

Project ID No. 703615

PROJECT EVALUATION (PEF)

PCA No. _____

PROJECT CONCEPT		
PROJECT TITLE Big Basin Water System Improvements		PARK UNIT NAME Big Basin Redwoods State Park
DISTRICT NAME Santa Cruz District		FACILITY NO.
PROJECT MANAGER Rachel Arias	PHONE NO. 831-335-6311	EMAIL Rachel.Arias@parks.ca.gov
DISTRICT PROJECT MANAGER Felipe Jauregui	PHONE NO. 831-335-6380	EMAIL Felipe.Jauregui@parks.ca.gov
PROJECT BID DATE Estimated 12/15/19	CONSTRUCTION START DATE Estimated 5/7/20	FUNDING SOURCE

PROJECT DESCRIPTION

Identify the scope of the project in detail, including its purpose, location, and potential impacts. If the ground is to be disturbed, describe the depth and extent of excavation. Describe the existing site conditions, including previous development. Note if work will impact or extend beyond park property. Indicate if work will be done in conjunction with, or as part of, other projects. (Use additional pages if necessary.)

The project primarily involves upgrades inside the Big Basin Water Treatment Plant (WTP) building and this work would not be expected to have any environmental impacts. However, the project also includes exterior work. The exterior work is shown on Drawings C-1 and C-2 of the 50% Design dated July 19, 2019 and includes: 1) reconstructing the road adjacent to the WTP by removing the soil and replacing the material with aggregate base; 2) installing a new concrete pad for access along the north side of the WTP; and 3) Removing the existing deteriorated wooden retaining wall and installing a rock retaining wall approximately 50 feet long, near two existing redwood trees.

DOCUMENTS ATTACHED

- ☐ 7.5 minute (quad) map of project area (**Required**)
- ☒ Site Map (**Required** - Scale should show relationship to existing buildings, roads, landscape features, etc.)
- ☐ DPR 727 Accessibility Review and Comment Sheet (**Required** – Attach DPR 727 or emailed project exemption from the Accessibility Section.)
- ☐ Sea-level Rise Worksheet (for coastal park units)
- ☒ Graphics (Specify - photos, diagrams, drawings, cross-sections, etc.):
- ☐ Other (Specify):

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REGULATORY REQUIREMENTS

IS AN APPLICATION, PERMIT, OR CONSULTATION REQUIRED?

YES	MAYBE	NO	CONTACT
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Coastal Development Permit
DFG Stream Alteration Permit
State & Federal Endangered Species Consultation
Corps of Engineers 404 Permit
RWQCB or NPDES Permit
DPR Right to Enter or Temporary Use Permit
PRC 5024 Review
Stormwater Management Plan
Encroachment Permit (Specify Agency):
Native American Consultation
Other (Specify):

COMMENTS:

DEPARTMENT POLICY COMPLIANCE

HAS A GENERAL PLAN BEEN APPROVED FOR THE UNIT?

YES	NO
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>

If YES, is the project consistent with the GP?

If NO, what is the project justification?

Is it a temporary facility? (No permanent resource commitment)

Health and Safety?

Is it a Resource Management Project?

Is it repairing, replacing, or rehabilitating an existing facility?

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

IS THE PROJECT WITHIN A CLASSIFIED SUBUNIT?

Natural Preserve

Cultural Preserve

State Wilderness

<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>

IS THE PROJECT CONSISTENT WITH THE DEPARTMENT'S CULTURAL RESOURCE MANAGEMENT DIRECTIVES?

<input checked="" type="checkbox"/>	<input type="checkbox"/>
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IS THE PROJECT CONSISTENT WITH THE DEPARTMENT'S OPERATIONS MANUAL CHAPTER 0300?

<input checked="" type="checkbox"/>	<input type="checkbox"/>
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COMMENTS:

SUPERINTENDENT PROJECT CONCEPT APPROVAL OR DESIGNEE

TITLE

SPS II

DATE

10/7/19

PROJECT EVALUATION (PEF)

PCA No.

RESOURCES

Explain all 'Yes' or 'Maybe' answers in the 'Evaluation and Comments' section (reference by letter and number). Attach additional pages, if necessary.

YES	MAYBE	NO
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

A. EARTH – WILL THE PROJECT:

1. Create unstable soil or geologic conditions?
2. Adversely affect topographic features?
3. Adversely affect any unusual or significant geologic features?
4. Increase wind or water erosion?
5. Adversely affect sand deposition or erosion of a sand beach?
6. Expose people, property, or facilities to geologic hazards or hazardous waste?
7. Adversely affect any paleontological resource?

YES	MAYBE	NO
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

B. AIR – WILL THE PROJECT:

1. Adversely affect general air quality or climatic patterns?
2. Introduce airborne pollutants that may affect plant or animal vigor or viability?
3. Increase levels of dust or smoke?
4. Adversely affect visibility?

YES	MAYBE	NO
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

C. WATER – WILL THE PROJECT:

1. Change or adversely affect movement in marine or fresh waters?
2. Change or adversely affect drainage patterns or sediment transportation rates?
3. Adversely affect the quantity or quality of groundwater?
4. Adversely affect the quantity or quality of surface waters?
5. Expose people or property to flood waters?
6. Adversely affect existing or potential aquatic habitat(s)?

YES	MAYBE	NO
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

D. PLANT LIFE – WILL THE PROJECT:

1. Adversely affect any native plant community?
2. Adversely affect any unique, rare, endangered, or protected plant species?
3. Introduce a new species of plant to the area?
4. Adversely affect agricultural production?
5. Adversely affect the vigor or structure of any tree?
6. Encourage the growth or spread of alien (non-native) species?
7. Interfere with established fire management plans or practices?

YES	MAYBE	NO
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

E. ANIMAL LIFE – WILL THE PROJECT:

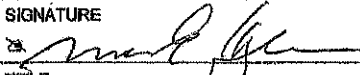
1. Adversely affect any native or naturalized animal population?
2. Adversely affect any unusual, rare, endangered, or protected species?
3. Adversely affect any animal habitat?
4. Introduce or encourage the proliferation of any non-native species?

YES	MAYBE	NO
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

F. CULTURAL RESOURCES – WILL THE PROJECT:

1. Adversely affect a prehistoric or historic archeological site, or tribal cultural resource?
2. Adversely affect a prehistoric or historic building, structure, or object?
3. Cause an adverse physical or aesthetic effect on an eligible or contributing building, structure, object, or cultural landscape?
4. Diminish the informational or research potential of a cultural resource?
5. Increase the potential for vandalism or looting?
6. Disturb any human remains?
7. Restrict access to a sacred site or inhibit the traditional religious practice of a Native American community?

