

Rose Creek Watershed Assessment Opportunities
RECREATIONAL ELEMENTS
TECHNICAL MEMORANDUM

Prepared for:
San Diego Earthworks

Prepared by:
KTU+A Landscape Architecture and Planning

April 2005

Rose Creek Watershed Recreational Elements

1 Introduction

The Rose Creek Watershed (RCW) offers a multitude of recreational opportunities for local residents and visitors alike. Two open space parks reside within the RCW that offer activities such as hiking, jogging, mountain biking and bird watching. The La Jolla Golden Triangle Rotary Club Nature Trail, located across the street from University High School, offers educational opportunities with a self guided nature trail complete with an informative kiosk, plant signage and benches along the trail. Numerous City of San Diego owned active recreation parks also can be found scattered throughout the watershed offering facilities for soccer, baseball and softball. Accessibility to these parks and opens spaces are easily obtained through main arterial roads and residential streets. There are trail connectivity issues between the three main parks within the watershed: Rose Canyon Open Space, Marian Bear Memorial Park and Mission Bay Park which will be addressed in this assessment.

1.1 Trail Types

A well designed trail system can bring an influx of valuable tourism dollars to the area and increase property values, while enhancing the overall quality of life for residents. Multi-use trails invite various users, including walkers, joggers, bicyclists, people in wheelchairs and others to share a trail corridor collectively. For many communities, a multi-use trail serves as a close-to-home recreational area that can accommodate various activities such as jogging, walking, bicycling and bird watching. Additionally, these trails serve an important transportation purpose by connecting areas together such as neighborhoods, schools, businesses and commercial districts serving as a transportation corridor.

There are miles of hiking and mountain biking trails within the Rose Creek Watershed, predominantly traversing the larger Rose Canyon Open Space Park and the Marian Bear Memorial Parks. Many of these trails are multi-use and provide benches along the trail for rest stops and in some cases, informative kiosks and restrooms. The main trails of Rose Canyon and Marian Bear

also serve as utility access paths, or maintenance roads, that span almost the entire length of both parks. Connecting to these utility access paths are miles of singletracks that meander in and out of the adjacent vegetation and either connect back to the main utility access paths or into nearby neighborhoods.

Singletrack trails are trails in which users must generally travel in single file and tend to wind around obstacles such as trees, large rocks and bushes (Figure 1-1). As compared to roads or multi-use paths, singletrack trails blend into the surrounding environment, disturb much less ground and are easier to maintain.

Figure 1-1: Singletrack on Biltmore Trail



Designated trails throughout the Rose Canyon Open Space and Marian Bear Memorial Park are typically 3-6 feet in width and are a shared-use trail designated for pedestrian and cycling use only. These shared-use trails disperse users across the entire trail system and are the most cost efficient for land managers as they require fewer signs and less staff for maintenance and monitoring. Shared-use trails also require less trail miles and therefore have less impact to the ecosystem (Figure 1-2).

Figure 1-2: Shared-use trail



Maintenance roads (also known as utility access paths) are typically the main trail type throughout these parks due to their heavy use and easy accessibility. The maintenance roads serve dual purpose in that they provide access for authorized vehicles for park management and recreational use for pedestrians and cyclists (Figure 1-3). These utility access paths also provide access to Metro Wastewater Department and San Diego Gas & Electric utilities. In many cases, these paths provide reasonable trail connections and linkages. As these paths are normally linear and bisect open space boundaries, they provide excellent connections between developed areas.

Figure 1-3: Maintenance Roads



1.2 Bikeway Facilities

There are 37 miles of designated bikeway facilities on city streets within the RCW (Table 1-1 and Figure 1-9). The largest bike facility found in the Rose Creek Watershed is the Class 2 bike lane that meanders 17 miles primarily west of MCAS Miramar. To prevent confusion when referring to bikeways, bicycle lanes, bicycle paths and bicycle routes, a description of each bicycle facility type is as provided below.

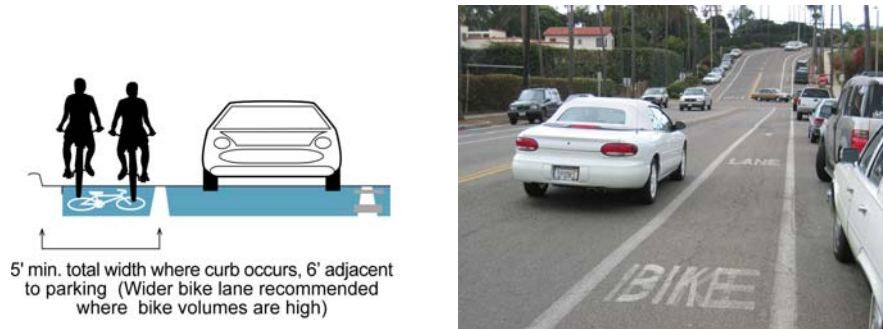
Class 1 – Paved “Bike Path” with an exclusive right-of-way, physically separated from vehicular roadways and intended specifically for non-motorized use (Figure 1-4). Bike paths offer opportunities not provided by the road system. They can either provide a recreational opportunity, or in some instances, can serve as a direct high-speed commute route if cross flow by motor vehicles and pedestrian conflicts can be minimized.

