

# A GRAND PARK AND A CAMPUS MEANDER FOR UCSD

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Prepared For:

**Campus Planning:** Physical Planning University of California, San Diego

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## Introduction

## Project Background

The University of California, San Diego campus is located within an ecologically valuable system of canyons and mesas at the edge of the Pacific Ocean, adjacent to the Torrey Pines State Reserve. This land supports an array of native plants and wildlife that has been diminishing due to growth and development for most of this century. Beginning with the City of San Diego, which introduced the picturesque but highly dominant non-native Eucalyptus Groves, and continuing with the military presence, where some of these lands were used for artillery practice, the pressure on this land has continued as the Campus has developed. These actions, taken as a whole, have fragmented previously contiguous habitat areas. UCSD has already taken steps to slow further fragmentation by designating certain open space areas of the Campus lands as the UCSD Park, to be preserved and protected from further development. These Park lands were subdivided into the following categories: Preserve Lands (disturbed vegetation or land forms), Grove Reserve (eucalyptus groves), and Ecological Reserve (native vegetation). Many of these lands, however, are separated from each other and exist as small, independent fragments, limiting their health and their ultimate viability.

The fragmentation of campus land has affected more than wildlife habitat; its physical manifestations can be seen in the form taken by the campus today. Due to public roads and the I-5 freeway, UCSD is divided into three separate areas: the Central Campus, Scripps Institute of Oceanography (SIO), and East Campus, on the east side of Interstate 5. There is also a fourth undeveloped section of University owned lands, west of the Central Campus, where administration buildings and the Gliderport are located. Each segment has its own physical identity, including its own small fragment of habitat. It is difficult for faculty and students, let alone visitors, to grasp that the four parts are actually one whole. There is a general feeling on the Central Campus that SIO and East Campus are far away and difficult to get to without stepping into a car or bus.

## **Goal Statement**

It is the intention of the proposal, A Grand Park & Meander For UCSD, while adhering to the Master Plan study, to reverse the ecological and physical fragmentation of the UCSD campus by enhancing and linking valuable ecological lands, connecting the Park with the State Reserve Lands external to the campus, and providing the necessary links to connect the campus fragments to each other. A separate, independent study by the Harrison Studio is investigating the feasibility of providing a wildlife migration corridor under Genesee Avenue to connect the UCSD Park habitat with the Torrey Pines State Reserve.

The linkage concept is often a study of small differences, sometimes removing or shifting a few parking spaces, sometimes adding plant material or moving a pathway, sometimes proposing a modest Master Plan study change. However, there are several points along the way where the modifications required to construct a new unity are more dramatic.

The Meander, as drawn in the Master Plan study and as extended and developed in this proposal, would serve the dual purpose of allowing people to traverse the campus while giving them the possibility of experiencing the natural habitat areas at their edges. The Meander would, however, limit their access to, and thus their impact on, ecologically sensitive zones. In this way, the Meander would allow the campus population to enjoy the Park and to appreciate its unifying quality without disturbing it's most fragile parts.

## Part I Project Description

The project consists of the two interrelated designs, the *Grand Park* and the *Meander*. Together, these two elements represent the "body" of the Campus' natural lands, the *Grand Park* serving as "tissue", the *Meander* providing a connective and supporting framework, or "skeleton". This scheme will provide an alternative to the normal system of grand axes typically found on urban university campuses. Major intact portions of the *Grand Park* already exist, as do other more disturbed remnants of the eucalyptus groves and canyon lands. It is intended that the project will unify these existing parts both by the restoration of the disturbed remnants and the formation of new connections where continuity has been lost.

Analysis of the Campus "natural" lands reveals that the "morphology" of the *Grand Park* and *Meander* can not rely on the traditional English or French notion of a park as a centralized, definitively bounded green space, distinct from its surrounding development. Rather, the *Grand Park* is based on the metaphor that a park is an echo of the diversity in the countryside located in the city. It then can exist as a flow of wildlife, vegetation, and human population woven into and around the campus fabric. This flow occurs in three distinct directions, which can be viewed as downstream flow of "tributaries" somewhat like a watershed system; however, unlike the water in a river, the human, animal, and plant populations move both "up" and "down" stream.

## The Grand Park and Meander

The *Grand Park* will be a designated "green" area that includes lands already protected under the 1989 Long Range Development Plan for UCSD (Ecological Reserve, Grove Reserve, and Preserve Lands) and the newly created *Meander* with the inclusion of additional green corridors to link the fragmented parts. The *Grand Park* will expand the visual properties of its boarders with "urban" (developed) areas by proposing the expansion of plantings into the edges of certain



adjacent areas such as parking lots and housing clusters, to increase the perceived scale and presence of the Park terrain.

The main goal of the *Meander* is to create a path, a single gesture which connects the campus' natural features and provides a means to experience the *Grand Park* informally, a "breathing space", as it were, for the campus community. The *Meander* differs from regular walking paths in that it is meant to invite relaxation and contemplation. In sensitive areas it can exist as a dirt path, cleared by hand and only a few feet wide. In other areas, particularly in the center of campus, it will be wider with a durable surface that can accommodate higher volumes of pedestrian traffic. In a few places it will merge with existing pedestrian pathways. It will have a physical and visual identity unique to itself as it moves from grove to canyon, to vista point, and back to grove again, always within minutes of the center of the campus. Wherever possible, the *Meander* will be isolated from the noise and business of campus life, through screening, occasional earth berming, planting, and sensitive placement of the pathway.

HE MÉANDER TRIBUTARIES FIGURE # 2

# Part II Important Park and Meander Links

As the name implies, the Meander is not a direct route from one place to another. The Meander is designed to intersect with the campus pedestrian system, but does not replace it. There will be no major feature on campus more than ten minutes from the path. Its main purpose is to connect the fragmented "natural" areas on campus. A secondary purpose is the creation of a sylvan promenade to provide a tranquil and meditative alternative route in which to experience the campus. Therefore, the Meander is composed of a series of three tributaries that meet just north of the Geisel Library, near the symbolic and physical center of Campus.

The three tributaries of the Meander (see Figure #2) offer three different walking experiences, each with a terminus in separate corners of campus. These termini will, for many of the users, become the starting point from which the main campus is reached, again accentuating the "up-stream" "down-stream" use of the tributaries. New park links or park easement areas surrounding the Meander are proposed where none now exist. Each tributary has been divided into segments that are presented in the form of design sketches and design guidelines included in this report. Further elaboration can be found under "Design Guidelines" in Part Ш.

The linkages themselves, as can be seen in Figure #3, are fingers that extend from the Park itself and connect the large Park masses via sylvan promenades that encourage the movement of human and wildlife populations. These linkages will have visual impact, symbolic significance and modest habitat value. Without these links there can be no "Grand Park" and no unified Meander, merely a series of disconnected preserves.

It is recommended that the linkages be structured along the same principle as an easement for a roadway. They are to be



treated as parts of the park for functional purposes, but are not, for the moment, formally annexed into the Park lands. As such, they have a slightly more flexible usage than the other park areas but are identified with, and protected from, development just as park areas are. It is recommended that, over time, these easements become permanent parts of the Campus Park system once the Meander pathways and plantings have become established and boundaries are more precisely defined.

IMPORTANT LINKAGES FIGURE #3

## Tributary Junction The meeting of Tributaries A, B and C

It is important to mark the ground at this junction (See Figure #2 for location). This marking offers an opportunity to tell the story of the *Grand Park* and *Meander*: the ecological significance, the unifying purpose, the tactile form and why it is so critical at this point in the physical development of the campus. This marking also offers the opportunity to describe the actual location of the tributaries and the flora and fauna that might be encountered while wandering on the various tributaries of the *Meander*.

