SANTA RITA MOUNTAIN RANCH
Specific Plan
Volume II: Development Plan

Submitted to:
Pima County Depr. of Planning & Development Services
Tucson, AZ

Prepared for:
The Remington Group
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Prepared by:
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in association with:
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P.A.S.T.
Harris Environmental Group
Curtis Luck & Associates, Transportation Planning

May 30, 2002

RECEIVED
MAY 05 2003
BY:
ORDINANCE NO. 2002-52

AN ORDINANCE OF THE PIMA COUNTY BOARD OF SUPERVISORS;
RELATING TO ZONING; REZONING 1598 ACRES FROM RH, SH©, CB-1©,
CMH-1©, CMH-2©, AND CR-4© TO SP (SPECIFIC PLANS, SANTA RITA
MOUNTAIN RANCH SPECIFIC PLAN) LOCATED GENERALLY SOUTH OF THE
CAMINO DEL TORO ALIGNMENT, WEST OF HARRISON ROAD, NORTH OF
THE SANTA RITA EXPERIMENTAL RANGE, AND EAST OF THE CAMINO
SECO ALIGNMENT; AND AMENDING PIMA COUNTY ZONING MAPS 470 &
561.

The Pima County Board of Supervisors finds and declares that:

1. On July 25, 2001, the owners of 1598 acres (the "specific plan") applied for a rezoning
from RH, SH©, CB-1©, CMH-1©, CMH-2©, AND CR-4© to SP; and

2. On April 2, 2002, the Pima County Board of Supervisors approved the Santa Rita
Mountain Ranch Specific Plan (the "specific plan"), which rezoned the property. The
specific plan is incorporated in attached Exhibit A (which has not been recorded but
may be viewed at the office of the Pima County Development Services Department -
Planning Division).

Now, therefore, be it ordained by the Pima County Board of Supervisors:

Section 1. That the Specific Plan is hereby adopted, subject to the following conditions:

1. Not more than 60 days after the Board of Supervisors approves the Specific Plan, the
Developer shall submit to the Planning Official Volume II of the specific plan document,
including any necessary revisions of the specific plan document, and the specific plan text and
exhibits in an electronic format acceptable to the Planning Division.

2. Recording of a covenant holding Pima County harmless in the event of flooding.

3. Recording of the necessary development-related covenants as determined appropriate by the
various County agencies.

4. Provision of development-related assurances as required by the appropriate agencies.
5. Prior to the preparation of the development-related covenants and any required dedication, a
title report (current to within 60 days) evidencing ownership of the property shall be submitted
to the Department of Transportation, Real Property Division.

6. There shall be no further subdividing or lot splitting without the written approval of the Board
of Supervisors.

7. Master Block Plat or Master Development Plan Requirements.
   A. Prior to the issuance of any permits, this specific plan is subject to the approval of a
      separate master block plat for the entire specific plan. Subsequent site development
      requires submittal of subdivision plats or development plans prepared in accordance
      with the master block plat. The master block plat shall include all necessary
      improvements and dedications (including roads, sewer, drainage, trails and open space).
   B. Prior to the submittal of any master block plat, this specific plan is subject to the
      approval by the Planning Official, with the written concurrence of the directors of the
      Transportation and Flood Control District and Wastewater Management departments,
      of a Master Improvements Phasing Schedule for the entire specific plan. The schedule
      shall reference the master studies necessary for preparation of the master block plat and
      subsequent subdivision plats and development plans and shall identify the sequencing
      of necessary improvements and dedications, including roads, sewer, drainage, trails and
      open space.
   C. The master block plat shall be completed within five years from the date the specific
      plan is approved by the Board of Supervisors.

8. No building permits shall be issued until all applicable specific plan requirements are
   satisfied and the Planning Official issues a Certificate of Rezoning Compliance.

9. This specific plan shall adhere to all applicable Pima County regulations that are not explicitly
   addressed within this specific plan. Design guidelines shall be used only when not in conflict
   with County regulations.

10. Department of Transportation requirements:
    A. Submittal of a Traffic Impact Analysis to the Department of Transportation and Flood
       Control District for review and approval prior to the submittal of a master plat of the
       Specific Plan. The format and content of the analysis must meet Department of
       Transportation requirements.
    B. The property owner(s) shall provide a fair share contribution towards area roadway
       improvements or provide impact fees in accordance with the Mountain View Fee
       Benefit Area in effect at the time of development.
    C. The property owner(s) shall reach a financial contribution and/or construction agreement
       (Development Agreement) with and acceptable to Pima County Department of
       Transportation and Flood Control District prior to any development plan or subdivision
       plat approvals. Said agreement shall address the required road improvements and/or the
       financial contributions for area roads, both onsite and offsite, impacted by the proposed
       development.
    D. Dedication of 15 feet right-of-way for the west half right-of-way of Harrison Road
       adjacent to the subject property. Additional right-of-way may be required at the
       connection of Harrison Road with the proposed internal collector roadway.
E. Dedication of appropriate right-of-way for the proposed collector roads within the Specific Plan area as defined on the Preliminary Development Plan. The roadway cross section shown in the Site Inventory and Analysis must be revised to meet Subdivision Street Standards or current standards at the time of development plan or subdivision plat review. The amount of right-of-way and roadway cross section and pathway and landscape responsibilities will need to be reviewed and shall require approval by the Department of Transportation.

F. The property owner(s) shall make provision for pedestrian and vehicular access to adjacent properties and/or proposed developments surrounding the Specific Plan.

G. Provision of any improvements to Harrison, Houghton and Sahuarita Roads, based upon the findings of the Traffic Impact Analysis, as determined necessary by the Department of Transportation and Flood Control District.

11. Flood Control District requirements:

A. The property owner(s) shall reach a financial contribution and/or construction agreement (Development Agreement) with and acceptable to Pima County Department of Transportation and Flood Control District prior to any development plan or subdivision plat approvals. Said agreement shall address the required drainage improvements and/or the financial contributions for area drainageways, both onsite and offsite, impacted by the proposed development.

B. A Sub Basin Management and Master Drainage Study shall be submitted for review and approval by the Flood Control District prior to, or concurrent with, the submittal of a master plat for the Specific Plan.

C. All internal drainage improvements and any external drainage improvements required to mitigate drainage impacts caused by the proposed development shall be constructed at no cost to the Flood Control District.

D. Drainage shall not be altered, disturbed or obstructed without the written approval of the Flood Control District.

12. Wastewater Management requirements:

A. The property owner must connect to the public sewer system at the location and in the manner specified by Wastewater Management at the time of review of a tentative plat, development plan or request for a building permit. Some lots may be served by septic system if it is determined that connecting to the sewer is not feasible.

B. The property owner must provide a public flow-through sewer at the locations designated by Wastewater Management for the upstream tributary area to the east.

C. The property owner must augment the downstream 12-inch public sewer if additional sewer capacity is needed to develop the subject parcel.

13. Department of Environmental Quality requirement:

For lots not being served by public or private sewer, all residential lots shall have a minimum area of 43,560 square feet. A maximum of one-half of adjacent rights-of-way or easements may be used in the calculation of the area. The adjacent rights-of-way or easements must be suitable to absorb effluent and all other design requirements must be satisfied.
14. Natural Resources, Parks and Recreation Department requirements:

A. A divided pathway system shall be constructed along the Harrison Road alignment from Sahaurita Road to the northern edge of the subject project, and along the project’s principal roadway system, which traverses the project area from north to south and east to west. The divided pathway system shall consist of a minimum 10-foot wide asphaltic paved path and 6-foot wide meandering natural surface path (compacted earth with DG cover). The cross-section of the pathway system may vary in certain locations, such as the segment of the pathway that passes through the village center. Any changes in the cross-section shall be subject to the approval of the Pima County Natural Resources, Parks and Recreation Department. A minimum 10-foot landscape buffer shall separate the paved path from the road, and a minimum distance of 6 feet shall separate the paved and natural surface paths. A cross section of the project’s 120-foot right-of-way, which depicts the pathway system, is attached as Exhibit 1. The landscape buffers shall be landscaped with native vegetation, and a rough landscape plan for the pathway system shall be submitted to the Natural Resources, Parks and Recreation Department for review and approval prior to the construction of the pathway system.

B. The portion of the divided pathway system (trails and landscaping) within the plan area shall be maintained by the project’s homeowner’s association.

C. A public trailhead staging area serving the divided pathway system shall be constructed adjacent to or within the project’s Village Center or Community Park, and shall provide four (4) parking spaces for equestrians, seven (7) standard parking spaces, and one (1) van-sized ADA accessible parking space. The surface of the equestrian portion of the trailhead staging area may be constructed of compacted AB instead of asphalt.

D. The developer shall construct a minimum of ten (10) acres of active parks in the subject project. The park elements may be dispersed throughout the project, but one of the parks shall be a minimum of six acres in size. The developer shall produce a parks and recreation facilities plan for the project for the review and approval of the Pima County Natural Resources, Parks and Recreation Department.

E. The developer has agreed to contribute $1,500 to the Sahaurita Greenway Development Fund.

15. Cultural Resources requirements:

A. Prior to ground modifications activities, an on-the-ground archaeological survey and appropriate mitigation measures shall be conducted on the subject property. A cultural resources mitigation plan for any identified archaeological sites on the subject property, shall be submitted at the time of, or prior to the submittal of any tentative plat or development plan. The mitigation plan shall be prepared and reviewed as described in the Pima County Site Analysis Requirements.

B. If, during construction, materials that may be human remains and associated burial items are discovered, ground-disturbing activities in the vicinity of the discovery shall cease, the discovery site shall be secured, and the Arizona State Museum shall be immediately notified.
16. Adherence to the specific plan document and preliminary development plan as approved at public hearing. This specific plan is restricted to a maximum of 1,320 dwelling units as allocated by the "Development Plan" table found in Volume II of the specific plan document with an allowance of up to a 10% increase in dwelling units within each planning area.

17. The owner shall file, prior to the submittal of any master block plat, a covenant running with the land stating that any transportation impact fees or financial contribution, or both, in accordance with condition #10.B, due from this project are payable to Pima County for funding of Pima County’s capacity improvements of area roadways. If the property is annexed by a city or town or incorporated into a new city or town, the owner shall promptly pay to the County an amount equal to that amount which would have been payable as a transportation impact fee or financial contribution, or both, had the project remained within the jurisdiction of the County.

18. Amend the development regulations of Volume II of the specific plan as follows:
   A. Page 20, subsection D-6.1: amend to read, "d. Equestrian center in accordance with section 18.17.030.C.1 (SR zone)"
   B. Page 20, subsection D-6.3: delete the natural open space credit.

19. Site development and conservation shall result in a minimum of 80 percent of the site within the Buffer Overlay Zone area being conserved as natural open space. This minimum percentage shall be met through the common areas, natural open space areas designated within the rezoning area, and those natural areas on each residential lot that are to be deed-restricted from development and will lie outside of an allowable maximum building site to be graded on each residential lot of 20,000 square feet on lots smaller than one acre and 30,000 square feet on lots one acre or larger, plus the area a single lane 12-foot driveway that extends from the lot property line to the garage or carport.

20. Construction monitoring shall be provided during all stages of grading on the site within the Buffer Overlay Zone area. The monitoring shall be provided at the expense of the master developer during project development to ensure protection of preserved vegetation, and to identify protected species of plants and wildlife. Monitoring shall be performed by an individual qualified in resource identification and protection, who shall be a third party professional approved by Pima County in consultation with the Arizona Game and Fish Department. The professional shall visit the site on at least a weekly basis and shall be available on an on-call basis to respond to development concerns as the site is built out.

21. Prior to approval of the master block plat, a biological resource management plan shall be prepared for the specific plan. The plan shall include an inventory of sensitive biological resources on the site as defined by the Sonoran Desert Conservation Plan documentation. The plan shall produce mitigation strategies and a site plan with the planning areas of open space and development areas configured and at an intensity to achieve actual conservation as defined in the Conservation Land System Urban Design Guidelines. If the planning areas and intensity of uses need to be reconfigured to achieve actual conservation, the modified site plan may be approved by the Board of Supervisors at a public hearing.

22. A minimum 100-foot natural open space buffer will be provided along the top bank of the large wash traversing the property; and a minimum 50-foot natural open space buffer will be provided along the top bank of the secondary washes in locations as indicated on the land use
plan. Whenever possible, these buffers will be increased in width, particularly along the east edge of the central wash.

Section 2. That the Santa Rita Mountain Ranch Specific Plan, attached as Exhibit A (which has not been recorded but may be viewed at the office of the Pima County Development Services Department - Planning Division), is hereby adopted, subject to amendment by the specific plan applicant of Exhibit A, as necessitated by Board of Supervisors' action.

Section 3. That the Legal Description of the Santa Rita Mountain Ranch Specific Plan is hereby shown in Attachment B to this ordinance and incorporated herein by this reference.

Section 4. That Pima County Zoning Map No.'s 470 and 561 in all or portions of sections 15, 21, 22, 26, 27, and 28 of T17S, R15E, is hereby amended to the SP (Specific Plan) Zone as shown on the entitled "Amendment No.'s _4_2__ ... to Pima County Zoning Map No.'s 470 & 561" contained in Attachment C to this ordinance and incorporated herein by this reference.

Section 5. That this ordinance shall become effective on the day the last of all of the following occurs:

A. The Planning Official's certification that the Surveyed Boundaries Map accurately reflects the specific plan as approved.
B. Thirty-one days after the date the Chair of the Board of Supervisors signs the ordinance adopting the specific plan.
C. Submittal of the specific plan text and exhibits in an electronic format acceptable to the Planning Division.

Section 6. Not more than 60 days after the Chair of the Board of Supervisors signs the ordinance adopting the Specific Plan, the Developer shall submit to the Planning Official an approvable Surveyed Boundaries Map.
PASSED AND ADOPTED by the Board of Supervisors of Pima County, Arizona, this
__14th________ day of __May________, 2002.

Chair, Board of Supervisors

ATTEST:

Clerk, Board of Supervisors 5/14/02

APPROVED AS TO FORM:

Civil Deputy County Attorney

Executive Secretary, Pima County Planning and Zoning Commission
PART II: DEVELOPMENT IMPACT ANALYSIS

per day and distribution of 50% of daily trips on Harrison Road). These trips, added to the estimated site traffic would bring the total ADT on Harrison road to about 14,300 in the worst case. This volume falls below the LOS D/E threshold for a two-lane, undivided roadway. The following table summarizes the estimated future volumes and LOS on the off-site roadways. In addition, the table provides an estimate for the percent of traffic generated by the proposed project on each road.

Table 2: Future Volumes and Level of Service

<table>
<thead>
<tr>
<th>Road Segment</th>
<th>Current ADT</th>
<th>Site Traffic</th>
<th>Regional Growth</th>
<th>New ADI</th>
<th>New LOS</th>
<th>Percent Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing roads</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Houghton Road north of Sahuarita Road</td>
<td>3,400</td>
<td>5,450</td>
<td>2,140</td>
<td>10,994</td>
<td>D</td>
<td>50%</td>
</tr>
<tr>
<td>Sahuarita Road west of Harrison Road</td>
<td>3,000</td>
<td>2,725</td>
<td>1,885</td>
<td>7,610</td>
<td>C</td>
<td>36%</td>
</tr>
<tr>
<td>Sahuarita Road east of Harrison Road</td>
<td>3,000</td>
<td>6,820</td>
<td>1,885</td>
<td>11,705</td>
<td>D</td>
<td>58%</td>
</tr>
<tr>
<td>Sahuarita Road east of Houghton Road</td>
<td>2,000</td>
<td>910</td>
<td>1,260</td>
<td>4,170</td>
<td>C</td>
<td>22%</td>
</tr>
</tbody>
</table>

LOS based on existing roadway cross section

New road

Harrison Road south of Sahuarita Road | 0         | 6,820        | 680             | 7,500   | C       | 90%          |
New route south of Sahuarita Road     | 0         | 2,275        | 225             | 2,500   | C       | 90%          |

LOS based on 2-lane undivided roadway

The project will utilize a typical 120' wide right-of-way to provide for two travel lanes, pathways, and ample landscaping. The final right of way cross-section for each roadway segment will vary depending on site conditions, adjacent land uses and approval by DOT.
ATTACHMENT A

TO

SANTA RITA MOUNTAIN RANCH SPECIFIC PLAN
Attachment A is the Santa Rita Mountain Ranch Specific Plan document approved by the Pima County Board of Supervisors on April 2, 2002.

The document is not recorded but may be viewed at the office of the Pima County Development Services Department, Planning Division, at the following address:

County-City Public Works Building
201 N. Stone Avenue, 2nd Floor
Tucson, Arizona
ATTACHMENT B

TO

SANTA RITA MOUNTAIN RANCH SPECIFIC PLAN
All of Sections 22 & 27 and portions of the southeast ¼ of section 15, the east ½ of Section 21, the northeast ¼ of Section 28 and the southwest ¼ of Section 26, T17S, R15E.
ATTACHMENT C

TO

SANTA RITA MOUNTAIN RANCH SPECIFIC PLAN
AMENDMENT NO.'S 4, 2 BY ORDINANCE NO. 2002-52 TO PIMA COUNTY ZONING MAP NO.'S 470 & 561 TUCSON, AZ.