Figure 1-4: Bike Path



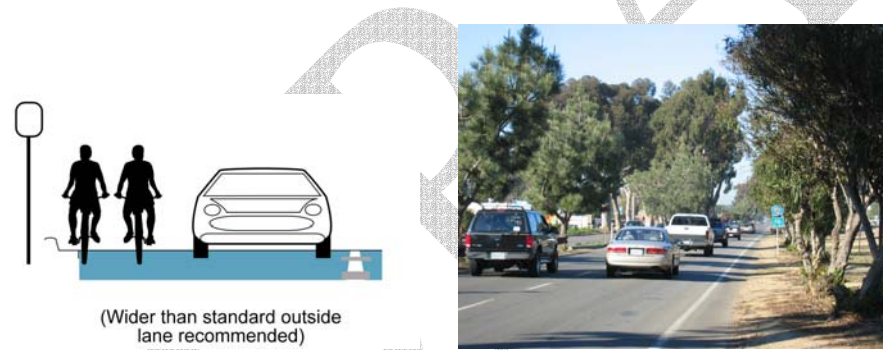
Class 2 – Signed and striped “Bike Lane” are established along streets in corridors where there is significant bicycle demand and where there are distinct needs that can be served by them (Figure 1-5). They are placed to accommodate bicyclists through corridors where insufficient room exists for safe bicycling on existing streets. Bike lanes are also intended to delineate the right-of-way assigned to bicyclists and motorists and to provide movements by each.

Figure 1-5: Bike Lane



Class 3 – “Bike Route” within a street right-of-way identified by signage only. These bike routes serve either to provide continuity to other bicycle facilities or designate preferred routes through high demand corridors (Figure 1-6). As with bike lanes, designation of bike routes should indicate to bicyclists that there are particular advantages to using these routes as compared with alternative routes.

Figure 1-6: Bike Route



Undesignated – An additional category defined as locally recommended on-street routes that appear on area bikeway maps only.

Figure 1-7: Undesignated Bike Route

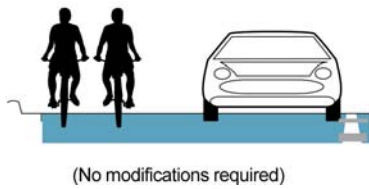


Table 1-1: Bikeway Facilities

Bikeway Facilities	Miles
Class 1: Bike Path	3
Class 2: Bike Lane	17
Class 3: Bike Route	7
Undesignated	10
Totals	37

There are roughly 15 miles of designated bike trails within the RCW (Figure 1-10). Three miles lie within the Rose Canyon Open Space Park and another 9 miles are in the Marian Bear Memorial Park. These off-road bicycle trails are a shared-use facility with hikers. In addition to these designated trails, there are approximately 3 miles of utility access paths on the north side of the railroad tracks in Rose Canyon. This fire road extends from where Gilman Drive and Rose Canyon Bike Path merge eastward to Interstate 805. This trail is the potential site for the Class I Coastal Rail Trail which is proposed to connect Oceanside to the Santa Fe Depot in downtown San Diego. Just north of this fire road along the northern rim of the canyon is a trail made of fine crushed rock resembling asphalt. This trail begins from Regents Road and ends a half mile west near the rail road tracks.

2 Trail Assessment

2.1.1 Trail Access

Rose Canyon Open Space Park can be accessed from the same streets as Marian Bear but at different locations. Marian Bear Memorial Park has two residential access trails on its southern slopes. One is the Biltmore Trail that is about one-third of a mile in length and can be accessed

from Biltmore Street in Clairemont Mesa. A concrete staircase off Cobb Place also in Clairemont Mesa can access Cobb Trail. Cobb Trail is roughly 900 feet in length from Cobb Place to the main trail in the Marian Bear Memorial Park. Both the Cobb and Biltmore Trails are highly shaded by a thick canopy of willows and oak woodlands keeping the trails moist and protected from direct rainfall which helps keep erosion to a minimum. A third access point is the Kroc Trail, which is a quarter-mile long trail and is the eastern most designated access into Marian Bear Memorial Park. The Kroc Trail follows a highly eroded tributary into San Clemente Creek and outlets onto a power line road that can be accessed from Lehrer Drive. Kroc trail is almost void of any canopy and the adjacent tributary is eroding towards the trail, making the long-term stability of the trail uncertain without management intervention. The northern most access into Marian Bear Memorial Park is through the Standley Trail north of San Clemente Creek. This trail can be accessed from Governor Dr. at the Standley Community Park. The trail then heads south across Syracuse Ave, then continues beneath State Route 52 and connects with the main fire road in Marian Bear Memorial Park. The only current residential access into Rose Canyon is through the Regents Road trail head just south of Rose Canyon.