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YES	MAYBE	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	G. AESTHETIC RESOURCES – WILL THE PROJECT: 1. Adversely affect a scenic vista or view? 2. Significantly increase noise levels? 3. Adversely affect the quality of the scenic resources in the immediate area or park-wide? 4. Create a visually offensive site? 5. Be incompatible with the park design established for this unit or diminish the intended sense of "a special park quality" for the visitor?
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	H. RECREATIONAL RESOURCES – WILL THE PROJECT: 1. Be in a public use area? 2. Have an adverse effect on the quality of the intended visitor experience? 3. Have an adverse effect on the quality or quantity of existing or future recreational opportunities or facilities? 4. Have an adverse effect on the accessibility of recreational facilities (e.g., ADA requirements)?
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	I. SEA-LEVEL RISE AND EXTREME EVENTS (COASTAL UNITS ONLY): 1. Has this project been evaluated for potential impacts from sea-level rise, coastal storm surge, and other extreme events, using the Department's Sea-Level Rise and Extreme Events Guidance Document or an equivalent process? <i>Please attach the Sea-Level Rise Worksheet (provided in the guidance document) or other detailed evaluation.</i> 2. Based on the evaluation described above, will the project be adversely impacted by frequent flooding or permanent inundation during its expected lifetime?
<input type="checkbox"/> Non-coastal unit			
EVALUATION AND COMMENTS C-3 If the well is put into service, it will be drawing water from the aquifer. D-1 We are proposing driving on native vegetation that will have some impact on it. E-3 By driving on the vegetation/soil, animal habitat could be impacted.			
ENVIRONMENTAL REVIEW <i>To Be Completed by Qualified Specialist(s) ONLY</i> <i>Attach additional reviews or continuation pages, as necessary.</i>			
TRIBAL LIAISON COMMENTS AND SIGNATURE (REQUIRED FOR ALL FINDINGS) <input checked="" type="checkbox"/> Reviewer is Designated District/Service Center/Division Tribal Liaison or Designee <input type="checkbox"/> NAHC Listed Tribe(s) contacted (attach correspondence record for contact and findings) Findings: <input checked="" type="checkbox"/> Project action does not have potential to affect "tribal cultural" resources (explain) <i>Check more than one box if tribes provide differing responses, and describe all consultations below.</i> <input type="checkbox"/> Tribe(s) did not respond <input type="checkbox"/> Tribe(s) approved project as written <input type="checkbox"/> Tribe(s) approved project with treatments or conditions <input type="checkbox"/> Tribe(s) and DPR unable to reach mutual agreement on project treatments or conditions Explain: <i>Maintenance of existing facility. Consultation not necessary.</i>			
SIGNATURE 		PRINTED NAME Mark Kulkerna	
TITLE SCR Dist. Tribal Liaison		DATE 10-6-2019	

PROJECT EVALUATION (PEF)

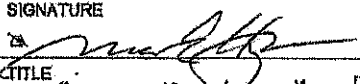
Project ID No. 703615
PCA No.

ARCHEOLOGIST COMMENTS AND SIGNATURE (REQUIRED FOR ALL FINDINGS)

Findings:

- ☒ No PRC 5024 necessary (provide justification)
☐ PRC 5024 attached; project approved as written
☐ PRC 5024 attached, conditions necessary
☐ PRC 5024 attached, mitigations and/or potential significant impacts

Explain Project as proposed will not involve archaeological resources.


SIGNATURE 	PRINTED NAME Mark Mylchre
TITLE SCR Dist Archaeologist	DATE 10-6-2019

HISTORIAN COMMENTS AND SIGNATURE (REQUIRED FOR ALL FINDINGS)

Findings:

- ☐ No PRC 5024 necessary (provide justification)
☐ PRC 5024 attached, project approved as written
☐ PRC 5024 attached, conditions necessary
☐ PRC 5024 attached, mitigations and/or potential significant impacts

Explain

SIGNATURE 	PRINTED NAME
TITLE	DATE

ENVIRONMENTAL SCIENTIST COMMENTS AND SIGNATURE (REQUIRED FOR ALL FINDINGS)

Findings:

- ☐ No Impact
☐ Impact(s), see conditions/mitigations below or on attached page(s)
☐ Potential Significant Impact

Explain

Project ID No. 703615

PROJECT EVALUATION (PEF)

PCA No.

ARCHEOLOGIST COMMENTS AND SIGNATURE (REQUIRED FOR ALL FINDINGS)

Findings:

- ☐ No PRC 5024 necessary (provide justification)
- ☐ PRC 5024 attached; project approved as written
- ☐ PRC 5024 attached, conditions necessary
- ☐ PRC 5024 attached, mitigations and/or potential significant impacts

Explain

SIGNATURE

PRINTED NAME

2a

TITLE

DATE

HISTORIAN COMMENTS AND SIGNATURE (REQUIRED FOR ALL FINDINGS)

Findings:

- ☒ No PRC 5024 necessary (provide justification)
- ☐ PRC 5024 attached, project approved as written
- ☐ PRC 5024 attached, conditions necessary
- ☐ PRC 5024 attached, mitigations and/or potential significant impacts

Explain ACCORDING TO DISTRICT, THE BUILDING WAS CONSTRUCTED IN 1983. BASED ON THIS, THE WTP IS NOT CONSIDERED A HISTORIC RESOURCE. NO 5024 NECESSARY. FURTHER ALL WORK WILL BE COMPATIBLE AND SYMPATHETIC WITH EXISTING SETTING AND NOT IMPACT POT. HIST. SIG.

SIGNATURE

PRINTED NAME

2a

TITLE

DATE

ENVIRONMENTAL SCIENTIST COMMENTS AND SIGNATURE (REQUIRED FOR ALL FINDINGS)

Findings:

- ☐ No impact
- ☐ Impact(s), see conditions/mitigations below or on attached page(s)
- ☐ Potential Significant impact

Explain

PROJECT EVALUATION (PEF)

PCA No.

ARCHEOLOGIST COMMENTS AND SIGNATURE (REQUIRED FOR ALL FINDINGS)

Findings:

- ☐ No PRC 5024 necessary (provide justification)
- ☐ PRC 5024 attached; project approved as written
- ☐ PRC 5024 attached, conditions necessary
- ☐ PRC 5024 attached, mitigations and/or potential significant impacts

Explain

SIGNATURE

PRINTED NAME

TITLE

DATE

HISTORIAN COMMENTS AND SIGNATURE (REQUIRED FOR ALL FINDINGS)

Findings:

- ☐ No PRC 5024 necessary (provide justification)
- ☐ PRC 5024 attached, project approved as written
- ☐ PRC 5024 attached, conditions necessary
- ☐ PRC 5024 attached, mitigations and/or potential significant impacts

Explain

SIGNATURE

PRINTED NAME

TITLE

DATE

ENVIRONMENTAL SCIENTIST COMMENTS AND SIGNATURE (REQUIRED FOR ALL FINDINGS)

Findings:

- ☒ No Impact
- ☐ Impact(s), see conditions/mitigations below or on attached page(s)
- ☐ Potential Significant Impact

Explain

CONSTRUCTION WILL MINIMIZE IMPACTS TO EXISTING
T~~REE~~ TREES BY AVOIDING DAMAGE TO ROOT ZONES WHERE
POSSIBLE.