ADOPTED 5-14-02 EFFECTIVE 5-14-02

EXECUTIVE SECRETARY PIMA COUNTY PLANNING AND ZONING COMMISSION

© NO BUILDING PERMITS WITHOUT CERTIFICATE OF COMPLIANCE FROM RH, SH, CB-I, CMH-I, CMH-2, CR-4, 1.598 ac±

ds-APRIL 16, 2002
SANTA RITA MOUNTAIN RANCH
Specific Plan

For Clarification of Material Contained in This Report Contact:

Planners Ink
Charlie Deans, AICP, Principal
240 North Court Avenue
Tucson, Arizona 85701
520.882.8177

May 30, 2002
# Development Plan

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# Development Plan

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DEVELOPMENT PLAN

A. PURPOSE AND INTENT

Santa Rita Mountain Ranch Specific Plan area is conceived to incorporate elements of community sustainability and livability. This Specific Plan is refocusing development and regulations to look at the immediate environment as an investment for the future and how we define the importance of community. In the Santa Rita Mountain Ranch community, this includes the co-existence of the built environment in the natural setting and how the built environment can benefit the desert ecosystem in a positive fashion. With these concepts in mind, Santa Rita Mountain Ranch sets out to utilize the best available knowledge regarding sustainable and regenerative development.

B. GOALS

The development plan is the result of thorough site research and analysis. It defines development issues in the form of proposed physical improvements, guidelines for future development, and technical information and regulations. In recognizing the importance of respecting this “place”, by connecting to the environment and creating a sustainable community, the following objectives are developed for this project:

- To provide a balanced range of land uses, allowing for a wide range of development opportunities (including significant areas of natural open space).
- To create a sense of place in the community through physical design, land use, intentional design recommendations and unifying the theme through landscape architecture.
- To integrate clusters of built environment with continuous open space corridors throughout the community.
- To utilize the natural washes as a community amenity for connectivity and open space.
- To develop a process within the specific plan allowing for flexibility to changes in new research and technologies regarding sustainable and regenerative development practices.

1. Land Use Plan

Within the core of the development is the Village Center comprised of uses such as a market, specialty retail, café, offices, community meeting rooms, central post office boxes, a community park, and residential live/work units. The village center is accessible via roadways and pathways from all areas of the community.

From the Village Center, the Plan proposes six neighborhoods with rural characteristics. The residential densities range from 2.5 residences per acre to one house per ten acres. The intent of the general range of housing types can be depicted from the descriptive cluster of village lots, rural lots, and estate lots.
## Land Use/Zoning Summary

<table>
<thead>
<tr>
<th>Land Use/Zoning</th>
<th>Acreage</th>
<th>Density (RAC)</th>
<th>Dwelling Units</th>
<th>NOS %</th>
<th>NOS ac</th>
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</thead>
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<tr>
<td>Village Center (VC)</td>
<td>20</td>
<td>4.2</td>
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<td>Village Residential (VR)</td>
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<td>778</td>
<td>20</td>
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<td>Rural Residential (RR)</td>
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<td>367</td>
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<td>Village Estate (VE)</td>
<td>166</td>
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<td>Community Recreation (CR)</td>
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<td>Functional Open Space (FOS)</td>
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<td>Natural Open Space (NOS)</td>
<td>734</td>
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<tr>
<td>Right-of-Way</td>
<td>48</td>
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<td>10</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td>1598 ac</td>
<td></td>
<td>1320 DU</td>
<td></td>
<td>367</td>
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</table>

**Open Space**

- **FOS**: 10
- **NOS**: 734
- **Development Areas NOS**: 367
- **Total Open Space**: 1111
- **% Open Space**: 70%

**BOZO**

- **Development Area NOS**: 182
- **NOS**: 439
- **Total NOS**: 621
- **Total BOZO Area**: 763
- **% NOS in BOZO area**: 81%
## Development Plan

### Development Table

<table>
<thead>
<tr>
<th>Planning Area</th>
<th>Density (RAC)</th>
<th>Land Use</th>
<th>Acreage</th>
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Land Use Plan

- Proposed Right of Way
- VC: Village Center
- VR: Village Residential
- RR: Rural Residential
- VE: Village Estate
- CR: Community Recreation
- FOS: Functional Open Space
- NOS: Natural Open Space
- 100 Ft. Natural Open Space
- 50 Ft. Natural Open Space
- Community Park

Santa Rita Mountain Ranch Specific Plan
Pima County, Arizona
2. Natural, Biological & Cultural Resource Plan

The Natural, Biological & Cultural Resource Plan includes wildlife habitat, vegetation communities and cultural resource elements. The Specific Plan provides large contiguous open space areas preserving the biotic and scenic characteristic of the region. The natural washes ribboning through the property will be left in their natural state. The widest drainageway traverses diagonally from the southeast to the northwest corners. There are five other smaller tributaries paralleling the larger wash.

Vegetation characteristic of the region will be preserved in place or transplanted on site. Development of the area will comply with Pima County's Plant Preservation and Mitigation requirements. In those areas where development occurs, viable native vegetation will be transplanted and supplemented with additional like species, especially saguaro cacti, large mesquite trees, ocotillo and agaves. Further limits will be placed through Covenants, Conditions and Restrictions on the planting of non-native vegetation by future property owners.

A habitat assessment of the Santa Rita Mountain Ranch was conducted to determine the potential of occurrence for 56 priority vulnerable species listed in the draft Sonoran Desert Conservation Plan. Because some of these species are listed as threatened or endangered by the Endangered Species Act, further consultation with the USFWS will be required. Therefore, preserving large areas of native vegetation on the property will be accomplished to the greatest extent possible.

An archeological survey for the northern portion of the site reveals no significant findings. A mitigation plan will be prepared by a qualified archaeologist for each planning unit of the Specific Plan area that contain archeologic or historic sites which are deemed significant to warrant further studies. Requirements for preservation, protection, testing, data recovery or excavation, analysis, report preparation, and curation will be addressed as well as a schedule for implementation. The mitigation plan shall be reviewed and approved by the county archaeologist prior to implementation.

3. Engineering Plan

The Engineering Plan includes those elements requiring infrastructure improvement such as roadways, public services (i.e., water, sewer, gas), grading, and hydrology. The intent is to integrate these features into the development with as minimal impact to the environment as possible and to enhance those areas where development disturbance and alterations are inevitable, such as at roadways and utility crossings.

a. Circulation

Primary vehicular access to the site will be provided from Sahuarita Road at the future
intersection with Harrison Road, which will be the major access road into the project. Secondary access will be provided through the proposed new route that will extend northwesterly from the project site to connect to Sahuarita Road. The project will utilize a 120' wide right-of-way to provide for two travel lanes, pathways, and ample landscaping.

b. Hydrology

The hydrological approach is to respect and preserve the existing floodplain conditions. Lot layouts are intended to avoid encroachment into the 100-year floodplain limits. At this time, encroachments are at roadway crossings. Mitigation measures proposed for this development include the provision for stabilized bank protection and/or the preparation of an erosion hazard setback reduction study performed by a Geotechnical engineer.

On-site detention basins and water harvesting measures will be provided, minimizing impacts of the developed on-site drainage conditions to downstream properties. Specific detention basin locations have not been mapped but multiple basins will be provided throughout the site. They will be placed downstream of neighborhood/lot configurations, sized and located based on the development. The basins will be located near the floodplains and also within vegetative areas to maximize storm water harvesting. This development will utilize culverts or dip crossings for the roadway crossings through the 100-year floodplain limits.

c. Sewer

An off-site sewer main extension will be constructed in order to service the Specific Plan area. A proposed public gravity main will be extended from the site north and connect into the terminal manhole of the existing 12" main (PN 5-350-2) within Harrison Road. Correspondence from Pima County Wastewater indicates there is conveyance capacity in this existing 12" main. The project's 12" main will run south along the Harrison road right-of-way where it will provide service to this project at its northeast corner.

The Engineering Concepts Map indicates the alignment for both the on and off-site sewer system. This alignment shows areas where the sewer will cross washes, w/ 100-year peak discharges greater than 500 cfs. The off-site main will be located within an area that may not be paved, but it will be provided with a means of access (for various size vehicles) under all conditions. Surface treatment over the sewer will be required. Vehicular wash-crossing capability may also be required in some instances.

A reclaimed water line extended to the project, from the wastewater treatment facility to the north, will be pursued with Pima County Wastewater Management during the platting process.

d. Grading

Slopes greater than 15% are will be preserved and are mainly associated with the drainage
corridors. These areas, with appropriate setbacks as required by Pima County Flood Control regulations, will be left in their natural state. Exceptions to portions of the wash may require soil stabilization due to hydrological recommendations.

There will be no areas graded with projected cut or fills greater than five feet. Specific grading plans will be submitted with plat reviews.

4. **Built Environment Plan**

The Santa Rita Mountain Ranch Specific Plan includes pathways, recreation and landscape guidelines. In site-specific areas, these pathways will be separate but parallel to adjacent vehicular roadways. Pathways within public right-of-ways will be included in roadway dedications. Off-road trails will utilize public service easements when feasible. The internal pathways system will provide future connections to Eastern Pima County’s Trail System Master Plan.

The community pathway is a divided path with a 10-foot wide multi-use path and an 6-foot decomposed granite path separated by 6 feet of landscaping. The neighborhood pathways are smaller 4-foot to 6-foot trails that will connect different planning areas through natural open space areas and along smaller washes. All of the neighborhood pathways are connected to the larger community pathway as shown on the Pathways Plan exhibit.

The plant palette used will be consistent with the Buffer Overlay Zone plant list. As required by Pima County’s Native Plant Preservation & Mitigation requirements, vegetation will be preserved-in-place or transplanted on-site whenever possible. Preservation & Mitigation plans will be completed on a site-by-site basis prior to any ground clearance, as required by Pima County ordinance. The Native Plant Preservation Plan requirements will be met primarily through the set-aside method. This will include the environmentally-sensitive lands, such as riparian, floodplain and slope areas. The Specific Plan proposes to set aside over sixty percent of the plan area as natural open space.
Sewer Service Plan

Proposed Right of Way

Sewer Service Area

Septic Service Area

Development Blocks

Note: Sewer and water main will run under the major east/west proposed road.

Santa Rita Mountain Ranch Specific Plan
Pima County, Arizona
Santa Rita Mountain Ranch Specific Plan
Pima County, Arizona
Santa Rita Mountain Ranch Specific Plan
Pima County, Arizona
DEVELOPMENT REGULATIONS

A. Purpose and Intent
These regulations will serve as the primary mechanism for implementation of the land uses for the Santa Rita Mountain Ranch Specific Plan.

Land use designations for the Specific Plan shall be as follows:
- Village Center (VC)
- Village Residential (VR)
- Rural Residential (RR)
- Village Estate (VE)
- Community Recreation (CR)
- Functional Open Space (FOS)
- Natural Open Space (NOS)

B. Definitions
The terms and definitions used in this Plan shall mean those defined in Chapter 18.03 of the Pima County Zoning Code, with the following exceptions:

1. **Builder/Developer** The person or entities who acquire and build within a planning area in the Santa Rita Mountain Specific Plan.

2. **Community Center** A building constructed for educational purposes (library, elementary school) or for community support and recreation such as a senior citizen/ cultural arts/activity center.

3. **Community Facilities** Facilities related to civic uses such as police, fire, schools (public, private, and charter), recreation facilities, religious facilities, and the management, storage, distribution and treatment of water and wastewater. These uses and facilities are subject to all applicable State and Federal regulations governing their siting, health and permitting requirements.

4. **Community Recreation** Any private land designated for the establishment of structures or areas in which to provide recreational support activities such as health club/spa, country club, resort/hotel, and/or recreational vehicle storage.

5. **Dwelling Unit Cap** The maximum number of dwelling units permitted within the Specific Plan.

6. **Gross Density** The total number of residences allowed within a planning area or subdivision, expressed as residences per acre (R/ac), but does not represent lot size. For example, 1 R/ac is one home per acre as gross density, but could be a net density of 5,000 sf lots with the remaining area as open space.
7. **Master Developer** The corporation or individual who owns and/or is responsible for the planning and development of the Santa Rita Mountain Ranch Specific Plan.

8. **Maximum Density** The maximum residences per acre (R/ac) allowed by a development area category, based on gross density.

9. **Minimum Landscape Coverage** The area by percent to be landscaped (including all required buffers, trees, shrubs, ground cover, hydroseeded areas and preserved and/or salvaged native plants) of the gross area being developed as a development plan and/or plat.

10. **Natural Open Space** An undisturbed area of native desert vegetation. Roadway/utility crossings, pathways, and minor modifications for water harvesting and riparian enhancement, are allowable uses. These areas will be set-aside by public ownership, common area, covenant and/or conservation easement.

11. **Planning Area** Area defined by land use designation and identified with a letter (i.e., A,B,C, etc.) on the Land Use Plan.

### C. General Provisions

1. If an issue, condition or situation occurs that is not sufficiently addressed within the specific plan, the regulations of the Pima County Zoning Code shall apply as follows:

   - **VE:** SR (18.21) Suburban Ranch.
   - **RR:** CR-1 (18.25) Single Family Residential.
   - **VR:** CR-3 (18.29) Single Family Residential.
   - **VC:** CB-1 (18.43) Local Business.
   - **CR:** CB-1 (18.40) and MR (18.31) Mixed Dwelling and Minor Resort.

2. This specific plan supplements or supersedes certain adopted Pima County zoning regulations. This plan does not make changes to Chapter 18.61 (Hillside Development), 18.67 (Buffer Overlay Zone), 18.72 (Native Plant), 18.73 (Landscaping and Buffering), 18.77 (Roadway Frontage), and 18.79 (Sign Standards).

3. Community facilities are permitted in all land use designations except NOS.

4. Home occupations are permitted in all land use categories as per section 18.09.030, with an allowance that up to two non-resident employees may be on-site and up to one-half of the floor area of the dwelling may be used for such purposes.

5. Density transfers are permitted between planning areas as per Section 18.90.080 subject to the following conditions:
   - a. the total number of dwelling units transferred to a recipient area will not exceed ten percent of the number of dwelling units established for the planning area;
b. all planning areas are designated as donor or recipient areas;
c. the natural open space requirement for the planning area will still be provided in the
donor or recipient areas and serve as the delineated buffer areas in conformance with
Section 18.90.080.B.2;
d. the overall density of the Specific plan will not be exceeded.

D. Land Use Categories
Land Use designations have been assigned to each planning area identified on the Santa Rita
Mountain Ranch Specific Plan. Their permitted uses and development standards are
described in the following sections.

1. Village Estate (VE)
   1. Uses Permitted:
      a. Single Family Residential

2. General Development Standards:
   a. Minimum Site Area: 36,000 sf
   b. Gross density: 0.33 RAC
   c. Building Height: 20'
   e. Site Setbacks: Front: 10' (min. 20' in front of garage)
      Side: 10'
      Rear: 10'
   f. Natural Open Space: 70% of planning area

2. Rural Residential (RR)
   1. Uses Permitted:
      a. Single Family Residential

2.a. General Development Standards:
   a. Minimum Site Area: 10,000 sf
   b. Gross density: 1.1 RAC
   c. Building Height: 24'
   e. Site Setbacks: Front: 10' (min. 20' in front of garage)
      Side: 5' or 0' with min 6' on one side
      Rear: 10'
   f. Natural Open Space: 50% of planning area

2.b. Additional Development Standards for Planning Areas A, B, and C:
   f. Natural bufferyard width along plan boundary: 200'
   g. Building height: 20' for buildings within 800' distance from plan area boundary

3. Village Residential (VR)
   1. Uses Permitted:
Development Plan

2. General Development Standards:
   a. Minimum Site Area: 5000 sf
   b. Gross density: 2.75 RAC
   c. Building Height: 24'
   e. Site Setbacks: Front: 10' (min 20' if parking front of garage)
      Side: 0'
      Rear: 10'
   f. Natural Open Space: 20% of planning area

4. Village Center (VC)
   1. Uses Permitted:
      a. Single family Residential
      b. Restaurant
      e. Retail Commercial
      f. Professional Offices
      g. Resort/Hotel
      h. Health Spa
      i. RV Storage (subject to 18.45.040G)

2. General Development Standards:
   a. Minimum Site Area: 3000 sf
   b. Gross density: 4.2 RAC
   c. Building Height: 28'
   e. Site Setbacks: Front: 5' (min. 20' if residential parking in front of garage)
      Side: 0'
      Rear: 5'
   f. Natural Open Space: None required
   g. Parking and loading space requirements: In conformance with 18.75 with exception, upon approval by Pima County Design Review Committee and a Traffic/Parking Study, that total parking and loading spaces are one-half than required provided that twice the number of minimum required bicycle spaces are provided (reduction not applicable to handicap parking spaces).
   h. Minimum area of non-residential uses (retail, offices, hotel, etc): 4,000 sf

5. Community Recreation (CR)
   1. Uses Permitted:
      a. Clubhouse
      b. Minor Resort/Hotel
      d. Restaurant
      f. Single Family Residential
Development Plan

e. RV Storage (subject to 18.45.040G)
f. Equestrian center in accordance with 18.07.030.F.3.a.7.

2. General Development Standards:
   a. Minimum Site Area: 5000 sf
   b. Gross density: 4.5 RAC
   c. Building Height: 28'
d. Site Setbacks: Front: 5' (min. 20' if residence parking in front of garage)
   Side: 0'
   Rear: 5'
e. Natural Open Space: None required
f. Parking and loading space requirements: In conformance with 18.75 with exception, upon approval by Pima County Design Review Committee and a Traffic/Parking Study, that total parking and loading spaces are one-half than required provided that twice the number of minimum required bicycle spaces are provided (reduction not applicable to handicap parking spaces).

6. Functional Open Space (FOS)
   1. Uses Permitted:
      a. Botanical Garden
      b. Commercial Golf Driving Range
      c. Equestrian Center in accordance with 18.07.030.F.3.a.7.