Visitors who want to access the trail system of the Marian Bear Memorial Park can park their vehicles at two parking locations; off Regents Road and Genesee Avenue. The parking lot off Genesee Avenue is located on the east side of Genesee Avenue lanes and can only be access from the northbound lanes. Visitors must make a u-turn at the light in front of the parking lot if heading southbound. The Regents Road parking lots cross beneath Regents Road and can be accessed from both the northbound and southbound lanes. Genesee Avenue has an ADT (average daily tips) of 32,000 vehicles per day. That is a high amount of vehicular traffic for pedestrians as the speed limit can reach 55 mph at sections where topography allows vehicles to move faster downhill. This is particularly evident when heading northbound on Genesee Avenue from Clairemont Mesa Blvd down to Marian Bear Memorial Park or from Governor Drive down to the Rose Canyon Open Space Park entrance. According to the San Diego Street Design Manual, Genesee Ave falls into the category of Four Lane Major Road with an ADT over 30,000 and a curb-to-curb width of 76ft. Genesee Avenue does fall into that category and is up to standard based on the San Diego Street Design Manual. The ADTs for Regents Road are not quite as high as Genesee Ave at just over 25,000 vehicles per day to access Marian Bear Memorial Park. The

Regents Road does have the same topographical issues as Genesee Ave in which the Marian Bear Memorial Park parking lots are located at the bottom of two mesas. With the Marian Bear Memorial Park parking lots on both sides of Regents Road, both southbound and northbound lanes can have speeds in excess of 45 mph which can potentially be dangerous for pedestrians and bicyclists. According to the San Diego Street Design Manual, Regents Road falls short on the curb-to-curb width standard of 82 feet and only has a narrow sidewalk on the northbound lanes. Regents Road is approximately 60 feet and does include Class 2 bike lanes. The Regents Road trail head into the Rose Canyon Open Space is accessed through a low ADT residential neighborhood. Locals can safely access Marian Bear Memorial Park through the residential access trails and to access the Rose Canyon Open Space, locals can walk or bicycle to the Regents Road trail head.

When accessing the open space parks from a surface street, a Class 2 bike lane on Genesee Ave provides access to both the Rose Canyon Open Space and the Marian Bear Memorial Park. Portions of both parks can also be accessed from the Rose Canyon Bike Path, a Class 1 bikeway facility, at the northern end of Sante Fe Street in Clairemont Mesa. The Rose Canyon Bike Path is a paved bike path that runs along the western edge of the railroad tracks and terminates on Gilman Drive where it turns into a Class 2 bikeway facility. Unfortunately, these facilities do not provide a safe access into the trail system of both the Marian Bear Memorial Park and the Rose Canyon Open Space. In order to access the trail system, users must cross the railroad tracks eastward and could face a hefty fine of up to \$1,000.

According to the Federal Railroad Administration, there have been five casualties due to trespassers on the railroad tracks in San Diego County in the past five years. Pedestrian safety improvement options are limited along the Rose Canyon Watershed, since stopping the train is not a viable option. The only recourse to improving conditions for park users is to improve the method of stopping users or to provide a grade separation for pedestrians and bicyclists from the tracks. Currently there is no safe railroad crossing to access the Marian Bear Memorial Park Trails just south of the State Route 52. Users must cross the tracks from the Rose Canyon Bike Path and make their way east towards Marian Bear Memorial Park and still have to cross Rose Creek before accessing the main utility access path. There is one railroad crossing to access the Rose Canyon Bike Path but it is currently closed (Figure 2-1). To access this crossing, users must exit the Rose

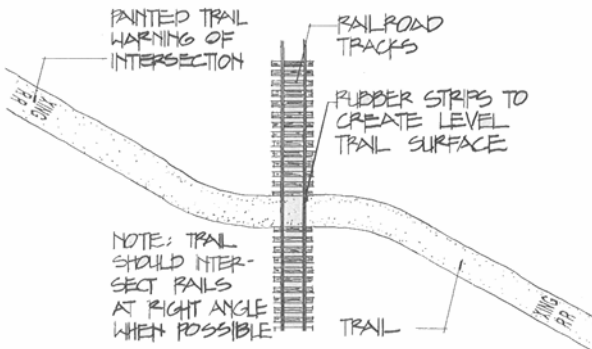
Canyon Bike Path and enter the railroad corridor and traverse some 500 feet alongside the railroad right-of-way to the railroad crossing.