Joanne Kervauz





JOANNE KERVAUZ

Ses 10/7/19

Project ID No.

PCA No.

PROJECT EVALUATION (PEF)

SIGNATURE 		PRINTED NAME	
TITLE		DATE	
MAINTENANCE CHIEF/SUPERVISOR (REQUIRED FOR ALL FINDINGS)			
COMMENTS: RACHEL ARIAS — PROJECT MANAGER			
SIGNATURE 		PRINTED NAME	
TITLE		DATE	
OTHER COMMENTS (COMMENTER MUST INCLUDE TITLE AND SIGNATURE)			
SIGNATURE 		PRINTED NAME	
TITLE		DATE	
OTHER COMMENTS (COMMENTER MUST INCLUDE TITLE AND SIGNATURE)			
SIGNATURE 		PRINTED NAME	
TITLE		DATE	

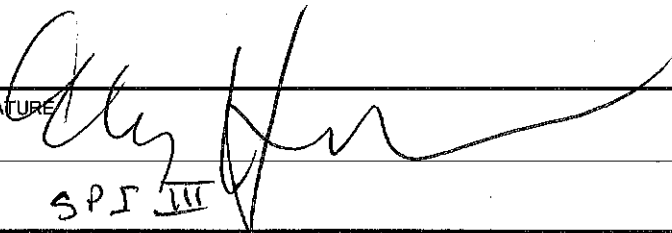
Project ID No. 703615

PCA No.

PROJECT EVALUATION (PEF)

OTHER COMMENTS (COMMENTS MUST INCLUDE TITLE AND SIGNATURE)

no interpretive component

SIGNATURE 		PRINTED NAME Elizabeth Hammack	
TITLE SPJ III		DATE 10-8-19	

Project ID No. 703615

PROJECT EVALUATION (PEF)

PCA No.

ENVIRONMENTAL COORDINATOR REVIEW

YES MAYBE NO

☐ ☐ ☒

☐ ☐ ☒

☐ ☐ ☒

☐ ☐ ☒

☐ ☐ ☒

CUMULATIVE IMPACTS

1. Will the project be conducted in conjunction with or at the same time as other projects at the park?
2. Will the project be part of a series of inter-related projects?
3. Are there any other projects that must be completed for any part of this project to become operational?
4. Are there any other projects (including deferred maintenance) that have been completed or any probable future projects that could contribute to the cumulative impacts of this project?
5. Are any of the projects that relate to the proposed work outside the General Plan?

COMMENTS:

RECOMMENDATION:

- ☐ Not a project for the purposes of CEQA compliance.
- ☐ Project is De Minimus; register in logbook
- ☒ The project is exempt. File a Notice of Exemption.
- ☐ A Negative Declaration should be prepared.
- ☐ A Mitigated Negative Declaration should be prepared.
- ☐ An EIR should be prepared.

SIGNATURE

Sheila Brannon

PRINTED NAME

Sheila Brannon

TITLE

Sr Park + Rec Specialist

DATE

10/3/19

DISTRICT SUPERINTENDENT REVIEW

COMMENTS:

I acknowledge any constraints placed on the project as a result of the specialists' comments above and recommend the project proceed.

DISTRICT SUPERINTENDENT APPROVAL SIGNATURE

[Signature]

TITLE

DS II

DATE

9/8/19

CALIFORNIA DEPARTMENT OF PARKS AND RECREATION
ACQUISITION AND DEVELOPMENT DIVISION
BIG BASIN REDWOODS STATE PARK
WATER SYSTEM IMPROVEMENTS
50% PLAN SET



ACQUISITION &
DEVELOPMENT DIVISION
One Capitol Mall
Sacramento, CA
95834-2028



Approval of the plans and specifications of
this project is given by the Department of
Parks and Recreation, Sacramento, California,
on the condition that the contractor shall
comply with all applicable laws and regulations
of the State of California.

Prepared by: [Blank]
Reviewed by: [Blank]
Checked by: [Blank]
Date: [Blank]

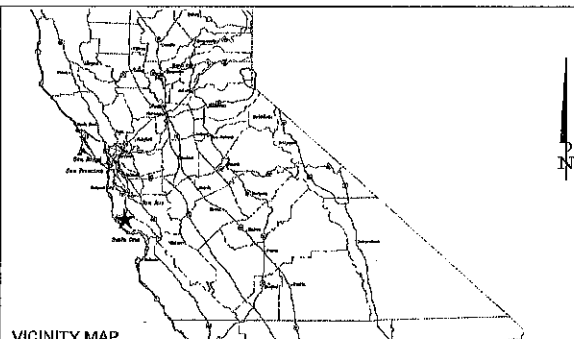
DESIGNED: M. SHAW
DRAWN: W. JONES
CHECKED: C. COLEMAN
DATE: JULY 10, 2019

