Ventura Botanical Gardens

Master Plan

Conditional Use Permit and Rezone Application

November 2014

VBG, Inc.

Project No. 5810

Case Nos. UP-1-13-14353; Z-4-13-15774; EIR-1-13-14355

Figure 1. General Location/Vicinity

FEB 2014

VENTURA BOTANICAL GARDENS
PROJECT DESCRIPTION

The Ventura Botanical Gardens (VBG) has identified Grant Park as the desired location to create a world class botanical garden. The mission of VBG is to create and maintain public gardens for the preservation, education, cultural contribution and enhancement of our planet on a community, regional, and global level. To achieve this mission the project will create gardens representing the five major Mediterranean climate zones of the world. There will be recreational and public gathering areas with features and facilities that provide interpretive and educational opportunities for people of all ages, background, and ability.

While some public parks, amusement parks, resorts, and even some shopping districts can have lovely and diverse plantings, these and other nicely landscaped places do not meet the essential criteria of being a botanic garden. Botanic gardens have a specific meaning in the world, and it is that higher purpose which VBG aspire to.

As defined by the American Public Gardens Association (APGA), Botanic Gardens Conservation International (GBCI), and others, authentic botanic gardens are "mission based institutions that maintain collections of plants for the purpose of education, research, conservation and public display. They must be open to the public and provide accommodations for access to all people. They must also have a system for maintaining records about the plants in the collections as well as a professional staff capable of managing and maintaining those collections."

Core values of education, research, and conservation need not be sterile or boring. VBG will stimulate the imaginations of its visitors and celebrate the beauty and serenity of nature. The relationship of plants to human culture, art, and history will be woven into the plant collections and activities created at VBG to expand awareness about the importance and richness of the botanic world around us.

The project involves the development of 106.98 acres in multiple phases on land leased by the City of Ventura to The Ventura Botanical Gardens, Inc. and this property is currently known as Grant Park. This project description provides details about the location, land use patterns, garden elements, facility needs, traffic control and other operational plans and can serve as the basis for a CEQA document project description.

PROJECT APPLICANT

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PROJECT LOCATION

The project site is located at Grant Park, 398 Ferro Drive, Ventura, CA 93001, see Figure 1, General Location/Vicinity. The roughly triangular, approximately 106.98 acre site is intersected by Ferro Drive, Brakey Road, and Summit Drive. The site is bounded by Poli Street to the south, Cedar Street to the west, North Kalorama Street to the East, and undeveloped hilly open space to the north.

Figure 2. Project Area with Option Areas

PROJECT OVERVIEW

The Ventura Botanical Gardens (VBG) is a 501©3 non-profit organization formed by local citizens with the mission of creating and maintaining a public garden.

Key objectives of the plan are to:

- Create a botanical garden with an ecological emphasis on the Ventura Coast and its relationship to regions of the world which share the Mediterranean biome;
- Encourage partnerships with other botanical, horticultural, educational, environmental, and cultural organizations;
- Participate in meaningful advancement of scientific knowledge and conservation practices;
- Build a knowledgeable volunteer core of community members;
- Promote education regarding the environment, ecology, and organic methods of horticulture; and
- Establish support facilities and amenities to generate revenue to foster and maintain a sustainable botanical institution.

CITY AND VBG COORDINATION

The Ventura Botanic Garden (VBG) project shall be implemented through direct coordination with the City through an established City/VBG Coordination Team lead by the City's Park Manager. The coordination team will consist of representatives from each city department involved in development review: Community Development, Fire, Public Works, Police, and Ventura Water; with assistance from City Attorney and Risk Management as needed. The VBG shall establish two representatives of the organization annually to participate as requested by the City/VBG Coordination Team. These requirements are included as one of the conditions of approval of the project.

CURRENT LAND USE REGULATIONS AND PATTERN OF EXISTING USES

Land Use Regulatory Overview

The City of Ventura General Plan (2005) identifies Grant Park as a city park facility. The Grant Park Master Plan identified in the General Plan was placed on hold in 2008. Currently, the site is divided into thirteen parcels, with the largest parcel of over 67 acres zoned R-1-7, or Single Family Residence with a minimum lot size of 7,000 square feet. The remaining twelve parcels are zoned, R-1-1AC (Single Family Residence with a minimum lot size of 1 acre) and R-3-5 (Multiple Family with 1 unit per 2,400 sq. ft. of land area). All parcels are owned by the City of Ventura with the exception of 069-0-060-110, owned by the Serra Cross Conservancy.

Proposed Conditional Use Permit

The applicant's VBG Master Plan proposal will be processed through a Conditional Use Permit (CUP) to authorize the range of uses and support facilities identified below in this detailed project description. The CUP and associated environmental review is subject to review and approval by the Planning Commission.

Proposed Rezone

Along with processing the CUP for the Ventura Botanic Garden Master Plan, the City will process a "consistency rezone" from Residential zoning (R-1-1-AC, R-1-7, and R-3-5) to Park zoning (P) for the entirety of the Grant Park lands inclusive of the VBG proposal in order to match the 2005 General Plan land use designation of Parks and

Open Space. The consistency rezone requires a recommendation by the Planning Commission and adoption by City Council.

Current Land Use

The site consists of mostly vacant, modestly disturbed land that measures 106.98 acres in size, organized into nine City lease areas, see Figure 2 –Project Area with Option Areas. Grant Park is a City owned-facility that includes a one-acre in-holding parcel owned by the Serra Cross Conservancy, which is the site of the Serra Cross Monument. The in-holding parcel is not included as a part of the Ventura Botanical Gardens project.

Development within Grant Park includes paved roads, including extensions of Ferro Drive, Brakey Road and Summit Drive, a few parking areas, two water tanks and associate pumps, cellular and communication tower relay sites, an arch structure and rock wall at Brakey Road, a group barbeque area, a City-owned water reservoir, a Police gun range operated by the City, and limited hiking trails. The site consists of thirteen contiguous parcels, all listed by size in Table 1.

Table 1 Site Parcels

Parcel	Size	Zoning
064-0-150-040	6.75	R-1-1 AC
Cross Conservancy	NA	
0710-112-110	0.06	R-1-7
071-0-151-080	2.13	R-3-5
071-0-192-010	2.6	R-1-7
071-0-120-160	67.31	R-1-7
071-0-201-130	0.26	R-1-7
071-0-120-050	9.44	T6.1
072-0-103-025	3.65	R-1-7
072-0-274-015	3.77	R-1-7
072-0-273-010	3.67	R-1-7
072-0-272-010	3.67	R-1-7
072-0-271-010	3.67	R-1-7
Gross Acreage	**106.98**	

Surrounding Land Uses

Surrounding land uses include public facility development, residential uses, and open space. Multi-family and Single-family residential neighborhoods are located east of the site at Kalorama Street and Summit Drive, west of the site at Cedar Street, and south of the site at Poli Street. Ventura City Hall is located at the center of the southern boundary. The northern tip of the project site includes a gun range that is currently operated by the Ventura Police Department. The northern tip of the project site is adjacent to open space that is outside the City

corporate boundary. Table 2 lists the surrounding land uses, current site conditions, public services and City planning and zoning attributes.

Table 2 Existing Site Characteristics

Site Size	106.98 gross acres	
2005 General Plan Land Use Designation, 2007 Downtown Specific Plan Zones	Parks & Open Space, Neighborhood High, Neighborhood Medium, Neighborhood Low; and Specific Plan Urban Core City Building	
Zoning Designations	R-1-1AC (Single Family Residence, Minimum Lot Size – 1 Acre), R-1-7 (Single Family Residence, Minimum Lot Size – 7,000 Square Feet), and R-3-5 (Multiple Family, 1 unit/2,400 sq. ft. of land area); T6.1 – Urban Core	
Current Use and Development	Open space, police gun range range, water tanks and pump, public roadways, parking, fire roads, communication tower site, Brakey Road arch and rock walls, barbeque area, and trails.	
Surrounding Uses/Zoning	North:	Vacant land/open space
	South:	Residential (T4.1 - Urban General 1 Zone, R-1-7, RPD-8) and Ventura City Hall (T6.1 – Urban Core)
	East:	Residential (RPD-1 – Residential Planned Development, 1 unit per acre, RPD-5– Residential Planned Development, 5 units per acre, RPD-8– Residential Planned Development, 8 units per acre, RPD-12– Residential Planned Development, 12 units per acre)
	West:	Cedar Street and adjacent Residential (T4.1, R-3-5, R-3-4)
Access	Ferro Drive, Summit Drive, Brakey Road, and upper City Hall parking lot	
Public Services	Water:	Ventura Water
	Natural Gas:	Southern California Gas Company (limited to no service inside park boundaries)
	Electricity:	Southern California Edison (limited to no service inside park boundaries)
	Sewer:	Ventura Water; Limited gravity flow lines to street mains, condition unknown (limited to no service inside park boundaries)

Serra Cross Monument

As already mentioned under the discussion of current land uses within the project site, Grant Park is a City owned-facility that includes a one-acre in-holding parcel owned by the Serra Cross Conservancy (SCC), which is the site of the Serra Cross Monument. This area is accessed from internal park roads within Grant Park. It includes landscaping, paving and parking areas, as well as a cross monument. Although this in-holding parcel is surrounded by the project site, it would remain under ownership by the Serra Cross Conservancy, would not be part of the proposed Botanical Gardens, and is not part of the project site. However, because of the adjacency of

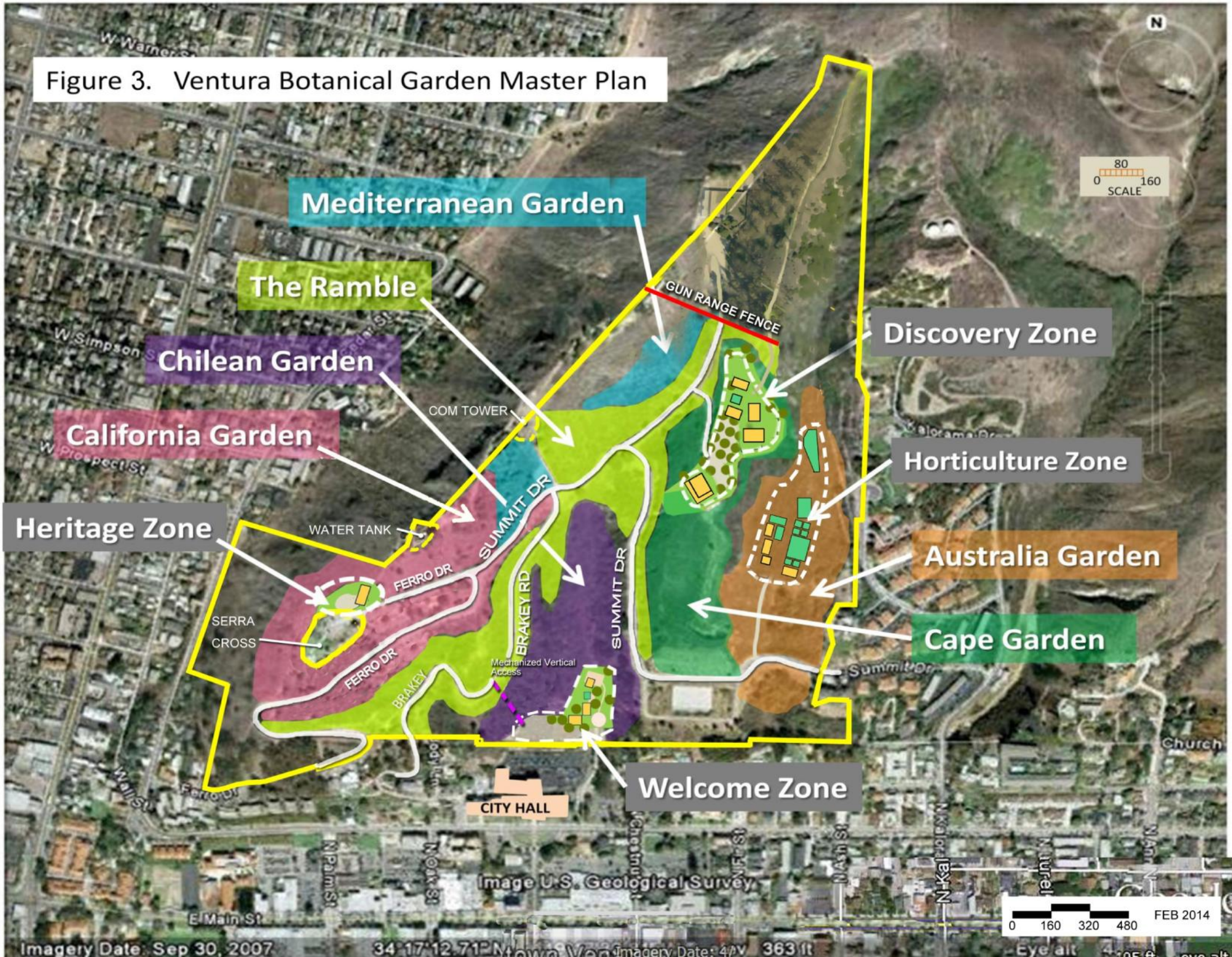


Figure 3. Ventura Botanical Garden Master Plan
Mediterranean Garden
The Ramble
Chilean Garden
California Garden
Heritage Zone
Discovery Zone
Horticulture Zone
Australia Garden
Cape Garden
Welcome Zone
GUN RANGE FENCE
COM TOWER
WATER TANK
SERRA CROSS
FERRO DR
SUMMIT DR
BRAKEY RD
BRAKEY
Mechanized Vertical Access
CITY HALL
W Simpson
W Prospect St
Wall St
E Main St
N Palm St
N Oak St
Church
Image U.S. Geological Survey
Imagery Date: Sep 30, 2007
FEB 2014
SCALE
0 160 320 480

the project site and the Serra Cross Monument, VBG, Inc. has committed to working with SCC on the following issues:

- Operation of the VBG tram on SCC property will be conditional; if an event is occurring during tram hours which will prevent the safe operation of the tram on SCC property, it will unload and load in a different location;
- Overflow parking for SCC events will be allowed on VBG ground on Summit and Brakey Drive given proper notice and coordination;
- VBG, Inc. and SCC will work together on issues surrounding the operational use of Summit Drive that will allow continued access to the SCC site from Summit Drive;
- VBG, Inc. and SCC will work together to identify and implement mutually agreeable modifications to the existing roadways that would slow traffic and improve the safety and tranquility of existing and future pedestrian zones adjacent to the roadway;
- Before the VBG's Heritage Center is approved and constructed, a shared parking MOU will be required and VBG, Inc. will need SCC approval for any access through the Serra Cross parking lot.

Police Gun Range

The northern tip of the project site includes a gun range that is currently operated by the Ventura Police Department (VPD). The relocation of the gun range to a site that is not adjacent to significant public uses has been under discussion by community members for many years. In March 2005 the Ventura City Council approved a policy statement regarding closing/relocating the gun range, cleaning up the lead contamination it has caused, and integrating the site into a new recreational strategy for Grant Park by the year 2010. As of November 2010 a relocation project for the gun range was included in the City's capital improvement plan but no funding had been allocated. That discussion remains active in the community at the time of this application. For that reason, the project application identifies the acreage and existing features of the gun range, anticipating eventual incorporation of that portion of the site into the project plan. However, the proposed project has been discussed with VPD and they have indicated that the project will be compatible with their continued use of the gun range at its current location. If the portion of Grant Park now occupied by the gun range but outside of the current City/VBG lease option map may become available, VBG will request an amendment to the Master Plan CUP for inclusion of that area as a part of VBG.

VBG, Inc. and the City Police Department have coordinated about their respective current and planned uses within Grant Park, and as a result the Master Plan CUP now includes fence and gates installation at the gun range access road and at two fire access roads to appropriately separate these uses, with incorporation of these features into the proposed project's permit conditions of approval.

PROJECT CHARACTERISTICS

The proposed project represents the Ventura Botanical Gardens plan for gardens and associated facilities that will be developed in phases over 30 years, as funding is secured and the needs of VBG and the public evolve, see Figure 3 – Ventura Botanical Garden Master Plan.

The Gardens

As previously stated, the primary mission of VBG is education and appreciation of plants and their relationship to humans and the environment. As such, the principal organizational pattern of VBG is the distribution of the five representative climate regions (California, Chile, Cape of Africa, South Australia, and Mediterranean) and a garden section identified as "The Ramble" as illustrated in Figure 3.

Figure 4. Facilities

The area titled The Ramble will comprise native California plantings, sometimes displayed to compare with plants of other Mediterranean biomes, and arrayed in a progression from south to north (and therefore up hill) that generally represents a geographical transect of California plant communities from the Coastal Prairie plant community to the Upper Montane plant community.

Gardens evolve over time. Therefore, the actual location, size and composition of each biome and garden section, including trails and associated garden features (including commemorative markers such as small pillars or stones with plaques or engravings that include text but also in some cases aesthetic elements), will be modified as needed by the VBG horticultural staff over the life of VBG to fit site micro-climatic, soil, display opportunities, educational opportunities, and other factors. The Master Plan CUP recognizes this evolving development of the gardens, implemented through conditions of approval, including mitigation measures of the adopted environmental document.

Support Facilities

In addition to laying out the primary garden sections, the Ventura Botanical Gardens Master Plan CUP identifies the future buildings, vehicular circulation and parking areas that will likely be required to maintain and support the mission of a world class botanic garden. This plan was developed based on current staffing and programmatic projections and estimated public attendance derived from the experience of other significant botanical gardens. It is anticipated that the plan will be altered somewhat over time in response to changing public needs, funding availability, and other VBG priorities, but considerable effort has been made to evaluate future needs. The project represents a realistic and reasonable projection of needs for approximately 30 years.

Summary of Facility Uses

Facility elements proposed for inclusion in the Master Plan CUP are delineated on the conceptual site plan and further grouped descriptively by geographic region within the VBG project, see Figure 4 – Facilities. These include four zones, the *Welcome, Discovery, Heritage, and Horticultural zones*. A general description of the purpose of each zone in the facility plan and their component features are included below. Function, size and staffing are detailed in Attachment A, VBG Facilities Summary. Note that staffing is based on a mix of VBG employees, volunteers, docents, and vendor staff

Welcome Zone

Located adjacent to the existing upper parking lot behind city hall and within easy walking distance of the Ventura downtown core, the Welcome Zone is anticipated to be the primary entrance and point of arrival for the majority of botanic garden visitors. A grouping of visitor serving buildings (see Figure 4, A to D) will be arranged with welcoming gardens, walks and a plaza to greet, orient, and welcome visitors to the gardens.

In addition to promoting walk-in visitors from downtown, parking for daily VBG visitors will be provided at the existing upper parking lot in the Welcome Zone and that existing lot will be upgraded to include appropriate trees and other landscaping.

This area would also contain a mechanized vertical transport system or other device to assist in VBG internal circulation.

Welcome zone components are as follows are as follows:

Welcome Zone	▪ Entry Plaza ▪ Visitor Center ▪ Book & Gift Shop ▪ Plant Sales ▪ Snack Bar ▪ Entrance to Open access pathway ▪ Entrance to Controlled access pathway ▪ Mechanized Vertical Transport

Discovery Zone

Located adjacent to an existing parking lot that has two large, unused barbeque pits, the site for the Discovery Zone provides a wonderful vantage point for visitors to the garden. The Master Plan CUP for this area will use previously disturbed portions of the site to group six proposed buildings that are primarily dedicated to the display and education aspects of Ventura Botanical Gardens' mission. The buildings will be used in conjunction with the grounds of the gardens to conduct classes, provide art and botanic exhibits, conduct ongoing research on environmental management, and host lectures.

In addition to serving as classrooms, community rooms, and lecture space, one of these buildings also includes a restaurant with outdoor dining terrace. This adjacency of food service and community rooms will support a wide variety of events in addition to the primary function of the community rooms as classrooms. The revenue from the restaurant and the events it will support are critical to the financial viability of the Ventura Botanical Gardens.

Discovery zone components are as follows:

Discovery Zone	▪ Event & Lecture Center ▪ Event Meadow ▪ Restaurant ▪ Headquarters Offices ▪ Conservation Center ▪ Discovery Center ▪ Children's Center ▪ Public Seeding Cage ▪ Temporary Events, including annual CAST Event

Prior to, and after completion of, the Discovery Zone development, VBG, Inc. also proposes to continue to use the Discovery Zone area as a host site for an annual state wide exhibit by the floriculture industry, known as the California Spring Trials (CAST). This multi-day series of invitation-only events showcases the gardens and provides an opportunity for further fundraising to benefit the ongoing improvement and maintenance of the VBG. During each day of CAST (8AM to 6PM), the number of attendees on the site ranges from 10 to 60, with an average per hour attendance of 31 guests. Staff and volunteers on the site vary from 6 to 18 during operating hours with an average of 10 at any given time. The 2014 CAST event hosted approximately 1,800 guests over 6 days. The event requires approximately one week of setup of event rental tents, temporary "planter boxes," irrigation water trucks, mobile restroom trailer (with self-contained holding tanks), and small generators (one for each tent plus one for the restroom trailer). No permanent structures are proposed as part of the CAST event at this time, but CAST has indicated a desire to improve water supply (the temperature of water in the tank trucks was too warm for roots) and reduce the cost of tent rental by building an interim structure or structures.

VBG has begun conversations with CAST in hopes of defining a useful structure or structures that would support VBG uses at the site throughout the year when CAST is not present.

To provide water for CAST events and other temporary events in the Discovery Zone, VBG Inc. will truck water to storage tanks. Water trucks would fill up from a temporary meter at a fire hydrant via a Temporary Meter Service Agreement and Memorandum of Understanding as approved by Ventura Water. VBG, Inc. would install interim water tanks in the Discovery Zone where the CAST Events are to be held. These tanks would have 6,000 gallons total storage, which could be contained in three tanks approximately 90" (7'6") in diameter and 80" (6'8") tall, or in two tanks approximately 96" (8') in diameter and 96" (8') tall.

Heritage Zone

Placed adjacent to the Serra Cross Conservancy property and with views to the Ventura River and agricultural lands west of it, the Heritage Zone is located to take advantage of these reference points. A component of the Ventura Botanical Gardens' mission is recognizing and teaching human cultural connections with plants. The Heritage Zone will emphasize ethno-botany while discussing and displaying the relationships of humans to plants and the environment in the past and present. The Master Plan CUP for this area includes the Heritage Center, a building serving as an interpretive exhibit center. Heritage zone components are as follows:

Heritage Zone	▪ Heritage Center

Horticulture Zone

Accessed by an existing abandoned access road that will be restored for VBG staff vehicular access, the Horticulture Zone is approximately 500 feet north of Summit Drive near the east line of the property. The primary purpose of this zone of the Master Plan CUP is to propagate and grow new plants for use in the gardens and for sale to the public. It will also be the hub of ongoing maintenance of the entire garden property.

Horticultural zone components are as follows:

Horticultural Zone	▪ Equipment & Storage Garages ▪ Maintenance Workshops ▪ Horticulture & Maintenance Staff Offices ▪ Growing Areas ▪ Material Storage ▪ Service Yards ▪ Tram Service & Vehicle Storage ▪ Restored Service Road

Regional Botanical Gardens Use and Operations

The average daily visitor attendance is estimated to be 100 to 300 people, not including weddings and wedding receptions, or other special event activities (major art openings, famous lecturers, etc.).

The heaviest daily use is expected during weekday and weekend afternoons and evenings. In addition to visitors, the botanical gardens will have 20 to 85 staff onsite at any moment depending upon activities. Staff will be comprised of employees, docents, volunteers, and concession vendors (such as security, restaurant, or event personnel, etc.). For further details about the location and function of VBG staff see Attachment A, Ventura Botanical Gardens Facility Summary.

The botanic garden and its facilities will be open to visitors seven days a week and every day of the year except Thanksgiving Day, Christmas Eve, Christmas Day, and New Year's Day. Hours of operation will be as shown below in Table 3.

Special Events

Special events at botanic gardens vary widely in character and scale. They are different from the ordinary daily displays in that they often differ thematically or intensively highlight a particular aspect of the theme. In addition to providing much needed revenue, special events create a compelling reason for people to visit for the first time or to return to see something new. Such time-limited events ranging from a day to two weeks, or an entire season for a major exhibit, convey a sense of urgency that other gardens have found to be very useful for attracting new and repeat visitors. VBG intends to host these sorts of events, and the Master Plan CUP establishes conditions of approval to authorize these events, in close coordination with the City's Parks Recreation & Community Partnerships Department.

The scale of events can be quite broad. Small events often occur over a few days or weeks and might attract hundreds to a few thousand people throughout the entirety of the event. Examples of some events of this type might include quilt shows, plant society flower shows, art exhibits, and celebrity chef cooking classes as well as music, drama, and dance performances.

At a somewhat larger scale, many gardens have established signature events held on an annual basis that become a major attendance builder. Because these events are held on a regular basis, staff and volunteers become very expert at executing them and therefore they become far more efficient than "one-off" endeavors. At VBG a signature event such as a yearly bonsai festival, major plant sale, holiday show, orchid show, or other event that builds a reliable yearly following that can be expected to draw thousands to tens of thousands of visitors throughout the entirety of the event.