Figure 2-1: Closed railroad crossing in Rose Canyon



Signage could warn users of the danger by prohibiting the crossing of the railroad tracks to access Marian Bear Memorial Park. Another solution would be to provide a safe section to cross from the Rose Canyon Bike Path that will lead directly to the Marian Bear Memorial Park trails. Solutions could include; 1) a crossing of level grade from the Rose Canyon Bike Path over the railroad tracks, 2) a pedestrian bridge crossing or 3) an underpass or tunnel. Approaches to the track and the area between the tracks should be raised to the level of the top of the rail because rail ties that are not flush with the travel surface create a tripping hazard in addition to the gap hazard. Since trains maybe coming in ether direction, the optimum condition is for pedestrians and bicyclists to cross at a 90 degree angle to the rail line (Figure 2-2). This also provides a straight angle for wheels such as bicycles, wheelchairs and strollers. Optimally, wheels should be able to cross rail lines at 90 degrees. Since this is currently a recreation trail, the surface should be hardened to reduce the debris that scatters over the tracks as users pass. Railroad crossing warnings could include stencils and signs to be placed prior to railroad crossings to warn oncoming pedestrians and bicyclists.

Figure 2-2. Railroad crossing



Source: Ryan, 1993

In the case of the Rose Canyon Open Space railroad crossing, a paved or re-worked trail with proper signage can direct users along the railroad corridor to a proper crossing and discourage illegal crossing at any given section of the railroad. Creating a railroad crossing where the Rose Canyon Bike Path ends near Gilman would also allow a safe access to the Rose Canyon Open Space trail system. Line of sight in both directions is acceptable and it will limit the amount of users walking alongside the railroad tracks to find a safe crossing.

A pedestrian bridge crossing over the railroad tracks is a possible solution to safety and accessibility issues. There is available clearance and access to create a bridge below the State Route 52 and Interstate 5 interchange to connect the Rose Canyon Bike Path to both the Rose Canyon Open Space Park and Marian Bear Memorial Park. With accessibility requirements resulting in ramped accessible bridges, all bridges must be assumed to provide service to both pedestrians and bicyclists. Clearance over railroad tracks is controlled by the railroad company but is generally at least 23 feet (GDOT, 2003). Pedestrian bridges can vary in their structure and can be constructed of cast-in-place concrete, prestressed concrete, steel or wood. Choosing the appropriate type of structure requires the knowledge of the conditions at any proposed location. Aesthetically, the bridge structure chosen should complement the site to blend in with the environment. A trail beneath the State Route 52 and I-5 interchange just above the existing concrete channel could potentially connect both parks.

Tunnels or underpasses are another option for crossing railroad tracks although they are less desirable than bridges due to greater potential costs, security related issues and the possibility of

drainage problems which increases maintenance especially adjacent to Rose Creek. Tunnels and undercrossings should have a minimum overhead clearance of 10 feet and should be at least 12 feet wide to accommodate several users to pass one another safely. Undercrossings and tunnels must have adequate lighting and sight distance for safety. They should also be designed to let more natural light in and wide enough to be inviting to pedestrians. To encourage maximum pedestrian use, tunnels should be easy to access and be as short as possible. A potential location would be to cross the railroad track from the Rose Canyon Bike Path to access the Marian Bear trail system.

2.1.2 Erosion

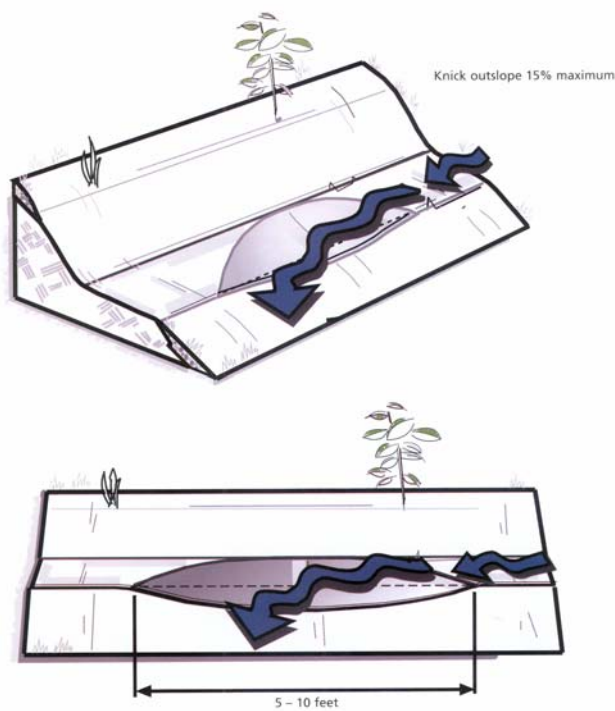
The majority of the trails through the main open space area (Rose Canyon Open Space Park, Marian Bear Memorial Park and Stevenson Canyon) are in stable condition with limited erosion problems. A few ruts can be found created by service vehicles along utility access paths in Marian Bear Memorial Park which can be easily fixed with minimal effort. However there are other trails that face more serious erosion issues that will require more time and money to repair and sustain.