REVISIONS
DATE

BIG BASIN REDWOODS STATE PARK
WATER SYSTEM IMPROVEMENTS
COVER SHEET

DRAWING NO.
XXXXXX
SHEET NO.
G1
1 of XX

1. ALL MATERIALS SHOWN OR NOTED ON THE PLANS ARE NEW UNLESS CALLED OUT OTHERWISE.
2. THE CONTRACTOR SHALL NOT SCALE THE DRAWINGS, BUT SHALL RELY ONLY ON THE WRITTEN DIMENSIONS GIVEN. THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS SHOWN OR DIMENSIONED HERE. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE STATE REPRESENTATIVE FOR RESOLUTION BEFORE PROCEEDING WITH THAT PORTION OF THE WORK.
3. ALL WORK SHALL COMPLY WITH THE CURRENT EDITION AT DATE OF PLAN APPROVAL OF THE FOLLOWING LISTED CODES, AND ALL OTHERS HAVING JURISDICTION OVER THE WORK.
 - 3.1. 2019 EDITION OF THE CALIFORNIA BUILDING CODE.
 - 3.2. 2019 EDITION OF THE CALIFORNIA ELECTRICAL CODE.
 - 3.3. 2019 EDITION OF THE CALIFORNIA PLUMBING CODE.
 - 3.4. 2019 ADA STANDARDS FOR ACCESSIBLE DESIGN.
- 3.5. CONDUCT ALL WORK IN ACCORDANCE WITH THE LATEST SAFETY RULES AND REGULATIONS OF ALL AUTHORITIES AND AGENCIES HAVING JURISDICTION OVER THE WORK. ALL WORK SHALL BE IN ACCORDANCE WITH THE CONSTRUCTION OCCUPANCY. WHERE OBTAINED INFORMATION OR CLARIFICATION IS REQUIRED THE MATTER SHALL BE REFERRED TO THE STATE'S REPRESENTATIVE FOR WRITTEN RESOLUTION.
4. TREE PROTECTION MEASURES SHALL BE IMPLEMENTED IN AREAS THAT HAVE THE POTENTIAL TO HARM TREES DURING THE PROCESS OF CONSTRUCTION ACTIVITY.
5. THE EXISTING WATER TANKS AND DISTRIBUTION LINES SHALL REMAIN INTACT AND OPERATIONAL DURING CONSTRUCTION ONCE THE NEW WATER TANKS HAVE BEEN INSTALLED. THE EXISTING TANKS SHALL BE DEMOLISHED AND SALVAGED PER SPECIFICATION 024110 FOR SELECTIVE STRUCTURE DEMOLITION.
6. CONSTRUCTION ACTIVITIES ARE LIMITED TO SEPTEMBER 16TH THROUGH MARCH 23RD. PROJECT MAY BE SUBJECT TO OVERSIGHT BY A STATE PARKS ENVIRONMENTAL MONITOR. THE PROJECT WILL BE SUBJECT TO CONSTRUCTION MILESTONES.
7. MAPS WERE PREPARED USING THE FOLLOWING:
 - 7.1. SURVEY PROVIDED TO FCE BY LACO ASSOCIATES ON APRIL 9, 2017.
 - 7.1.1. THE EXTENT OF THE SURVEY IS SHOWN IN THE PLANS AND THE ASSUMED ELEVATION OF THE SURVEY WAS REDUCED BY 146 FEET TO MATCH THE EXISTING LIDAR SURFACE.
 - 7.2. LIDAR DATED ON MARCH 1983 STATE PLANE CALIFORNIA 2 THAT WAS PROVIDED TO FCE BY LACO ASSOCIATES.
8. ALL FEATURES OUTSIDE OF THE EXTENT OF THE SURVEY, INCLUDING: ROADS, BUILDINGS, WATER TANKS, WATER FEATURES AND PARKING AREAS ARE BASED ON AERIAL IMAGERY AND THEREFORE ARE APPROXIMATE.
9. LOCATION OF ALL UTILITIES ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UTILITIES PRIOR TO EXCAVATION.
10. THESE PLANS WERE PREPARED BASED ON THE FINDINGS OF THE PRELIMINARY ENGINEERING REPORT COMPILED BY FALL CREEK ENGINEERING ON 12/22/2016.



VICINITY MAP



LOCATION MAP

#	SHEET	SHEET TITLE
1	01	COVER SHEET
2	02	SITE MAP, LEGEND AND ABREVIATIONS
3	03	WATER TREATMENT PLANT PROCESS FLOW DIAGRAM
4	04	SITE PLAN
5	05	WATER TREATMENT PLANT BUILDING LAYOUT
6	06	CONSULTANT EXISTING EQUIPMENT DETAILS
7	07	DEMOUNTING TANK DETAILS
8	08	WATER TREATMENT PLANT Piping DETAILS
9	09	ELECTRICAL SYMBOLS AND ABBREVIATIONS
10	10	SCHEMATIC LAYOUT
11	11	MOTOR CONTROL ELEMENTARY
12	12	CONTROL DIAGRAMS
13	13	PLC CONTROL PIPING AND CONNECTIONS
14	14	ELECTRICAL DETAILS - 1
15	15	ELECTRICAL DETAILS - 2
16	16	ELECTRICAL DETAILS - 3
17	17	PAID SYMBOLS AND ABBREVIATIONS
18	18	PAID DRAWING - 1
19	19	PAID DRAWING - 2

SORTED SHEETS DENOTE FUTURE DRAWINGS

SHEET INDEX

CIVIL ENGINEER
COLEMAN ENGINEERING
1334 BLUE OAK BOULEVARD
SUITE 200
ROSELILLE, CA 96078
PHONE: 916-781-1100
CONTACT: CLAY COLEMAN

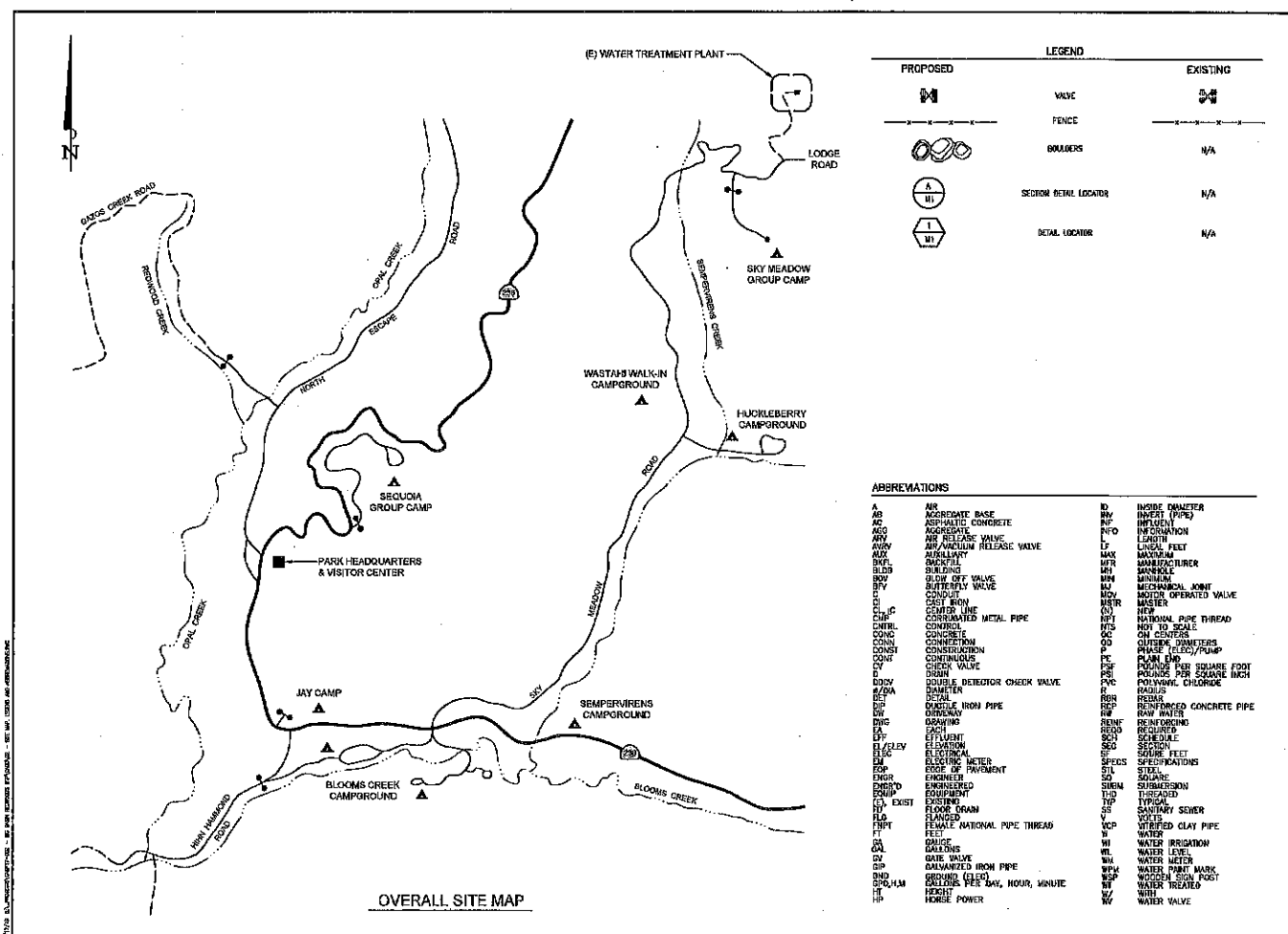
ELECTRICAL ENGINEER
FRISCH ENGINEERING, INC.
1345 FOLSON BOULEVARD
UNIT 600
FOLSOM, CALIFORNIA
PHONE: 916-383-1200
CONTACT: TON FRISCH