In the largest category of special events at VBG, there are examples of expositions held at botanic gardens that often last for six months to a year and have tremendous revenue potential. These installations are akin to blockbuster attractions at art museums, are enormously popular with the public and attract large crowds. In recent years two examples of this type of show include "Big Bugs", a display of gigantic hand sculpted bugs placed in garden displays and the Dale Chihuly glass exhibition, a customized sculpture exhibit unique to each installation.

To explore the numbers of such an event, here is a summary of the experience at several botanic gardens that arranged to exhibit the work of Dale Chihuly. Each put on the display for 6 to 9 months, and each experienced major increases in all categories of revenue. To focus on the revenue data for one, the Atlanta Botanical Garden, the exhibit resulted in increases in the following categories: total attendance 136%; admissions revenue 243%; membership dues 84%; museum shop sales 215%. See Attachment B for attendance projections for regular daily attendance and for different types of events, including Expositions.

Table 3 – Hours of Operation

LIVING COLLECTIONS

Chilean Garden	8:30 am to 7:30 pm	March -October
Mediterranean Basin Garden	8:30 am to 6:30 pm	November - February
Cape Garden		
Australia Garden		
California Garden		
The Ramble		

WELCOME ZONE

Visitor Center	9:00am to 7:30 pm	March - November
Book & Gift Shop	9:00am to 6:30 pm	November - February
Plant Sales		
Café		
Vertical Transport		

DISCOVERY ZONE

Event & Lecture Center	7:30 am to 12:00 am
Restaurant	
Discovery Center	9:00 am to 9:00 pm
Headquarters	9:00 am to 6:00 pm
Conservation Center	
Children's Center	
Public Seedling Cage	

HERITAGE ZONE

Heritage Center	9:00am to 7:00 pm	March - November
	9:00am to 6:00 pm	November - February

HORTICULTURE ZONE

Garden Maintenance Operations	Dawn to Dusk	
Tram Operations	9:00am to 7:30 pm	March - November
	9:00am to 6:30 pm	November - February

Access, Circulation and Parking

Parking & Circulation

To accommodate those who arrive by automobile, the project will actively advocate parking in the downtown area and walking to the gardens, or parking at the main project lot adjacent to the Welcome Zone courtyards that will be created in the existing upper parking lot behind City Hall. Automobile accessibility from Ferro and Summit Drives will remain open to the public, with future traffic calming provisions on Summit Drive in the east/west portion of this roadway, see Figure 5.

On-site parking for the project will be accommodated by redistribution of existing parking spaces, revised and new striping/delineation of spaces, and the addition of 32 new parking spaces, see Figure 6 – Access/Parking/Circulation. Table 4 below compares existing parking with proposed project parking.

For general daily use, restricted nighttime parking similar to that provided at public beaches and public parks will be provided throughout the botanic gardens to restrict access after operating hours. Security lighting will be provided for all facilities, roadways, and parking lots and some fixtures may remain on all night. Lighting will only be provided on pathways connecting immediately adjacent facilities with parking areas and within the Welcome, Discovery, and Heritage areas. No lighting of pathways is proposed within the plant collection zones. All lighting will be directed downward to maintain security while minimizing ambient night light pollution, as conditioned in the Master Plan CUP.

Table 4. Parking Spaces

(See Figure 5 for locations)

Symbol on Figure 5	Description	Existing	Proposed
P1	Main Lot- Exist. City Hall Upper	153	106
P2	Lower Brakey Turnout	7	0
P3	Lower Ferro Turnout	0	6
P4	Mid- Ferro Turnout	15	15
P5	2011 Stone rampart near cross	15	28
P6	Adjacent to Gun Range	0	10
P7	Exist. BBQ Lot - Future Discovery	30	72
P8	Horticulture/Maintenance	0	10
P9	Cedar Street	0	5
	TOTAL	**220**	**252**

For large special events the public will be encouraged to arrive early, park in lots distributed throughout downtown and enjoy the restaurants and shops in Ventura as they come and go. In the case of occasional very large events, VBG will provide shuttles to and from more remote parking sites such as the fairgrounds, schools, churches, or other appropriate sites. During weekends and some evenings when no other events are occurring at City Hall, the additional 225 parking spaces at that location will also be available subject to a parking permit system. A third means of accommodating parking will be the use of valet attendants who will shuttle

automobiles to selected appropriate parking locations. As conditioned in the Master Plan CUP, an Access and Parking Management Plan is required during the initial project phase and thereafter amended to as each additional phase of the Master Plan build-out is activated with new uses or buildings. This management plan ensures that off-site parking locations, shuttles and use of lower City Hall parking is adequately coordinated between VBG, Inc. and the City.

Bicycle Parking

The project design anticipates a shift in emphasis from automobile to pedestrian circulation. Visitors will be encouraged to walk or bicycle to the site. Adequate secure bicycle parking will be provided at the Welcome Zone, Discovery Zone, Heritage Zone and Horticulture Zone for use by visitors and staff. Bicycle racks will also be placed at each end of the roads indicated for pedestrian use (see Figure 5), as conditioned in the Master Plan CUP. After operation, the VBG anticipates that additional bike racks will be installed as visitor usage patterns are observed over time.

Pathways

An extensive pathway network will be created within the garden to not only provide the primary means of pedestrian circulation within the gardens for public enjoyment and education, but also to connect the project with the Westside community and Downtown community core, see Figure 6 –Pathways. While portions of the gardens will require paid access, the network will allow for separate unpaid public passage as well.

Conceptual pathway alignments are indicated on Figure 6 but ultimately will be selected over time by VBG with a critical eye to erosion control, service access, groupings of garden displays, preservation of sensitive flora and fauna, and other factors that will ensure minimal site intrusion.

Ramble

To further the theme of walking, Brakey Road will be closed to vehicle use by the public from the existing stone arch entrance at the southern boundary of the proposed VBG to Brakey's intersection with Ferro at the west, (see Figure 5). This will become a pedestrian zone where the arch and stone wall remains and with narrowed paving, new plantings and garden features that form a portion of The Ramble garden. This pedestrian zone will only be open for emergency and service vehicles as well as a project tram that will provide on-site transit for botanical garden visitors. General public vehicle access to the Serra Cross will remain available using Ferro Drive and Summit Drive.

Tram & Mechanized Vertical Transport

After arriving at the main parking lot, visitors will have the option of walking the new trails and pathways that will be constructed throughout the project or they may choose to use the VBG tram system that will circulate within portions of the project site. In addition, the steep terrain separating The Ramble from the main parking lot will be overcome by means of a mechanized link such as a small funicular or other gondola and the VBG tram will further assist by circulating within The Ramble as well.

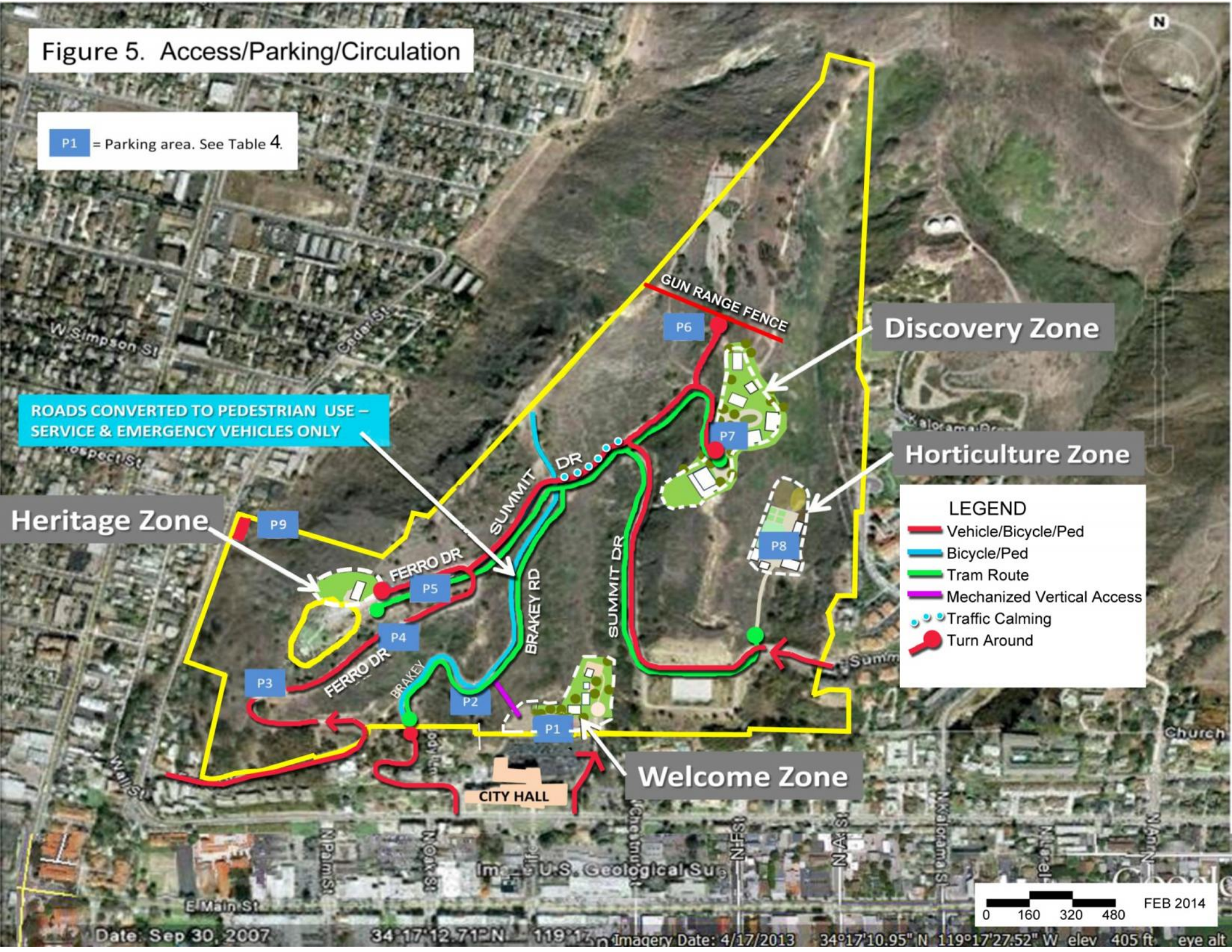


Figure 5. Access/Parking/Circulation
P1 = Parking area. See Table 4.
ROADS CONVERTED TO PEDESTRIAN USE – SERVICE & EMERGENCY VEHICLES ONLY
Heritage Zone
Discovery Zone
Horticulture Zone
Welcome Zone
GUN RANGE FENCE
SUMMIT DR
BRAKEY RD
FERRO DR
BRAKEY
CITY HALL
P1
P2
P3
P4
P5
P6
P7
P8
P9
LEGEND
Vehicle/Bicycle/Ped
Bicycle/Ped
Tram Route
Mechanized Vertical Access
Traffic Calming
Turn Around
0 160 320 480
FEB 2014
Date: Sep 30, 2007
Imagery Date: 4/17/2013
34°17'10.95" N 119°17'27.52" W elev 405 ft

Figure 6. Pathways
GUN RANGE FENCE
E Warner St
Bell Way
E Barnett St
Kellogg St
N Olive St
W Ramona St
E Ramona St
W Simpson St
W Center St
E Center St
E Prospect St
N Ventura Ave
Summit Dr
Kalorama Dr
Vallecito Dr
Tioga Dr
Church St
Ferro Dr
Brake Rd
Buena Vista St
Poli St
N Palm St
N Oak St
N California St
N Chestnut St
N Fir St
N Ash St
N Kalorama St
E Main St
LEGEND
Open Pathway
Controlled Pathway
0 160 320 480
FEB 2014
© 2013 Google
Imagery Date: 4/17/2013 34°17'10.95" N 119°17'27.52

Public Accessibility: Open vs. Closed Pathways

As a professionally managed botanic garden, VBG will have a responsibility to protect its living collections as would any museum that has taken great care in assembling and presenting its valued collection. Therefore Figure 6 indicates both open and controlled pathways, as approved by this Master Plan CUP.

Open pathways will be provided as a part of the project to provide general access to the site during hours of operation of the living collections without need to pay an admissions charge or pass through a monitored entrance point. The location of the open pathways, in conjunction with the pedestrian zones of the Ramble (Brakey Road segment) which will also provide open pedestrian access, provide walkable paths through the property from north to south and east to west to a far greater extent than was possible at the inception of the VBG project.