2. General Development Standards:
   a. Shall be in conformance with Chapter 18.59 of the Pima County Zoning Code.

7. Natural Open Space (NOS)
   1. Uses Permitted as allowed by Pima County Zoning Code and including utility, road crossings, water harvesting modifications and riparian enhancement.
SANTA RITA MOUNTAIN RANCH
Specific Plan
Volume I: Site Inventory and Analysis

Submitted to:
Pima County Dept. of Planning & Development Services
Tucson, AZ

Prepared for:
The Remington Group
1600 E. Hanley Blvd., Ste. 124
Tucson, AZ

Prepared by:
Planners Ink
240 N. Court Ave.,
Tucson, AZ 85701

In association with:
Presidio Engineering
P.A.S.T.
Harris Environmental Group
Curtis Lueck & Associates, Transportation Planning

May 30, 2002
SANTA RITA MOUNTAIN RANCH
Specific Plan

For Clarification of Material Contained in This Report Contact:

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Charlie Deane, AICP, Principal
240 North Court Avenue
Tucson, Arizona  85701
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May 13, 2002
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PART I:
SITE INVENTORY AND ANALYSIS
PART I: SITE INVENTORY & ANALYSIS

SITE INVENTORY & ANALYSIS

A. INTRODUCTION

The proposed Santa Rita Mountain Ranch Specific Plan allows for a mix of open space, residential and commercial uses on 1,598 acres, located within Pima County, Arizona.

The adoption of the Specific Plan will establish the type, location, intensity and character of development and the required infrastructure to support it. The Specific Plan also defines the development characteristics that respond to the natural features and opportunities of the site, in providing an appropriate mix of residential, commercial, open space, and recreation uses.

The Specific Plan provides the necessary regulatory functions and development controls that are consistent with the current adopted area and jurisdictional plans. The specific plan serves to implement Pima County’s Comprehensive Plan, by providing specific regulations and standards for this area within the region.

1. Purpose and Intent

The Plan focuses on coordinating a mix of single family attached and detached homes with supporting commercial and providing adequate circulation, open space and recreational amenities.

Responsible planning of the proposed Santa Rita Mountain Ranch development is insured through the adoption of a development control mechanism that reflects sustainable planning practices. It provides provisions for future development with the flexibility to anticipate future needs. It provides development controls to assure that the Specific Plan will be built out as planned.

The Specific Plan is a device used to implement the existing adopted Comprehensive Plan and further the goals of the draft Sonoran Desert Conservation Plan. The Specific Plan articulates planning considerations and imposes regulations or controls on the proposed uses. The Santa Rita Mountain Ranch Specific Plan is the combination of concepts, procedures, and regulations of numerous planning documents combined into one.

2. Project Location and Description

The subject property is located southeast of the City of Tucson and west of the community of Corona de Tucson in Eastern Pima County, Arizona. It is approximately twenty-six miles from downtown Tucson, ten miles east of the Town of Sahuarita, and nine...
miles south of Interstate 10. Tucson International Airport is located approximately seventeen miles to the northwest. (See Location Map).

The site is adjacent to the undeveloped, platted subdivision of New Tucson and the unincorporated town of Corona de Tucson, a small community with a general store and a fire station. The site is characterized by rolling hills at an approximate elevation of 3,400 feet. The dominant natural feature is a wash which bisects the property. The southern edge of the property is adjacent to Santa Rita Experimental Range. The Coronado National Forest is located one mile southeast of the site.

Extensive open space will complement residential uses within the overall Plan area. These uses will have an average gross density of approximately .75 dwelling units per acre and consist of single-family detached and attached homes. The project will also include a village center with supporting commercial and civic facilities. The utilities will be installed underground to enhance the visual amenities.

3. Authority and Scope
The Santa Rita Mountain Ranch Specific Plan has been prepared pursuant to the provisions of the Arizona Government Code, Title 11, Chapter 6, Article 2, Section 11-825. The Arizona Revised Statutes authorize jurisdictions to adopt specific plans by resolution as policy or by ordinance as regulation. Hearings are required by both the County Planning and Zoning Commission and the Board of Supervisors.

The Santa Rita Mountain Ranch Specific Plan is a regulatory plan which will serve as the zoning for the subject property. Proposed development plans, or agreements, tentative plat and any other development approval must be consistent with the Specific Plan. Projects which are found consistent with the Specific Plan will be deemed consistent with the County’s Comprehensive Land Use Plan.

The intent of this Specific Plan is to provide a development plan for the subject property. This Specific Plan will serve to implement the development of the approved plan within the bounds of the regulations provided herein and will be adopted by ordinance as a regulatory document.

4. Legal Description, Ownership and Tax Code
See Appendix for legal description, ownership and tax code information.
PART I: SITE INVENTORY & ANALYSIS

B. EXISTING LAND USES

1. Site Location in Regional Context:
The Santa Rita Mountain Ranch property is a 1,598 acre planning area located in southeastern Pima County. The property is located west of Harrison Road one mile south of Sahuarita Road. It is approximately six miles south of the City of Tucson, nine miles south of Interstate 10, and directly north of the Santa Rita Experimental Range.

2. Existing Land Uses on Site:
The property is currently vacant. There are two abandoned cattle water tanks located on the property that are accessible from South Helvetia Road (see Existing Land Uses).

3. Surrounding Property with 1/4 Mile Radius:
The property is surrounded by low-density (0.24 RAC) residential dwellings to the north, medium-density (2.7 - 5.4 RAC) residential to the east, vacant State Trust Land property to the west and the Santa Rita Experimental Range to the south. There are no rezoning or development plans currently under review for the surrounding area.

4. Existing Zoning on Site:
The property is currently zoned (RH) Rural Homestead under Pima County zoning code. There was conditional zoning that expired in 1996.

   a. Existing Surrounding Zoning:
      ▶ North: RH - Single Family Residence   ▶ West: RH - Single Family Residence
      ▶ South: RH - Single Family Residence    ▶ East: CR-2 & CR-3 - Single Family Residence

      The site is identified within the Rincon-Southeast Subregion of the Pima County Comprehensive Plan as Low Intensity Urban (LIU-1.2) and Neighborhood Activity Center (NAC).

   b. Existing Surrounding Land Use:
      ▶ North: Single Family Residential and Vacant
      ▶ East: Single Family Residential and Vacant
      ▶ South: Santa Rita Experimental Range
      ▶ West: Vacant (State Trust Land)

   c. Building Heights:
      Buildings to the north, east, and south within 1/4 mile of the site radius, are single story.
PART 1: SITE INVENTORY & ANALYSIS

4. Pending Rezoning within ¼ mile:
   There are no pending rezonings within a ¼ mile radius.

5. Well Sites:
   There are no well sites located within 100 feet of the property.
C. TOPOGRAPHY

1. Topographic Characteristics:
The Santa Rita Mountain Ranch property is rich with diverse topographical features. The property slopes gently from a high elevation of 3,612 ft. at the southeast corner to a low elevation of 3,114 ft. at the northwest corner. There are no significant peaks, ridges or rock outcrops that fall within the property. The property is transected by a number of wash corridors that run from southeast to northwest. Some of these drainages have slopes 15% or greater at their banks. The rest of the property is relatively flat with some limited slopes that exceed 15% in the southwest corner.

2. Average Cross-Slope:
The average cross slope of the site calculated at 10-foot intervals is as follows:

\[
\text{Average Cross Slope} = \frac{1 \times L \times 0.0023}{A} = \frac{10' \times 600,175' \times 0.0023}{1598 \text{ ac}} = 8.6\%
\]

The site has an average cross slope of 8.6%.

D. HYDROLOGY

1. Off-site Watershed:
The perimeter of all off-site watersheds that affect this site have been delineated on Off-Site Hydrology exhibit. This exhibit shows this site is impacted along its southern and eastern boundaries by stormwater generated runoff from a total of fourteen off-site watersheds. All off-site watersheds drain in a northwest direction towards the southern and/or eastern parcel boundaries. Currently, this site, including the above-described watersheds, is designated as a Critical Basin per the Lee More Wash Basin Management Plan.

2. Off-site Natural or Man-Made Features:
There are no significant natural or man-made features within the above-mentioned watersheds.

3. 100 Year Discharges Greater than 100 cfs:
There are ten upstream off-site watersheds that have 100-year peak discharge rates greater than 100 cfs. The acreage of these watersheds varies from 31 acres to 5,050 acres with corresponding 100-year peak discharge rates varying from 132 cfs to 8861 cfs.
PART I: SITE INVENTORY & ANALYSIS

4. On-site Hydrology:
   The following is a summary of the characteristics of the on-site hydrology:

a. 100-year Floodplains with a Discharge Greater than or Equal to 100 Cfs:
   Combined off-site and on-site generated runoff exceeds 100 cfs for the 100-year event within this site. The 100-year floodplain limits have been delineated and are shown on the On-Site Hydrology Exhibit.

b. Sheet-flooding areas:
   Sheet flooding does occur on one portion of this site, approximately located at the midpoint of the western half of the site. The average depth of flow varies from 2' to 3'.

c. Federally mapped floodways and floodplains:
   A review of FEMA’s Flood Insurance Rate Map community-panel no. 040073 3410K and 3420, effective date: February 8, 1999, does not indicate the existence of any federally mapped 100-yr floodplains or floodways on this site.

d. 100-year peak discharges greater than 100 cfs entering and leaving the site:
   As mentioned above, ten off-site watersheds generate a discharge of 100 cfs or more. The off-site watersheds produce 100-year peak discharge rates ranging from 132 cfs to 8861 cfs. The combined on-site and off-site runoff exits the site along its northern and western boundaries. The 100-year peak discharge rates exiting the site vary from 198 cfs to 8563 cfs.

5. Existing Drainage Conditions Along Downstream Property Boundary:
   Currently, stormwater generated runoff leaves the site along the property's northern and western boundaries with this runoff continuing towards the northwest. The 100-year peak discharge rates exiting the site range from 58 cfs to 8563 cfs.
E. VEGETATION

1. Vegetation Inventory and Description:

a. Vegetation Communities and Associations:
The site is currently undeveloped. The existing vegetation is representative of the Arizona Upland Subdivision of Sonoran Desertsrub and consists of scrubby trees, shrubs, cacti and groundcover. The wash networks provides a habitat for plants and animals, supporting larger plant specimens and more diverse vegetative communities. See Vegetation and Wildlife exhibit for site details.

<table>
<thead>
<tr>
<th>Plant Species Inventory</th>
<th>Botanical Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Name</td>
<td>Botanical Name</td>
</tr>
<tr>
<td>Velvet Mesquite</td>
<td>Prosopis velutina</td>
</tr>
<tr>
<td>Blue Palo Verde</td>
<td>Cercidium floridum</td>
</tr>
<tr>
<td>Whitethorn Acacia</td>
<td>Acacia constricta</td>
</tr>
<tr>
<td>Catclaw Acacia</td>
<td>Acacia greggii</td>
</tr>
<tr>
<td>Hackberry</td>
<td>Celtis spp.</td>
</tr>
<tr>
<td>Creosote Bush</td>
<td>Larrea tridentata</td>
</tr>
<tr>
<td>Wolfberry</td>
<td>Lycium spp.</td>
</tr>
<tr>
<td>Brittlebush</td>
<td>Encelia spp.</td>
</tr>
<tr>
<td>Prickly Pear</td>
<td>Opuntia spp.</td>
</tr>
<tr>
<td>Cholla</td>
<td>Opuntia spp.</td>
</tr>
<tr>
<td>Ocotillo</td>
<td>Fouquieria splendens</td>
</tr>
<tr>
<td>Fishhook Barrel Cactus</td>
<td>Ferocactus wislizenii</td>
</tr>
<tr>
<td>Saguaro</td>
<td>Carnegiea gigantea</td>
</tr>
</tbody>
</table>

b. Federally Listed and Threatened Endangered Plant Species:
Arizona Game and Fish Department’s Heritage Data Management System indicates that the following species may potentially occur in the vicinity of the project:

<table>
<thead>
<tr>
<th>Species</th>
<th>Botanical Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pima Pineapple Cactus</td>
<td>Coryphantha scheeri var. Robustispina</td>
</tr>
<tr>
<td>Needle Spine Pineapple Cactus</td>
<td>Echinomastus erectocentrus var. Erectocentrus</td>
</tr>
<tr>
<td>Chihuahuan stickseed</td>
<td>Hackelia urisina</td>
</tr>
<tr>
<td>Mock Pennyroyal</td>
<td>Hedeoma dentatum</td>
</tr>
<tr>
<td>Tumamoc Globeberry</td>
<td>Tumamoca macdougallii</td>
</tr>
<tr>
<td>Sonoran Noseburn</td>
<td>Tragia laciniata</td>
</tr>
</tbody>
</table>

A thorough inventory of site vegetation in accordance with the Pima County Plant Preservation Ordinance will be completed prior to any site disturbance. The Arizona
PART I: SITE INVENTORY & ANALYSIS

Department of Agriculture database indicates the potential occurrence of plant species regulated by the Arizona Native Plant Law. The Arizona Department of Agriculture will be notified in writing prior to any site clearing as required by Arizona State Law. The Specific Plan site is subject to the Pima County Riparian Habitat Protection Ordinance and wash vegetation will be protected in accordance with the ordinance requirements.

c. Vegetative Values:
Portions of the wash network are classified as xeroriparian habitat “C” by Pima County’s Riparian Habitat Regulations. Xeroriparian habitats are associated with intermittent water supplies. These habitats provide the highest vegetative values within Santa Rita Mountain Ranch.

Many site washes are identified as containing riparian habitats both linked and not linked to protected areas in Shaw’s Critical and Sensitive Wildlife Habitats of Eastern Pima County. No areas of significant vegetative value exist outside of the wash network. The Vegetation and Wildlife exhibit identified the areas of greatest value.

The site is dotted with saguaros and ocotillo. There are no identifiable “clusters” of either of these species. Both saguaros and ocotillo add to the character of the upper Sonoran Desert character. Both plant types have shallow lateral branching root systems and may tend to compete when growing close to each other. Development of the area will comply with Pima County’s Plant Preservation and Mitigation requirements, primarily through the set-aside method. The plan will provide standards in “Volume II: Development Regulations” to transplant and/or preserve native plant materials to maintain the character of the region.

2. Vegetative Densities:
Vegetation densities refer to canopy coverage of trees and larger shrubs. Trees and shrubs have more screening/buffering and scenic value than smaller shrubs and ground cover. Calculations were measured from aerial photographs and verified during on-site inspection. Smaller shrubs and ground covers were not included in the calculations. The site was evaluated using these three categories of vegetative density based on the percentage of canopy cover.

- Low  0% - 35%
- Medium  36% - 65%
- High  66% - 100%

The canopy coverage for the entire site is low density, with the washes supporting a slightly denser canopy. No areas of medium or high vegetative cover exist on the site. See Vegetation and Wildlife exhibit.
PART I: SITE INVENTORY & ANALYSIS

Vegetation & Wildlife

- Xeroriparian "C"
- Major extension of riparian habitat from protected areas
- Major Segments of riparian habitat not linked to protected areas

Note: Entire site is low density, undisturbed Arizona upland subdivision of Sonoran Desert scrub vegetative community.
PART I: SITE INVENTORY & ANALYSIS

F. WILDLIFE

1. Letter from Arizona Game and Fish Dept:

   a. State-listed Threatened or Endangered Species:
      A letter from the Arizona Game and Fish Department provides an attachment which lists the following special status species as being known to occur within the vicinity of the project. See Arizona Game and Fish Letter.

      Mexican Long-tongued Bat  
      Lesser Long-nosed bat  
      Choeronycteris mexicana  
      Leptonycteris curasoae yerbasuenuae

      Santa Rita Mountain Ranch falls within Zone 2 of the Cactus Pygmy-Owl Survey Zones.

   b. Density/Diversity of Species:
      A site visit did not reveal high densities or unusual diversities of any wildlife species on the site.

   c. Aquatic or Riparian Ecosystems
      Portions of the site wash network have been categorized as xero-riparian habitat "C" according to the Riparian Habitat Regulations in Article X of the Pima County Floodplain and Erosion Hazard Management Ordinance. Riparian ecosystems exist onsite according to Pima County's Critical and Sensitive Wildlife Habitats map (1986). These are classified as either extensions of riparian habitat connected to protected areas or major segments of riparian habitat not linked to protected areas. Both support desert wildlife and provide routes for animal movement. See Vegetation and Wildlife exhibit for habitat details.

   d. Pygmy Owl Survey
      Three survey passes were conducted for the cactus ferruginous pygmy-owls during the time period of February 15 to June 15, 2001 when the owl is most active. The results of the surveys were negative; no cactus ferruginous pygmy-owls responded to broadcast calls. For a detailed report see Appendix.

   e. Priority Vulnerable Species Habitat Assessment
      The 6 vulnerable species identified as potentially occurring on the property are presented in Table 1. Because some of these species are listed as endangered and protected by the Endangered Species Act (ESA) of 1973, as amended, further consultation with the U. S. Fish and Wildlife Service (USFWS) may be required.
Part 1: Site Inventory & Analysis

Table 1. Priority vulnerable species with potential of occurring on Santa Rita Mountain Ranch, Pima County, Arizona.

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Status</th>
<th>Likelihood of</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pima pineapple cactus</td>
<td>Coryphantha scheeriv. robustispina</td>
<td>LE, HS</td>
<td>High</td>
</tr>
<tr>
<td>Lesser long-nosed bat</td>
<td>Leptonycteris curasoae</td>
<td>LE, WC</td>
<td>Medium</td>
</tr>
<tr>
<td>Mexican long-tongued bat</td>
<td>Choeronycteris mexicana</td>
<td>SC, WC</td>
<td>Low to Medium</td>
</tr>
<tr>
<td>Needle-spined cactus</td>
<td>Echinomastus</td>
<td>SC, SR</td>
<td>Low to Medium</td>
</tr>
<tr>
<td>Swainson’s hawk</td>
<td>Buteo swainsoni</td>
<td>SC, WC</td>
<td>Medium to High</td>
</tr>
<tr>
<td>Rufous-winged sparrow</td>
<td>Aimophila carpalis</td>
<td>MB</td>
<td>Medium to High</td>
</tr>
</tbody>
</table>

*Status Definitions*

LE Listed Endangered. Species identified by the USFWS under the Endangered Species Act as being in imminent jeopardy of extinction.