CONSULTANT INFORMATION

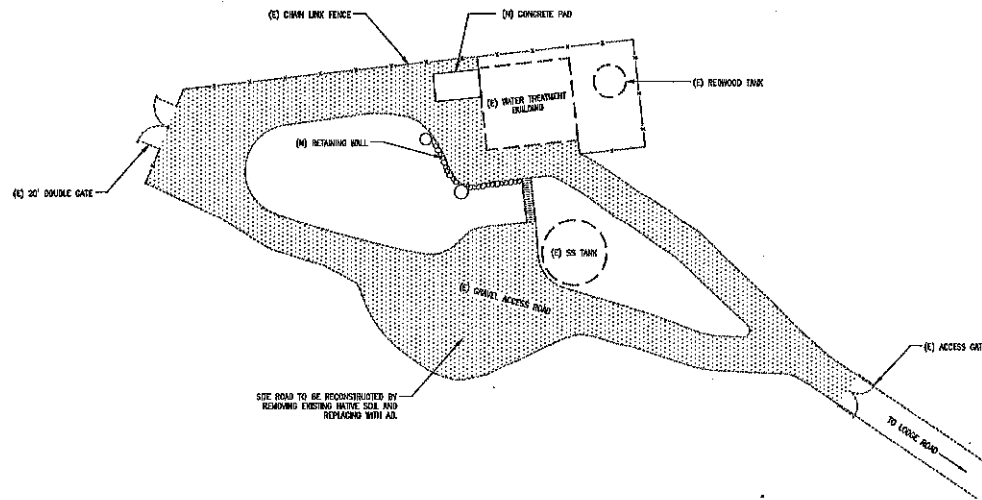
BIG BASIN REDWOODS STATE PARK
2180 BIG BASIN WAY
SOLICITOR CREEK, CA 95066
SANTA CRUZ COUNTY

PARK ADDRESS

GENERAL NOTES



BIG BASIN REDWOODS STATE PARK **WATER SYSTEM IMPROVEMENTS** **SITE MAP, LEGEND AND** **ABBREVIATIONS**



1 WATER TREATMENT PLANT SITE PLAN
NO SCALE



ACQUISITION &
DEVELOPMENT DIVISION
One California Way
Sacramento, CA
95834-3228



California State Parks, Acquired
Approval of this plan does not constitute an
approval of any other plan or specification
submitted in connection with this project.
Approval of this plan does not constitute an
approval of any other plan or specification
submitted in connection with this project.

Reviewed by: One
Approved by: One

Reviewed by: One
Approved by: One

DESIGNED BY: M. SHAW
DRAWN BY: W. JONES
CHECKED BY: C. COLEMAN
DATE: JULY 16, 2016

REVISIONS
DATE

DATE

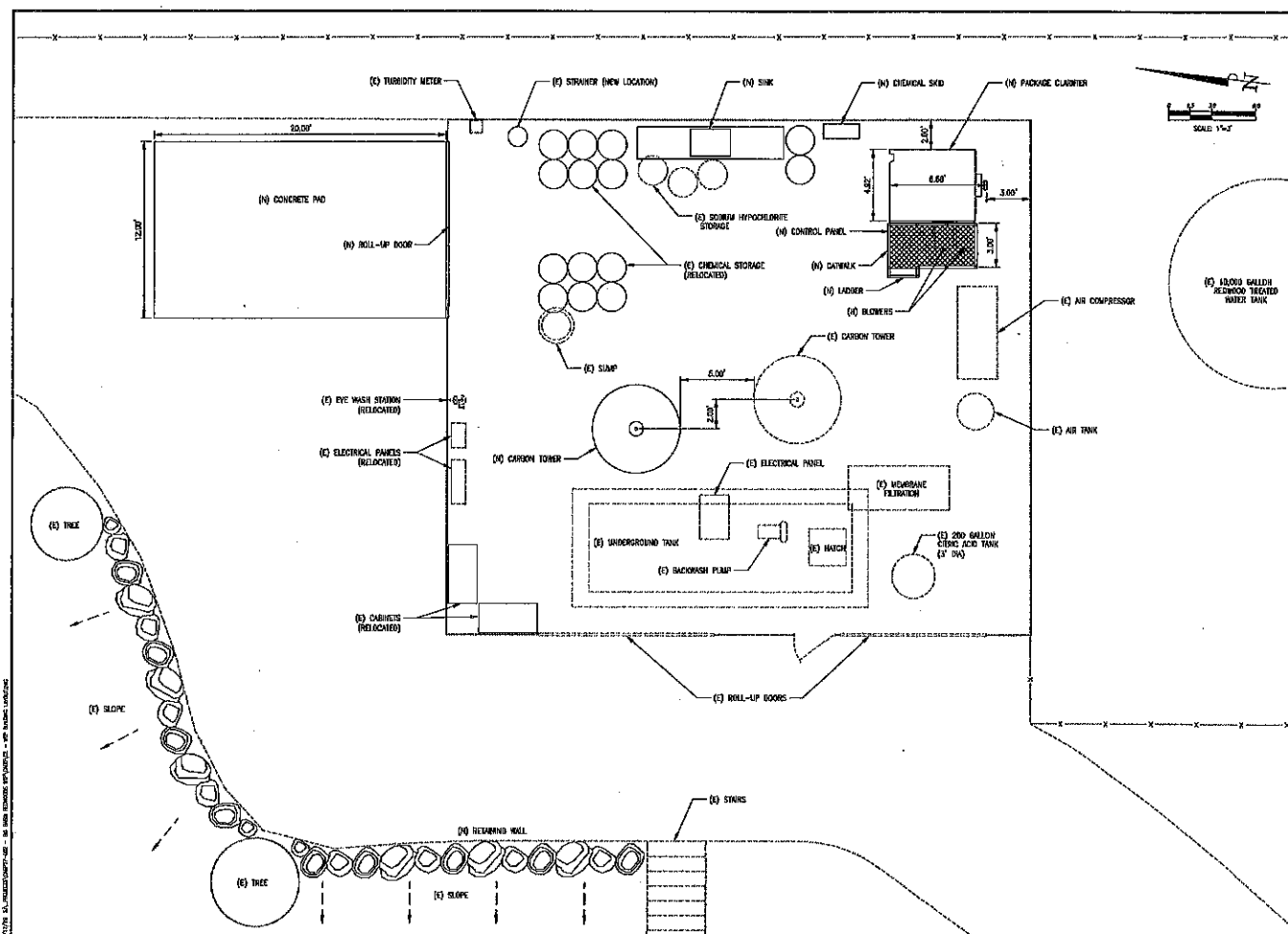
BIG BASIN REDWOODS STATE PARK
WATER SYSTEM IMPROVEMENTS

