

SECTION 3:

THE HAHAMONGNA ANNEX PLAN

This section describes the Hahamongna Annex Plan recommendations for the Hahamongna Watershed Park (HWP) addendum. Exhibit 3-1, Hahamongna Watershed Park Master Plan Addendum, illustrates the amended master site plan that now includes the Annex area. The recommended Master Plan addendum elements are firmly based upon the planning framework that was developed through a series of community forums as discussed in Section 1.

The Master Plan recommendations are presented and discussed as follows:

- Vision
- Land Uses & Anticipated Facilities
- The Natural Environment
- Site Drainage & Water Quality
- Utilities & Infrastructure
- Solid Waste
- Mobility
- Recreation
- Safety & Security
- Sustainability, Design & Aesthetics
- Park Management
- Partnerships & Stewardships
- Next Steps

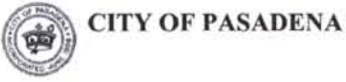
3.1 VISION

The following vision statement was developed based on the input received from the public via the open house event of January 28, 2006, several public workshops and Hahamongna Watershed Park Advisory committee meetings, as well as comments submitted directly to the City of Pasadena. The vision statement describes the community's long term desires for the HWP Annex. As outlined in Section 1, the goals and objectives from the adopted HWP Master Plan were used as the starting point in establishing the goals and objectives for the Annex site that are outlined in Section 1. The revised goals and objectives describe how the City will move towards achieving the community's long term vision for the HWP Annex.

Vision Statement

As a unique, centralized part of the Hahamongna Watershed Park and the Arroyo Seco Watershed, the Annex site will be a focal point for visitors to the park and the greater Arroyo Seco area, functioning as

EXHIBIT 3-1



AMENDED HAHAMONGNA WATERSHED PARK MASTER PLAN

- LA COUNTY FIRE CAMP 2**
- EQUESTRIAN CENTER**
 - RIDING AREA & EQUESTRIAN STAGING AREA
 - HORSE BOARDING AREA
 - YOUTH CAMP OPERATION
 - WRANGLERS RESIDENCE
- ENVIRONMENTAL EDUCATION CENTER**
 - CONFERENCE FACILITY
 - ENVIRONMENTAL CLASSROOMS
 - DINING HALL
 - OUTDOOR CLASSROOM/GATHERING AREA
 - SITE MANAGER RESIDENCE & OFFICE
 - XERISCAPE GARDEN
 - DEMONSTRATION GARDENS
 - GROUP PICNIC AREA
 - ENVIRONMENTAL VOCATION CENTER
 - PARK MAINTENANCE FACILITY
 - NATIVE PLANT NURSERY CO-OP
- HABITAT ESTABLISHMENT & RESTORATION**
 - COAST LIVE OAK WOODLAND
 - SOUTHERN WILLOW SCRUB
 - SAGE SCRUB
 - RIVERSIDIAN ALLUVIAL FAN SAGE SCRUB
 - MULE FAT SCRUB
 - SOUTHERN SYCAMORE RIPARIAN WOODLAND
 - STREAMBED RIPARIAN
- WATER CONSERVATION**
 - WESTSIDE SPREADING BASINS*
- SUPERVISED OVERNIGHT CAMPING AREA**
 - IMPROVED PARKING AREAS
- WEST SIDE PARK ACCESS**
 - PARK ENTRANCE AT FOOTHILL BLVD.
 - OAK GROVE DRIVE IMPROVEMENTS
- OAK GROVE AREA**
 - GROUP PICNIC SHADE SHELTERS
 - WEST SIDE PICNIC AMENITIES
 - OAK GROVE FIELD RESTROOM
 - FOOTHILL DRAIN IMPROVEMENTS
 - OUTDOOR AMPHITHEATER
 - MULTI-USE FIELDS - 3
 - DISC GOLF IMPROVEMENTS
 - EXPANDED PARKING AREA
- LA CANADA H.S.**
- EQUESTRIAN PICNIC AREA**
 - UPGRADE RESTROOM
 - WIDEN ACCESS ROAD
 - BERKESHIRE DRAIN IMPROVEMENTS
- PERIMETER TRAIL**
- SUNRISE OVERLOOK**
- BICYCLE ROUTE**
- FLINT WASH BRIDGE**
- DEVIL'S GATE DAM AREA**
 - NEW PARKING AREA AT OBSERVATION DECK
 - EAST ACCESS (ENTRY) TO DAM
 - WEST ACCESS (EXIT) FROM DAM
 - CLOSE LA CANADA-VERDUGO ROAD
 - DAM KEEPER'S QUARTERS & PUBLIC RESTROOM
 - FENCING AT DAM & OBSERVATION DECK FOR PUBLIC SAFETY



- GABRIELINO TRAIL AREA**
 - CONVERT JPL PARKING TO PUBLIC PARKING*
 - NEW PUBLIC RESTROOM*
- NORTH PERIMETER TRAIL BRIDGE CROSSING**
- WATER CONSERVATION**
 - EAST SIDE SPREADING BASINS*
 - ALTADENA DRAIN IMPROVEMENTS
 - ALTACREST DRAIN IMPROVEMENTS*
- SUNSET OVERLOOK**
 - HABITAT RESTORATION
 - IMPROVED PARKING
 - TRAILHEAD IMPROVEMENTS
- WATER CONSERVATION**
 - SEASONAL FLOOD MANAGEMENT
 - WATER CONSERVATION POOL
 - PUMP BACK SYSTEM*
 - OVERALL STORM DRAIN IMPROVEMENTS
- FLOOD MANAGEMENT**
 - SEDIMENT & DEBRIS MANAGEMENT
 - SEDIMENT REMOVAL ACCESS
- TRAIL DEVELOPMENT**
 - PERIMETER TRAIL
 - FLINT WASH BRIDGE CROSSING
 - NORTH BRIDGE CROSSING
 - EAST RIM TRAIL & CONNECTORS
 - WEST RIM TRAIL & CONNECTORS
 - DAM OBSERVATION TRAIL

* This project could impact NASA/JPL perchlorate clean-up and cannot proceed without NASA/JPL coordination.

both a local and regional hub for education and passive recreation that is compatible with natural resource protection and enhancement. The Annex will also provide a gateway to the broader network of open spaces and trails that connect the Angeles National Forest, La Cañada Flintridge, Altadena, the central and lower Arroyo of Pasadena, and reaches south.

As a model for demonstrating the integration of context-sensitive facilities within a natural setting by applying sustainable design and management practices, the Annex will emphasize protection of the site's unique oak habitat, indoor and outdoor education, and continued passive recreation for the public. Key facilities will include an equestrian facility, multipurpose interpretive and education center, and a native plant nursery. As a public facility, the Annex will be sustained through partnerships and financing.