SC Federal Species of Concern. The term “Species of Concern” should be considered as a term-of-art that describes the entire realm of taxa whose conservation status may be of concern to the USFWS, but the term has no official status (currently all former C2 species).

WC Wildlife of Special Concern in Arizona. Species whose occurrence in Arizona is or may be in jeopardy, or with known or perceived threats or population declines, as described by the Department’s listing of Wildlife of Special Concern in Arizona (WSCA, in prep.). Species included in WSCA are currently the same as those in Threatened Native Wildlife in Arizona (1988).

HS Highly Safeguarded. Those Arizona native plants whose prospects for survival in this state are in jeopardy or are in danger of extinction, or are likely to become so in the foreseeable future, as described by the Arizona Native Plant Law (1993).

SR Salvage Restricted. Those Arizona native plants not included in the Highly Safeguarded Category, but that have a high potential for theft or vandalism, as described by the Arizona Native Plant Law (1993).

MB Migratory Bird. It is unlawful to take, possess, buy or sell a bird listed as a migratory bird under the Migratory Bird Treaty Act of 1918.

Pima Pineapple Cactus (LE, HS): Populations of the Pima pineapple cactus (*Coryphantha scheeriv. robustispina*) are known to occur in southern Arizona, south of Tucson in the Altar and Santa Cruz valleys, with the highest known densities occurring around Green Valley, Arizona. The cactus is typically found along ridges in semi-desert grasslands and alluvial bajadas that are comprised of granitic material in Sonoran desertscrub plant communities (Pima County 2001, Roller 1996). They are most abundant within the ecotone between the grassland and desert scrub biomes (Roller 1996).

Conducting protocol surveys (Roller 1996) for the Pima pineapple cactus over the entire property will occur prior to any ground disturbance activities. Surveys for Pima pineapple cacti are conducted by establishing multiple, criss-crossing belt transects across identified
potential habitat with surveyors 4–6 meter apart. While transplantation of this species is possible, in situ preservation offers the greatest degree of conservation value. Therefore, all development on the property will be configured in a manner that disturbs the least number of these plants as possible. When disturbance is unavoidable, all Pima pineapple cacti will, to the extent practicable, be transplanted into suitable adjacent habitat following transplantation recommendations and guidelines provided by the USFWS. Additional mitigation required by Pima County and/or the USFWS may include purchasing and conserving Pima pineapple cactus habitat elsewhere. Mitigation will occur prior to or at the time of any development.

Lesser Long-nosed Bat (LE, WC): The lesser long-nosed bat (LLNB) (Leptonycteris curasoae verbauenenae) occurs in semi-desert grasslands and Sonoran desertscrub from the southern United States to Northern Mexico and is typically associated with its primary food source: flower nectar and fruit of columnar cacti and flower nectar of certain agave plants (Pima County 2001). Because of the seasonal nature of their food source, LLNB must migrate to follow the flowering and fruiting of these plants. In addition to food availability, there must be suitable roosting sites within commuting distance of the food source, typically no more than 40 miles.

Based on the property’s habitat components, in particular the presence of saguaro cacti, and the inclusion of the property in Priority Conservation Area 2 for this species, as indicated in the Priority Vulnerable Species report by Pima County (2001), there is a medium likelihood of LLNB occurring on the property.

Proximity to humans does not necessarily pose a threat to this species (USFWS 1995). However, a significant threat to the LLNB is loss of food plants, therefore, development on the property will be configured in a manner that disturbs the least amount of saguaro cacti as possible. When disturbance is unavoidable, all viable saguaro cacti will be transplanted into suitable adjacent habitat. Habitat for the LLNB will be enhanced on the property by planting supplemental saguaro cacti and agaves, provided they are mature enough to produce flowers and fruit.

Mexican Long-tongued Bat (SC, WC): The Mexican long-tongued bat (MLTB) (Choeronycteris mexicana) is known from the canyons of mixed oak-conifer forests in mountain ranges surrounded by desert and also from semi-desert grasslands (Pima County 2001). This bat feeds on the nectar and pollen of saguaro cacti and certain agaves. This species requires caves, inactive mines, unoccupied buildings, or wide rock crevices for use as day and night roosts, however its distribution does not appear to be limited by roost availability. Most known roosts are in areas near water and riparian vegetation (Pima County 2001).

Santa Rita Mountain Ranch is not included in any Priority Conservation Areas for this
species. However, based on the presence of saguaro cacti on the property and known locations of this species in the Santa Rita Mountains, there is a low to medium likelihood of the MLTB occurring on the property.

As with the LLNB, the MLTB relies on a consistent food source. Therefore, development on the property will be configured in a manner that disturbs the least amount of saguaro cacti possible. When disturbance is unavoidable, all viable saguaro cacti will be transplanted into suitable adjacent habitat. Habitat for the MLTB will be enhanced on the property by planting supplemental saguaro cacti and agaves that are mature enough to produce flowers and fruit.

Needle-spined Pineapple cactus (SC, SR): The needle-spined pineapple cactus (NSPC) (Echinomastus erectocentrus erectocentrus) is found in Sonoran desertscrub and semi-desert grasslands on alluvial fans and hills on southern and western exposures (Pima County 2001). No population trend information for the NSPC is currently known and the most pressing management need for this species is the acquisition of more information on distribution and demographics.

Based on the property’s habitat components and the inclusion of the property in Priority Conservation Area 3 for this species (Pima County 2001), there is a low to medium likelihood of NSPC occurring on the property.

Conducting surveys for this species concurrent with surveys for the Pima pineapple cactus is intended to occur. The success of transplantation of this species is unknown. Therefore, all development on the property will, to the extent practicable, be configured in a manner that disturbs the least number of NSPC as possible. When disturbance is unavoidable, all NSPC should be transplanted into suitable adjacent habitat.

Swainson’s Hawk (SC, WC): In Arizona, the Swainson’s hawks (Buteo swainsoni) breed in suitable open grassland habitats and open Sonoran desertscrub that sustains a grassland component (Gliński and Hall 1998). Swainson’s hawks typically soar low to the ground over open areas hunting for their prey, which includes rodents, rabbits, and reptiles. Unlike other hawks, this species is almost exclusively insectivorous when it is not breeding (England et al. 1997). In Arizona, this hawk’s nests are usually composed of sticks and located in a saguaro cactus or yucca, or on a cliff.

The shift of grasslands into scrub-shrublands in the southwest has likely altered this species breeding range. Habitat loss, degradation, and fragmentation may further contribute to the decline of this species.

Based on the property’s habitat components and the inclusion of the property in Priority
PART I: SITE INVENTORY & ANALYSIS

Conservation Area 1 for this species (Pima County 2001), there is a medium to high likelihood of Swainson's hawks occurring on the property.

Swainson's hawks would likely use Santa Rita Mountain Ranch for foraging and nesting. Therefore, compatible development of the property will preserve unfragmented areas of native vegetation (to support its prey species), as well as cacti and trees capable of supporting nesting structures. Suitable habitat on the property will be enhanced by planting additional saguaro cacti and mesquite trees that are capable of supporting nest structures.

Rufous-winged Sparrow (MB): Rufous-winged sparrows (*Aimophila carpalis*) use flat or gently hilly Sonoran desertscrub characterized by scattered spiny trees and shrubs. Grasses also are an essential habitat component and their territories typically include some riparian habitat. During the breeding season, this species forages on caterpillars, grasshoppers, and grass and forb seeds. This species was once considered extirpated from the state, but is now considered relatively widespread wherever habitat conditions are appropriate.

Based on the property's habitat components and the inclusion of the property in Priority Conservation Area 1 for this species (Pima County 2001), there is a medium to high likelihood of rufous-winged sparrows occurring on the property. Because the most significant threat to this species is loss of habitat, preserving native vegetation on the property to the greatest extent possible, particularly the grassland and riparian components, will serve to retain its presence on the site. Careful consideration will be given to enhancement and restoration of native grasses.
PART I: SITE INVENTORY & ANALYSIS

I.E.1: ARIZONA GAME AND FISH LETTER

Ms. Windell
May 10, 2001

Federal/State Regulatory Compliance:

The following measures that relate to Federal/State regulatory compliance should be applied when appropriate:

- It appears that the subject parcel falls within Zone 2 of the Gila Boundary Property Chief Survey Zone. Apply the Guidance for Private Landowners from the U.S. Fish & Wildlife Service (USFWS) and contact them as appropriate. The Landowner Guidance and accompanying information can be found in the Documents Library section of the USFWS website (https://www.fws.gov/.
- Also, contact the USFS for information pertaining to other federally owned lands (e.g., Parks, preserve areas and some long-lot lands) that may have potential to occur on the subject parcel.
- If plants protected under the Arizona Native Plant Law are likely to occur on the subject parcel, contact the Arizona Department of Agriculture for additional information regarding potential mitigation which may apply to the salvage or removal of plant species.

Sherry Barrett, USFWS, Native Plant Services, Tucson Office, 551 N. Congress Rd, Tucson, AZ 85711

Special Status Species within 5 Miles of T17S,R1SE Sec. 15, 21, 22, 26, 27, 28

Arizona Game and Fish Department, The Zone Management Project

April 20, 2001

No endangered species are protected by AGFD Title 15 (CF, Frye's, and Craftsman's Tame)

SUBJECT SPECIES:

LT - Listed Threatened. Species deemed to be at risk of being listed as Threatened under the Endangered Species Act (ESA) or at risk of extinction within the state. Species listed as LT are not currently threatened or endangered.

ST - Sensitive. Species that are of special concern to the Arizona Game and Fish Department. The species have not been listed as Threatened or Endangered under the ESA and are not currently considered to be in danger of extinction within the state. The Department encourages habitat preservation and restoration of these species.

LPT - Listed Plant Threatened. Species deemed to be at risk of being listed as Threatened under the Endangered Species Act (ESA) or at risk of extinction within the state. Species listed as LPT are not currently threatened or endangered.

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PART I: SITE INVENTORY & ANALYSIS

G. SOILS

1. Soils Testing:
   No site specific soils testing has been done at this time. Soil characteristics of
   permeability, shear strength, compaction, expansion, drainage, and shrink/swell are critical
   in planning and engineering design. These characteristics reveal soil suitability for
   structural integrity.

   Natural Resource Conservation Services files indicates several common soil types for the
   site. These alluvial soils range from sandy loam to gravelly loam to very gravelly sandy
   loam. All are well drained with moderate or better permeability. The soils located on the
   project site pose no special or unusual impediments to the proposed development

2. Septic Suitability:
   This soil type is suitable for septic systems.

H. VIEWSHEDS

1. Off-site Views:
   Since the property slopes gently down from southeast to northwest, only a few of the
   residences located to the northwest of the property may have their views of the Santa
   Rita Mountain Range impacted. The development can be viewed from areas beyond
   adjacent properties due to the increase in slope when looking south. Certain views of the
   development from Houghton Road, will be blocked by existing development. See Viewsheds
   exhibit for off-site views that will possibly be affected.

   a. Onto and Across from Adjacent Properties:
   Views and vistas from adjacent properties across the project site are a function of the
   topography, vegetative characteristics, and the distance/expanse of the vista.

   Views onto and across the site from adjacent properties include distant vistas to the
   Santa Catalinas, Santa Rita and Rincon Mountains. These distant vistas will be minimally
   impacted due to the site topography falling to the northwest.

   b. Views and Vistas from Beyond Adjacent Properties:
   Views and vistas from beyond adjacent properties are similar to those of the adjacent
   properties. Distant vistas will not be obscured by the proposed project. Viewers looking
   south will see portions of the development due to the property's northwesterly aspect.
   The proposed development will not impair or affect views to the mountains from public
   roadways within a one mile radius, although portions of the site will be visible in the
   foreground from some locations.
2. On-site Visibility from Off-site:

On-site visibility as seen from nearby off-site locations was determined from topographic maps and verified by field investigation. Topography, distance, and vegetation (screening ability of plants) greatly determine on-site visibility.

Three (3) viewpoints were selected along the following public rights-of-way:
1. one (1) point along Sahuarita Road to the north of the site,
2. one (1) point along Gabler Lane, near the southern end of the east,
3. one (1) viewpoint along Harrison Road to the east of the site.

Topography limits the site visibility. There are areas of low, medium, and high visibility. The criteria determining ranges of visibility are as follows:

- High Visibility: Areas that can be seen from three viewpoints.
- Medium Visibility: Areas that can be seen from two viewpoints.
- Low Visibility: Areas visible from one viewpoint.
I. TRAFFIC

1. Existing and Proposed Off-site Streets:

   The project site is served by Sahuarita Road and Houghton Road. These are both
designated as major scenic routes on the Pima County Major Streets and Scenic Routes
Plan. Houghton Road provides access to Interstate 10 (I-10), about 8 miles north of
Sahuarita Road and continues north into the City of Tucson. Sahuarita Road connects to
Interstate 19 (I-19) about 15 miles west of Houghton Road and to State Route 83 (SR
83) about 6 miles east of Houghton Road. These two major roadways provide primary
access to the regional transportation system and to major employment centers located
along I-10 and I-19 and the mines in Sahuarita. The project is located in an area that is
comprised mostly of state-owned land that is not expected to be released for development
in the near future. While the project proposes limited consumer services within the
development, residents of the development will travel primarily to Tucson and Sahuarita for
employment and shopping. Existing Circulation exhibit provides detail of the roadways
surrounding the project site and identifies the designated major streets included on the
MS&SRP.

   a. Existing Right-of-Way

   Table 1 identifies the existing and required right-of-way width on roadways surrounding the
project. Houghton Road south of Sahuarita, Camino del Toro east of Harrison, and
Camino Aurelia east of Harrison all meet the width requirements of the MS&SRP.

   According to the plan, an additional 75 feet is required along Harrison Road. The east 75
feet have been dedicated by subdivision plats. Sycamore Springs, located directly north of
the project was recently recorded in Book 53, Page 22, M&P and dedicated 15 feet for the
west half of Harrison Road, bringing the total width to 90 feet. This project also
dedicated 150 feet for the south half of Sahuarita Road, bringing the total width of
Sahuarita Road to 225 feet along the front of this subdivision. Vail-Helvetia Road is an
unimproved roadway that traverses the east side of the project site.
### Table 1: Roadway Inventory

<table>
<thead>
<tr>
<th>Roadway</th>
<th>Route</th>
<th>Scenic</th>
<th>RW Width</th>
<th>MS&amp;SRP Width</th>
<th>No. Lanes</th>
<th>Divided Facility</th>
<th>Bike/Ped Facility</th>
<th>Speed Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sahuarita Road</td>
<td>Houghton Road to Camino Seco</td>
<td>Y</td>
<td>150 - 225</td>
<td>300</td>
<td>2</td>
<td>No</td>
<td>No</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>East of Houghton Road</td>
<td>Y</td>
<td>150</td>
<td>300</td>
<td>2</td>
<td>No</td>
<td>No</td>
<td>50</td>
</tr>
<tr>
<td>Houghton Road</td>
<td>Camino Aurelia to Sahuarita Road</td>
<td>Y</td>
<td>N</td>
<td>150 - 200</td>
<td>120</td>
<td>2</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Sahuarita Road to Interstate 10</td>
<td>Y</td>
<td>Y</td>
<td>150</td>
<td>200</td>
<td>2 - 3</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Harrison Road</td>
<td>Camino Aurelia to Sahuarita Road</td>
<td>Y</td>
<td>N</td>
<td>75 - 90</td>
<td>150</td>
<td>Unimproved Road</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camino del Toro</td>
<td>Houghton to Harrison</td>
<td>Y</td>
<td>N</td>
<td>150</td>
<td>150</td>
<td>Unimproved Road</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camino Aurelia</td>
<td>Houghton to Harrison</td>
<td>Y</td>
<td>N</td>
<td>150</td>
<td>150</td>
<td>Unimproved Road</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camino Seco</td>
<td>Camino Aurelia to Sahuarita Road</td>
<td>Y</td>
<td>N</td>
<td>None</td>
<td>150</td>
<td>No existing R/W</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b. **Major Streets and Scenic Routes Plan**

The MS&SRP shows that Camino del Toro and Camino Aurelia are to be extended west through the subject property to the Camino Seco alignment and Camino Seco is to extend north to Sahuarita Road. All of these roadways are designated as 150-foot roads.

c. **Alternate Modes**

There are no bike routes or public bus routes currently available in the area, although Sahuarita Road is used regularly as a cyclist training route, and by recreational riders.

d. **Current Traffic Volumes and Level of Service**

Level of service (LOS) is a qualitative description of how well a roadway operates under prevailing traffic conditions. A grading system of A through F, similar to academic grades, is utilized. LOS A is free-flowing traffic, whereas LOS F is forced flow and extreme congestion. The region has adopted the LOS assessment methods prepared by the Florida Department of Transportation, as incorporated in the Pima Association of Governments Mobility Management Plan. The regionally-adopted performance standard is LOS D for up to two hours during peak traffic periods on typical weekdays.