SITE MAP

DRAWING NO.
XXXXX-XXX

SHEET NO.
C1

4 OF XX



ACQUISITION &
DEVELOPMENT DIVISION
One Capitol Mall
Sacramento, CA
95834-3220



Approval of the plan does not authorize or approve any cessation of operations that appears to be justifiable. Final approval is subject to the full approval of the state. Any act of approval appears to be a violation of the regulations of the state.

Reviewed by _____ Date _____
 CONFIDENTIALITY & REVIEW
 ACCESSIBILITY SECTION
 CERTIFICATION # _____
 Reviewed by _____ Date _____

ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE
DATE 08-11-2010 BY 60322 UCBAW/STP

DESIGNED:	M. SHAW
DRAWN:	W. JONES
CHECKED:	G. COLEMAN
DATE	JULY 18, 2019

REVISIONS	
NO.	DATE
1	

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15

PLANNING

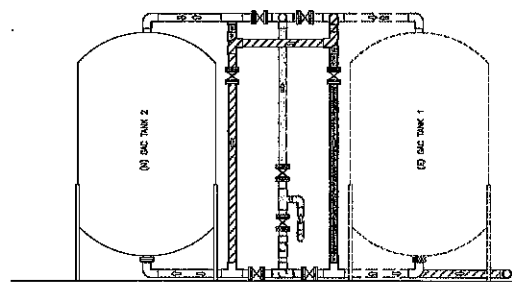
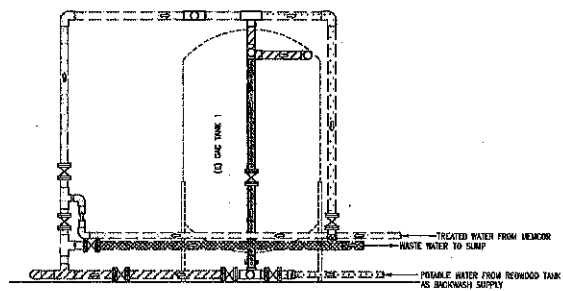
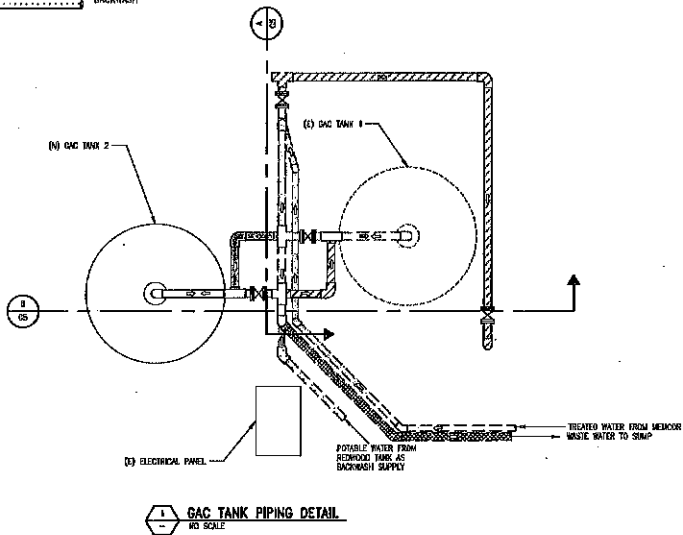
STATE
OVER
NT F
YOU

IMPROVING LAYERS

REDWOOD SYSTEMS CREATING INNOVATION

LEGEND

- NEW PIPING
- EXISTING PIPING
- TREATED BY MEMOR
- TREATED BY GAC 1 ONLY
- TREATED BY GAC 2 ONLY
- TO SS TANK
- DRAIN TO WASTE (DW)
- BACKWASH



ACQUISITION & DEVELOPMENT DIVISION
One Capitol Mall
Sacramento, CA 95833-3029



CALIFORNIA STATE PARKS AND RECREATION DEPARTMENT
Approval of this plan does not constitute a warranty or representation of any kind by the Department of Parks and Recreation, nor does it constitute an endorsement of any product or service.

Drawn by: [blank] Date: [blank]
Reviewed by: [blank] Date: [blank]
Checked by: [blank] Date: [blank]
Approved by: [blank] Date: [blank]

DESIGNED: M. CHAN
DRAWN: W. JONES
CHECKED: G. COLEMAN
DATE: JULY 18, 2010

REVISIONS
A DATE

BIG BASIN REDWOODS STATE PARK
WATER SYSTEM IMPROVEMENTS
WATER TREATMENT PLANT
PIPING DETAILS

DRAWING NO.
XXXXXX.XXX

SHEET NO.
C5

8 OF XX



ACQUISITION & DEVELOPMENT DIVISION
One Capitol Mall
Sacramento, CA 95834-0029



APPROVED FOR THE PROJECT BY
DATE: JULY 15, 2015
FORWARDED BY: DATE: _____

APPROVED FOR THE PROJECT BY
DATE: JULY 15, 2015
FORWARDED BY: DATE: _____

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DATE: JULY 15, 2015
FORWARDED BY: DATE: _____

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APPROVED FOR THE PROJECT BY
DATE: JULY 15, 2015
FORWARDED BY: DATE: _____

