Staff Report to the Planning Commission

Application Number: 05-0145

Applicant: City of Watsonville
Owners: City of Watsonville, Tom Mine & Sons
APN's: 052-571-01,-8,-09, 052-581-12

Agenda Date: October 26,2005
Agenda Item #: 8
Time: After 9:00 a.m.

Project Description: Proposal to modify the City of Watsonville's Wastewater Treatment Plant (WWTP) to accommodate a tertiary-level treatment Recycled Water Facility (RWF), which would be used solely for the provision of treated wastewater for supplemental irrigation in coastal portions of the Pajaro Valley.

Location: Located at the end of Panabaker Lane, off West Beach Road, at 401 Panabaker Lane in Watsonville.

Supervisorial District: Second District (District Supervisor: Pine)

Permits Required: Coastal Development Permit, Lot Line Adjustment, Riparian Exception.

Staff Recommendation:

- Approval of Application 05-0145, based on the attached findings and conditions.
- Recommendation to the Board of Supervisors adopt a Statement of Overriding Consideration regarding loss of prime farmland (Exhibit D) and CEQA Findings (Exhibit B).

Exhibits

A. Project plans
B. Findings
C. Conditions of Approval
D. Statement of Overriding Considerations
E. PVWMA's CEQA Documentation (Resolutions certifying the Revised Basin Management Plan EIR and Addendum No. 3, including Statement of Overriding Considerations)
F. APAC staff report and Minutes of 9-15-05
G. Visual simulation, RMC
H. Program Statement from the City of Watsonville
I. Proposed Policy Changes
J. Zoning Designations
K. General Plan Designations

Parcel Information

Parcel Sizes:	City of Watsonville site APN 052-571-08 – 56.65 acres; Mine sites APN 052-052-571-01 – 84.5 acres, 052-581-12 – 16.47 acres, and 052-571-09 – 14.48 acres.
Existing Land Use - Parcel:	Wastewater treatment plant, commercial agriculture
Existing Land Use - Surrounding:	Commercial Agriculture
Project Access:	West Beach Road, ocean side of Highway One
Planning Area:	San Andreas
Land Use Designations:	P (Public Facilities) & A (Agriculture)
Zone Districts:	PF (Public Facilities) & CA (Commercial Agriculture) (Commercial Agriculture)
Coastal Zone:	_x_ Inside __ Outside
Appealable to Calif. Coastal Comm.	_x_ Yes __ No

Environmental Information

Geologic Hazards:	Mapped/portions in floodway/floodplain
Soils:	Clear Lake clay, Fluvaquentic Haploxerolls-Aquic Xerofluvents
Fire Hazard:	Not a mapped constraint
Slopes:	0-15 percent
Env. Sen. Habitat:	Riparian corridor
Grading:	Grading at ring levee proposed
Tree Removal:	No trees proposed to be removed
Scenic:	Mapped resource/Hwy 1, San Andreas, Beach Road
Drainage:	Existing drainage adequate
Traffic:	No significant impact
Roads:	Existing roads adequate
Parks:	Existing park facilities adequate
Archaeology:	Not mapped/no physical evidence on site

Services Information

Urban/Rural Services Line:	__ Inside _X_ Outside
Water Supply:	City of Watsonville
Sewage Disposal:	City of Watsonville
Fire District:	Pajaro Valley Fire Protection District
Drainage District:	Zone 7 Flood Control/Water Conservation District

Project Description

The water recycling project proposed by the City of Watsonville and PVWMA consists of a new Recycled Water Facility (RWF) to be located on unincorporated County land adjacent to the existing Watsonville Wastewater Treatment Plant (WWTP), which is located on an island of incorporated City of Watsonville land west of the City, at the end of Panabaker Lane south of Beach Road, and adjacent to the Pajaro River (see Exhibit F for location map). The RWF project would be constructed adjacent to the existing WWTP in order to consolidate operations at one site and reduce costs of pumping the existing plant effluent to another location and then back to the coastal fannland. Operating a RWF at another location would also result in duplication of staff.

The RWF would provide tertiary-level treatment, initially of up to 4,000 acre-feet per year, of the secondary-leveltreated effluent coming from the existing WWTP. The tertiary-treated effluent then would be blended with clean water pumped from more inland portions of the basin and transported via PVWMA's new Coastal Distribution System of irrigation water pipelines to fields near the coastline where saltwater intrusion into existing agricultural wells is occuring. The resulting blended mix would be solely used for crop imgation in the coastal area of Pajaro Valley (including the San Andreas Road area and the Trafton/Springfield Road area in Monterey County), thus reducing the need to pump groundwater in that area and reducing seawater intrusion into the groundwater basin. The 4,000 acre-feet of water is enough to irrigate approximately 2,000 acres of farmland.

While the existing WWTP is located on an island of incorporated City of Watsonville land, the adjacent areas both to the east and west of the WWTP that are proposed to be used for the RWF are on unincorporated County land that has a Commercial Agricultural (CA) zoning designation. Approximately 14.1 acres of prime agricultural land would be required to be converted from cultivation to accommodate the new RWF according the City. Three reconfigured parcels would result from proposed lot line adjustments to the four existing parcels. The total land area to be added to the WWTP site would be approximately 34.4 acres. However 20.3 of these acres would consist of a portion of the Pajaro River levee and the riparian and riverbed areas within the levees, with the remaining 14.1 acres consisting of prime agricultural soils. Of this remaining 14.1 acres, the City and PVWMA state that approximately 12.8 acres consist of currently farmed land (i.e., "Type 3" agricultural land - defined as land containing prime agricultural soils located within the Coastal Zone) that would have to be permanently converted from crop production, since approximately 1.3 acres of the site is currently used for farm roads.

The project includes RWF infrastructure such as storage tanks, flocculating clarifiers, pump stations, disinfection facilities and filters for Phases 1 and 2 (see Program Statement, Exhibit H). The existing ring levee surrounding the treatment plant would be modified to include the RWF expansion. An 18,000 square foot Operations Center Facility is proposed (Exhibits A and G). That building is proposed to include a two-story operations wing of 13,000 square feet of offices, workstations and conference rooms, a single-story water quality testing laboratory wing of 4,000 square feet, and a single-story employee locker wing of 1,000 square feet. The facility will house the current City of Watsonville WWTF staff of 27 plus 2 new staff for the RWF. Four PVWMA coastal distribution system staff will be included at this location, for a total of 34 employees. The operations facility is being designed to meet the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) gold standard. It will serve as a demonstration facility for energy efficiency and environmental sustainability. The current WWTF currently hosts about 1,200 visitors per year. It is expected that expanded educational opportunities will be provided, such as interpretive displays of the water cycle and the importance of water recycling, water conservation, agricultural sustainability, the impact of humans on the watershed and what individuals can do to help protect it, as well as the green building principles and materials used in the operations facility building. Improvement of an existing farm road parallel to Panabaker Lane is proposed to access the Operations Center.

The improvements are structured in three phases (Exhibit H). Phase One components are required for the immediate project goal of providing 4,000 acre-feet of recycled water per year. Phase Two of the project includes additional components that could provide a total of 7,000 acre-feet. Phase Three would include additional water treatment. The recycled water will require blending with a fresh water supply having a lower total dissolved solids (TDS) or further treatment in order to achieve the water quality objective. If the PVWMA import pipeline project is not constructed, an alternative

means of reducing the salinity in the recycled water to an acceptable level will be required. This would require additional treatment to remove the nitrates prior to being used for irrigation. It is proposed that the RWF be designed and constructed to accommodate the addition of nitrification and de-nitrification facilities to the treatment process if necessary in the future. A number of Phase Three components would need to be integrated into the middle of the treatment process, and have been incorporated into the project design to facilitate their future construction while minimizing overall space requirements. Locating these components in other areas of the project site would require additional piping and pump stations and would result in increased energy use and land area.

The proposed Recycled Wastewater Facility project would require reconfiguration of the three Mine & Sons parcels and the WWTP parcel to enlarge the WWTP parcel to the east and west and thus allow construction of RWF on the WWTP site. The proposed lot line adjustments will result in the transfer of approximately 34.41 acres from APN's 051-571-01, 052-571-09 (Mine & Sons) and 052-581-12 (an agricultural parcel owned by the City of Watsonville and leased for farming) to APN 052-571-08 (WWTP site). The net effect of the transfer is to provide additional land for the RWF and to consolidate the Mine & Sons agricultural holdings. No new parcels will be created as a result of this application. There are four parcels currently and there will be three reconfigured parcels as a result of this permit.

In addition to the Lot Line Adjustment, the proposal includes a Coastal Development Permit for the construction of the proposed RWF jointly developed by the City of Watsonville and PVWMA. The RWF would allow the City to initially produce up to 4,000 acre feet of recycled water per year to local farmers, enough to irrigate approximately 2,000 acres of farmland near the coast. Plans include the construction of an 18,000 square foot Operations Center for offices, laboratories and lockers and a new access road parallel to Panabaker Lane, parking lot, trail and landscaping. Modifications to the ring levee surrounding the existing WWTP are proposed. A new operating plant would be installed for the recycled water processing as described in the attached Program Statement (Exhibit H).

History

The proposed Watsonville Recycled Water Facility (RWF) Project is a part of the regional effort being made by the City of Watsonville and the Pajaro Valley Water Management Agency (PVWMA) to ensure a sustainable supply of water for the Pajaro Valley area. PVWMA's 2002 Revised Basin Management Plan (BMP), which addresses Pajaro Valley's severe groundwater overdraft problem, proposes a number of water supply augmentation projects to reduce the impacts of seawater intrusion caused by over pumping the Pajaro Valley area aquifers. Coastal Development Permits 99-0335, 02-0596 and 04-0258 have been approved for construction of three of the projects proposed in the BMP: (1) the Harkins Slough Recharge and Water Distribution project, (2) the retrofit and construction of wells further inland from the coast and provision of connections to PVWMA's Integrated Coastal Distribution System pipeline, and **(3)** the Integrated Coastal Water Distribution System and Central Valley Project import pipeline.

The RWF project was reviewed by the Santa Cruz County Agricultural Policy Advisory Commission (APAC) at a noticed public hearing on September 15, 2005 (see Exhibit F for minutes). APAC supported the project in concept with the understanding that the recycled water be used to sustain agriculture in the Pajaro Valley, and that a condition that the groundwater offset provided by the supplemental irrigation supply not be counted as being available to support new urban development.

Project Setting

The proposed project is located in the San Andreas Planning Area, west of Highway One and immediately adjacent to the Pajaro River at 401 Panabaker Lane in Watsonville. Assessor's Parcel Number 052-571-08, currently entirely within the city limits of the City of Watsonville, is the site of the existing Watsonville Wastewater Treatment Plant (WWTP).

APN's 052-571-01, & -09 (owned by Tom Mine & Sons) and 052-581-12 (owned by the City of Watsonville), are commercial agricultural fields within Santa Cruz County jurisdiction. These three parcels surround the WWTP, and taken as a single unit are roughly bounded by the Pajaro River to the south and West Beach Road to the north (Exhibit A). The surrounding area is completely comprised of commercial agricultural uses, from the Watsonville city limits at Lee Road (near Highway One) to the ocean, with the exception of the Pajaro Dunes residential development. The south side of the Pajaro River in Monterey County is also commercial agriculture.

County Code & General Plan/Local Coastal Program (LCP) Consistency

The parcel containing the existing Watsonville Wastewater Treatment Plant (WWTP), (APN 052-571-08) comprises an island of incorporated City land surrounded to the north, east and west by unincorporated County land, and on the south by the Pajaro River and the Monterey County line. As a result of the proposed lot line adjustment, this parcel would expand to include some unincorporated land on the east and west sides of the existing parcel boundary, creating a parcel that is partially inside and partially outside Watsonville City limits. The proposed RWF would be located on a portion of the expanded APN 052-571-08 that is on unincorporated County land and which has an "Agricultural" ("A") General PladLCP designation and a "Commercial Agricultural" ("CA") zoning designation.

Consistency with General Plan/LCP:

The recycled water facility (RWF) project is not currently consistent with the allowed uses of the "A" (Agriculture) General Plan designation. However, it will be consistent if the General Plan/LCP amendment that is being proposed in conjunction with this project is approved by the County and the Coastal Commission. This amendment to General Plan/LCP Policies 5.13.6 (Conditional Uses on CA-Zoned Lands) and 5.13.7 (Agriculturally Oriented Structures) would designate recycled water facilities that are used solely in support of agriculture as a type of agricultural use, and thus an allowed use on agricultural land. (See Exhibit I).

The proposed Watsonville RWF project would currently be consistent with General Plan/LCP Objective 5.8b ("Overdrafted Groundwater Basins"), which requires the County to "act directly and coordinate and work with relevant water purveyors and agencies to eliminate long-term groundwater overdraft in all water basins where overdraft has been documented." Program "c" under that objective requires the County to "work with water purveyors and water management agencies to augment natural groundwater recharge where it is environmentally and fiscally acceptable." Moreover, Program "h" under that objective requires the County to "continue to work with the Pajaro Valley Water Management Agency to eliminate overdraft and salt water intrusion through implementation of their Basin Management Plan."

The proposed RWF would also be consistent with General Plan/LCP Policy 5.17.9, which requires

sewage treatment and solid waste disposal projects to utilize sewage and solid waste reclamation and conversion techniques to provide resource conservation and net energy benefits to the County. It would also be consistent with General Plan Program 5.17.p which requires that the County cooperate with other local government agencies, special districts and contiguous counties to explore (and implement)joint efforts to develop sewage and solid waste reclamation and conservation alternatives which will provide a net energy benefit to the County and conserve resources.

The proposed RWF project is also consistent with General Plan/LCP Water Supply Policy 7.18.5 to promote water management in the Pajaro Valley groundwater basin, and Policy 7.18.7 to encourage the reuse and recycling of water where feasible. Program 7.18.b requires the establishment of an active public education program and Program 7.18.j requires review and evaluation of proposals by water agencies to develop supplemental sources of water supply (such as wastewater reclamation and water conservation)to reverse overdraft and seawater intrusion. General Plan Policy 7.22.2 requires support for the concept of building and upgrading sewage treatment facilities capable of producing reusable water for reclamation and agricultural use within the Pajaro Valley.

The proposed RWF is consistent with General Plan/LCP visual resource protection policies ,in that the proposed RWF plant is sited and designed to be visually compatible, in scale with, and integrated with the agricultural character of the surrounding area by screening one of the large existing settling tanks with a new operations building with an exterior finish of cedar, split face cement block in neutral earth tone colors (as viewed fiom Highway 1 - See visual simulation, Exhibit G). The site is within the scenic corridor of Highway One, San Andreas Road and West Beach Road. The visual impact of the proposal is mitigated by landscaping and the use of natural materials and colors, consistent with General Plan/LCP policy 5.10.11.

The RWF project site is not located between the shoreline and the first public road, and is not identified as a priority coastal acquisition site in the General Plan/LCP. Consequently, the proposed RWF project will not interfere with public access to the beach, ocean, or other nearby body of water. Moreover, public access to the Pajaro River levee (north side) is planned to be made available fiom the RWF site. However, General Plan/LCP policies 7.7.27 & 28 require that access ways adjacent to agricultural lands be minimized in number to minimize any potential negative impact to the agricultural operations, and General Plan/LCP policy 5.15.4 requires minimizing the amount of impervious surfaces. The proposed new RWF entrance road would be parallel to Panabaker Lane and is in the location of an existing farm road. The new paved road would remain available for agricultural use. The new road is needed to provide access to the RWF for necessary weekly chemical deliveries by truck (which according to the City would not be possible via Panabaker Lane) and to allow public access. The road would be paved using permeable pavement and would be gated at Beach Road.

Consistency with Zoning Ordinance (County Code Chapter 13.10):

Because the recycled water facility (RWF) is proposed to be built upon land that is zoned Commercial Agriculture (CA), and public facilities such as the RWF are not an allowed use on CA-zoned land, the proposed RWF is not currently consistent with the Zoning Ordinance (County Code Chapter 13.10). However, it will be consistent if the County Code amendments that are being proposed as part of this project are approved by the County and the Coastal Commission. These changes, including an amendment, to County Code Section Sections 13.10.312 (Agricultural Uses Chart) and the addition of a new Section 13.10.635 (Regulations for Special Uses – Agricultural Uses), would designate recycled water facilities that are used solely in support of agriculture and

subject to specific criteria, as a type of agricultural use, and thus an allowed use on agricultural land (see Exhibit I).

Consistency with Geologic Hazards Ordinance (County Code Chapter 16.10):

Because the RWF must be built adjacent to the exiting Watsonville Wastewater Treatment Plant (WWTP) to make the proposed tertiary-level treatment of the secondary-level treated effluent of the WWTP logistically feasible and efficient, the RWF will necessarily be located within the 100-year floodplain of the Pajaro River. The project plans call for an extension of the existing ring levee surrounding the WWTP to be built around the RWF, and because this ring levee extension will involve the placement of more than 50-cubic yards of fill within the 100-year Pajaro River floodplain, the project findings for an exception to County Code Section 16.10.070.f.7 must be made, as described in Section 16.10.100. The Planning Director has determined that pursuant to Section 16.10.100.c & d the RWF meets the criteria for an exception.

Design Review

The proposed RWF complies with the requirements of the County Design Review Ordinance. The proposed project will incorporate site and architectural design features such as landscaping and the use of neutral earth tone colors to reduce the visual impact of the proposed development (and the existing WWTP) on the surrounding rural landscape. Site lighting, signage and parking lot design shall comply with County Code Sections 13.10.580.c and 13.11.074.

Riparian Exception

The project includes a pedestrian pathway that will link the facility to the riparian woodland and the Pajaro River. It will provide access to the riparian area for visitors to the RWF, which the applicants indicate will be a destination for people visiting "green" facilities, and for the public in general.

The riparian woodland along this stretch of river is generally of good quality even though it is heavily invaded by non-native species in the under story. It is especially important as a wildlife resource because of the poor quality of the riparian corridor along the Pajaro north of the Highway 1 bridge. The corridor varies in width along the frontage of the property. In places it begins within ten feet of the base of the levee, in others there are fifty feet of separation between the woodland and the levee.

The pedestrian pathway will encroach into the riparian woodland. Although specific plans for the exact location of the path have not yet been developed, the project will be conditioned such that detailed plans are required prior to exercising the permit. The plans must indicate a pathway that is surfaced with permeable material, is no greater than six feet in width, will not require tree removal, limits the disturbance envelope, and includes directional signs (outside the floodplain). The disturbance envelope must be re-vegetated with riparian species and maintained in good condition. With these conditions the path will provide an access point for the public with minimal disturbance to the riparian area. Findings for the riparian exception are included in Exhibit B.

Environmental Review

Environmental review has been completed for the proposed project pursuant to the requirements of

the California Environmental Quality Act (CEQA) with the Pajaro Valley Water Management Agency (PVWMA) serving as the lead agency. The environmental impacts of the RWF and other planned PVWMA water supply augmentation projects were evaluated in the Final Environmental Impact Report (EIR) for PVWMA's 2002 Revised Basin Management Plan (BMP), published in January 2002 (State Clearinghouse No. 2000062030). Of the Three Addenda prepared by the PVWMA subsequent to certification of the EIR, only the third Addendum is related to the project currently under review by the County. That Addendum, dated August 2005, evaluated the additional impact of increasing the RWF's encroachment onto prime agricultural land from approximately **8** to approximately 14 acres.

The EIR, along with Addendum #3, identified impacts resulting from implementation of the BMP, including construction and operation of the RWF project. The EIR outlines mitigation measures to reduce identified significant impacts to less-than-significant levels. Implementation of the mitigation measures will ensure that all potential Basin Management Plan project-related significant impacts will be mitigated to less-than-significant levels, with the exception of two significant and unavoidable impacts associated with the RWF: loss of prime agricultural land, and secondary effects of growth. In addressing these significant unavoidable impacts, the PVWMA Board of Directors adopted of a Statement of Overriding Considerations, judging that the long-term benefits to the groundwater supply and Pajaro Valley's agricultural viability outweighed the drawbacks of the significant unavoidable impacts.

One of those impacts that now must be addressed by the County is the permanent conversion of approximately 14 acres of prime agricultural soils from crop production to public facility uses. Pursuant to CEQA, as a responsible agency, the Board of Supervisors must adopt it own Statement of Overriding Considerations regarding the significant and unavoidable impact of the conversion of 14 acres of prime agricultural land, as identified in the EIR. Staff is recommending that your Commission forward a recommendation to the Board of Supervisors that includes adopting the proposed Statement of Overriding Considerations (Exhibit D) which states that the long-term benefits to the Pajaro Valley groundwater supply and agricultural viability derived from the proposed RWF outweigh the potentially significant and unavoidable impacts of the conversion of approximately 14 acres of prime agricultural land.

The other unavoidable significant impact of the RWF identified in the EIR relates to the growth that could occur if the additional water that the RWF produces were to be made available to support urban growth. The PVWMA found that secondary effects of growth that could be induced by the RWF include significant unavoidable impacts such as: loss of additional agricultural land and open space due to growth, increased demand on groundwater resources that would negate the positive effect on the groundwater overdraft problem that the RWF would otherwise have, and changes in visual character.

In its Basin Management Plan EIR, PVWMA noted that it is an agency with no authority over growth or the use of Pajaro Valley groundwater by other governmental entities, therefore it could not mitigate this potential impact. Staff recommends that any groundwater offset created by making additional water available for crop irrigation be allocated and counted solely towards combating the Pajaro Valley's ongoing groundwater overdraft problem and not be considered as water available to accommodate urban growth (see proposed Coastal Development Permit Condition of Approval IV.B. in Exhibit C). With this Condition of Approval in place, staff believes this impact would be reduced to a less than significant level, and that a Statement of Overriding Considerations does not have to be

made by the County for this impact.

Conclusion

As proposed and conditioned, and assuming all required associated policy changes are approved as proposed, the RWF project would be consistent with all applicable codes and policies of the Zoning Ordinance, the Geologic Hazards Ordinance and the General Plan/LCP. Please see Exhibit "B" ("Findings") for a complete listing of findings and evidence related to the above discussion.

Staff Recommendation

- Direct staff to forward the proposed RECOMMENDATION FOR APPROVAL of Application Number **05-0145,** based on the attached findings and conditions, to the Board of Supervisors, along with any proposed amendments and comments; and

- Recommend that the Board adopt the attached Statement of Overriding Consideration regarding loss of prime farmland and findings pursuant to CEQA.

Supplementary reports and information referred to in this report, including the PVWMA Basin Management Plan EIR, are on file and available for viewing at the Santa Cruz County Planning Department, and are hereby made a part of the administrative record for the proposed project.

The County Code and General Plan, as well as hearing agendas and additional information are available online at: www.co.santa-cruz.ca.us

Report Prepared By: _____

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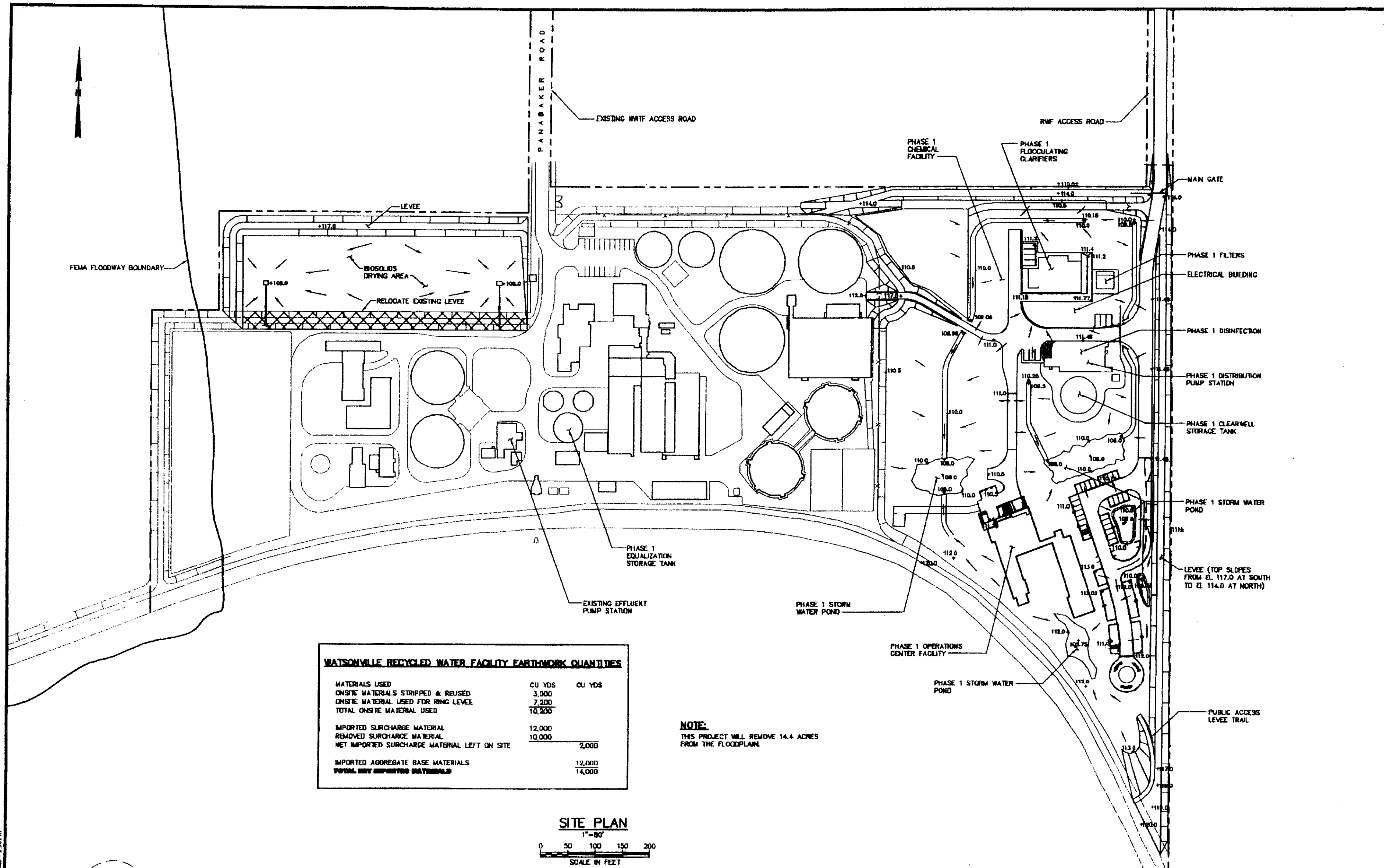
Report Reviewed By: _____

Cathy Graves
Principal Planner
Development Review
Santa Cruz County Planning Department



WATSONVILLE RECYCLED WATER FACILITY EARTHWORK QUANTITIES

MATERIALS USED	CU YDS	CU YDS
ONSITE MATERIALS STRIPPED & REUSED	3,000	
ONSITE MATERIAL USED FOR RING LEVEE	7,200	
TOTAL ONSITE MATERIAL USED	10,200	
IMPORTED SURCHARGE MATERIAL	12,000	
REMOVED SURCHARGE MATERIAL	10,000	
NET IMPORTED SURCHARGE MATERIAL LEFT ON SITE		2,000
IMPORTED AGGREGATE BASE MATERIALS		12,000
[illegible]		14,000

NOTE:
THIS PROJECT WILL REMOVE 14.4 ACRES FROM THE FLOODPLAIN.