All existing roads and intersections within the study area are operating at LOS C or better. The following table, Table 2 provides the current Average Daily Traffic (ADT) and the LOS on the major roadways.
PART I: SITE INVENTORY & ANALYSIS

Table 2: Current Traffic Volumes and Level of Service

<table>
<thead>
<tr>
<th>Road Segment</th>
<th>ADT</th>
<th>Source</th>
<th>Date</th>
<th>Capacity</th>
<th>LOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sahuarita Road west of Houghton Rd</td>
<td>3,000</td>
<td>Pima County</td>
<td>12/00</td>
<td>13,500</td>
<td>C/+</td>
</tr>
<tr>
<td>Sahuarita Road east of Houghton Rd</td>
<td>2,000</td>
<td>Pima County</td>
<td>11/00</td>
<td>13,500</td>
<td>C/+</td>
</tr>
<tr>
<td>Houghton Road north of Sahuarita Rd</td>
<td>3,400</td>
<td>Pima County</td>
<td>11/00</td>
<td>13,500</td>
<td>C/+</td>
</tr>
<tr>
<td>Houghton Road south of Sahuarita Rd</td>
<td>1,600</td>
<td>Pima County</td>
<td>11/00</td>
<td>13,500</td>
<td>C/+</td>
</tr>
</tbody>
</table>

\( C/+ = C \) or better

J. SEWERS & WATER

1. Letter from Pima County Department of Wastewater Management:
   A letter from Pima County Wastewater Management states there is capacity for the development in the downstream sewerage system. Pima County Wastewater Management will provide sewer service: The Developer will need to construct some offsite and onsite sewers. If a Sewer Service Agreement (SSA) is desired, a request for public sewer extension would be required. See Wastewater Letter.

2. Location of Existing Public Sewers:
   Sewer exists in the area in a 12-inch line in the Harrison Road right-of-way just north of the site. The location of the public sewer is shown on Sewer exhibit.

3. Water:
   The site lies within the Tucson Water Service area. There are existing water lines in the Harrison Road right of way north of the site.

K. SCHOOLS

1. Existing/Proposed Schools:
   The site falls within the Vail School District, and will be serviced by the Vail schools. Currently there are no public schools located on or within one mile of the Santa Rita Mountain Ranch property.

2. Schools Outside One-Mile Radius:
   Mesquite Elementary is located twelve miles north of the site on Rita Rd. Old Vail Middle School and Cienega High School are located on E. Colossal Cave Road, seven miles north and five miles east of the site. The Vail School District is currently constructing new school facilities and anticipates changing enrollment figures with the summer 2001 opening of new elementary, middle and high schools. Cienega High will be the first high school in the district. Currently, high school students attend high school outside of the district. Vail schools operate on a multi-track system, with each student on one of four attendance tracks, reducing the total numbers of students on campus at any one time.
PART I: SITE INVENTORY & ANALYSIS

A new elementary school site is projected for construction in the Corona de Tucson area by 2004. Santa Rita Mountain Ranch has an agreement with the Vail School District to make a voluntary fee contribution for each new residence constructed.

Below is a table of the projected capacity and enrollment for Elementary, Middle, and High School. Current enrollment numbers at Mesquite Elementary and Old Vail Middle are expected to drop by a small amount with the opening of the new facilities. Cienega High School numbers are projected enrollment in fall of 2001.

Table 3: School Capacities

<table>
<thead>
<tr>
<th></th>
<th>Mesquite Elementary School</th>
<th>Old Vail Middle School</th>
<th>Cienega High School*</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrolled**</td>
<td>847</td>
<td>775</td>
<td>400*</td>
<td>2022</td>
</tr>
<tr>
<td>Capacity</td>
<td>623</td>
<td>816</td>
<td>1650</td>
<td>3089</td>
</tr>
<tr>
<td>Vacancy**</td>
<td>-</td>
<td>41</td>
<td>1250</td>
<td>1291</td>
</tr>
</tbody>
</table>

*Projected enrollment when Cienega High opens in fall of 2001.
**Multi-track system reduces student numbers on campus at any one time.

1. RECREATION AND TRAILS

1. Parks, Recreation Areas, and Adopted Public Trails:
   Although there are currently no parks or recreation areas on or within one mile of the property, both the Coronado National Forest and the Santa Rita Experimental Range lie within the one mile buffer. The National Forest land offers a variety of recreational activities such as nature studies, birdwatching, hiking, hunting, biking, and camping. There are two proposed trails that are within a mile radius of the property as mapped from the Eastern Pima County Trails System Master Plan. Although the trails haven't been fully developed they offer connections to a variety of recreational nodes in the region. See Recreation exhibit for park and trail locations.

2. Proposed Trail Rights-of-Way:
   The Sahuarita (#70) and Houghton Road (#65) trails are proposed trails within the designated right-of-way in the Eastern Pima County Trails System Master Plan.
Dear Ms. Diaz:

We have reviewed the recent submittal regarding the availability of sewer service for the following proposed use and property:

A residential development of approximately 1500 dwelling units on 1500 acres west and south of Corona de Tucson, within T17S, R15E Sections 15, 22 and 27.

Under existing conditions (actual developments and commitments for service through approved Sewer Service Agreements), there is capacity for this proposed development in the existing 18-inch diameter sewer located within Section 15, approximately 3/4 of a mile from the site. The capacity within a 12-inch diameter sewer east from the 18-inch diameter sewer and in Harrison Road was designed to serve an area east of Harrison Road; connection to that line would create the need for augmentation of part or all of the 12-inch. There is capacity in the existing wastewater treatment facility (WWTF) within Section 10, but not much extra if this were fully developed. There are also other proposed developments in this basin which could get a higher, or equal, priority for the capacity within the treatment facility.

This response is not to be construed as a commitment for capacity allocation, but rather an analysis of the existing sewerage system as of this date.

Should you desire to enter into a Sewer Service Agreement, a Development Plan or Tentative Plat, showing the preliminary sewer layout for the proposed project, must be submitted and approved. Public sewers will be required by Wastewater Management in order to serve upstream parcels.

Should you desire additional information regarding this subject, please contact this office (740-6547).

Very truly yours,

Glenn W. Hitz, P.E.
Civil Engineer

Copy:  Bob Decker       Steve Magelli
       Capacity Response File/171522
M. CULTURAL/ARCHAEOLOGIC/HISTORIC RESOURCES

1. Letter from Arizona State Museum:
   A review of Archaeological Site Survey Files indicate no archaeological survey projects have been conducted on the site, nor have any sites been reported. The Arizona State Museum recommends that if cultural remains are found that a data recovery program be done by a qualified archaeologist. See Arizona State Museum Letter.

2. Archaeology Report:
   An archaeological survey was conducted on 840 acres of land in portions of Sections 15 and 21 and all of Section 22. The survey was conducted by Pima Community College Centre for Archaeological Field Training on June 11 through 15, 2001. There were no surface indications of archaeological sites on the property that met the Arizona State Museum minimum standard for recording as an archaeological site or that would be eligible for inclusion in the National Register of Historic Places. The survey report (PCCAC No. 00-04) will be submitted to the Arizona State Museum for registration. For a detailed report see Appendix.

3. Future Surveys
   An archaeological survey of the remaining portions of the property will be conducted at the time of, or prior to, the submittal of any tentative plat or development plan. Should archaeological sites or historic resources be found, a mitigation plan shall be prepared and reviewed as described in the Pima County Site Analysis Requirements.

N. AIR QUALITY

   The proposed development will not include any industrial facilities and no air quality data has been collected.

O. COMPOSITE MAP

   The Composite Map shows the cumulative constraints that apply to the site based on the previous exhibits concerning topography, hydrology, visibility, vegetation, wildlife, and viewsheds. The analysis indicates that topography, hydrology, vegetation, and wildlife all overlap within the natural drainage network. See Composite Map.
PART I: SITE INVENTORY & ANALYSIS

Legend

- Site Boundary
- Eastern Pima County Trails Master Plan
- Streets
- Federal/State Open Space

SANTA RITA EXPERIMENTAL RANGE AND WILDLIFE AREA
CORONADO NATIONAL FOREST

Recreation

Sahuarita Greenway (Trail #15)
Sahuarita Road
Houghdon Greens
Sahuarita Rd
DAMINO RD
DAMINO MILE
SAHUARITA RD

1 Mile Radius
Buffer Overlay Zone Boundary

Santa Rita Mountain Ranch Specific Plan
Page 1-33
January 5, 2000

Ms. Alece Otero/Project Manager
PLANNERS INK
240 North Court Avenue
Tucson, AZ 85701

Dear Ms. Otero:

Thank you for your letter of December 29, 1999 requesting an archaeological site file check for property located at T17S R15E Secs 15 (SE4), 21 (E2), 22 (all), 26 (SW4), 27 (all), and 28 (NE4). This is in conjunction with your proposed project to the southwest of Corona de Tucson.

The Archaeological Site Survey Files at the Arizona State Museum have been consulted with the following results. There have been no archaeological survey projects conducted on the subject property, nor have any sites been reported. Based on what is known of the general area, there is a high degree of potential for the recovery of cultural remains. Therefore, the State Museum recommends that an on-the-ground survey be conducted on this property prior to any ground modification activities. In the event that cultural remains are found, then a data recovery program (which may include: monitoring, testing, and/or excavation) will be required of those areas impacted by the development. Clearance on this property would not be recommended until after archaeological investigations have been completed by a qualified (based on standards established by the State Historic Preservation Office) archaeologist.

If you have any questions please feel free to contact me at 621-4011. An invoice will be mailed out next week for this file check.

Sincerely,

Sharon F. Urban (Miss)
Public Archaeologist
PART I: SITE INVENTORY & ANALYSIS

Composite Map

- Steep Slopes > 15%
- High Visibility
- 100 year floodplain
- Xeroriparian "C"
- Major extension of riparian habitat from protected areas
- Major Segments of riparian habitat not linked to protected areas
- Sheet Flooding

Note: Darker areas represent overlap of two or more features
PART II: DEVELOPMENT IMPACT ANALYSIS

DEVELOPMENT IMPACT ANALYSIS

A. DEVELOPMENT PURPOSE AND INTENT

Santa Rita Mountain Ranch Specific Plan area is conceived to incorporate elements of community sustainability and livability. This Specific Plan is refocusing development and regulations to look at the immediate environment as an investment for the future and how we define the importance of community. In the Santa Rita Mountain Ranch community, this includes the co-existence of the built environment in the natural setting and being aware of how the built environment can benefit the ecosystem of the desert in a positive manner.

Residential clusters are connected to an internal pathway system. The pathway networks into the regional Pima County system. Pedestrian systems are also linked to roadway and bicycle systems. Destination points along the pathway include linking neighborhoods to the Village Center for recreational, commercial and community activities.

Santa Rita Mountain Ranch sets out to utilize the best practices regarding sustainable development. It is a mixed land-use community entailing commercial, housing, recreation and infrastructure development. The physical form of the development is about neighborhoods that encourage social interaction, pedestrian-friendly roadway systems that promote alternative modes of transportation, structural forms that efficiently utilize renewable resources through solar, water conservation, and natural open space corridors that enhance wildlife habitat and movement through the development.

B. GOALS

The development plan is the result of thorough site research and analysis. It resolves development related issues in the form of proposed physical improvements, guidelines for future development, technical information and regulations. Recognizing the importance of respecting this “place”, connecting to the environment and creating a sustainable community, the following objectives are developed for this project:

- To provide a balanced range of land uses, allowing for a wide range of development opportunities (including significant areas of natural open space).
- To create a sense of place in the community through physical design, land use, intentional design recommendations and unifying the theme through landscape architecture.
- To integrate clusters of built environment with contiguous open space corridors throughout the community.
- To utilize the drainageways as a community amenity for recreation and open space.
- Within the core of the development is the Village Center comprised of uses such as a market, specialty retail, cafe, offices, community meeting rooms, central post office boxes, a community park, and residential live/work units. The village center is accessible via roadways and pathways from all areas of the community.
From the Village Center, the Plan proposes six neighborhoods with rural characteristics. The residential densities range from 2.5 residences per acre to one house per ten acres. The intent of the general range of housing types can be depicted from the descriptive cluster of village lots, rural lots, and estate lots.

1. Natural, Biological & Cultural Resource Plan

The Natural, Biological & Cultural Resource Plan includes wildlife habitat, vegetation communities cultural resource elements. The Specific Plan provides large contiguous open space areas preserving the biotic and scenic characteristic of the region. The natural drainage ways ribboning through the property will be left in their natural state. The widest drainage way traverses, diagonally from the southeast to the northwest corners. There are five other smaller tributaries paralleling the larger wash. These drainage ways provide contiguous corridors for both wildlife and trail development to connect residential neighborhoods with the community's village center. Wildlife values will remain high within these corridors when preserved and/or enhanced with restorative practices.

One of the goals for Santa Rita Mountain Ranch is to maintain the character of the region. One way to do this is to preserve and enhance indigenous vegetation. Vegetation strongly characteristic of the region will be preserved in place or transplanted on site. Examples of indigenous vegetation strongly defining the character of the Upper Sonoran Desert include Ocotilo and Saguaro.

A habitat assessment of the Santa Rita Mountain Ranch was conducted to determine the potential of occurrence for 56 priority vulnerable species listed in the draft Sonoran Desert Conservation Plan. Potentially, the property could support 6 vulnerable species: the Pima pineapple cactus, lesser long-nosed bat, Mexican long-tongued bat, needle-spined cactus, Swainson’s hawk, and rufous-winged sparrow. Because some of these species are listed as endangered and protected by the Endangered Species Act, further consultation with the USFWS may be required.

A common threat to all of these species is loss or fragmentation of habitat. Therefore, preserving large areas of native vegetation on the property will be accomplished through clustering development and allowing for large areas of connected open space. To enhance the benefit of these open spaces to wildlife, the development on the property is configured so that the largest areas of open space are near the southern boundary of the property, adjacent the Santa Rita Experimental Range. In those areas where development does occur, viable native vegetation will be transplanted and supplemented with additional like species, especially saguaro cacti, ocotillo, large mesquite trees, and agaves. Further limits will be placed, through Covenants, Conditions and Restrictions (CC&Rs), on the planting of non-native vegetation.

There are a number of strategies that will be implemented to conserve and regenerate habitat for the priority vulnerable species potentially occurring on the property. The first
strategy is avoidance of areas of high habitat value or known locations where the species are present. This will be accomplished through preserving 95% of the meso-riparian and riparian linkage areas, and setting aside contiguous areas of natural open space that will most benefit the species habitat requirements. This strategy is being implemented through the land use plan development regulations as defined in Volume II: Development Plan, which requires specific areas, primarily the riparian areas, to remain undisturbed through a Natural Open Space (NOS) development designator, a 1200' buffer to the Santa Rita Experimental Range, and additional NOS requirements within each land use planning area. When disturbance is unavoidable, the next strategy is to minimize the impact to the species by transplanting into suitable adjacent habitat or provide new mature plants capable of supporting the priority species’ requirements. On and off site mitigation will occur prior to or at the time of any development. The overall goal of the biological resource management plan is to increase habitat potential, through regenerative and permacultural development practices, by increasing water management of rainfall, wastewater and gray water sources, increasing capacity for soil-building and erosion-prevention, and re-introduction and restoration of native plant species that are beneficial to the priority species present. This will be accomplished through management of grasses and plants as required species in the landscape plant list, and development of swales, berms and check-dams on a local and sub-basin watershed basis to reduce runoff velocity and increase available water quantity.

An archeological survey for the northern portion of the site reveals no significant findings. The remaining portions of the Specific Plan area will be surveyed by a state permitted archaeologist. A mitigation plan will be prepared for each planning area of the Specific Plan area that contains archaeological sites or historic resources that Pima County determines are eligible for listing on the national Register of Historic Places. Requirements for preservation, protection, testing, date recovery or excavation, analysis, report preparation, and curation will be addressed as well as a schedule of implementation. The mitigation plan shall be reviewed and approved by the Pima County Cultural Resources Manager prior to implementation.

a. **Cactus ferruginous pygmy owl habitat**
   Three survey passes were conducted for the cactus ferruginous pygmy owls during the time period as required, when the owl is most active. The results of the surveys were negative; no cactus ferruginous pygmy owls responded to broadcast calls.

b. **Buffer Overlay Zone**
   The southern half of the Santa Rita Mountain Ranch (SRMR) Specific Plan area, approximately 800 acres, lies within one mile of the Santa Rita Experimental Range. The Santa Rita Mountain Ranch will meet or exceed the performance standards as of the Buffer Overlay Zone Ordinance (BOZO). No exceptions or variances to the BOZO are anticipated. The following Performance Standards for the BOZO as per 18.67.050 are addressed:
PART II: DEVELOPMENT IMPACT ANALYSIS

1. Building Color:
All exposed exterior walls and roofs of buildings, retaining walls, and accessory structures that are visible from outside the land parcel boundary, will be earthtone in color and shall blend in with the natural setting. Colors will not exceed a light reflective value of 60 percent. Mechanical equipment will be screened and painted to reduce visibility.

2. Fences and Walls:
   Height: A fence or wall will not exceed four feet in height unless it encloses an area of less than one-half acre, or a horse corral, dog kennel, swimming pool or spa.
   Location: A fence or wall will not be constructed to delineate property boundaries unless it is four feet or less in height. A fence or wall will not be constructed in a location or manner that impedes wildlife movement through natural open space from and to off-site locations.
   Barbed wire: Barbed wire fences, if utilized, will contain no more than four strand of wire. The bottom and top wires will be barbless and the middle wires may be barbed. The top wire will be no more than forty-eight inches from the ground surface, and the bottom wire shall be no lower than sixteen inches from the ground.

