

TREE PROTECTION MEASURES
 IN ORDER TO COMPLETE THE PROJECT, THE FOLLOWING TREE PROTECTION MEASURES WILL BE REQUIRED.
 1. PRIOR TO THE START OF THE PROJECT, REMOVE OR RELOCATED TREES INSIDE PROPOSED SOUND WALL AREA. BOX UP TREES THAT WILL BE REPLANTED IN SAME PLANTING BED POST CONSTRUCTION IF DETERMINED TO BE THE BEST OPTION.
 2. PRIOR TO SET UP OF SOUND WALL AND INGRESS OF EQUIPMENT, INSTALL TEMPORARY CHAIN LINK FENCES. THESE SHOULD BE PLACED OUTSIDE OF AREA WHILE PANELS ARE BEING SET AND AROUND THE TREES TO BE PROTECTED INSIDE OF THE SOUND WALL. THESE AREAS ARE TREE PROTECTION ZONES THAT SHALL BE VOID OF ACTIVITIES, DUMPING, AND STORAGE OF MATERIALS.
 3. ONCE THE SOUND-WALL IS IN PLACE, REMOVE FENCES OUTSIDE, BUT RETAIN THE FENCING INSIDE.
 4. PRIOR TO EXCAVATION OF TRENCHES FOR UTILITIES OUTSIDE OF THE SOUND WALL, INSTALL TEMPORARY FENCING TO PROTECT TREES ADJACENT TO THOSE TRENCHES AS INDICATED ON THE PLAN.
 5. IT MAY BE DETERMINED THAT MONITORING BY A PROJECT ARBORIST DURING INSTALLATION OF THE SOUND-WALL AND DURING UTILITIES EXCAVATION WILL BE ADEQUATE, INSTEAD OF FENCING OUTSIDE OF THE SOUND WALL. CLEAN CUT ROOTS, IRRIGATE SOIL PROFILE IN TRENCHING SITES.
 6. ANY ROOTS THAT ARE ENCOURAGED FROM WOODY TREES DURING UTILITY TRENCHING SHALL BE CLEANLY CUT WITH A SHARP TOOL RATHER THAN BEING RIPPED OR TORN, OR SHALL BE TUNNELED UNDER WITHOUT SEVERING THE ROOT. THE CONTRACTOR SHALL NOTIFY THE CITY PRIOR TO SEVERING ROOTS 3" IN DIAMETER OR LARGER.
 7. ACCESS TO PROTECTED TREES SHALL BE AVAILABLE TO CITY STAFF AT ALL TIMES DURING CONSTRUCTION FOR MONITORING AND WATERING AS NECESSARY.
 8. NO PRUNING OF TREE CANOPIES WILL BE ALLOWED FOR THE INSTALLATION OF THE SOUND WALLS.

PRELIMINARY PLAN - PLANTING AND DESIGN

CJM:LA STRIVES TO UPHOLD THE ARCHITECTURAL AND CULTURAL HERITAGE OF THE SANTA BARBARA COMMUNITY THROUGH THE DEVELOPMENT OF ENGAGING SPACES. OUR APPROACH RESPONDS TO CONTEXT, HISTORY AND OUTLOOK IN ORDER TO PROVIDE OUTDOOR SPACES WHICH QUIET THE MIND AND ACTIVATE THE SENSES. THE BUILT ENVIRONMENT IS PARAMOUNT IN REPRESENTING THE IDENTITY OF A COMMUNITY, AND WE SEEK TO PROVIDE RESPONSIBLE DESIGN THAT RESPECTS THE BALANCE OF PAST AND FUTURE. WE PRIDE OURSELVES IN DESIGN THAT IS UNIQUE AND SPECIFIC; ENDURING AND AUTHENTIC.

THIS PLAN ENGAGES BOTH SUSTAINABLE BUILDING PRACTICES AS WELL AS AESTHETIC AND FORWARD-THINKING DESIGN SOLUTIONS TO CREATE A UNIQUE ADDITION TO THE BUILT ENVIRONMENT.

PEDESTRIAN, BICYCLE AND VEHICULAR CIRCULATION HAS BEEN STUDIED IN ORDER TO MAINTAIN APPROPRIATE CONNECTIVITY WITH THE SURROUNDING COMMUNITY, AS WELL AS WITHIN THE DEVELOPMENT.

- STORMWATER QUALITY WILL BE ADDRESSED WITH THE MOST APPROPRIATE BEST MANAGEMENT PRACTICES FOR THIS DEVELOPMENT.
- GREEN SCREENS WILL BE INCLUDED WHERE FEASIBLE.

EXISTING TREES ON SITE WILL BE PROTECTED TO THE MAXIMUM EXTENT FEASIBLE WITHIN THE PROJECT REQUIREMENTS.

THE PLANT PALETTE WILL BE MEDITERRANEAN IN CHARACTER AND SUITABLE TO THE SANTA BARBARA REGIONAL CLIMATE. PLANT MATERIAL WILL BE LOW-WATER AND LOW-MAINTENANCE. ONLY ORGANIC FERTILIZERS AND SOIL AMENDMENTS WILL BE USED.

COMMON AREA IRRIGATION WILL INCLUDE A COMBINATION OF LOW-VOLUME SPRAY HEADS, BUBBLERS AND DRIP SYSTEMS AS APPLICABLE. ALL IRRIGATION WILL BE CONTROLLED BY AN AUTOMATIC TIMER WITH A SEASONAL ADJUSTMENT CAPACITY TO APPLY LESS WATER DURING THE RAINY SEASON. POTS WILL BE HAND-WATERED OR WILL INCLUDE SELF-WATERING SYSTEMS.

PRELIMINARY PLAN - EXISTING TREE NOTES

CJM:LA STRIVES TO PROTECT EXISTING TREES ON SITE TO THE MAXIMUM EXTENT FEASIBLE WITHIN THE PROJECT REQUIREMENTS.

MANY FACTORS ARE REVIEWED IN EVALUATING THE APPROPRIATENESS OF PROTECTING-IN-PLACE, RELOCATING, OR REMOVING EXISTING TREES AT EACH PROJECT SITE. IN GENERAL, THE FOLLOWING PARAMETERS ARE CONSIDERED:

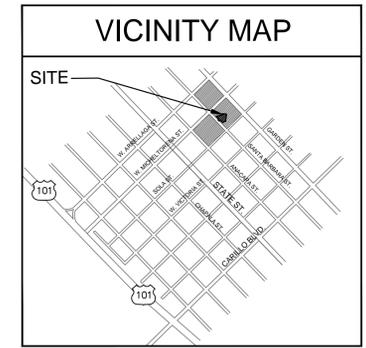
- HEALTH AND LONG-TERM VIABILITY OF EXISTING TREES IS ASSESSED EITHER BY A REPRESENTATIVE OF CJM:LA OR BY THE PROJECT ARBORIST.
- LOCATION OF EXISTING TREES IN RELATIONSHIP TO PROPOSED PROJECT ELEMENTS SUCH AS BUILDINGS, HARDSCAPE AND LANDSCAPE AMENITIES IS REVIEWED IN DEPTH.
- APPROPRIATENESS OF EXISTING TREE SPECIES IN RELATIONSHIP TO PROJECT DESIGN AND ARCHITECTURAL STYLES IS CONSIDERED.
- VALUE OF EXISTING TREES RELATED TO BIOLOGICAL HABITAT IS REVIEWED.
- VISUAL AND AESTHETIC VALUE IS ASSESSED IN RELATIONSHIP TO NEIGHBORHOOD OR SITE CONTEXT.
- HISTORIC VALUE IS REVIEWED, AND SPECIMEN TREES ARE NOTED.