Exactly how this place should be accomplished and designed is not for this report to state; however, certain guidelines are recommended:

- a. It should be marked on the ground, and have some physical form.
- b. Its location should indicate its function as the meeting point of the three tributaries.
- c. It should elaborate the story of the *Park* and *Meander*, both their purposes and importance. This story could be elaborated for general educational purposes.
- d. It might include a rest area in the form of some kind of seating, or a fountain or other physical object to give form to the space.

## Tributary A Geisel Library to the North Entry, the Gliderport and the Cliffs Beyond

This segment winds through the heart of the Grove Reserve and has a special significance as it approaches the north entry. The strongest reminder visible on Campus of the early character of UCSD, one actually feels the Grove as a "mass" of eucalyptus trees. In order to capitalize on this quality, the new connection from the existing grove to the north entry and to the bluffs beyond must continue this feeling of walking through a seemingly endless eucalyptus grove.



## Segment A-1 Tributary Junction through Grove Reserve to Hopkins Drive

The pathway through this segment already exists and needs only to be marked and preserved. It is an extraordinary segment, since it straddles the two main landscape features of the campus, grove and canyon. The path, as it winds through the grove, hugs the edges of the canyon, appearing and disappearing into the grove, until it reemerges onto Hopkins Drive.

It is necessary here to discourage the penetration of the Canyon itself by the use of edge plantings and by signage. The *Meander* path in this area is used by joggers and its existing width averages about 4-5 feet. Stabilizing the path with decomposed granite in order to handle the traffic and prevent erosion is a necessity and will result, as well, in a more stable surface for joggers.

Path Location: Existing trail through the Grove.

Path Type: Fine sized, stabilized decomposed granite.

Plant Palette: Native plantings at the edges of the path in particular where the Grove is sparse or at the edge of the canyon where the original habitat needs protection.



TRIBUTARY A- SEGMENT A-1 JUNCTION THROUGH GROVE RESERVE TO HOPKINS DRIVE FIGURE #5

### North Entry/Grove Connection Segment A-2

This addition will establish a new leg of the Meander, as it wanders past the existing recreation field, crosses the Ridgewalk and connects to the new entry and beyond. Exiting the grove at Hopkins Drive, there is no grove or Park link to the north entry and Gliderport parcel. In order to provide space for the Meander and its associated plantings from the existing old grove to the information kiosk, it is necessary to do a modest redesign. First, realign the 90 degree corner at Hopkins Drive so that it becomes a smooth curving road, which will allow the extension of new grove plantings to the northwest of Hopkins Drive in such a way that crossing the street is avoided. This redesign will create space for a new massing of eucalyptus, providing a transition for the Meander as it exits the grove and moves between the athletic fields. The realigned street curve and associated landscape will not encroach into the functional area of the recreation fields.

An elevation difference of 15-30 feet between the track field and the Ridgewalk will require creation of a gentle slope, roughly following the road, to accommodate the Meander. The path can then flow undisturbed, following the north side of the street in an expanded mass of trees, a maximum of 40 feet wide, tapering towards Northview Lane. The existing fence parallel to the sidewalk will need to be relocated northward towards the bottom of the slope to allow space for the Meander. Additionally, it is not necessary to have both the existing sidewalk and the Meander in this area. Therefore it is recommended that the existing sidewalk be removed and replaced with a special paving design for urban areas of the Meander (See Part III-Design Guidelines). If the existing tunnel between the fields cannot be expanded to handle the path on the north side of the railing, the path will have to swing towards the street for the length of the overpass and then move back into the landscape setback.

As the Meander proceeds from the fields westward to the Campus' north entry, it will be aligned within a landscape swath that will vary from 30-75 feet in width. Two pedestrian paths are not necessary in such close proximity, so the existing sidewalk in this section should also be removed and replaced with the special Meander paving design for urban areas.

At the north entry, the Meander will cross North Torrey Pines Road and proceed to the Gliderport parcel. As with other road crossings, special surfacing and marking will be created at both the crossing and the landing at the opposite side of North Torrey Pines Road (See Part III-Design Guidelines).

After the road crossing, the Meander will extend through the Gliderport parcel to the future city park and coastal bluffs west of campus property.

Path Location: From the grove to the north entry on the north side of Hopkins Drive. The segment adjacent to the track and recreation fields should be coordinated with representatives of Sports Facilities.



Plant Palette: Eucalyptus, Torrey Pines, and native plants blending along the edges. Landscape should not be so dense as to compromise security at the track.

Path Type: Special paving treatment for urban areas of the Meander

## Tributary A terminus at the Terminus A Gliderport parcel, coastal bluff & future city park

One-half of the UCSD Gliderport parcel will ultimately be redeveloped with recreation uses, so that the Meander alignment will be located when the parcel is actually designed. In addition, a future city park will be located to the west on the coastal bluffs. It is strongly recommended that a Meander terminus be developed at or adjacent to the park. This will need to be negotiated with city officials.

> TRIBUTARY A- SEGMENT A-2 NORTH ENTRY/GROVE CONNECTION FIGURE #6

Tributary B Tributary Junction to East Campus, and

**Tributary B-B Canyonview Recreation Center** to Biology Field Station and beyond to connect with Torrey Pines State Reserve

This section (Tributary B and B-B) of the Meander skirts some of the most undisturbed and ecologically valuable land on Campus. There is great potential here for both canyon views and a solitary walking experience through a setting much like Torrey Pines State Reserve. Construction of a connection to Torrey Pines State Reserve and Penesquitos Lagoon under Genesee is recommended and is being investigated under a separate study.

This tributary includes a number of critical transitional linkages, including connections between the Ecological Reserve and Pepper Canyon and between Central Campus and East Campus via the proposed bridge over I-5.



TRIBUTARIES & AND B-B FIGURE #7

## Segment B-1 Tributary Junction to Warren College Student Housing

This *Meander* segment includes the dramatic historic canyon views once so common in San Diego. It is located on the north side of Voigt Drive directly in the view corridor between the Geisel Library and the Ecological Reserve. Screening the pathway with native species will be essential in order to provide a path segment that feels like part of the canyon and not part of the campus street and parking lot 502. The *Meander* should be sited approximately 10 feet below the elevation of the road and parking lot so that it is hidden from view and gains its sense of place and space from the reserve. This can be done without significant disturbance to the Reserve.

This part of the *Meander* parallels the mesa dedicated to the future recreation area (existing parking lot 502); however, it is recommended that the path be placed along the rim of the mesa (the edge of the future recreation area). This plan will protect the canyon, while visually extending its impact. The construction of the path on level terrain will enable a design that, with the use of berming and native vegetation, will provide a new buffer-zone, averaging 30-40 feet wide, between the existing fragile canyon ecology and the new recreation fields. This plan provides the best solution for both the canyon and the fields. A Torrey Pine overstory would serve to shade the path and the edge of the playing fields.

A less desirable solution would be to enter the canyon, and, as gently as possible, hand clear a narrow path by selective removal of planting on the down slope side of the mesa, approximately 10 feet below grade of mesa top. This would require a sensitive design that would not impact native vegetation or safety.

Clearly it is necessary to indicate where path users can get on and off the path at this stretch, in order to discourage random canyon penetration, especially if the *Meander* is placed below the mesa top. The slope itself and the native plants will, to some extent, regulate the possibilities; the steeper and more densely planted the slope, the more difficult to penetrate.



At the northernmost location of the recreation field mesa, a viewpoint area is recommended that can easily be accessible to the physically challenged. The views from this location are breathtaking and are typical for the views found on this segment as a whole. Providing this type of viewpoint for the physically challenged is a persuasive argument for choosing to place the path on the edge of the mesa and not on the steep canyon side grade.