3. Lighting
   External lighting will be limited to that necessary to provide the functional requirements of safety, security and identification. High-pressure sodium and mercury vapor lighting are prohibited. Light standards for roads, parking lots, driveways and all other outdoor areas will not exceed forty-two inches in height, unless attached to a building, and will consist of bollard or other low-intensity, low profile type of lighting. Lighting will be spaced sufficiently to create isolated pools of light rather than a contiguous, saturated condition. Lighting for tennis courts and horse corrals will be exempt from the restrictions of subdivision 1, but shall conform to Chapter 15.12 (Outdoor Lighting Code) and shall be designed to minimize or eliminate the dispersal of refracted light. All lighting sources shall be fully shielded to reduce dispersal of ambient light.

4. Parking Lots
   Not applicable as there are no parking lots for nonresidential uses located within the BOZO area.

5. Setback
   The specific plan exceeds the 300' requirement by providing a 1200' buffer between any building and development areas and the Santa Rita Mountain Experimental Range.

6. Utilities
   All new or relocated utility lines will be placed underground, unless the relocated line is a one hundred fifteen kilovolt (or greater) transmission line. All utility lines relocated due to improvement projects shall be placed underground unless such relocated line is a forty-six kilovolt (or greater) transmission line. Location of underground utility and sewer lines shall be joint-trenched where possible, and located beneath the paved portions of roadways so
PART II: DEVELOPMENT IMPACT ANALYSIS

as to minimize vegetative disruption. When making upgrades and reinforcements to existing utilities, existing poles shall be used wherever possible to provide the required transition to underground service to new developments. Upgrades and reinforcements of existing overhead utilities are allowed to the extent that the total number of cables is not increased.

7. Vegetation
Only plants on the approved BOZO plant list will be planted outside private areas. All native species of cacti may be planted; and native species not on the approved plant list may be planted with the prior written approval of the planning director or authorized representative.

Private areas: Any plant not on the prohibited plant list may be planted in a private area, except for nonnative species of plant whose mature height may reasonably be expected to exceed the highest adjacent structure.

Common areas: Only those plants on the approved plant list, or approved pursuant to subdivision 2 of this subsection, shall be planted in recorded common areas. A landscape or revegetation them shall be established emphasizing the preservation and enhancement of native plant species. Natural open space common areas shall be further limited to on-site species. To the fullest extent possible, buildings and other improvements will be sited so as not to disturb native trees, shrubs or cacti. Where removal of this plant material cannot be avoided, all reasonable efforts shall be made to relocate this plant material into other areas located within the BOZO area. Nursery-grown native species may be planted in lieu of salvaging mature on-site material at a 3:1 ratio, however at least thirty percent of the on-site material will be salvaged when physical conditions permit. Should revegetation and replanting be necessary, only plant material listed in the approved plant list, or approved pursuant to subdivision 2, will be used in public, recreation, or common areas.

8. Trails Access
Public access to trails identified in the eastern Pima County trail system master plan will be reserved in subdivisions.

9. Washes
Washes identified on the critical and sensitive biological communities maps, and other washes identified by the criteria applied in the maps, will be left in their predevelopment state with the following exceptions:

1. Disturbance shall be permitted in association with roadway, utility and trail crossings, however:
   a.) Encroachment for these crossings shall not reduce the width of the critical and sensitive wash area by more than twenty percent at any cross-section of the critical and sensitive area.
   b.) Additional reduction may occur only where necessary to provide floodwater retention requested by the Pima County flood control district or to provide for larger drainage structures so as not to impede movement of wildlife as approved by the Arizona Game and Fish Department; and
c.) Erosion protection shall only be permitted within the critical and sensitive wash area to protect fill slopes required for roadway, utility and trail crossings. Erosion protection measures shall be designed so as to not hinder the movement of wildlife.

2. Mitigation plans for construction impacts:
   a.) Construction impacts may affect up to ten percent of the low-flow channel length where defined channels exist, or up to ten percent of the length of the centerline of flow where braided or undefined channels exist, provided that a mitigation plan for any construction impacts within the critical and sensitive wash area shall be submitted to the Pima County flood control district together with a site plan, tentative plat or development plan.
   b.) The mitigation plan shall reflect predevelopment wildlife habitat and visual conditions as a baseline, and provide for post-development replacement with species on the approved plant list.

9. Functional Open Space
   In areas where functional open space is provided in the BOZO area of the Specific Plan, it will be credited as natural open space at 50%.

10. Natural Open Space
    The Specific Plan meets and exceeds all of the natural open space requirements by preserving 80% of the land as natural open space. The natural open space forms an interconnected system of vegetation and wildlife corridors by preserving one hundred percent of the Class I habitat area. Boundaries of designated natural open space shall be surveyed and identified on a master subdivision plat. Minor alterations of the boundary may be allowed in a resubdivision of one or more lots of the master subdivision plat with the consent of the planning director provided that:
    a.) The new boundaries are surveyed and identified on the resubdivision plat
    b.) The resubdivision plat does not create any less total amount of natural open space than shown on the master subdivision plat
    c.) The performance standards are in no way diminished
    d.) No special condition of the Specific Plan is violated

11. Visual Quality Standards
    All development in areas identified as having high visual sensitivity, according to the procedures set forth in county site analysis requirements, shall have minimal visual impact. Development in these areas will be designed to be in harmony with the form, line, color, texture and scale of the existing landscape. All developments in areas identified as having medium visual sensitivity, shall remain in subordinate to the existing landscape when viewed in the middle ground. Development in these areas will also be designed to be in harmony with the form, line, color, texture and scale of the existing landscape. Nothing contained in the visual quality standards shall limit uses or lessen densities otherwise allowed, but may govern specific location and design of the development.

c. Hillside Development Overlay Zone
PART II: DEVELOPMENT IMPACT ANALYSIS

The Santa Rita Mountain Ranch Specific Plan will comply with grading requirements as specified in Pima County’s Hillside Development ordinance. There are no protected peaks or ridges within the Santa Rita Mountain Ranch Specific Plan area.

d. Watercourse and Riparian Habitat Protection and Mitigation Requirements
Contiguous segments of riparian habitat are critical for wildlife corridors traveling from large areas of undeveloped public lands. Drainageways mapped as Xeroriparian “C” on the Vegetation & Wildlife map, in the Site Inventory and Analysis section of the Specific Plan, will be preserved. Over 95% of the meso-riparian and riparian corridors will remain in their natural state. Minimal encroachment will occur at roadway crossings.

e. Pima County Comprehensive Plan
The proposed Santa Rita Mountain Ranch development area is in conformance with the Comprehensive Plan as amended to date.

2. Engineering Plan
The Engineering Plan includes those elements requiring infrastructure improvement such as roadways, public services (i.e., water, sewer, gas), grading, and hydrology. The intent is to integrate these features into the development with as minimal impact to the environment as possible and to enhance those areas where development disturbance and alterations are inevitable, such as at roadways and utility crossings.

a. Circulation
Primary vehicular access to the site will be provided from Sahuarita Road at the future intersection with Harrison Road, which will be the major access road into the project. Secondary access will be provided through the proposed new route that will extend northwesterly from the project site to connect to Sahuarita Road. Sahuarita Road currently exists as a two-lane paved roadway with a stop controlled intersection at Houghton road. If access is provided at Camino del Toro and Camino Aurelia, it is expected that site traffic on these roadways, and on Houghton road south of Sahuarita will be minimal. The proposed new route that will extend northwesterly to the western edge of the project where it will end in a cul-de-sac. This new route may eventually be extended to Sahuarita Road as development to the west occurs.

Based on the project’s proposal for approximately 1,200 single-family residential units, and commercial village center, projections for traffic general is about 9,100 trips on the off-site roadways during average weekday, 750 trips during the a.m. peak hour, and 620 trips during the p.m. peak hour (Institute of Transportation Engineers Trip Generation, 6th Edition, land use category 270 - Planned Unit Development). The trip rates associated with this category compensate for the internalization of trips within the community that are associated with the commercial services and the use of alternate modes of transportation within the development. Daily trips on the internal roadways may be higher than the daily trips generated on the off-site roadways. Distribution and site traffic assignment of the off-site traffic on the surrounding roadways is estimated as shown on
the following table.

Table 1: Site Traffic Distribution

<table>
<thead>
<tr>
<th>Location</th>
<th>Distribution</th>
<th>Daily</th>
<th>A.M. Peak</th>
<th>P.M. Peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>North on Houghton from Sahuarita</td>
<td>60%</td>
<td>5,450</td>
<td>370</td>
<td>450</td>
</tr>
<tr>
<td>West on Sahuarita from Harrison Road</td>
<td>30%</td>
<td>2,700</td>
<td>185</td>
<td>225</td>
</tr>
<tr>
<td>East on Sahuarita from Houghton</td>
<td>10%</td>
<td>910</td>
<td>60</td>
<td>75</td>
</tr>
</tbody>
</table>

The future daily traffic volumes and level of service of the roadways impacted by the project are estimated by adding the site traffic volumes to the existing volumes plus estimating regional growth, or background traffic on the roads.

Regional growth on the existing off site roadways is estimated at five percent per year for 10 years (assuming a ten-year build-out period). Future traffic on Harrison road and the new route (west of the site) is estimated at ten percent of the site traffic assignment on the road.

Under normal circumstances, background traffic on Harrison road would be estimated based on the undeveloped subdivisions located east of the project. However, legal issues have prevented development of these subdivisions, which were recorded in the mid-1960's and it is not expected that these issues will be resolved to allow development in the near future. Traffic from these subdivisions (containing about 2,000 single-family residential lots) would generate about 7,500 trips a day on Harrison Road (based on trip rate of 7.5 per day and distribution of 50% of daily trips on Harrison Road). These trips, added to the estimated site traffic would bring the total ADT on Harrison road to about 14,300 in the worst case. This volume falls below the LOS D/E threshold for a two-lane, undivided roadway. The following table summarizes the estimated future volumes and LOS on the off-site roadways. In addition, the table provides an estimate for the percent of traffic generated by the proposed project on each road.

Table 2: Future Volumes and Level of Service

<table>
<thead>
<tr>
<th>Road Segment</th>
<th>Current ADT</th>
<th>Site Traffic</th>
<th>Regional Growth</th>
<th>New ADT</th>
<th>New LOS</th>
<th>Percent Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing roads</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Houghton Road north of Sahuarita Road</td>
<td>3,400</td>
<td>5,450</td>
<td>2,140</td>
<td>10,994</td>
<td>D</td>
<td>50%</td>
</tr>
<tr>
<td>Sahuarita Road west of Harrison Road</td>
<td>3,000</td>
<td>2,725</td>
<td>1,885</td>
<td>7,610</td>
<td>C</td>
<td>36%</td>
</tr>
<tr>
<td>Sahuarita Road east of Harrison Road</td>
<td>3,000</td>
<td>6,820</td>
<td>1,885</td>
<td>11,705</td>
<td>D</td>
<td>58%</td>
</tr>
<tr>
<td>Sahuarita Road east of Houghton Road</td>
<td>2,000</td>
<td>910</td>
<td>1,260</td>
<td>4,170</td>
<td>C</td>
<td>22%</td>
</tr>
</tbody>
</table>
PART II: DEVELOPMENT IMPACT ANALYSIS

LOS based on existing roadway cross section

New road

Harrison Road south of Sahuarita Road  
0  
6,820  
680  
7,500  
C  
90%

New route south of Sahuarita Road  
0  
2,275  
225  
2,500  
C  
90%

LOS based on 2-lane undivided roadway

The project will utilize a typical 120’ wide right-of-way to provide for two travel lanes, pathways, and ample landscaping. The final right of way cross-section for each roadway segment will vary depending on site conditions, adjacent land uses and approval by DOT.

b. Hydrology

The hydrological approach is to respect and preserve the existing floodplain conditions. Lot layouts are intended to avoid encroachment into the 100-year floodplain limits. At this time, encroachments are at roadway. Mitigation measures proposed for this development include the provision for stabilized bank protection and/or the inclusion of an erosion hazard setback reduction study performed by a Geotechnical engineer.

This site has been designated as a Critical Basin per the Lee More Wash Basin Management Plan. Due to this designation, an increase in the 100-year peak discharge rates is not anticipated exiting the site, nor will there be upstream impacts. On-site detention in the form of water harvesting measures will be provided, minimizing impacts of the developed on-site drainage conditions to downstream properties.

Specific detention basin locations have not been mapped. Multiple basins will be provided throughout the site. They will be placed downstream of neighborhood/lot configurations, sized and located based on the development. The basins will be located near the floodplains and also within vegetative areas to maximize storm water harvesting. This
**PART II: DEVELOPMENT IMPACT ANALYSIS**

Development will utilize culverts or dip crossings for the roadway crossings through the 100-year floodplain limits.

c. **Sewer**

The majority of the residential units will be served via a proposed public gravity sewer system. There are a few lots which will be serviced by individual on-site septic systems due to topographic constraints preventing connection to the proposed public gravity sewer system as shown on the Sewer Plan Exhibit.

An off-site sewer main extension will need to be constructed in order to service the Specific Plan area. Currently 12” and 18” sewer mains are located near the intersection of Harrison Road and Sahuarita Road, north of this project. A proposed public gravity main will be extended from the site north and connect into the terminal manhole of the existing 12” main (FN 5-350-2) within Harrison Road. Correspondence from Pima County Wastewater indicates there is conveyance capacity in this existing 12” main. The project’s 12” main will run south along the Harrison road right-of-way where it will provide service to this project at its northeast corner.

The Engineering Concepts Map indicates the alignment for both the on and off-site sewer system. This alignment shows areas where the sewer will cross washes, w/ 100-year peak discharges greater than 500 cfs. The off-site main will be located within an area that may not be paved. If the sewer is not located within an area that is paved, it will be provided with a means of access (for various size vehicles) under all conditions. Surface treatment over the sewer will be required. Vehicular wash crossing capability may also be required in some instances.

A reclaimed water line extended to the project, from the wastewater treatment facility to the north, will be explored with Pima County Wastewater Management during the platting process. This will provide a non-potable water source to the landscaped areas.

d. **Grading**

The majority of the site is gently sloping south to north with the exception of the drainageway embankments. The site does exhibit evidence of former ranching and cattle grazing activity. Minimal amounts of grading will occur on-site as shown on the Grading Plan Exhibit. Slopes greater than 15% are will be preserved and are mainly associated with the drainage corridors. These areas, with appropriate setbacks as required by Pima County Flood Control regulations, will be left in their natural state. Exceptions to portions of the wash may require soil stabilization due to hydrological recommendations.

There will be no areas graded with projected cut or fills greater than five feet. Specific grading plans will be submitted with plat reviews.
PART II: DEVELOPMENT IMPACT ANALYSIS

Sewer Service Plan

- Proposed Right of Way
- Sewer Service Area
- Septic Service Area
- Development Blocks

Note: Sewer and water main will run under the major east/west proposed road.

Santa Rita Mountain Ranch Specific Plan
Pima County, Arizona
PART II: DEVELOPMENT IMPACT ANALYSIS

3. Built Environment Plan

The Santa Rita Mountain Ranch Specific Plan includes pathways, recreation and landscape concepts. With the large amount of open space on site, neighborhood clusters, residential units and the village center will be connected by non-vehicular trails. These pathways are valuable in providing alternative transportation means of linking areas within the community. The multi-use pathways are strongly associated with the drainage ways and will provide the link between destinations areas. In site specific areas, these pathways will be separate but may parallel or be adjacent to vehicular roadways.
Grading Plan

Proosed Right of Way

- 20% Not Graded
- 50% Not Graded
- 70% Not Graded
- Grading Varies
- No Grading

Santa Rita Mountain Ranch Specific Plan
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Pathways within public right-of-ways will be included in roadway dedications. Off-road trails will utilize public service easements when feasible. The internal pathways system will provide future connections to Eastern Pima County’s Trail System Master Plan.

The Santa Rita Mountain Ranch Specific Plan has a pathway system consisting of a community pathway and a neighborhood pathway. The community pathway parallels the major proposed roads through the property. This pathway is a divided trail with a 10’ wide multi-use path, 6’ width of landscaping and a 6’ wide decomposed granite path. The neighborhood pathways are smaller 4’-6’ trails through natural open space and along smaller washes connecting neighborhood areas. All neighborhood pathways are connected to the larger community pathway.

Where detention/retention basins are necessary, they will be designed to be integrated with neighborhood recreational sites and be connected to the pedestrian pathways system when feasible. Public parks will also be incorporated into neighborhoods within the specific plan. A community park of six acres will be developed adjacent to the community pathway west of the major wash. Up to four acres of neighborhood parks will be dispersed within the planning areas as appropriate in areas of highest density and drainage, topography and soils for this intended use. A recreational facility plan will be submitted and approved by the Natural Resources, Parks and Recreation Department.

The landscape concept provides a cohesive framework for the visual character of the overall areas. The landscape palette will promote indigenous materials to maintain the ambiance of the region and provide similar flora for the fauna of the area and be consistent with the Buffer Overlay Zone plant list. This includes usage of ocotillo which is scattered throughout the site. Entry into the Specific Plan area will be subtly enhanced to provide a sense of passage into the community, but not marked by grand entry monumentation. Individual clusters of residential development may also be marked by low-keyed entry features.

Vehicular roadways with pedestrian pathways, will include landscape treatments to provide shade and sense of safety for the pedestrian. The landscape will also include design visually interesting to those in the vehicles but not detracting from the regional landscape flavor. As required by Pima County’s Native Plant Preservation & Mitigation requirements, vegetation will be preserved-in-place or transplanted on-site whenever possible. Preservation & Mitigation plans will be completed on a site-by-site basis prior to any ground clearance, as required by Pima County ordinance.