HWP ANNEX VISITORS

As Pasadena's largest park and natural open space, the Arroyo Seco attracts thousands of visitors annually. The Annex will build on and expand these visitor opportunities to provide richer and even more varied experiences. The recommended facilities and the community vision for the area are intended to create a facility with broad appeal. Visitors will come to the Annex for the chance to connect with nature, learn about the natural and cultural history of the Arroyo Seco Watershed and participate in the many recreational opportunities that are planned to be available.

Recommendations on the Vision for the Annex:

- ☞ Achieve the community's long term vision for the HWP Annex;
- ☞ Programs and facilities will inspire visitors of all ages, economic backgrounds and learning styles;
- ☞ The Annex and its facilities will provide an excellent learning resource for students and school groups, support school curricula and allow students to fully experience nature on-site; and
- ☞ Users and activities shall have a strong purpose associated with:
 - ◆ nature and natural resources
 - ◆ watershed management
 - ◆ Native American history
 - ◆ outdoor experiential education
 - ◆ flood management
 - ◆ water resources and conservation
 - ◆ habitat restoration, enhancement and/or preservation
 - ◆ ecosystems
 - ◆ sustainability

- ◆ open space conservation
- ◆ horsemanship
- ◆ outdoorsmanship

3.2 LAND USES & ANTICIPATED FACILITIES

The vision for the use of the Annex site evolved through an extensive community process, as further outlined in Section 1. As a part of this process, the City undertook two studies that assisted in the formulation and configuration of the recommended land uses.

The first study was a *Preliminary Code Evaluation of Existing Structures* within the entire Annex site (completed May 2008). The primary objective of this evaluation was to understand the rough order of magnitude in meeting minimum code compliance requirements in the rehabilitation and/or continued use of the existing structures located within the Annex.










The second study was a *Carrying Capacity Analysis* of the site (completed March 2008) that examined the optimum carrying capacity of the Annex to assist in designing the appropriate concentration of people within each proposed use area so as to not degrade the site or the experience for the users of the site. The structures planned for the Annex along with their intended use, frequency of use and the cumulative maximum capacity for the site at any one time, were all evaluated. A summary of the capacity analysis can be found in Appendix B-7. Both of these studies served as important tools in the development of the final recommended plan for the Annex.

Regarding zoning, changing the zoning within the Annex site from PD-16 to the OS zone would eliminate the split-zoning of the site and make the zoning designation consistent with most of the surrounding area. However, to do so without a corresponding adjustment to the JPL parking lot portion of the PD-16 area would jeopardize the use by JPL of the west parking lot in Hahamongna, due to the remainder of the PD not meeting the 2-acre size requirement for PD zoning designation. Also, the recommended use areas are all in keeping with the easements listed in Section 2.

The recommended land uses for the annex can be summarized into four major use areas, as shown in Exhibit 3-2, HWP Annex Master Plan Use Areas:

- A. The Environmental Education Center
- B. The Equestrian Center
- C. Los Angeles County Fire Camp 2
- D. Natural Open Space

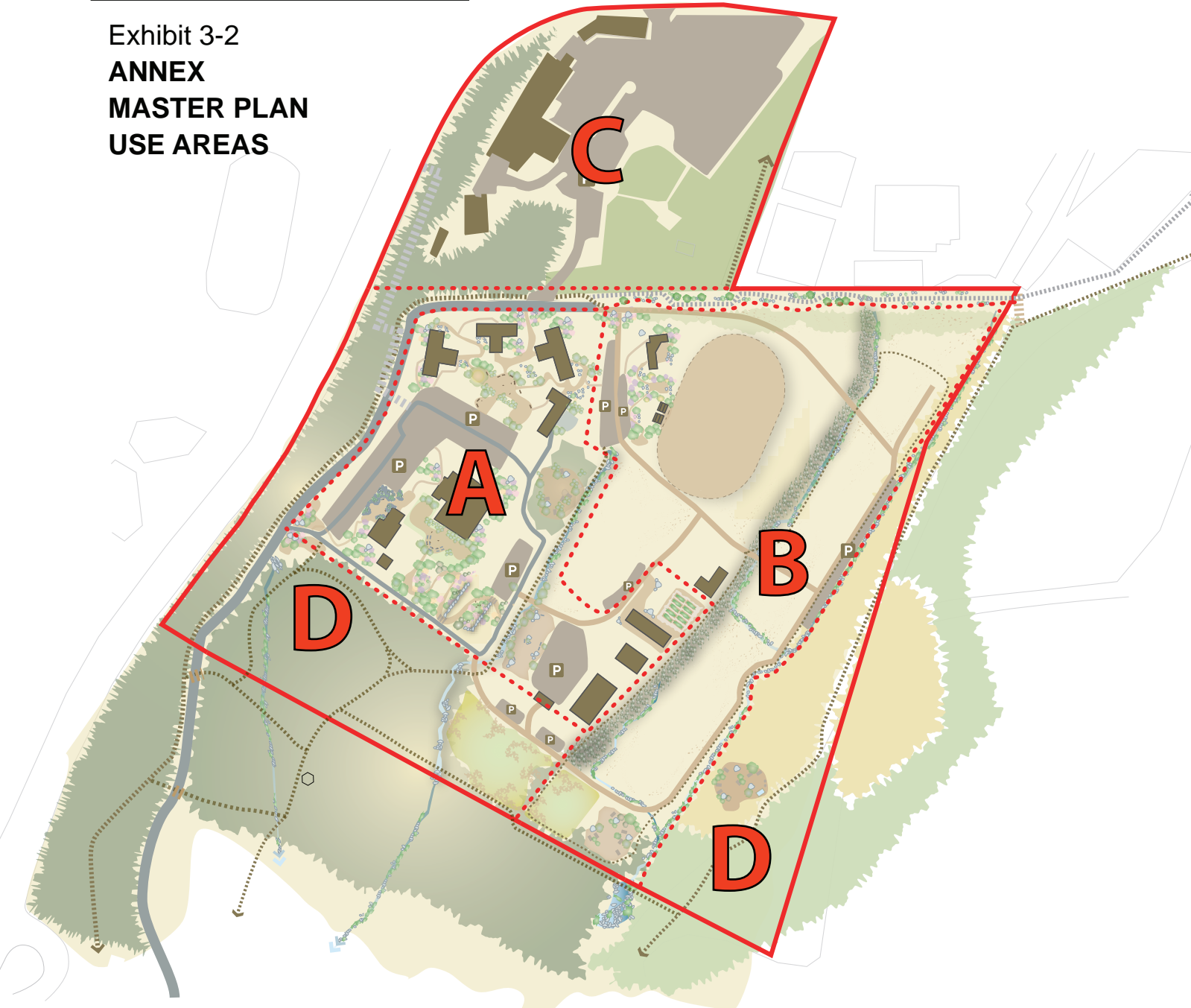
Legend

-  Recreational Bikeway
-  Primary Park Roads
-  Secondary Park Roads
-  Internal 'all weather' Route
-  Trails
-  Universally Accessible Trail Ramp
-  Trail Crossing
-  Parking
-  Use Area Boundary

Use Areas

- A Environmental Education Center**
- B Equestrian Center**
- C L.A. County Fire Camp 2**
- D Natural Open Space**

**Exhibit 3-2
ANNEX
MASTER PLAN
USE AREAS**



Following is a description of the use areas, the facilities anticipated within each use area and the recommendations for each. Exhibit 3-3 focuses on the use areas with the greatest number of planning recommendations. Since the recommendations for LA County Fire Camp 2 are minimal, its inclusion in Exhibit 3-3 has been minimized.