THE FOLLOWING TREES REQUIRE SPECIFIC REVIEW AND ADDITIONAL REQUIREMENTS PER THE CITY OF SANTA BARBARA:

- STREET TREES
- TREES ON CITY OR PUBLIC PROPERTY
- SETBACK TREES
- PARKING LOT TREES
- HISTORIC OR SPECIMEN TREES
- TREES WITHIN THE EL PUEBLO VIEJO LANDMARK DISTRICT

Tree Totals Within Limit of Work

TOTAL TREES REMOVED:	4
TOTAL TREES TO PROTECT IN PLACE:	7
TOTAL TREES TO RELOCATE:	1



NOTE:
 REFER TO TREE ASSESSMENT & PROTECTION PLAN AS WELL AS ARBORIST'S REPORT FOR REQUIRED TREE PROTECTION MEASURES. REFER TO SHEETS L-2 & L-3.



CJM:LA
 COURTNEY JANE MILLER
 LICENSED LANDSCAPE ARCHITECT
 STATE OF CALIFORNIA
 LICENSE NO. 2115

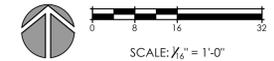
PUBLIC WORKS DEPARTMENT
 ENGINEERING DIVISION

APPROVED: _____ DATE _____
 CITY ENGINEER ORIGINAL SIGNED DATE _____

NO.	DATE	APPROVED	DESIGN	CJM	KK	KK	CJM	REVISIONS

CITY OF SANTA BARBARA
ALAMEDA PARK WELL
 Existing Conditions

2014-01058
 PBW. NO.
 3728 L-1
 BID NO. SHT. DES.
 C-1-4427
 DWG. NO.
 SHT. 11 OF 17



PROJECT ARCHITECT DATE _____



ARBORIST'S FIELD REPORT: ALAMEDA WELL RELOCATION PROJECT

September 15, 2014

Prepared for:
MNS Engineers, Inc.
201 Calle Cesar Chavez, Ste 300
Santa Barbara, California 93108

Prepared by:
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Registered Consulting Arborist #381
American Society of Consulting Arborists
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SUMMARY

The well in East Alameda Park needs to be relocated approximately 100' to the west of its current location in a planter with multiple trees. As a result, it was required that trees within project parameters be inventoried, assessed, and protected, relocated, or removed as necessary.

I have determined that one dead palm will need to be removed, three other live trees (one palm and two birds of paradise) will need to be removed, and one palm (*Dracena species*) will be relocated.

This report identifies the trees within the parameters of construction and provides measures for protection. Refer to the table of contents on the next page for the organization of this report. A site plan is included with hard copies of this report or as a pdf in the electronic version.

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Alameda Well Relocation Project

September 15, 2014

TABLE OF CONTENTS

BACKGROUND/ASSIGNMENT 3
Limits of Report 3
Use of Report 3
OBSERVATIONS 3
The Site and Trees 3
The Project 3
Tree Inventory 4
CONCLUSIONS 7
TREE PROTECTION MEASURES 7
ARBORIST DISCLOSURE STATEMENT AND CERTIFICATION OF PERFORMANCE 8
PHOTOS 9

Bill Spiewak - Consulting Arborist

2

Alameda Well Relocation Project

September 15, 2014

BACKGROUND/ASSIGNMENT

The City of Santa Barbara has contracted with Pueblo Water Resources, Inc. and a team of sub-consultants including MNS Engineers to relocate the existing well in East Alameda Park approximately 100' to the west. In order to obtain the approval to commence with this project, one requirement was to address the potential impact to trees. I was retained by MNS Engineers to inventory the trees within the parameters of construction, assess their condition, and prepare a report with my findings and recommendations. I met with the team on site in early July 2014.

Limits of Report

The identification of trees was based on city tree lists and *Trees of Santa Barbara, Haller & Muller, 2005*. However the exact genus and species may not be accurate on some of the palms.

Use of Report

It is intended that this report provide the steps necessary to protect the trees within the project parameters.

OBSERVATIONS

The Site and Trees

I looked at forty-four trees on the site; of which, two thirds were palms. There were eight woody trees of different varieties and a few that were quite unusual. Although most trees appear to be in fair to good condition, yellowing and some die-back is a common symptom of drought stress. One palm was dead. Most of the trees are adequately distanced from the proposed project.

The Project

The well construction begins with installation of a large sound wall. This is composed of multiple panels, 24' in height, surrounding the work area. Once the sound-wall is in place, no project activities will occur outside of its perimeter except for some trenching and installation of plumbing and electrical.

Inside of the sound-wall perimeter is a planter with ten palm trees and two giant bird of paradise. [See the attached inventory for a description of each tree. Refer to the corresponding numbers on the site plan for their locations].

Due to project requirements, the well will be relocated inside that planter which will warrant the removal of four trees (including one dead palm) and the relocation of one. Seven trees will need to be protected inside of the sound-wall.

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3

Alameda Well Relocation Project

September 15, 2014

Tree Inventory

The spreadsheet below is the inventory of trees with column headings and descriptions. Refer to the site plan for their location by corresponding number.

#	Common Name/ Botanic Name	DBH	CRZ	Hlth	Struct	Comment
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= tree number to refer to on site plan
Common name/Botanical name.
DBH = diameter at breast height measured at 54" above ground. Multiple trunks on an individual tree are measured separately but not individually identified on multi stemmed palms and birds of paradise.
CRZ = critical root zone and is calculated as 12" radius per inch of DBH on woody trees. For multi-trunk trees, the CRZ is calculated by taking the square root of the sum of the squares of each trunk's DBH. On palms, I used a critical root zone of 2'-4' outside of the root ball due to fibrous root system.
Hlth = health or biological condition on a scale of 1-5: 4=good, 3=fair, 2=poor. "+" and "-" have been used for intermediate condition
Struct = structure or structural condition based on same scale as health
Comment = a noted observation

Trees in bold text are within the sound-wall and will be removed or protected.