The canyon finger located between the parking lot/ recreation area and Warren College Residence Halls, comes to a steep narrow head. Providing a safe, stabile *Meander* segment would be almost impossible without disturbing the canyon area. Rather, heavy use of this segment is anticipated, since it will become an attractive short-cut for housing residents to and from the parking lot/recreation area. Thu this pro Pat gra cles fee will the (Se Pla pro of TRIBUTARY B- SEGMENT B-1 TRIBUTARY JUNCTION TO WARREN COLLEGE RESIDENCE HALLS FIGURE #8

Thus, installing a small pedestrian suspension bridge at this location, perhaps modeled on a similar bridge proposed for Pepper Canyon, would be necessary.

Path Type: The level portion of the path is decomposed granite. The sloping portion of the path is a hand cleared decomposed granite covered ledge, only a few feet wide, carefully cut into the existing slope. The path will need redwood bender board or some equivalent on the down slope to keep the decomposed granite in place (See Figure #25).

Plant Palette: Dense planting along the edges of the path on both sides is encouraged. With time this will provide an almost impenetrable barrier along the rim of the canyon and protect its delicate natural ecology.

## Segment B-2 **Ecological Reserve Overlook:** From Warren College Residence Halls to **Canyonview Recreation Center**

At the beginning of this section, one small pedestrian suspension bridge is necessary, as mentioned in Segment B-1. The eastern edge of the bridge connects to the existing graded path which, in this area, becomes the Meander. Thereafter, the Meander continues along this slope until it reaches the northern-most tip of the Warren Housing complex. At this location, a looping dirt path intersects the Meander, and this would be an ideal spot to establish an accessible viewpoint. This viewpoint should not be indicated by a traditional bench, but rather by a small cleared area surrounded by canyon vegetation and an array of boulders for seating. Any boulders used should be the type naturally found in the area (See Part III-Design Guidelines).

From the viewpoint, the Meander continues along the eastern edge between the Ecological Reserve and the Warren Housing complex, hugging the hillside at an elevation lower than the housing areas. Most of the trail along this edge already exists as a ledge between the native planting and the edge which was disturbed by the construction of the buildings. In a few instances, shrubs should be hand-cleared to make way for the path. The path continues skirting the canyon of the Reserve, away from the buildings, until it reaches the intersection at Canyonview, where Tributary B-B splits from Tributary B, and continues along the canyon edge. Tributary B continues towards East Campus.

A buffer between the path with its potential viewpoint and the noise and activity of the housing areas will need to be established through plantings and path placement. The Meander needs plantings on both the path edges facing the canyon and on the sides of the buildings themselves. These plantings will allow the walker to visually experience the canyon, while blocking out the presence of the buildings.

It is recommended that Torrey Pines be planted along the rim of the canyons, though not extending into it. The trees will visually extend the canyon and in part screen the path, while reducing the scale of the buildings and their perceived impact on the path. The Torrey Pines will act as a screen for pedestrians, but are not dense enough to block views form the buildings to the canyon. In addition, planting eucalyptus within the Warren College Residence Hall neighborhood areas would extend the visual impact of the grove and continue the campus design metaphor that buildings and neighborhoods are cut like "building blocks" from a eucalyptus grove (See Part III-Design Guidelines).

Path Location: An existing path will be used along the west side of Warren Housing. From the viewpoint a hand cleared path should go below the rim of the canyon (disturbed area) following the existing paths.

Path Type: Existing path should be retrofitted with decomposed granite; new paths should also use decomposed granite.

Plant Palette: Canyon natives at the path edges, Torrey Pines at the canyon rim, and eucalyptus on the mesa.



TRIBUTARY B- SEGMENT B-2 WARREN COLLEGE RESIDENCE HALLS TO CANYONVIEW RECREATION CENTER FIGURE # 9

## MAINTAIN THE REDUCE PARKING ~



### Segment B-3 Ecological Reserve to Pepper Canyon via **Canyonview Recreation Area**

This is one of the most difficult and important connections to establish (See Segment B-4 for a discussion of the importance of Pepper Canyon). The difficulties of the connection itself arise from the distance between the Ecological Reserve (north of Canyonview) and Pepper Canyon, which is considerable. Specifically, the need to pass adjacent to the Canyonview Recreation Center, then cross Voigt Drive and continue through a future college development area requires complex design considerations. In addition, the urban environment here is quite dense, with almost no original vegetation. However, without some kind of connection here the Grand Park concept will not succeed, simply because there will be no continuity, either physically or symbolically, between the Ecological Reserve and East Campus Preserve Lands, two of the largest and most beautiful natural environments on campus. This link will not only benefit wildlife, but will also become a handsome wooded area, between the buildings of both the Canyonview area and the future college development. The edges of the proposed plantings then become available as outdoor picnic or study areas.

At the time of the future development, or preferably before, the missing link between the Ecological Reserve and Pepper Canyon can be established by developing a nature corridor and a modest path. This would require revisions to the future development plan for the Canyonview Recreation Complex and the future housing area, as currently recommended in the Fifth College Neighborhood Planning Study.

The first leg of the Meander from the Ecological Reserve to Voigt Drive would occur by creating an open space swath along the west edge of the Canvonview Recreation Complex. This could be accomplished by demolishing the existing office and replacing it in a new location southeast of the recreation building. This could potentially be accomplished, because the Recreation Office has recently considered the future program for Canyonview and has indicated that only one additional pool is likely to be constructed rather

than the two pools as shown in the Fifth College Neighborhood Planning Study. A funding source will have to be found, prior to any changes, to underwrite the cost of demolishing and replacing the office space.

The path would then continue through the future academic reserve building sites. To accommodate the Meander, the area can be widened slightly more than presently proposed in the Fifth College study. This simple shifting of the proposed buildings east and west, by 30 to 40 feet, will provide an 80 to 100 foot space that the Meander can move through, giving advantage to both the new buildings and the Grand Park. The Meander and associated plantings would thus connect the Reserve with Pepper Canyon.

Path Location: West of the recreation buildings, across Voigt Drive, and through the future college development area. This segment will be coordinated with the recreation office and sports facilities.

Path Type: Decomposed granite path / asphalt path

Plant and Tree Palette: The plantings envisioned in this connection are of two kinds: For the first leg, from the Ecological Reserve through Canyonview Recreation Area to the north side of Voigt Drive, the continuation of the canyon species is appropriate. For the second leg, from the southern side of Voigt Drive to the existing part of Pepper Canyon, a willow, cottonwood, and sycamore riparian habitat is envisioned, thus stretching Pepper Canyon to meet the Ecological Reserve (See Segment B-4 for a discussion of Pepper Canyon planting).

COLLEGE NEIGHBORHOOD PLAN

SEE FIGURE #9



SEE FIGURE #11

TRIBUTARY B- SEGMENT B-3 CANYONVIEW RECREATION AREA TO PEPPER CANYON FIGURE #10

What Pepper Canyon should become has long been a controversial issue on campus. Although neglected for many years, it is still appreciated by students, faculty, and staff and is recognized as a valued natural amenity for nearby academic and student housing areas. In order to realize its potential and, once again, become a very important ecological zone, a restoration of Pepper Canyon is essential.

Pepper Canyon is completely isolated from the other Park areas and yet has within it one of the most important ecological elements: water. It is the depository for runoff from a number of drain outlets, resulting in one of the most verdant canyons in the area. (Note: It is recommended that some form of purification system should filter these waters before they enter the canyon).

While the connection between Pepper Canyon and the Ecological Reserve will permit the movement of people and some animal species between them, there will be no impact from the water in Pepper Canyon on the Ecological Reserve, as they are completely separate watersheds.

This abundance of water in Pepper Canyon has created a unique corridor, that in its most compelling form, could be revegetated as a willow-cottonwood-sycamore based riparian habitat, with oak and coastal sage scrub interspersed on the dryer slopes. It is recommended that Pepper Canyon be revegetated to reflect more completely this wooded riparian character. While this has been attempted with very limited success in other areas of campus, Pepper Canyon would be singular as the only large, accessible corridor with this riparian character on campus and its environs.