A. THE ENVIRONMENTAL EDUCATION CENTER

The Environmental Education Center (EEC) will be an approximately 5.63 acre complex with both indoor and outdoor facilities that will serve as a premier learning, conference and community center with an emphasis on environmental education of the Arroyo Seco watershed. The EEC will strive to adaptively re-use the existing vacant buildings on the former USFS site and will include the following primary facilities:

MAIN BUILDING WITH CONFERENCE HALL

The main conference hall will accommodate up to approximately 185 people and will serve as the primary meeting space for educational sessions and community gatherings. A main office will serve as the information and administrative center for the EEC and visitor reception area. Several offices will be provided for key EEC personnel and a modest exhibit space will afford the opportunity to showcase interpretive material as well as special displays.

ENVIRONMENTAL CLASSROOMS

Three classroom buildings will provide meeting spaces with some office support space. Two of the classroom buildings will accommodate a total of approximately 85 people; the third classroom building will accommodate up to a total of approximately 108 people. The design of these classroom buildings will include portable walls to allow for the flexibility of smaller classroom configurations or the option of a larger meeting space.

DINING HALL

The dining hall would be an ancillary facility that would support the other facilities within the EEC. A commercial kitchen would be available for food preparation along with small office support space. Both indoor and outdoor dining facilities would be provided for gatherings.

OUTDOOR CLASSROOMS & GATHERING AREAS

The proximity of the Annex to the Arroyo Seco stream, flood basin, natural plant communities and views of the San Gabriel Mountains lends itself to the utilization of

A Environmental Education Center

- 1 Main Conference Facility
- 2 Environmental Classrooms
- 3 Dining Hall
- 4 Outdoor Classroom/Gathering Area
- 5 Site Manager Residence & Office
- 6 Xeriscape Garden
- 7 Demonstration Gardens
- 8 Group Picnic Area
- 9 Environmental Vocation Center
- 10 Park Maintenance Facility
- 11 Native Plant Nursery Co-op
- 12 New Restroom

D Natural Open Space

- 17 Restored Oak Woodland
- 18 Restored Sycamore Woodland
- 19 Restored Habitat
- 20 Rest Area

C L.A. Fire Camp 2

B Equestrian Center

- 13 Riding Area & Equestrian Staging Area
 - 13a Clubhouse
 - 13b Garden/Group Picnic Area/Trail Hub
 - 13c Viewing Stands
- 14 Horse Boarding Area
- 15 Youth Camp Operation
 - 15a Wranglers Residence
- 16 Therapeutic Recreation Area



Legend

	Primary Park Roads		Sycamore Woodland Restoration
	Secondary Park Roads		Oak Woodland Restoration
	Recreational Bikeway		Habitat Restoration
	Internal 'all weather' Route		Vegetative Bank Stabilization
	Trails		Bioswale Drainage
	Universally Accessible Trail Ramp		Structure
	Trail Crossing		Parking Area

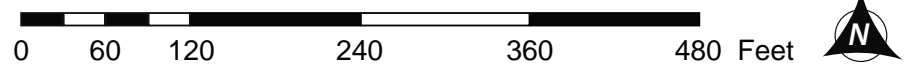


Exhibit 3-3
MASTER PLAN AREA

outdoor classrooms and gathering areas. The creation of several of these areas are envisioned throughout the EEC area, varying in size to serve groups between 25 and 150 people. Most of these spaces are immediately outside other EEC buildings but could function either as an extension to the adjacent building or as independent meeting spaces. These spaces would provide both seating and standing areas and include native plantings to provide shade, enhance wildlife and provide interpretive educational opportunities.

SITE MANAGER RESIDENCE & OFFICE with XERISCAPE GARDEN

This facility would house the on-site manager who would oversee the Annex. An office for the manager will be provided and a garage with storage area is adjacent to the residence. The grounds of the residence will be landscaped as a water conserving garden, serve as a demonstration showpiece for the EEC and showcase low maintenance materials and plant selections.

DEMONSTRATION GARDEN AREA

The demonstration garden area will be a series of terraced plots separated by the existing Arroyo stone retaining walls, originally built by the CCC's (California Conservation Corps), prior to the former U.S. Forest Service occupation of the site in the 1950's. The garden will be a major teaching stop for the EEC and include a combination of garden paths and garden plots. Demonstration areas will include a variety of sustainable gardening ideas.

GROUP PICNIC AREA

This group picnic area will accommodate groups of up to approximately 50 people. The site is envisioned as a meadow setting under the existing oak trees and will be used to support the activities at the EEC. Picnic tables to support the anticipated attendance will be installed. This site will also be available to the Equestrian Center.

ENVIRONMENTAL VOCATION CENTER

The environmental vocation center will serve as a community work and training center and will support the mission and vision of the EEC. The environmental vocation center will provide an outdoor yard area for learning and gathering, office space, meeting space and storage space.

PARK MAINTENANCE FACILITY

The park maintenance facility will house the tools, supplies and equipment for the City park maintenance operations of the Arroyo Seco with an emphasis on the Annex. This facility will serve as an extension of the Oak Grove Maintenance Office (OGMO) in southwest corner of the park.

NURSERY CO-OP

The native plant nursery co-op will provide facilities for the propagation and growing native plants species and promote horticultural education with a particular focus on the restoration of the natural plant communities of the Arroyo Seco. The nursery co-op will provide a plant lab, native plant germination green house facilities, growing beds and exterior space for nursery purposes.

NEW RESTROOM

A new public restroom will be provided to service the anticipated use from both the EEC facilities and the Equestrian Center facilities planned in this section of the park.

Recommendations for the Environmental Education Center:

- ☞ Existing structures will be retained for reuse to the greatest possible and to minimize demolition (see Section 3.10);
- ☞ The EEC will be known as the Arroyo Seco Environmental Education Center;
- ☞ The EEC will be a model of sustainability and green construction technology, operations and maintenance in every aspect;
- ☞ The EEC will operate and be managed as a cohesive center with a central vision and mission;
- ☞ None of the EEC facilities listed should be allowed to function independently; there shall be a strong interaction and partnership between each of the EEC facilities listed above; and
- ☞ There shall be a strong interaction and connection between the EEC and the Equestrian Center, HWP and the Arroyo Seco at large.