Closed pathways will require admission at monitored points of entrance. VBG does not intend to charge for admission into the controlled pathway areas in the early years of creating the gardens. However, as the living collections are expanded and begin to mature and to be protected, VBG does intend to charge admission. Other institutions currently charge $8 for adults, $6 for seniors, teen, students, etc., and $4 for children over 2yrs. This is the likely range of admissions that VBG will institute at some time in the future. To expand public access to the living collections themselves and to further stimulate participation in its activities, VBG will also designate and promote free access days at various times of the year.

The American Public Gardens Association advises that admissions are not only extremely important for the basic revenue they provide, they are extremely important for building the public's awareness of the value of the gardens, as well as an essential tool in engaging and attracting new members and donors.

Access during Phased Development

VBG recognizes that its early commitment to this project by funding and constructing the "demonstration trail" has become a popular public amenity. To respect the public's desire for the open access that they have become accustomed to, the project proposes a new open pathway linking the future pedestrian access through the Ramble along Brakey Road to the Welcome Zone (western end of the upper City Hall parking lot), as shown on Figure 6. That pathway will be completed prior to instituting controlled access at the existing "demonstration trail" so the public will have continuous open access to the property from south to north when entering the Welcome Zone.

When development commences for each Phase (or Activity within a Phase), any construction staging areas that might require temporary alternate accessibility will be coordinated in advance with the Serra Cross Conservancy and Police Gun Range as part of the VBG implementation with the City's Parks, Recreation, & Community Partnerships Department.

Water & Sewer Use

A water use and availability analysis dated September 2011 estimated water use for all irrigated portions of the 106.98 acre parcel to be as much as 52.6 acre-feet per year. In addition to the non-potable irrigation water need, that report estimates a further need for approximately 15 acre-feet of potable water per year to support the visitor and staff needs identified in the project.

What little water infrastructure exists on the site presently is in very poor condition and the project will therefore need to develop a functional distribution system for potable water and fire protection. Summit Drive, Brakey Road, and Ferro Drive represent favorable routes for extending existing potable water from the city to the interior of the project and connection to water at Poli Street would be available to support the Welcome Zone.

As a large land holding whose primary purpose is production, planting, and maintenance of ornamental plants, the project site will be agricultural in nature. As with agricultural operations of this size, VBG proposes to supply some or all of its irrigation needs through development of a well or wells on the property.

Irrigation water will be an essential ingredient of VBG as it is in every garden. VBG strives to be an example of best practices for water conservation and management committed to low water use, identification of water capture and retention systems, and maximizing use of untreated or minimally treated water for irrigation purposes. Preliminary investigations indicate that well water suitable for irrigation is likely to occur at reasonably accessible depths on an adjacent property and negotiations are under way to drill an exploratory well at that location (see Attachment D for this off-site well concept). It is also likely that a similar well site or sites may be discovered within the bounds of the lease option areas. A well source irrigation system would include a pumping station at the source and a tank or tanks, ideally situated at an elevation to allow for gravity outflow.

If feasible, VBG will capture storm water runoff in subterranean tanks and distribute that water through the same irrigation system as the well water. In the event that well water sources are not available or prove to be insufficient, VBG will connect to the City provided potable water system.

Potable water supply could also be provided through connection to the City's existing water supply system. According to a Water System Evaluation completed for the project (RBF Consulting, November 2014), the VBG selected Alternative 4 of the study which is acceptable to Ventura Water that proposes water service provided by gravity service from the City's existing 605K Zone. The 605K Zone is located to the east of the project site, separated by a valley, but joined by Summit Drive. Storage for the 605K Zone currently consists of two above grade steel water storage tanks (the Kalorama tanks), each with a capacity of 0.15 million gallons (MG), for a combined capacity of 0.30 MG, located approximately 1,030 feet north of the northern terminus of Kalorama Drive and approximately 680 feet east of the Police gun range. According to the RBF report, the regulatory storage required for the project is 175 percent of maximum day demand, which is equivalent to approximately 0.32 MG, which would result in requiring roughly double the amount of storage currently available at the Kalorama Tanks, although provision of this required storage could be gradually phased in as Master Plan CUP demand increase over time. Under this scenario, two additional 0.16 MG storage tanks would be constructed at the site of the Kalorama tanks, subject to reaching an agreement with the City. The RBF report also states that a tank siting study and geotechnical investigation would need to be done to confirm that the site can physically accommodate the new tanks, and a retaining wall may be required on the north side of the site, as the hill continues to slope upward where the new tanks are proposed. It is anticipated that the tank would be above grade welded steel meeting the City's Engineering Design Standards.

The RBF report also concludes that, in addition to the new storage tanks, service would need to be brought from the 605K Zone over to the project site. In order to accomplish this, approximately 500 feet of existing 12-inch asbestos cement pipe (ACP) in Summit Drive would need to be converted from the City's 260 Zone to the 605K Zone. This could be done by installing a new, normally closed isolation valve near the Grant Park Reservoir, and opening the existing zone break valve. This would require verification that the existing line can handle the approximate 150 psi increase in working pressure. Service would be completed by installing a backflow preventer and flow meter. The exact zone break location would be verified prior to performing any improvements.

Implementation of the recommendations of the RBF report regarding extension of service from the 605K Zone have been made a condition of approval of Master Plan CUP, as has requiring extension of water service from Poli Street to the Welcome Zone as part of Phase 1, including a water line, meter, and fire hydrant near the Welcome Center.

Regardless of which water supply source is used, or combination of supply sources, the onsite irrigation system would include a 2" to 3"diameter subterranean main piping distribution system would distribute to two manifolds. Manifold 1 would serve the Ramble as well as Cape and Australia Gardens, each with a 1" diameter sub-main. Manifold 2 would serve the Mediterranean, California, and Chilean Garden each with a 1" diameter sub-main. Both the main and sub-main piping will be buried in an approximate 36" deep x 12" wide trench. From the sub-mains in each garden several additional ¾" diameter branch distribution zones will take water to additional manifolds needed to route ½" diameter and smaller drip irrigation tubing to the plants of the living collections. The branch distribution will be buried approximately 6" deep and the drip irrigation tubing will have 6" to 1" of cover except at the surface level drip emitters.

Sanitary connections will be made by means of new appropriately sized lines at the time that permanent buildings are constructed. The buildings at the Welcome zone will be connected to the existing main at Poli Street. The existing sewer main in Summit Drive that currently terminates at the project's east boundary will be extended to the Discovery zone for those buildings. The buildings in the Horticulture zone and the Heritage center will be connected to the new extension of the sewer line in Summit Drive as well. A "Sewer Infrastructure Review" report produced by Kennedy/Jenks Consultants in September 2014 identified specific points of connection existing sewer mains at these locations, and found that no upgrades to these sewer mains or any other "downstream" sewer facilities would be required either in the near term or at buildout of the Master Plan.

Plant Species Management

Many plant species, including the vast majority of our California native plants, have little information or data on invasiveness. VBG necessarily has to make many assumptions where there is little information available and follow up on those assumptions with diligent observation and stewardship. However, VBG recognizes the need for a well-reasoned and careful approach to plant selections based on applying rational thought processes in conjunction with the best available botanic evidence.

Therefore, VBG has instituted a policy for assessing invasive potential of introduced plant species. The policy is comprised of seven steps that have been applied, and will continue to be applied by qualified botanists, horticulturalists, and other experienced and credentialed members of the VBG collections committee. After application of the steps, the collection committee makes a determination based on the totality of the results. A negative result for any one step does not necessarily mean a species is disallowed for acquisition and propagation as negatives can be balanced by other information. Most botanic gardens apply step 1 or parts of it if they have any policy at all.

The seven steps of the VBG policy:

1. Life cycle traits analysis. Indices: fecundity traits, distribution mechanisms, plasticity, and preferences for disturbed environments. A weed risk assessment system uses information on a taxon's current weed status in other parts of the world, climate and environmental preferences, and biological attributes. Australian Weed Risk Assessment (WRA) system is commonly used. http://www.daff.gov.au/ba/reviews/weeds/system/ (Note: This step has led VBG to eliminate several species and groups of species from consideration, such as ALL Chilean grass species.)

2. Review scientific literature for indications of invasiveness of species, hybridization potential.

3. Compare to lists of known weedy/invasive taxa, for California as well as other Mediterranean climate regions.

4. Search California herbarium records database for indications of invasive presence in state. (Note: This is a powerful tool that was not available in the past. It has already resulted in VBG eliminating species from our proposed list to import from Chile in 2013.)

5. Exercise caution in taking unknown species from wild. Prefer species already available in horticulture (in Chile and elsewhere) and have a track record to review by communicating with horticulture experts in country.

6. Controlled setting of VBG with intensity of observation allows us to monitor closely. This can be done in a scientific manner. Specimens are not permanent and can be removed as other gardens have done based on results of monitoring. (Note: as a part of the global botanic garden network, observations on newly discovered potential for invasiveness will add to the knowledge base and VBG will also receive updates from other institutions on their experiences.)

7. VBG will sell plants, but not those that have legal restrictions associated with them and/or those plants with invasive potential. VBG will not sell specimen propagules, seeds, or plants to the public in plant sales with weedy potential, CBD (Convention on Biological Diversity) issues, or liability for VBG analogous to what other gardens have dealt with. Stewardship includes monitoring to determine if our specimens were illicitly entered into the commercial nursery trade. (Note: Not introducing new species into horticultural trade, including selling at plant sales or distributing to growers is the single most important impact component of this policy.)

VBG is cautious about being too reactionary to reports of weediness for species in the scientific literature as species are often placed on lists of weeds promulgated by the state only to be later downgraded or removed after the scientific assessment does not verify. Science progresses. Findings are more often than not found to vary upon repeated or expanded experimentation. Local environment and experimental design have huge effects on studies of invasiveness.

It is unclear how VBG will apply this to species already on the site. Grant park was under agriculture from the 1700's, then became pasture for grazing in the 1800s, then arboriculture, then the current vegetation is what has colonized since the last fire in the 1950's. The current vegetation is a mix of invasive plant species and a very small number of native plant species. Many of the natives which are present are quite aggressive and would grossly fail each step of the VBG policy. VBG plans to define a policy to address control of both invasive non-native and aggressive native plant species so that these species do not overwhelm VBG's efforts to increase biodiversity. This policy on invasive and aggressive plant species will be part of a larger policy on stewardship that will also address herbicide and pesticide use.

Further, the Master Plan CUP includes mitigation measures to reduce potential impacts to biological resources on site. VBG, Inc. will implement all measures as identified in the Permit's phased development.

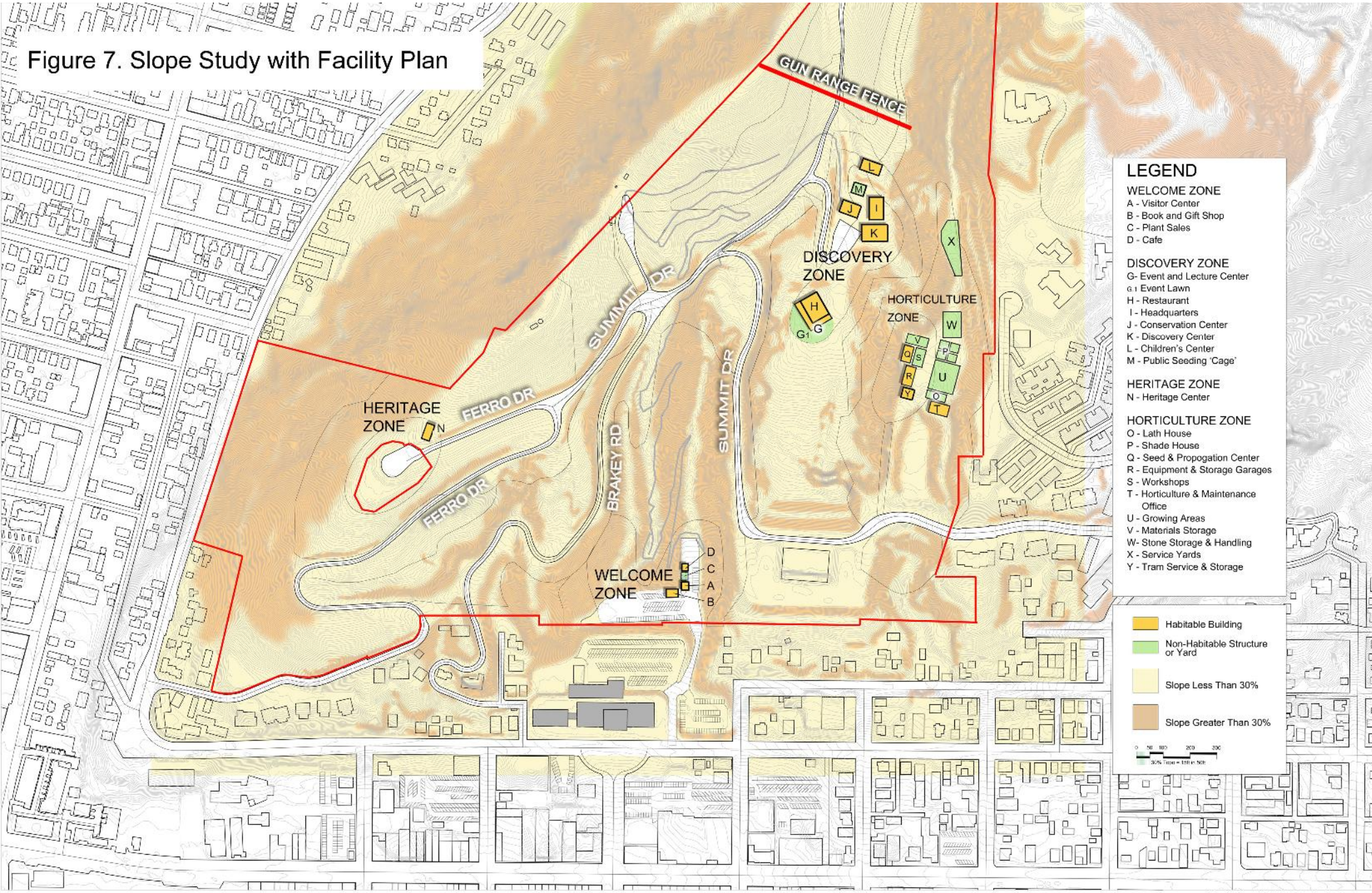
Noise Control

The Master Plan CUP includes conditions of approval to ensure sound control that will minimize sound intrusion to its own gardens and to neighboring properties and will be in compliance with adopted City noise ordinances.