Protection of the canyon from over-use will be a critical part of this restoration. Because Pepper Canyon is less than two acres, it is vulnerable to the heavy traffic between Central Campus and East Campus, and specifically, between academic areas and the existing student housing surrounding the canyon. No habitat

of significance can be established unless access through the base of the canyon is limited.

Removal of existing road remnants and concrete foundations is also proposed, in contrast to the Fifth College Neighborhood Planning Study which advocated that the foundations remain and be used for informal gatherings and performances.

From the northwest tip of Pepper Canyon, it is recommended that the Meander be located approximately 10 feet below the eastern rim of the canyon along an existing ledge all the way to the future recreation and open space area. (The slopes and vegetation in this area were disturbed when the student housing was constructed). The Meander exits Pepper Canyon at the junction of parking lot 406 (future recreation and open space) and Gilman Drive. Planting on both sides of the path will allow everyone to enjoy the area and its wildlife without unnecessary disruption of the delicate ecology of the canyon.

The location of two future bridges across the width of the canyon would provide fine views into the canyon, although entry into the canyon from these bridges would not be appropriate. Outdoor terraces or view platforms from the existing or future college buildings at the edges of the canyon are appropriate, as long as they are above the rim of the canyon. After the oak and sycamore populations have established themselves, a modest, hand-cleared trail through the bottom of the canyon could be considered by the Park Committee.

Path Location: Eastern edge of canyon rim, 10 feet below the edge. This segment of the Meander should be reviewed with the Stuart Collection and Artist due to the proximity of the proposed bridge.

## Path Type: Decomposed granite

Plant Palette: Restored riparian habitat species, such as willows and sycamore, to be determined in consultation with campus ecologists. The plants to be removed from Pepper Canyon, after discussions with campus ecologists, would be eucalyptus (except at the canyon rim where it should be intensified), some of the lower peppers, and the exotic species at the lower elevations.



TRIBUTARY B- SEGMENT E-4 PEPPER CANYON FIGURE #11

## Segment B-5 From Pepper Canyon across future I-5 bridge to East Campus

This section of the *Meander* requires the reorganization of the present parking areas, (future recreation and open space area) permitting Pepper Canyon to be connected to the future I-5 bridge and the East Campus beyond. This connection is the sole link to the wetland on East Campus, and is thus a necessary requirement to complete the *Grand Park*. The *Meander* will function both as a pedestrian passage and as a perceptual link between two of the most verdant, natural areas of campus, Pepper Canyon and the newly restored East Campus Wetland area.

A green link with a recommended minimum width of 80 feet should be provided on both sides of Gilman Drive. It will then be possible to create the necessary missing connection from Pepper Canyon's northeastern edge to the future I-5 bridge.

Visual connection can be established through signage, path color, and markers on either side of the future 1-5 bridge. This marking will help identify the *Meander* to pedestrians and drivers alike. Both ends of the bridge should be planted with vegetation and eucalyptus trees so that pedestrians enter and leave the bridge through a dense canopy of trees. Also the start and end of the pedestrian path at the bridge should be identified with a portal design, not unlike the ones proposed at either side of a street, at other pedestrian road crossings (See Part III-Design Guidelines).

A landscaped area on the bridge itself and between the pedestrian path and the street portion of the bridge is recommended. This planting concept would require a widening of the bridge. Although there is no equivalent in the U.S., several sites in Europe provide ecostructures across highways for small animal and botanical migrations. They resemble an ordinary crossing but are topped with several feet of earth which allows for a dense planting both to screen and to attract animals. Although costly, such a bridge could become a



hybrid of a regular bridge for traffic and pedestrians, and an eco-structure. A university like UCSD is an ideal site for such an experimental bridge to be tested.

Path Location: Across the existing parking lot 406 (future open space and recreation area), the path links up with the Gilman Drive alignment and the I-5 bridge. This section includes the I-5 bridge crossing.

Path Type: Decomposed granite and asphalt.

Plant Palette: Combination of Diegan scrub and eucalyptus trees on the slopes and eucalyptus grove on both sides of the future bridge.

TRIBUTARY B- SEGMENT B-5 FROM PEPPER CANYON ACROSS FUTURE I-5 BRIDGE TO EAST CAMPUS FIGURE # 12

## Segment B-6 Future I-5 Bridge to East Campus Student Housing

Visual connection between Central and East Campus is created by the existing eucalyptus plantings on both sides of the bridge sloping down to the freeway. These areas need to be enhanced with further planting. Once the Meander reaches the wetland area, extreme care must be taken due to the sensitiveness of the restoration area and its steep slopes. The best pathway for the Meander would be parallel to the north side of the road, on a ledge a bit lower than the grade of the road itself, approximately 5-10 feet, much like the path treatment along Voigt Drive. It is recommended that part of the existing sidewalk be removed and replaced with a berm, native vegetation, and eucalyptus trees to further isolate the pedestrian and enhance the walking experience. Thereafter, the Meander continues past the hospital before reaching the student housing.

Path location: Northern edge of the East Campus central canyon. Hand cleared path located below grade of road where possible.

Path type: Decomposed granite

Plant palette: Eucalyptus at the crossing of I-5 at both sides and along the freeway. Native plantings (Diegan coastal scrub species) beyond on the south side of the road, west of the medical facility. Natives on both sides of the path and on the slope, where possible.

For future discussion: planting as it relates to the Science Park and the hospital

## Terminus Tributary B terminus on East Campus at Student Housing

The terminus of Tributary B is adjacent to student housing. It would seem both natural and appropriate to provide a neighborhood-like place or plaza to mark this terminus on the ground. For Mesa Housing residents, it is the starting point of the *Meander*, offering a very useful way to reach campus on foot.



This terminus can become a destination, a place of activity for the housing residents, perhaps a playground/picnic area with benches and tables and a jungle gym for children.

TRIBUTARY B- SEGMENT B-6 FUTURE I-5 BRIDGE TO EAST CAMPUS STUDENT HOUSING FIGURE # 13

Tributary B-B Canyonview Recreation via Biology Field Station with connection to Torrey Pines State Reserve

The Meander path should be sited approximately 10 feet below the canyon edge north of Canyonview Recreation Facility, following the existing path below the west and north sides of the Voigt Drive parking lot, and continuing along the edge of the canyon just below the grade of the roadway, west of the Campus Services Facility. The Meander is situated below and out of view of both the parking lot and the street. It terminates at a viewing plateau next to the Biology Field Station.

Along the street, west of Campus Services Facility, view platforms are already located slightly below grade, with steps down from the street. These platforms should be incorporated into the *Meander* design.

There is also the opportunity to create two larger view points along this segment that can accommodate picnicking or other modest gatherings, as well as an interpretive display (See Part III-Design Guidelines).

Path Location: South and eastern rim of the canyon

Path Type: Decomposed granite

Plant Palette: Native shrubs at the edges of the path and within the view point areas, and native oaks at the rim.

<u>Please note</u>: It is recommended that a connection be created, in order to preserve a biodiverse habitat and a wildlife migration route, between Torrey Pines State Reserve and the UCSD *Grand Park*. This connection would be for wildlife species only, not for people. The actual possibility and design of such a passage under Genesee is under investigation in a separate study by the Harrison Studio.



PROPOSED CONNECTION TO

TRIBUTARY B-B FIGURE #14

## Tributary C Junction through the Groves to Scripps Institute of Oceanography (SIO) and the Pacific Ocean.

This tributary of the *Meander* includes some of the most developed portions of campus, particularly the grove passage on the Main Campus. Here it is especially necessary and valuable to the walking experience to strengthen the grove. Additional forestation and plantings are required to reestablish some of the initial intentions of the campus design, the metaphor of the buildings being "carved out of the Eucalyptus Grove".