APPROVED FOR THE PROJECT BY
DATE: JULY 15, 2015
FORWARDED BY: DATE: _____

PANEL "PP-2"									
LOCATION: WTP BUILDING ENCLOSURE SURFACE NO RATING: 10 KVA						240/120 VOLTS, 3 PHASE, 4 WIRE 225 AMP BUS 200 AMP MAIN BREAKER			
NO.	DESCRIPTION	LOAD VA	PHASE A B C	AMPS PHASE	WIRE SIZE	NO.	DESCRIPTION	LOAD VA	PHASE A B C
1	MEMORIAL PLANT PNL 220	1800	7.5	20/3	1	2	30/3	8.0	1200
2		1800	7.5	20/3	2	3	30/3	8.0	1200
3		1800	7.5	20/3	3	4	30/3	8.0	1200
4		1800	7.5	20/3	4	5	30/3	8.0	1200
5		1800	7.5	20/3	5	6	30/3	8.0	1200
6		1800	7.5	20/3	6	7	30/3	8.0	1200
7		1800	7.5	20/3	7	8	30/3	8.0	1200
8		1800	7.5	20/3	8	9	30/3	8.0	1200
9		1800	7.5	20/3	9	10	30/3	8.0	1200
10		1800	7.5	20/3	10	11	30/3	8.0	1200
11		1800	7.5	20/3	11	12	30/3	8.0	1200
12		1800	7.5	20/3	12	13	30/3	8.0	1200
13		1800	7.5	20/3	13	14	30/3	8.0	1200
14		1800	7.5	20/3	14	15	30/3	8.0	1200
15		1800	7.5	20/3	15	16	30/3	8.0	1200
16		1800	7.5	20/3	16	17	30/3	8.0	1200
17		1800	7.5	20/3	17	18	30/3	8.0	1200
18		1800	7.5	20/3	18	19	30/3	8.0	1200
19		1800	7.5	20/3	19	20	30/3	8.0	1200
20		1800	7.5	20/3	20	21	30/3	8.0	1200
21		1800	7.5	20/3	21	22	30/3	8.0	1200
22		1800	7.5	20/3	22	23	30/3	8.0	1200
23	CLIMATE AL. & CL. PLANT	600	3.1	20/3	23	24	30/3	8.0	1200
24	WTP HPI	600	3.1	20/3	24	25	30/3	8.0	1200
25	WATER MAIN BUS	600	3.1	20/3	25	26	30/3	8.0	1200
26	WATER DRAIN	600	3.1	20/3	26	27	30/3	8.0	1200
27	WATER DRAIN	600	3.1	20/3	27	28	30/3	8.0	1200
28	WATER DRAIN	600	3.1	20/3	28	29	30/3	8.0	1200
29	WATER DRAIN	600	3.1	20/3	29	30	30/3	8.0	1200
30	WATER DRAIN	600	3.1	20/3	30	31	30/3	8.0	1200
31	WATER DRAIN	600	3.1	20/3	31	32	30/3	8.0	1200
32	WATER DRAIN	600	3.1	20/3	32	33	30/3	8.0	1200
33	WATER DRAIN	600	3.1	20/3	33	34	30/3	8.0	1200
34	WATER DRAIN	600	3.1	20/3	34	35	30/3	8.0	1200
35	WATER DRAIN	600	3.1	20/3	35	36	30/3	8.0	1200
36	WATER DRAIN	600	3.1	20/3	36	37	30/3	8.0	1200
37	WATER DRAIN	600	3.1	20/3	37	38	30/3	8.0	1200
38	WATER DRAIN	600	3.1	20/3	38	39	30/3	8.0	1200
39	WATER DRAIN	600	3.1	20/3	39	40	30/3	8.0	1200
40	WATER DRAIN	600	3.1	20/3	40	41	30/3	8.0	1200
41	WATER DRAIN	600	3.1	20/3	41	42	30/3	8.0	1200
42	WATER DRAIN	600	3.1	20/3	42	43	30/3	8.0	1200
43	WATER DRAIN	600	3.1	20/3	43	44	30/3	8.0	1200
44	WATER DRAIN	600	3.1	20/3	44	45	30/3	8.0	1200
45	WATER DRAIN	600	3.1	20/3	45	46	30/3	8.0	1200
46	WATER DRAIN	600	3.1	20/3	46	47	30/3	8.0	1200
47	WATER DRAIN	600	3.1	20/3	47	48	30/3	8.0	1200
48	WATER DRAIN	600	3.1	20/3	48	49	30/3	8.0	1200
49	WATER DRAIN	600	3.1	20/3	49	50	30/3	8.0	1200
50	WATER DRAIN	600	3.1	20/3	50	51	30/3	8.0	1200
51	WATER DRAIN	600	3.1	20/3	51	52	30/3	8.0	1200
52	WATER DRAIN	600	3.1	20/3	52	53	30/3	8.0	1200
53	WATER DRAIN	600	3.1	20/3	53	54	30/3	8.0	1200
54	WATER DRAIN	600	3.1	20/3	54	55	30/3	8.0	1200
55	WATER DRAIN	600	3.1	20/3	55	56	30/3	8.0	1200
56	WATER DRAIN	600	3.1	20/3	56	57	30/3	8.0	1200
57	WATER DRAIN	600	3.1	20/3	57	58	30/3	8.0	1200
58	WATER DRAIN	600	3.1	20/3	58	59	30/3	8.0	1200
59	WATER DRAIN	600	3.1	20/3	59	60	30/3	8.0	1200
60	WATER DRAIN	600	3.1	20/3	60	61	30/3	8.0	1200
61	WATER DRAIN	600	3.1	20/3	61	62	30/3	8.0	1200
62	WATER DRAIN	600	3.1	20/3	62	63	30/3	8.0	1200
63	WATER DRAIN	600	3.1	20/3	63	64	30/3	8.0	1200
64	WATER DRAIN	600	3.1	20/3	64	65	30/3	8.0	1200
65	WATER DRAIN	600	3.1	20/3	65	66	30/3	8.0	1200
66	WATER DRAIN	600	3.1	20/3	66	67	30/3	8.0	1200
67	WATER DRAIN	600	3.1	20/3	67	68	30/3	8.0	1200
68	WATER DRAIN	600	3.1	20/3	68	69	30/3	8.0	1200
69	WATER DRAIN	600	3.1	20/3	69	70	30/3	8.0	1200
70	WATER DRAIN	600	3.1	20/3	70	71	30/3	8.0	1200
71	WATER DRAIN	600	3.1	20/3	71	72	30/3	8.0	1200
72	WATER DRAIN	600	3.1	20/3	72	73	30/3	8.0	1200
73	WATER DRAIN	600	3.1	20/3	73	74	30/3	8.0	1200
74	WATER DRAIN	600	3.1	20/3	74	75	30/3	8.0	1200
75	WATER DRAIN	600	3.1	20/3	75	76	30/3	8.0	1200
76	WATER DRAIN	600	3.1	20/3	76	77	30/3	8.0	1200
77	WATER DRAIN	600	3.1	20/3	77	78	30/3	8.0	1200
78	WATER DRAIN	600	3.1	20/3	78	79	30/3	8.0	1200
79	WATER DRAIN	600	3.1	20/3	79	80	30/3	8.0	1200
80	WATER DRAIN	600	3.1	20/3	80	81	30/3	8.0	1200
81	WATER DRAIN	600	3.1	20/3	81	82	30/3	8.0	1200
82	WATER DRAIN	600	3.1	20/3	82	83	30/3	8.0	1200
83	WATER DRAIN	600	3.1	20/3	83	84	30/3	8.0	1200
84	WATER DRAIN	600	3.1	20/3	84	85	30/3	8.0	1200
85	WATER DRAIN	600	3.1	20/3	85	86	30/3	8.0	1200
86	WATER DRAIN	600	3.1	20/3	86	87	30/3	8.0	1200
87	WATER DRAIN	600	3.1	20/3	87	88	30/3	8.0	1200
88	WATER DRAIN	600	3.1	20/3	88	89	30/3	8.0	1200
89	WATER DRAIN	600	3.1	20/3	89	90	30/3	8.0	1200
90	WATER DRAIN	600	3.1	20/3	90	91	30/3	8.0	1200
91	WATER DRAIN	600	3.1	20/3	91	92	30/3	8.0	1200
92	WATER DRAIN	600	3.1	20/3	92	93	30/3	8.0	1200
93	WATER DRAIN	600	3.1	20/3	93	94	30/3	8.0	1200
94	WATER DRAIN	600	3.1	20/3	94	95	30/3	8.0	1200
95	WATER DRAIN	600	3.1	20/3	95	96	30/3	8.0	1200
96	WATER DRAIN	600	3.1	20/3	96	97	30/3	8.0	1200
97	WATER DRAIN	600	3.1	20/3	97	98	30/3	8.0	1200
98	WATER DRAIN	600	3.1	20/3	98	99	30/3	8.0	1200
99	WATER DRAIN	600	3.1	20/3	99	100	30/3	8.0	1200
100	WATER DRAIN	600	3.1	20/3	100	101	30/3	8.0	1200
101	WATER DRAIN	600	3.1	20/3	101	102	30/3	8.0	1200
102	WATER DRAIN	600	3.1	20/3	102	103	30/3	8.0	1200
103	WATER DRAIN	600	3.1	20/3	103	104	30/3	8.0	1200
104	WATER DRAIN	600	3.1	20/3	104	105	30/3	8.0	1200
105	WATER DRAIN	600	3.1	20/3	105	106	30/3	8.0	1200
106	WATER DRAIN	600	3.1	20/3	106	107	30/3	8.0	1200
107	WATER DRAIN	600	3.1	20/3	107	108	30/3	8.0	1200
108	WATER DRAIN	600	3.1	20/3	108	109	30/3	8.0	1200
109	WATER DRAIN	600	3.1	20/3	109	110	30/3	8.0	1200
110	WATER DRAIN	600	3.1	20/3	110	111	30/3	8.0	1200
111	WATER DRAIN	600	3.1	20/3	111	112	30/3	8.0	1200
112	WATER DRAIN	600	3.1	20/3	112	113	30/3	8.0	1200
113	WATER DRAIN	600	3.1	20/3	113	114	30/3	8.0	1200
114	WATER DRAIN	600	3.1	20/3	114	115	30/3	8.0	1200
115	WATER DRAIN	600	3.1	20/3	115	116	30/3	8.0	1200
116	WATER DRAIN	600	3.1	20/3	116	117	30/3	8.0	1200
117	WATER DRAIN	600	3.1	20/3	117	118	30/3	8.0	1200
118	WATER DRAIN	600	3.1	20/3	118	119	30/3	8.0	1200
119	WATER DRAIN	600	3.1	20/3	119	120	30/3	8.0	1200
120	WATER DRAIN	600	3.1	20/3	120	121	30/3	8.0	1200
121	WATER DRAIN	600	3.1	20/3	121	122	30/3	8.0	1200
122	WATER DRAIN	600	3.1	20/3	122	123	30/3	8.0	1200
123	WATER DRAIN	600	3.1	20/3	123	124	30/3	8.0	1200
124	WATER DRAIN	600	3.1	20/3	124	125	30/3	8.0	1200
125	WATER DRAIN	600	3.1	20/3	125	126	30/3	8.0	1200
126	WATER DRAIN	600	3.1	20/3	126	127	30/3	8.0	1200
127	WATER DRAIN	600	3.1	20/3	127	128	30/3	8.0	1200
128	WATER DRAIN	600	3.1	20/3	128	129	30/3	8.0	1200
129	WATER DRAIN	600	3.1	20/3	129	130	30/3	8.0	1200
130	WATER DRAIN	600	3.1	20/3	130	131	30/3	8.0	1200
131	WATER DRAIN	600	3.1	20/3	131	132	30/3	8.0	1200
132	WATER DRAIN	600	3.1	20/3	132	133	30/3	8.0	1200
133	WATER DRAIN	600	3.1	20/3	133	134	30/3	8.0	1200
134	WATER DRAIN	600	3.1	20/3	134	135	30/3	8.0	1200
135	WATER DRAIN	600	3.1	20/3	135	136	30/3	8.0	1200
136	WATER DRAIN	600	3.1	20/3	136	137	30/3	8.0	1200
137	WATER DRAIN	600	3.1	20/3	137	138	30/3	8.0	1200
138	WATER DRAIN	600	3.1	20/3	138	139	30/3	8.0	1200
139	WATER DRAIN	600	3.1	20/3	139	140	30/3	8.0	1200
140	WATER DRAIN	600	3.1	20/3	140	141	30/3	8.0	1200
141	WATER DRAIN	600	3.1	20/3	141	142	30/3	8.0	1200
142	WATER DRAIN	600	3.1	20/3	142	143	30/3	8.0	1200
143	WATER DRAIN	600	3.1	20/3	143	144	30/3	8.0	1200