Garden Components

As previously discussed, the primary objective of VBG is establishing beautiful and well organized living collections with plantings that represent the Mediterranean climate regions of the world. In addition to installation of plant materials these gardens will by necessity incorporate elements such as soil amendments, irrigation systems, pathways, water features, foot bridges, trellises, benches, signage, fencing, informational

Figure 7. Slope Study with Facility Plan



NORTH

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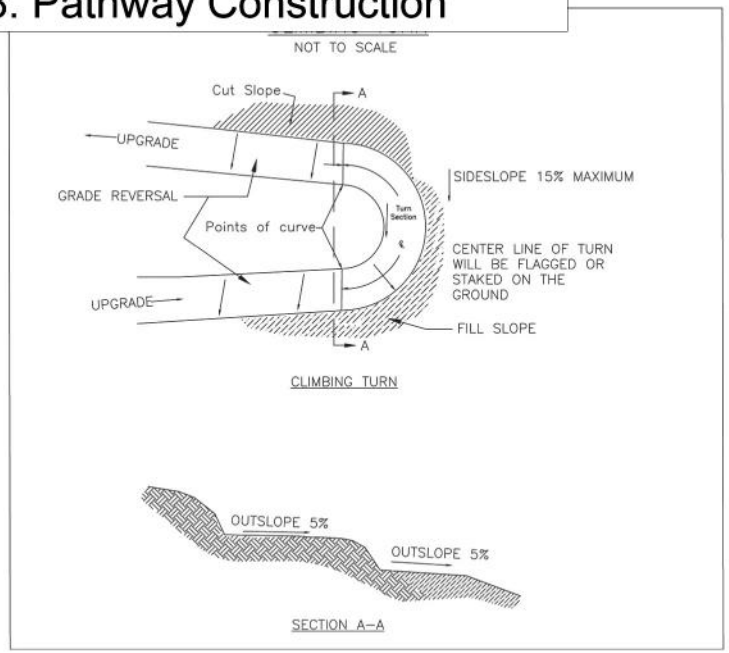
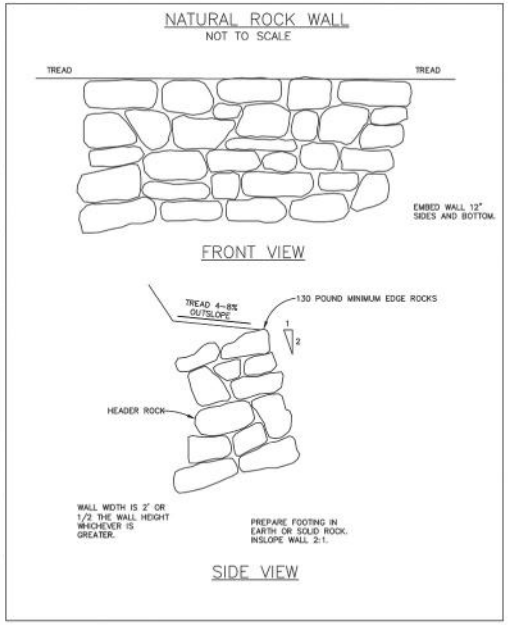
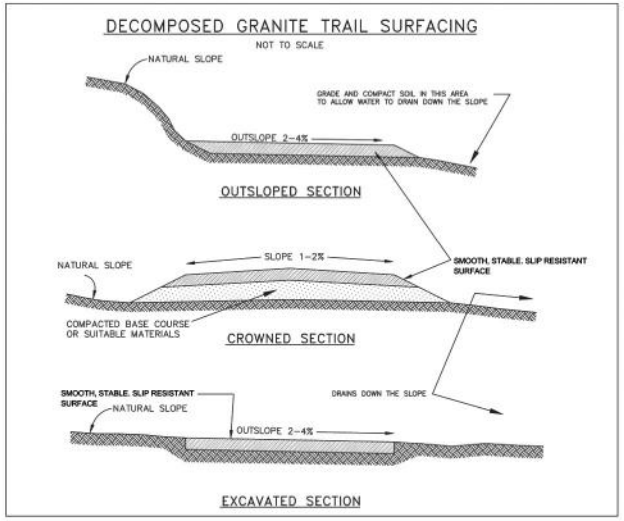
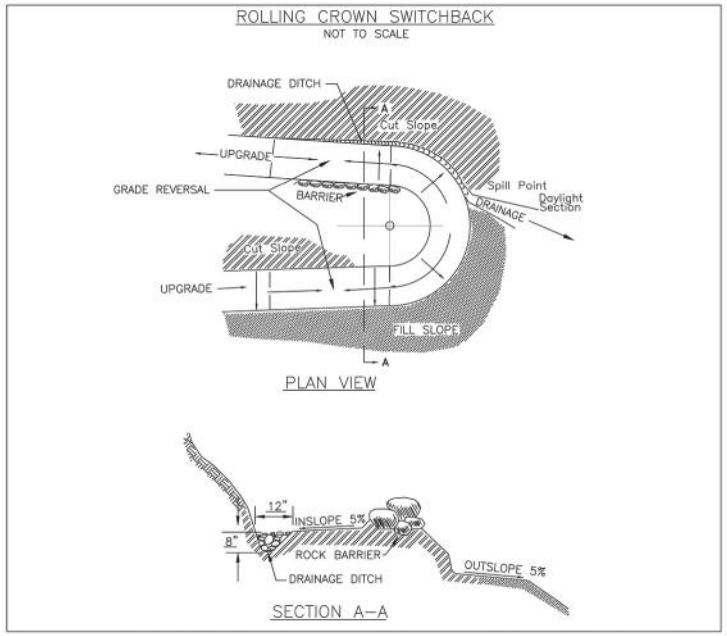
February 2014

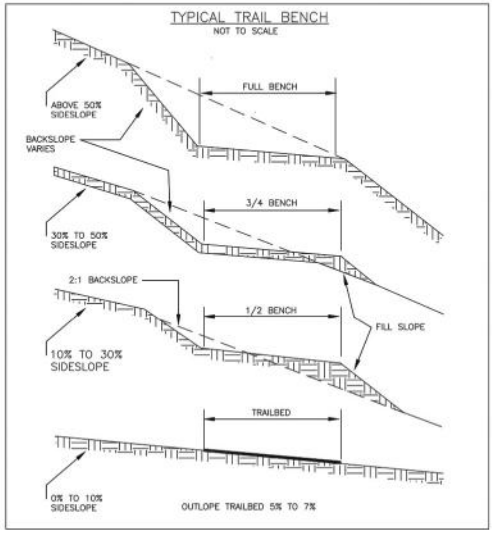
8. Pathway Construction











VENTURA BOTANIC GARDEN

PATH CONSTRUCTION

These standards are based upon the plans prepared by the Contractor who constructed the initial path now being enjoyed by the community.

They apply to all paths, depending upon the site conditions and the function of the particular path. In terms of physical development, they are all 'light impact', using natural or recyclable materials and minimal excavations. The paths with gravel base would primarily be used where service vehicles require routine access.

The VBG intends to modify these standards in response to experience gained as the Garden undergoes increased use. The VBG intends to use 'best practices' as practiced by numerous similar Botanical Gardens throughout the country and beyond, in order to construct paths that provide safe, stable and environmentally sound access ways.

FEB 2014

kiosks, informal gathering areas, works of art, and other features commonly associated with important botanic gardens of the world. Those features would be beyond the development envelopes shown in Figure 7. By their nature gardens are evolutionary. While some features may endure for many decades, others are likely to be altered and reshaped by botanic garden staff and volunteers over time to improve the diversity of the collections, to respond to changes in the environment, to better educate the public, and to generally rejuvenate and energize the experience for visitors.

One of the most important garden components will be the network of pathways running throughout the gardens. Figure 8 shows path construction standards for these pathways. These standards are based on the plans prepared by the Contractor who constructed the demonstration path already being used by the community, which runs from a trailhead at the back of the upper parking lot behind City Hall to the top of Grant Park Fuel Break Road, where a parking lot and barbeque pits are currently located. The standards are meant to apply to all paths, depending upon the site conditions and the function of the particular path. In terms of physical development, they are all 'light-impact', using natural or recyclable materials and minimal excavations. The paths with gravel base would primarily be used where service vehicles require routine access.

The VBG intends to modify these standards in response to experience gained as the Garden undergoes increased use. The VBG intends to use 'best practices' as practiced by numerous similar Botanical Gardens throughout the country and beyond, in order to construct paths that would provide safe, stable, and environmentally sound access ways. All garden components, including the layout, size and organization of buildings as depicted in these exhibits, is representational of the intended uses and activities, and is not intended to present a final design. All such designs will be subject to a set of Design Principles and Guidelines/Sign Guidelines developed by VBG, Inc. and subject to approval through applications processed by the City and the City's Design Review Committee as identified in the Master Plan CUP Conditions of Approval. A set of such Principles and Guidelines proposed by VBG is included in Attachment C.

Interim Structure and Facility Use

In the course of phasing the project, interim structures will be built or installed for the purpose of supporting the short term needs of the botanic garden. For instance, the Master Plan CUP does not indicate horticultural support structures located in the Welcome Zone when the entire project has been completed. However, because phasing anticipates construction and maintenance of the Chilean Garden in Phase 1 and that is immediately adjacent to the Welcome Zone, interim structures are proposed in this area.

Interim structures will be placed on site and may be reused for a different function, and relocated or removed from the site in future phases. For example, some water lines installed to serve temporary uses may remain in place to serve a later permanent use. The general type of interim structures will include some, all or a combination of the following list. This list is illustrative of the purpose and intent for interim structures in the phasing of the Master Plan, however there might be other specific unforeseen needs that emerge over time and require review and authorization of other structures of a similar nature:

<u>Buildings</u>

1. Prefabricated buildings
2. Prefabricated structures re-purposed as buildings (shipping containers for instance)
3. Factory designed and built buildings assembled on site
4. Conventionally constructed buildings

<u>Site Improvements:</u>

1. Shade structures
2. Hardscape patios

3. Raised and grade level planters
4. Fencing (Chain link and decorative)
5. Access ramps and parking
6. AC Paving resurfacing
7. Temporary power poles
8. Temporary water lines
9. Signage
10. Security lighting

All interim structures will be installed or constructed in compliance with applicable building and fire codes as if they are permanent structures, as identified in the Master Plan CUP Conditions of Approval. The following is a summary of some known, specific criteria applicable to the project:

1. All Buildings will meet or exceed the requirements of Chapter 7A of the California Building Code (CBC) relating to buildings in the wildland-urban interface. Accessibility to the interim facilities will meet or exceed the requirements of Chapter 11B of the CBC relating to accessibility.
2. Any interim building over 120 square feet must provide confirmation and/or calculations proving the seismic integrity of the structure in compliance with CBC.
3. For any proposed interim building over 1,000 square feet in area, a geotechnical report must be provided.
4. Any building over 500 square feet must have an approved fire sprinkler system.

Uses of the interim structures will be the same as the uses in the Master Plan CUP and their intensity of use will be equal to or less than the completed permanent building or structure.