B. THE EQUESTRIAN CENTER

The Equestrian Center will be an approximately 3.6 acre complex and will serve as a public equestrian facility for the City of Pasadena. The Equestrian Center will serve as a horse riding, staging, teaching and boarding facility for the City. The Equestrian Center will consist of the following four primary facilities:

RIDING ARENA & EQUESTRIAN STAGING AREA

The Riding Arena and Equestrian Staging Area will be open for public use. Associated public facilities would include:

- Riding arena(s)
- A Clubhouse would provide meeting and gathering space for up to approximately 60 people, an office with storage space, a kitchen and restroom facilities;

- The Garden, Group Picnic Area & Trail Hub would be a destination spot within the annex and on the grounds immediately adjacent to the Clubhouse. The garden would be a model for water conservation. The picnic area would also have tables to accommodate up to approximately 60 people. This location would also have a kiosk with trail and park information and serve as a rest area for trail users; and
- Other related facilities could include: a barn, visiting horse corrals, a smaller arena, a turn out pen and a visiting horse station (with a hose, wash rack, watering trough, etc.) Viewing stands for up to 150 people to sit and view the activities within the riding arena(s) would also be provided. A parking area to accommodate visitors to this area of the park, special event attendees and visiting equestrians (with and without horse trailers) will be provided.

HORSE BOARDING AREA

The horse boarding area will provide boarding facilities for up to 70 horses and encompass approximately 2.3 acres. Access to this area by the public will be controlled to keep the area safe for the horses. Other facilities anticipated within the horse boarding area could include:

- ♦ Hay and feed storage
- ♦ Horse wash rack
- ♦ Tack and equipment storage
- ♦ Barn or barn storage rooms
- ♦ Jumping arena and/or turn out pen
- ♦ Boarding Stables (with space for up to 70 horses)
- ♦ Shared horse waste disposal area
- ♦ Horse trailer parking (maximum of 8 emergency horse trailers + visiting trailers)
- ♦ Horse boarder parking

YOUTH CAMP OPERATIONS AREA

This area will support youth camp operations that takes place in the larger HWP park area, and also serve as a staging area for public youth camp programs. This youth camp operations area will encompass approximately 1.9 acres. Access to this area will be controlled for the safety of the horses. The youth camp operations area shall consist of the following facilities:

- ♦ The Horse Boarding area, where a maximum of 70 horses will be corralled in the summer months and a maximum of 35 horses will be corralled in the non-summer months;
- ♦ Staging area, where horses are saddled and riders will gather for a lesson or a ride, whether campers or members of the general public;
- ♦ Recreation area where a small area is dedicated to youth recreation in association with the summer camp program;

- ◆ “Wrangler’s residence” is the site where a mobile trailer will be located to house the camp operations facility manager. The site will also provide for an enclosed garage or carport and storage area;
- ◆ Other pertinent facilities could include a barn, hay and feed storage, tack and equipment storage, corral-stables, a horse wash rack and parking (including space for 2 horse trailers).

THERAPEUTIC RECREATION AREA

The therapeutic recreation area will encompass approximately 0.8 acres and provide facilities for adaptive/therapeutic recreation programs utilizing horses. The facilities anticipated at this location are:

- ◆ A teaching arena
- ◆ Office space with ADA restroom
- ◆ Horse wash rack
- ◆ Tack and equipment storage
- ◆ Hay, feed and equipment storage
- ◆ Picnic and outdoor gathering area
- ◆ Stables (8 horses maximum)
- ◆ Hay and feed storage
- ◆ Visitor and staff parking (including space for 1 horse trailer)
- ◆ Spectator viewing area (seating for 50 people max)

Recommendations for the Equestrian Center:

- ☞ The existing equestrian tenants will be encouraged to remain on the site and execute their various missions in keeping with this adopted master plan addendum;
- ☞ The equestrian center will be referred to as the Pasadena Equestrian Center;
- ☞ Public use hours will be posted;
- ☞ Usage rules for all areas must be developed and shared with the public;
- ☞ Enter into individual operating agreements between the operator of each facility and the City, to clearly outline the programming and operational issues for the site;
- ☞ Where possible, the adaptive reuse of existing structures will occur (see Section 3.10);
- ☞ The Equestrian Center will be a model of sustainability and green technology in every aspect;
- ☞ There will be a strong and cooperative working relationship between the facilities of the Equestrian Center;
- ☞ There will be a strong interaction and connection between the Equestrian Center and the EEC, HWP and the Arroyo Seco at large;
- ☞ The horse boarding areas will have secured access due to liability concerns;

- ☞ Efficiency of space paralleled with quality facilities will be the hallmark of the Equestrian Center so as to afford the most public benefit for the community;
- ☞ The maintenance and management of all trees and the common landscaped areas will be the responsibility of the City and not those of the operators;
- ☞ Exterior lighting will be provided for security and emergency/humane horse care and maintenance. The best available technology to minimize light and glare impacts to the natural environment will be utilized;
- ☞ All recreation and routine horse care and maintenance will be conducted during HWP park hours; in the fall and winter months this may require an extension of the park hours to offset the reduced daylight hours.

C. LOS ANGELES COUNTY FIRE CAMP 2

The Los Angeles County Fire Camp 2 will continue to operate under its current use and as a tenant within the annex. The City will honor the 50 year lease that was renewed just prior to the City's purchase of the property and assigned to the City.

Recommendations for Fire Camp2:

- ☞ The Fire Camp 2 facility should maintain a strong partnership with the educational mission of the EEC; and
- ☞ The County shall work cooperatively with the City to bring facilities up to standard.

D. NATURAL OPEN SPACE

The natural open space area encompasses approximately 8.5 acres within the Annex area and is intended to seamlessly blend with the surrounding natural open space at its edges and the larger park. These areas: a) restore sectors of the Annex that are within a predominant plant community b) restore areas that are currently dominated by ruderal vegetation and that are suitable for restoration, or c) suggest specific useage of a space as general open space.

Recommendations for natural open space:

- ☞ Restore the oak woodland along the slope between Oak Grove Drive and the park while retaining the existing recreational hiking trail;
- ☞ Restore the large oak woodland area at the southernmost portion of the Annex, including the form van parking area utilized by the youth camp. Remove fencing around this area and make accessible to all park users via designated trails. Recognize the existing and continued need to provide access through this area while protecting the oak woodland;

- ☞ Restore the easternmost area of the Annex as a sycamore woodland or equally appropriate habitat restoration area;
- ☞ Provide a shaded rest area with boulders for sitting and several picnic tables and a horse tie rail for hikers and equestrians, within the habitat restoration area along the easternmost area of the Annex;
- ☞ Retain and restore the southernmost area of oak woodland at the southern portion of the Fire Camp 2 compound as well as the western slope along Oak Grove Drive;
- ☞ No active recreational sports shall be allowed within the natural open space areas;
- ☞ Restoration and protection of natural habitats shall be the priority in the natural open space areas.

E. Recreational Bikeway

This feature is a dedicated recreational bikeway that will connect the existing park road on the west to the terminus of the bikeway proposed in the adopted HWP Master Plan. The bikeway will be a maximum width of 10 feet and meander along the northern border of the Equestrian Center.