#	Common Name/ Botanic Name	DBH	CRZ	Hlth	Struct	Comment
1	Montezuma cypress/ <i>Taxodium mucronatum</i>	13"	13"	4	4	Thin canopy and branches
2	Queen palm/ <i>Arecastrum romanzoffianum</i>	14"	4'	3	3	Street tree
3	Queen palm/ <i>Arecastrum romanzoffianum</i>	16"	4'	3	2	Eroded trunk at 25' and very narrow at 30', street tree
4	Queen palm/ <i>Arecastrum romanzoffianum</i>	15"	4'	3	3	Street tree
5	Ginkgo/ <i>Ginkgo biloba</i>	10"	10'	3+	3	Codominant stems
6	Queen palm/ <i>Arecastrum romanzoffianum</i>	14"	4'	3	3-	Splits in trunk from 30' up, hole at 40', Street tree
7	Queen palm/ <i>Arecastrum romanzoffianum</i>	15"	4'	3	3	Street tree
8	Queen palm/ <i>Arecastrum romanzoffianum</i>	12"	4'	3	3	Slightly narrower at lower trunk, Street tree
9	Firewheel Tree/ <i>Stenocarpus sinuatus</i>	11"	11'	3+	3+	

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4

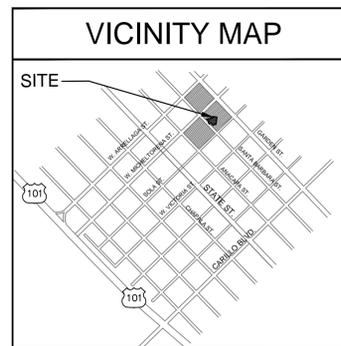
Alameda Well Relocation Project

September 15, 2014

#	Common Name/ Botanic Name	DBH	CRZ	Hlth	Struct	Comment
10	Giant Bird of Paradise/ <i>Strelitzia nicotai</i>	6@7"	4'	4	4	Protect-within sound wall
11	Canary Island Palm/ <i>Phoenix canariensis</i>	17"	4'	0	0	Dead- remove
12	King Palm/ <i>Archontophoenix cunninghamiana</i>	9"	4'	3-	3-	Hour glass trunk effect. Remove
13	Dracaena/ <i>Cordylone Australia</i>	6"	4'	2+	2+	Declining. Relocate.
14	Senegal Date Palm/ <i>Phoenix reclinata</i>	6@6"-8"	12'	4	4	Protect-within sound wall
15	King Palm/ <i>Archontophoenix cunninghamiana</i>	11"	4'	2+	3	Few fronds, drought stressed, struggling. Protect-within sound wall
16	Chinese Fountain Palm/ <i>Livistona chinensis</i>	13"	6'	4	4	Nice palm. Protect-within sound wall
17	Chinese Fountain Palm/ <i>Livistona chinensis</i>	12"	6'	4	4	Nice palm. Protect-within sound wall
18	Chinese Fountain Palm/ <i>Livistona chinensis</i>	11"	8'	4	4	Nice palm. Protect-within sound wall
19	Chinese Fountain Palm/ <i>Livistona chinensis</i>	12"	6'	4	4	Nice palm. Protect-within sound wall
20	Giant Bird of Paradise/ <i>Strelitzia nicotai</i>	3@5"	6'	3	2-	Poor specimen, remove.
21	Giant Bird of Paradise/ <i>Strelitzia nicotai</i>	9@5"-6"	6'	3	3	Remove
22	New Zealand Chaste Tree/ <i>Vitex lucens</i>	9"/12"	15'	3	4	Unusual tree
23	English Yew/ <i>Taxus baccata</i>	24"/24"	34'	3	4	Unusual tree
24	Canary Island Palm/ <i>Phoenix canariensis</i>	30"	4'	3+	3	
25	Senegal Date Palm/ <i>Phoenix reclinata</i>	4@6"-9"	4'	3+	3	

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5



Know what's below.
Call before you dig.



NO.	DATE	APPROVED	DESIGN	CJM	KK	DATE
			DRAWN			
			CHECKED			

CITY OF SANTA BARBARA
ALAMEDA PARK WELL
Arborist's Field Report

2014-01058
PBW. NO.

3728 L-2
BID NO. SHT. DES.

C-1-4427
DWG. NO.

SHT. 12 OF 17

PROJECT ARCHITECT DATE

90% Submittal 09/17/14

#	Common Name/ Botanic Name	DBH	CRZ	Hlth	Struct	Comment
26	Henkel's Yellow Wood/ <i>Podocarpus henkelii</i>	12"	12'	4	4	nice tree
27	Feather palm/unknown species	Small multi	4'	3	3	Young palm
28	Med Fan Palm/ <i>Chamaerops humilis</i>	Small multi	4'	3	3	Young palm
29	Med Fan Palm/ <i>Chamaerops humilis</i>	Small multi	4'	4	4	Young palm
30	Deodar Cedar/ <i>Cedrus deodara</i>	21"	21'	4	4	Nice tree
31	Med Fan Palm/ <i>Chamaerops humilis</i>	Small multi	4'	3	3	Young palm
32	Senegal Date Palm/ <i>Phoenix reclinata</i>	Small multi	4'	3	3	Young palm
33	Sago Palm/ <i>Caryota urens</i>	Small	4'	3-	3	Drought stressed young palm
34	Brazilian Needle Palm/ <i>Trithrinax brasiliensis</i>	16"	4'	3	3	Nice palm
35	Brazilian Needle Palm/ <i>Trithrinax brasiliensis</i>	16"	4'	3	3	Nice palm
36	Brazilian Needle Palm/ <i>Trithrinax brasiliensis</i>	16"	4'	3	3	Nice palm
37	Brazilian Needle Palm/ <i>Trithrinax brasiliensis</i>	11"	4'	3	3	Nice palm
38	Chinese Fountain Palm/ <i>Livistona chinensis</i>	12"	4'	3	3	Young palm
39	Chinese Fountain Palm/ <i>Livistona chinensis</i>	12"	4'	3	3	Young palm
40	Blue Fan Palm/ <i>Brauhia armata</i>	12"	4'	4	4	Young palm
41	Med Fan Palm/ <i>Chamaerops humilis</i>	3@5" -8"	4'	4	4	Young palm
42	Canary Island Palm/ <i>Phoenix canariensis</i>	28"	6'	4	4	

#	Common Name/ Botanic Name	DBH	CRZ	Hlth	Struct	Comment
43	Moreton Bay Fig/ <i>Ficus macrophylla</i>	144"	120'	4	4	Great, massive tree overhanging <i>Kids World</i> . Needs pruning to reduce weight of large horizontal branches.
44	Star Pine / <i>Araucaria heterophylla</i>	36"	36'	3	3	

CONCLUSIONS

- Four trees will be removed including one dead and one live palm, and two bird of paradise. One *Dracena* palm will be relocated.
- Tree protection measures will adequately protect those trees to be retained, which are the most valuable and in good condition.
- None of these trees are a designated specimen or historic tree.

TREE PROTECTION MEASURES

- In order to complete the project, the following tree protection measures will be required.
- Prior to the start of the project, remove and relocate trees inside proposed sound wall area, as indicated on the plan.
 - Prior to set up of sound wall and ingress of equipment, install temporary chain link fences. These should be placed outside of area while panels are being set and around the trees to be protected inside of the sound wall. These areas are tree protection zones that shall be void of activities, dumping, and storage of materials.
 - Once the sound-wall is in place, remove fences outside, but retain the fencing inside.
 - Prior to excavation of trenches for utilities outside of the sound wall, install temporary fencing to protect trees adjacent to those trenches as indicated on the plan.
 - It may be determined that monitoring by a Project Arborist during installation of the sound-wall and during utilities excavation will be adequate, instead of fencing outside of the sound wall. Clean cut roots. Irrigate soil profile in trenching sites.
 - Any roots that are encountered from woody trees during utility trenching shall be cleanly cut with a sharp tool rather than being ripped or torn, or shall be tunneled under without severing the root. The contractor shall notify the City prior to severing roots 3" in diameter or larger.
 - Access to protected trees shall be available to City Staff at all times during construction for monitoring and watering as necessary.
 - No pruning of tree canopies will be allowed for the installation of the sound walls.