This tributary also contains areas with spectacular views, descending towards the ocean and SIO. While the *Meander*, east of La Jolla Shores Dr. and south of Expedition Way, provides some extraordinary views, walking through SIO requires careful consideration. Most of the pathways needed to complete the *Meander* in this segment already exist. However, the challenge of this segment is in the reinforcing of the existing pathway systems, while highlighting the specific identity of the *Meander* and reducing the impacts of adjacent development.

While a single segment of the *Meander* brings pedestrians through the Main Campus, three separate paths, each providing a unique experience, are accessible to pedestrians descending through SIO to the Pacific Ocean.

# SEGMENT C-3 SEGMENT C-4 SEGMENT C-6

17

BLUFF WALK

C. TERMINUS ENTRY



TRIBUTARY C FIGURE # 15

## Segment C-1 Tributary Junction at Voigt Drive to the northwest side of Geisel Library

The Meander segment, from the large grove north of Voigt Drive through a proposed underpass to the smaller grove area southeast of Voigt Drive's intersection with Hopkins Drive, is a connection requiring sensitive design. In order to let pedestrians walk safely and directly between the more urban areas of central campus without having to address traffic, a mid-block tunnel under Voigt Drive is recommended. The existing lower elevations on both sides of Voigt Drive, where the tunnel would be located, make a more appropriate walk than on the narrow sidewalks above.

Another less expensive but far more awkward option would be to loop the Meander up to the northeast corner of the intersection of Voigt Drive and Hopkins Drive for a surface crossing. A small passageway located at the bottom of the canyon under Voigt Drive already exists, allowing for small wildlife migration.

From the tunnel, the Meander cuts through the corner grove northeast of the library close to Hopkins Drive. In this scenario the Meander comes to a stop at the service road on the north side of the library. Just before reaching the service road, a stretch of the Meander parallels Hopkins Drive next to existing parking spaces. Here it is recommended that a berm and an understory of planting be provided to screen the pedestrian from the street and the parking.

Path Location: North side of Voigt Drive and east side of Hopkins Drive

## Path Type: Decomposed granite

Plant Palette: Eucalyptus, and intermittently heavy native planting (varying in width from 5-40 feet) at the edges of the path, planted to blend into the existing fauna while creating a natural sheltered feeling for the path.



TRIBUTARY JUNCTION AT VOIGT DRIVE TO THE NORTH-WEST SIDE OF GEISEL LIBRARY FIGURE #16

## Segment C-2 Northwest of Geisel Library to the **Cognitive Science Building**

After crossing the service road, the pedestrian reaches the Library's northwest side, at a location not far from the existing turnaround. The turnaround should be moved north to encompass the service road (See Figure #17) and the fire lane extended to meet it, thus eliminating the crossing of one of the two roads. This change will remove much hardscape and provide new space for the grove and other vegetation, expanding the grove area and the sylvan properties of the Meander as it passes the heavily trafficked library area.

The pedestrian traffic at both the north and the west edges of the library is particularly heavy, although intermittent. The grove is at its thinnest and most symbolic here. Therefore, careful attention to screening the buildings and to increasing the perceived density of the existing grove is important to the credibility of the Meander within the context of the Grand Park. Without this intensification of growth, the Meander loses its sylvan property, becoming merely a path among trees between many buildings.

From the library it is somewhat difficult to proceed further, due to all the existing hardscape and the existing quality of the adjacent open space. The Meander was not aligned into the open space east of the existing walk because the landscape is too ornamental; and the Meander was not aligned into the grove to the west because this grove is very narrow and should not be fragmented by an additional path. The Meander at this awkward juncture must of necessity join and merge with the concrete fire lane/ walk. In order not to loose the specific character of the Meander in this merge, a special treatment will be required. Some form of sandblasting and reworking the surface of the existing sidewalk will be needed. This end can be accomplished by sawcutting the outline of the Meander in a 3-6 foot wide band. The Meander can then flow north or south within the 24 foot wide fire lane. Color in the form of stains and intermittent tiles (See Part III-Design Guidelines) can enhance and distinguish the Meander. The fire lane ends in a v-split, east of the Cognitive Science

building. Thereafter, the Meander continues straight through the triangular grove island, crosses the road south of the triangle, and snakes through the grove trees. The existing bike lane is located to the east of the Meander. Therefore, the pedestrian path of the decomposed granite and the asphalt bicycle path are clearly separated at this heavily used area.

Path Location: West of Geisel Library

Path Type: Decomposed granite, existing concrete (treated) and asphalt

Plant Palette: Eucalyptus, and intermittently native planting (varying in width from 5-40 feet) at the edges of the path where appropriate and adjacent to the buildings. Planted unevenly to blend into the existing fauna while creating a natural sheltered feeling for the path.







ROAD CROSSING TREATMENT

TRIBUTARY C- SEGMENT C-2 NORTHWEST OF GEISEL LIBRARY TO THE COGNITIVE SCIENCE BUILDING FIGURE #17

### From Cognitive Sciences Building past Segment C-3 the Student Center to Gilman Drive.

The *Meander* continues through the grove, passing two sculptures from the Stuart Collection and reappearing at the Mandeville Road intersection with the Mandeville Walk. The intersection is crossed using existing pedestrian crosswalks (See Part III-Design Guidelines). The Meander joins the existing asphalt path south of the intersection and continues on this path through the grove past the old Student Center to the intersection of Gilman Drive and Eucalyptus Grove Lane. Intensification of the eucalyptus grove, along this segment of the Meander, is necessary.

Path Location: West of the bicycle path through the grove, east of Mandeville Center, and between the old Student Center buildings. This segment of the Meander will be reviewed with the Stuart Collection and the Artists involved because of the close proximity of two projects.

Plant Palette: Eucalyptus, and intermittently dense native planting (varying in width from 5-40 feet) at the edges of the path where appropriate and adjacent to the buildings. Planted unevenly to blend into the existing fauna while creating a natural sheltered feeling for the path.



BERMS AND LANDSCAPE TO HIDE CARS

MERGE WITH EXISTING ASPHALT PATH

TRIBUTARY C- SEGMENT C-3 COGNITIVE SCIENCE BUILDING PAST STUDENT CENTER TO GILMAN DRIVE FIGURE #18

### Segment C-4 Gilman to Galbraith Hall

The alignment of the Meander from the Student Center to the Theater District poses the greatest challenge on this segment of the tributary (shown in Figure #19 and #20). It originally seemed appropriate to run the Meander parallel to Gilman Drive, having it emerge east of the Central Plant area. However, the noise from the plant is so extreme in this area that an alternate route, crossing Revelle Plaza, is proposed (See Figure # 19).

Preferably, this passageway should have a sense of separation from Revelle Plaza, that emphasizes a tree canopy over the Meander and also frames the plaza with trees without reducing its actual size. In addition to this design criteria, the ultimate design solution for this segment of the Meander must also take into account the recommendations of the Revelle College Neighborhood Planning Study which envisions maintaining the formal shape and functions of the plaza. Thus, the stairs and the hardscape along the east side of Revelle Plaza would remain as a "stage" for events in the plaza as well as a place for students to walk, sit, and meet one another.

From York Hall the Meander proceeds along the east side of Galbraith Hall. This urban segment of the Meander will require landscape screening and selective berming. In addition, the concrete (which is not a fire lane) should be partially removed and replaced with inset tiles (See Part III-Design Guidelines) marking the Meander while increasing the planting area, strengthening the grove itself, and extending the landscaping to the buildings along the route. This result can be achieved by planting more eucalyptus as well as natives, providing the "cut from a grove" feeling which would more clearly identify the Grand Park and the Meander.

Path Location: Between York Hall and Mayer Halls, east of Revelle Plaza and Galbraith Hall. Design for this entire segment of the Meander within Revelle Plaza will be coordinated with the Provost of Revelle College.