Recommendations for the Recreational Bikeway:

- ☞ Bikeway alignment shall incorporate design features to discourage fast speeds by bicyclists;
- ☞ Bikeway surface shall be permeable, sustainable and compliant with the City municipal code for bicycling within park areas;
- ☞ Usage shall be limited only to bicycles with no equestrian or pedestrian use permitted and will be signed as such;
- ☞ This recreational bikeway alignment shall not serve as a park vehicular access, but shall allow for access by small motorized maintenance/emergency vehicles;
- ☞ Minimize the removal of native tree species in the final bikeway alignment
- ☞ Restore the native plant species (both trees and shrubs) along the edges of the bikeway alignment;
- ☞ Utilize planting to screen the uses north of the Annex site and along the northern edge of the bikeway alignment; and
- ☞ Incorporate Arroyo stone into any necessary low retaining walls along the bikeway, in keeping with the built Arroyo stone walls in other portions of the Arroyo.

F. COMMON AREAS

The common areas are those areas within the Annex site that are not mentioned in any of the previous five use areas, but that are nevertheless use areas within the Annex. These areas are public/common areas and include:

- ♦ the park road
- ♦ the City's park maintenance storage area, currently used for stockpiling Arroyo stone and boulders

Recommendations for the common areas:

- ☞ Once the City's park maintenance storage area is no longer needed for this purpose, or is relocated to an alternate secured location, the area shall be restored to native plant habitat.

3.3 THE NATURAL ENVIRONMENT

The existing conditions section explained the pertinent issues surrounding the natural environment on the Annex site and in response to these, the following recommendations for the natural environment are made.

Recommendations for the natural environment:

- ☞ Consider the wildlife corridors of the larger HWP and extend these corridors through the Annex site wherever possible, through a diversified habitat restoration effort. This would improve the Annex's function as a wildlife corridor;
- ☞ Strive for minimal fencing;
- ☞ Restore, protect and expand natural habitat and plant communities as indicated on the master Annex site plan;
- ☞ Encourage non-native tree/shrub removal and replacement with native species. Any removals shall be done in a phased approach as Annex projects are funded and implemented over the course of the project;
- ☞ Landscaping on the Annex site shall be comprised of native plant species;
- ☞ Structures within the Annex site need to be located above the 1075.0 flood line or be designed to handle remotely possible, short-term inundations. Trails, emergency/maintenance access and recreation activities need to be located above elevation 1045 to avoid seasonal inundation.

3.4 SITE DRAINAGE & WATER QUALITY

The site drainage and the quality of the water that runs off from the site, are both areas that will benefit from better management practices (BMP's).

Recommendations for site drainage and water quality:

- ☞ Re-grade and reconfigure the horse boarding areas when possible, for an improved and sustainable drainage plan that will improve conditions for tenants as well as the park;
- ☞ Avoid use of paths and access routes as the primary corridor for concentrating drainage flows; establish drainage courses (as shown in Exhibit 3-3) for the primary purpose of carrying site drainage and surrounding areas graded to flow to these corridors;
- ☞ Erosion prone areas shall be stabilized, such as with vegetation and/or strategically placed arroyo stones/boulders, to mitigate for further erosion and run-off problems;
- ☞ Install natural stormwater drainage courses that will include native vegetation within and along the edge of the equestrian center and at critical areas within the Annex, with the goal of eliminating and treating any runoff from this area before it enters the Arroyo Seco streamcourse corridor;
- ☞ Develop an outreach program and educational material for various user groups to teach about the impacts of animal wastes on Arroyo water quality and to assist with animal waste hot spots within the Annex, the larger HWP park and on trails, prior to and during the storm season;
- ☞ Reduce the volume of stormwater runoff in the Annex by incorporating design features such stormwater retention basin, vegetated swales or the use of permeable surfaces in parking lots to allow ground water percolation and improve water quality by reducing the amount of runoff as well as pre-treatment of the runoff, all before entering storm drains or the Arroyo Seco streamcourse corridor.

3.5 UTILITIES & INFRASTRUCTURE

There are a number of issues requiring attention regarding the utilities and infrastructure at the Annex.

Recommendations for utilities & infrastructure:

- ☞ Conduct a detailed drainage study to reaffirm the recommendations below
- ☞ Repair or replace the non-functioning storm drain inlet associated with storm drain No. 1 (as shown on Exhibit 2-6, Site Drainage) and restore the trail; consider a natural drainage solution within the County Fire Camp 2 area;

- ☞ Repair the problem at storm drain No. 2 (as shown on Exhibit 2-6, Site Drainage) by connecting the Fire Camp grey water and storm water inlet at the kitchen loading dock to the existing sewer system in accordance with city codes;
- ☞ Repair, replace and/or modify as necessary the storm drain inlet structure at storm drain No. 3;
- ☞ Modify storm drain No. 5 (the open box, concrete lined ditch in the horse boarding area and shown on Exhibit 2-6, Site Drainage) and implement recommendations in Section 3.4 – Site Drainage;
- ☞ Provide individual water meters to each tenant within the Annex and implement the water utility upgrades and connections as outlined in the FY 2009 City Capital Improvement Program (CIP);
- ☞ Provide individual electrical service as needed to each tenant within the annex as outlined in the FY 2009 City Capital Improvement Program (CIP);
- ☞ Provide natural gas connection from the existing distribution system to the clubhouse in the Riding Area & Equestrian Staging Area, and as needed to each tenant within the annex as outlined in the FY 2009 CIP;
- ☞ Eliminate the two septic systems in the Annex area and implement the sewer utility upgrades and connections as outlined in the 2009 City CIP.

3.6 SOLID WASTE

A number of opportunities exist for improving the solid waste issues within the Annex.

Recommendations regarding solid waste:

- ☞ All land uses within the Annex shall adhere to the City's Green Action Plan.
- ☞ All uses within the Annex shall implement effective recycling efforts;
- ☞ Tenants shall demonstrate their participation and work collaboratively with each other and the City in the collection of solid waste, including horse manure.
- ☞ There shall be a centrally located communal horse waste disposal area, in keeping with best management practices for water quality;
- ☞ Coordinate with the USFS to continue to allow placement of solid waste container at mutually agreed upon location within the Annex site to facilitate the USFS maintenance operations of the Angeles National Forest;
- ☞ Tenants shall demonstrate collaboration with the Environmental Education Center and their partners, in developing a program that recycles horse waste for small garden composting within the Annex, and if practical for the greater HWP and other city park projects.

3.7 MOBILITY

VEHICULAR CIRCULATION

Mobility to and within the HWP Annex will be configured to encourage and promote diverse modes of transportation. Exhibit 3-4, Mobility, illustrates the proposed circulation through the Annex site. In general, the current footprint for vehicular access in and around the site shall be retained, with some minor modifications. The existing park road and its current alignment shall continue to be the primary access route to the site.