SITE PLAN
1"=80'
0 50 100 150 200
SCALE IN FEET

PRELIMINARY

RMC Water & Environment

REV	DATE	BY	APVD	DESCRIPTION

DESIGNED M VAN HORNE
DRAWN J. MAY
CHECKED

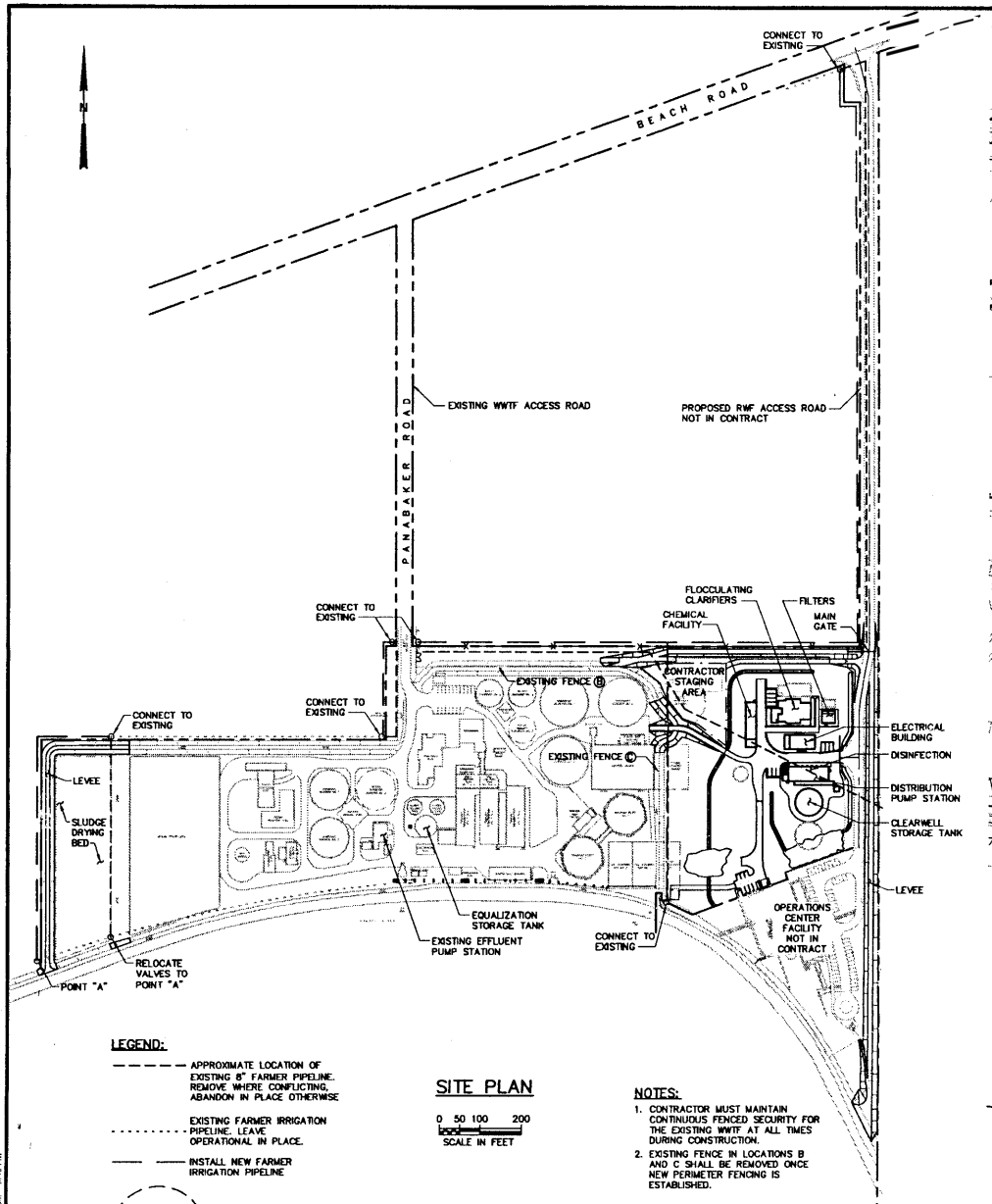
SUBMITTED: RMC PROJ ENGR C___
APPROVED: RMC ENGR C___

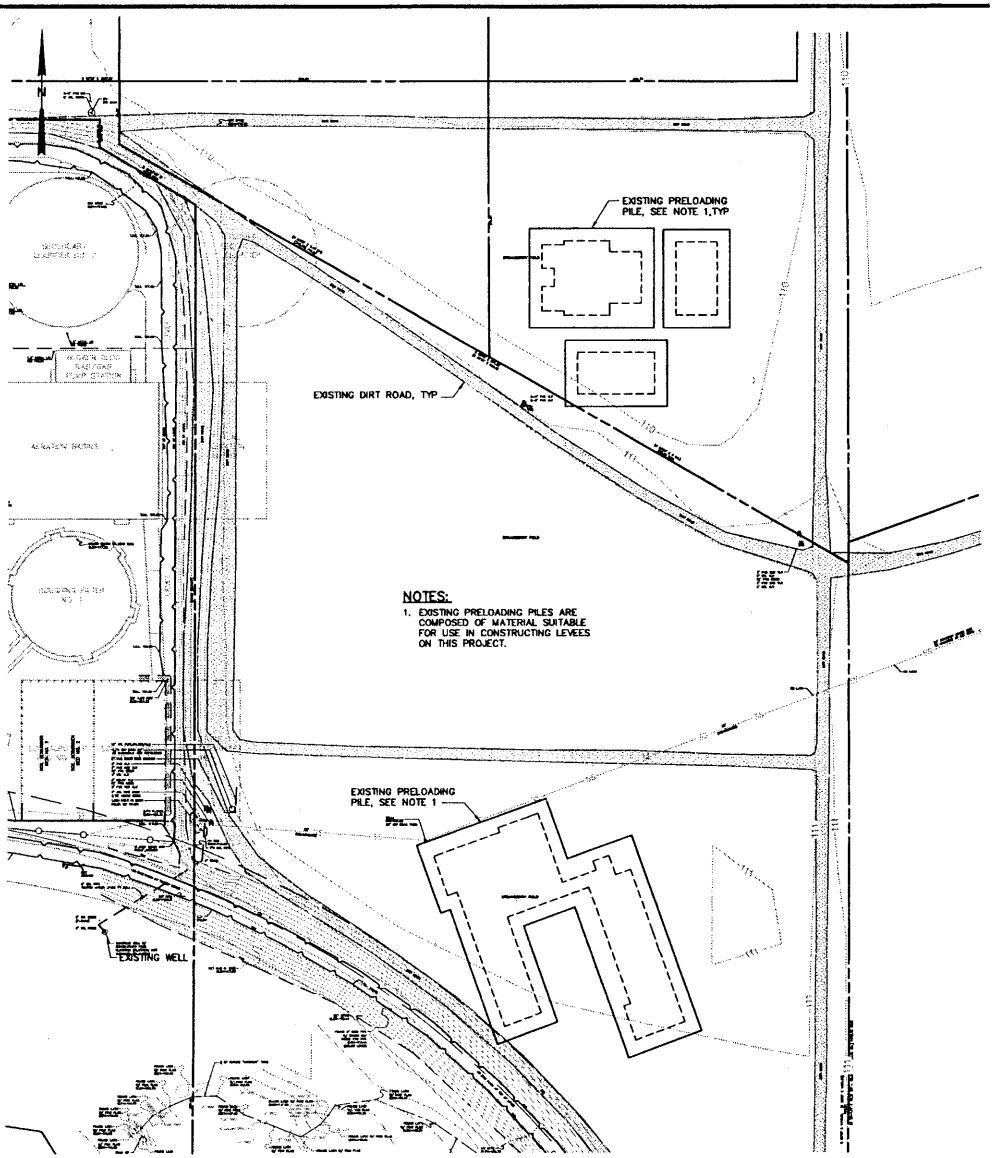
RECYCLED WATER TREATMENT FACILITY
OVERALL SITE
GRADING AND PAVING PLAN

DWG NO CC-1
SHEET NO OF X
PROJ NO 039-3
DATE OCTOBER 2005

CC-1.DWG - OCT 13 2005 - 2:56 PM

EXHIBIT A





LEGEND:

- APPROXIMATE LOCATION OF EXISTING 6" FARMER PIPELINE. REMOVE WHERE CONFLICTING, ABANDON IN PLACE OTHERWISE
- EXISTING FARMER IRRIGATION PIPELINE. LEAVE OPERATIONAL IN PLACE.
- INSTALL NEW FARMER IRRIGATION PIPELINE

SITE PLAN

0 50 100 200
SCALE IN FEET

NOTES:

1. CONTRACTOR MUST MAINTAIN CONTINUOUS FENCED SECURITY FOR THE EXISTING WWTF AT ALL TIMES DURING CONSTRUCTION.
2. EXISTING FENCE IN LOCATIONS B AND C SHALL BE REMOVED ONCE NEW PERIMETER FENCING IS ESTABLISHED.

NOTES:

1. EXISTING PRELOADING PILES ARE COMPOSED OF MATERIAL SUITABLE FOR USE IN CONSTRUCTING LEVEES ON THIS PROJECT.

EXISTING CONDITIONS PLAN

1"=50'

PRELIMINARY

6" VERIFY SCALES BAR IS ONE INCH LONG ON FULL SIZE DRAWING. IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

RMC Water & Environment

REV	DATE	BY	APVD	DESCRIPTION

DESIGNED M. VAN HORNE
DRAWN J. MAY
CHECKED X

SUBMITTED: RMC PROJ ENGR
APPROVED: RMC ENGR

RECYCLED WATER TREATMENT FACILITY

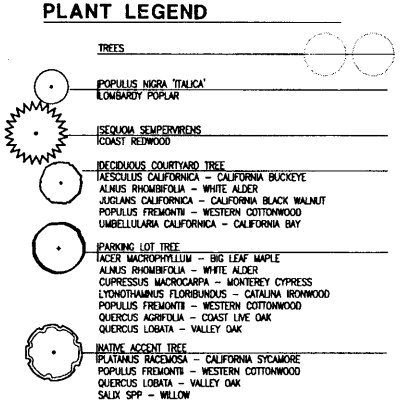
OVERALL SITE PLAN AND EXISTING CONDITIONS

DWG NO	G-7
SHEET NO	X OF X
PROJ NO	039-3
DATE	JULY 2005

EXHIBIT A

G-7.DWG - JUL 05 2005 - 3:46 PM

PLANT LEGEND



TREES

POPULUS NIGRA 'ITALICA'
LOMBARDY POPLAR

SEQUOIA SEMPERVIRENS
COAST REDWOOD

DECIDUOUS COURTYARD TREE
AESCULUS CALIFORNICA – CALIFORNIA BUCKEYE
ALNUS RHOMBIFOLIA – WHITE ALDER
JUGLANS CALIFORNICA – CALIFORNIA BLACK WALNUT
POPULUS FREMONTII – WESTERN COTTONWOOD
UMBELLULARIA CALIFORNICA – CALIFORNIA BAY

PARKING LOT TREE
ACER MACROPHYLLUM – BIG LEAF MAPLE
ALNUS RHOMBIFOLIA – WHITE ALDER
CUPRESSUS MACROCARPA – MONTEREY CYPRESS
LYONOTHAMNUS FLORIBUNDUS – CATALINA IRONWOOD
POPULUS FREMONTII – WESTERN COTTONWOOD
QUERCUS AGRIFOLIA – COAST LIVE OAK
QUERCUS LOBATA – VALLEY OAK

NATIVE ACCENT TREE
PLATANUS RACEMOSA – CALIFORNIA SYCAMORE
POPULUS FREMONTII – WESTERN COTTONWOOD
QUERCUS LOBATA – VALLEY OAK
SALIX SPP – WILLOW

AQUATIC EMERGENT

WETLAND
CAREX OBNUPTA – SLOUGH SEDGE
ELEOCHARIS MACROSTACHYA – CREEPING SPIKE RUSH
EQUISETUM ARVENSE – COMMON HORSETAIL
HORDEUM BRACHYANTHERUM – MEADOW BARLEY
JUNCUS EFFUSUS – COMMON RUSH
LEYMUS TRITICOIDES – CREEPING WILD RYE
SAGITTARIA LATIFOLIA – WAPATO
SCIRPUS ACUTUS – HARD STEM BULRUSH
SCIRPUS AMERICANA – THREE-SQUARE BULRUSH
WOODWARDIA FIMBRIATA – GIANT CHAIN FERN

EMERGENT

GRASSES
DESCHAMPSIA CAESPITOSA HOLCIFORMIS – COASTAL HAIRGRASS
LEYMUS TRITICOIDES – CREEPING WILD RYE

SHRUBS
CALYCANTHUS OCCIDENTALIS – SPICE BUSH
CORNUS SERICEA – REDTWIG DOGWOOD
LONICERA INVOLUCRATE – TWINFLOWER
MYRICA CALIFORNICA – PACIFIC WAX MYRTLE
ROSA CALIFORNICA –CALIFORNIA WILD ROSE

UPLAND

GRASSES
CALAMAGROSTIS NUTKAENSIS – PACIFIC REED GRASS
CAREX TUMULICOLA – FOOTHILL SEDGE
DESCHAMPSIA CAESPITOSA HOLCIFORMIS – COASTAL HAIRGRASS
ELYMUS GLAUCUS – BLUE WILD RYE
FESTUCA CALIFORNICA – CALIFORNIA FESCUE
FESTUCA IDAHOENSIS – IDAHO FESCUE
FESTUCA OCCIDENTALIS – WESTERN FESCUE
LEYMUS CONDENSATUS 'CANYON PRINCE' – CANYON PRINCE WILD RYE
LEYMUS TRITICOIDES – CREEPING WILD RYE
MELICA IMPERFECTA – COAST RANGE ONIONGRASS
MUHLENBERGIA RIGENS – DEER GRASS
NASSELLA CERNUA – NODDING NEEDLE GRASS
NASSELLA PULCHRA – PURPLE NEEDLE GRASS

PERENNIALS
ACHILLEA MILLEFOLIUM – COMMON YARROW
ERIGERON GLAUCUS – BEACH ASTER
ERIOGONUM ARBORESCENS – SANTA CRUZ ISLAND BUCKWHEAT
ESCHSCHOLZIA CALIFORNICA – CALIFORNIA POPPY
IRIS DOUGLASIANA – DOUGLAS IRIS
LUPINUS CHAMISSONIS – SILVER LUPINE
SALVIA CLEVELANDII – CLEVELAND SAGE
SEDUM SPATHULIFOLIUM – STONECROP
SISYRINCHIUM BELLUM – BLUE-EYED GRASS

GROUNDCOVER
ARCTOSTAPHYLOS EDMUNDSII – LITTLE SUR MANZANITA
CEANOTHUS GRISEUS 'YANKEE POINT' – YANKEE POINT CEANOTHUS
FRAGARIA CHILOENSIS – COAST STRAWBERRY

SHRUBS
ARTEMESIA CALIFORNICA – CALIFORNIA SAGEBRUSH
CEANOTHUS 'JOYCE COULTER' – JOYCE COULTER CEANOTHUS
ERIOGONUM SPP. – WILD BUCKWHEAT
FREMONTODENDRON CALIFORNICUM – COMMON FLANNEL BUSH
GAULTHERA SHALLON – SALAL
HETEROMELES ARBUTIFOLIA – TOYON
HOLODISCUS DISCOLOR – OCEANSPRAY
MAHONIA AQUIFOLIUM – OREGON GRAPE
MIMULUS AURANTIACUS – STICKY MONKEY FLOWER
PHYSOCARPUS CAPITATUS – NINEBARK
RHAMNUS CALIFORNICA – COFFEEBERRY
RHUS INTEGRIFOLIA – LEMONADE BERRY
RIBES SANGUINEUM GLUTINOSUM – RED FLOWERING CURRANT
SALIX LASIOLEPIS – ARROYO WILLOW
SAMBUCUS MEXICANA – BLUE ELDERBERRY

VINES
SPIRAEA DOUGLASII – DOUGLAS SPIRAEA
ARISTOLOCHIA CALIFORNICA – CALIFORNIA DUTCHMAN'S PIPE
CLEMATIS LASIANTHA – PIPE STEM
CLEMATIS LIGUSTICIFOLIA – VIRGIN'S BOWER
LONICERA HISPIDULA – CALIFORNIA HONEYSUCKLE
VITUS CALIFORNICA – CALIFORNIA GRAPE

ORNAMENTAL; PREDOMINANTLY NATIVE WITH SOME NON-NATIVE SPECIES.

LEVEE PLANTING; MIX OF NATIVE GROUNDCOVER SPECIES

FIELD GRASS; NATIVE GRASS MIX

GRASS (VOIDS IN TURFSTONE)

BAMBOO SPP.

PRELIMINARY

— VERIFY SCALES —
BAR IS ONE INCH LONG ON FULL SIZE DRAWING. IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

GreenWorks, P.C.
Landscape Architecture
Environmental Design

RMC
Water & Environment

REV	DATE	BY	APVD	DESCRIPTION

DESIGNED BW
DRAWN MG
CHECKED

SUBMITTED: RMC PROJ ENGR C___
APPROVED: RMC ENGR C___

RECYCLED WATER TREATMENT FACILITY

PLANTING LEGEND

DWG NO L-1
SHEET NO X OF X
PROJ NO 039-3
DATE JULY 2005

4081 WRF_L1_PLANT.DWG - JUL 06 2005 - 2:58 PM

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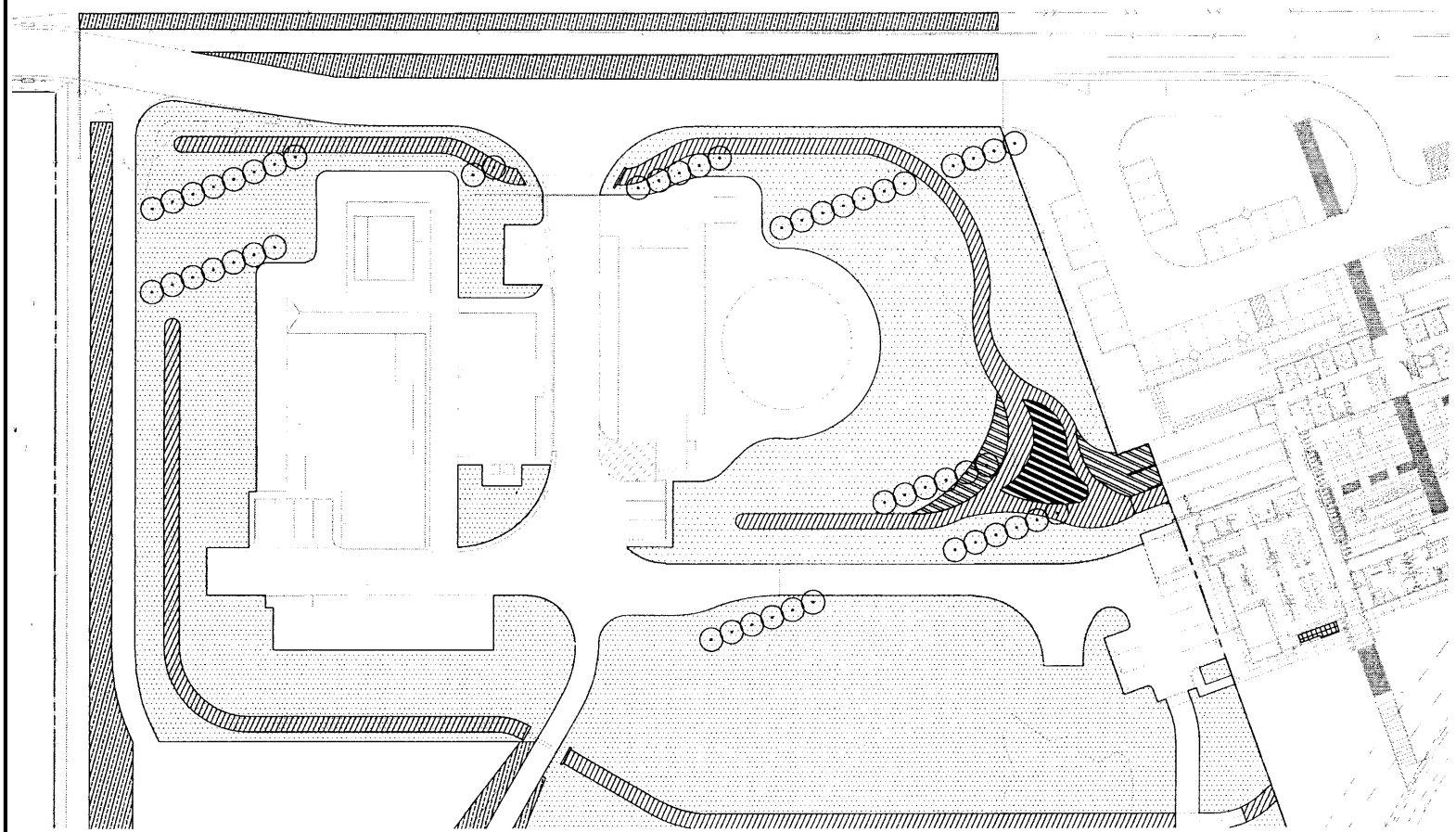
EXHIBIT A



SHEET NOTES:

1. SEE SHEET L-1 FOR PLANTING LEGEND

0 15 30 60

NORTH

PRELIMINARY

VERIFY SCALES — BAR IS ONE INCH LONG ON FULL SIZE DRAWING. IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

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GreenWorks, P.C.
Landscape Architecture
Environmental Design

RMC
Water & Environment

REV	DATE	BY	APVD	DESCRIPTION

DESIGNED BW
DRAWN MG
CHECKED

SUBMITTED:
RMC PROJ ENGR C___
APPROVED:
RMC ENGR C___

RECYCLED WATER TREATMENT FACILITY

PLANTING PLAN - EAST

DWG NO L-2
SHEET NO X OF X
PROJ NO 039-3
DATE JULY 2005

4081_WRF_L2_PLANT.DWG - JUL 06 2005 - 2:58 PM

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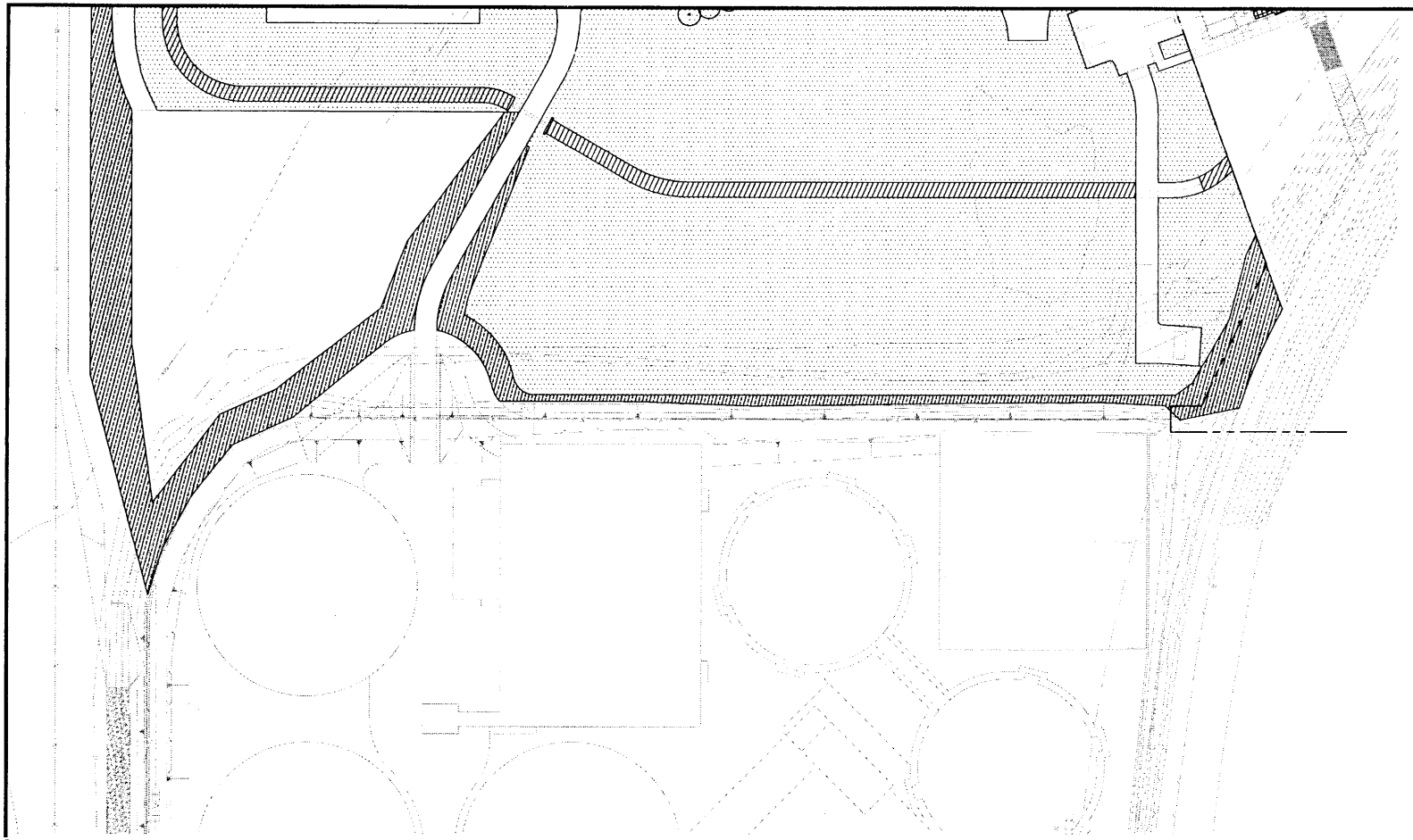
EXHIBIT A



SHEET NOTES:

1. SEE SHEET L-1 FOR PLANTING LEGEND

0 15 30 60

NORTH

PRELIMINARY

0" VERIFY SCALES 1"
BAR IS ONE INCH LONG ON FULL SIZE DRAWING. IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

GREENWORKS
GreenWorks, P.C.
Landscape Architecture
Environmental Design

RMC
Water & Environment

REV	DATE	BY	APVD	DESCRIPTION

DESIGNED BW
DRAWN MG
CHECKED

SUBMITTED: RMC PROJ ENGR C___
APPROVED: RMC ENGR C___

RECYCLED WATER TREATMENT FACILITY

PLANTING PLAN - WEST

DWG NO L-3
SHEET NO X OF X
PROJ NO 039-3
DATE JULY 2005

4081 WRF_L3_PLAN.DWG - JUL 06 2005 - 2:58 PM

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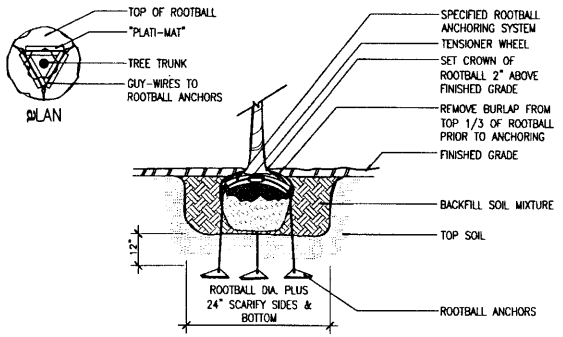
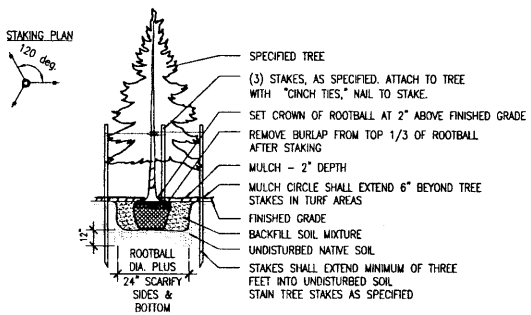
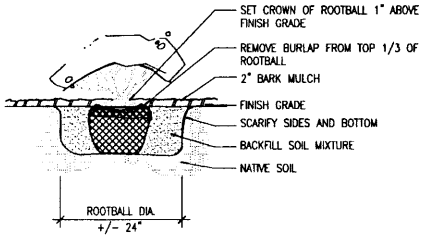
EXHIBIT A



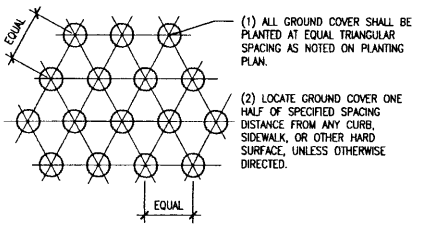
1 / L-4 DECIDUOUS TREE
SCALE: NTS



2 / L-4 CONIFER TREE
SCALE: NTS



3 / L-4 SHRUB
SCALE: NTS



4 / L-4 GROUNDCOVER
SCALE: NTS

PRELIMINARY

0" — VERIFY SCALES — 1"
BAR IS ONE INCH LONG ON FULL SIZE DRAWING. IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

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GreenWorks, P.C.
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REV	DATE	BY	APVD	DESCRIPTION

DESIGNED BW
DRAWN MG
CHECKED

SUBMITTED: RMC PROJ ENGR C____
APPROVED: RMC ENGR C____

RECYCLED WATER TREATMENT FACILITY

PLANTING DETAILS

DWG NO	L-4
SHEET NO	X OF X
PROJ NO	039-3
DATE	JULY 2005

4081_WRF_L4_DETL.DWG - JUL 06 2005 - 2:58 PM

EXHIBIT A

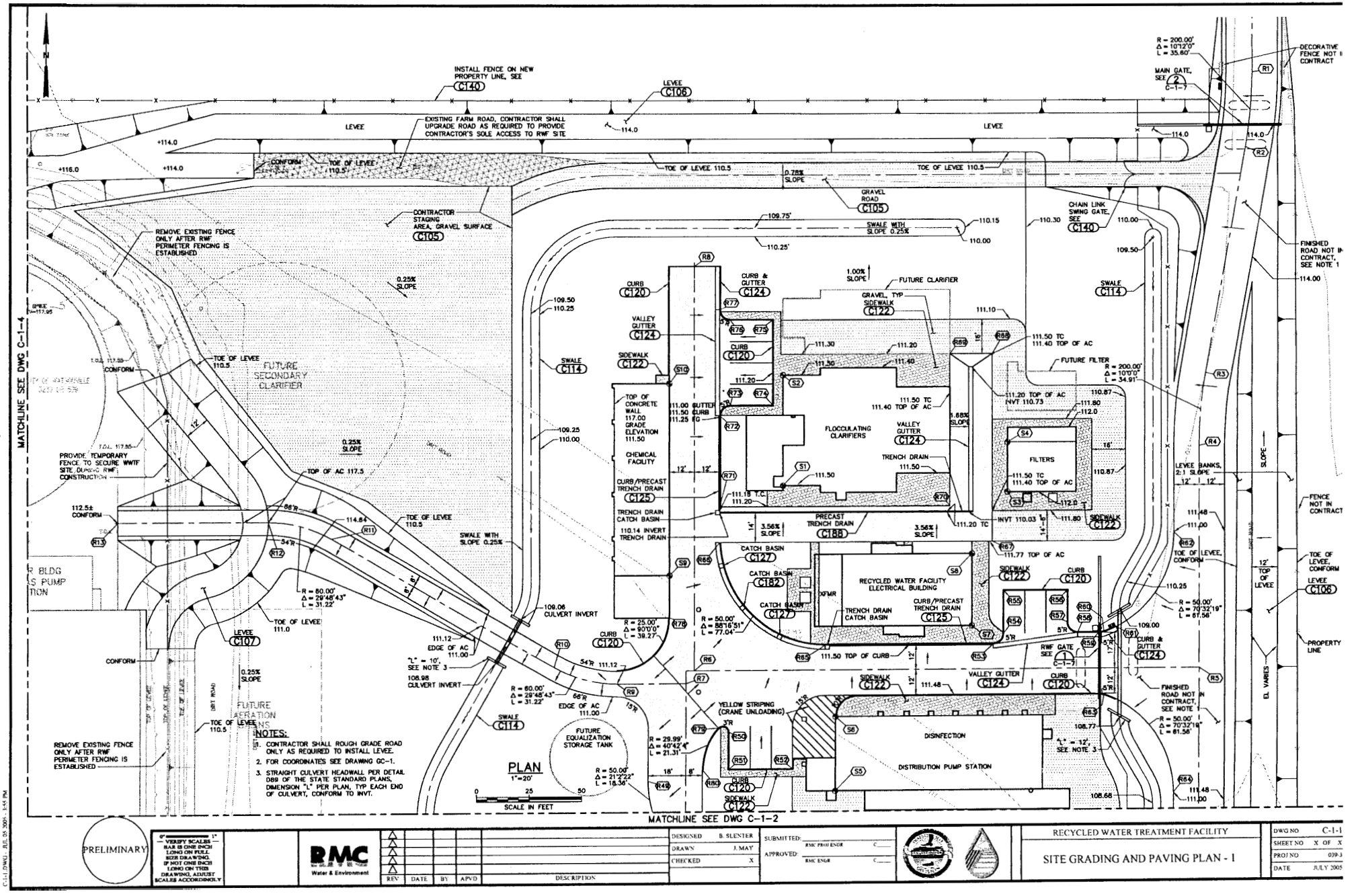
MATCHLINE SEE DWG C-1-4
MATCHLINE SEE DWG C-1-2
INSTALL FENCE ON NEW PROPERTY LINE, SEE C140
LEVEE C106
EXISTING FARM ROAD, CONTRACTOR SHALL UPGRADE ROAD AS REQUIRED TO PROVIDE CONTRACTOR'S SOLE ACCESS TO RWF SITE
CONTRACTOR STAGING AREA, GRAVEL SURFACE C105
REMOVE EXISTING FENCE ONLY AFTER RWF PERIMETER FENCING IS ESTABLISHED
PROVIDE TEMPORARY FENCE TO SECURE WWTF SITE DURING RWF CONSTRUCTION
FUTURE SECONDARY CLARIFIER
FUTURE AERATION BASINS
FUTURE EQUALIZATION STORAGE TANK
GRAVEL ROAD C105
FUTURE CLARIFIER
FLOCCULATING CLARIFIERS
FILTERS
RECYCLED WATER FACILITY ELECTRICAL BUILDING
DISINFECTION
DISTRIBUTION PUMP STATION
CHEMICAL FACILITY
MAIN GATE, SEE 2 C-1-7
RWF GATE SEE C-1-7
CHAIN LINK SWING GATE, SEE C140
FUTURE FILTER
LEVEE BANKS, 2:1 SLOPE
FINISHED ROAD NOT IN CONTRACT, SEE NOTE 1
DECORATIVE FENCE NOT IN CONTRACT
FENCE NOT IN CONTRACT
PROPERTY LINE
TOE OF LEVEE, CONFORM
TOP OF LEVEE
EL VARIES
SLOPE
YELLOW STRIPING (CRANE UNLOADING)
NOTES:
1. CONTRACTOR SHALL ROUGH GRADE ROAD ONLY AS REQUIRED TO INSTALL LEVEE.
2. FOR COORDINATES SEE DRAWING GC-1.
3. STRAIGHT CULVERT HEADWALL PER DETAIL D88 OF THE STATE STANDARD PLANS, DIMENSION "L" PER PLAN, TYP EACH END OF CULVERT, CONFORM TO INVT.
PLAN 1"=20'
SCALE IN FEET
PRELIMINARY
RMC Water & Environment
RECYCLED WATER TREATMENT FACILITY
SITE GRADING AND PAVING PLAN - 1
DESIGNED B. SLENTER
DRAWN J. MAY
CHECKED X
SUBMITTED
APPROVED
DWG NO C-1-1
SHEET NO X OF X
PROJ NO 039-3
DATE JULY 2005