ARBORIST DISCLOSURE STATEMENT AND CERTIFICATION OF PERFORMANCE

Arborists are tree specialists who use their education, knowledge, training and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risk of living near trees. Clients may choose to accept or disregard the recommendations of the arborist, or to seek additional advice.

Arborists cannot detect every condition that could possibly lead to structural failure of a tree. Trees are living organisms that fail in ways we do not fully understand. Conditions are often hidden within trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Likewise, remedial treatments, like any medicine, cannot be guaranteed.

Treatment, pruning and removal of trees may involve considerations beyond the scope of the arborist's services such as property boundaries, property ownership, site lines, disputes between neighbors, and other issues. Arborists cannot take such considerations into account unless complete and accurate information is disclosed to the arborist. An arborist should then be expected to reasonably rely upon the completeness and accuracy of the information provided.

Trees can be managed, but they cannot be controlled. To live near a tree is to accept some degree of risk. The only way to eliminate all risk associated with trees is to eliminate all trees.

I Bill Spiewak, certify:

That I have personally inspected the trees on the property referred to in this report and have stated my findings accurately. The analysis, opinions and conclusions stated herein are my own and are based on current scientific procedures and commonly accepted arboricultural practices.

Signed: Bill Spiewak
 Bill Spiewak
 Registered Consulting Arborist #381
 American Society of Consulting Arborists

 Board Certified Master Arborist #310B
 International Society of Arboriculture



PHOTOS



Trees inside sound wall to be protected: #10, Bird of Paradise #14-Senegal date palm, #15-King palm, #16-#19 Chinese Fountain Palms



Above: #20-Bird of Paradise to be removed



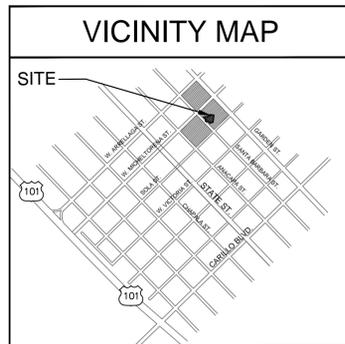
Above: #21-Bird to be removed

Below: #13-Dracena to be relocated



Bill Spiewak - Consulting Arborist

Below #11-dead dead palm & #13-King palm to be removed (arrow)



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CJM::LA
COURTNEY JANE MILLER

PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
APPROVED: _____ DATE _____
CITY ENGINEER ORIGINAL SIGNED DATE _____

NO.	DATE	APPROVED	DESIGN	CJM	KK	KK	KK	KK	KK	REVISIONS

CITY OF SANTA BARBARA
ALAMEDA PARK WELL
Arborist's Field Report

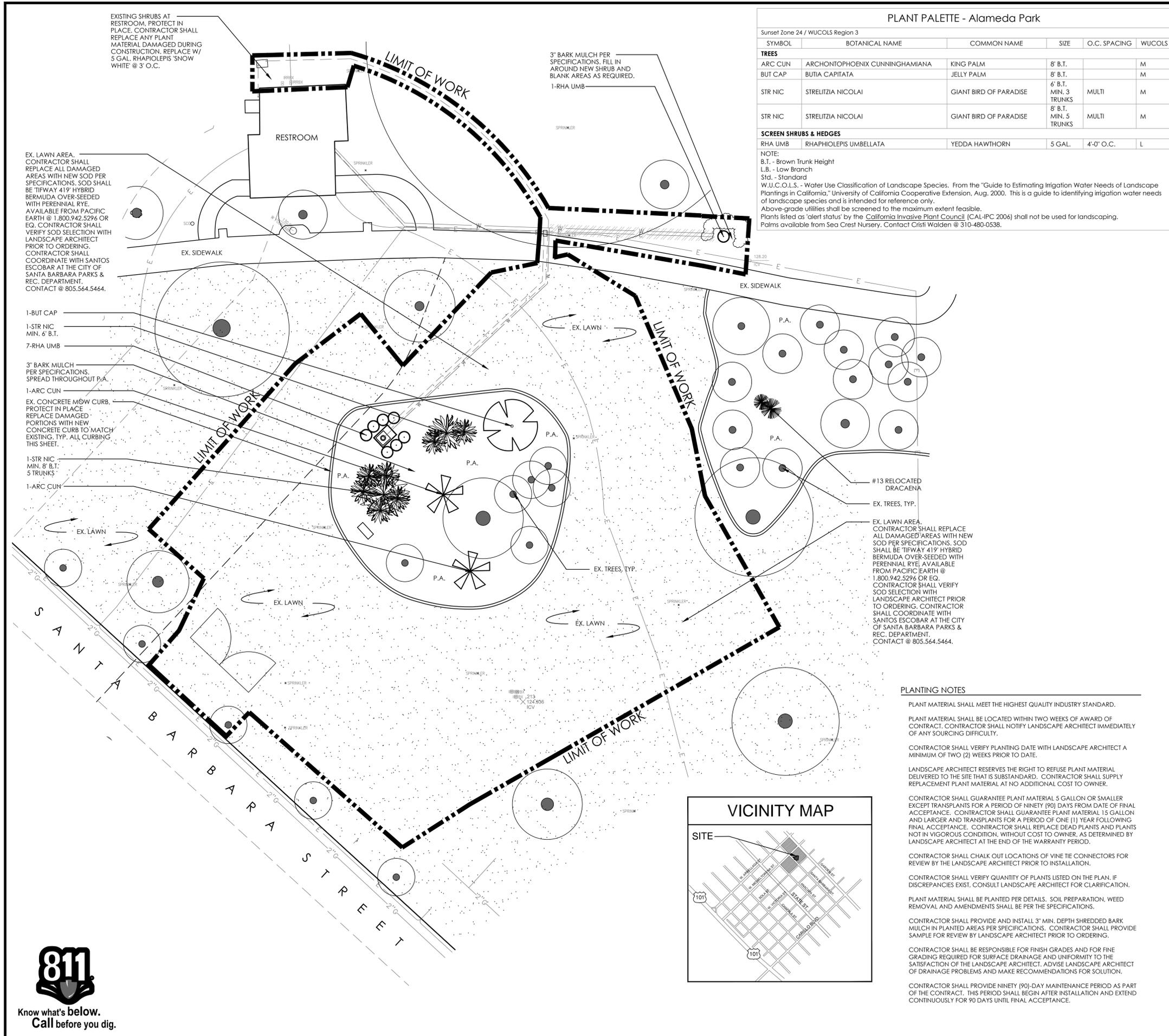


2014-01058
PBW. NO.