P&ID ABBREVIATIONS			
SWITCH IDENTIFIER			
F/R	FORWARD/REVERSE	OPN	OPEN
HA	HAND-OFF-AUTO	CLS	CLOSE
HA	HAZ - CYC - RESTART	VAL	VALVE
LOK	LOCK OUT STOP	S/O	START / STOP
L/B	LOCAL / REMOTE	N	PERCENT ADJUSTMENT
MA	MANUAL - OFF-AUTO		
OPN	OPEN - CLOSE-AUTO		
O/C	OFF / ON - BLOCK		
O/O	ON / OFF		



ACQUISITION &
DEVELOPMENT DIVISION
One Capitol Mall
Sacramento, CA
95814-3229

CA 0666 STATEMENTS MANUALLY APPROVED

Approval of Obsolete does not authorize or require the release of information from the project to the public. The project is subject to the requirements of the project's environmental impact statement. The project is subject to the requirements of the project's environmental impact statement. The project is subject to the requirements of the project's environmental impact statement.

Reviewed by: State

DESIGNATION #

Reviewed by: DHS

APPROVED BY (NAME, TITLE, AND SIGNATURE)

DESIGNED BY: T. FRISCH

DRAWN BY: B. WOODMAN

CHECKED BY: SA FRISCH

DATE: JULY 19, 1995

REVISIONS

DATE

P&ID SYMBOLS AND ABBREVIATIONS

DRAWING NO.
XXXXX.XXX

SHEET NO.
11

17 OF XX