## Segment C-5 Galbraith Hall to North **Torrey Pines Road**

From the southeast corner of Galbraith Hall, leaving the concrete fire lane, the Meander descends the grassy knoll around the southeast corner of the La Jolla Project. Here the Meander becomes an asphalt path (See Part III-Design Guidelines) until it crosses Campus Loop Road north east of the new dance studio and continues until just west of the Weiss Forum Theater. It then will continue on a decomposed granite path to the La Jolla Vista View sculpture. At this sculpture site the Meander moves west on the new path through a future central court in the Theater District. It may pass the campus directory kiosk, where information on the Grand Park and Meander might be listed. The Meander continues on an existing asphalt path through the grove passing close to the Red Shoe sculpture and then on to North Torrey Pines Road.

Crossing a road with the Meander will be difficult, as the heavy vehicular traffic on North Torrey Pines Road makes a forceful, if unintentional, campus boundary. A major premise of the Grand Park concept is to provide continuity by visually linking the fragmented Park areas of campus. This linkage at North Torrey Pines Road is similar in importance to the one over Interstate 5 to East Campus (Segment B-5). It is the only connecting point between the Park areas of Central Campus and Skeleton Canyon as well as the other Park areas at SIO.

The treatment of this street crossing will include dense vegetation and trees, street treatment, special pavers, and a visual marker, on either side of the street crossing (See Part III-Design Guidelines).

Path Location: East around the La Jolla Project to the La Jolla Vista View Sculpture. Through the Theater District and eucalyptus grove south of Revelle College Drive, past the Red Shoe sculpture and then across North Torrey Pines Road.

Path Type: Asphalt and concrete with tile paver insets





## Segment C-6 North Torrey Pines Road to SIO and the Pacific Ocean

The southern leg of the SIO *Meander* travels west towards Birch Aquarium and SIO on a path through the Park south of Expedition Way. It is unique primarily because of the stunning views of the Pacific and Skeleton Canyon. Utilizing the existing dirt paths will minimize ecological disruption; the pathways, however, must be evaluated for stability, slope and the environmental impact of increased pedestrian traffic.

The southern leg splits into two tributaries south of Coast Apartments, each following different terrain until they join again near the south east corner of Nierenberg Hall. The southernmost path of the *Meander* loops around a knoll of native vegetation and winds down a hill towards the Aquarium where it crosses Expedition Way and follows the SIO path to the bridge at La Jolla Shores Drive. The other path of the *Meander* follows the Scripps Ladder down to Nierenberg Hall where the two paths of the southern leg merge again. This southern leg of the *Meander* then crosses over the bridge at La Jolla Shores Drive and descends the elevator to the bottom level where it moves west through SIO to meet the Bluff Walk.

The northernmost leg of the SIO Meander travels through a eucalyptus grove via a clear, fairly straight path that already exists near the Coast Apartments. A more sensitive alignment is necessary to create continuity through the western area of the student housing, especially at the crossing of La Jolla Shores Drive where traffic is intense and a street marking will be made (See Part III-Design Guidelines). Intensification of the grove with the addition of native species to more effectively screen the housing on the southern border is recommended. After crossing La Jolla Shores Drive, the Meander follows a finger of Park Reserve Lands down to the Marine Fisheries building, descending to the west side of the parking area on the bluffs continuing down to the pier at the beach. It will certainly be the most dramatic and spectacular portion of the Meander, as it is the only place on campus that makes the ocean bluff ascent and descent directly available to pedestrians.

Path Location:

1) South along Expedition Way following either the Scripps Ladder or Skeleton Canyon to the bridge at La Jolla Shores Drive and then on to Bluff Walk.

2) North of Coast Apartments, through the grove to the Marine Fisheries building, and down the Bluff Walk to the ocean.

Path Type: Decomposed granite and asphalt.

Plant Palette: Eucalyptus, Torrey Pines or other native trees, and native shrubs.



Terminus C.

## is C. Tributary C terminus

Scripps Coastal Reserve and Pier.

### Segment C-7 Bluff Walk.

This section starts at the Marine Fisheries building and descends down the west side of the Biological Grade (behind the guard rail) on the bluffs all the way to the beach at the pier (See Figure # 21). In response to the problem of the instability of the cliffs along the Bluff Walk, it is recommended that a cantilevered wooden path (perhaps attached to the existing buildings) be created following the existing dirt pathway down to the pier. It will be costly and demanding from an engineering point of view (as noted by a preliminary geological assessment included in appendix #1 provided by Geocon, Inc.). However, this section is already used informally by many pedestrians and so it is strongly recommended that a more detailed and comprehensive geologic and engineering study be undertaken. When the issues of soil instability are resolved, this section will, by far, be the most dramatic and spectacular portion of the Meander.

Path Location: From the Marine Fisheries building along the bluffs to the Scripps Pier.

Path Type: Small portions of this section may include a raised, cantilevered wooden walk, decomposed granite when on grade, and special paving treatment where the Meander merges with the existing paths and service roads.

Plant Palette: Native coastal shrubs



TRIBUTARY C- SEGMENT C-7 BLUFF WALK FIGURE # 22

# Part III Design Guidelines

## Path Treatments

The Meander needs to be legible to the campus community and to visitors. A fundamental aspect of the Meander will be the path surface, color and texture which provide clues to understanding where the Meander begins, where its boundaries are, and where it ends.

Meander path types within the Park and adjacent A. easement areas:

> Many of the Meander routes within the 1. sensitive Ecological Reserve, Grove Reserve and Preserve Lands have already been carved into the ground by pedestrians (See Figures #23 and #24). These portions will need only slight improvements in the form of redwood borders, slope stabilization and decomposed granite fill to accommodate the Meander. In the most sensitive areas, new paths will be hand cleared, with no heavy machinery allowed. These new pathways will be approximately 3-4 feet wide (See Figure #25). In those few areas where no previous path exists, the location of the new path will be evaluated in-situ with a biologist and/or ecologist who will site it precisely based on the approximate locations indicated in this report. The southernmost leg of the Meander, as it descends from below the Coast Apartments down to the Steven Birch Aquarium, paralleling Expedition Way, is an example of such a site (See Figure #21).

> Along its most "urban" sections, the Meander 2. merges with existing asphalt or concrete pedestrian lanes, as it does in the area adjacent to Geisel Library (See Figure #28). In order to distinguish the Meander from the existing pedestrian walkways or street crossings, a different surface treatment will be created to make it identifiable as part of the Meander. The Meander in the "urban" sections will be created with asphalt and concrete when not merging with existing paths. How this takes form is discussed in detail in the following paragraphs: B and C and D.

- Color will be one of the identifying features of the Β. Meander. The spirit of the Meander will best be served by the continuity of earth tones along the path, in particular beige and terra-cotta, two of the dominant colors found in the soils of the Ecological Reserve. The color will come in the form of the decomposed granite in the more bucolic settings of campus. For the more urban sections of campus where the path merges with existing pedestrian lanes, colored asphalt or colored/stained concrete with colored inset pavers will be the most appropriate marking system.
- Along areas with a slope, a wooden footer rail similar C. to those used in national park trails can be used to stabilize the path.

Texture will become a rich aspect of the visual signage system when the Meander merges with existing concrete walkways. Here, sawcutting and sandblasting portions of the existing concrete will provide an identifiable texture for the Meander within areas that have existing paying materials (for example, the concrete east of Galbraith Hall, or the fire lane at Geisel Library).

The physical surface coverings will vary along the D. Meander. While decomposed granite is appropriate for more natural areas of the pathway as it traverses the urban areas, use of this will not always be possible or even desirable. Therefore, the introduction of precast pavers (or tiles) with a common texture and color inserted into the surface of existing concrete or asphalt is recommended. This will clearly designate the continuation of the Meander through the urban areas of the campus. This may require patterned saw cuts, cut into the existing surfaces, both to insert the pavers and to make the Meander more clearly identifiable, thus establishing a sense of continuity.

> These pavers (or tiles) may also be inserted at regular intervals into the pathway material to clearly mark the direction and boundaries of the path. The pavers should have representations of local flora and fauna common to the Grand Park incised or inserted on the surface and perhaps include a descriptive text.