There are three types of erosion that can be found throughout the Rose Creek Watershed; steep slope erosion, utility erosion and stream erosion. There are four factors that cause slope erosion: the amount and rate of rainfall, the steepness or gradient of the slope, the amount of plant cover and the type of soil. Slope erosion may play a factor in the creation of new trails for potentially connecting both Rose Canyon Open Space Park and Marian Bear Memorial Park. Unfortunately, these trails are alongside steep slopes that have begun to erode due to heavy rainfall and lack of substantial plant cover. Erosion can cause large amounts of sediment to slide down the slope covering and eroding trails and creating a safety hazard.

Slope erosion can be prevented by adding a retaining wall alongside a proposed trail to stabilize the slope and armoring the trail itself to harden the trail against user caused erosion. Retaining walls prevent debris from building up on the trail surface and stabilizing the width of the trail. Re-planting native vegetation on barren slopes will also help reduce erosion rates. Along the steep hills above the railroad tracks are foot trails that can be expanded and engineered into a more

viable trail network to connect the two parks. Once a trail system has been established, opportunities such as knicks, rolling grade dips and water bars can be utilized to help stabilize trails and create a self sustaining drainage system to minimize trail erosion (Figure 2-3 and 2-4).

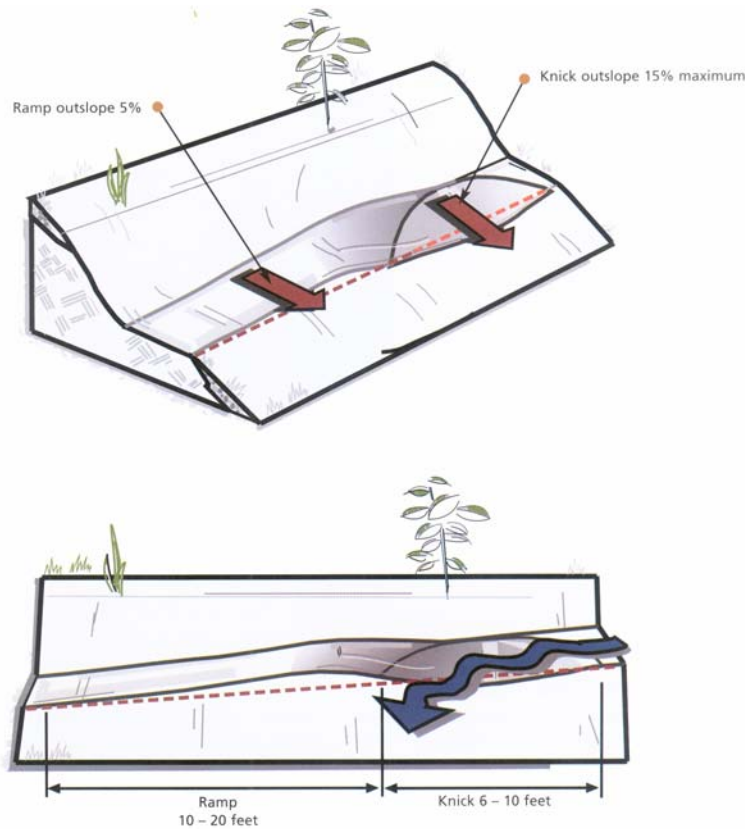
Figure 2-3: Knick



Source: International Mountain Biking Association, 2004

A knick is a semi-circular, shaved down section of trail, about 10 feet in diameter that is canted to the outside. A knick is smooth and subtle; its presence can go virtually unnoticed.

Figure 2-4: Rolling Grade Dip



Source: *International Mountain Biking Association, 2004*

A rolling grade dip builds on the knick device. It features a similar outsloped depression in the tread, followed by a long, gentle ramp made of soil.