3728 L-3
BID NO. SHT. DES.

C-1-4427
DWG. NO.

SHT. 13 OF 17



PLANT PALETTE - Alameda Park

Sunset Zone 24 / WUCOLS Region 3

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	O.C. SPACING	WUCOLS
TREES					
ARC CUN	ARCHONTOPHOENIX CUNNINGHAMIANA	KING PALM	8' B.T.		M
BUT CAP	BUTIA CAPITATA	JELLY PALM	8' B.T.		M
STR NIC	STRELITZIA NICOLAI	GIANT BIRD OF PARADISE	6' B.T. MIN. 3 TRUNKS	MULTI	M
STR NIC	STRELITZIA NICOLAI	GIANT BIRD OF PARADISE	8' B.T. MIN. 5 TRUNKS	MULTI	M
SCREEN SHRUBS & HEDGES					
RHA UMB	RHAPHIOLEPIS UMBELLATA	YEDDA HAWTHORN	5 GAL.	4'-0" O.C.	L

NOTE:
 B.T. - Brown Trunk Height
 L.B. - Low Branch
 Std. - Standard
 W.U.C.O.L.S. - Water Use Classification of Landscape Species. From the "Guide to Estimating Irrigation Water Needs of Landscape Plantings in California," University of California Cooperative Extension, Aug. 2000. This is a guide to identifying irrigation water needs of landscape species and is intended for reference only.
 Above-grade utilities shall be screened to the maximum extent feasible.
 Plants listed as 'inert status' by the California Invasive Plant Council (CAL-IPC 2006) shall not be used for landscaping.
 Palms available from Sea Crest Nursery. Contact Cristi Walden @ 310-480-0538.

CONSTRUCTION NOTES

CONTRACTOR SHALL CONFORM TO ALL LOCAL CITY, COUNTY, STATE AND INTERNATIONAL CODES.

CONTRACTOR SHALL NOT MAKE FIELD CHANGES UNLESS AUTHORIZED BY THE LANDSCAPE ARCHITECT. ANY UNAUTHORIZED CHANGES SHALL BE CORRECTED TO CONFORM TO THE PLANS. AT NO ADDITIONAL COST TO THE OWNER OR LANDSCAPE ARCHITECT.

CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT IF ANY FIELD CHANGES ARE NECESSARY.

CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO UNDERGROUND UTILITIES AND SHALL REPLACE OR REPAIR SAME AS REQUIRED AT HIS EXPENSE.

CONTRACTOR SHALL COORDINATE ELECTRICAL AND IRRIGATION CONDUIT SLEEVES PRIOR TO INSTALLATION OF NEW PAVEMENT.

CONTRACTOR TO REVIEW SITE FOR PROPER DRAINAGE AND REPORT APPARENT PROBLEMS TO LANDSCAPE ARCHITECT IMMEDIATELY.

CONTRACTOR SHALL VERIFY ALL MATERIALS, COLORS AND FINISHES WITH LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION. CONTRACTOR SHALL OBTAIN SAMPLES OF ALL CONCRETE COLOR & FINISHES, TILE, BRICK, PAVERS, ETC. FOR REVIEW BY LANDSCAPE ARCHITECT PRIOR TO ORDERING.

LANDSCAPE ARCHITECT SHALL REVIEW ALL FORMING AND SCORELINE "SNAP LINES" BEFORE CONCRETE IS POURED OR CUT. ALLOW 24 HRS. LEAD TIME.

CONTRACTOR SHALL STAKE LOCATIONS FOR LAWN HEADERS FOR REVIEW BY THE LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION.

CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT OF ANY CONFLICTS BETWEEN TREE BOX SIZE AND HARDSCAPE. FIELD CHANGES SHALL BE MADE EXPRESSLY BY THE LANDSCAPE ARCHITECT.

CONTRACTOR SHALL PROTECT TREE ROOTS AND TRUNKS FROM COMPACTION AND DAMAGE DURING CONSTRUCTION. TRENCHING ADJACENT TO EXISTING TREE DRIP LINES SHALL BE DONE BY HAND TO AVOID ROOT DAMAGE.

ALL SCORELINES, SAWCUTS AND EXPANSION JOINTS SHALL BE INSTALLED AS SHOWN ON THE PLANS.

PAVING SUB-BASE AND REINFORCEMENT SHALL BE PER THE GEOTECHNICAL SOILS REPORT AND STRUCTURAL DETAILS.

REFER TO THE CIVIL ENGINEER'S PLANS FOR DRAIN LOCATIONS AND DETAILS. UNLESS OTHERWISE NOTED, DIMENSIONS ARE TO FACE FINISH OF STRUCTURE.

CONSTRUCTION LEGEND

A/C	Asphaltic Concrete
B.C.R.	Beginning Curve Radius
B.O.C.	Back of Curb
C.J.	Cold Joint
C.L.	Center Line
CLEAR.	Clearance
CONC.	Concrete
CONT.	Continuous
DIA.	Diameter
D.G.	Decomposed Granite
EA.	Each
E.C.R.	End Curve Radius
E.J.	Expansion Joint
EQ.	Equal
EX.	Existing
F.O.B.	Face of Building
F.O.W.	Face of Wall
F.O.C.	Face of Curb
F.G.	Finish Grade
F.S.	Finish Surface
FTG.	Footing
GALV.	Galvanized
H.B.	Header Board
H.B.	Maximum
MIN.	Minimum
M.B.	Mail Box
NAT.	Natural
N.I.C.	Not In Contract
N.T.S.	Not To Scale
O.C.	On Center
P.A.	Planting Area
P.I.P.	Poured In Place
P.L.	Property Line
R.	Radius
R.S.	Resawn
R.O.S.	Rough Sawn
RWD.	Redwood
S.D.	Slot Drain
SHT.	Sheet
S.L.	Score Line
SQ.	Square
S4S	Surfaced Four Sides
STD.	Standard
T.F.	Top of footing
T.W.	Top of wall
TRANS.	Transformer
TYP.	Typical
W.I.	Wrought Iron

DIMENSION LEGEND

●	Point of reference
⊙	Radius = 2'-0"
⊙	Radius = 2'-6"
⊙	Radius = 3'-0"
⊙	Radius = 4'-0"
⊙	Radius = 5'-0"
⊙	Radius = 6'-0"
⊙	Radius = 18"

PLANTING NOTES

PLANT MATERIAL SHALL MEET THE HIGHEST QUALITY INDUSTRY STANDARD.

PLANT MATERIAL SHALL BE LOCATED WITHIN TWO WEEKS OF AWARD OF CONTRACT. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT IMMEDIATELY OF ANY SOURCING DIFFICULTY.

CONTRACTOR SHALL VERIFY PLANTING DATE WITH LANDSCAPE ARCHITECT A MINIMUM OF TWO (2) WEEKS PRIOR TO DATE.

LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REFUSE PLANT MATERIAL DELIVERED TO THE SITE THAT IS SUBSTANDARD. CONTRACTOR SHALL SUPPLY REPLACEMENT PLANT MATERIAL AT NO ADDITIONAL COST TO OWNER.