E.

Path legibility, especially in areas where the Meander moves through more ecologically sensitive areas, is important in order to discourage unnecessary Park Reserve/Preserve penetration and to facilitate entry to and exit from the pathway at only appropriate locations (See Guideline B).



EXISTING DIRT FATH, NOFTH OF WARREN COLLEGE RESIDENCE HALLS. WHEN RETROFFITED WITH DECOMPOSED GRANITE AND REDWOOD BORDERS IT WILL BECOME PART OF THE MEANDER.



NEW DECOMPOSED GRANITE PATH WITH REDWOOD BORDERS, 4 EXIST FEET WIDE. LOCATED WEST OF THE CAMPUS SERVICES COMPLEX. THE FIGURE #25

EXISTING DIRT PATH, NORTH OF WARREN COLLEGE RESIDENCE HALLS. TO BE USED FOR THE MEANDER.

FIGURE #24



EXISTING ASPHALT PATH EAST OF NORTH TORREY PINES ROAD. THE MEANDER MERGES WITH THIS PATH.



VIEW OF THE NORTH TORREY PINES ROAD CROSSING FROM THE ASPHALT PATH, LOOKING WEST. .

FIGURE #27

EXISTING CONCRETE FIRE LANE ADJACENT TO GEISEL LIBRARY.

FIGURE # 2A

27



PATH IN TORREY PINES STATE RESERVE. SPECIFICALLY THE POST AND WIRE RAILS.

## **Planting Strategy:**

Obviously, a coherent planting strategy is necessary to the ultimate success of the Grand Park and the Meander within it. The following guidelines will reinforce and preserve the qualities of the Meander as it moves through the Grand Park. In addition, these strategies support the preservation and use of native plants and wildlife and create the sylvan properties of the Meander. These strategies will also provide boundaries legible to students, faculty, staff and visitors. This can be accomplished through a combination of new landscape plantings and surface design, land form manipulations and interpretive signage.

- Continue to plant eucalyptus groves on the mesa Α. portions of the campus, emphasizing the original groves, particularly throughout areas that have been heavily impacted with new buildings. For example: The north / south axis of Central Campus and the Theater District; the south side of the future recreation area at parking lot 502; the strips of land along I-5; the future open space and recreation area at parking lot 406; and on either side of the future I-5 bridge.
- Begin to plant Torrey Pines and associated native plant В. species along the upper rim of canyons where feasible. In certain instances, extending the canyon planting into adjacent areas like parking lots and housing areas will increase the perceived size and scale of the Park (for example, at Warren College Residence Halls, see Figures #8 and #9). Where the Ecological Reserve has been disturbed along the Meander, this study recommends using native plants such as large bushy lemonadeberry, toyone, deerweed, monkey flowers, and certain sages in order to make the Reserve more impenetrable to people while reinforcing the boundaries and edges of the Meander.

Dense planting is encouraged along the rim of the canvons to prevent encroachment into sensitive habitat. If this is not successful, and if a barrier is needed on the path's down slope, a method similar to the one in Torrey Pines State Reserve would be effective (for example, wooden posts with chains or wire hanging between, See Part III-Design Guidelines). The planting palette at this location should be the

existing species located in the canyon, such as encelia, buckwheat, rhus, and sage.

It should be noted however, that this planting may cause problems, as the initial growth stages will call for irrigation. Water reaching into the Reserve may disrupt the delicate ecological balance. A study with a small test area, to be overseen by campus biologists/ecologists, is recommended to evaluate the impact that this type of irrigation would have on the Reserve.

- С. Provide native species as understory and screen plantings to give an important sense of enclosure and separation from intrusive buildings, roads, cars, and noise along the Meander, particularly in the campus areas where these elements are very close (less than 50-100 feet) to the path. The screening vegetation should be planted as close as possible to the intrusive elements. In broader and more open areas, for example in the groves and on the ridges, it is more important to lightly distribute the native plantings to give a more random and natural feeling to the path, densely screening only the buildings within the view shed of the path.
- Berm the edges of the Meander, where necessary, D. particularly in the more urban areas of the Central Campus to create separation, reduce noise and distraction, and to define the path. Some berming along parking lots, service yards, and trash areas that can be seen from the Meander can enhance adjoining areas. Grading and berming must be done in ways to mimic the natural topography (See Figure #30) so that the berms have an intermittent pattern rather than being a tall, wall like element.
- E. For fire prevention: Trees and shrubs planted too close to the buildings can become a hazard. The Fire Marshal's recommendations must be upheld.



BERMS AND PLANTINGS WHERE APPROPRIATE ALONG THE MEANDER HELP TO DEFINE THE PATH.

## Road crossing strategy:

Road Crossings are one of the most difficult and intractable problems faced by the Meander. In order to create the correct sense of transition across roadways, some type of markers are necessary on either side of the street to visually link the gap. The design of the markers should be compatible with the rustic nature of the path and the Park, and should not appear as an urban element. These markers form a threshold through which pedestrians pass as well as indicate the continuation of the walk. Surface pavers and colors could be incorporated into the design of the face of the road, providing a uniquely different crossing than exists anywhere else in the city. This will signal that the Meander actually continues beyond the barrier of the road, and does not stop at the main road edges. Such a signal is especially important at North Torrey Pines Road and at the I-5 crossings. Size, and structure of the markers, and the elaboration of their design, must, of course, depend on factors such as the width of the road, the location on campus, the physical surroundings and the amount of traffic at the crossing.

## Viewpoints:

Viewpoints along the canyon, and on the way down the hillside towards Scripps, can be marked at the most spectacular spots, not by placing traditional benches, but rather by making small cleared areas, each with its own treatment. For example, the Meander pavers could highlight the local flora and fauna as well as provide an accessible surface. Wildflowers could provide a beautiful but brief carpet at certain locations and interpretive signage should be included. The areas should be furnished with an array of locally guarried boulders to sit on, and picnic.

## Trail Markers and Interpretive Signage:

Markers and interpretive signage can clarify the Meander while aiding the pedestrian. Rocks and boulders can be placed in such a way as to define the path in sparsely vegetated areas not dissimilar to the methods found in some national parks. Informative signage, located at critical junctions, can also be used to indicate to pedestrians the location of interesting sites, or unusual vegetation.

The use of stone or concrete "mile markers" along the path is also a possibility, to indicate the distance to points of interest, such as sculpture sites, campus buildings, view points, etc. Wooden posts, or similar objects, can be introduced intermittently to mark the edges and boundaries of the Park and make them legible to the campus communities where plantings alone cannot accomplish the job.

## Lighting and Security:

The *Meander*, when it passes through the Ecological Reserve and the more natural areas of the Grand Park should not be lit, as these paths are natural trails, and also are not intended for use at night. The more "urban" segments of the Meander that flow through the central portion of campus and merge with existing paths, will be lit per campus standards.

## Accessibility:

The *Meander* is primarily a nature trail, much like the ones at Torrey Pines State Reserve, and will not be accessible along its entirety. The accessibility of the Grand Park and Meander to the physically challenged will be governed by topography. The Meander should be enjoyed by as broad a population as possible; however, when complete accessibility is limited, viewpoints or other experiential opportunities will be provided as an alternative. In particular, where parking overlooks the canyon and the Meander passes adjacent to the lots, clearings could be created that have wildflowers, and other qualities of the canyon, including the panoramic views, so that not everyone would have to navigate the trail.

## Termini:

It is recommended that a special design should mark the terminus of each tributary of the Meander. Each terminus should include the following elements:

A. A marking on the ground, to provide a physical form using lasting materials.

A three dimensional form, so the location can be seen В. from a distance and can indicate both the beginning and the end of the Meander at that point.

Interpretive information to tell the story of the C. Meander, including its purpose and importance, with educational information about the natural surroundings.