EXHIBIT A

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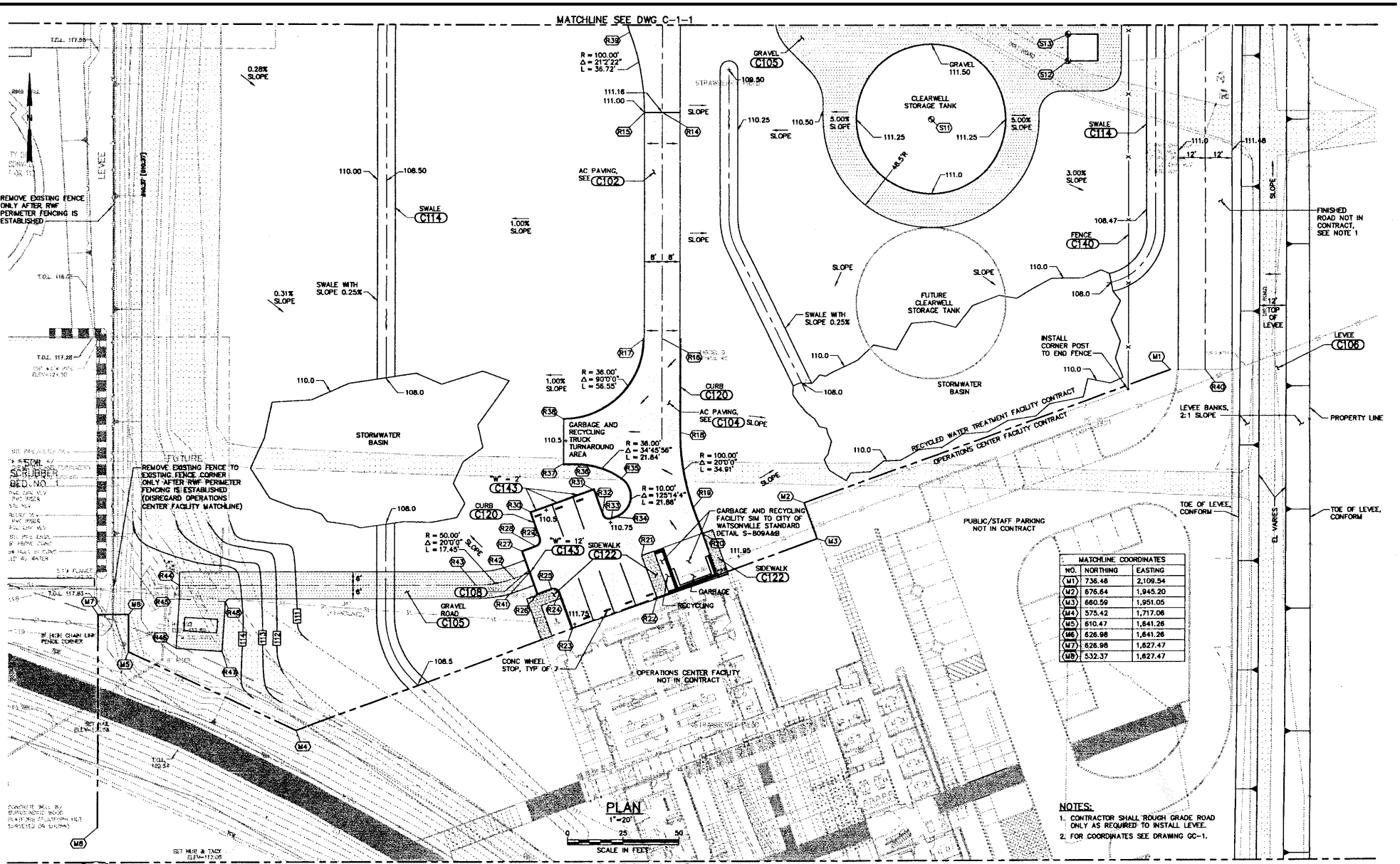

MATCHLINE COORDINATES		
NO.	NORTHING	EASTING
M1	736.46	2,109.54
M2	676.64	1,945.20
M3	660.59	1,951.05
M4	575.42	1,717.06
M5	610.47	1,641.26
M6	626.98	1,641.26
M7	626.96	1,627.47
M8	532.37	1,627.47

NOTES:
1. CONTRACTOR SHALL ROUGH GRADE ROAD ONLY AS REQUIRED TO INSTALL LEVEE.
2. FOR COORDINATES SEE DRAWING GC-1.

PRELIMINARY

VERIFY SCALES — BAR IS ONE INCH LONG ON FULL SIZE DRAWING. IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

RMC Water & Environment

REV	DATE	BY	APV'D	DESCRIPTION

DESIGNED	B. SLENTER
DRAWN	J. MAY
CHECKED	X
SUBMITTED:	RMC PROJ ENGR C____
APPROVED:	RMC ENGR C____

RECYCLED WATER TREATMENT FACILITY

SITE GRADING AND PAVING PLAN - 2

DWG NO	C-1-2
SHEET NO	X OF X
PROJ NO	039-3
DATE	JULY 2005

C-1-2.DWG - JUL 05 2005 - 3:56 PM

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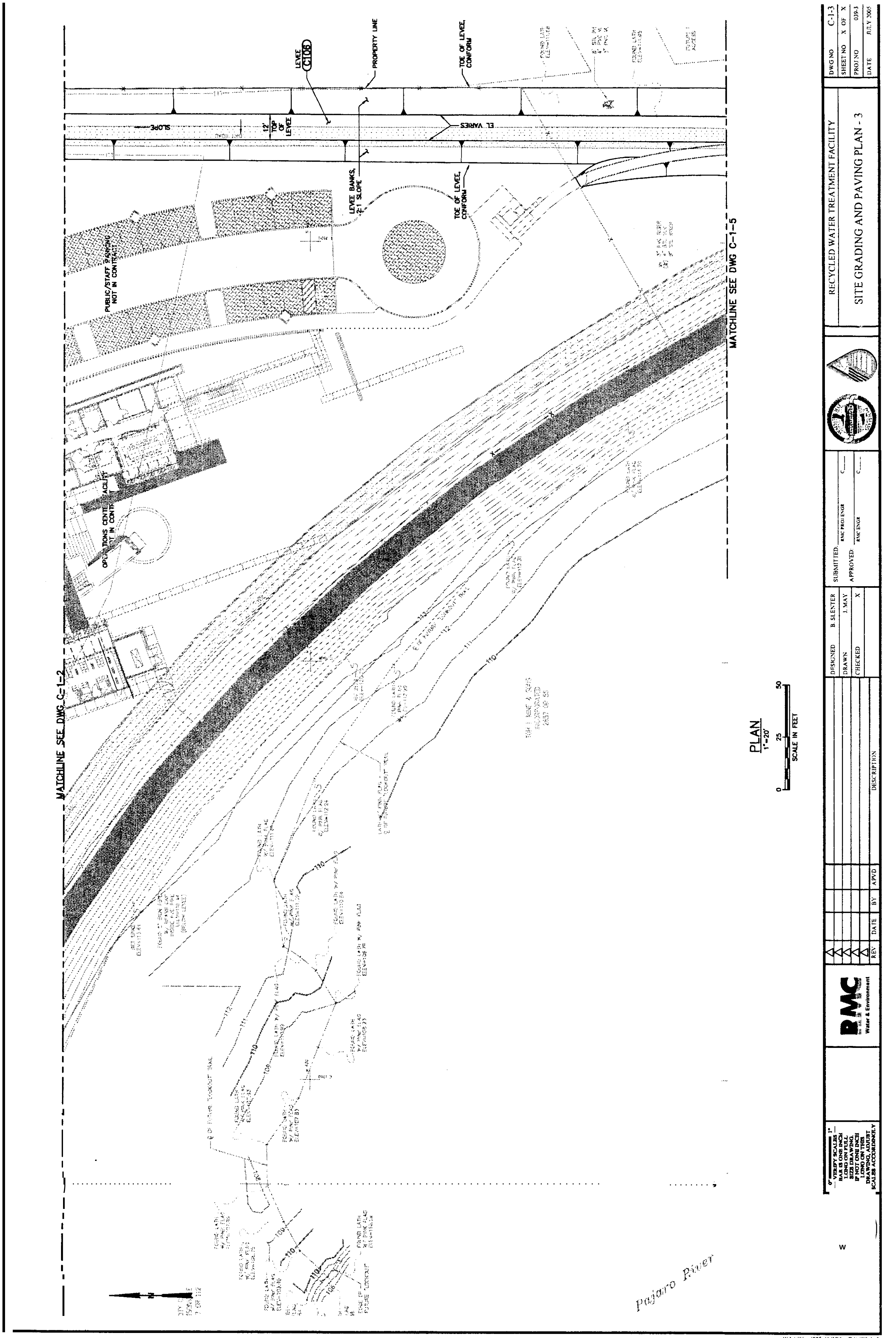
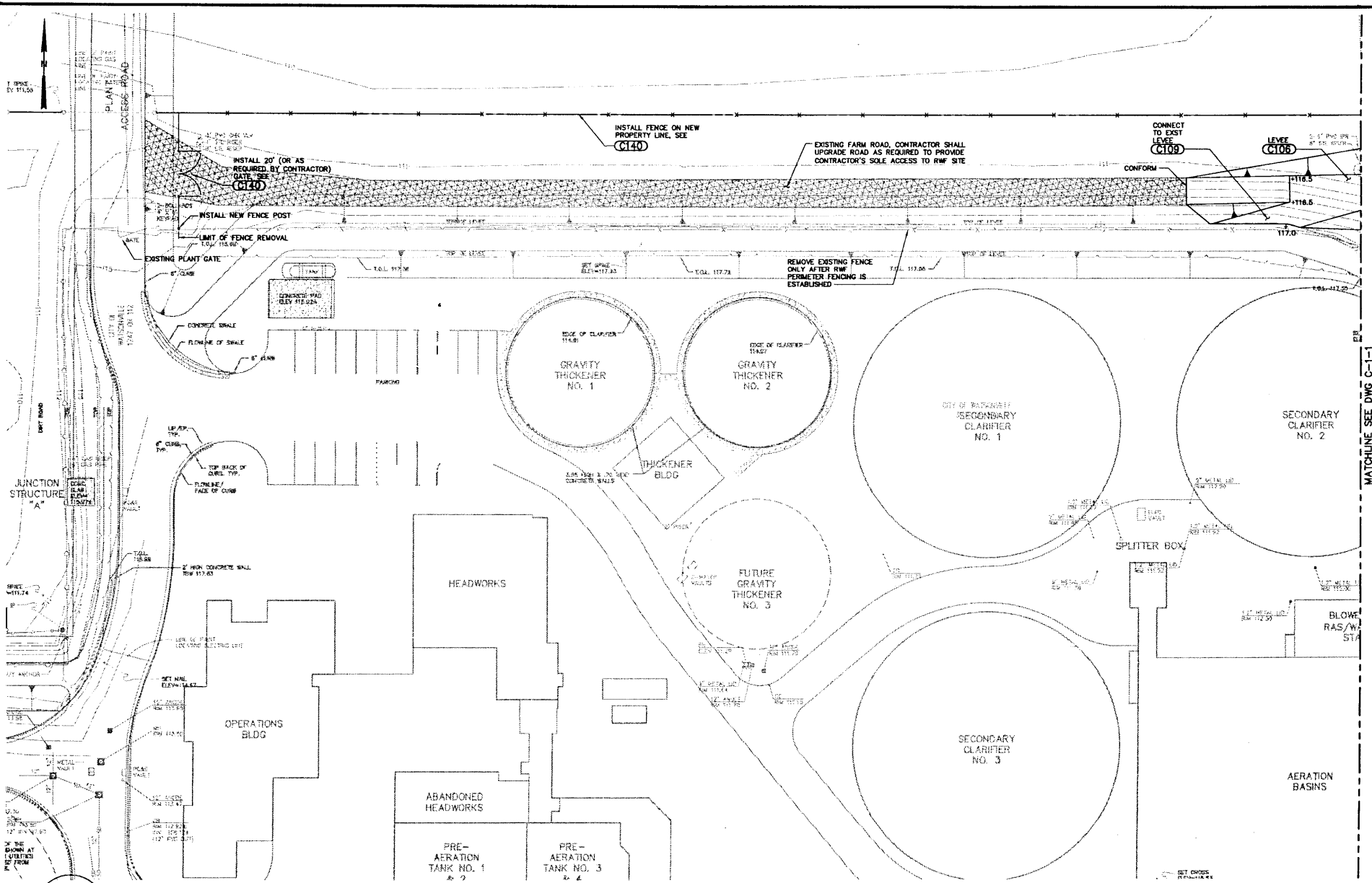
EXHIBIT A



MATCHLINE SEE DWG C-1-2
MATCHLINE SEE DWG C-1-5
LEVEE
C106
PROPERTY LINE
TOE OF LEVEE, CONFORM
12' TOP OF LEVEE
SLOPE
EL VARIES
LEVEE BANKS, 2:1 SLOPE
TOE OF LEVEE, CONFORM
PUBLIC/STAFF PARKING NOT IN CONTRACT
OPERATIONS CENTER FACILITY NOT IN CONTRACT
PLAN
1"=20'
0 25 50
SCALE IN FEET
Pajaro River
RECYCLED WATER TREATMENT FACILITY
SITE GRADING AND PAVING PLAN - 3
DWG NO C-1-3
SHEET NO X OF X
DATE JULY 2005
DESIGNED B. SLENTER
DRAWN J. MAY
CHECKED X
SUBMITTED
APPROVED
REV DATE BY APVD DESCRIPTION
RMC Water & Environment

EXHIBIT A



PRELIMINARY

— VERIFY SCALES — BAR IS ONE INCH LONG ON FULL SIZE DRAWING. IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

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REV	DATE	BY	APVD	DESCRIPTION

DESIGNED M. VAN HORNE
DRAWN J. MAY
CHECKED X

SUBMITTED: RMC PROJ ENGR
APPROVED: RMC ENGR

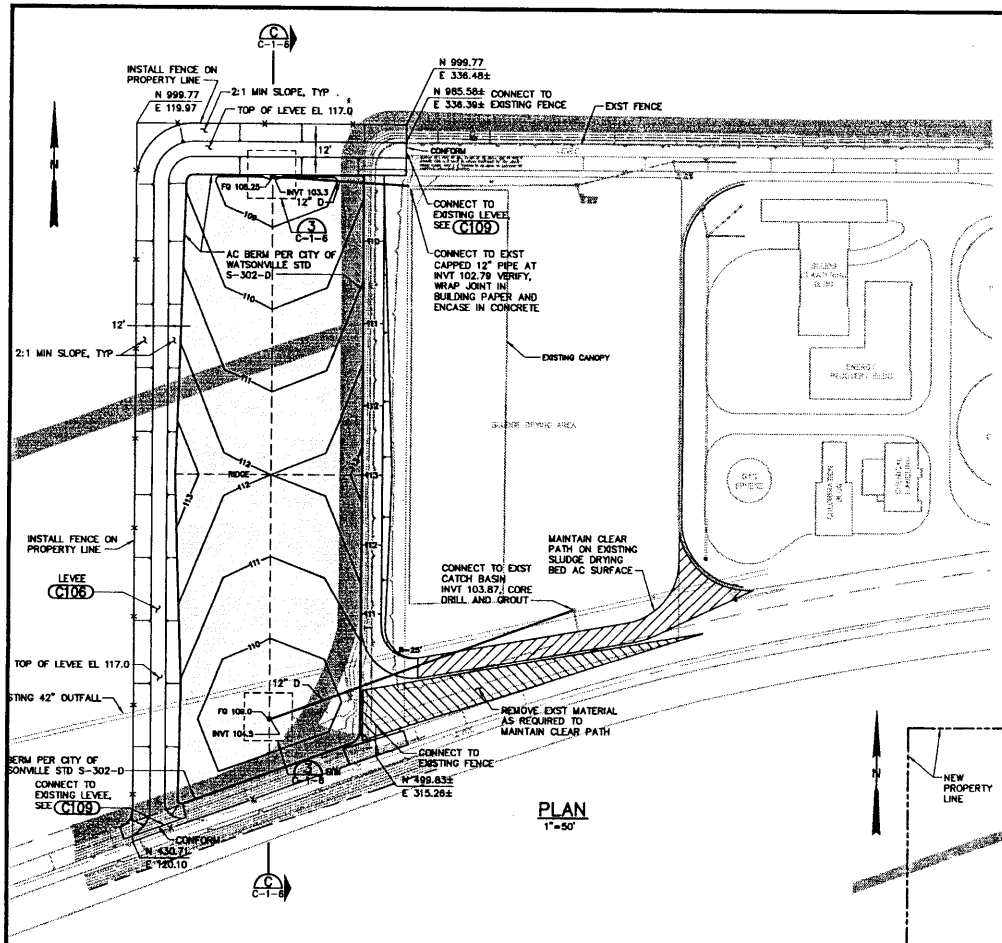
RECYCLED WATER TREATMENT FACILITY

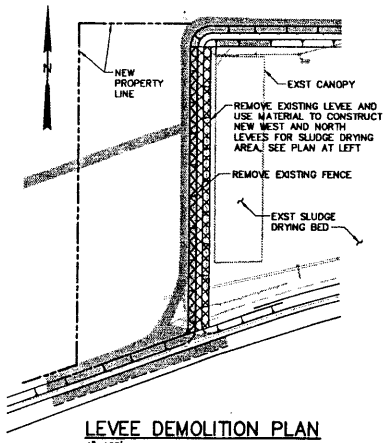
SITE GRADING AND PAVING PLAN - 4

DWG NO	C-1-4
SHEET NO	X OF X
PROJ NO	039-3
DATE	JULY 2005

C1-4.DWG - JUL 07, 2005 - 3:56 PM

EXHIBIT 19





LEVEE DEMOLITION PLAN
1"=100'

PRELIMINARY

VERIFY SCALES — BAR IS ONE INCH LONG ON FULL SIZE DRAWING. IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

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REV	DATE	BY	APVD	DESCRIPTION

DESIGNED M. VAN HORNE
DRAWN J. MAY
CHECKED X

SUBMITTED: RMC PROJ ENGR
APPROVED: RMC ENGR

RECYCLED WATER TREATMENT FACILITY

SITE GRADING AND PAVING PLAN - 5

DWG NO	C-1-5
SHEET NO	X OF X
PROJ NO	039-3
DATE	JULY 2005

C-1-5.DWG - JUL 05 2005 - 3:59 PM

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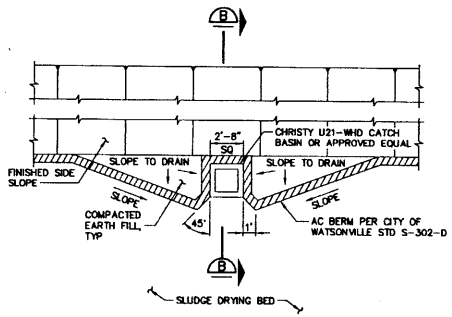
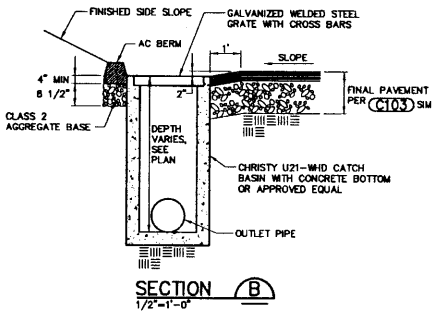
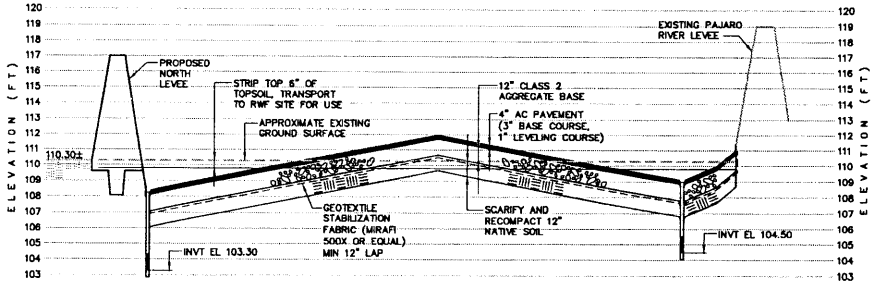
EXHIBIT A



PARTIAL PLAN 3
1"=5' C-1-5



SECTION B
1/2"=1'-0"



SECTION C
HORIZ: 1"=50' C-1-5
VERT: 1"=4'

PRELIMINARY

VERIFY SCALES
BAR IS ONE INCH LONG ON FULL SIZE DRAWING
IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

RMC Water & Environment

REV	DATE	BY	APVD	DESCRIPTION

DESIGNED M. VAN HORNE
DRAWN J. MAY
CHECKED X

SUBMITTED: RMC PROJ ENGR C_____
APPROVED: RMC ENGR C_____

RECYCLED WATER TREATMENT FACILITY

SITE GRADING AND PAVING DETAILS

DWG NO	C-1-6
SHEET NO	X OF X
PROJ NO	039-3
DATE	JULY 2005

C-1-6.DWG - PDF CREATED JUL 05 2005 - 4:00 PM

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EXHIBIT A

ELECTRICAL PLAN SYMBOLS

IDENTIFICATION SYMBOLS

- NON-POWERED EQUIPMENT IDENTIFICATION
- POWERED EQUIPMENT IDENTIFICATION
- INSTRUMENT IDENTIFICATION
- EQUIPMENT/INSTRUMENT LOCATOR
- LUMINAIRE IDENTIFICATION
  a = DEVICE SWITCHED FROM
  b = CIRCUIT DESIGNATION
  c = MOUNTING HEIGHT IN FEET
- XXXX — CONDUIT IDENTIFICATION
  XXXX = CONDUIT NUMBER,
  REFER TO CONDUIT SCHEDULE
- INDICATES KEYNOTE 1
  (PERTAINS ONLY TO SHEET WHERE NOTE IS FOUND)
- OPERATOR INTERFACE STATION
  1 = STATION TYPE
- XXXX TYP — TYPICAL DETAIL REFERENCE BUBBLE
  XXXX = TYPICAL DETAIL NUMBER IDENTIFICATION,
  TYPICAL DETAIL IS TO BE FOUND ON THE TYPICAL DETAIL DRAWINGS.

GROUNDING

- UNDERGROUND GROUND GRID #4/0 S.D.B.C. UNLESS OTHERWISE NOTED
- GROUND ROD
- GROUND ROD AND GROUND WELL
- COMPRESSION OR EXOTHERMIC GROUNDING CONNECTION

LUMINAIRES

- 2', 4', OR 8' FLUORESCENT STRIP
- LUMINAIRE, EMERGENCY BATTERY-POWERED
- LUMINAIRE, EMERGENCY/EXIT BATTERY-POWERED
- LUMINAIRE EMERGENCY BATTERY-POWERED REMOTE
- LUMINAIRE CEILING MOUNTED
- LUMINAIRE WALL MOUNTED
- LUMINAIRE FLOOD/SPOT
- LUMINAIRE, EXIT
- LUMINAIRE, WALL WASHER
- 2' x 2' FLUORESCENT
- 2' x 4' FLUORESCENT
- LUMINAIRE POLE MOUNTED
- STROBE
  a = COLOR

SWITCHES/RECEPTACLES

- $^{a}S^{b}$ SINGLE POLE SWITCH
  a = DEVICE SWITCHED DESIGNATION
  b = CIRCUIT DESIGNATION
- $^{a}S_{c}^{b}$ IF c =
  2 = DOUBLE POLE SWITCH
  3 = THREE-WAY SWITCH
  4 = FOUR-WAY SWITCH
  K = KEY OPERATED SWITCH
  F = SWITCH AND FUSESTAT HOLDER
  P = SWITCH AND PILOT LIGHT
  T = THERMOSTAT
  D = DIMMER SWITCH
  L = LOW VOLTAGE LIGHT SWITCH
- S_M MANUAL MOTOR STARTER
- OCCUPANCY SENSOR
  a = CIRCUIT DESIGNATION
- SWITCH AND SINGLE RECEPTACLE
  a = CIRCUIT DESIGNATION
  b = DEVICE TYPE DESIGNATION
- SWITCH AND DUPLEX RECEPTACLE
  a = CIRCUIT DESIGNATION
  b = DEVICE TYPE DESIGNATION
- SINGLE RECEPTACLE
  a = CIRCUIT DESIGNATION
  b = DEVICE TYPE DESIGNATION
- DUPLEX RECEPTACLE
  a = CIRCUIT DESIGNATION
  b = DEVICE TYPE DESIGNATION
- QUADRUPLEX RECEPTACLE
  a = CIRCUIT DESIGNATION
  b = DEVICE TYPE DESIGNATION
- DUPLEX RECEPTACLE w/SPLIT WIRE
  a = CIRCUIT DESIGNATION
  b = DEVICE TYPE DESIGNATION
- WELDING OR APPLIANCE RECEPTACLE
  a = CIRCUIT DESIGNATION
  b = DEVICE TYPE DESIGNATION
- WELDING RECEPTACLE
  a = CIRCUIT DESIGNATION
  b = DISCONNECT TYPE
- SPECIAL PURPOSE RECEPTACLE
  a = MOUNTING HEIGHT
  b = DEVICE TYPE DESIGNATION
- CLOCK RECEPTACLE
  a = MOUNTING HEIGHT
- FAN RECEPTACLE
  a = MOUNTING HEIGHT
- TWIST LOCK RECEPTACLE
  a = AMP RATING
- TELEPHONE OUTLET
  a = MOUNTING HEIGHT
  b = NUMBER OF CIRCUITS
- DATA COMMUNICATIONS OUTLET
  a = MOUNTING HEIGHT
  b = NUMBER OF CIRCUITS
- DISCONNECT SWITCH
  a = TYPE, REFER TO DISCONNECT SCHEDULE
- (E) PHOTO-EYE
- SMOKE DETECTOR
  a = TYPE
  I = IONIZATION
  P = PHOTOELECTRIC

RACEWAY

- EXPOSED CONDUIT
- INDICATES BREAK IN CONDUIT RUN
- CONDUIT IN CEILING SLAB
- CONDUIT BELOW FLOOR GRATING
- UNDERGROUND CONDUIT
- CONDUIT IN FLOOR SLAB
- CONDUIT CHANGING DIRECTION
- (J) JUNCTION BOX
- CONDUIT SEAL
- DUCTBANK

ELECTRICAL ONE-LINE SYMBOLS

MEDIUM VOLTAGE

- b 52 a — CIRCUIT BREAKER, MEDIUM VOLTAGE
  a = CIRCUIT BREAKER NUMBER
  b = frame rating
- ANSI RELAY DEVICE
  a = ANSI DEVICE FUNCTION
  b = QUANTITY
- MEDIUM VOLTAGE DISCONNECT SWITCH NON-FUSED CUT OUT
- MEDIUM VOLTAGE DISCONNECTING FUSE SINGLE FUSE CUT OUT
- MEDIUM VOLTAGE DISCONNECTING FUSE DOUBLE FUSE CUT OUT
- MEDIUM VOLTAGE SINGLE FUSE
- MEDIUM VOLTAGE DOUBLE FUSE
- MEDIUM VOLTAGE LIVE FRONT TERMINATOR
- MEDIUM VOLTAGE ELBOW
- MEDIUM VOLTAGE T
- MOV-ELBOW ARRESTOR

LOW VOLTAGE

- LOW VOLTAGE CIRCUIT BREAKER
  a = TYPE
  MCP = MOTOR CIRCUIT PROTECTOR
  TM = THERMAL MAGNETIC
  SS = SOLID STATE
  b = FRAME SIZE/MCP CONTINUOUS RATING
  c = NUMBER OF POLES
  d = AMP TRIP
  e = DESIGNATION
  f = INTERRUPTING RATING
- LOW VOLTAGE CIRCUIT BREAKER AUXILIARY OPERATOR
  • = S = SHUNT TRIP
  = K = KIRK KEY INTERLOCK
  = G = GROUND FAULT INTERRUPTER
  = V = SOLENOID KEY RELEASE
- DISCONNECT SWITCH
  a = TYPE, REFER TO DISCONNECT SCHEDULE
- FUSED DISCONNECT SWITCH
  a = TYPE, REFER TO DISCONNECT SCHEDULE
  b = FUSE RATING
- FUSE
- SST — SOLID STATE TRIP UNIT

- COMBINATION STARTER WITH CONTROL POWER TRANSFORMER
  a = CIRCUIT BREAKER DISCONNECT, TYPE AS NOTED
  b = STARTER TYPE
  c = NEMA STARTER SIZE
  d = OVERLOAD HEATERS
- VARIABLE FREQUENCY DRIVE WITH FEATURES AS NOTED
  a = INPUT CONTACTOR
  b = OUTPUT CONTACTOR
  c = BYPASS STARTER
  LR — LINE REACTOR
  LL — LOAD REACTOR
- REDUCED VOLTAGE SOLID STATE STARTER
  IC = INPUT CONTACTOR
  BC = FULL SPEED BYPASS CONTACTOR

MISCELLANEOUS

- HP — MOTOR
  HP = HORSEPOWER RATING
  FULL LOAD AMPS AS NOTED
- PACKAGED EQUIPMENT
  a = SIZE
  b = HP, KW, KVA AS INDICATED
- TRANSFORMER
  a = DEVICE I.D.
  b = KVA RATING
  c = NUMBER OF PHASES
  d = PRIMARY VOLTAGE
  e = SECONDARY VOLTAGE
- GROUNDED WYE CONNECTION
- DELTA CONNECTION
- ENGINE-GENERATOR RATINGS AS INDICATED ON THE DRAWINGS
  a = KVA/KW
  b = VOLTAGE/CONNECTION
  c = PHASE
  d = WIRE
  e = pf
- CURRENT TRANSFORMER WITH SHORTING TERMINAL BLOCK
  a = QUANTITY
  b = RATIO
- POTENTIAL TRANSFORMER
  a = QUANTITY
  b = RATIO
- SSM — SOLID STATE MULTIFUNCTION METER
- ATP — AMMETER TEST POINT
- VTP — VOLTAGE TEST POINT
- UTILITY METER
- LIGHTNING ARRESTER
- TVSS — TRANSIENT VOLTAGE SURGE SUPRESSOR
- DRAWOUT CONNECTIONS
- GROUND
- CAPACITOR
- BATTERY

PRELIMINARY

0" — 1" VERIFY SCALES — BAR IS ONE INCH LONG ON FULL SIZE DRAWING. IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

Carollo Engineers

RMC Raines, Melton & Carella, Inc.