Utility erosion is caused by man-made structures diverting run-off from adjacent developed areas into the stream system. Run-off from storm drains that terminate at the top of a slope can cause major erosion issues such as gullies from its terminus all the way to the bottom of the slope and into its major tributary. If the run-off is not managed, trails that intersect these gullies will be washed downstream leaving eroded trail conditions for users. One example of this is in Rose Canyon just west of Regents Road. There is an existing storm drain at the top of the slope that empties onto the slope. This has caused a 10-14 foot gully to be formed that intersects with the Rose Canyon trail. Currently a culvert directs flow beneath the trail and in wet months overflows onto the trail eliminating a continuous crossing for trail users. Erosion can also be associated with the ground disturbance caused by underground utilities and their utility easement access roads that

run throughout the Rose Creek Watershed. These access roads have little if no vegetation on the surface creating less resistance for storm water to flow. This type of erosion can be found in Marian Bear Memorial Park east of Diane Street where the gas line easement crosses Marian Bear in a north-south direction. Run-off at the bottom of this easement has created a gully and deposited sand onto the trail (Figure 2-5). The easement then continues as a cobbled stream bed into San Clemente Creek.

Figure 2-5. Utility erosion



One potential solution to remedy utility erosion is to re-vegetate the barren strips of land above the utility lines. Plant cover will slow down run-off and provide stability to the soil and lessen the effects of sediment transfer downstream. For storm drains that empty at the top of slopes, pipelines can be introduced to transport the flow directly from the storm drain to the bottom of the slope and into the creek. Thus eliminating the run-off down the slope and causing gullies to form and run-off onto the trail system.

Stream erosion is the detachment of material from the bed or sides of a channel. They erode materials from the bed and sides of the channel; they transport the eroded material to a new location, and then deposit it. Stream erosion occurs throughout the Rose Creek Watershed in Rose Creek, San Clemente Creek and its major tributaries. In many places along the creeks, stream erosion can be identified by the visibility of roots from the side of the channels and the layers of strata in the soil. In various sections of San Clemente and Rose Creek, trees have fallen into the creeks resulting in more debris for stream flow to carry and erode channels downstream. This type

of erosion causes many issues related to creek crossings in high flow months. In some cases, creek crossing is assisted by a cobbly streambed in which users can navigate on rocks protruding above water to cross the creek. Stream erosion can continue to cut into the sides of the channel making the length of crossing longer, deeper and more difficult. Trail users with children may see this as a deterrent and may not cross if it is not safe to do so. Some of the residential access trails also face erosion problems as adjacent tributaries continue to erode towards the trails. Wooden planks that act as bridges are washed away during high flow events making access very difficult.

Stabilizing highly eroded stream banks is a structural approach that has been used in parts of San Clemente Canyon. Riprap can be created using cobbles from the streambed to help stabilize the eroding channel which also has aesthetic benefits over ordinary concrete channels. A tree revetment is an inexpensive solution to stabilize stream erosion and provide bank stabilization. The trees in the stream bank trap sediment over time, aid in rebuilding bank structure and establishing long term bank stability. The tree limbs reduce water velocities; provide cover for juvenile fish, and a source of organic debris.

2.1.3 Creek Crossing

The Rose Canyon Open Space Park boasts a dirt and gravel trail from approximately Gilman Drive in Clairemont Mesa to Genesee Ave in the community of University. The trail crosses Rose Creek a few times via culverts built into the system leaving a relatively flat, paved and safe trail for many types of users. Marian Bear Memorial Park is quite different. The trail system in Marian Bear Memorial Park intersects with San Clemente Creek many times throughout the park and varies in width and elevation. Marian Bear Memorial Park has a more rugged terrain particularly on the western end near the Rose Creek and San Clemente Creek confluence. These numerous intersections between trail and stream pose many trail crossing issues throughout the park. The access into Marian Bear Memorial Park from the Rose Canyon Bike Path is one of the most difficult creek crossings in the Rose Creek Watershed. Rose Creek in this section is roughly ten feet wide with running water and unstable broken concrete and rocks acting as a bridge to access the trail system (Figure 2-6). It's nearly impossible to cross with a bicycle and hikers must use the

utmost care to cross without falling in. During high flow events, it is impossible to cross and the only access is from Regents Road or Genesee Ave.

Figure 2-6: Rose Creek crossing in Marian Bear Memorial Park



To access the western portion of the Marian Bear Memorial Park from Regents Road, users must cross the San Clemente Creek in about 6-12 inches of water. There is no bridge or large rocks to aid in the crossing (Figure 2-7). In low flow events, the water level could be low enough to allow hikers and bicyclists to cross with little resistance but during higher flow events, crossing would be difficult. There is a small single track path that runs adjacent to the main trail and eventually crosses the creek where there are more cobbles and debris to make crossing less difficult. This trail is not easily identifiable and thus can be missed by new users to the park.