## Parking lots adjacent to the park lands:

The following is recommended for both new parking lots adjacent to Park land and for existing parking lots at the edge of Park lands, wherever possible. The design metaphor used is that of "a country fair lot", where vehicles park at the edge of a wooded area. As growth matures, it becomes a very pleasant arrival point. Therefore, an understory, a middle story, and an overstory like those found in a typical wooded area is recommended.

The understory used to break up large level parking spaces into smaller groupings (less than 10 spaces per grouping) would include native plants, shrubs, and ground cover in small landscape clusters. The middlestory would occupy both large medians and the outer edges of the parking lots and include low undulating berms that would create a sense of massing and volume that actually screen the cars (See Figure #31). Overstory would include the local type of trees extended from adjacent areas into the parking lot, typically Torrey Pines or eucalyptus (See Figure #31).

Parking space design should refrain from the typical geometric layout, and instead design organically with the flow of the land, following both the shape of the site and the character of the adjoining natural topography, as much as possible. Design groupings of no more that 10 cars in one continuous line before a break of landscaping in order to provide small pockets of parking, where the cars are hidden by middle and overstory vegetation.

Allow for adequately sized landscaping areas for healthy vegetation. Where two lanes of cars face each other, provide a landscaped area between them. The cars can overhang the first 18" of low vegetation in planting-zone.

Refrain from systematic layout of vegetation area; stagger the zones to provide as much overstory coverage as possible.

Special considerations: Use level redwood bender boards for outlining the edges of landscape areas, instead of the typical asphalt or concrete curbs. If rock outcroppings and boulders are found naturally in the adjacent nature reserve, they should be introduced into the landscaped areas of the parking

D. A rest area in the form of seating, and perhaps a water fountain or other amenities.

lot, as should any other special characteristics of the adjacent reserve.

Lot Paving: If drainage allows, use decomposed granite as paving. If the use of decomposed granite is not possible, use colored asphalt to mimic the colors of the nearby nature. Avoid the use of concrete/asphalt swales and drains placed in the middle of the road; if necessary, place them adjacent to the planted areas. If possible, let the water drain naturally where the underlying soil type allows.

Wheel Stops: Use railroad ties, preferably recycled ones (See Figure # 32).

Edge Treatments: If at all possible lower the elevation of the lot itself in relation to the roadway and provide berms around the perimeter with dense planting in order to screen the vehicles. If bollards are needed at an edge, use wooden posts with metal chains between the posts for safety (See Figures # 31, 33).

Planting Palette: Extend the nearby natural Park vegetation into the lot in order to extend physically and visually, the character of the Reserve at the given location. This will provide shade for the cars and hide the parking lot, when looking down from adjacent buildings.

See the existing parking lot on Voigt Drive by the Campus Services Complex, which is an example of the implementation of many of the strategies detailed above.



BERMING AND PLANTING OF LANDSCAPE AREA IN ORDER TO SCREEN THE CARS FROM VIEW. ALSO NOTE THE OVERSTORY PLANTING.

FIGURE # 31

CHAIN AND POST SOLUTION FOR VEHICLE-STOP AT THE EDGE OF THE CANYON SLOPE. FIGURE # 33



RECYCLED RAILROAD TIES CAN BE USED FOR WHEEL STOPS. FIGURE # 32



# Part IV General Recommendations

## **Future Studies:**

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The following issues and elements could not be fully resolved within the scope of this study, and will be addressed in additional future studies:

- 1) Design of each terminus
- 2) Design of the *Meander* paver and special paving treatments
- 3) Design of street crossings, including markers
- 4) Feasibility analysis at Canyonview Recreation Area
- 5) Feasibility analysis and design of the SIO Bluff Walk
- 6) Feasibility analysis and design of the revegetation of Pepper Canyon

## Implementation:

This study outlines the alignment and character of the *Campus Meander*. It is conceptual in nature and will progress into design development prior to construction of each of the *Meander* segments. As part of the design development phase, the design will be reviewed with the Park Committee and other pertinent campus individuals or groups who have an interest in or responsibility for buildings or open space adjacent to the *Meander* segment.

Some segments of the Grand Park and Campus Meander concept can be implemented over time in association with other capital improvement projects on campus, or in some instances, may be funded as individual projects. These funding mechanisms, however, will be insufficient to complete the entire *Meander* alignment as well as the most integral connections required to unify the fragmented areas of the Park. Therefore, an endowment fund is recommended for this project to provide funding for precise design and construction of the *Meander*, as well as contribute to the maintenance and evolution of the *Grand Park* as a whole.

Once funds are available, one or more *Meander* segments should be designed to serve as a general prototype for subsequent segments, although it is recognized that each segment will have unique conditions to address. Potential candidates for this first phase of prototypical design and implementation include Segment B-2 to Terminus B-B, which would entail a natural path and several viewpoint areas along the canyon edge from Warren housing to the Biology Field Station; and also Segments C-4 and C-5 which will travel through Revelle College and the Theater District and entail both natural and urban path treatments.

Following this initial phase, a comprehensive phasing plan will be prepared to identify the sequence and timing for implementing the overall *Meander* concept. Although all segments of the *Grand Park and Campus Meander* concept are important, the three most integral connections to implement include:

- The connection of the north Ecological Reserve to Pepper Canyon through the Canyonview recreation area.
- Connections between the Central Campus and East Campus, SIO and the Gliderport.
- 3) The *Meander* segment from Revelle Plaza to the Theater District.

## Conclusion:

If fragmented Park lands and open spaces are connected, as this document recommends, a *Grand Park* will truly exist; unifying the campus in a new way and offering a singular amenity that will improve over time. This *Grand Park*, benefiting the 1200 acre campus as a whole, has the potential of joining Balboa Park and Torrey Pines Park as part of the San Diego regional identity.

Building on the original *Meander* concept, first introduced through the UCSD Master Plan Study, this *Grand Park and Meander* concept is unique. It is designed to alternately embrace and separate the pedestrian from an academic community which is growing in population and building in density. It will offer spectacular views with diversity of experience including canyon, mesa, eucalyptus grove, wetlands, athletic fields, and a full array of the academic environment, extending from Scripps Pier at the westernmost edge of campus to the future Science Research Park at its easternmost edge. Clearly, the arguments for bringing the *Grand Park and Campus Meander* concept to reality are compelling, despite the fact that the implementation issues and the monetary costs involved are so complex.

The landscape concept for the *Grand Park and Campus Meander* respects the original campus design theme of a "university cut out of a grove"; however, other landscape considerations will need to be addressed in the future. Unlike a building, a park need not, indeed cannot, stay constant over time; therefore, over time campus planners may make changes to the concept as long as the landscape continues to unify and enhance the *Grand Park*. In particular, the future for the campus "ecoscape" may hinge on the answer to two rhetorical questions:

1) If the mesa lands of the county and city continue to be built out, and the coastal scrub ecosystem continues to disappear, is the highest and best use to maintain the eucalyptus grove in the Reserve north of Voigt Drive, or is the highest and best use to let the grove die out and replace it with native species, including Torrey Pines and coastal sage scrub?

2. Over time, as the campus landscape dies, can or even should, a new revegetation concept for UCSD be put in place whereby the increasingly rare native ecosystem gradually replaces all of the non-native vegetation on campus with the exceptions of small gardens associated with individual buildings? If this occurs, a new image for the campus would emerge; that of a large educational institution cut out of and enfolding into itself its historic ecosystem.

These questions will likely not affect planting strategies for the next 20 years or so, but may begin to influence the planting of the entire campus over the next 50 to 100 years.

# Part V Appendix #1



QUALITATIVE ASSESSMENT OF RELATIVE SLOPE STABILITY BASED ON OBSERVATION. NOTE: PERTAINS TO IMMEDIATE PATH AREA AND NOT GROSS SLOPE STABILITY OF BLUFF.

APPENDIX #1