Recommendations for Vehicular Circulation:

- ☞ Improve access to the Equestrian Center via the existing park road by relocating the existing main gate to ensure safety for the horses while also allowing visitors barrier free access into the enhanced parking area in front of the clubhouse building (See Section 3.9 for Safety and Security of this area);
- ☞ Continue to monitor the school drop off arrangement between the City and the City of La Canada Flintridge and the usage and parking needs of the Annex and the larger park, to ensure the utmost safety for park visitors;
- ☞ Provide way-finding signage to and from the Annex facilities;
- ☞ When feasible, replace existing asphalt roadways with a permeable surface alternative;
- ☞ Relocate and construct new all-weather permeable surface access route within the horse boarding area. Re-grade for improved drainage and stormwater management;
- ☞ Create one drop-off/parking area for buses within the EEC (in addition to the two included in the adopted HWP master plan; See Exhibit 3-5).








ACCESS & PUBLIC TRANSIT

The following recommendations are suggested regarding access and public transit for the Annex:

Recommendations for Access & Public Transit:

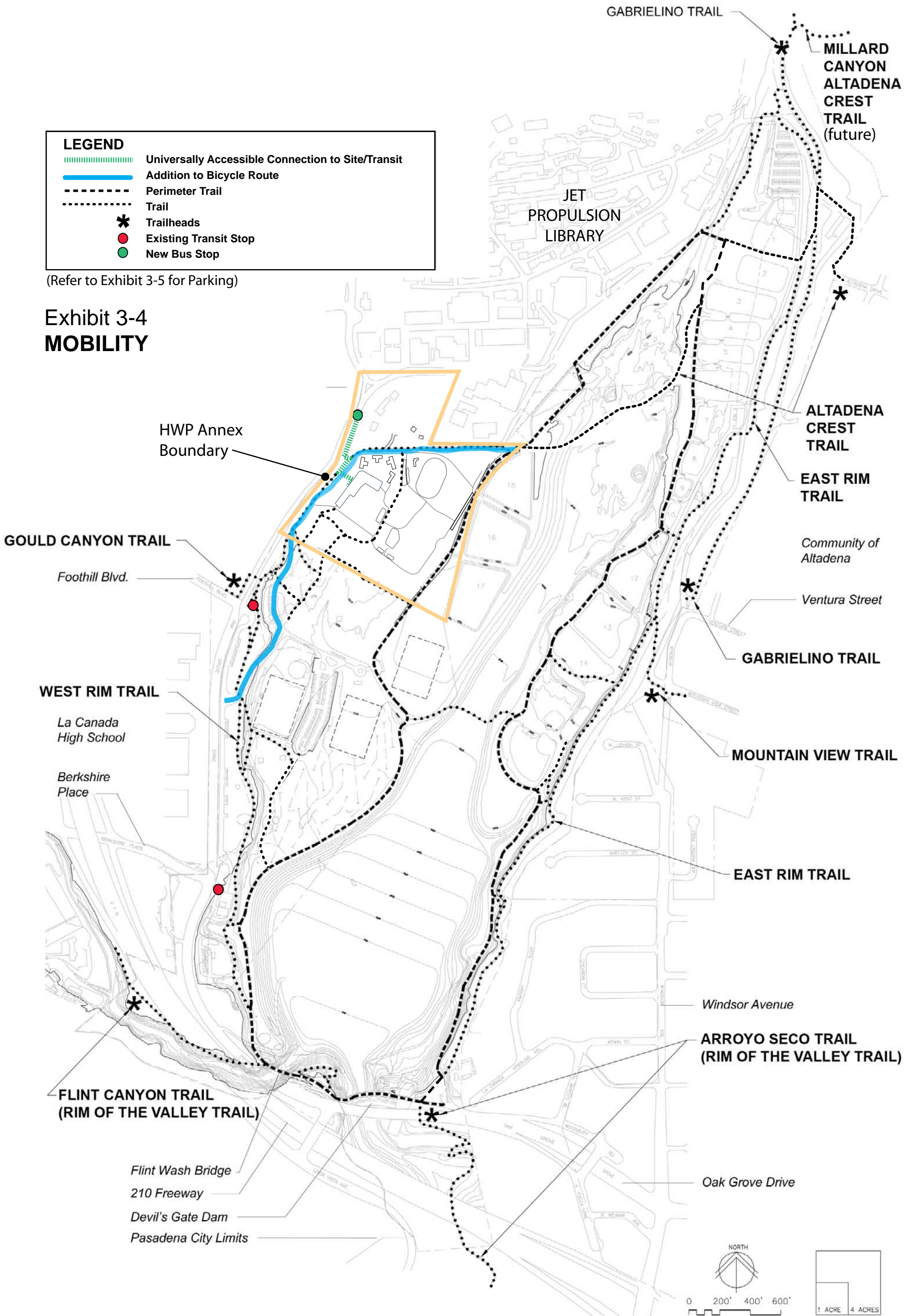
- ☞ Support the proposed new transit stop on Oak Grove Drive, immediately south of the entrance to JPL and generally shown on Exhibit 3-4, Mobility;
- ☞ Construct a universally-accessible connection to the proposed transit stop on Oak Grove Dr. and as indicated on Exhibit 3-4. Portions of this connection will be elevated above ground level to protect the slope and preserve the habitat;
- ☞ Improve the existing north/south trail between the Equestrian Center and the JPL South Entrance, including a safe bikeway crossing to the EEC;

LEGEND

-  Universally Accessible Connection to Site/Transit
-  Addition to Bicycle Route
-  Perimeter Trail
-  Trail
-  Trailheads
-  Existing Transit Stop
-  New Bus Stop

(Refer to Exhibit 3-5 for Parking)

**Exhibit 3-4
MOBILITY**



- ☞ Improve the existing pedestrian/equestrian trail from the transit stop at the park entrance at Oak Grove Drive and Foothill Blvd., north, to and through the Annex;
- ☞ Ensure the Environmental Education Center is a known destination stop for Dial-A Ride;
- ☞ Eliminate/relocate any impediments, such as locked gates at the primary entrance to the public equestrian area (Area B on Exhibit 3-2) to allow emergency vehicles access to this area and to be able to maneuver and exit the Annex on the park road (See Section 3.9 for Safety & Security in this area).