REV	DATE	BY	APVD	DESCRIPTION

DESIGNED
DRAWN DJH
CHECKED X

SUBMITTED: RMC PROJ ENGR C___
APPROVED: RMC ENGR C___

RECYCLED WATER TREATMENT FACILITY

ELECTRICAL
ELECTRICAL LEGEND

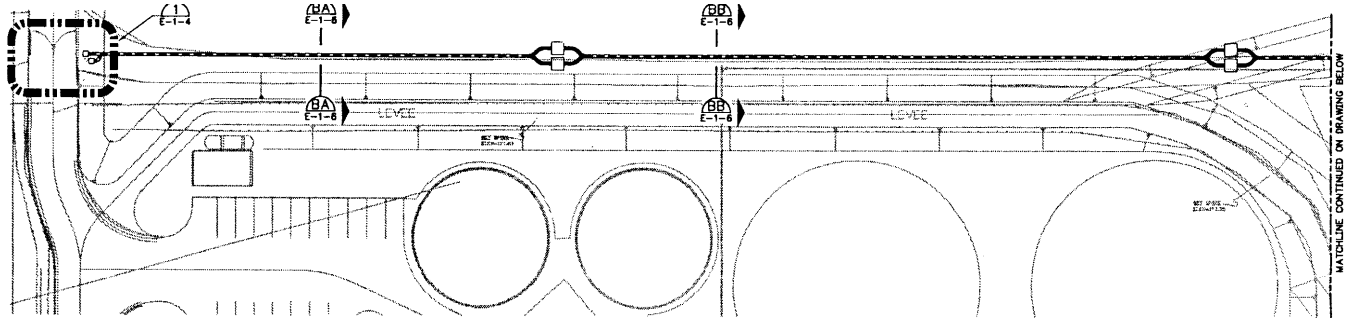
DWG NO	GE-1
SHEET NO	X OF X
PROJ NO	039-3
DATE	DEC 2003

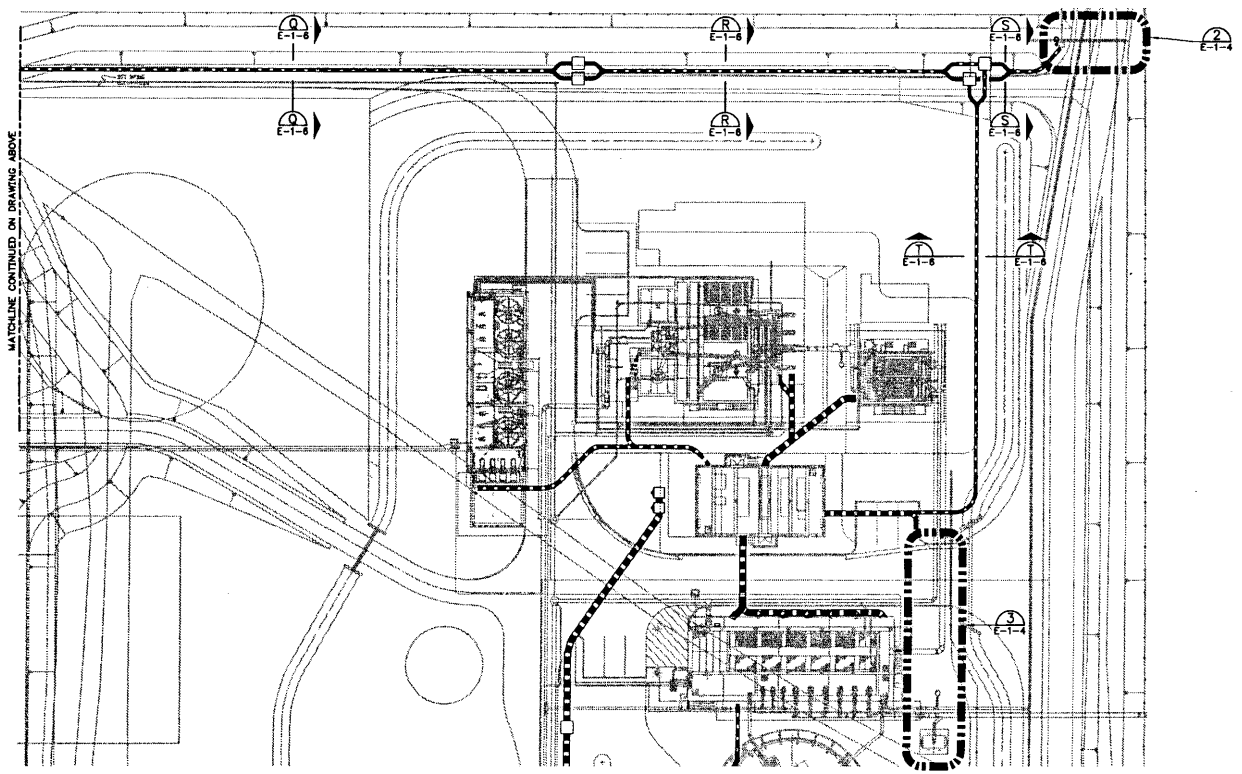
H:\Client\RMC_Dent\Watsonville Recycled Water Facility\684881B\Dwg\GE-01 6-22-05 02:25pm SFunckes XREFS: WATBDR WATSLOGOFORTB; WTPCOUT;

GE-01.DWG - JUN 22 2005 - 2:25 PM

22

EXHIBIT A





OVERALL SITE PLAN
1"=30'-0"

PRELIMINARY

0" 1" VERIFY SCALES BAR IS ONE INCH LONG ON FULL SIZE DRAWING IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

carollo engineers

RMC Water and Environment
Raines, Melton & Carella, Inc.

REV	DATE	BY	APVD	DESCRIPTION
1				
2				
3				
4				
5				

DESIGNED	GCE
DRAWN	SMW
CHECKED	X

SUBMITTED: _____ RMC PROJ ENGR _____ C____
APPROVED: _____ RMC ENGR _____ C____

RECYCLED WATER TREATMENT FACILITY

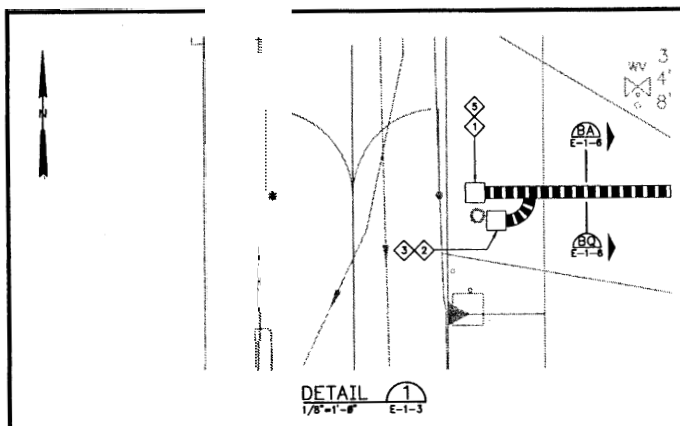
ENTRY GATES
POWER PLAN

DWG NO	E-1-3
SHEET NO	X OF X
PROJ NO	039-3
DATE	DEC 2003

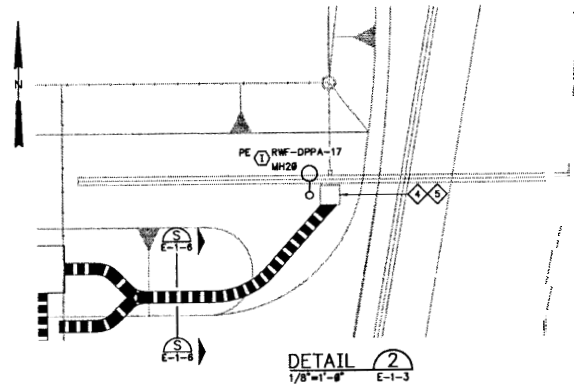
E-1-3.DWG - JUN 24 2005 - 3:36 PM

23

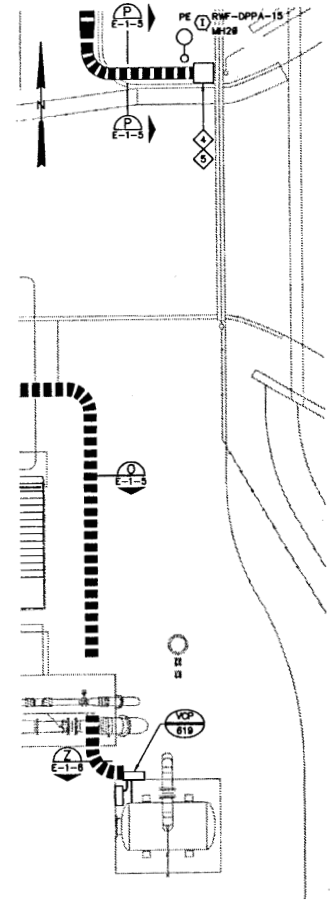
EXHIBIT A



DETAIL 1
1/8"=1'-0" E-1-3



DETAIL 2
1/8"=1'-0" E-1-3



DETAIL 3
1/8"=1'-0" E-1-3

KEY NOTES:

1. EXISTING GATE.
2. EXISTING TELEPHONE PEDESTAL.
3. VERIFY EXACT LOCATION AND ADJUST EQUIPMENT AND CONDUIT LOCATIONS ACCORDINGLY.
4. NEW GATE CONTROLLER.
5. GATES AND SECURITY CAMERAS WILL BE CONTROLLED FROM FUTURE OPERATIONS CENTER FACILITY. CONDUITS FOR SUCH SHALL BE INSTALLED WITHIN THIS CONTRACT, INCLUDING APPROPRIATE JUNCTION BOXES.

PRELIMINARY

— VERIFY SCALES — BAR IS ONE INCH LONG ON FULL SIZE DRAWING. IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

carollo engineers

RMC Raines, Melton & Carella, Inc.

REV	DATE	BY	APVD	DESCRIPTION

DESIGNED	X
DRAWN	SMW
CHECKED	X

SUBMITTED: RMC PROJ ENGR. C___

APPROVED: RMC ENGR. C___

RECYCLED WATER TREATMENT FACILITY

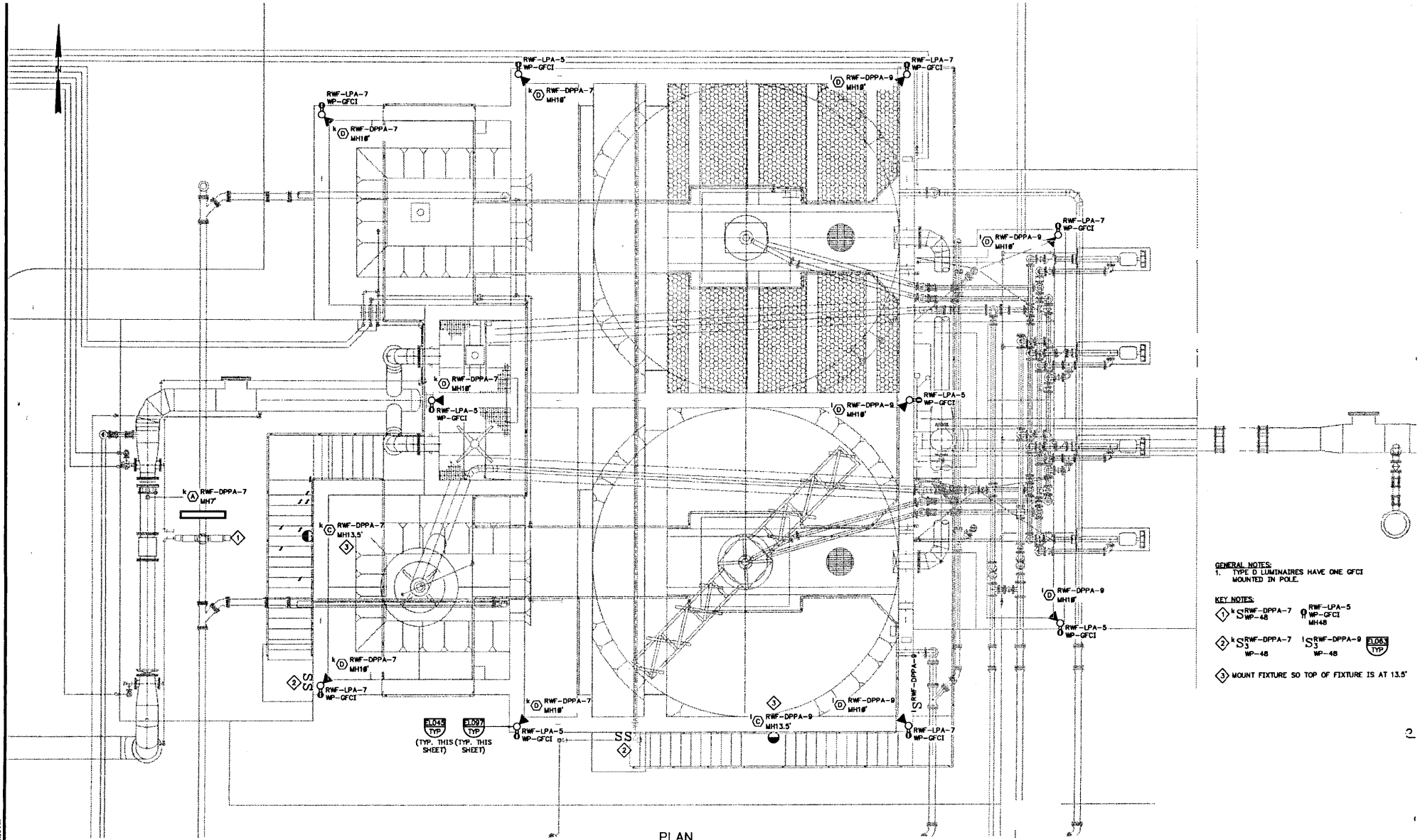
ENTRY GATES DETAILS

DWG NO	E-1-4
SHEET NO	X OF X
PROJ NO	039-3
DATE	DEC 2003

E-1-4.DWG - JUN 27 2006 - 7:33 AM

24

EXHIBIT A



PLAN
1/4"=1'-0"

PRELIMINARY

0" 1" — VERIFY SCALES — BAR IS ONE INCH LONG ON FULL SIZE DRAWING. IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

carollo engineers

RMC Ratinoff, Mellton & Carrella, Inc.

REV	DATE	BY	APVD	DESCRIPTION

DESIGNED	X
DRAWN	SMW
CHECKED	X

SUBMITTED: _____ RMC PROJ ENGR C___

APPROVED: _____ RMC ENGR C___

RECYCLED WATER TREATMENT FACILITY

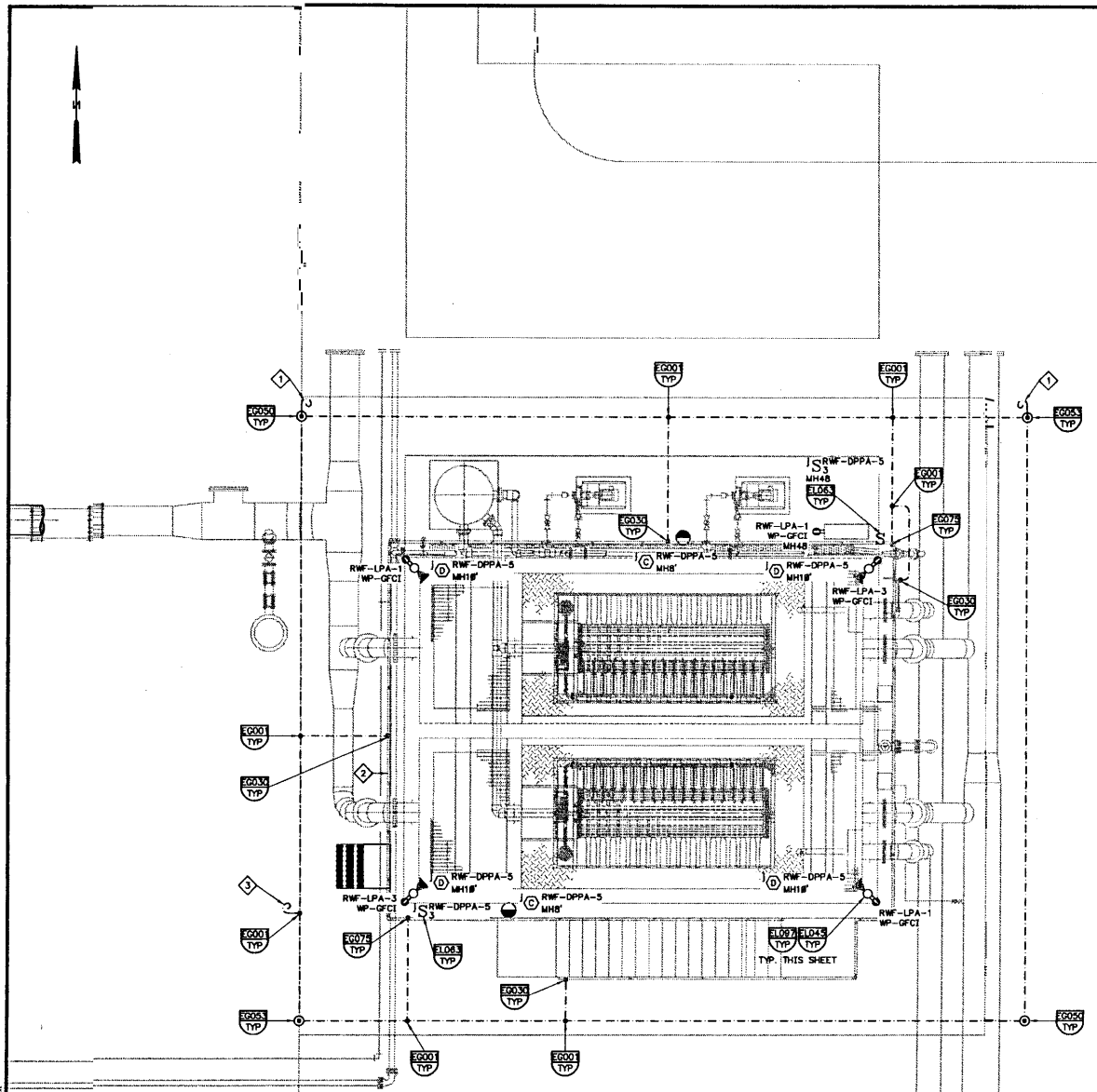
FLOCCULATING CLARIFIER
120V, LIGHTING & GROUNDING PLAN

DWG NO	E-30-2
SHEET NO	X OF X
PROJ NO	039-3
DATE	DEC 2003

E-30-2.DWG - JUN 23 2005 - 1:30 PM

24

EXHIBIT A



PLAN
1/4"=1'-0"

GENERAL NOTES:
1. TYPE D LUMINAIRES HAVE ONE GFCI MOUNTED IN POLE.

KEY NOTES:

(1) GROUND GRID PIGTAIL FOR FUTURE EXPANSION.

(2) CONTRACTOR SHALL INSURE EQUIPMENT WILL HAVE CONTINUOUS ELECTRICAL PATH TO GROUND.

(3) BOND GROUND GRID INTO DUCT BANK GROUND GRID CONDUCTOR.

PRELIMINARY

VERIFY SCALES
BAR IS ONE INCH LONG ON FULL SIZE DRAWING. IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

carollo engineers

RMC Raines, Melton & Carella, Inc.

REV	DATE	BY	APVD	DESCRIPTION

DESIGNED	X
DRAWN	SMW
CHECKED	X

SUBMITTED: RMC PROJ ENGR C___
APPROVED: RMC ENGR C___

RECYCLED WATER TREATMENT FACILITY

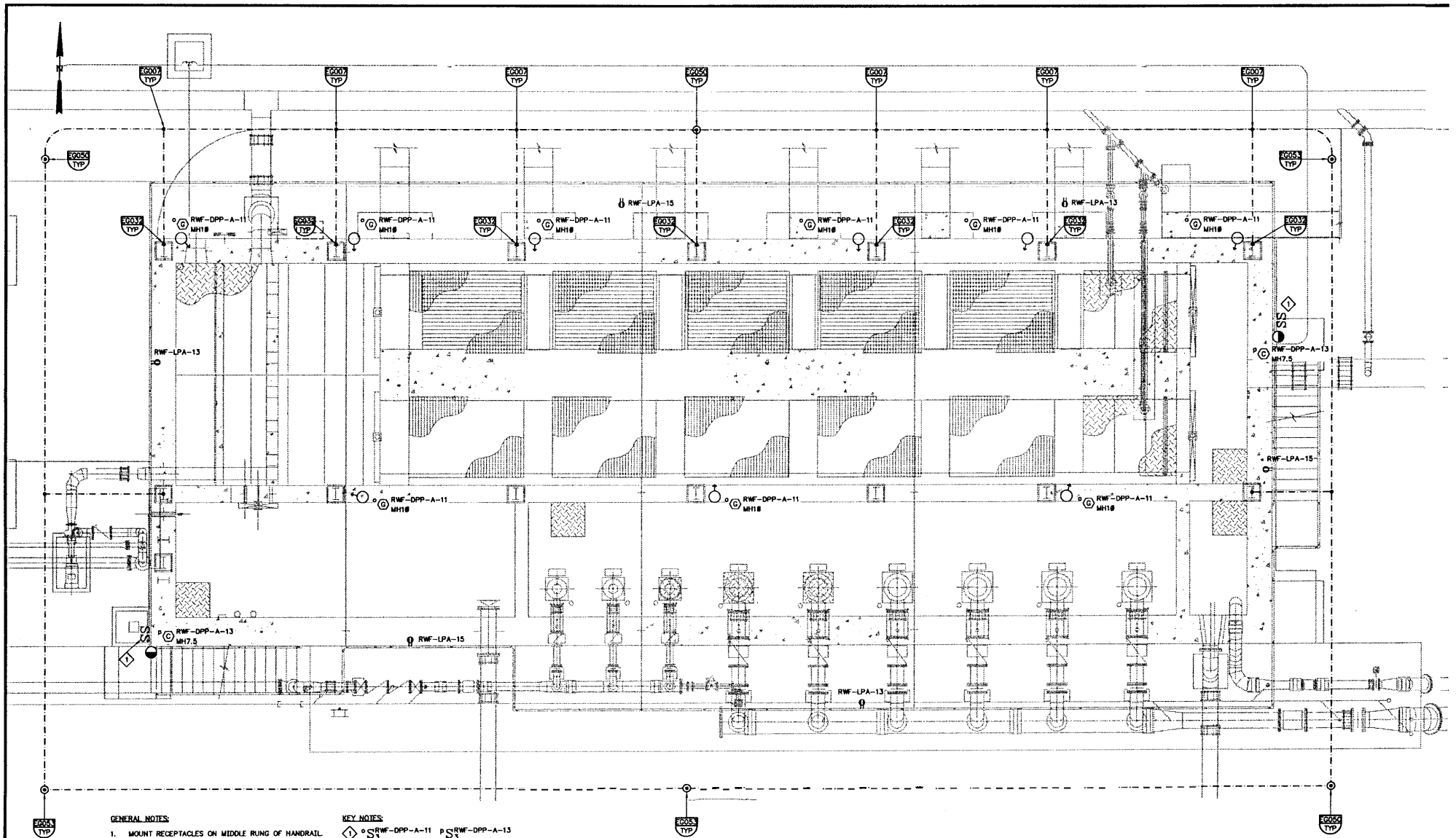
FILTER
120V, LIGHTING & GROUNDING PLAN

DWG NO	E-40-2
SHEET NO	X OF X
PROJ NO	039-3
DATE	DEC 2003

E-40-2.DWG - JUN 22 2005 - 1:41 PM

26

EXHIBIT A



GENERAL NOTES:

1. MOUNT RECEPTACLES ON MIDDLE RUNG OF HANDRAIL.

KEY NOTES:

1 °S3 RWF-DPP-A-11 PS3 RWF-DPP-A-13

PLAN
1/4"=1'-0"

PRELIMINARY

— VERIFY SCALES —
BAR IS ONE INCH LONG ON FULL SIZE DRAWING. IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

carollo engineers

RMC
Raines, Melton & Carella, Inc.

REV	DATE	BY	APVD	DESCRIPTION

DESIGNED	X
DRAWN	SMW
CHECKED	X

SUBMITTED: RMC PROJ ENGR C___
APPROVED: RMC ENGR C___

RECYCLED WATER TREATMENT FACILITY

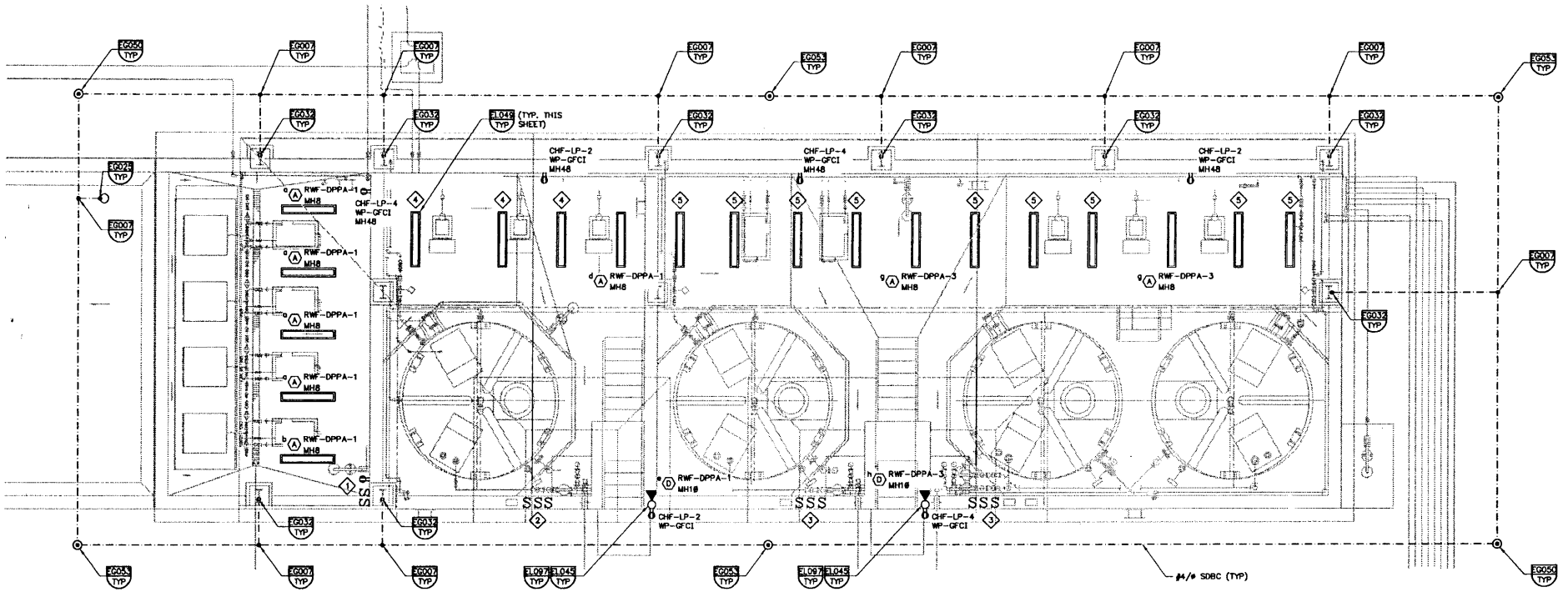
DISTRIBUTION PUMP STATION
120V, LIGHTING & GROUNDING PLAN

DWG NO	E-60-3
SHEET NO	X OF X
PROJ NO	039-3
DATE	DEC 2003

B-60-3.DWG - TUN 27 2005 - 12:48 PM

27

EXHIBIT A



PLAN
1/4"=1'-0"

GENERAL NOTES:
1. TYPE D LUMINAIRES HAVE ONE GFCI MOUNTED IN POLE.

KEY NOTES:
1. a RWF-DPPA-1 WP48; b RWF-DPPA-1 WP48; CHF-LP-2 WP-GFCI MH48
2. c RWF-DPPA-1 WP48; d RWF-DPPA-1 WP48; e RWF-DPPA-1
3. f RWF-DPPA-3 MH48; g RWF-DPPA-3 MH48; h RWF-DPPA-3 MH48; EL08 TYP
4. c RWF-DPPA-1 MH8
5. f RWF-DPPA-3 MH8

PRELIMINARY

— VERIFY SCALES — BAR IS ONE INCH LONG ON FULL SIZE DRAWING. IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

cardno entrix

RMC Raines, Melton & Carella, Inc.

REV	DATE	BY	APVD	DESCRIPTION

DESIGNED	X
DRAWN	SMW
CHECKED	X

SUBMITTED: RMC PROJ ENGR C___
APPROVED: RMC ENGR C___

RECYCLED WATER TREATMENT FACILITY

CHEMICAL STORAGE AND FEED
120V, LIGHTING & GROUNDING PLAN

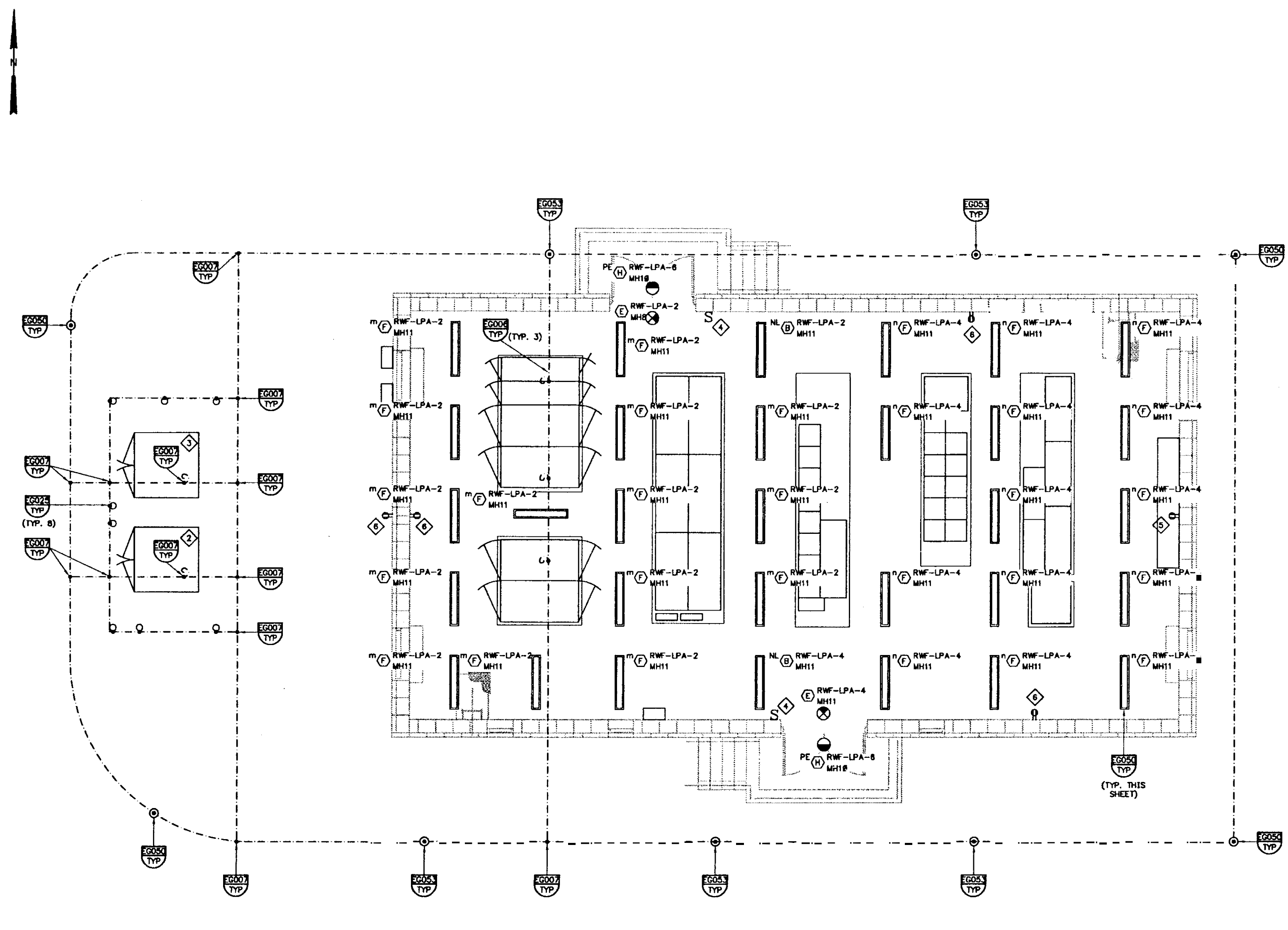
DWG NO	E-70-2
SHEET NO	X OF X
PROJ NO	039-3
DATE	DEC 2003

E-70-2.DWG - JUN 22 2005 - 2:03 PM

28

EXHIBIT A

KEY NOTES:
1. NOT USED
2. TR-SSG-1
3. TR-SSG-2
4. RWF-DPP-A-11 IW48; RWF-DPP-A-13 IW48; RWF-LPA-9 WP-GFCI IW48
5. RWF-LPA-9 WP-GFCI IW48
6. RWF-LPA-11 WP-GFCI IW48



ELECTRICAL BUILDING
1/4"=1'-0"

PRELIMINARY

VERIFY SCALES — BAR IS ONE INCH LONG ON FULL SIZE DRAWING. IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

carollo engineers — RMC Raines, Melton & Carella, Inc.