Where permanent utilities such as sewer, water, power, and communications have not yet been installed on the site, specific alternative measures may be employed. For example, a self-contained restroom facility with holding tanks for wash water and sewage is proposed adjacent to the interim horticulture facility noted above. Features of this sort will be reviewed and permitted by City and County departments as applicable prior to installation through coordination with the City's Parks, Recreation, and Community Partnerships Department.

Project Phasing

Development of a botanic garden of this size and scope will be a complex task and will take many years to accomplish. The phasing plan is shown in Table 5 below, which identifies how implementation of the Master Plan CUP will occur.

In summary, VBG's primary objective is the construction and maintenance of public botanic gardens. The expense of growing the necessary support infrastructure and revenue generating programs and facilities is closely tied and balanced to that primary objective.

VBG proposes continuous construction of gardens over time and the use of temporary structures to support that growth until significant portions of the gardens have been established. Completion of VBG permanent building projects and garden special features will be funded by means of separately directed capital campaigns and built in later years.

Furthermore, the gardens of the six climate regions themselves have been planned for both the basic, but complete, representations of their plant collections and for the special features within them. Keeping the cost of the special features separate from the baseline collections will allow further flexibility in fund raising and scheduling.

Table 5. Project Phasing

PHASE	ESTIMATED DATE	ACTIVITIES
1	2015-2017 Option Area 1	Special events, including CAST event Temporary water supply Chilean Garden - Create 35-40% Mediterranean Garden -Create 1 -3% Ramble - Create 1 -2% Develop on-site or site adjacent well for irrigation Install interim facilities @ Welcome Zone
2	2018-2020 Option Area 1 thru 4	Chilean Garden - Create additional 40-45% Mediterranean Garden -Create additional 10 -15% Ramble - Create additional 1 -2% Cape Garden - Create 4-6% California Garden - Create 2-4% Continue interim facilities @ Welcome Zone Sewer & water Infrastructure construction @ Welcome Zone Construct & occupy permanent Welcome Zone building(s) Remove interim facilities @ Welcome Zone when permanent facilities completed Install interim facilities @ Discovery Zone
3	2021-2023 Option Area 1 thru 7	Chilean Garden - complete final 10-20% Mediterranean Garden -Create additional 40-45% Ramble - Create additional 3-5% Cape Garden - Create additional 9-11% California Garden - Create additional 5-7% Australia Garden - Create 3-5% Chilean creek garden Continue interim facilities @ Discovery Zone Turnaround/welcome plaza @ Brakey stone arch Sewer & Water Infrastructure Construction @ Discovery Zone Construct and occupy Restaurant & Event Center @ Discovery Zone Improve road with gravel surface to Horticulture Zone Install interim facilities @ Horticulture Zone
4	2024-2026 Option Area 1 thru 8	Mediterranean Garden -complete final 35-45% Ramble - Create additional 8-10% Cape Garden - Create additional 25-35% California Garden - Create additional 10-15% Australia Garden - Create additional 4-6% New welcome Terrace @ Brakey & Summit New welcome Terrace @ Summit & Ferro New welcome Terrace @ Summit & Range Road Continue interim facilities @ Discovery Zone Continue interim facilities @ Horticulture Zone Install permanent lath house and two shade structures @ Horticulture Zone

Table 5. Project Phasing (Cont'd.)

PHASE	ESTIMATED DATE	ACTIVITIES
5	2027-2029 Option Area 1 thru 8	Ramble - Create additional 15-20% Cape Garden - Create additional 40-50% California Garden - Create additional 10-20% Australia Garden - Create additional 6-12% New exhibit in Chilean garden New meditation area in Mediterranean Garden Construct and occupy Discovery Center @ Discovery Zone Continue interim facilities @ Discovery Zone Continue interim facilities @ Horticulture Zone
6	2030-2032 Option Area 1 thru 8	Ramble - Create additional 20-30% Cape Garden - Complete final 5-15% California Garden - Create additional 35-45% Australia Garden - Create additional 20-25% Scenic overlook in Mediterranean Garden Construct and occupy Children's Center & Seedling Cage @ Discovery Zone Continue interim facilities @ Discovery Zone Continue interim facilities @ Horticulture Zone
7	2033-2035 Option Area 1 thru 8	Ramble - Create final 35-45% California Garden - Create final 30-40% Australia Garden - Create final 55-65% New exhibit in Chilean garden Construct and occupy Conservation Center @ Discovery Zone Continue interim facilities @ Discovery Zone Continue interim facilities @ Horticulture Zone
8	2036-2038 Option Area 1 thru 8	Sewer & water infrastructure @ Horticulture Zone Update access road to impermeable paving @ Horticulture Zone Construct and occupy Workshops, Garages, and Offices @ Horticulture Zone New exhibit in Mediterranean Garden New watershed exhibit in Cape Garden New drought, culinary, and interactive displays in Cape Garden New sculpture and astronomy areas in Cape Garden Continue interim facilities @ Discovery Zone Remove interim facilities @ Horticulture Zone
9	2039-2041 Option Area 1 thru 8	Construct and occupy Headquarters @ Discovery Zone New meditation area within the Mediterranean Garden New exhibit in Ramble New Children's Discovery garden near Children's Center New agricultural demonstration gardens near Heritage Center New wetland exploration garden within Australia Garden New bird exploration garden within Australia Garden Construct Mechanized Vertical Transport Install permanent lath house and two shade structures @ Horticulture Zone Remove interim facilities @ Discovery Zone
10	2042-2044 Option Area 1 thru 8	New exhibit in Mediterranean Garden New exhibit in Cape Garden New Heritage gardens within the California Garden New water play fountain within the California Garden Sewer & water infrastructure @ Heritage Zone Construct and occupy Heritage Center @ Heritage Zone

This strategy, as approved in this Master Plan CUP, will allow for incremental development and flexibility while insuring that adequate support facilities are in place as each successive phase of development is undertaken. For example, in the event of an unforeseen circumstance like a delay in the construction of the Welcome Center component (or any other "Capital Campaign" component shown in the phasing plan) our yearly revenue stream is calibrated to fund the temporary interim facilities and operating costs needed to support the continued growth and maintenance of gardens.

On the other hand, a more positive example of the kind of flexibility VBG needs is the eventuality that a major donor or grant opportunity may appear. For instance, if VBG identifies a donor who is anxious to help build a new Children's Learning Center in 2019 rather than 2029 as currently shown on the phasing document, VBG might want to take steps to move in that direction. In that case VBG may decide to accelerate construction of portions of the South Africa Garden and develop a Capital Campaign for the Event Center prior to the Welcome Center for instance.

Attachment A

Ventura Botanical Garden Facility Summary

		Building	Function	Bldg. Area S.F. *	Stories	Bldg. Footprint S.F. **	Exterior Space S.F.	Use of Outdoor Space	Staff ****
WELCOME ZONE	A	Visitor Center	Visitor admissions & orientation, restrooms, lost & found, first aide, etc.	1,256	1	1,256	600	Visitor orientation terrace.	2
	B	Book & Gift Shop	Cashier stations, ample storage and retail display areas for books, art, pottery, ceramics, garden objects, hats, t-shirts, and other items.	2,228	1	2,228	200	Patio sales area.	2
	C	Plant Sales	Lathhouse like plant sales building with all-weather cashier stations, potting work benches, tool storage, and adjacent outdoor sale patio with	1,620	1	1,620	1,000	Plant sales patio; 2/3 shaded.	2
	D	Snack Bar	Coffee, pastry, soup, sandwich & snack venue with little or no indoor seating adjacent to a small "dining" patio.	662	1	662	400	"Dining" patio.	1
DISCOVERY ZONE	G	Event & Lecture Center	Lecture, classroom, and community event venue. Main room (which can be subdivided) capable of hosting an event of 250-350 people. Also includes catering/demonstration kitchen, arrival foyer, restrooms, storage and direct access to the event meadow.	11,570	1***	11,570	6,250	Event meadow, small stage, and service area.	0
	H	Restaurant	Indoor seating for 35-45 for dining, 20-25 in the bar area, and 35-60 terrace dining, as well as a small gift shop.	6,048	1***	0***	2,200	Dining terrace & patio.	8
	I	Headquarters	Administrative and fund raising offices.	6,710	2	3,355	800	Entry forecourt and patio	18
	J	Conservation Center	Botanic laboratory and collection space for the advancement of the understanding, use, and preservation of plants of the world.	9,060	2 + Basement	3,020			9
	K	Discovery Center	The main educational building of VBG it will include an exhibition space, botanic lab classroom for adult education, offices for staff educators, and a volunteer center. Also houses the main security	7,992	2	3,996	1,600	Exhibit and patio areas.	9
	L	Children's Center	Children's education including a botanic lab designed for kids, a discussion classroom, and access to adjacent outdoor classroom.	2,288	1	2,288	800	Outdoor classroom and demonstration area.	0
	M	Public Seedling "Cage"	A lathhouse like building for education about plant propagation.	1,200	1	1,200			0
HERITAGE ZONE	N	Heritage Center	An exhibit space for orientation to the human history of the region in relationship to the natural and cultivated botanic environment.	3,186	1	3,186	1,000	Visitor orientation terrace.	1
HORTICULTURE ZONE	O-1	Lath House #1	Garden Stock	600	1	600			0
	O-2	Lath House #2	Plant Sales Stock	600	1	600			0
	P-1	Shade House # 1	Garden Stock	300	1	300			0
	P-2	Shade House # 2	Garden Stock	600	1	600			0
	P-3	Shade House # 3	Plant Sales Stock	600	1	600			0
	P-4	Shade House # 4	Plant Sales Stock	400	1	400			0
	Q	Seed & Propagation Center	Seed handling, storage and propagation building.	1,450	1	1,450			2
	R	Equipment & Storage Garages	Truck and tractor storage as well as tractor attachments and hand tools.	2,338	1	2,338			0
	S	Workshops	General maintenance, equipment maintenance, and wood working plus general storage.	2,313	1	2,313			2
	T	Horticulture & Maintenance Staff	Offices, meeting rooms, and support space for operational staff.	2,754	1	2,754			14
	U	Growing Areas	Can yards and other open space to develop nursery stock.	0	0	0	9,500	Plant development; some with shade cloth.	0
	V	Material Storage	Sand, gravel, mulch, wood, etc. in bins + room for tractor maneuvering	0	0	0	1,800	Outdoor material storage	0
	W	Stone Storage & Handling	Stone materials + crafting and maneuvering space	0	0	0	5,000		2
	X	Service Yards	Bulk materials, trash/recycle area, fuel storage, wood chipping, compost, firewood, lumber, brush burning.	0	0	0	8,000		0
	Y	Tram Service & Storage	Storage area for on-site public transport vehicles	875	1	875	500		3
				66,650		47,211	39,650		75

***** Building Area is the total area of the building including all levels.
****** Building Footprint is the area of the building at ground level.
******* Event & Lecture Center is below the Restaurant; building appears as two stories from the west, a single story from the north, east, and south.
******** Staff represents largest number on site at one moment from 9AM to 6PM and includs employees, volunteers, and concessionaires.

Attachment B

ATTENDANCE PROJECTIONS

USE	NUMBER, INTERVAL & DURATION	HOURS	LOCATION
Daily Paid Attendance	March - October 150 to 300 per day evenly distributed throughout hours of operation with average 2 hour stay	8:30 am to 7:30 pm	Living Collections
	November - February 100 to 250 per day evenly distributed throughout hours of operation with average 2 hour stay	8:30 am to 6:30 pm	
School Bus Visits	January to June - 10 buses per month, 30 students + 6 adults, weekdays, 4 hours per bus, two buses maximum at any time.	8:30 am to 2:30 pm	Children's Center, Living Collections, Heritage Center, Visitor Center
	September to December - 5 buses per month, 30 students + 6 adults, weekdays, 4 hours per bus two buses maximum a any time.		
Adult Classes	March - May; 6 classes per week; 10 students per class; 1 to 2 hours per class	9:00 am to 9:00pm	Discovery Center
	June - August; 4 classes per week; 10 students per class; 1 to 2 hours per class		
	September - November; 6 classes per week; 10 students per class; 1 to 2 hours per class		
	December - February; 6 classes per week; 10 students per class; 1 to 2 hours per class		
Lectures & Symposia	Once Per Quarter; 100 attendees; 2 to 8 hours	9:00 am to 9:00pm	Event Center
Revenue Events (weddings, plant sales, lease by outside groups, etc.)	March - August; 8 events per month; 350 people per event; 4 to 8 hours per event	9:00 am to 10:00pm	Event Center, Event Lawn, Welcome Plaza
	September - February; 6 events per month; 350 people per event; 4 to 8 hours per event		
Donor, Member, & Volunteer Recognition Events	Once Per Quarter; 10 to 40 attendees; 2 to 4 hours	9:00 am to 9:00pm	Event Center, Event Lawn, Discovery Center, Welcome Plaza, Heritage Center, Living Collections
Exposition	Every three to five years; 9 month durtion; the first three months of an Exposition would result in approximately 615 to 660 additional daily paid visitors; the remaining 6 months of an Exposition would result in approximately 405 to 480 additional daily paid visitors.	9:00 am to 10:00pm	Event Center, Event Lawn, Discovery Center, Welcome Plaza, Heritage Center, Living Collections
Annual Trade Show	Once per year; 200 to 300 per day; 10 days	9:00 am to 10:00pm	Event Center, Event Lawn

Attachment C

The Ventura Botanical Gardens

November, 2014

Design Principles and Guidelines/Sign Guidelines

1. Design Principles and Guidelines

These Design Principles and Guidelines are based upon the ideas and priorities established during the Ventura Botanical Garden Design Workshop held on February 23, 2013 by the VBG Board of Directors. The resulting Design Principles are reiterated here, with refined language, along with Design Guidelines intended to help guide the implementation of each Principle. In addition to these criteria, improvements within the Botanical Garden are subject to compliance with city ordinances and codes in effect at the time work is undertaken.