CONTRACTOR SHALL GUARANTEE PLANT MATERIAL 5 GALLON OR SMALLER EXCEPT TRANSPLANTS FOR A PERIOD OF NINETY (90) DAYS FROM DATE OF FINAL ACCEPTANCE. CONTRACTOR SHALL GUARANTEE PLANT MATERIAL 15 GALLON AND LARGER AND TRANSPLANTS FOR A PERIOD OF ONE (1) YEAR FOLLOWING FINAL ACCEPTANCE. CONTRACTOR SHALL REPLACE DEAD PLANTS AND PLANTS NOT IN VIGOROUS CONDITION, WITHOUT COST TO OWNER, AS DETERMINED BY LANDSCAPE ARCHITECT AT THE END OF THE WARRANTY PERIOD.

CONTRACTOR SHALL CHALK OUT LOCATIONS OF VINE TIE CONNECTORS FOR REVIEW BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

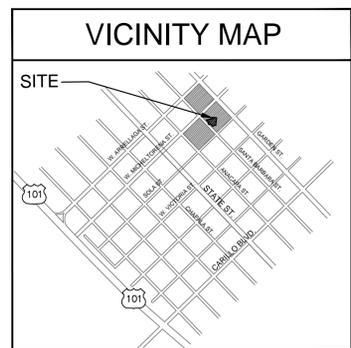
CONTRACTOR SHALL VERIFY QUANTITY OF PLANTS LISTED ON THE PLAN. IF DISCREPANCIES EXIST, CONSULT LANDSCAPE ARCHITECT FOR CLARIFICATION.

PLANT MATERIAL SHALL BE PLANTED PER DETAILS. SOIL PREPARATION, WEED REMOVAL AND AMENDMENTS SHALL BE PER THE SPECIFICATIONS.

CONTRACTOR SHALL PROVIDE AND INSTALL 3" MIN. DEPTH SHREDDED BARK MULCH IN PLANTED AREAS PER SPECIFICATIONS. CONTRACTOR SHALL PROVIDE SAMPLE FOR REVIEW BY LANDSCAPE ARCHITECT PRIOR TO ORDERING.

CONTRACTOR SHALL BE RESPONSIBLE FOR FINISH GRADES AND FOR FINE GRADING REQUIRED FOR SURFACE DRAINAGE AND UNIFORMITY TO THE SATISFACTION OF THE LANDSCAPE ARCHITECT. ADVISE LANDSCAPE ARCHITECT OF DRAINAGE PROBLEMS AND MAKE RECOMMENDATIONS FOR SOLUTION.

CONTRACTOR SHALL PROVIDE NINETY (90)-DAY MAINTENANCE PERIOD AS PART OF THE CONTRACT. THIS PERIOD SHALL BEGIN AFTER INSTALLATION AND EXTEND CONTINUOUSLY FOR 90 DAYS UNTIL FINAL ACCEPTANCE.



Scale: 1/8" = 1'-0"

CITY OF SANTA BARBARA

ALAMEDA PARK WELL

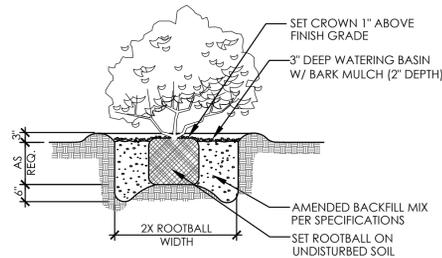
Planting Plan

2014-01058 PBW. NO.	L-4 SHT. DES.
3728 BID NO.	C-1-4427 DWG. NO.
SHT. 14 OF 17	

DATE _____
PROJECT ARCHITECT _____

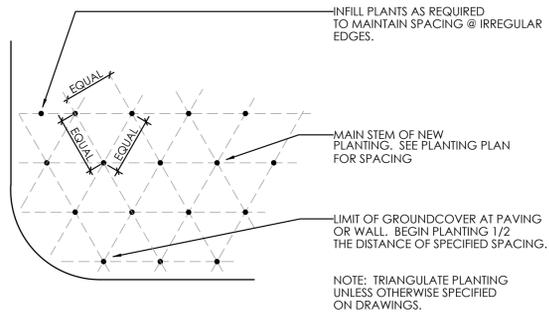
90% Submittal 09/17/14





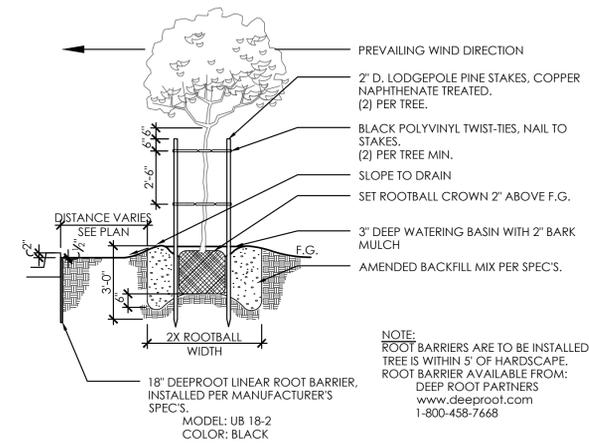
1 SHRUB PLANTING
L-5

NOT TO SCALE



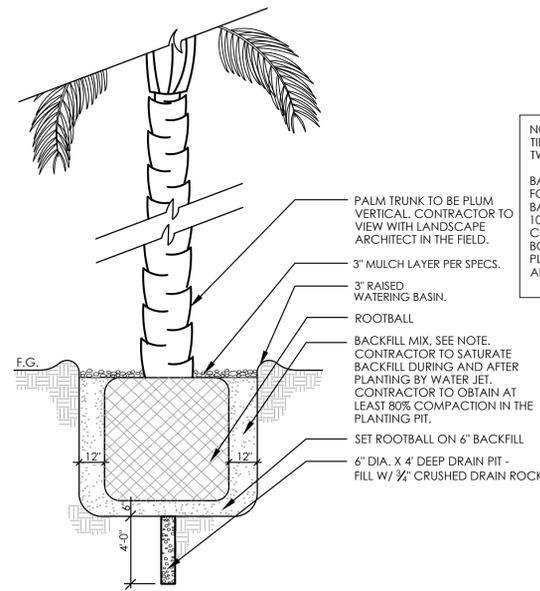
2 PLANT SPACING
L-5

NOT TO SCALE



3 TREE PLANTING WITH LINEAR ROOT CONTROL BARRIER
L-5

SCALE: 1/4"=1'-0"



4 PALM TREE PLANTING
L-5

NOT TO SCALE



CJM::LA
COURTNEY JANE MILLER
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

APPROVED: _____ DATE _____
CITY ENGINEER ORIGINAL SIGNED DATE _____

DESIGN: C/JM
DRAWN: K/K
CHECKED: C/JM

NO.	DATE	APPROVED	REVISIONS

CITY OF SANTA BARBARA
ALAMEDA PARK WELL
Planting Details

2014-01058
PBW. NO.

3728 L-5
BID NO. SH. DES.

C-1-4427
DWG. NO.