REV	DATE	BY	APVD	DESCRIPTION

DESIGNED X
DRAWN X
CHECKED X

SUBMITTED: RMC PROJ ENGR C____
APPROVED: RMC ENGR C____

RECYCLED WATER TREATMENT FACILITY
RECYCLED WATER FACILITY
ELECTRICAL BUILDING
120V, LIGHTING & GROUNDING PLAN

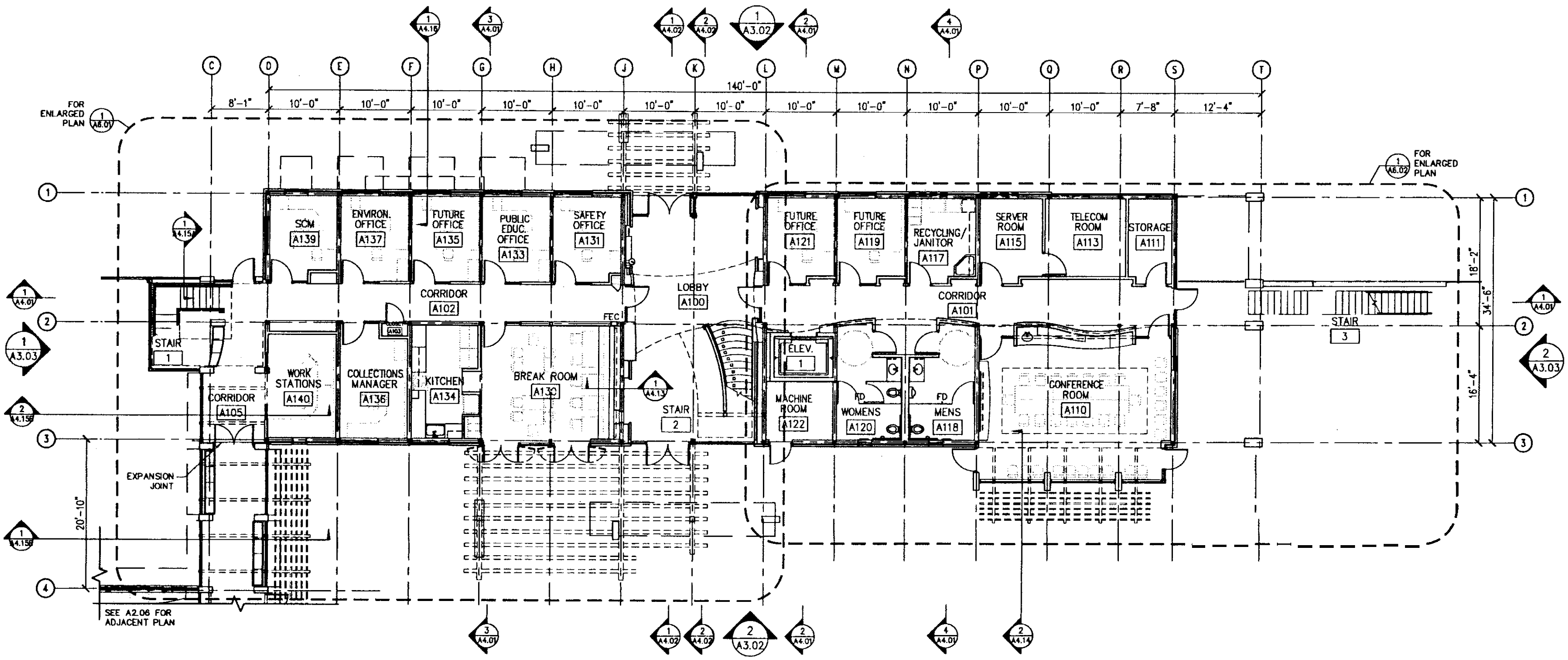
DWG NO E-80-2
SHEET NO X OF X
PROJ NO 039-3
DATE DEC 2003

E-80-2.DWG - JUN 24 2005 - 9:18 AM

EXHIBIT A

GENERAL NOTES

1. ALL DIMENSIONS ARE TO FACE OF STUD, CONCRETE, AND CENTERLINE OF COLUMNS, WINDOWS, DOORS, AND TO OUTSIDE FACE OF FASCIA AT ALL ROOF EDGES.
2. SEE SHEETS A3.02–A3.04 FOR ELEVATIONS.
3. SEE SHEETS A6.01–A6.42 FOR ENLARGED FLOOR PLANS AND INTERIOR ELEVATIONS.



FLOOR PLAN– OPERATIONS WING–MAIN FLOOR
1/A2.03 SCALE: 1/8"=1'0"

PRELIMINARY	VERIFY SCALES — BAR IS ONE INCH LONG ON FULL SIZE DRAWING. IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY	RMC Water & Environment	Michael Willis Architects

REV	DATE	BY	APVD	DESCRIPTION	
				GJK, SSK	DESIGNED
				AGF, MCA	DRAWN
				DW, JJM	CHECKED

OPERATIONS CENTER FACILITY

FLOOR PLAN

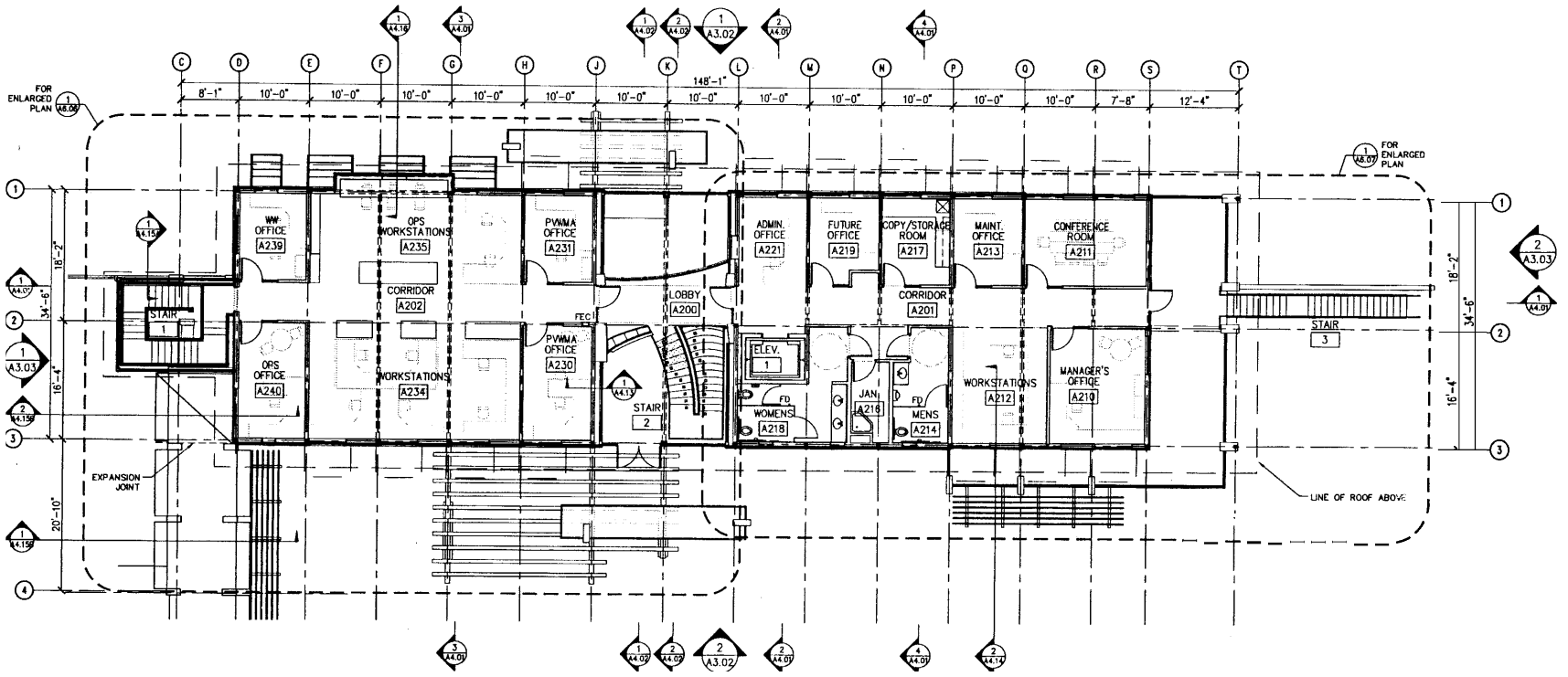
DWG NO	A2.03
SHEET NO	OF X
PROJ NO	039-3
DATE	AUGUST 2005

00311-1-SF-A203.DWG - AUG 01 2005 - 11:56 AM

EXHIBIT A

GENERAL NOTES

1. ALL DIMENSIONS ARE TO FACE OF STUD, CONCRETE, AND CENTERLINE OF COLUMNS, WINDOWS, DOORS, AND TO OUTSIDE FACE OF FASCIA AT ALL ROOF EDGES.
2. SEE SHEETS A3.02–A3.04 FOR ELEVATIONS.
3. SEE SHEETS A6.01–A6.42 FOR ENLARGED FLOOR PLANS AND INTERIOR ELEVATIONS.



1/A2.04 FLOOR PLAN – OPERATIONS WING SECOND FLOOR
SCALE: 1/8"=1'0"

N

PRELIMINARY

VERIFY SCALES
BAR IS ONE INCH LONG ON FULL SIZE DRAWING. IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

RMC Water & Environment

Mitchell Wills Architects

REV	DATE	BY	APVD	DESCRIPTION
				GJK,SSK — DESIGNED
				AGF, MCA — DRAWN
				DW, JJM — CHECKED

OPERATIONS CENTER FACILITY

FLOOR PLAN

DWG NO	A2.04
SHEET NO	OF X
PROJ NO	039-3
DATE	AUGUST 2005

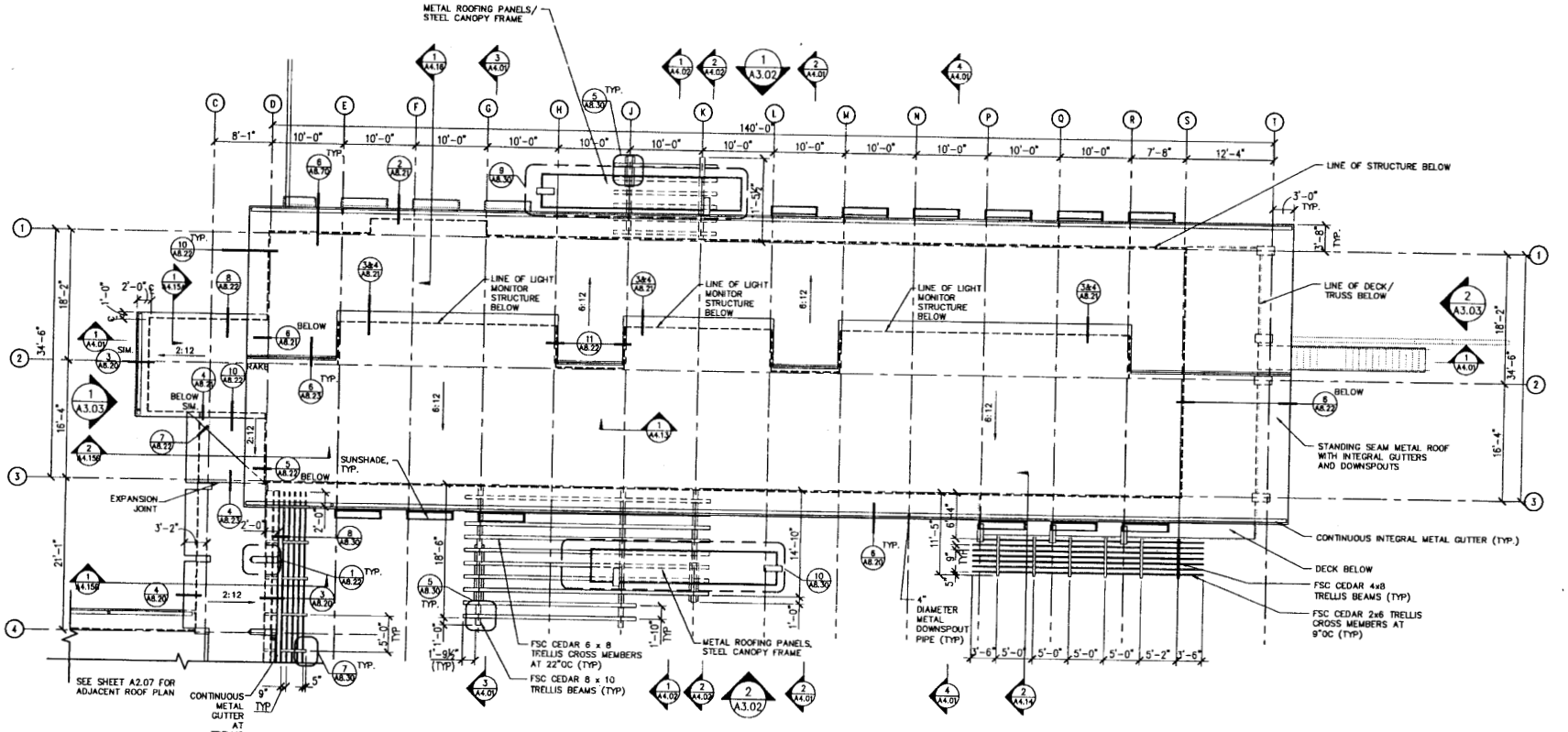
20011-1-SF-A204.DWG - AUG 01 2005 - 11:37 AM

31

EXHIBIT A

GENERAL NOTES

1. ALL DIMENSIONS ARE TO FACE OF STUD, CONCRETE, AND/OR CENTERLINE OF COLUMNS, AND TO OUTSIDE FACE OF FASCIA AT ALL ROOF EDGES.
2. SEE SHEETS A3.02–A3.04 FOR ELEVATIONS.
3. SEE SHEETS A8.01–A8.42 FOR ENLARGED FLOOR PLANS AND INTERIOR ELEVATIONS.
4. REFER TO SHEET A8.20 FOR ADDITIONAL ROOF MATERIAL INFORMATION.
5. VERIFY ALL DOWNSPOUT LOCATIONS WITH LANDSCAPE DRAWINGS.



1 A2.05 ROOF PLAN– OPERATIONS WING
SCALE: 1/8"=1'0"

N

PREL AR

VERIFY SCALES — BAR IS ONE INCH LONG ON FULL SIZE DRAWING. IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

RMC Water & Environment

Michael Willis Architects

REV	DATE	BY	APVD	DESCRIPTION
				GJK, SSK
				AGF, MCA
				DW, HM

DESIGNED
DRAWN
CHECKED

OPERATIONS CENTER FACILITY

ROOF PLAN

DWG NO	A2.05
SHEET NO	OF X
PROJ NO	039-3
DATE	AUGUST 2005

32

EXHIBIT A

2003111-SP-A205.DWG - AUG 01 2005 - 12:20 PM

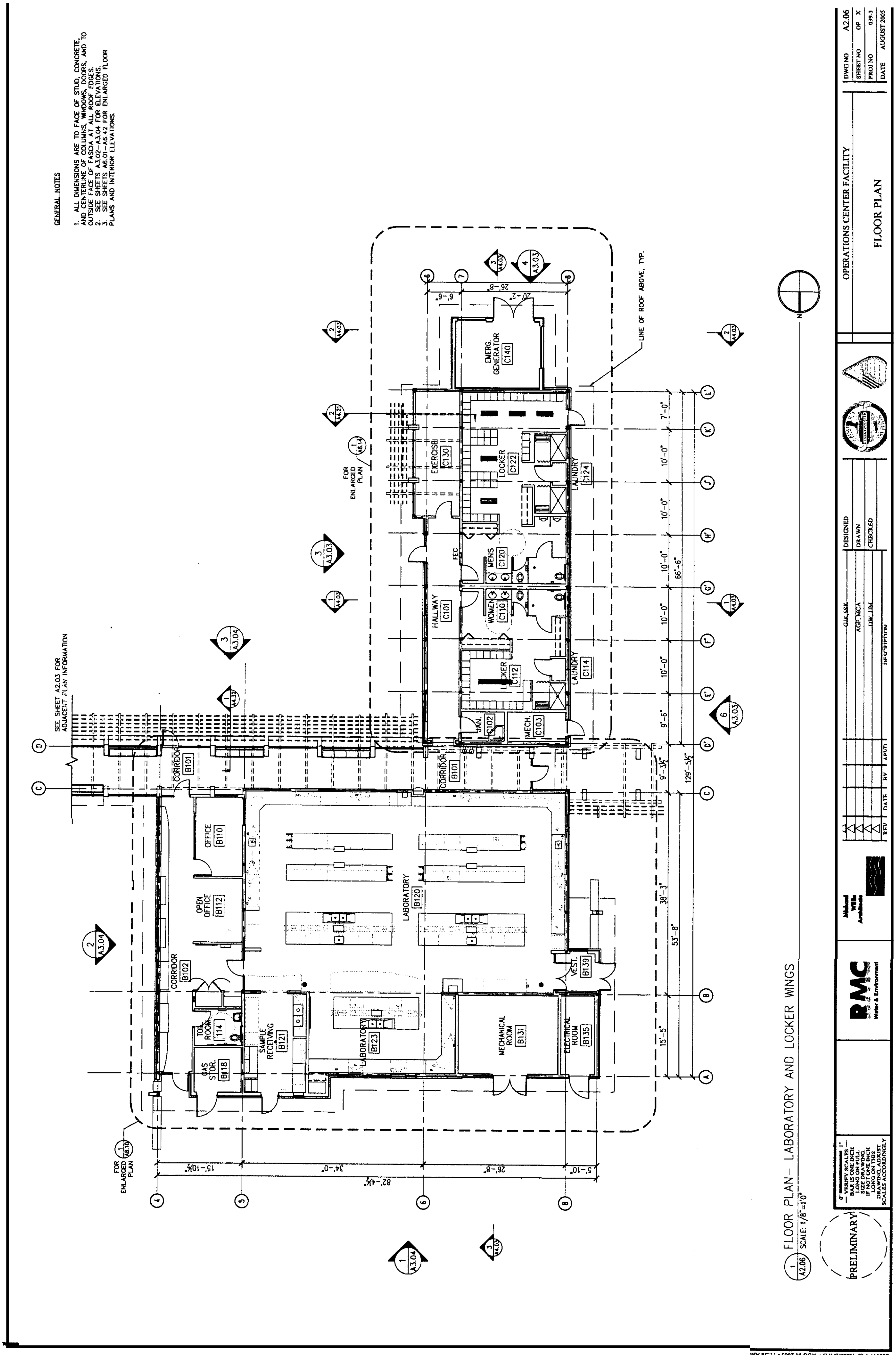
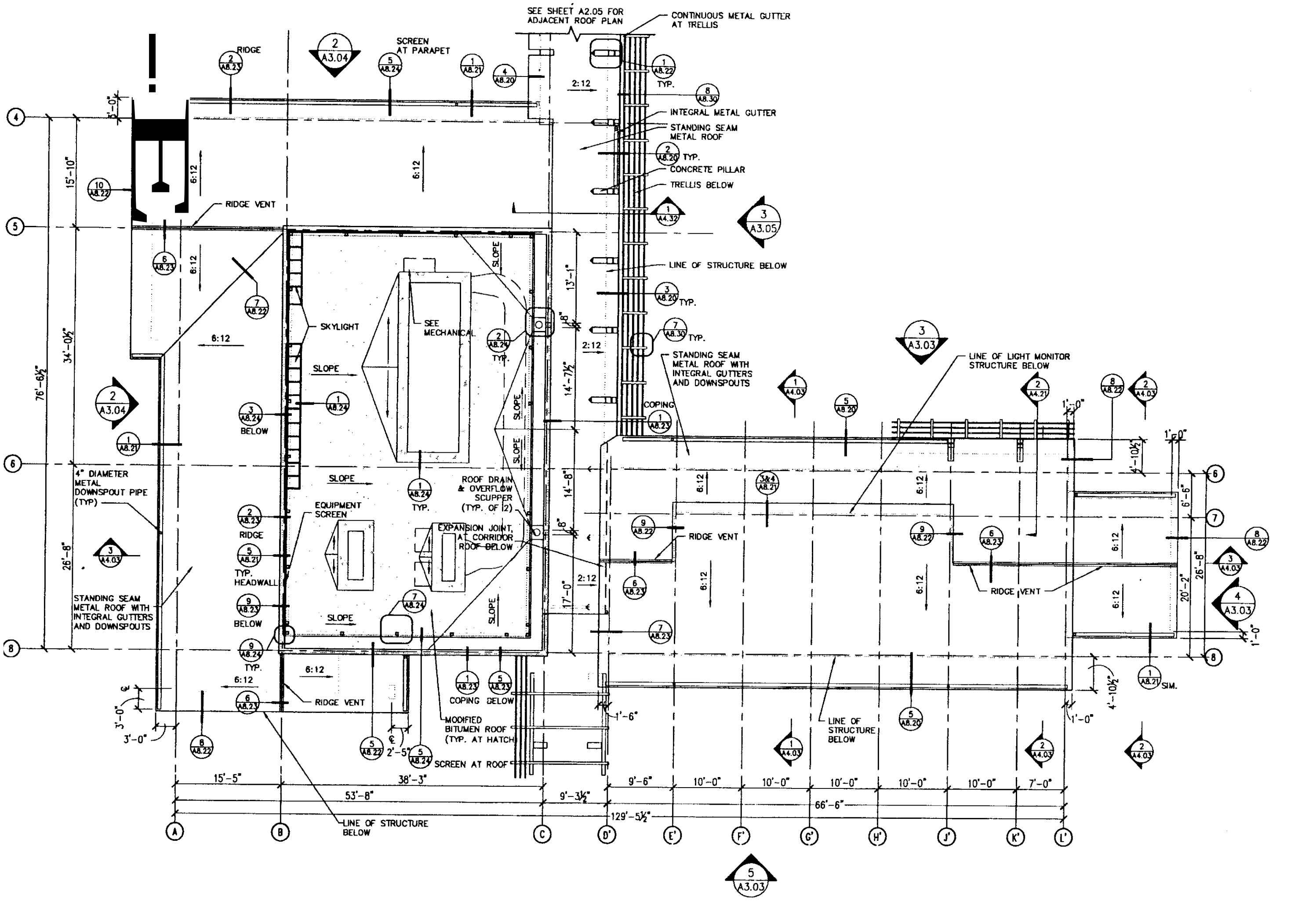

GENERAL NOTES
1. ALL DIMENSIONS ARE TO FACE OF STUD, CONCRETE, AND CENTERLINE OF COLUMNS, WINDOWS, DOORS, AND TO OUTSIDE FACE OF FASCIA AT ALL ROOF EDGES.
2. SEE SHEETS A3.02-A3.04 FOR ELEVATIONS.
3. SEE SHEETS A6.01-A6.42 FOR ENLARGED FLOOR PLANS AND INTERIOR ELEVATIONS.
SEE SHEET A2.03 FOR ADJACENT PLAN INFORMATION
LINE OF ROOF ABOVE, TYP.
FOR ENLARGED PLAN
EMERG. GENERATOR C140
EXERCISE C130
LOCKER C122
LAUNDRY C124
MENS C120
WOMEN C110
HALLWAY C101
FEC
LOCKER C112
LAUNDRY C114
JAN. C102
MECH. C103
CORRIDOR B101
OFFICE B110
OPEN OFFICE B112
LABORATORY B120
CORRIDOR B102
TOIL ROOM 114
GAS STOR. B118
SAMPLE RECEIVING B121
LABORATORY B123
MECHANICAL ROOM B131
ELECTRICAL ROOM B135
VEST. B139
FLOOR PLAN- LABORATORY AND LOCKER WINGS
SCALE: 1/8"=1'0"
PRELIMINARY
OPERATIONS CENTER FACILITY
FLOOR PLAN
DWG NO A2.06
SHEET NO OF X
PROJ NO 039-3
DATE AUGUST 2005
DESIGNED
DRAWN
CHECKED
RMC Water & Environment
Michael Willis Architects
200311-1-SP-A206.DWG - AUG 01 2005 - 11:58 AM

EXHIBIT A



ROOF PLAN- LABORATORY AND LOCKER ROOM

1 A2.07 SCALE: 1/8"=1'0"

GENERAL NOTES

1. ALL DIMENSIONS ARE TO FACE OF STUD, CONCRETE, AND/OR CENTERLINE OF COLUMNS, AND TO OUTSIDE FACE OF FASCIA AT ALL ROOF EDGES.
2. SEE SHEETS A3.02–A3.04 FOR ELEVATIONS.
3. SEE SHEETS A6.01–A6.42 FOR ENLARGED FLOOR PLANS AND INTERIOR ELEVATIONS.
4. REFER TO SHEETS A8.20 FOR ADDITIONAL ROOF MATERIAL INFORMATION.
5. VERIFY ALL DOWNSPOUT LOCATIONS W/ LANDSCAPE DRAWINGS.

PRELIMINARY

VERIFY SCALES — BAR IS ONE INCH LONG ON FULL SIZE DRAWING. IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

RMC Water & Environment

Michael Willis Architects

REV	DATE	BY	APVD	DESCRIPTION

DESIGNED GJK,SSK
DRAWN AGF,MCA
CHECKED DW,JJM

OPERATIONS CENTER FACILITY

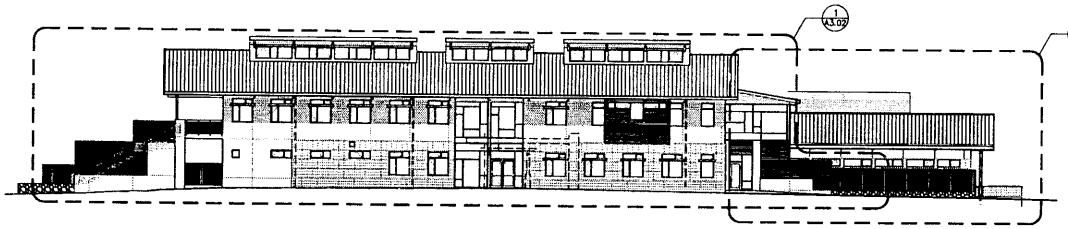
ROOF PLAN

DWG NO	A2.07
SHEET NO	OF X
PROJ NO	039-3

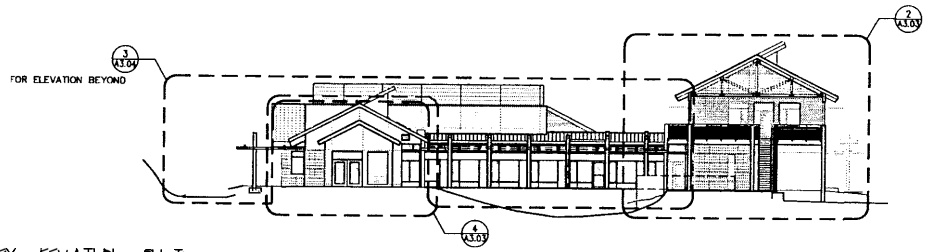
200311-1-SF-A207.DWG - AUG 01 2005 - 12:25 PM

34

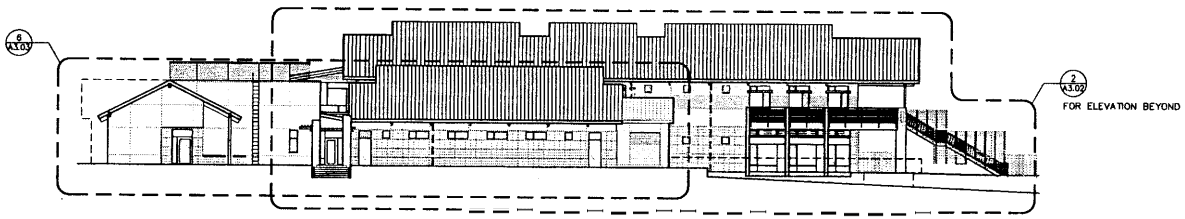
EXHIBIT A



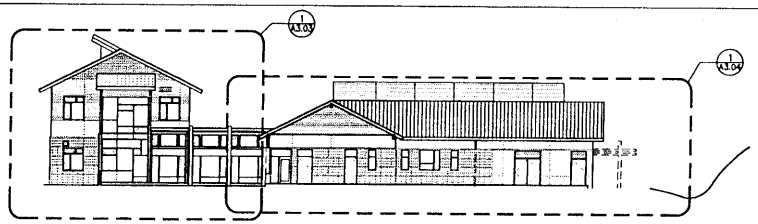
1 / A3.01 KEY ELEVATION-EAST



2 KEY ELEVATION-SOUTH



3 / A3.01 KEY ELEVATION-WEST
SCALE: 1/16"=1'0"



4 KEY ELEVATION-NORTH

GENERAL NOTES

1. SEE SHEETS A3.02–A3.05 FOR BUILDING ELEVATIONS.
2. SEE SHEETS A3.02–A3.05 FOR ELEVATION HEIGHTS AND MATERIAL NOTES.
3. THE KEY BUILDING ELEVATIONS ARE TO BE USED ONLY AS AN ORIENTATIONAL GUIDE.