The Ventura Botanical Gardens is comprised of several garden areas (climatic region gardens) representing unique regions of the world that share climatic characteristics similar to those of our region. Within this setting, the Master Plan for the Botanical Gardens provides for several facilities, sited to meet specific program needs and to take advantage of unique opportunity areas on the property. These guidelines provide a framework for design that encourages a connectedness between the various facilities while promoting unique design solutions appropriate to the various needs and functions of each.

1. **Improvements, including buildings, structures, walls, paving, seating and other construction should emphasize materials of local origin and color suitable to this climate and site through authentic, durable and intriguing design.**
    a. Materials considered specifically well-suited to this intention include:
        i. Fieldstone – common to the site, as evidenced by the many hand-laid retaining walls built of this durable muted cobble in the past century and earlier;
        ii. Quarried stone from the region, primarily sandstone;
        iii. Rammed earth, in which soil from the site is combined with binding additives such as chalk, lime and gravel.
        iv. Masonry of brick clay, adobe or concrete block, many varieties of which are fabricated in the region of regionally local materials.

    b. Materials considered complimentary to this intention include:
        i. Weathering steel, which exhibits increased resistance to atmospheric corrosion with a characteristically red-rust colored coating that forms to retard future corrosion;
        ii. Woods of a natural finish, ideally farmed through sustainable practices, as structural elements and/or in the fabrication of architectural elements such as screens, trim, frames and surfaces;
        iii. Metal and metal cladding or panels, with natural finish or colors complimentary to the intent of the stated design principles of the Botanical Garden.
        iv. Glass, glass panels, glass channels and similar materials, clear, translucent, or colored, and of a non-reflective finish;
        v. Materials from recycled sources should be used wherever feasible.

2. **Sustainability in the Botanical Garden should be a common attribute, inherent and demonstrable in the use and experience of the buildings and gardens.**
    a. Energy systems need not be screened from view if the system is intended to visibly demonstrate awareness of energy conservation.
    b. These systems may include both active and passive processes:
        i. Active energy systems, such as solar water heating and photovoltaic panels, wind turbines, heat pumps and geo-thermal.

ii. Passive energy systems, such as thermal mass and ventilation chimneys, skylights and light shelves, shade elements, and natural cross ventilation.

c. Plantings of low-water use will predominate, clustered according to the nature of their climatic region;
d. Water will be used conservatively, in a manner that acknowledges its value and scarcity;
e. Site drainage and retention will be configured to provide for bio-filtering, with planting configurations appropriate to the respective climatic region, and in patterns that reflect natural occurrences or artful demonstration. Rain water harvesting should be considered as a potential resource for the Garden.
f. Site improvements, at a minimum, shall comply with the requirements of MS4, Ventura County NPDES Municipal Stormwater Permit (Order No. R4-2010-0108).

3. Built improvements should express permanence and respect for the Garden and environs, through:

a. Materials that endure and weather with grace;
b. Strong connections between the interior and exterior spaces;
c. The use of natural light and ventilation;
d. Exterior spaces that provide a functional extension of interior space and activities;
e. Emphasis on views and vistas, both within the garden and of the dramatic coastal setting.
f. Grading shall be minimized where possible. Where grading is necessary it shall be done with respect for the topographic character of the site, and with conscious attention to establishing non-erosive drainage patterns.
g. Lighting for site and building improvements shall be designed to minimize stray light pollution, while providing for minimum safety standards and enjoyment of garden visitors.

4. The Gardens shall be designed to accommodate a variety of activities, large and small.

a. Outdoor gathering areas of differing sizes should be created where opportunities are present, for teaching, performances and celebrations.
b. Outdoor spaces may be in the form of plazas, sitting circles (stepped or level), terraces, simple open clearings, picnic areas, covered pavilions, etc.
c. Several ‘vista points’ offer opportunity for informal gatherings. Materials and construction in these unique locations should abide by the intentions of these design principles, using materials that endure and weather with grace.

5. Art shall compliment the Garden experience through integration within the architecture of built improvements, as well as both permanent and temporary installations.

a. Opportunities for the integration of artworks are found in such features as walls, seating, vista points and gardens. Materials of the grounds and improvements in these unique locations should abide by the intentions of these design principles.
    i. Lighting of artworks should be done with care to minimize stray light pollution while providing for dramatic effect.
    ii. Up-lighting should be used sparingly, using only low-voltage lighting.

6. The forms of buildings and improvements shall be integrated into the topography and landscape of the site, and embody a balance of rustic, contemporary and sophisticated design.

a. Grading shall be minimized. Where grading is necessary it shall be done with respect for the topographic character of the site, and with conscious attention to establishing non-erosive drainage patterns. Any development for interim or permanent structures or buildings that requires a grading permit shall also require DRC review and approval. Development of any pathways is not subject to DRC review.
b. Structures shall respond to unique site conditions and opportunities through:
    i. Terracing, stepping, and subterranean forms, where appropriate;
    ii. Choices of material and color;
    iii. Integration of buildings, structures and site walls with adjacent garden spaces and features.
c. Rustic design allows for the use of raw or hewn materials in a manner that expresses the material's natural state. Expression of structural members and connections are also common attributes of rustic design.
d. Contemporary design here intends to encourage design that is of contemporary aesthetic, using materials and technologies that reflect the need for architecture that is both artfully expressive and environmentally responsible.
e. Sophisticated design here intends to encourage architecture of a higher art – that which is enduring, timeless and inherently adaptable to the purposes of the Botanical Garden.
f. Any structures or improvements within the Welcome Zone shall respect and not compromise the historic setting of City Hall as defined by the National Register of Historic Places Bulletin 15.

7. The orientation of structures and open spaces shall respond to the unique conditions and environmental factors of the site, including prevailing winds from the west, sweeping views of the site and coastline, and topography;

a. Buildings should be designed to utilize natural ventilation and passive heat gain as a significant component in the conditioning of interior spaces;
b. Buildings and structures should be strategically placed to benefit from coastal vistas and interior views, and to enhance views of the Garden from off-site vantages;
c. Buildings and structures should be configured to provide outdoor spaces that offer protection from sun, wind and chill;
d. Topographic conditions of the site offer unique opportunities to create varied and interesting spaces, both interior and exterior;
e. Careful consideration should be given to the principal of Universal Design, creating *accessible paths of travel that are integral to the building and site design*.

8. Lighting shall be limited to that which is necessary to the safe enjoyment of the gardens. The following standards shall apply

a. Exterior lighting shall be fully shielded or fitted with opaque hoods, shields, louvers, shades, and other devices to insure that light generated by the light source is directed downward and not outward horizontally, and so fitted that no portion of the light source is visible when the light fixture is viewed from the property line.
b. No exterior light source, including fixtures not mounted on the primary structure, shall be mounted higher than 12 feet measured from the grade at the light location.
c. No exterior light source shall illuminate, reflect, spill over, or otherwise create a nuisance upon adjoining property.
d. No flashing, laser, searchlight, strobe, tracing, pulsating, or neon exterior lighting is permitted.

e. Lighting intended to illuminate foliage, trees, landscape, or architectural structures shall be limited to low voltage lighting.
f. Outdoor light fixtures operated by a “dusk to dawn” timer or sensor, shall be motion-sensor activated, and programmed to shut off after 10 minutes. Such sensors shall not be triggered by activity located off the property.

2. Sign Standards

Signage will play an important role in the function and experience of the Botanical Garden. Several types of signs will be of use and will serve distinctly different purposes. Some of these signs will need to be highly visible and often of a larger format, while other signs will be discreet and informational at a basic functional level.

Section 2.1 identifies the types of signage to be utilized at the garden, and provides a design framework for each sign type. All but the temporary signs should be durable, constructed of materials that are well-suited to the outdoors and resistant to tampering and vandalism.
Section 2.2 and 2.3 provide sizing and placement criteria for the different sign types.

2.1 Sign Types and Uses

1. **Architectural Building and Place Identification**: Includes building or facility identification, coordinated with the design of related architecture.
   a. Materials: stainless steel, corten steel, cast bronze, aluminum, carved or sandblasted wood
   b. Mounting: Individual letters building-mounted, placard or panel-mounted
   c. Colors: Natural finish
   d. Lighting: Ambient lighting, spot lighting, backlighting, up-lighting *

2. **Educational, with narrative and pictorial content:** Graphic placard with printed, etched or cast content, includes narrative text and possibly illustrations or other graphic images.
   a. Materials: High Pressure Laminate; cast bronze, aluminum, powder-coated metal, carved or sandblasted wood
   b. Mounting: Panel or placard mounted to pole, stand or base
   c. Colors: Earth tones, or colors drawn from related plant materials and the environment of the sign setting.
   d. Lighting: Ambient or spot lighting*

3. **Way Finding and Directional:** Graphic blade or placard with printed, etched or cast content, includes direction arrow or directional shape. May include illustrations or other graphic images.
   a. Materials: High Pressure Laminate; cast bronze, aluminum, powder-coated metal, carved or sandblasted wood
   b. Mounting: Panel or placard mounted to pole or stand
   c. Colors: Earth tones, or colors drawn from related plant materials and the environment of the sign setting
   d. Lighting: Ambient or spot lighting*

4. **Memorial and Donor Identification:** Placard with printed, etched or cast content, primarily used to state the name(s) of donors and memoriam messages
   a. Materials: High Pressure Laminate; cast bronze, aluminum, powder-coated metal

b. Mounting: Panel or placard mounted to stand, base, bench or rock
c. Colors: Natural material, earth tones, or colors drawn from related plant materials and the environment of the sign setting
d. Lighting: Ambient or spot lighting*

5. **Botanical Identification:** Placard with printed, etched or cast content, primarily used to state the name(s) of specific plant species or garden information
   a. Materials: High Pressure Laminate; etched laminate, cast bronze, aluminum, powder-coated metal
   b. Mounting: Panel or placard mounted to stand or base
   c. Colors: Natural material, earth tones, or colors drawn from related plant materials and the environment of the sign setting
   d. Lighting: Ambient or spot lighting*

6. **Cautionary or Restrictive:** Placard with printed, etched or cast content, primarily used to state a cautionary message or directive
   a. Materials: High Pressure Laminate; etched plastic laminate, aluminum, powder-coated metal
   b. Mounting: Blade, panel or placard mounted to wall, door, pole, stand or base
   c. Colors: Dark red with white lettering
   d. Lighting: Ambient or spot lighting*

7. **Functional:** used to identify facility service functions, restrooms, employee areas
   a. Materials: High Pressure Laminate; etched plastic laminate, aluminum, powder-coated metal
   b. Mounting: Panel or placard mounted to wall, door, pole, stand or base
   c. Colors: Natural material, earth tones, or colors drawn from related plant materials and the environment of the sign setting
   d. Lighting: Ambient or spot lighting*

8. **Temporary:** used to promote fund raising and special projects, and to announce events and special attractions, for a limited duration. Board signs should be limited to a one-year duration, while banner signs should be limited to a 90-day duration. Regardless of duration, temporary signs should be keep in good repair, free of tears, chips, cracks, mars and breaks.
   a. Materials: Printed hard mounted board, banners made of waterproof fabric
   b. Mounting: Boards to be pole-mounted; Banners hung in place
   c. Colors: Natural material, earth tones, or colors drawn from related plant materials and the environment of the sign setting (note that some brighter colors may be useful and appropriate for short-term sign display)
   d. Lighting: Ambient or spot lighting*

2.2 Sign Sizing

In general, signs should be sized ***no larger than the smallest size needed*** to accomplish the sign purpose. Many signs in the Garden will serve an educational purpose, including graphic content, and will often be viewed by groups of visitors, including school children. These signs, by their nature and purpose, will be sized larger to present the content in a graphically interesting and compelling manner.