SHT. 15 OF 17

90% Submittal 09/17/14





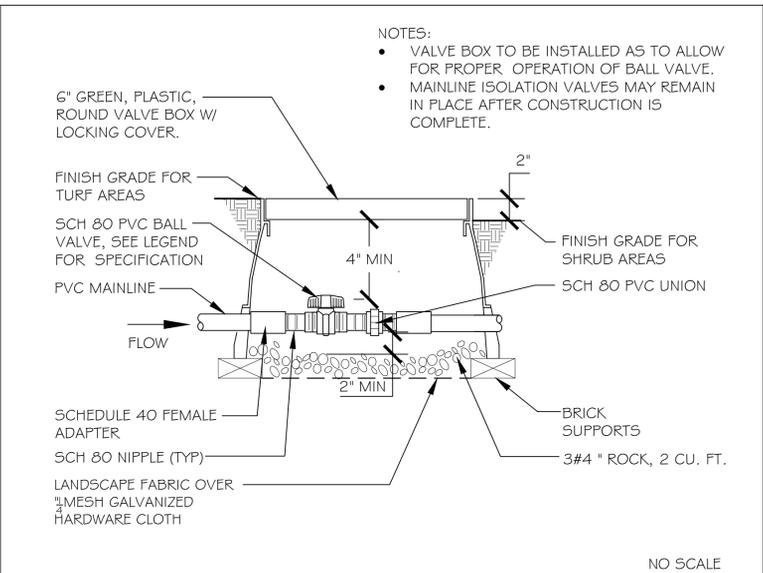
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

APPROVED: _____ DATE _____
CITY ENGINEER ORIGINAL SIGNED DATE _____

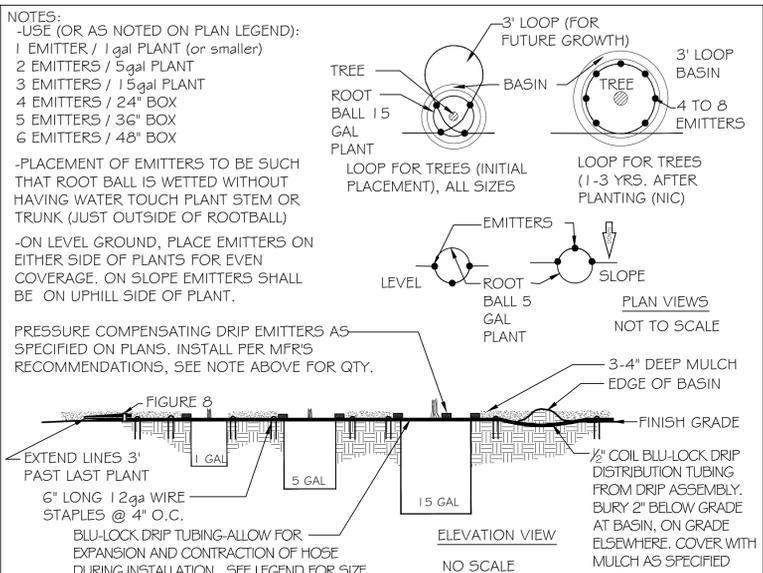
NO.	DATE	APPROVED	DESIGN	DRAWN	CHECKED	REVISIONS

CITY OF SANTA BARBARA
ALAMEDA PARK WELL
IRRIGATION DETAILS

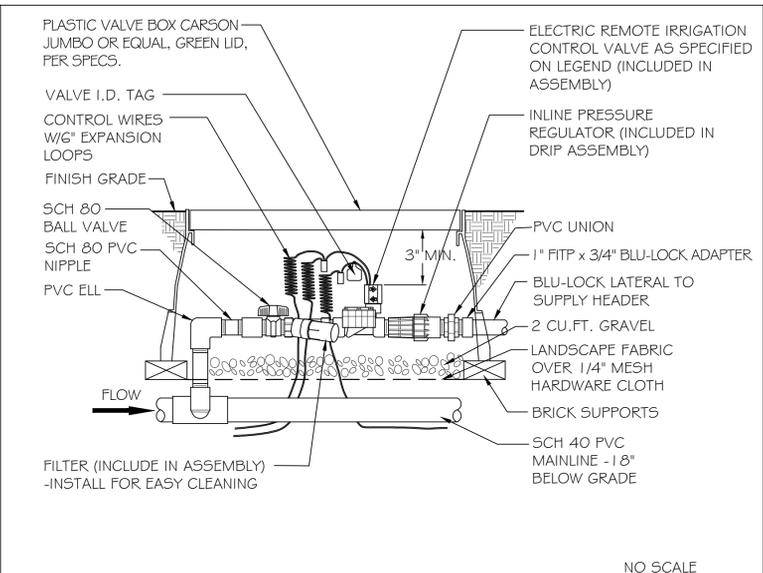
90% Submittal 09/17/14
2014-01058
PBW. NO.
3728 LI-2
BID NO. SHT. DES.
C-1-4427
DWG. NO.