4. Water

Tucson Water will provide potable water supply to the proposed development. This will require extending the existing water line in Harrison Road right-of-way to the development planning areas.
5. Schools
The Santa Rita Mountain Ranch has a development agreement with the Vail School District to meet the K-12 educational needs of the school-age residents. The School District did not want a school site designated within the plan area as their preference for a site was on the State Trust Land located to the west adjacent to the Camino Seco alignment. It is intended that the Santa Rita Mountain Ranch internal collector road will serve as access to the future school site.

Based on the Vail School District’s criteria for estimating student populations, the Santa Rita Mountain Ranch community at full build out will generate 360 elementary students, 120 middle school students and 627 high school students. Using the District’s standards for school sizes, this would result in .6 elementary school, .2 middle school and .1 high school.
PART III:
DESIGN CONCEPTS AND GUIDELINES
PART III: DESIGN CONCEPTS & GUIDELINES

A. INTRODUCTION AND PURPOSE

The Specific Plan for Santa Rita Mountain Ranch and overall strategic plan for its design and development promotes the creation of a livable and sustainable community. The purpose of these guidelines is to ensure that the concepts outlined in the master plan are conveyed to provide guidance for the Design Review Committee overseeing the design intent of developments. These guidelines provide the foundation and basis for evaluating the planning and design of the individual neighborhoods and Village Center for the community.

These guidelines provide the necessary details to be used by the project developers, architects, engineers, landscape architects, builders, and other professionals to maintain the quality of the design that meets the master plan's goals and objectives. The Santa Rita Mountain Ranch Design Review Committee will also review all development plan submittals resulting from this Specific Plan for compliance with these guidelines.

The following goals form the basis for these guidelines:

To treat the land with respect by integrating development with existing topography, topographic grading changes to be as minimal as possible.
- Preserve the open vistas of the site.
- Develop the site based on recommendations of environmental site inventory and assessments. This contributes to mitigating the impacts of development and, in some instances, enhances and restores the natural environment.
- Offer a wide variety of housing, community, and recreation, and job opportunities.
- Provide for transportation alternatives to the car.
- Provide a variety of open spaces and places for active recreation, walking, and public gatherings.
- Develop an identity and sense of place that results from the visual character and vitality of the community.
- Integrate public art throughout the community

B. SITE DEVELOPMENT

Site development concepts address the intent of placement of structures and infrastructure. This requires an understanding of existing site opportunities and constraints. It also integrates building form, orientation, coverage, setbacks, and parking into the environmental setting.

These basic principles stress walkable neighborhoods. These communities have defined centers that include public spaces such as community retail and gathering spaces (i.e., libraries, public institutions, park). There should be a diverse mix of activities within this central space. Diversity of housing adds to the spectrum of income, ages, and family types. The diversity also adds to the sustainability of the community, where goods,
services and employment can are potentially provided by those living within, or in close proximity to the development.

1. Village Center Concepts

The following concepts are goals for the community’s central village center. The uses within this area potentially include those non-residential uses, but accessible to the public.

- Encourage a “Park Once” concept with on-street parking and shaded walkways.
- Develop a grid network of streets
- Locate parking areas at the rear of buildings
- Develop a shared parking strategy between uses when appropriate to reduce site grading and prevent development of large areas of under-utilized parking
- Develop pedestrian connections throughout and provide opportunities for alternate modes of non-motorized transportation
- In areas of heavier public exposure, develop wider sidewalks (min. 10’) for pedestrian, street furniture and landscape
- Develop a “Village Green” element as the community focus
- Develop “limits of building” for structures to ensure proper building placement and minimal disturbance to the natural environment
- Allow for a mix of possible uses, such as: small market, community meeting rooms, telecommuting offices, private school, cafe, live/work housing, artisan coop space, and post office boxes.
- Provide shade within public spaces and buildings (i.e., either covered walks, ramadas, or landscape
- Develop areas of shade, shadow, and landscape oasis throughout the area
- Incorporate LEED (Leadership in Energy and Environmental Design) Green Building criteria in site and building design.

2. Residential Concepts

The following concepts are goals for residential units and neighborhoods. The density ranges within the cluster of housing varies. This diversity of housing units allows for diverse products
and individuality between homes and/or between neighborhood clusters.

- Large lot area “building envelopes” define the construction pad area and the areas not to be disturbed. The building envelopes are designed to minimize development impact during construction and occupation. By utilizing development envelope concepts, larger areas of the community will remain open and undeveloped.
- Manage surface run-off through water harvesting and utilizing principles of permaculture. This includes channeling run-offs from the house or lot towards the surrounding landscape, capturing the run-off in basins or slowing the flow and spreading it outward helps to reduce on-site erosion.

Typical example of achieving 20% natural open space within Village Residential development area
Typical Examples of achieving 50% natural open space within Rural Residential development area

Typical examples of achieving 70% natural open space within Village Estate development area
PART III: DESIGN CONCEPTS & GUIDELINES

3. Terrain Management Concepts

Perhaps the one most scarring effect on the land is the initial grading. By applying terrain sensitive practices, the scarring effect of development can be minimized.

- Limit buildings on steeper slopes, no buildings on 15% or greater, unless through sensitive design and building placement the impact can be mitigated.
- Do not build in drainageways.
- Limit the height of cut and fill slopes.
- Balance cut and fill volumes to prevent excess movement of dirt off or on-site.
- Limit height of retaining walls, use materials that blend with nature and screen with landscape.
- Promptly re-vegetate disturbed areas.
- Provide temporary silt control during construction activities.

C. INFRASTRUCTURE

Infrastructure is the spine of the community, creating the connections and services necessary for all development. As an integral part of the community, these elements also need to be incorporated into the livable and sustainable concepts of the community.

1. Circulation Concepts

- Design roadways to accommodate the neighborhoods, provide residential-scale ambiance and do not over-design.
- Design roadways to follow topography and or drainageways to minimizing grading.
- Street layouts should include both through and cul-de-sac streets, all of which are designed to maintain the natural flow rates and directions of water runoff after a storm event.
- Weave pedestrian pathways throughout the development across dedicated open space and along the drainageways, connecting each neighborhood to the Village Center as well as to the neighboring Pima County and Federal public land trail systems.
2. Drainage Concepts

- Preserve and enhance the natural arroyos. The natural arroyos or dry water courses channel the water off the site and maintain habitat and migration corridors for the resident wildlife.
- Minimize crossing of drainageways.

3. Greywater & Reclaimed Water Concepts

- When possible utilize greywater (waste water from bathroom sinks, showers, and washing machines) as a supplemental source for residential landscape irrigation.
- When available, utilize reclaimed water to irrigate functional open space landscape (i.e., developed public parks and/or public institutional outdoor fields) and public landscape (streetscape within public right-of-ways)

E. LANDSCAPE GUIDELINES

Landscape features provide a unifying element through the Specific Plan area. It is the intent of these guidelines to maintain the existing natural ambiance of the region.
PART III: DESIGN CONCEPTS & GUIDELINES

1. Landscape Concepts

- In higher density neighborhoods, restore the landscape with indigenous plant materials to maintain habitat for animals and to preserve the area’s natural ambiance.
- Revegetate disturbed areas within building envelopes with indigenous plant materials as part of the planting palette.

2. Lighting Concepts

- Limit light pollution by using shielded street lights with narrower beam projections.
- Residential and commercial developments need to be assessed on a case-by-case basis regarding.

F. ARCHITECTURAL GUIDELINES

Architectural elements have an impact on the visual quality of a region. The intent of these guidelines to provide an architectural vocabulary that integrates with the southwestern ambiance and the environment of the region.

1. Architectural Concepts

- Site structures on a lot to take advantage of the natural system (i.e., solar orientation, preserving/planting shade trees).
- Encourage environmentally sound approaches to storm water management for each lot. This may include reducing the impervious areas, utilize rainwater collected for landscape irrigation and the use of on-site retention areas to control site run-off.
- Maintain openness of area by discouraging use of walls or utilize open or low walls.
- Encourage residential connections to trail system.
- Encourage use of energy efficient, “green” building materials.
- Thick walls, deep overhangs, shaded windows, protected courtyards, and ramadas, evoke a native “Sonoran Desert” architectural style.
- Colors that make the buildings appear to blend with the earth are all appropriate for residential areas.
- Allow brighter, more festive colors, accenting desert sunsets or flowers, to be utilized in the Village Center area. Such textures and colors also provide historical connections to Tucson’s Spanish heritage.
PART IV: IMPLEMENTATION

A. PURPOSE

Development will be implemented in conformance with the regulations and guidance contained within the Specific Plan. This section contains the procedures for administration of the provisions contained herein, including a Phasing Plan for the development of the proposed planning areas which define the type, location, intensity and timing of development. Programs for the projected sequence of development are also included. A monitoring program is required so that the County may track the progress of the Specific Plan development and monitor associated improvements and budgetary needs.

Other information covered in this chapter pertains to general administration, subdivision, amendment procedures, and the linkage between these elements. In addition, the Santa Rita Mountain Ranch Specific Plan shall be implemented through the subdivision/development plan process. The subdivision process will allow for the creation of lots as tentative plat maps which will allow for implementation of the project phasing.

B. DEFINITIONS

For the purpose of identifying those responsible for implementation of the improvements for Santa Rita Mountain Ranch, two entities must be identified. These are the master developer and the builder.

The master developer is the entity responsible for insuring that the basic infrastructure facilities are planned and constructed to serve the development areas within the Santa Rita Mountain Ranch Specific Plan.

The builder is the purchaser of a development area, or portions of a development area, who will either build or provide for building within their areas of ownership.

The master developer will be responsible for establishing the Santa Rita Mountain Ranch Design Review Committee. This committee will consist of five members as appointed by the master developer. This committee will review and approve screen wall design, entry statements, landscape plans, utility design and construction, sign design and the location of municipal and community facility uses as to conformance with the Santa Rita Mountain Ranch Design Guidelines. The committee will have approval authority on these matters until such time that the property is entirely transferred from the master developer or its assigns to builder(s) within the project.
C. GENERAL IMPLEMENTATION RESPONSIBILITIES

Implementation of the Santa Rita Mountain Ranch Specific Plan shall be the responsibility of the master developer and the builders, except as noted. The master developer shall be responsible for engineering and implementation of the spine infrastructure systems, except those portions accessed by builders. The spine infrastructure systems are defined as those systems which are necessary to provide for development of the individual development areas. These include the access road, residential collector and their associated streetscapes, the trunk sewers, water mains, electric lines, gas lines and cable television facilities in the major streets. The builder is responsible for implementation of those facilities within each of the development areas, and ancillary facilities within the spine infrastructure system that would be damaged or destroyed by secondary development if installed by the master developer.

Permitting for building and construction of areas within the Specific Plan shall follow the development and platting process set forth by Pima County. All development plans and/or plats shall be submitted to the county staff for review and approval. All development plans shall be approved by the Santa Rita Mountain Design Review Committee for compliance with the Specific Plan regulations and design guidelines prior to development plan approval.

Upon adoption of the Santa Rita Mountain Specific Plan, the Specific Plan shall become the zoning district of the Santa Rita Mountain property, replacing the existing zoning designation on the official county zoning map. The Specific Plan shall be administered and enforced by the Pima County Planning Official.

D. MONITORING PROGRAM

The purpose of the Specific Plan Monitoring Program is to provide assurances to the County and developer that the Specific Plan is working as development is built out. The monitoring program effectively establishes an accounting system to insure that all changes, upon approval, are properly recorded at the scale of the total project and each planning area reflected in this Specific Plan.

A development plan or plat shall be submitted to the County for review and approval prior to development occurring in any development area. Such plans shall be consistent with this Specific Plan and are subject to conditions of approval set forth by the County.
E. PHASING

The Santa Rita Mountain Ranch will be developed in three phases as indicated on the Phasing Exhibit. This will allow the adequate level of infrastructure to be developed within each phase to accommodate an orderly and planned build-out of the project. The Phasing Plan conceptually delineates the boundaries of the Master Plats that will be submitted as development is initiated in each phase.

It is the intention of the phasing plan to relate infrastructure requirements to the proposed development. Sewer, water facilities, streets, drainage and grading that will serve the project will be constructed and extended as necessary to meet the requirements of the phased build-out of the project.

Minor modifications in the boundaries and acreage of planning areas or adjustments because of final road alignments and drainage design will occur during technical refinements in the tentative plat process and will not require an amendment to the Specific Plan. All infrastructure will be to Pima County standards and will be based in studies prepared by the developer related to the Traffic Impact Analysis (TIA), Sewer Basin Study, Master Drainage Study, and Infrastructure Financing Plan. These studies will be prepared according to the County's procedures and approved by the County prior to implementation.
APPENDIX

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**Eastern Pima County Trail System Master Plan.** Dames & Moore: Tucson, AZ. Revised August, 1996.

**Major Streets and Routes Plan - (Co14-79-2),** Pima County, Arizona, amended June, 1996.


Pima County. 2001 Priority Vulnerable Species: Analysis and review of species proposed for coverage by the “Sonoran Desert Conservation Plan” (draft). Pima County, Arizona.

Ruther, Sherry, Habitat Specialist, Tucson Regional Office, Arizona Game and Fish Department.

**Stormwater Detention/Retention Manual.** Pima County Department of Transportation and Flood Control District, City of Tucson, 1987.

**Subdivision Street Standards.** Pima County Transportation and Flood Control District, May, 1989.

Urban, Sharon, Public Archaeologist, Arizona State Museum, University of Arizona.

**Pima County Zoning Code,** Pima County, AZ, as amended through October, 1998.

**Balanced and Critical Basin Map,** Pima County, AZ.

**Flood Insurance Rate Map (FIRM),** Pima County, AZ.

June 25, 2001

Mr. Charles Deans  
Planners Ink  
240 N. Court Avenue  
Tucson, AZ 85701

RE: Report for Santa Rita Mountain Ranch Archaeological Survey  
PCCAC No. 00-04

Dear Mr. Deans:

Introduction. Pima Community College Centre for Archaeological Field Training conducted an archaeological survey of the 840 acre Santa Rita Mountain Ranch property located in Pima County approximately 25 miles southeast of Tucson. With David Stephen as Principal Investigator, the survey was carried out on June 11 to June 15, 2001 by Jennifer Heilen and a crew of three to five students of the Archaeology Centre over a total of 16.5 person field days. The purpose of the project was to determine the presence or absence of any significant cultural resources that might be adversely impacted by construction.

Background To Study Area: Description & Location. The project area is located on the upper bajada at the northwestern end of the Santa Rita Mountain Range, within the Basin and Range physiographic province at an approximate elevation of 3,300 feet. The project area is approximately nine miles east of the town of Sahuarita, and consists of Sec. 22 and portions of Secs. 15 and 21 T17S R15E G&SRB&M. Project area vegetation is typical of the Arizona Lowland subdivision of the Sonoran Desertscrub biotic province (Turner and Brown 1982) with creosote, succulents, semi-shrubs and grasses dominant.

Records Review. A review of the records of the Arizona State Museum (ASM) prior to the survey revealed that the subject parcel had not undergone an archaeological survey. These records revealed no recorded cultural resources within a 100 meter perimeter around the inspected parcel.

Culture History. The earliest well dated sites in Arizona and the Southwest are those attributed to the Clovis culture, part of a "Paleoindian" tradition dated to about 9,800 B.C. By about 7,500 B.C. the Paleoindian tradition had been replaced or evolved into what is known as the Archaic tradition, in which subsistence was based on both hunting and gathering of wild resources. Paleoindian and Archaic archaeological sites typically exhibit only stone artifacts, because pottery had not yet been introduced into Arizona and perishable materials such as wood have not been preserved.

The introduction of ceramics to the region around 100-200 B.C. marks the beginning of the Formative tradition in which people began to rely on agriculture and live a more sedentary lifestyle. The Hohokam culture, the primary Formative culture in the project area, is known for its red-on-buff and red-on-brown painted pottery, elaborate artifacts made of ground and carved stone and seashells, houses built inside of shallow pits, and communal structures known as ballcourts and platform mounds.

Around 1450 the Hohokam tradition came to an end. By the time the first Europeans (Spanish soldiers and missionaries) entered southeastern Arizona in the late seventeenth century the region was occupied primarily by the Sobaipuri and Tohono O'odham Indians, whose material culture appears to have been much less complex than that of the earlier Hohokam. Between 1700 and 1850 Apache Indians moved into the area and raided extensively, so Europeans did not begin settling the area until after the raiding threat was removed in the 1870s.
Survey Expectations. This project study area was located in a portion of the greater Tucson Basin that is conducive to prehistoric and/or historical settlement. Therefore, it was considered a reasonable likelihood that prehistoric or historical sites would be found during the survey.

Cultural Resources Survey: Methods. The fieldwork consisted of intensive on-foot coverage of the property by Pima Community College staff in order to identify and locate any cultural resources, historic or prehistoric, within the property boundaries. Field personnel (J. Heilen, J. Treat, J. Sheehan, J. Benta, M. Heilen, M. Rutland) were spaced approximately 20 meters apart and crossed the subject property in a series of contiguous corridors. General conditions were very good for conducting the fieldwork. Ground visibility was minimally affected by the presence of trees, shrubs, semi-shrubs, succulents and grasses. The original land-form was minimally disturbed by historic alterations to the ground surface. Survey Results. There were no surface indications of archaeological resources on the property which meet the Arizona State Museum minimum standard for recording as an archaeological site or that would be eligible for inclusion in the National Register of Historic Places. Cultural manifestations identified during the survey include a recent livestock enclosure, one prehistoric chipping station (15 artifacts from a single core), seven isolated prehistoric artifacts (one single core, one single flake, one core with two flakes, and one core with one flake) and two rockpiles of unknown age.