TRAIL & BICYCLE ACCESS

The following recommendations are suggested regarding trail and bicycle access for the annex:

Recommendations for Trail & Bicycle Access:

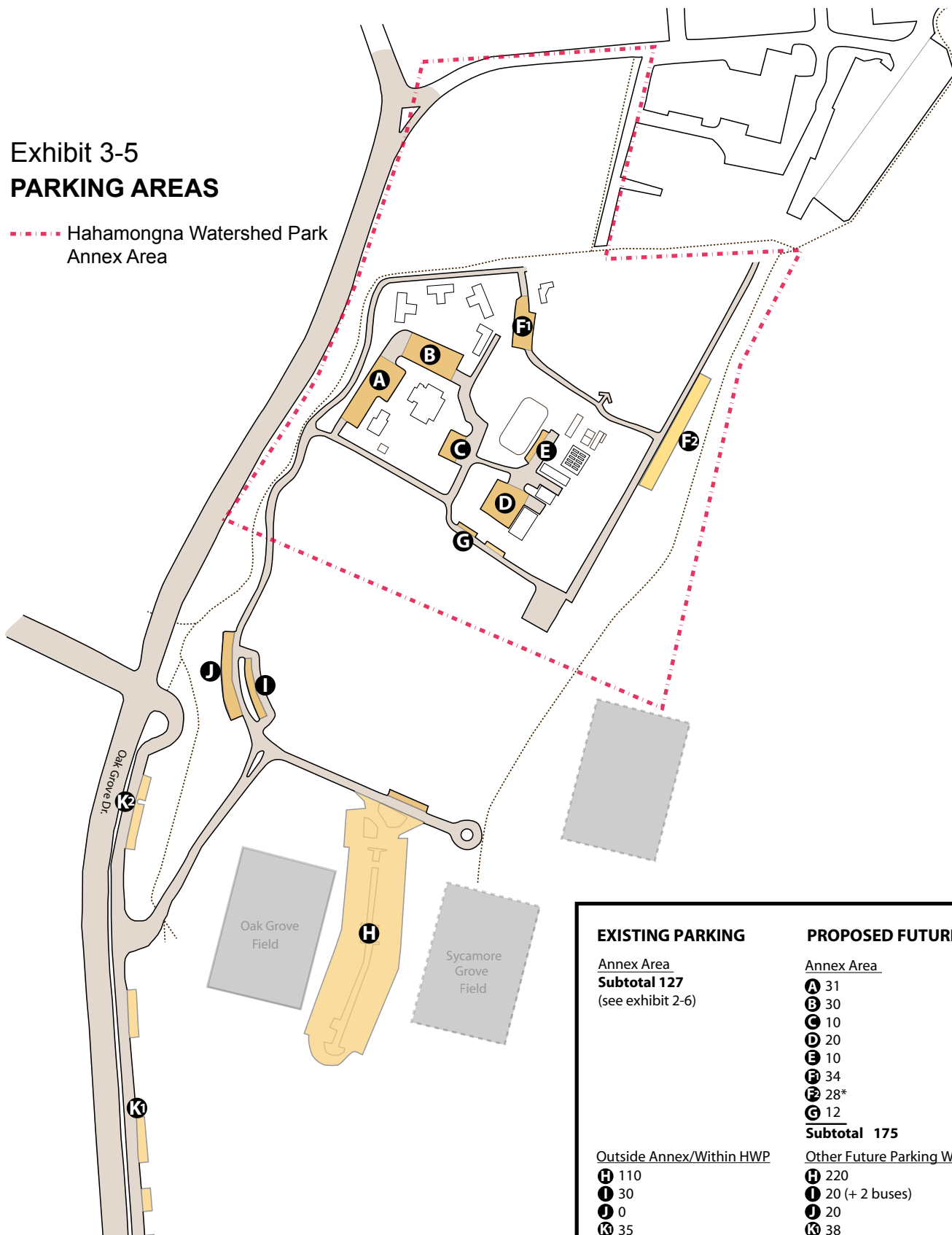
- ☞ Construct an ADA compliant connection to proposed transit stop on Oak Grove Dr. and as indicated on Exhibit 3-4. Portions of this connection are suggested to be elevated above ground level so as to not impact the slope and the habitat;
- ☞ Enhance existing north/south trail between EEC/Equestrian Center and JPL;
- ☞ Improve existing pedestrian/equestrian trail from the transit stop at the park entrance at Oak Grove Drive and Foothill Blvd. north, to and through the Annex;
- ☞ Restore the public trail connections from the EEC through the oak woodland at the southern end of the Annex and to the park area to the south;
- ☞ Ensure thru-trail connections to/from the greater park and the Arroyo Seco;
- ☞ Install bicycle racks at the EEC and Equestrian Center;
- ☞ Establish a recreational bikeway along the northern edge of the site that will connect the park road with the bicycle route in the adopted HWP master plan; and
- ☞ Comply with Arroyo Seco Design guidelines. Bikeway shall be a maximum of 10 feet in width and trails shall be 4 to 8 feet in width.

PARKING

Exhibit 3-5, Parking, illustrates that 175 spaces are planned within the proposed Annex site, not including the existing or proposed parking on the western portion of HWP. A total weekday parking demand of 132 spaces is projected, with a weekend parking demand of 140 spaces, indicating that the proposed parking supply within the Annex site is anticipated to accommodate the peak parking demand during typical weekday and weekend conditions.

**Exhibit 3-5
PARKING AREAS**

--- Hahamongna Watershed Park Annex Area



EXISTING PARKING	PROPOSED FUTURE PARKING
<u>Annex Area</u>	<u>Annex Area</u>
Subtotal 127 (see exhibit 2-6)	A 31
	B 30
	C 10
	D 20
	E 10
	F 34
	F 28*
	G 12
	Subtotal 175
<u>Outside Annex/Within HWP</u>	<u>Other Future Parking Within HWP</u>
H 110	H 220
I 30	I 20 (+ 2 buses)
J 0	J 20
K 35	K 38
L 19	L 19
Subtotal 194	Subtotal 317 (+ 2 buses)
TOTAL EXISTING 321	TOTAL PROPOSED 492(+ 2 buses)

*Only for horse trailer & horse boarding area

Parking is limited within the Annex area and accommodations will need to be made under special event conditions. Special events are defined as any event outside of the typical daily or weekend conditions. Special events at the annex site occur throughout the year on both weekdays and weekends; the same is true for the west side of the park, outside of the Annex area. The continuation of these special events is envisioned.

The traffic study concluded that the proposed parking supply within the Annex site will not be sufficient to accommodate the total forecasted parking demand under a special events condition, which can have a peak parking demand of 237 spaces. Since the forecasted total parking demand for a special event scenario exceeds the proposed parking supply of 175 spaces within the Annex site and since the total proposed future parking anticipated on the west side of the park is 272 total spaces, parking outside of the Annex and alternative modes of transportation will be needed to accommodate special events.

Recommendations for Parking:

- ❧ Impermeable surface parking should be eliminated and converted to a permeable surface, whenever possible;
- ❧ Parking areas should incorporate environmentally sound features into their design to reduce, collect and treat surface run-off;
- ❧ Events and programs planned at the Annex area will be monitored by the City's park permitting process such that the anticipated parking demand generated by any event or simultaneous activities held at the Annex facilities would not exceed the proposed parking supply unless sufficient off-site parking is identified and secured; or unless the event/program planned demonstrates a management plan for their event that will be aimed at decreasing the number of vehicular trips generated by increasing the use of alternative transportation modes (public transit, walking, bicycling, carpooling etc.);
- ❧ Long-term parking of horse trailers will not be permitted. A limited number of horse trailer parking spaces (for emergency purposes only) will be assigned to each tenant;
- ❧ Parking of horse trailers in the Riding Area & Equestrian Staging Area will be for visiting equestrians and event participants. Parking for horse borders and the allotted horse trailer parking spaces (see above) will be permitted in the horse boarding area only.