Figure 2-7: Stream crossing from Regents Road parking lot in Marian Bear

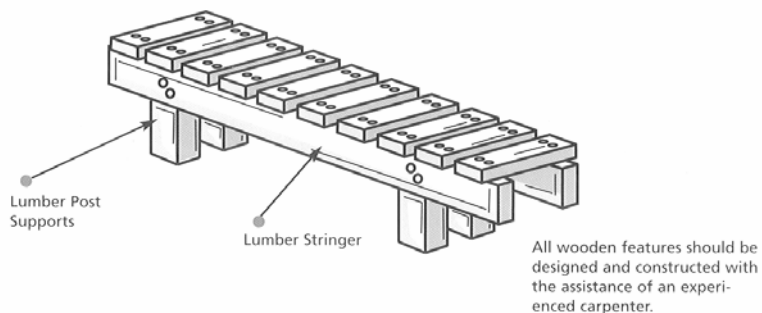


Signage would allow users to navigate through the adjacent trail and find their way across the creek to the main utility access path. Two other options for stream crossings through Marian Bear Memorial Park is utilizing bridges or armored crossings. Armored crossings are a simple and inexpensive means of allowing trail users to pass through water while minimizing sedimentation. Armoring a stream crossing is much like armoring a wet section of trail. Stones are sunk into the ground at grade to make both the streambed and the approach more durable. The new hardened surface will protect the banks, the stream and the trail. These trails can be constructed by hand with volunteer labor if the stream is small enough. Due to San Clemente Creek typically experiencing low flows throughout the year, armored crossings would benefit users at the shallow stream crossings.

Bridges and boardwalks are more labor intensive, expensive and frequently require permits. However if the stream needing to be crossed is large enough, bridges are the best means of crossing. By putting the trail above water, impact will be minimized in relation to each other. Today there are wide ranges of bridge designs from simple one-log-and-a-hand-rail versions, to wooden bridges to pre-built steel bridges. Ladder bridges can be implemented on the residential access trails as they provide a continuous trail segment over intersecting tributaries (Figure 2-8). Ladder bridges can also be used at shallow creek crossings as they can be built to meander to a flat section on the opposite side of the stream.

Figure 2-8. Ladder Bridge

May be constructed from hand-prepared logs or dimensional lumber.



Source: *International Mountain Biking Association, 2004*

A foot bridge would also allow users to cross the creek at low to medium flow events without having to navigate the single track to cross. This would be more suitable for users with children

because it allows for a safer crossing as well as staying on the main utility access path. A foot bridge would could also be used in the west end Rose Creek crossing that enters Marian Bear Memorial Park. Users that access the park from the Rose Canyon Bike Path can have a safer means to cross the creek and access the Marian Bear Memorial Park trail system. Because Rose Creek and San Clemente Creek can experience high flow during severe storms, these low lying foot bridge may hinder water and debris flow as they traverse downstream. The foot bridges can act like a dam and prevent consistent flow and debris to move freely thus potentially destroying the bridge. These bridges can be designed to “break away” and travel downstream in order to prevent debris build-up and flooding upstream.

2.1.4 Connectivity Issues

Currently there is no trail connection between the Rose Canyon Open Space Park, Marian Bear Memorial Park and Stevenson Canyon. Land ownership plays a big part in the disconnection between these canyons. These canyons and parks are surrounded by predominantly private ownership thus allowing limited connectivity between them. The City of San Diego does not own stretches of land to connect the two parks together. Topography also plays a factor in the connectivity of these parks particularly at the confluence of Rose Creek and San Clemente Creek. The steep slopes surrounding the confluence and lack of a safe trail have limited users from connecting the parks together. These slopes are greater than 25% thus limiting development and leaving an opportunity to develop a connecting trail system. Within Marian Bear Memorial Park itself, there are disconnects in the trail system at Genesee Ave. Users must cross Genesee Ave using the pedestrian crossing to access the eastern half of the park. This creates a safety hazard as the intersection where the crossing is the location of the State Route 52 on and off ramps from Genesee Ave. To access Mission Bay Park from either the Rose Canyon Open Space or the Marian Bear Memorial Park, users must use surface streets since there currently is no trail access to Mission Bay Park. From the Rose Canyon Bike Path, users can travel south on Santa Fe Street, right onto Damon Avenue and access the Rose Creek Bike Path at the corner of Damon Avenue and Garnett Ave. This Class 1 bike path follows the lower portion of Rose Creek as it empties into Mission Bay.

To safely connect the Marian Bear Memorial Park to the Rose Canyon Open Space Park, users must cross the railroad tracks as they head west and access the Rose Canyon Bike Path and travel north until the bike path ends at Gilman Drive and the Rose Canyon Open Space Park begins. Users must then cross the railroad tracks once again to access the trail system. Another option to connect the two parks is to use surface streets and the trail systems of each park. The Standley trail on the north side of Marian Bear Memorial Park crosses below State Route 52 and into Standley Park in the community of University. Once the trail terminates at Governor Drive, users can then head west on Governor Drive then north on Regents Road which will eventually dead end and become a trail head into the Rose Canyon Open Space Park. A similar route can be undertaken between Stevenson Canyon and the Marian Bear Memorial Park. Users from Stevenson Canyon can travel north on Moraga, northwest on Clairemont Mesa and continue as it becomes Regents Road and access the park from the Regents Road parking lot.