Criteria for Significance Evaluation. Archaeological and historical sites generally are not considered significant unless they are eligible for listing in the National Register of Historic Places. To be listed in the National Register a historic property normally must be at least 50 years of age and must be significant according to the following definition:

The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and: A) that are associated with events that have made a significant contribution to the broad patterns of our history; or; B) that are associated with the lives of persons significant in our past; or C) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or D) that have yielded, or may be likely to yield, information important in prehistory or history [National Park Service 1986].

Significance Assessment. No important cultural materials in the project area appear to satisfy the criteria above. Consequently there are no significant cultural resources in the inspected project area.

Evaluation Of Effects Of The Proposed Project. Development of the inspected parcel will not have an effect on significant cultural resources.

Recommendations. Based on the archival information, field findings, the observable surface indications and because none of the materials observed on the subject property have potential to provide important archaeological or historical information beyond what was obtained for this project, Pima Community College supports approving the sponsor's application. Although Pima Community College does not endorse additional archaeological studies for this project, ground disturbing activities on the property should not commence without authorization by the agency archaeologist(s). There remains the possibility that ground-disturbing activities could reveal the presence of heretofore undiscovered cultural resources. If such materials are discovered construction activities should stop. Consultation should be initiated with the cognizant agency archaeologist, and if applicable under ARS §41-841 et seq. the Arizona State Museum, to assess the potential significance of any materials unearthed. Under State law (ARS 41-§865 & §41-844) if human skeletal remains or funerary objects are discovered on either public or private lands the Arizona State Museum should be contacted immediately.

Thank you for the opportunity to work with you on this project. If I may be of any further assistance please do not hesitate to contact me.

Sincerely,

David V. M. Stephen
Director

State Antiquities Permit No. 2001-50bl
A. INTRODUCTION

An on-foot cultural resources survey of private property (860 acres) near Sahuarita in Pima County identified 3 cultural features (2 rockpiles and 1 chipping station) and 7 isolated lithic artifacts. The quantity of artifacts within the subject property and data about known sites on adjacent lands suggests no significant cultural resources will be impacted by the undertaking. Based on the field work and archival documentation, the project sponsor should be allowed to develop the subject property without further cultural resource studies.

References:

Form Completed By: J. Heilen
Form Rev. 1/01 Date: 06/25/2001
Fig. 1 U.S.G.S. 7.5’ MAP
Corona de Tucson EE:1:NE
28 June 2001

Charlie Deans
Planners Ink
240 N. Court Ave.
Tucson, AZ 85701

Dear Mr. Deans;

RE: Santa Rita Mountain Ranch–Corona de Tucson
Cactus Ferruginous Pygmy-Owl Survey Results

We surveyed the proposed Santa Rita Mountain Ranch development southwest of Corona de Tucson for cactus ferruginous pygmy-owls (*Glaucidium brasilianum cactorum*), an endangered species protected by the Endangered Species Act of 1973, as amended. We conducted 3 survey passes of the property and at least 1 of the survey passes was conducted during the time period of February 15 to April 15, when the owl is most active. Survey dates are presented in Table 1.

The property consisted of approximately 1,582 acres and was specifically located in Sections 15, 21, 22, 26, 27, and 28 of Township 17 South and Range 15 East, Pima County, Arizona. The property was bordered by the Santa Rita Experimental Range to the south. The property and surrounding areas consisted of predominantly undisturbed native vegetation. Several large drainages traversed the property.

The results of our surveys were negative; no cactus ferruginous pygmy-owls responded to our broadcast calls.

Table 1. 2001 Survey dates for the proposed Santa Rita Mountain Ranch development.

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<th>Survey Pass</th>
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<td>Survey Pass 1</td>
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<td>Survey Pass 2</td>
<td>7, 8, 9, 11, 14, and 16 May</td>
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<tr>
<td>Survey Pass 3</td>
<td>1, 4, 6, 8, 11, and 12 June</td>
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</table>

SURVEY METHODOLOGY

We followed the U.S. Fish & Wildlife Service's 20001 pygmy-owl survey protocol and used the broadcast call methodology. Our U. S. Fish and Wildlife Service permit to survey for pygmy-

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Cactus Ferruginous Pygmy-Owl Survey Results

owls is #TE-828640-0. Each call-point was located at an interval of 400 meters. At each call-point, a 2-minute listening period was conducted prior to broadcasting taped calls. Following the initial listening period, calls were broadcast for 30-seconds followed by a 90-second listening and observation period at each of the 4 cardinal directions and a 5th random direction (approximately 10 minutes). After completing the 10-minute survey/listening sequence, an additional 3-minute observation/listening period was conducted. We used a Johnny Stewart Caller set at medium volume to broadcast a taped cactus ferruginous pygmy-owl call. The caller speaker was placed between waist and chest height during each call broadcast.

We conducted all surveys during the morning (1 hour before sunrise to 2 hours after sunrise). Surveys did not occur during adverse weather conditions such as rain or high winds.

We broadcast calls at 40 call points during each of 3 survey sessions (120 total call points). We received no response to the taped calls during the survey periods, nor did we observe any owls. Furthermore, we did not observe any mobbing behavior characteristic of small birds, such as gnatcatcher (Polioptila spp.) or verdin (Auriparus flaviceps), in response to the broadcast calls. As pygmy-owls are predators of small birds and other animals, gnatcatchers and verdins familiar with an owl may "mob", or show signs of increased activity when owl calls are broadcast.

The proposed Santa Rita Mountain Ranch development is located within Survey Zone 2 as designated by the USFWS. Currently, Zone 2 includes the currently known range of the pygmy-owl within Pima and southern Pinal counties. The USFWS expects to have pygmy-owls from Zone 1 dispersing into suitable habitat in Zone 2 and a greater likelihood of documenting new pygmy-owl locations in Zone 2 than in Zone 3.

HABITAT DESCRIPTION

Structural diversity of vegetation
The vegetation within the property was characteristic of the Sonoran desert scrub biome with some components of the semi-desert grassland biome. Drainages within the Sonoran desert scrub biome are dominated by dense, native vegetation with high structural diversity, including a layer of underbrush and ground cover, a middle layer of shrubs and small trees, and a canopy layer of mature trees (those with trunks greater than 6" in diameter measured at breast height) and saguaro (Carnegiea gigantea) cacti over 6 feet in height. All drainages and portions of the upland areas within the property contained these habitat components, including large trees and saguaros.

Habitat characteristics for cactus ferruginous pygmy-owl typically consist of dense, native vegetation with large trees and saguaro cacti (i.e., the aforementioned dimensions) capable of supporting cavities. Based on these criteria, the proposed Santa Rita Mountain Ranch development contains potential pygmy-owl habitat.

Composition of vegetation
Vegetation on the property consisted of native tree and plant species such as paloverde (Cercidium microphyllum), velvet mesquite (Prosopis velutina), ocotillo (Fouquieria splendens), saguaro cacti, prickly pear (Opuntia spp.) cacti, creosote (Larrea tridentata) bush, desert zinnia (Zinnia spp.), fairy duster (Calliandra eriophylla), and a variety of wildflowers and grasses.
Availability of nest cavities
Numerous saguaro cacti with cavities were located within the property. Additionally, the property contained numerous trees with trunks over 6" in diameter, measured at breast height, but we did not identify any cavities within these trees.

Presence or absence of competitors for nest cavities
We did not observe pygmy-owl nest competitors during our surveys of the property.

Amount and type of development and human disturbance
Human disturbances on the 1,582-acre site included a single lane dirt road crossing from north to south along the eastern portion of the property, 2 large corrals, stock tanks, a jeep trail, and a utility line along the northern boundary. Land use adjacent to the site consisted of low density residential development (about 1 house per 5 acres) along a portion of the east boundary, Santa Rita Experimental Range to the south and undeveloped lands to the west and north.

Elevation
The elevation at the site ranged from 3,200-3,600 feet (NAVD-88).

Presence of nearby riparian vegetation
There were no obligate riparian species within the survey site. The plant species within washes were similar to the surrounding uplands, but they exhibited more vigorous and robust growth forms.

If you have any questions, or require additional information, please do not hesitate to contact me.

Best regards,

Susy Morales
Biologist
2002 Pima County Assessor Property Inquiry

Search Parcel2001 History Tax Summary Genealogy Maps

PARCEL 30522011C GO 

Book-Map-Parcel: 305-22-011C

TUSK INTERNATIONAL LIMITED
PO BOX 694
GRAND CAYMAN, CAYMAN ISLANDS
B.W.I.

00000 0000

Legal Description
SE4 160.00 AC SEC 22-17-15

TaxPayer Information

TaxArea: 2001 TaxYear: 2002

Recording Information
Docket 9416 Page 931 Date Nov-12-1992

WARRANTY DEED

Zoning Information CMH-1

Miscellaneous
Section 22 Town 17.0S Rng 15.0E

LandMeasure 160.00 A

MarketArea: BOC - CORONA (611)

Tract Block Lot GroupCo
CensusTract 4102 UseCode 4710 Fil

Date of Last Change Jun-19-2001

Secondary Valuation Data LegislativeClass FullCash Percentage

Land VACANT/AG(4 0) $1,120 16.0

Improvements
2001 Personal Property

Gross Value Totals

$1,120

2001 LMTD/SCND Exemptions

Net Value Totals

$1,120

PriorLimitedValue: $1,120

CurrentLimitedValue: $1,120

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( W1 = BUYER/SELLER HAS AN OUT-OF-STATE ADDRESS.)

2002 Valuation subject to change until August 2003.

Pima County Assessor ~ 115 N. Church ~ Tucson Az. 85701
2002 Pima County Assessor Property Inquiry

Search Parcel 2001 History Tax Summary Genealogy Maps

PARCEL 305220111

Book-Map-Parcel: 305-22-011D
TaxPayer Information
TUSK INTERNATIONAL LTD
PO BOX 694
GEORGETOWN GRAND CAYMAN BWI
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Legal Description
SW4 160.00 AC SEC 22-17-15

Appraiser DON HOGG

TaxArea: 2001 TaxYear: 2002
Recording Information
Docket 8619 Page 892 Date Sep-11-1989
Zoning Information RH

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Tract Block Lot GroupCa
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Date of Last Change Jun-19-2001

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Improvements
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Gross Value Totals $1,120

2001 LMTD/SCND Exemptions
Net Value Totals $1,120

PriorLimitedValue: $1,120 CurrentLimitedValue: $1,120

2002 Valuation subject to change until August 2003.
Pima County Assessor ~ 115 N. Church ~ Tucson Az. 85701
Client: ~ 63.15.99.147

Pima County Assessor Online
**2002 Pima County Assessor Property Inquiry**

*Search Parcel 2001 History Tax Summary Genealogy Maps*

**PARCEL 30522011B**

**Taxpayer Information**

TUSK INTERNATIONAL LTD
PO BOX 694
GEORGETOWN GRAND CAYMAN BWI

**Recording Information**

Docket 8619 Page 892 Date Sep-11-1989

**Zoning Information**

CB-1

**Miscellaneous**

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Date of Last Change Jun-19-2001

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**2002 Valuation subject to change until August 2003.**

Pima County Assessor ~ 115 N. Church ~ Tucson Az. 85701

Client: ~ 63.15.99.147
PARCEL: 305-22-0100

Taxpayer Information
TUSK INTERNATIONAL LTD
PO BOX 694
GEORGETOWN GRAND CAYMAN BWI

Legal Description
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2002 Valuation subject to change until August 2003.

Pima County Assessor - 115 N. Church ~ Tucson Az. 85701
Client: 63.15.99.147
Supplemental Notice Tax Years: 2001

Book-Map-Parcel: 305-22-448A

TaxPayer Information
HBK LP 50% & UNITY LP 50%
3000 GLENWOOD
BILLINGS MT

59102 0000

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AKA PTN PCL 8 SYCAMORE SPRINGS PHASE 1A
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Supplemental Notice TaxYears: 1998

Book-Map-Parcel: 305-22-0530

TaxPayer Information
ANACAY LTD
PO BOX 694
GEORGETOWN GRAND CAYMAN BWI

00000 0000

Legal Description
NW4 EXC NE4 THEREOF SEC 22-17-15 120.00 AC

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Improvements

2001 Personal Property

Gross Value Totals

$840

2001 LMTB/SCND Exemptions

Net Value Totals

$840

Prior Limited Value: $840

Current Limited Value: $840

2002 Valuation subject to change until August 2003.

Pima County Assessor ~ 115 N. Church ~ Tucson Az. 85701
Client: ~ 63.15.99.147
2002 Pima County Assessor Property Inquiry

Search Parcel 2001 History Tax Summary Genealogy Maps

PARCEL 30523013B GO

Book-Map-Parcel: 305-23-013B
TaxPayer Information
ANACAY LTD
PO BOX 694
GEORGETOWN GRAND CAYMAN BWI

TaxArea: 2001  TaxYear: 2002

Recording Information
Docket 8012 Page 1404 Date Apr-13-198
WARRANTY DEED

Legal Description
E2 E2 160.00 AC SEC 21-17-15

Zoning Information RH

MarketArea: BOC - RINCON VLY (610')
Tract Block Lot Group Co
Census Tract 4102 Use Code 4710 Fill

Date of Last Change Jun-19-2001

RANCH PROPERTY

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Gross Value Totals

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Net Value Totals

| Prior Limited Value: $1,120 |                   | Current Limited Value: $1,120 |     |

2002 Valuation subject to change until August 2003.

Pima County Assessor ~ 115 N. Church ~ Tucson Az. 85701
Client: ~ 63.15.99.147
2002 Pima County Assessor Property Inquiry

Search Parcel 2001 History Tax Summary Genealogy Maps

**PARCEL: 305-22-018D**

**Appraiser DON HOGG**

**TAXPAYER INFORMATION**

ANACAY LTD
PO BOX 694
GEORGETOWN GRAND CAYMAN BWI

00000 0000

**LEGAL DESCRIPTION**

NE4 NE4 40 AC SEC 28-17-15

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**IMPROVEMENTS**

2001 Personal Property
Gross Value Totals
2001 LMTD/SCND Exemptions
Net Value Totals
Prior Limited Value: $500

**CURRENT LIMITED VALUE: $500**

2002 Valuation subject to change until August 2003.

Pima County Assessor ~ 115 N. Church ~ Tucson AZ 85701
Client: ~ 63.15.99.147

07/20/2001 11:03 AM
### Property Inquiry Information

**TaxYear:** 2002  
**TaxArea:** 2001  
**Recording Information:**  
- **Docket:** 8068  
- **Page:** 2707  
- **Date:** Jul-01-1987  

**Zoning Information:**  
- **Zoning:** RH  

**Miscellaneous:**  
- **Section:** 27  
- **Town:** 017  
- **Range:** 05  
- **Land Measure:** 480.00 A

**Market Area:** BOC - CORONA (611)

**Tract Block Lot Group Co:**  
- **Census Tract:** 4102  
- **Use Code:** 4710  
- **Fil:**  
- **Date of Last Change:** Jun-19-2001

**Property Address:** 17690 S HARRISON RD (PC)

**RANCH PROPERTY**  
- **Full Cash Percentage:** $3,360  
- **Ass:**  

**Improvments**

**2001 Personal Property**
- **Gross Value Totals:** $3,360

**2001 LMTD/SCND Exemptions**
- **Net Value Totals:** $3,360

**Prior Limited Value:** $3,360  
**Current Limited Value:** $3,360

**Affidavit of Fee Number Sale Date Property Type Sale $ Cash $ Validation Financing**

- **Sale:** 111354 06 1987  
- **Property Type:** Vacant Land  
- **Sale $:** $4,560,000  
- **Cash $:** $0  
- **Validation:** R15 RJB  
- **Financing:** None

**DEED:** Warranty Deed (R15=R)

---

2002 Valuation subject to change until August 2003.
2002 Pima County Assessor Property Inquiry

Search Parcel: 2001 History Tax Summary Genealogy Maps

PARCEL: 305-22-0730

Appraiser: DON HOGG

TaxArea: 2001  TaxYear: 2002

Recording Information
Docket 7685 Page 86 Date Dec-20-1985

Zoning Information
RH

Miscellaneous
Section 26 Twin 17.0S Rng 15.0E
LandMeasure 80.00 A
MarketArea: BOC - CORONA (611)
Tract Block Lot Group Co
CensusTract 4102  UseCode 4710  Fil
Date of Last Change Jan-04-2000

RANCH PROPERTY

FullCash Percentage Ass
$560  16.0

Secondary Valuation Data  Legislative Class

Land VACANT/AG(4 0)

Improvements
2001 Personal Property

Gross Value Totals

$560

2001 LMTD/SCND Exemptions

Net Value Totals

$560

PriorLimitedValue: $560  CurrentLimitedValue: $560

2002 Valuation subject to change until August 2003.

Pima County Assessor ~ 115 N. Church ~ Tucson Az. 85701
Client: 63.15.99.147
PARCEL 305-22-017A

Appraiser DON HOGG

ANACAY LTD
PO BOX 694
GEORGETOWN GRAND CAYMAN BWI

00000 0000

Legal Description
SW4 160.00 AC SEC 27-17-15

Secondary Valuation Data

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<th>Land Measure</th>
<th>160.00</th>
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<th>Secondary Valuation Data</th>
<th>Legislative Class</th>
<th>Full Cash Percentage</th>
<th>Assessment</th>
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<td>Land VACANT/AG(4 0)</td>
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<td>$1,120 16.0</td>
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Improvements
2001 Personal Property
Gross Value Totals $1,120
2001 LTD/SCND Exemptions
Net Value Totals $1,120
Prior Limited Value: $1,120

Current Limited Value: $1,120

2002 Valuation subject to change until August 2003.

Pima County Assessor ~ 115 N. Church ~ Tucson Az. 85701
Client: ~ 63.15.99.147

07/20/2001 11:06 AM