3.8 RECREATION

While the site currently offers limited public recreation, the recommendations within this addendum are intended to expand public recreation opportunities.

Recommendations for Recreation:

- ☞ The recreational bikeway will complete the bicycle loop around the perimeter of HWP park and as recommended in the adopted HWP master plan;
- ☞ The Riding Arena and Equestrian Staging area shall be a public facility open to everyone. Public usage hours will be established;
- ☞ Rental of the building and picnic facilities within the Riding Area and Equestrian Staging Area will be managed through the City's park permitting system;
- ☞ The operators of the leased horse boarding area will be encouraged to make that facility more efficient, allowing for boarding corrals for up to 70 horses;
- ☞ All tenants having leases with the City will be required to offer public recreational programs in exchange for reduced lease rates. Programs will include, but not necessarily be limited to horsemanship classes and guided trail rides and shall be consistent with the vision and goals of the EEC;
- ☞ Hiking/equestrian trails shall be made available to the public through the oak woodland area at the southern end of the Annex and will connect the greater park to the Annex site;
- ☞ An extensive range of programs shall be offered to the community through the Environmental Education Center and the various partnerships planned;
- ☞ Picnic areas, rest stops and outdoor demonstration gardens will be established within the Annex for recreational and educational experiences;
- ☞ Pasadena residents, PUSD students and those who work in Pasadena shall have a priority in the use and programming of the Annex and what is planned to be a community facility;
- ☞ The Annex will serve as a hub and special destination for trail users, cyclists and equestrians.

3.9 SAFETY & SECURITY

The adopted HWP master plan provides guidance on issues surrounding safety and security. The following is a list of new recommendations that are unique to the Annex site and revisions of recommendations within the adopted HWP master plan because of the unique circumstances at the annex.

Recommendations for Safety & Security:

- ☞ Normal park hours at the Annex will be dawn to dusk, consistent with all of HWP. Exceptions to this will be at those areas specifically intended and permitted for evening use, such as, but not limited to, evening programs at the EEC and horse care activities at the boarding areas;
- ☞ Lighting in the Equestrian Center will be minimal and only for emergency purposes and humane horse care purposes, including site maintenance;
- ☞ All lighting should provide the appropriate level of illumination with minimum impacts to the natural environment;
- ☞ Emergency access shall be provided to all public areas in the Annex with designated access to all areas with occupied structures;
- ☞ Public access to the horse boarding areas shall be controlled to minimize liability issues and for the safety of the animals;
- ☞ The use of fencing shall be kept to a minimum and installed only where the City considers safety or security a concern.

3.10 SUSTAINABILITY, DESIGN & AESTHETICS

As an area integrated into the existing natural setting of the HWP, the Annex will be designed and managed to reflect and function within its natural context. The Annex will be a model for sustainability and uphold the City's environmental stewardship policies. Sustainable practices include, but are not limited to site design, energy efficiency, water conservation, indoor air quality, materials and resource selection.

Recommendations for Sustainability, Design & Aesthetics:

Detailed sustainability guidelines for the reduction of impacts on human health and the environment through better design, construction, and operations and maintenance will be developed for the Annex including such recommendations as:

- ☞ Preference for rehabilitation of existing facilities over demolition;
- ☞ Use of high quality, durable, long lasting materials;
- ☞ Incorporation of energy saving design and water conservation;
- ☞ Architectural design and treatment that highlights the natural attributes of the Arroyo Seco;
- ☞ Sustainable site design treatment such as drainage and improvement to water quality;
- ☞ Green maintenance and operations in compliance with the City's adopted practice;
- ☞ The facilities at the Annex will create a place that highlights the unique natural and cultural setting of the Arroyo Seco;

- ☞ The rehabilitation of the structures within the Annex will utilize best practices to reduce the impacts on human health and the environment through better design, materials, construction, operation, and maintenance;
- ☞ An approach to achieve a zero waste strategy for the Annex shall be developed.

3.11 PARK MANAGEMENT

The park will be managed to protect natural resources while providing the park visitor with an opportunity to experience, explore, study and appreciate the natural environment of the Arroyo Seco.

The design of the Annex site requires a managed plan to avoid over-burdening its natural resources and to ensure that the park visitor experience is not diminished. Scheduled events will need to be carefully scheduled so that all facilities are not used to their maximum capacity at the same time. This will be accomplished through the City's park permitting process.

Parking on the site and throughout HWP is limited. Users will be encouraged to find alternate modes of transportation. Scheduled events may not necessarily include parking spaces for the number of participants expected. Those applicants planning scheduled events will be required to provide a plan indicating alternative, off-site parking and or alternative modes of transportation for their participants.

The City will make efforts to encourage, provide and pursue alternative transportation methods and/or off site parking venues for all HWP users.

All improvements within the Annex must be consistent with the adopted Arroyo Seco Design Guidelines.

3.12 PARTNERSHIPS & STEWARDSHIP

The success of the Annex and all of the aforementioned recommendations will be the result of the partnerships that are created. Opportunities exist for all of the recommended Annex uses to bring together important partnerships. With these collaborations, come increased opportunities for funding as well.

Park stewardship undertaken by the City, tenants and interested groups/individuals taking the initiative to protect, enhance, restore, care for and manage the Annex and its resources so that current and future generations can enjoy this unique park, recreation and open space asset. The implementation of the recommendations within this addendum will reflect the City's stewardship for the Annex as will the successful partnerships that form as a part of the next steps.

3.13 NEXT STEPS

Once the master plan addendum is adopted by the City Council, the City will:

- ☞ Apply for a 'master' Conditional Use Permit for the entire Annex site to facilitate the implementation of planned improvements;
- ☞ Prepare individual real property leases with the tenants, as necessary for City Council review and approval;
- ☞ Prepare individual operating agreements for those entities operating programs and services on behalf of the City at the Annex for City Council approval;
- ☞ Conduct community outreach and undertake actions necessary to make the annex facilities and the programs to be offered at the Annex known to the community;
- ☞ Aggressively pursue funding opportunities for the implementation of the Annex projects;
- ☞ Form a task force of key stakeholders and the HWP Advisory Committee to solicit ideas and formulate a management strategy for the Environmental Education Center and its proposed facilities;
- ☞ Make the future programming and management for the EEC a priority implementation measure of the Master Plan;
- ☞ Recruit an operator for the public riding arena and equestrian staging area;
- ☞ Work collaboratively with the individual property lessees in addressing the recommendations in the *Preliminary Code Evaluation of Existing Structures (May 2008)*.