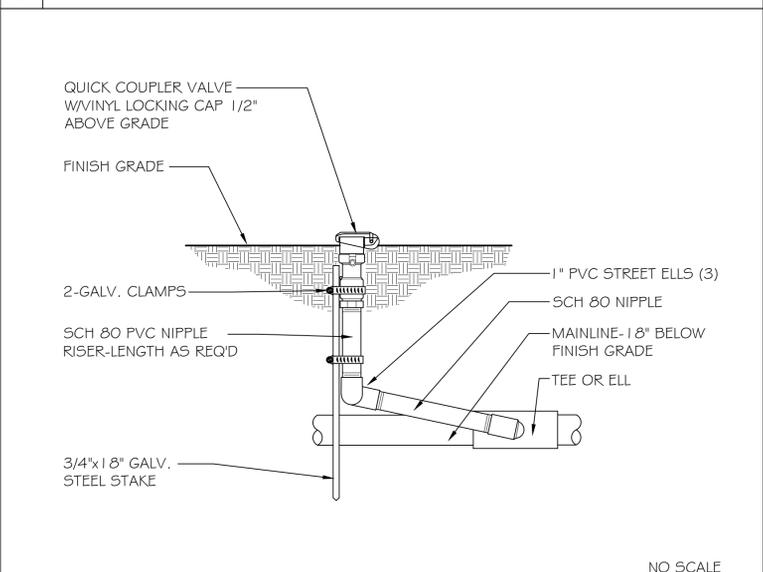
7 SCH 80 PVC BALL VALVE



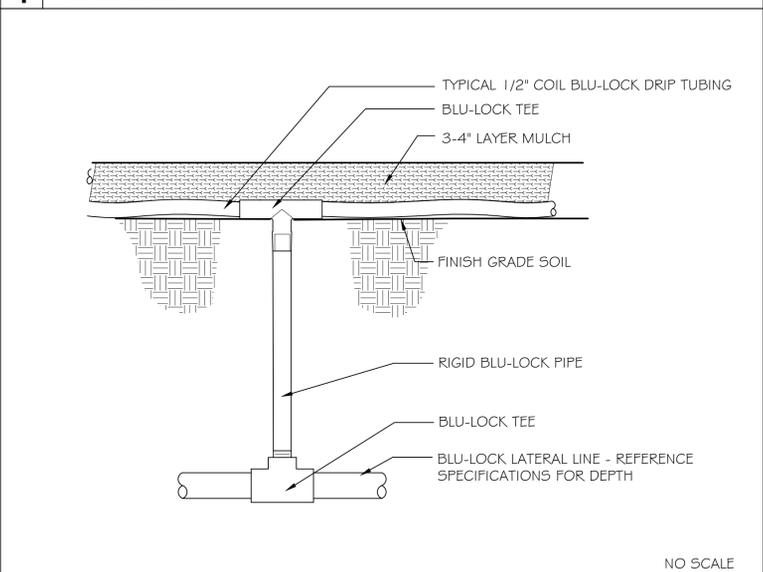
4 EMITTER



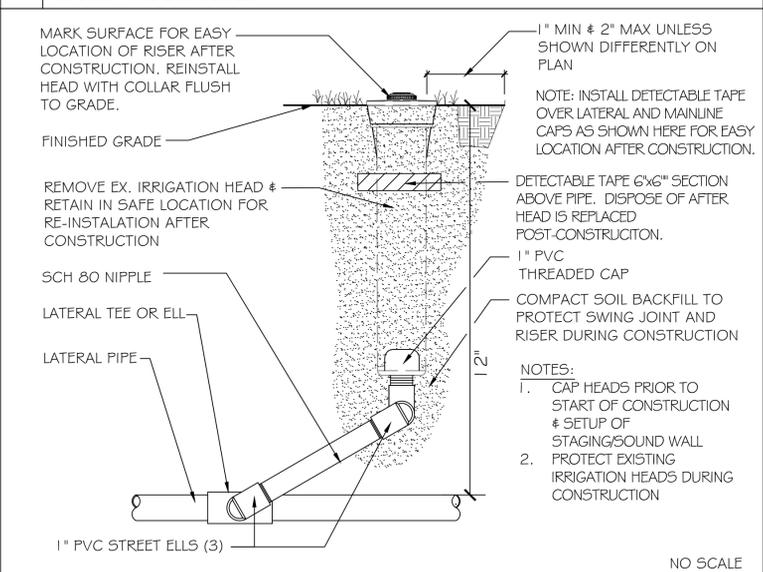
1 DRIP ASSEMBLY



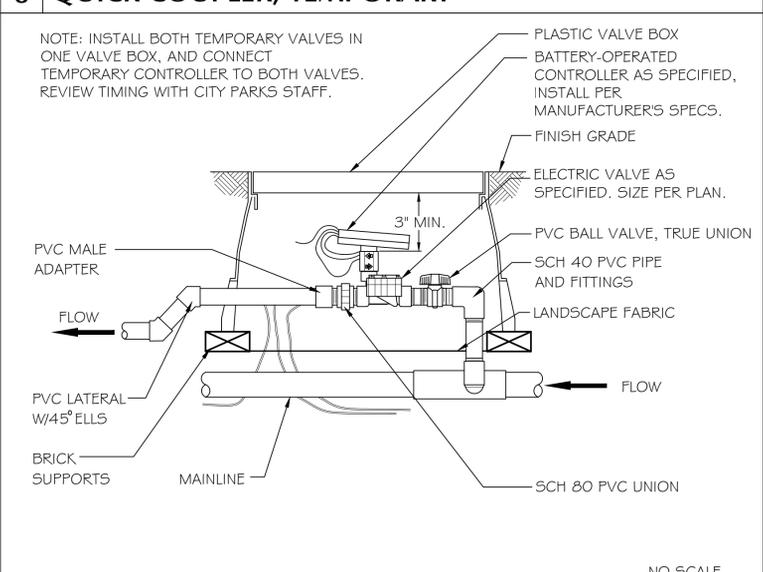
8 QUICK COUPLER, TEMPORARY



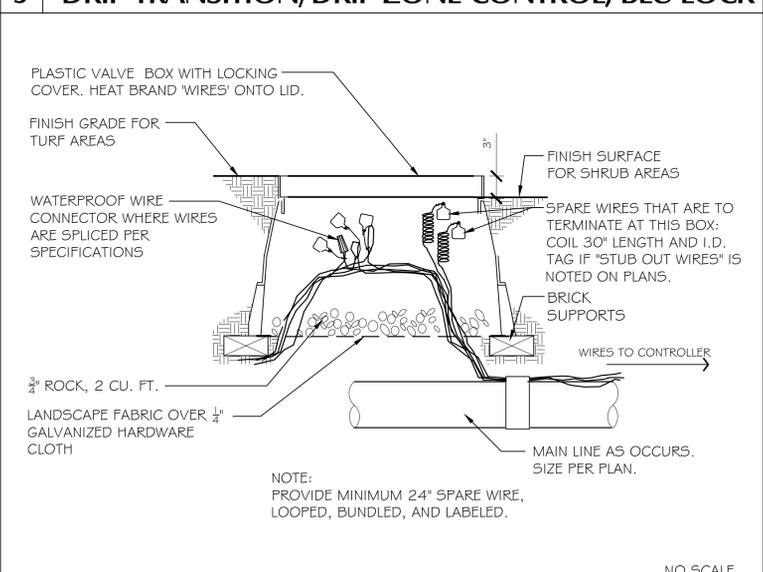
5 DRIP TRANSITION/DRIP ZONE CONTROL, BLU-LOCK



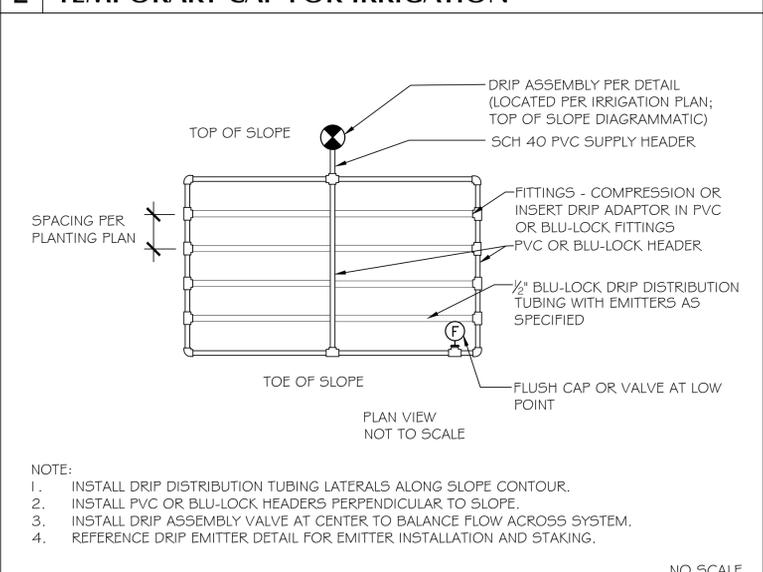
2 TEMPORARY CAP FOR IRRIGATION



9 AUTOMATIC IRRIGATION VALVE, TEMPORARY



6 SPLICE BOX



3 DRIP TUBING LAYOUT