PRELIMINARY

0" VERIFY SCALES 1"
BAR IS ONE INCH LONG ON FULL SIZE DRAWING IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

RMC Water & Environment

Mithun Mills Architects

REV	DATE	BY	APVD	DESCRIPTION

GJK,SSK	DESIGNED
AGF,MCA	DRAWN
DW,JJM	CHECKED

OPERATIONS CENTER FACILITY

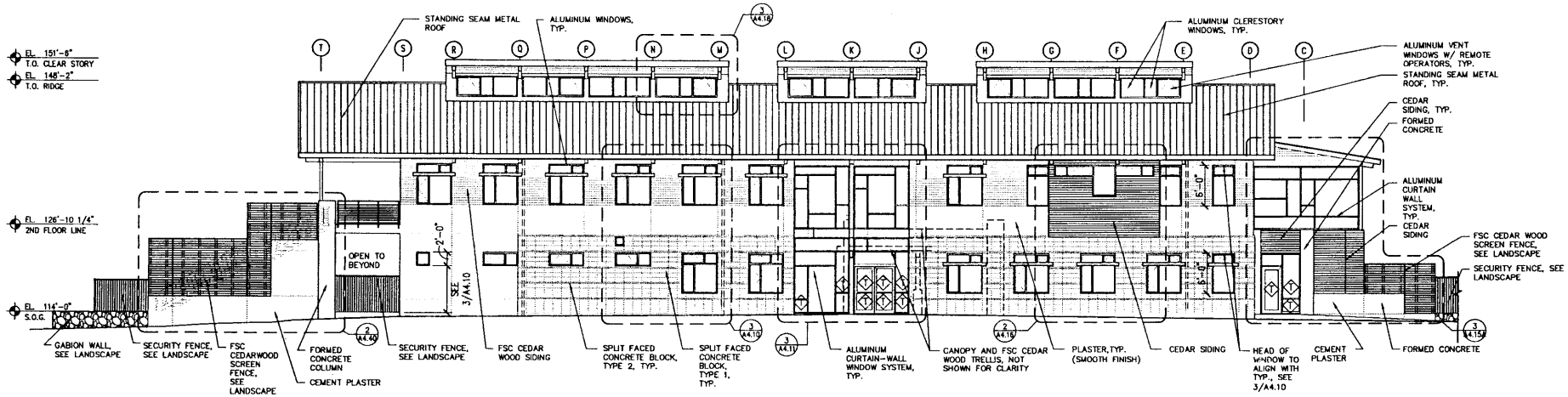
KEY ELEVATIONS

DWG NO	A3.01
SHEET NO	OF X
PROJ NO	039-3
DATE	AUGUST 2005

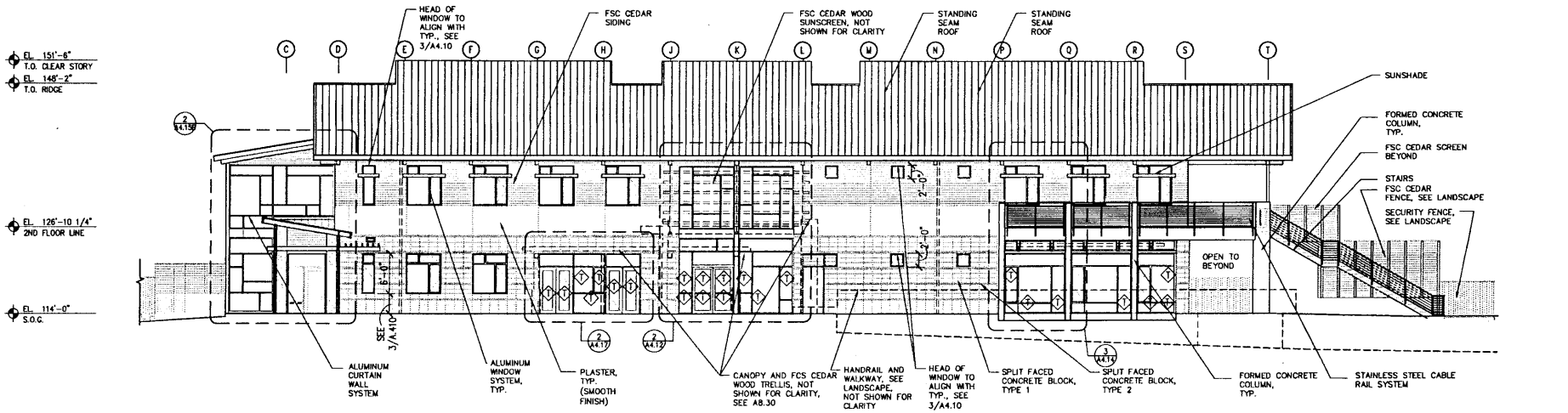
2003\1-1-SF-A01.DWG - AUG 01 2005 - 12:00 PM

35

EXHIBIT A



1 A3.02 BUILDING ELEVATION - A SERIES OPERATIONS WING
SCALE: 1/



2 A3.02 BUILDING ELEVATION - W SERIES OPERATIONS WING
SCALE: 1/8"=1'0"

PRELIMINARY

0" 1" — VERIFY SCALES — BAR IS ONE INCH LONG ON FULL SIZE DRAWING. IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

RMC Water & Environment

Michael Willis Architects

REV	DATE	BY	APVD	DESCRIPTION
				GJK,SSK
				AGF,MCA
				DW,HM

DESIGNED
DRAWN
CHECKED

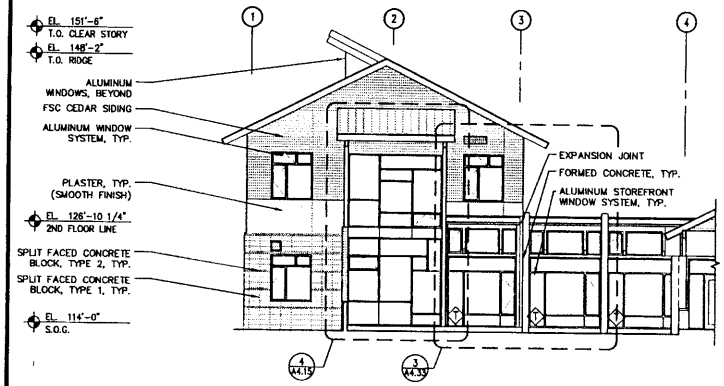
OPERATIONS CENTER FACILITY

BUILDING ELEVATIONS

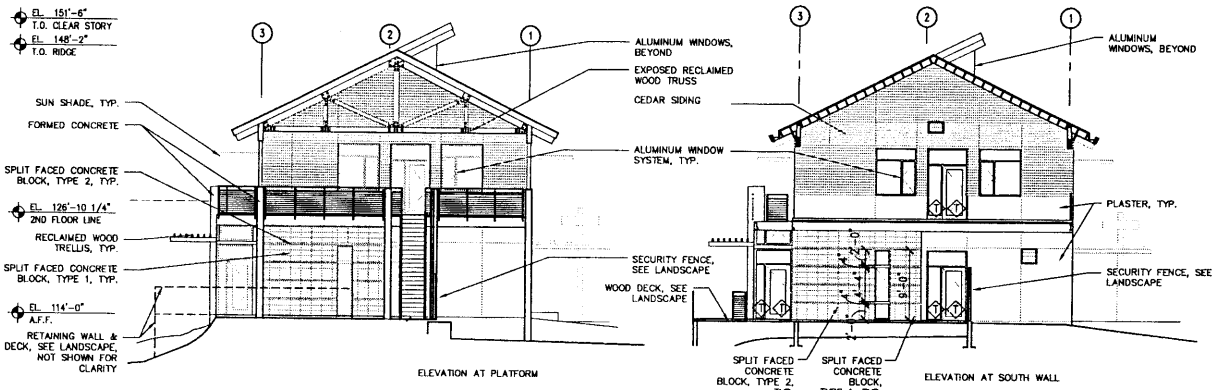
DWG NO	A3.02
SHEET NO	OF X
PROJ NO	039-3
DATE	AUGUST 2005

3b

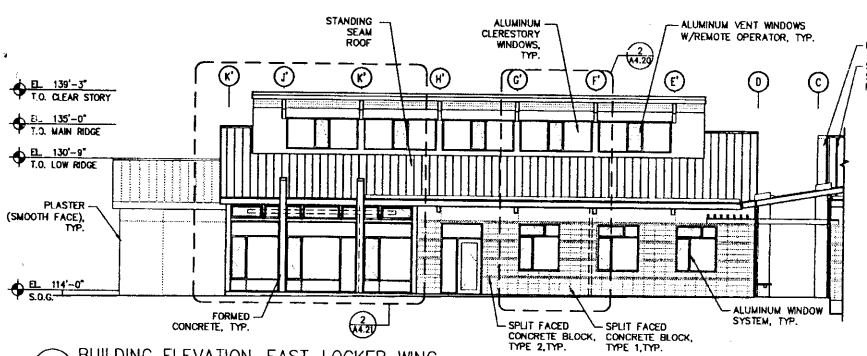
EXHIBIT A



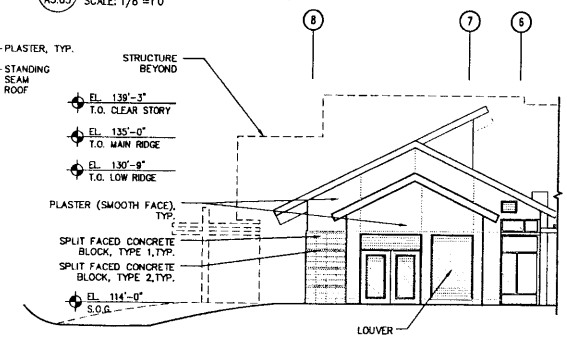
1 A3.03 BUILDING ELEVATION-NORTH-OPERATIONS WING
SCALE: 1/8"=1'0"



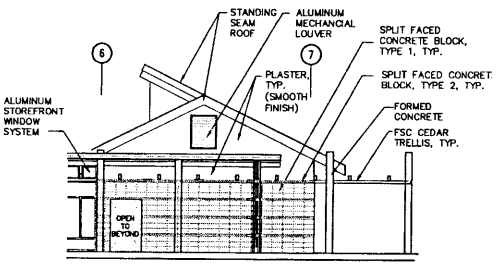
2 A3.03 BUILDING ELEVATION SOUTH-OPERATIONS WING
SCALE: 1/8"=1'0"



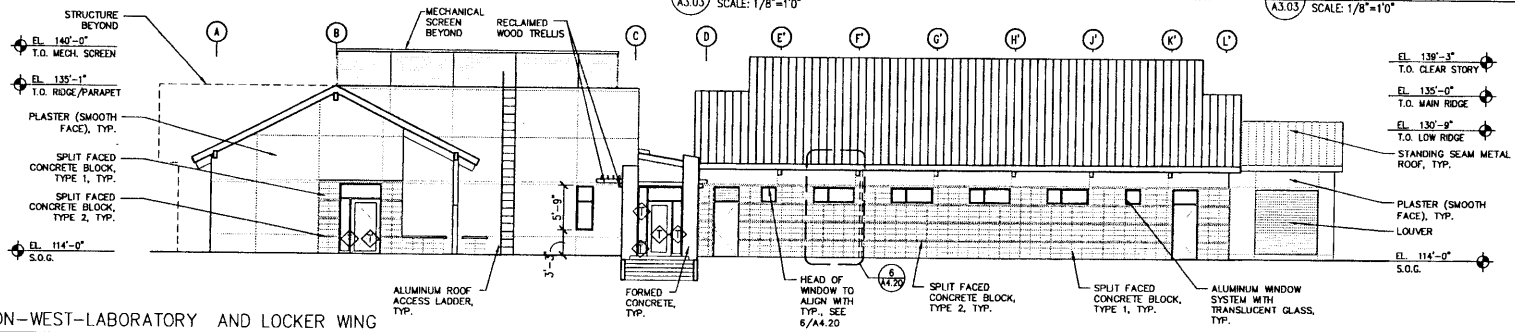
3 A3.03 BUILDING ELEVATION-EAST-LOCKER WING
SCALE: 1/8"=1'0"



4 A3.03 BUILDING ELEVATION-SOUTH-LOCKER WING
SCALE: 1/8"=1'0"



5 A3.03 BUILDING ELEVATION-NORTH-LOCKER WING
SCALE: 1/8"=1'0"



6 A3.03 BUILDING ELEVATION-WEST-LABORATORY AND LOCKER WING
SCALE: 1/8"=1'0"

PRELIMINARY

0" 1" — VERIFY SCALES — BAR IS ONE INCH LONG ON FULL SIZE DRAWING IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

RMC Water & Environment

Michael Willis Architects

REV	DATE	BY	APVD	DESCRIPTION

CJK,SSK
AGF,MCA
DW,HM

DESIGNED
DRAWN
CHECKED

OPERATIONS CENTER FACILITY

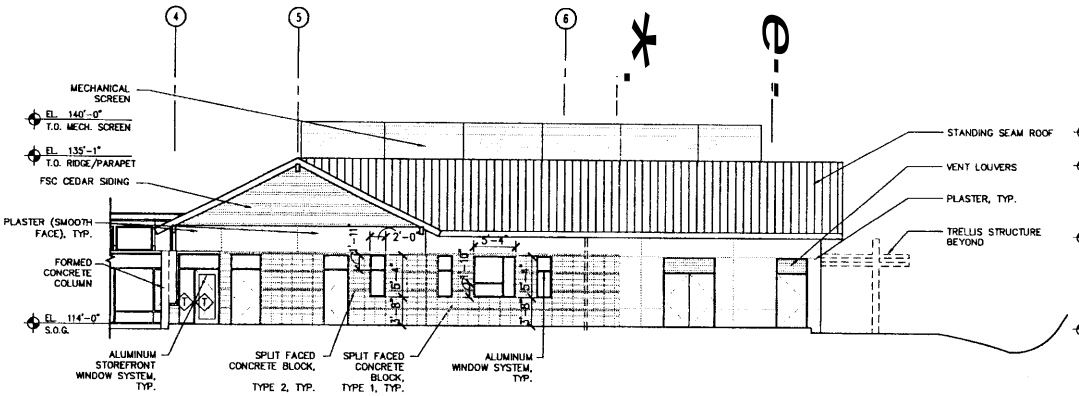
BUILDING ELEVATIONS

DWG NO	A3.03
SHEET NO	OF X
PROJ NO	039-3
DATE	AUGUST 2005

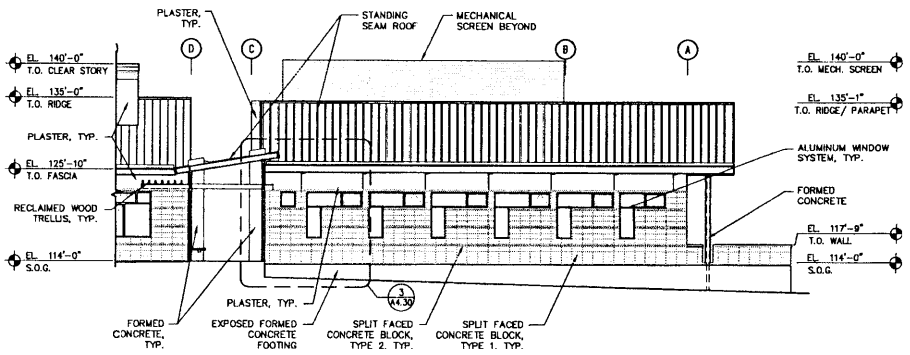
20031113-SF-A303.DWG - AUG 01 2005 - 12:04 PM

37

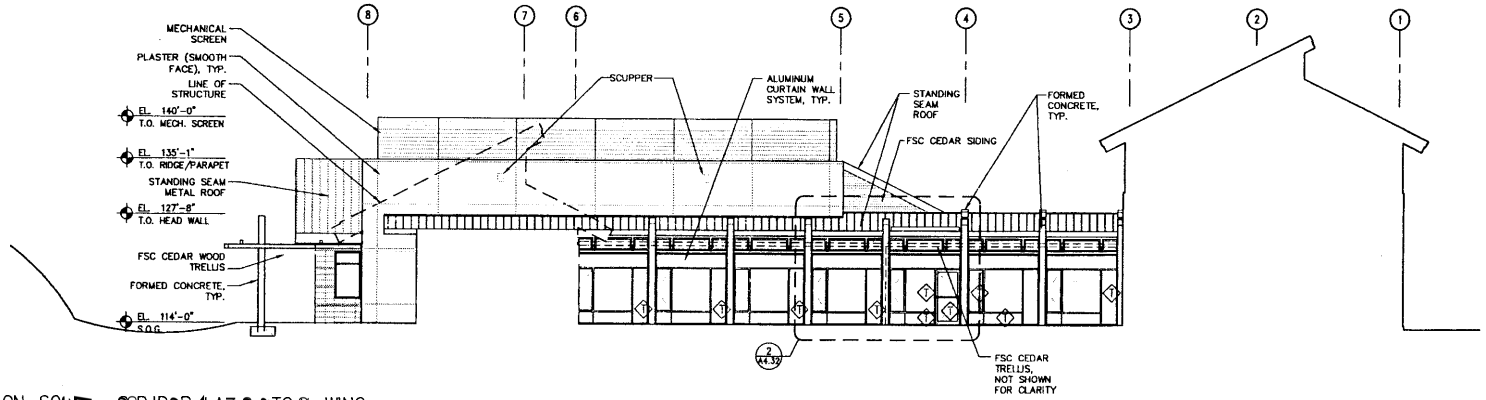
EXHIBIT A



1 A3.04 BUILDING ELEVATION - NORTH - DOORA TO WING
SCALE: 1/8"=1'0"



2 A3.04 BUILDING ELEVATION - EAST - LOBBY TO WING
SCALE: 1/8"=1'0"



3 A3.04 BUILDING ELEVATION SOUTH - CORRIDOR/LAB 2 TO WING

38

EXHIBIT A

200311-I-SS-A304.DWG - AUG 01 2005 - 12:48 PM

PRELIMINARY

VERIFY SCALES — BAR IS ONE INCH LONG ON FULL SIZE DRAWING. IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

RMC Water & Environment

Michael Willis Architects

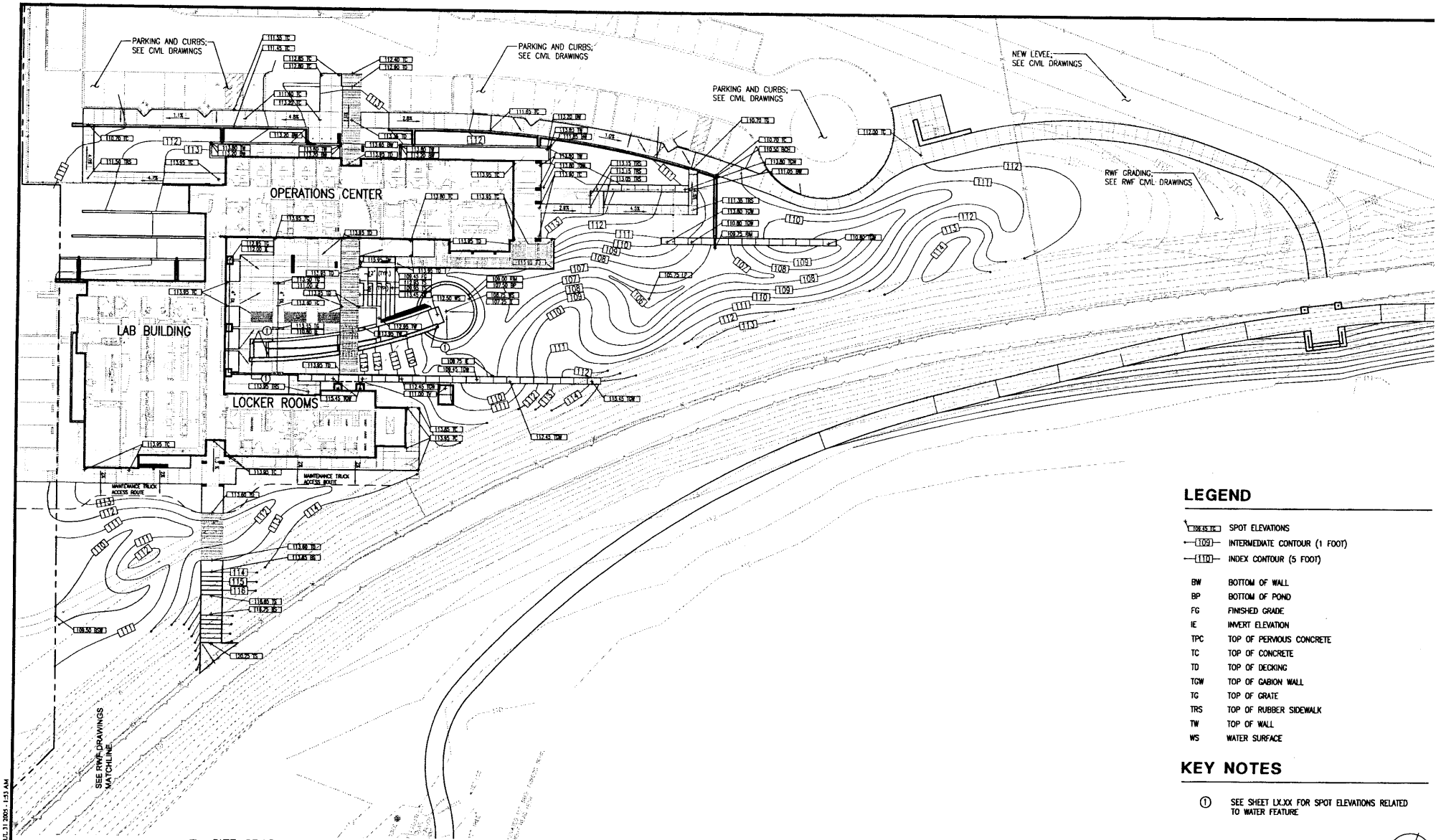
REV	DATE	BY	APVD	DESCRIPTION

GJK,SSK — DESIGNED
AGF,MCA — DRAWN
DW,HM — CHECKED

OPERATIONS CENTER FACILITY

BUILDING ELEVATIONS

DWG NO	A3.04
SHEET NO	OF X
PROJ NO	039-3
DATE	AUGUST 2005



LEGEND

- SPOT ELEVATIONS
- INTERMEDIATE CONTOUR (1 FOOT)
- INDEX CONTOUR (5 FOOT)

BW	BOTTOM OF WALL
BP	BOTTOM OF POND
FG	FINISHED GRADE
IE	INVERT ELEVATION
TPC	TOP OF PERVIOUS CONCRETE
TC	TOP OF CONCRETE
TD	TOP OF DECKING
TGW	TOP OF GABION WALL
TG	TOP OF GRATE
TRS	TOP OF RUBBER SIDEWALK
TW	TOP OF WALL
WS	WATER SURFACE

KEY NOTES

① SEE SHEET LX.XX FOR SPOT ELEVATIONS RELATED TO WATER FEATURE

2 L1.21 SITE GRADING – 2
SCALE: 1"=20'

0 10 20 40

NORTH

PRELIMINARY

VERIFY SCALES
BAR IS ONE INCH LONG ON FULL SIZE DRAWING
IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

GREENWORKS
GreenWorks, P.C.
Landscape Architecture
Environmental Design

RMC
Reinse, Melton & Caroffa, Inc.

REV	DATE	BY	APVD	DESCRIPTION

DESIGNED	BW
DRAWN	MG
CHECKED	JF

OPERATIONS CENTER FACILITY

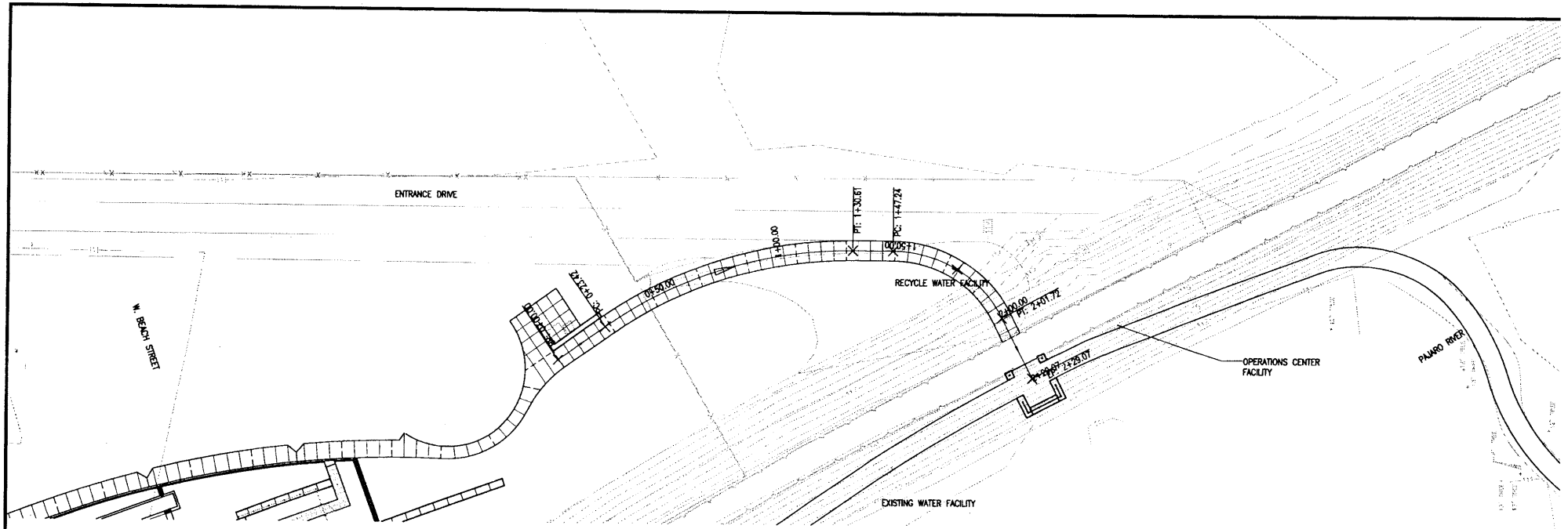
OPERATIONS CENTER
SITE GRADING - 2

DWG NO	L1.21
SHEET NO	X OF X
PROJ NO	039-3
DATE	AUGUST 1, 2005

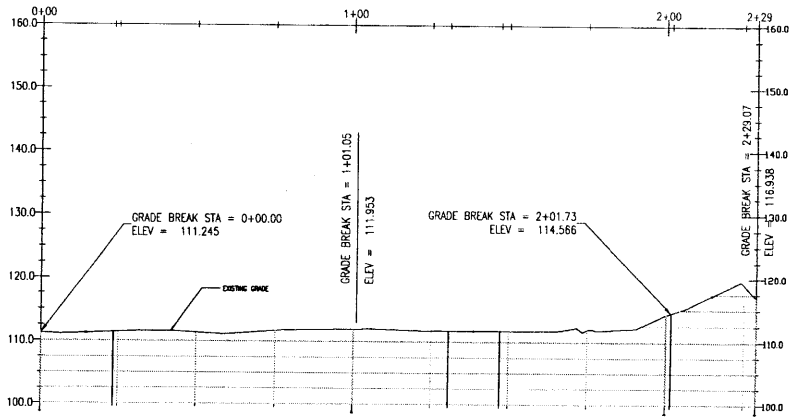
4081 L121 SITE GRADE.DWG - JUL 31 2005 - 1:53 AM

39

EXHIBIT A



1 L2.34 TRAIL ALIGNMENT – A – PLAN: STA 0+00–2+29.07
SCALE: 1"=20'



2 L2.34 TRAIL ALIGNMENT – A – PROFILE: STA 0+00–2+29.07
SCALE: 1"=20'

0 10 20 40

NORTH

PRELIMINARY

— VERIFY SCALES —
BAR IS ONE INCH LONG ON FULL SIZE DRAWING. IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

GREENWORKS
GreenWorks, P.C.
Landscape Architecture
Environmental Design

RMC
Raines, Melton & Carella, Inc.

REV	DATE	BY	APVD	DESCRIPTION

DESIGNED	BW
DRAWN	MG
CHECKED	JF

OPERATIONS CENTER FACILITY

PAJARO RIVER TRAIL - PLAN & PROFILE
ALIGNMENT-A: STA 0+00 - 2+29.07

DWG NO	L2.34
SHEET NO	X OF X
PROJ NO	039-3
DATE	AUGUST 1, 2005

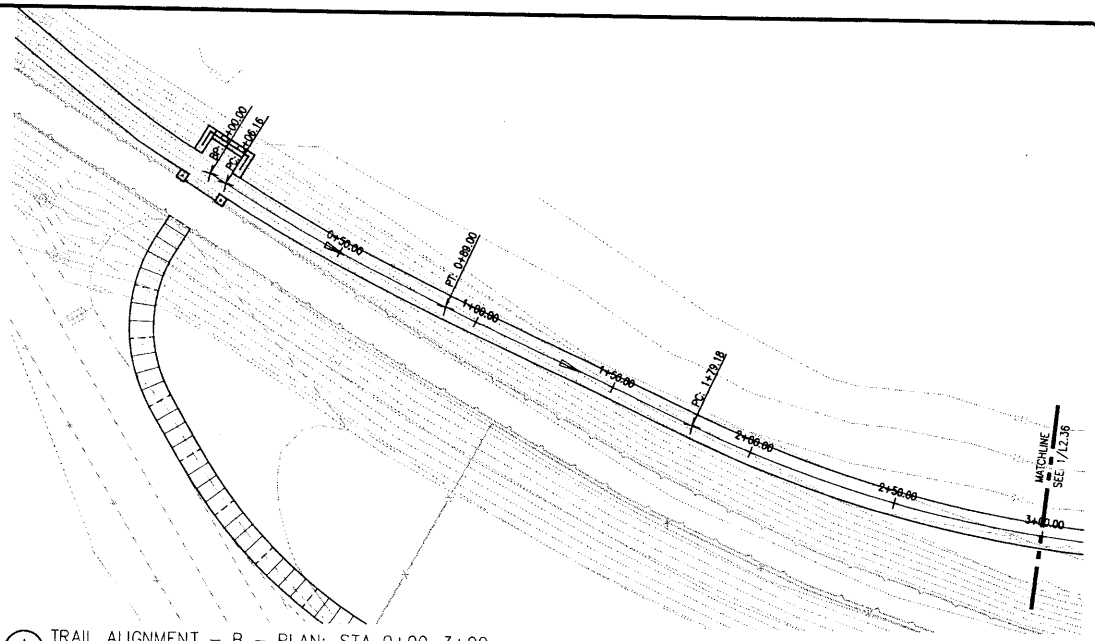
4081 L234 RT PP.DWG - JUL 31 2005 - 1:59 AM

46

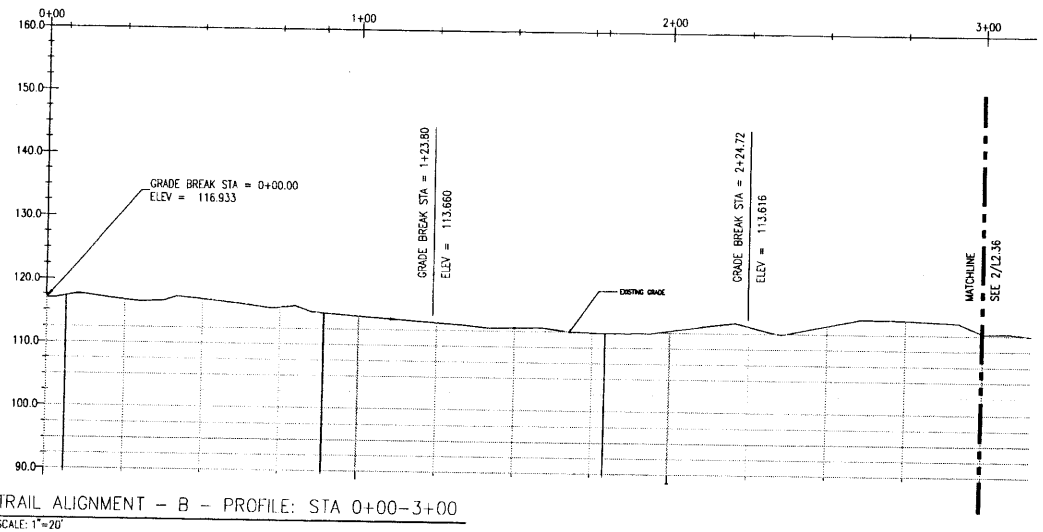
EXHIBIT A

EXHIBIT A

49



1 L2.35 TRAIL ALIGNMENT – B – PLAN: STA 0+00–3+00
SCALE: 1"=20'



2 L2.35 TRAIL ALIGNMENT – B – PROFILE: STA 0+00–3+00
SCALE: 1"=20'

0 10 20 40

PRELIMINARY

0" 1" — VERIFY SCALES — BAR IS ONE INCH LONG ON FULL SIZE DRAWING. IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

GREENWORKS GreenWorks, P.C. Landscape Architecture Environmental Design

RMC Raines, Melton & Carella, Inc.