1. **Architectural Building and Place Identification:** These are generally highly aesthetic signs that should fall under the purview of the architect for the building.

2. **Educational, with narrative and pictorial content:** These signs serve an educational purpose, typically including graphic content, and will often be viewed by groups of visitors, including school children. These signs, by their nature and purpose, will be sized larger to present the content in a graphically interesting and compelling manner.

   The size of such signs will vary depending upon the location and extent of content, and may include a single large panel, or an array of panels, sometimes several feet in length.

3. **Way Finding and Directional:** Signs that serve to facilitate visitor access should be sized to be legible to the casual stroller and the facilitated tour-member.
   Directional signs should be designed to be legible from a distance of 20 to 30 feet, with fonts as tall as 6 to 8 inches.
   Signs with graphic content may be larger, as supports the intent of the graphic.

4. **Memorial and Donor Identification:** These signs are intended to be discreet, no larger than is necessary to identify the Memoriam or Donor name. The font size should not exceed 1 inch in height.

5. **Botanical Identification:** These signs serve both to inform visitors and to provide a 'scientific tag'. These are discreet signs with fonts no larger than one-half inch.

6. **Cautionary or Restrictive:** These signs are provided for visitor safety, and must be large enough to be visible, but not detract from the garden environs. A dark red background with white font will facilitate visibility while helping to limit the size of the sign. The placard should be limited to 5 inches in height where feasible.

7. **Functional:** These signs are provided for basic information, room labeling, access restriction and similar purposes. Placards should be limited to 5 inches in height where feasible.

8. **Temporary:** These signs are often intended to serve a promotional purpose, and as such may be larger and more contrasting than would otherwise be acceptable. The maximum size of a banner or board should not exceed 4 feet by 8 feet, unless specifically determined necessary for the intended purpose.

2.3 Sign Placement, Height and Lighting

Signs within the Botanical Garden are provided to facilitate the enjoyment of the Garden. Signs should never be made to become more important than the garden setting. Placement of all signs must consider potential negative impacts on the aesthetic environment of the Garden.

1. Signs should be placed to the side of important vistas, viewsheds and focal points.

2. Signs should be set as low as is functionally practical, as determined by the specific sign purpose. In general, signs should not be placed higher than twelve feet (12') above adjacent grade.

3. Signs should be set to the side of paths and trails, never set directly in the path, or set directly in the line of site of a path terminus.

4. Sign Lighting shall be low voltage unless specifically required otherwise, and shall conform to the criteria set forth in Section A.8, above.

3. Compliance with city-wide Design Guidelines

In order to ensure consistency between these Design Principles and Guidelines/Sign Guidelines, and in response to comments received during their preparation, VBG will adhere to the following guidelines:

3.1 Trash Enclosures

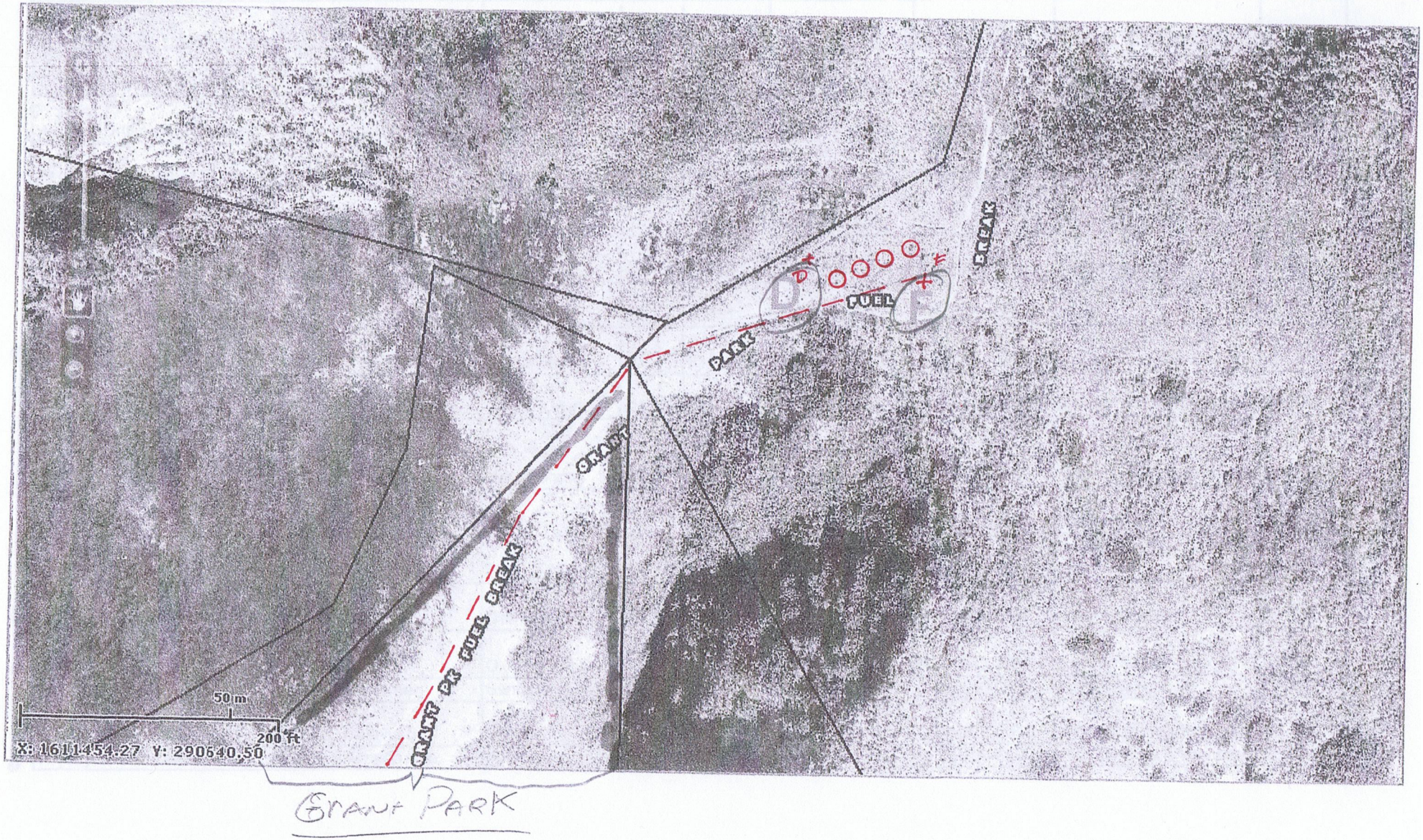
Trash enclosures within the Botanical Garden will comply with the following requirements, which are based on the guidelines for trash enclosures from the City's city-wide Design Guidelines:

- Trash enclosures shall include separate bins for trash and recycle materials.
- Trash enclosures shall be shielded from general view.
- Enclosures shall be animal proof.
- All trash enclosures shall have a solid roof and screened from public view by solid fences or walls with a minimum 6 feet in height.

3.2 Utility and Mechanical Equipment

All utility and mechanical equipment should be out of view from the public street, either by its placement or by use of screening materials that blend in with their surroundings.

Attachment D
Off-site Well Concept



1. **Are there storage devices proposed? What are the sizes and where located?** *Yes, though the system has not yet been designed there will likely be at least two and likely more tanks. The size and number is dependent upon the flow rate of the well. A slow flowing well will take much longer to fill than a fast flowing well and will therefore require larger storage capacity. Past experience indicates that a botanic garden of this size will need a minimum of 40,000 gallons of storage capacity and optimally would have twice that. See the attached sketch/aerial photo which illustrates four 10,000 gallon tanks. Pre-manufactured above ground tanks of this capacity are available in different configuration. The attached sketch represents a common configuration and color of approximately 12 feet diameter x 12 feet high (although manufacture example photo above shows 18-24 feet high).* **B)". . . . . please provide spec sheet of proposed storage devices."** *Since no test well has yet been attempted, there is no design or selected components for a system yet. However, installation of pre-manufactured water tanks in our region is not uncommon. Here is an example from a supplier in Arroyo Grande:* http://www.loomistank.com/tiger-tanks-galvanized-steel.shtml

RESPONSES FROM VBG TO CITY QUESTIONS – REGARDING OFFSITE WELL FOR WATER SUPPLY 4/18/14

1. **What are County requirements for drilling a private well on county lands?** *This is a by-right use, see attached application form.*
2. **Has the County issued a permit for water lines crossing property line? How do they regulate this?** *There has been no discussion with the county regarding water passing over property lines. It is common for agricultural wells to be drilled with shared ownership or mutual agreement between property owners and it is therefore not anticipated that this would be an issue if both parties grant permission.*
3. **A) Can water from another property (in county) be used on leased City land?** *VBG believes this is a viable option that the County will approve.* **B) Is the land where the pipeline will be required part of the current lease to VBG?** *No, the pipeline connecting from the off-site well to VBG would be mostly within Grant Park, but along the ridgeline down range of the firing line of the gunnery range and is therefore not a part of the lease option agreement and therefore a specific separate agreement with the City would be required*; **C) Do they need an easement*?*** *VBG is working with adjacent land owners to secure necessary access rights/easements/ or other agreements to accomplish necessary test well and long term installation of permanent well and tank(s).*
4. **Does LAFCO have a regulatory role and how would they consider a private water service across a jurisdictional boundary from county to city?** *The Ventura Local Agency Formation Commission Commissioner's Handbook – Policies of the Ventura LAFCO Adopted October 17, 2007 (updates through Nov. 2013) provides general guidance on LAFCO's policy relative to extension of infrastructure as follows:*

   <u>1.4.4.3 Projects Considered to be Exempt from CEQA</u>:

   (b) The following projects/actions are considered to be categorically exempt from CEQA pursuant to CEQA Guidelines Section 15300-15332:

   iii. Out of agency service agreements to provide for extensions of service to existing structures provided:
   1. *the associated infrastructure (e.g., water lines) would be limited in size so as to allow no expansion of use beyond that which currently exists; and*
   2. *the installation of any new infrastructure necessary to deliver service to the receiving property would involve only minor alterations to the land; and*
   3. *the project area would not be located in a particularly sensitive environment in which significant effects might result.*

5. **A) Define how much water will be used?** *The amount of water that would be used would be maximized within the best management practices for operation an irrigation well. Because no test well has yet been drilled, it is unknown what the perched water capacity might yield;* **B) Is this all for non-potable only and VBG will still be using City water for consumption purposes?** *Yes, well water is proposed for non-potable, irrigation use. City water will be used as a potable supply.*
6. **A) Where is the water line physically going on the property and show at which point does it cross the property line?** *See attached sketch/aerial photo for proposed point of crossing;* **B) How will it be installed and how much clearance of vegetation and grading is necessary?** *The*

proposed alignment of the pipe is along the current fire break on the ridge east of the gunnery range and therefore any vegetative clearing would be a benefit. The size of pipe and proposed trenching is for an irrigation main as described on page 18 of the project description.

7. **Are there any necessary mechanical pumping devices along the route?** *No, the well on adjacent property would pump to the holding tank(s) and then gravity would distribute. The well pump and tank(s) would be located off-site. See attached conceptual sketch/aerial photo.*
8. **A) Are there storage devices proposed? What are the sizes and where located?** *Yes, though the system has not yet been designed there will likely be at least two and likely more tanks. The size and number is dependent upon the flow rate of the well. A slow flowing well will take much longer to fill than a fast flowing well and will therefore require larger storage capacity. Past experience indicates that a botanic garden of this size will need a minimum of 40,000 gallons of storage capacity and optimally would have twice that. See the attached sketch/aerial photo which illustrates four 10,000 gallon tanks. Pre-manufactured above ground tanks of this capacity are available in different configuration. The attached sketch represents a common configuration of approximately 12 feet diameter x 12 feet high.* **B)". . . . . please provide spec sheet of proposed storage devices."** *Since no test well has yet been attempted, there is no design or selected components for a system yet. However, installation of pre-manufactured water tanks in our region is not uncommon. Here is an example from a supplier in Arroyo Grande:* http://www.loomistank.com/tiger-tanks-galvanized-steel.shtml
9. **Storage may also raise a fire suppression question. How much more fire protection is needed even if there is no potable water uses up at the gardens?** *VBG does not propose to provide fire suppression by means of a well system. That will need to come from City water.*
10. **Advisory: In-lieu fee for City water service may still apply if approved by Council.** *Understanding that we are in partnership with the City, what is the process that allows an applicant to enter into discussions that would provide full or partial relief from these fees and/or phased payment?*