A potential option to connect the Marian Bear Memorial Park with the Rose Canyon Open Space is to create a trail system below the State Route 52 and I-5 interchange east of the railroad tracks. Currently there is a trail that follows a sewer line easement from the beginning of the trail system in Rose Canyon that follows the railroad tracks but terminates at a flood control channel. A trail can potentially be designed to travel the adjacent hillside to reach the State Route 52 and I-5 interchange and make a connection to Marian Bear Memorial Park. Designing a trail to accommodate users of both parks to make a connection would greatly enhance the usage and safety issues of both parks' trail system.

2.1.5 Trail Amenities

Trail amenities can be found in both Marian Bear Memorial Park and Rose Canyon Open Space Park, although they are very sparse in Rose Canyon. Marian Bear Memorial Park does have better amenities such as benches, restrooms, trash receptacles and parking for users. Restrooms can be found at the Genesee Ave parking lot and both Regents Road parking lots in Marian Bear (Figure 2-9). Picnic tables can also be found on both Regents Road parking lots in Marian Bear Memorial Park. Here users can read informative kiosks to traverse east or west throughout the park. Individual trail maps can be found at the eastern parking lot of Regents Road before they head onto

the main trail. The kiosks at Genesee Ave and west Regents Road provide an outdated trail map for users to use. The kiosks at all the Marian Bear parking lots range in educational information from California's biodiversity to the wildlife and history of the Marian Bear Memorial Park. Plastic bags for picking up after dog feces can be found at these entrances as well as drinking bowls for dogs and water fountains. Along the main utility access paths, benches are spread about for users needing a quick break. The current signage of Marian Bear Memorial park is inadequate for the users and more informative kiosks along the main trail could educate users as they pass connecting trails, cultural resources and sensitive habitat.

Figure 2-9: Regents Road access into Marian Bear Memorial Park



Within Rose Canyon, there are benches near the La Jolla Golden Triangle Rotary Club Nature Trail off of Genesee Ave. There is no parking off Genesee to access Rose Canyon so users must either commute by foot, bicycle or park at University City High School which is across the street. Benches and kiosks are rare throughout Rose Canyon and can be found at the trail head off Genesee Ave and the Regents Road access trail (Figure 2-10 and 2-11). The kiosks at these two entrances do not provide as much educational information as those of Marian Bear and lack trail maps for users to orient themselves within the park. There are currently no public restrooms, picnic tables or trash receptacles in Rose Canyon but plastic bags for dogs are present at the kiosks. Kiosks near the Rose Canyon Bike Path entrance would be a good place to put a kiosk for users entering the park from the west. More kiosks or signage, benches, picnic tables and a public restroom would be a good start to promote the use and preservation of the Rose Canyon Open Space Park.

Figure 2-10: Regents Road access into Rose Canyon Open Space



Figure 2-11: Genesee Ave access into Rose Canyon Open Space



2.2 New Trails and Un-official Trails

There are numerous miles of volunteer trails within the RCW particularly within the Rose Canyon Open Space Park and Marian Bear Memorial Park. These trails do not show up on official park maps or general plans and are not designated for “use”. These volunteer trails are mainly created by local residents who use these trails as access into the park. Many of these trails can be found parallel to the main trails as another means of recreation to avoid the main trails and utility access paths. Some volunteers trails are used as detours over obstacles such as fallen trees and will either be covered by vegetative growth if not regularly used or become a well-used un-paved trail through compaction by bicycle tires and hikers. All trails (including volunteer trails) will be evaluated by Open Space staff to determine suitability. Trails approved by staff will be included in

the City Master Trail Plan. Volunteer trails not designated for use will be closed and actively or passively restored.

DRAFT

3 References

City of San Diego Street Design Manual Advisory Committee. The City of San Diego Street Design Manual. November 2002.

International Mountain Bicycling Association. Trail Solutions: IMBA's Guide to Building Sweet Singletrack. 2004.

Georgia Department of Transportation. 2003. Pedestrian and Streetscape Guide.
http://www.dot.state.ga.us/dot/plan-prog/planning/projects/bicycle/ped_streetscape_guide/toolkit%207%20final.pdf.

Ryan, Karen-Lee. Trails for the Twenty-First Century: Planning Design, and Management Manual for Multi-Use Trails. 1993