REV	DATE	BY	APVD	DESCRIPTION

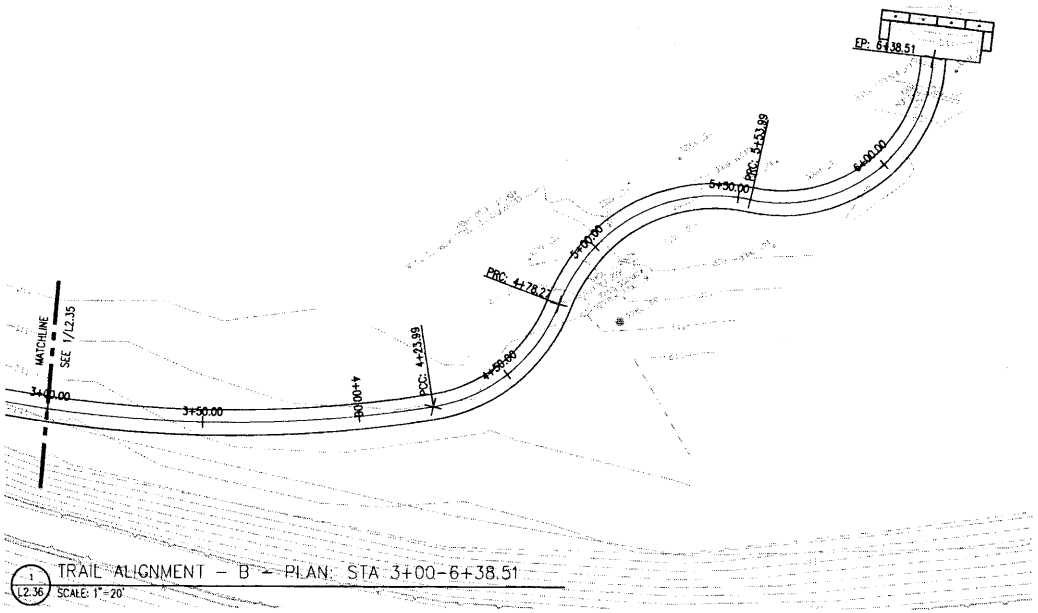
DESIGNED	BW
DRAWN	MG
CHECKED	JF

OPERATIONS CENTER FACILITY

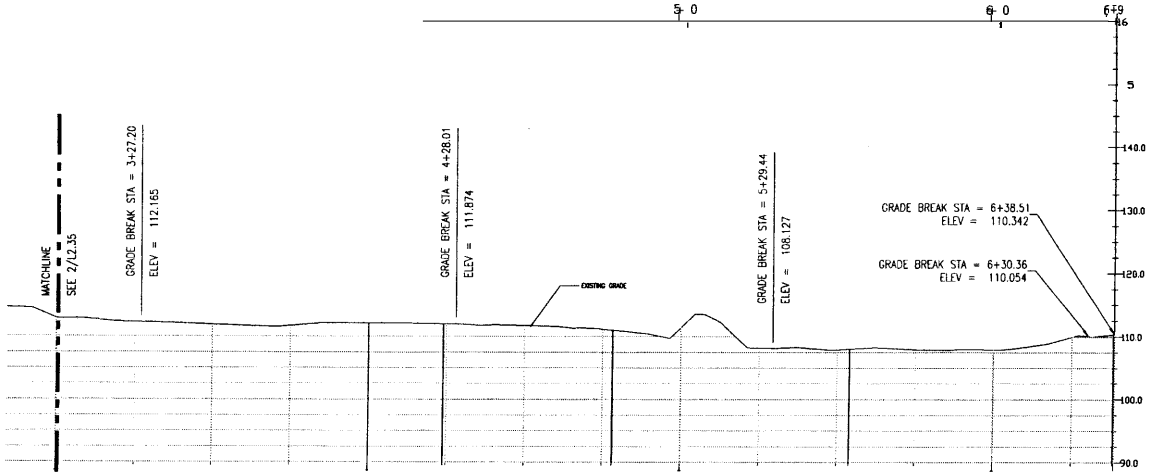
PAJARO RIVER TRAIL - PLAN & PROFILE - ALIGNMENT-B: STA 0+00 - 3+00

DWG NO	L2.35
SHEET NO	X OF X
PROJ NO	039-3
DATE	AUGUST 1, 2005

4081 L2.35 RT PP.DWG - TUE, 31 2005 - 2:49 AM



1 L2.36 TRAIL ALIGNMENT – B – PLAN: STA 3+00–6+38.51
SCALE: 1"=20'



2 L2.36 TRAIL ALIGNMENT – B – PROFILE: STA 3+00–6+38.51
SCALE: 1"=20'

0 10 20 40

NORTH

PRELIMINARY

VERIFY SCALES
BAR IS ONE INCH LONG ON FULL SIZE DRAWING. IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

GREENWORKS
GreenWorks, P.C.
Landscape Architecture
Environmental Design

RMC
Raines, Melton & Carella, Inc

REV	DATE	BY	APVD	DESCRIPTION

DESIGNED	BW
DRAWN	MG
CHECKED	JF

OPERATIONS CENTER FACILITY

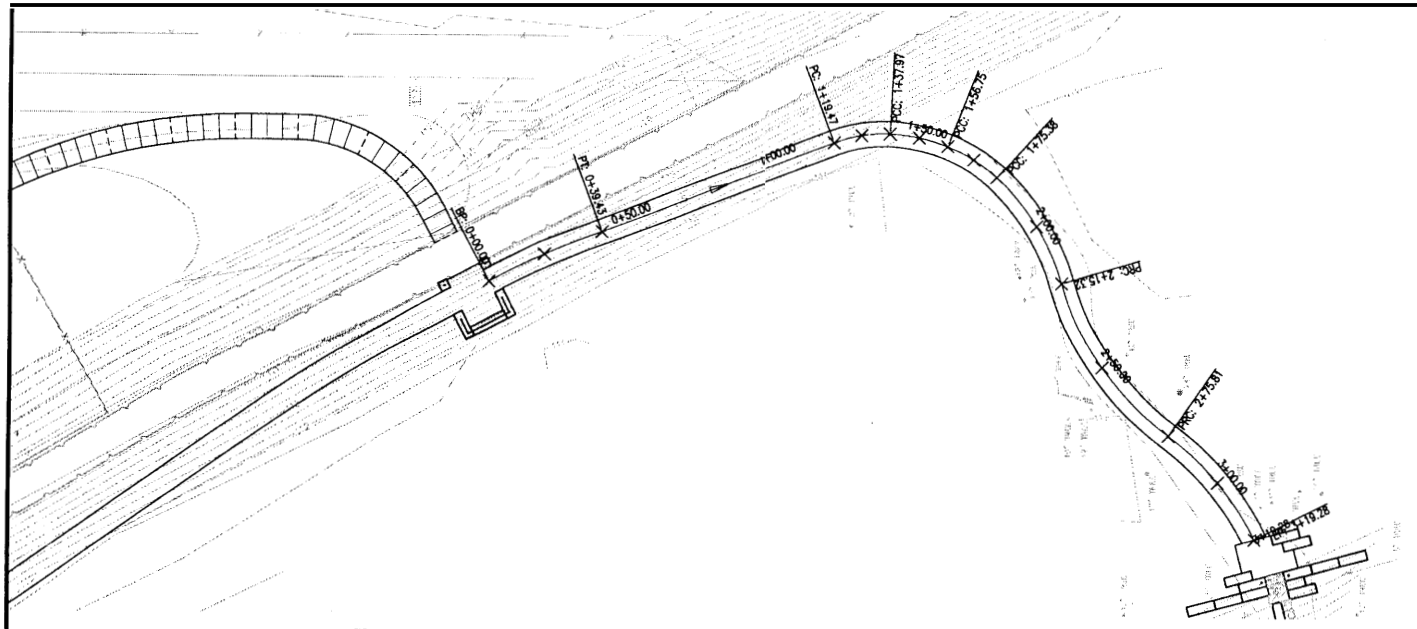
PAJARO RIVER TRAIL - PLAN & PROFILE - ALIGNMENT-B: STA 3+00 - 6+38.51

DWG NO	L2.36
SHEET NO	X OF X
PROJ NO	039-3
DATE	AUGUST 1, 2005

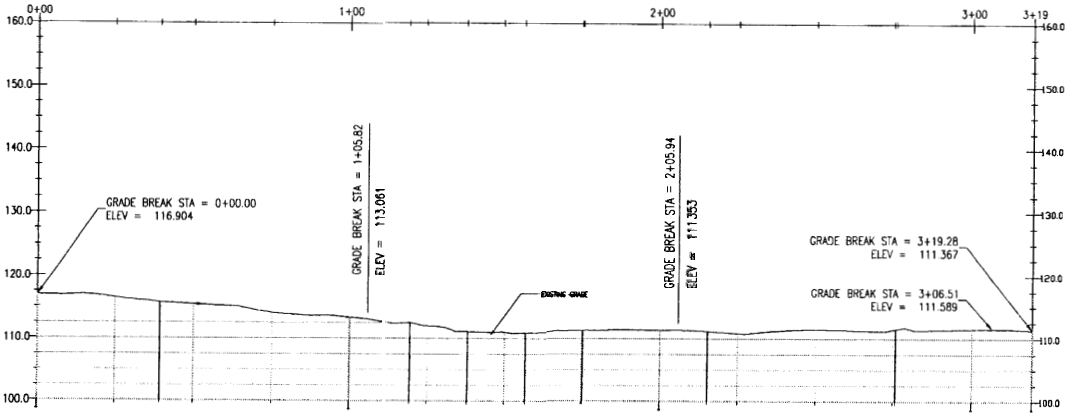
4081 L236 RT PP.DWG - JUL 31 2005 - 1:59 AM

42

EXHIBIT A



1 L1.37 TRAIL ALIGNMENT – C – PLAN: STA 0+00–3+19.28
SCALE: 1"=20'



2 L1.37 TRAIL ALIGNMENT – C – PROFILE: STA 0+00–3+19.28
SCALE: 1"=20'

0 10 20 40
NORTH

PRELIMINARY

"0" VERIFY SCALES "
IF BAR IS ONE INCH LONG ON FULL SIZE DRAWING, IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

GREENWORKS
GreenWorks, P.C.
Landscape Architecture
Environmental Design

RMC
Raines, Melton & Carella, Inc.

DESIGNED	BW
DRAWN	MG
CHECKED	JF

DEV	DATE	BY	APVD	DESCRIPTION

OPERATIONS CENTER FACILITY

PAJARO RIVER TRAIL - PLAN & PROFILE - ALIGNMENT-C: STA 0+00 - 3+19.28

DWG NO	L2.37
SHEET NO	X OF X
PROJ NO	039-3
DATE	AUGUST 1, 2005

4281 L237 RT PP.DWG - JUL 31 2005 - 1:59 AM

43

EXHIBIT A

PLANT LEGEND

TREES (2 L5.04) (3 L5.04)

- POPULUS NIGRA 'ITALICA' — LOMBARDY POPLAR – 24" BOX
- SEQUOIA SEMPERVIRENS — COAST REDWOOD
- ALNUS RHOMBIFOLIA — WHITE ALDER – 24" BOX
- QUERCUS AGRIFOLIA — COAST LIVE OAK – 24" BOX
- PLATANUS RACEMOSA — CALIFORNIA SYCAMORE – 36" BOX
- PYRUS KAWAKAMI — EVERGREE PEAR – 36" BOX

ACER
BIG L

SHRUBS / GROUNDCOVERS / GRASSES (1 L5.04) (4 L5.04)

- SPIRAEA DOUGLASII — DOUGLAS SPIRAEA – 5 GAL. CONT., SPACE AS SHOWN
- HOLODISCUS DISCOLOR — OCEANSPRAY – 5 GAL. CONT., SPACE AS SHOWN
- HETEROMELES ARBUTIFOLIA — TOYON – 5 GAL. CONT., SPACE AS SHOWN
- RHUS INTEGRIFOLIA — LEMONADE BERRY – 5 GAL. CONT., SPACE AS SHOWN
- ARTEMISIA CALIFORNICA — CALIFORNIA SAGEBRUSH – 2 GAL. CONT., SPACE AS SHOWN
- RIBES SANGUINEUM GLUTINOSUM — PINK FLOWERING CURANT – 5 GAL. CONT., SPACE AS SHOWN
- CORNUS SERICEA — REDTWIG DOGWOOD – 5 GAL. CONT., SPACE AS SHOWN
- DESCHAMPSIA CAESPITOSA VAR. HOLCIFORMIS — COASTAL HAIRGRASS – 1 GAL. CONT., SPACE AS SHOWN
- WOODWARDIA FIMBRIATA — GIANT CHAIN FERN – 5 GAL. CONT., SPACE AS SHOWN
- HEUCHERA 'ROSADA' — ALUM ROOT HYBRID – 1 GAL. CONT., SPACE AS SHOWN
- LONICERA INVOLUCRATA — TWINBERRY – 5 GAL. CONT., SPACE AS SHOWN
- FRAGARIA CHILOENSIS — COAST STRAWBERRY – 4" POTS, 12" O.C.
- CALAMAGROSTIS NUTKAENSIS — PACIFIC REED GRASS – 1 GAL. CONT., SPACE AS SHOWN
- SISYRINCHIUM BELLUM 'GREYHOUND ROCK' — GREYHOUND ROCK BLUE EYED GRASS – 1 GAL. CONT., 18" O.C.
- LEYMUS CONDENSATUS 'CANYON PRINCE' — CANYON PRINCE WILD RYE – 1 GAL. CONT., 3' O.C.
- CAREX TUMULICOLA — BERKELEY SEDGE – 1 GAL. CONT., 18" O.C.
- CEANOTHUS 'JOYCE COULTER' — JOYCE COULTER CEANOTHUS – 1 GAL. CONT., 3' O.C.
- MEADOW MIX (1) — SEE SPECIFICATIONS
- MEADOW MIX (2) — SEE SPECIFICATIONS
- FIELDGRASS — SEE SPECIFICATIONS
- GROUND COVER – LEVEE PLANTING — MATCH EXISTING – 4" POTS, 12" O.C.
- MUHLENBERGIA RIGENS — DEER GRASS – 1 GAL. CONT., 3' O.C.
- ARCTOSTAPHYLOS EDMUNDSII — LITTLE SUR MANZANITA – 1 GAL. CONT., 3' O.C.
- CEANOTHUS GRISEUS 'YANKEE POINT' — YANKEE POINT CEANOTHUS – 1 GAL. CONT., 4' O.C.
- MAHONIA AQUIFOLIUM 'COMPACTA' — COMPACT OREGON GRAPE – 1 GAL. CONT., SPACE AS SHOWN
- PSEUDOSASA JAPONICA 'TSUTSUMIANA' — GREEN ONION BAMBOO – 7 GAL. CONT., SPACE AS SHOWN
- ERIGERON GLAUCUS 'CAPE SEBASTIAN' — DWARF SEASIDE DAISY – 4" POTS, 18" O.C.
- VITUS CALIFORNICA — CALIFORNIA GRAPE – 15 GAL. CONT., TIE TO TRELLIS

WETLAND PLANTING
CAREX OBNUPTA – SLOUGH SEDGE
ELEOCHARIS MACROSTACHYA – CREEPING SPIKE RUSH
EQUISETUM ARVENSE – COMMON HORSETAIL
HORDEUM BRACHYANTHERUM – MEADOW BARLEY
JUNCUS EFFUSUS – COMMON RUSH
LEYMUS TRITICOIDES – CREEPING WILD RYE
SAGITTARIA LATIFOLIA – WAPATO
SCIRPUS ACUTUS – HARD STEM BULRUSH
SCIRPUS AMERICANA – THREE-SQUARE BULRUSH
WOODWARDIA FIMBRIATA – GIANT CHAIN FERN

EMERGENT PLANTING
DESCHAMPSIA CAESPITOSA HOLCIFORMIS – COASTAL HAIRGRASS
LEYMUS TRITICOIDES – CREEPING WILD RYE
CALYCANTHUS OCCIDENTALIS – SPICE BUSH
CORNUS SERICEA – REDTWIG DOGWOOD
LONICERA INVOLUCRATE – TWINFLOWER
MYRICA CALIFORNICA – PACIFIC WAX MYRTLE
ROSA CALIFORNICA –CALIFORNIA WILD ROSE

PRELIMINARY

VERIFY SCALES — BAR IS ONE INCH LONG ON FULL SIZE DRAWING. IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

GREENWORKS — GreenWorks, P.C. Landscape Architecture Environmental Design

RMC — Raines, Melton & Carella, Inc.

REV	DATE	BY	APVD	DESCRIPTION

DESIGNED BW
DRAWN MG
CHECKED JF

OPERATIONS CENTER FACILITY

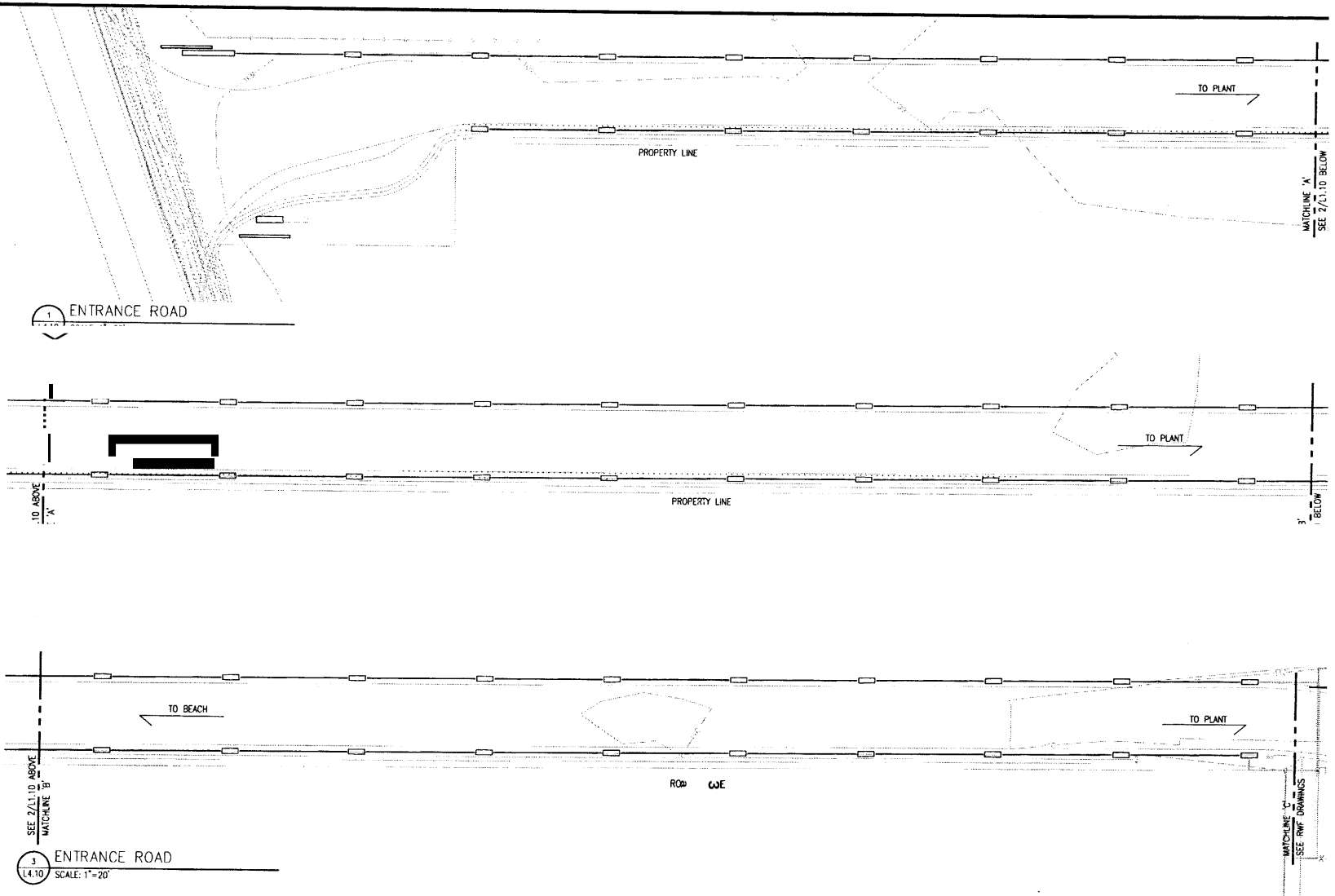
PLANTING LEGEND

DWG NO L4.00
SHEET NO X OF X
PROJ NO 039-3
DATE AUGUST 1, 2005

4081 L400 PLNTD.DWG - JUL 31 2005 - 3:05 AM

44

EXHIBIT A



PRELIMINARY

VERIFY SCALES — BAR IS ONE INCH LONG ON FULL SIZE DRAWING. IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

GREENWORKS
GreenWorks, P.C.
Landscape Architecture
Environmental Design

RMC
Raines, Melton & Carella, Inc.

REV	DATE	BY	APVD	DESCRIPTION

DESIGNED	BW
DRAWN	MG
CHECKED	JF

OPERATIONS CENTER FACILITY

ENTRANCE ROAD
PLANTING PLAN

DWG NO	L4.10
SHEET NO	X OF X
PROJ NO	039-3
DATE	AUGUST 1, 2005

4081 L4.10 ER PLAN.DWG - JUL 31 2005 - 3:55 AM

45

EXHIBIT A

PARTIAL PLANTING PLAN
SCALE: 1"=20'-0"
PARTIAL PLANTING PLAN
SCALE: 1"=20'-0"
MATCHLINE
SEE 2/L4.20
MATCHLINE
SEE 1/L4.20
MATCHLINE
SEE 1/L4.2T
SEE RMC DRAWING
NORTH
PRELIMINARY
GREENWORKS
RMC
Rattner, Mellon & Cornelia, Inc.
OPERATIONS CENTER FACILITY
OPERATIONS CENTER (WEST)
PLANTING PLAN
DESIGNED BW
DRAWN MG
CHECKED JF
DWG NO L4.20
SHEET NO X OF X
PROJ NO 0393
DATE AUGUST 1, 2005
REV DATE BY APVD DESCRIPTION
0" HEIGHT SCALE 1" IF THIS BAR IS ONE INCH LONG ON FULL SIZED DRAWING IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY
GreenWorks, P.C.
Landscape Architecture
Environmental Design
Rattner, Mellon & Cornelia, Inc.
K:\01 L420 OC PLNT.DWG - JUL 31 2005 - 3:05 AM

EXHIBIT A

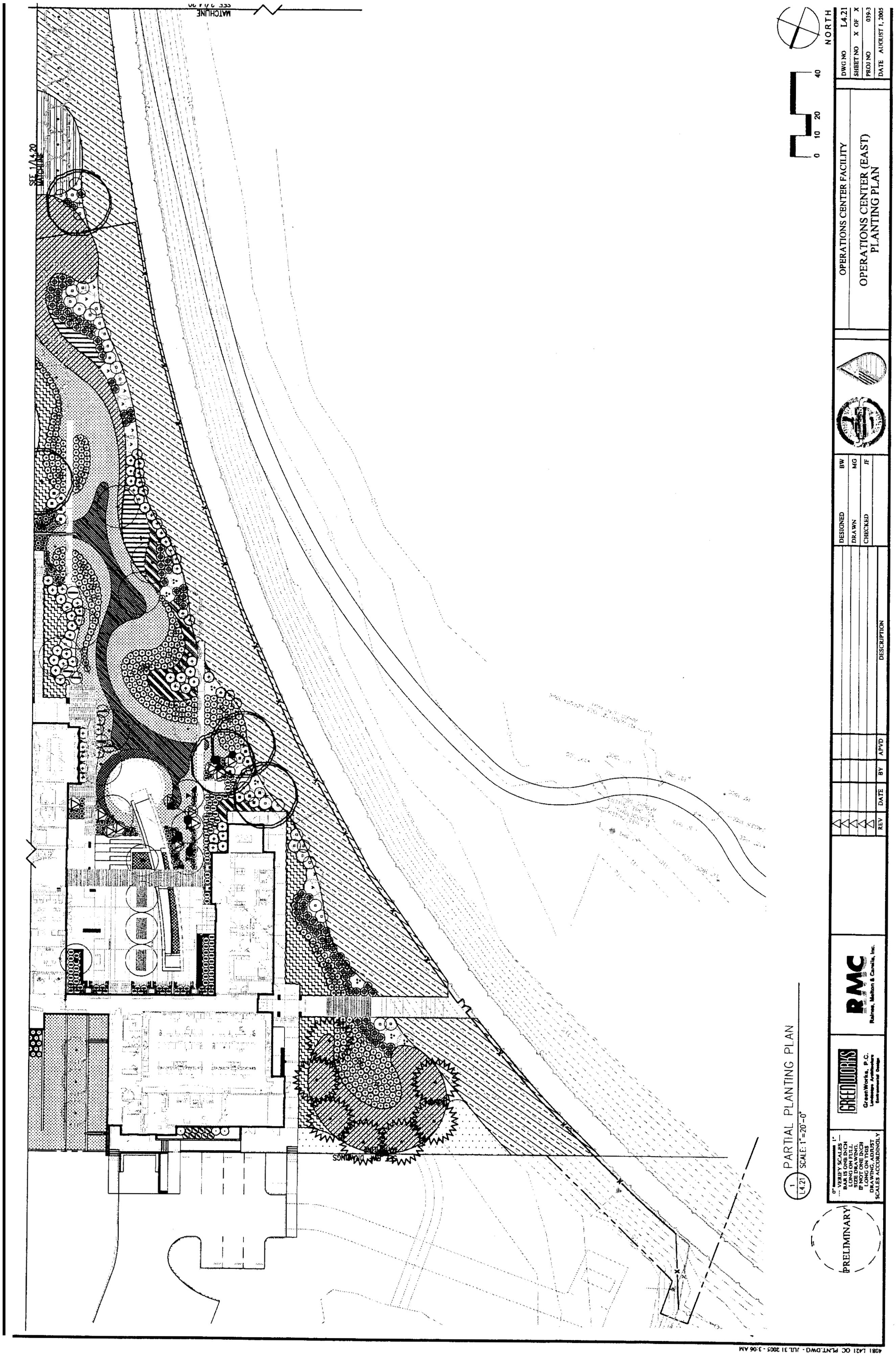
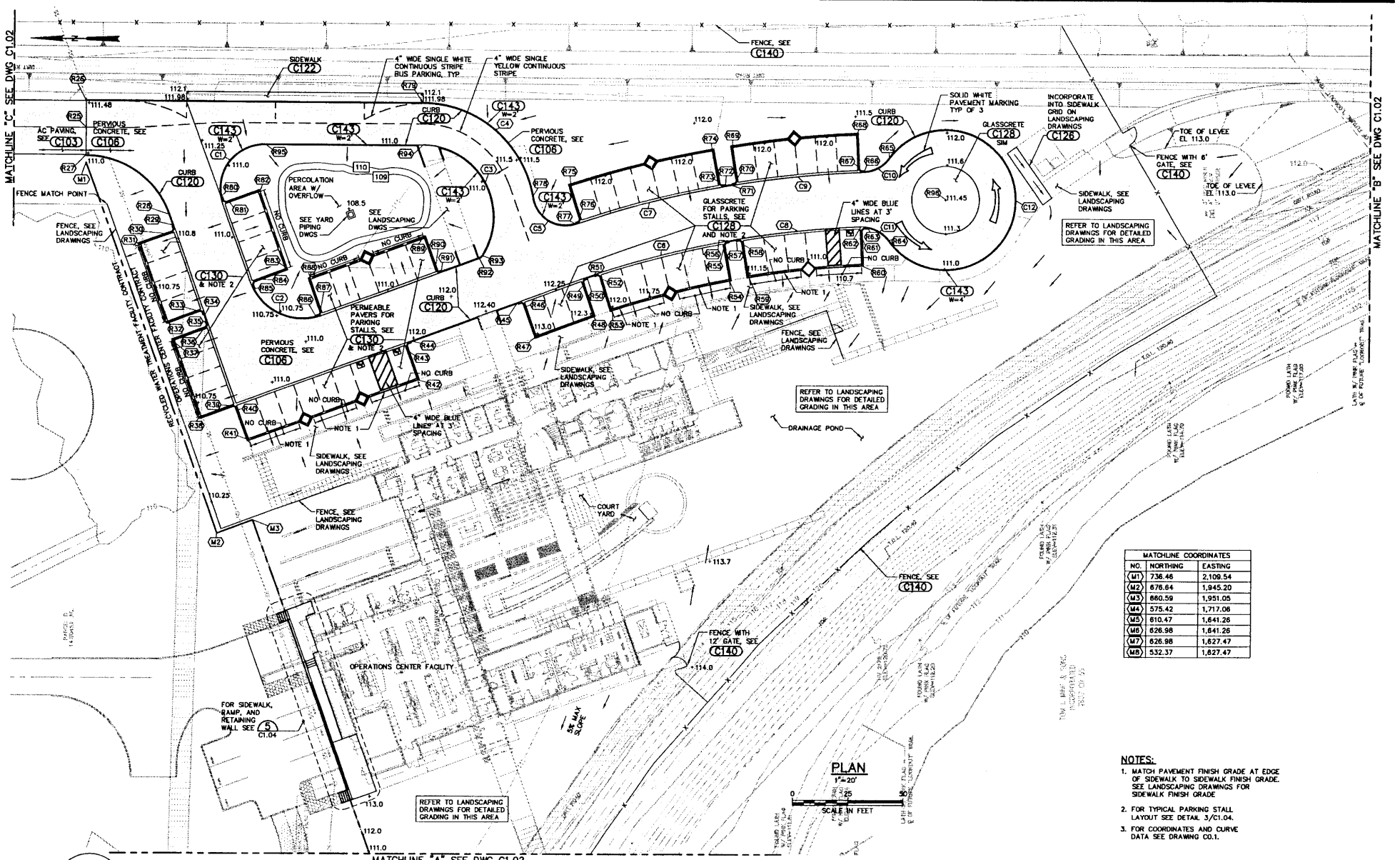

PARTIAL PLANTING PLAN
1
L4.21
SCALE: 1"=20'-0"
PRELIMINARY
0" 1"
VERIFY SCALES
BAR IS ONE INCH LONG ON FULL SIZE DRAWING.
IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY
GREENWORKS
GreenWorks, P.C.
Landscape Architecture
Environmental Design
RMC
Raines, Melton & Carella, Inc.
REV
DATE
BY
APVD
DESCRIPTION
DESIGNED BW
DRAWN MG
CHECKED JF
OPERATIONS CENTER FACILITY
OPERATIONS CENTER (EAST)
PLANTING PLAN
0 10 20 40
NORTH
DWG NO L4.21
SHEET NO X OF X
PROJ NO 039-3
DATE AUGUST 1, 2005
SEE 1/L4.20
MATCHLINE
4081 L421 OC PLNT.DWG - JUL 31 2005 - 3:06 AM

EXHIBIT A



MATCHLINE COORDINATES		
NO.	NORTHING	EASTING
M1	736.46	2,109.54
M2	676.64	1,945.20
M3	660.59	1,951.05
M4	575.42	1,717.06
M5	610.47	1,641.26
M6	626.98	1,641.26
M7	626.98	1,627.47
M8	532.37	1,627.47

NOTES:

1. MATCH PAVEMENT FINISH GRADE AT EDGE OF SIDEWALK TO SIDEWALK FINISH GRADE. SEE LANDSCAPING DRAWINGS FOR SIDEWALK FINISH GRADE
2. FOR TYPICAL PARKING STALL LAYOUT SEE DETAIL 3/C1.04.
3. FOR COORDINATES AND CURVE DATA SEE DRAWING C0.1.

PRELIMINARY

VERIFY SCALES BAR IS ONE INCH LONG ON FULL SIZE DRAWING. IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

RMC Water & Environment

Michael Willis Architects

REV	DATE	BY	APVD	DESCRIPTION

DESIGNED M. VAN HORNE
DRAWN J. MAY
CHECKED X

OPERATIONS CENTER FACILITY

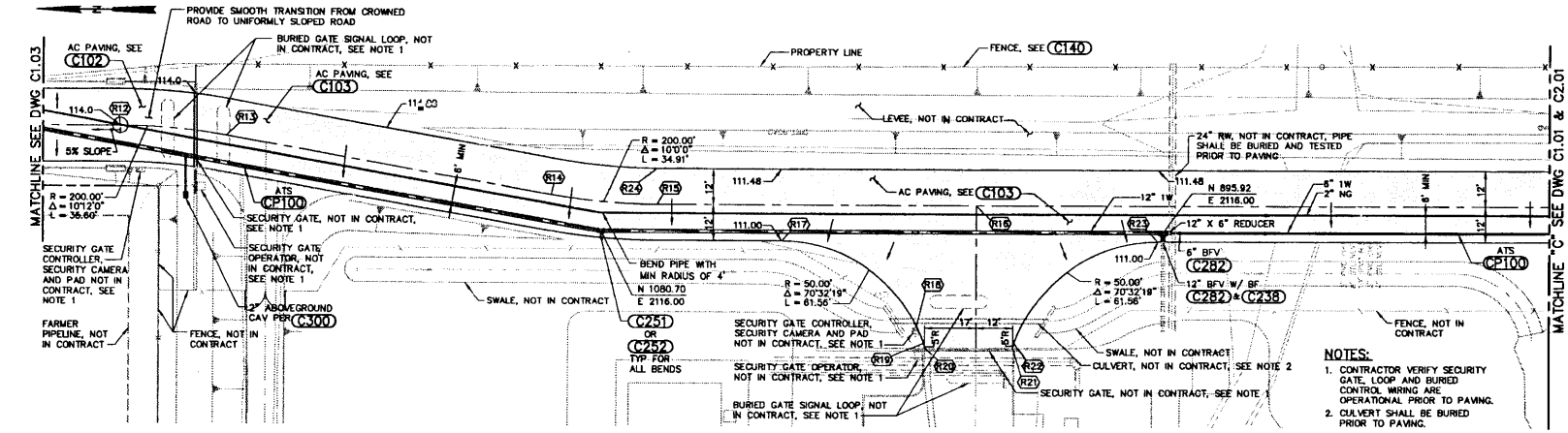
SITE GRADING AND PAVING PLAN - 1

DWG NO	C1.01
SHEET NO	X OF X
PROJ NO	039-3
DATE	AUGUST 1, 2005

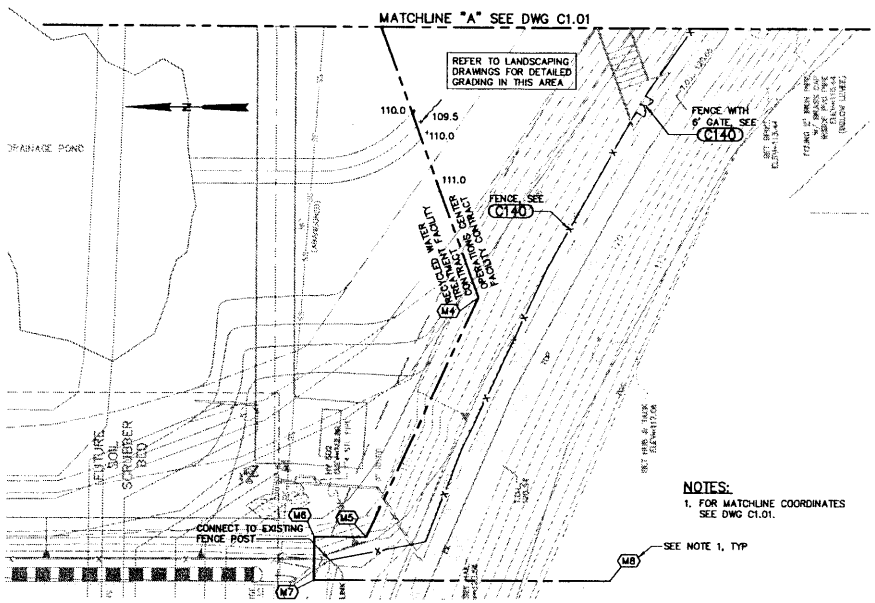
OP-C-1-1.DWG - AUG 01, 2005 - 9:51 AM

84

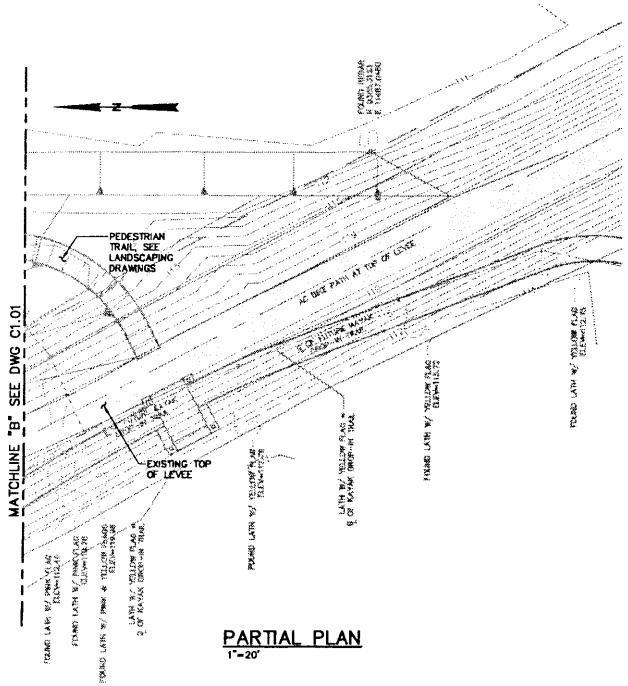
EXHIBIT A



PARTIAL PLAN
1"=20'



PARTIAL PLAN
1"=20'



PARTIAL PLAN
1"=20'

								DESIGNED	M. VAN HORNE
								DRAWN	J. MAY
								CHECKED	X
REV	DATE	BY	APV'D	DESCRIPTION					

RMC Water & Environment

Michael Willis Architects

OPERATIONS CENTER FACILITY

SITE GRADING AND PAVING AND YARD PIPING PLANS - 2

DWG NO	C1.02
SHEET NO	X OF X
PROJ NO	039-3
DATE	AUGUST 1, 2005

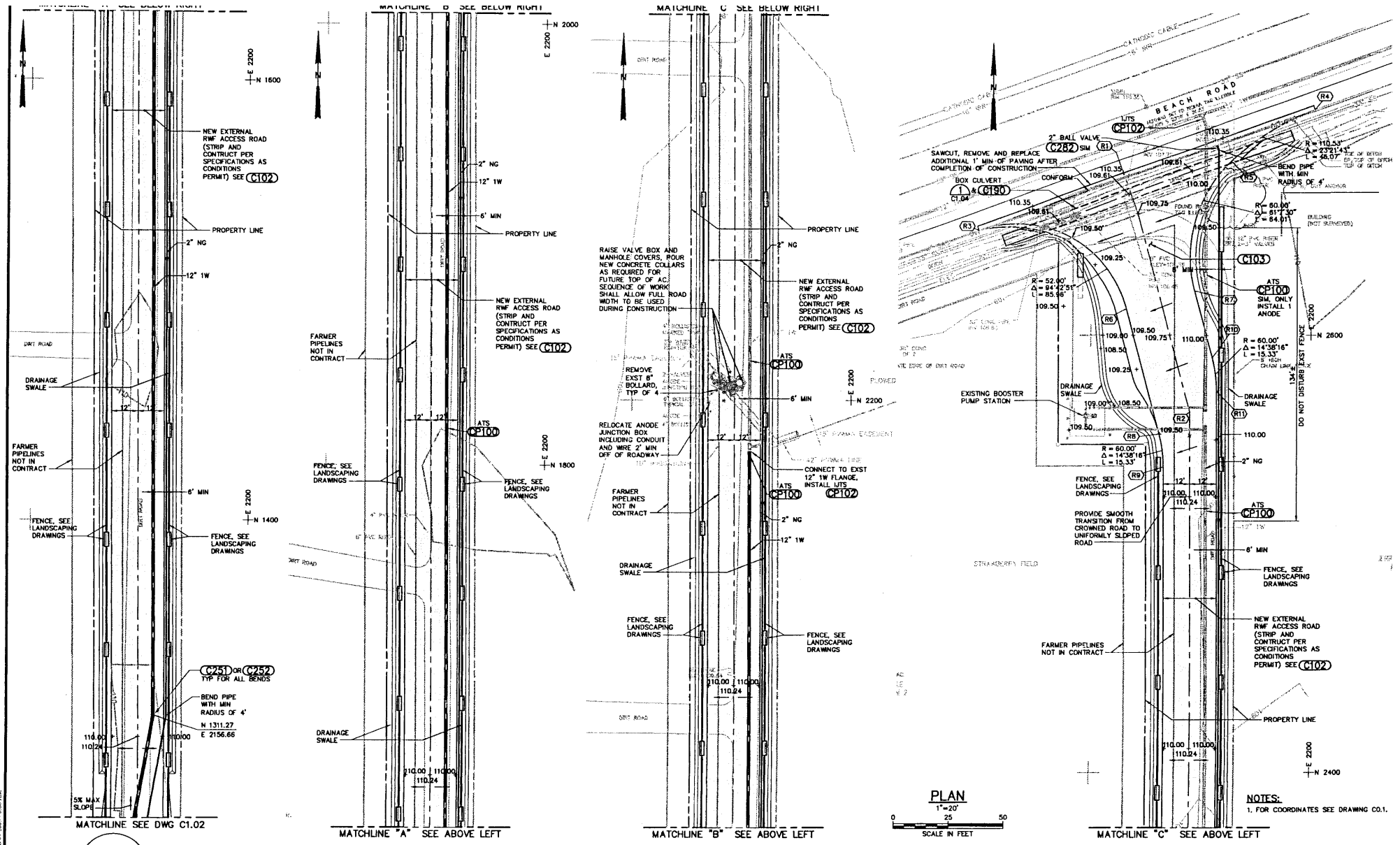
0" 1" VERIFY SCALES BAR IS ONE INCH LONG ON FULL SIZE DRAWING. IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

E

OP-C-1-2.DWG - AUG 01, 2005 - 7:46 AM

49

EXHIBIT A



PRELIMINARY

VERIFY SCALES — BAR IS ONE INCH LONG ON FULL SIZE DRAWING. IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

RMC Water & Environment

Michael Willis Architects

REV	DATE	BY	APVD	DESCRIPTION

DESIGNED	M. VAN HORNE
DRAWN	J. MAY
CHECKED	X

OPERATIONS CENTER FACILITY

RWF ACCESS ROAD - GRADING AND PAVING, AND YARD PIPING PLAN

DWG NO	C1.03
SHEET NO	X OF X
PROJ NO	039-3
DATE	AUGUST 1, 2005

OPC-1.DWG - AUG 01 2005, 8:00 AM

EXHIBIT A

SD

LIGHTING FIXTURE SCHEDULE

(A) 2'Wx4'L LAY-IN T-BAR GRID RECESS INDIRECT FLUORESCENT FIXTURE, WHITE FINISHED STEEL HOUSING WITH PERFORATED LIGHT BASKET SUPPORTED BY PLASTIC AND ENDCAPS, WHITE REFLECTOR, (4) 40TT 40 WATT THIN TUBE LAMPS AND (2) 277 VOLT ELECTRONIC THIN TUBE BALLAST.

COLUMBIA: STR24-240TTG SERIES

(A1) SAME AS TYPE 'A' EXCEPT WITH (2) T8 32 WATT LAMPS AND (2) 277 VOLT ELECTRONIC BALLAST.

(B) SAME AS TYPE 'A' EXCEPT 2'Wx2'L BODY WITH (2) 40TT 40 WATT LAMPS AND (1) 277 VOLT ELECTRONIC BALLAST.

(B1) SAME AS TYPE 'B' EXCEPT WITH (2) T8 17 WATT LAMPS.

(C) 4'Lx8"Wx3.125"H FLUORESCENT COVE MOUNTED FIXTURE, DIE-FORMED STEEL HOUSING, BAKED WHITE ENAMEL FINISH, DIE-FORMED STEEL HIGH-REFLECTANCE WHITE REFLECTORS. (1) T8 32H LAMP AND (1) 277V ELECTRONIC BALLAST.

LITECONTROL: CC-AI-3014 SERIES

(C1) SAME AS TYPE 'C' EXCEPT 3' LONG WITH (1) T8 25 WATT LAMP.

(D) 8" DIA. RECESSED COMPACT FLUORESCENT DOWNLIGHT WITH 7.75" NOMINAL INTERNAL APERTURE. SPECULAR CLEAR ALZAK REFLECTOR, WHITE TRIM RING WITH (2) 26H PL LAMPS AND (1) 277 VOLT DIMMABLE BALLAST.

PRESCOLITE: CFR826UEBDM-ST442A SERIES

(D1) SAME AS TYPE 'D' EXCEPT WITH (2) 13H PL LAMPS AND (1) 277 VOLT ELECTRONIC BALLAST.

PRESCOLITE: CFR813UEB-ST442A SERIES

(D2) SAME AS TYPE 'D1' EXCEPT 6" DIA.

PRESCOLITE: CFR613UEB-ST3T2A SERIES

(D3) SAME AS TYPE 'D2' EXCEPT IS WALL WASH.

PRESCOLITE: CFR613EB-ST3T2HN SERIES

(D4) SAME AS TYPE 'D1' EXCEPT WITH LENS. UL LISTED FOR WET LOCATION.

(E) 4' LONG PENDANT OR SURFACE MOUNTED FLUORESCENT FIXTURE WITH WIRE GUARD, WHITE ENAMEL FINISH DIE FORMED STEEL HOUSING WITH REFLECTANCE 87% PLUS AND (2) 4' T8 32H LAMPS AND (1) 277 VOLT ELECTRONIC BALLAST. PROVIDE MOUNTING HARD WEAR AND CUSTOM MADE STEM FOR MOUNTING THE BOTTOM OF FIXTURE AT +10' AFF. FIELD MEASURE FOR EXACT LENGTH PRIOR TO ORDER FIXTURE.

COLUMBIA: CS4-2 SERIES

(F) 4'Lx10.5"Wx2.625"H (OR 8' AND 12' LONG) PENDANT MOUNTED DIRECT/INDIRECT FLUORESCENT FIXTURE WITH EXTRUDED ALUMINUM TOW-SIDED HOUSING, END CAPS, SEMI-SPECULAR, CENTER LOW IRIDESCENCE ANODIZED ALUMINUM PARABOLIC BAFFLES. DIE-FORMED HIGH-REFLACTANCE ALUMINUM REFLECTORS. (3) T8 32H LAMPS PER 4' LENGTH, AND (2) 277V ELECTRONIC BALLAST. PROVIDE FIXTURE CONNECTOR HUBS TO JOINT CONTINUOUS FIXTURES EARTHQUAKE STEM WITH POWER CABLE. CANOPY AND OTHER MOUNTING HARDWARE TO MOUNT THE BOTTOM OF FIXTURE AT +10' AFF, FIELD MEASURE FOR EXACT STEM LENGTH PRIOR TO ORDER.

LITECONTROL: P-ID-5234 SERIES

(G) 11"Wx41.Lx3.5"D SUSPENDED MOUNTED DIRECT/INDIRECT FLUORESCENT FIXTURE. ALUMINUM SIDE PANELS AND ENDPLATE, REINFORCED BY HEAVY GAUGE STEEL STRUCTURAL ENDPLATE SUPPORTS, WHITE FINISH, CLEAR PRISMATIC ACRYLIC LENS, (2) T8 32H LAMPS AND (1) 277 VOLT ELECTRONIC BALLAST. PROVIDE EARTHQUAKE STEM WITH CABLE, CANOPY AND OTHER MOUNTING HARDWARE TO MOUNTING THE BOTTOM OF FIXTURE AT +10' AFF, FIELD MEASURE FOR EXACT STEM LENGTH PRIOR TO ORDER.

COLUMBIA: ITI135-H2-4-CPA SERIES

(H) 2'Wx4'L LAY-IN T-BAR GRID RECESS FLUORESCENT FIXTURE, DIE FORMED AND EMBOSSED CODE GAUGE STEEL HOUSING, HIGH REFLECTANCE BAKED WHITE ENAMEL FINISH, 100% CLEAR PRISMATIC ACRYLIC PATTERN 12 LENS, (2) T8 32 WATT LAMPS AND (1) 277 VOLT ELECTRONIC BALLAST.

COLUMBIA: 4PS24-2 SERIES

(H1) SAME AS TYPE 'H' EXCEPT 2'Wx2'L. BODY WITH (2) T8 U-BENT 32 WATT LAMPS.

(J) 3.2"Wx4'L STRIP SURFACE MOUNTED FLUORESCENT FIXTURE, DIE FORMED HEAVY GAUGE STEEL HOUSING, WHITE ENAMEL FINISH, (1) 4' T8 32 WATT LAMP AND (1) 277 VOLT ELECTRONIC BALLAST.

COLUMBIA: CH4-132-EB8 SERIES

(J1) SAME AS TYPE 'J' EXCEPT 3' LONG WITH (1) 3' T8 25 WATT LAMP.

(K) 4.5"DIA.x6.1"H SEMI-RECESSED GLOWING DOWNLIGHT WITH BILLET ALUMINUM HOUSING. ANODIZED SPUN ALUMINUM TRIM. CYLINDRICAL TRANSLUCENT ACRYLIC CYLINDRICAL DIFFUSER (BELOW CEILING). (2) 13 WATT CF LAMPS AND (1) 277 VOLT ELECTRONIC BALLAST. DESIGN-BUILT TO FIT INTO WOOD SLAT CEILING.

HESSAMERICA: MS150RG SERIES

(K1) SAME AS TYPE 'K' EXCEPT 6.3"DIA.x4.3"H WITH (1) 13 WATT CF LAMP.

HESSAMERICA: MSBORG SERIES

(L) 6.25"DIA.x14.125"H SUSPENDED MOUNTED FIXTURE, CYLINDRICAL SHAPE BLOWN WHITE GLASS DIFFUSER WITH NARROWER CENTER SECTION OF SMALL DIAMETER AND SMOOTH CURVE TRANSITION FROM LARGER DIAMETER OF 6.25" AT THE TOP AND BOTTOM OF DIFFUSER, GRAY ALUMINUM CONSTRUCTION. (1) 100 WATT E26 LAMP.

EUROFASE: SAX SERIES

(L1) SAME AS TYPE 'L' EXCEPT WALL MOUNTED.

(M) 21.x2'Wx3.5"H SURFACE MOUNTED FLUORESCENT FIXTURE, 22 GAUGE STEEL HOUSING, HIGH TEMPERATURE BAKED WHITE ENAMEL FINISH, 100% ACRYLIC PATTERN 12 CONSULT LENS, DOOR OPEN FROM EITHER SIDE. (2) T8 U-BENT 32 WATT LAMPS AND (1) 277 VOLT ELECTRONIC BALLAST.

COLUBIA: PM22-23216-PSA12-EB8-277 SERIES

(N) 2.75"DIA.x10.975"H UP/DOWN WALL MOUNT FIXTURE WITH MACHINED ALUMINUM HOUSING. ANODIZED SATIN ALUMINUM FINISH, EQUIPPED WITH 4.75"DIA. WALL PLATE. (2) 20 WATT MR16 HALOGEN LAMPS. PROVIDE REMOTE 120-VOLT TRANSFORMER AS REQUIRED. COORDINATE WITH HEVILITE PRIOR TO BID.

HEVILITE: HL-340-2X SERIES

(N1) SIMILAR TO TYPE 'N' EXCEPT 7"H DOWN LIGHT, (1) PAR20 35 WATT LAMP, UL LISTED FOR WET LOCATION.

HEVILITE: HL-374 SERIES

(N2) SIMILAR TO TYPE 'N1' EXCEPT 5.75"H SURFACE MOUNT DOWN LIGHT, (1) PAR20 35 WATT LAMP, UL LISTED FOR WET LOCATION.

HEVILITE: HL-373 SERIES

(O) 24"DIA.x5"D PENDANT MOUNTED DIRECT/INDIRECT DISK FLUORESCENT FIXTURE, WITH SPUN STEEL HOUSING AND FLAT ACRYLIC DIFFUSER. (4) 13 WATT PL LAMPS (INDIRECT) AND (1) 21 WATT 2D LAMP (DIRECT). SUSPENDED WITH (3) STAINLESS STEEL CABLES METALLIC DISK AND POWERED BY CORD.

LITECONTROL: P-ID-33JR-FP SERIES

(O1) SAME AS TYPE 'O' EXCEPT 33"DIA.x3.5"D WITH (3) 50 WATT PL LAMPS (INDIRECT) AND (1) 38 WATT 2D LAMP (DIRECT).

LITECONTROL: P-ID-3300-FP SERIES

(P) POLE TOP MOUNTED SINGLE LUMINARIES WITH 31.5"DIA.x24"H CAST ALUMINUM FLAT SPUN SHADE 31.5"DIA. TOP CAP ALUMINUM HOUSING, CLEAR ACRYLIC LENS EXTENDS THROUGH THE SHADE. (1) 175 WATT MH LAMP AND -20°F 277 VOLT BALLAST. UL LISTED FOR WET LOCATION. POLE SHALL BE 4.5"DIA.x47.2"H AND 3"DIA.x14'H STEPPED ROUND STEEL WITH SPUN ALUMINUM BASE COVER. ALL MATTE SILVER GREY METALLIC FINISH, PROVIDE STEEL RE-IN FORCED CONCRETE BASE. UL LISTED FOR WET LOCATION.

HESSAMERICA: AVB00 SERIES

(P1) SAME AS TYPE 'P' EXCEPT [illegible] EXTENDED ARM ON POLE AND WITH TWO LUMINARIES.

(Q) 54"Lx2.2"Wx3.7"D ADJUSTABLE FLUORESCENT OVER-MIRROR LIGHT. EXTRUDED ALUMINUM HOUSING WITH DIE-CAST METAL ENDS, WHITE FINISH, SNAP-IN TRANSLUCENT OPAL ACRYLIC DIFFUSER, (1) 4'I 32 WATT T8 LAMP AND 277 VOLT ELECTRONIC BALLAST.

ALKCO: TAB132-RSW SERIES

(Q1) SAME AS TYPE 'Q' EXCEPT 30" LONG WITH (1) 2' T8

(R) 7.3"SQx5.9"H SLIGHTLY REGULAR CUBE WALL MOUNTED FIXTURE WITH CAST ALUMINUM HOUSING AND HEAVY ALUMINUM PLATE, MATTE SILVER GREY METALLIC FINISH, TRANSLUCENT ACRYLIC LENS, (1) 23 WATT CF LAMP. UL LISTED FOR WET LOCATION.

HESSAMERICA C5150 SERIES

(S) 20.5"Wx5"Hx4"D RECESSED MOUNT STEP LIGHT. DIE-CAST AND EXTRUDED ALUMINUM HOUSING. ONE PIECE DIE-CAST ALUMINUM FACEPLATE, BRONZE FINISH CLEAR TEMPERED GLASS. WATER TIGHT CONTINUOUS HIGH TEMPERATURE, MOLDED SILICONE RUBBER GASKET, (1) 34N CF LAMP AND 277 VOLT ELECTRONIC BALLAST. UL LISTED FOR WET LOCATION.

BEGA: 2024P SERIES

(T) 9.2"DIAx42.1"H BOLLARD FIXTURE WITH HEAVY DUTY STEEL WITH FLUSH HANDHOLE BOLLARD SHAFT AND HEAVY CAST ALUMINUM TOP, BLACK FINISH, CYLINDRICAL CLEAR ACRYLIC LENS WITH WHITE INTERAL LOUVER, (1) 50 WATT MH LAMP. UL LISTED FOR WET LOCATION, 277 VOLT, 0°C BALLAST.

HESSAMERICA: VC1010 SERIES

(U) 31.Lx5.7"Wx1.8"H UNDER CABINET FLUORESCENT TASK LIGHT, EXTRUDED ALUMINUM HOUSING AND MOLDED LEXAN POLYCARBONATE END CAPS WHITE FINISH, CLEAR LINEAR PRISM DIFFUSER, (1) 25 WATT T8 LAMP AND 277 VOLT ELECTRONIC BALLAST.

ALKCO: LINC5 150 SERIES

(U1) SAME AS TYPE 'U' EXCEPT 2' LONG WITH (1) 17 WATT T8 LAMP.

(V) 2.75"DIA. RECESSED MOUNTED FIXTURE, DIE CAST TRIM WITH INTEGRAL GLASS LENS, SILVER FINISH, (1) 12V 35 WATT MR16 HALOGEN LAMP. PROVIDE 120 VOLT REMOVE GLASS 2 ELECTRONIC TRANSFORMER WITH SHORT CIRCUIT AND OVERLOAD PROTECTION, AUTOMATIC RESET, RFI FILTER, LOW VOLTAGE ELECTRONIC DIMMINGABLE AS REQUIRED. COORDINATE WITH MANUFACTURER PRIOR TO BID.

PRIMA: 8404 SERIES

(X) UNIVERSAL MOUNT LED EXIT SIGN, SINGLE OR DOUBLE FACES WITH GREEN LED'S, UNIVERSAL DIRECTIONAL ARROWS AS INDICATED ON DRAWING, STEEL HOUSING AND FACEPLATE, INJECTION MOLDED CLEAR ACRYLIC PANELS WITH CHAMFERED EDGES, BUILT-IN EMERGENCY NICAD BATTERY PACK WITH TEST SWITCH AND INDICATION LIGHT, 277 VOLT.

ALKCO: EDGE-GLO EXIT LED SERIES
EMERGI-LITE: LXN-X-GX-ARROW-C-U

LIGHTING FIXTURE SCHEDULE NOTES

1. ALL FIXTURES SHALL BE FOR OPERATION ON A 277 VOLT LIGHTING SYSTEM, EXCEPT UON.
2. ALL 4' FLUORESCENT LAMPS SHALL BE FO32T8, 3500K ENERGY SAVING TYPE UON. SEE SPECIFICATION.
3. ALL FLUORESCENT FIXTURES SHALL BE OF THE ELECTRONIC BALLAST ENERGY SAVING TYPE. SEE SPECIFICATION.
4. CEILING TYPES NOTED ARE FOR INFORMATION ONLY. VERIFY EXACT CEILING TYPE PRIOR TO ORDERING FIXTURES.
5. PROVIDE DIMMING BALLAST FOR FIXTURES THAT LOCATED AT DAYLIT AREA AND TO BE CONTROLLED BY THE ROOM DAY LIGHT LEVEL PHOTOCELL.
6. PROVIDE FIXTURE ADAPTER PLATE FOR FIXTURE INSTALLED IN 'GRILLZ' CEILING, FIELD CUT HOLE IN CEILING PANEL FOR INSTALLATION, SEAL CUT EDGES.

LANDSCAPE LIGHTING FIXTURE SCHEDULE

(L1) 4.5" DIAx8"H, 8" DIA BASE, YOKE MOUNTED UPLIGHT FIXTURE, STAINLESS STEEL HOUSING WITH HEAVY WALL CAST BRONZE ROCK GUARD DOOR. CONSTRUCTION, TEMPERED BOROSILICATE DIFFUSED GLASS LENS. SINGLE PIECE U-SHAPED MOLDED SILICONE GASKET. (1) 120V, 100H T-4 QUARTZ HALOGEN LAMP, UL LISTED FOR WET LOCATION.

HYDREL: 4800 SERIES

(L2) 3.3"Wx11"Lx7"D RECESSED WALL MOUNTED FIXTURE, HEAVY WALL CAST BRONZE CONSTRUCTION, TEMPERED BOROSILICATE DIFFUSED GLASS LENS. SINGLE PIECE U-SHAPED SILICONE GASKET. (1) 120V, 45H T-4 QUARTZ HALOGEN LAMP. UL LISTED FOR WET LOCATION.

HYDREL: 4462 SERIES

(L3) SAME AS TYPE 'L1'.

(LA) 7"DIAx20"H IN GRADE UPLIGHT FIXTURE, CAST ALUMINUM WITH FINS FOR HEAT DISSIPATION HOUSING. THE LIGHT TO BE SUSPENDED FROM THE GRILL AND ADJUSTABLE TO 90°, THE GRILL TO BE ANCHORED TO THE 6" ABS WELL BY TAMPER-PROOF SCREWS. (1) 120V, 35H T-4 QUARTZ HALOGEN LAMP. UL LISTED FOR WET LOCATION.

HYDREL: 4310 SERIES

(LB) SAME AS 'LA'.

(LC) 5"Wx20.5"Lx4"D RECESSED WALL MOUNTED FIXTURE, DIE CAST AND EXTRUDED ALUMINUM HOUSING COMPONENTS WITH INTEGRAL WIRING COMPARTMENT. CLEAR TEMPERED GLASS LENS. MOLDED SILICONE RUBBER GASKET. (1) 120V, 39H CF LAMP AND ELECTRONIC BALLAST. UL LISTED FOR WET LOCATION.

BEGA: 2024P SERIES

(LD) SAME AS TYPE 'LC' EXCEPT 13"L WITH (1) 120V 18W CF LAMP.

BEGA: 2224P SERIES

(LF) 3/4"Wx5/8"H CHANNEL WITH 6/8"H LENS COVER. EXTERIOR LOW VOLTAGE STRIPLIGHT. SCREW MOUNTED WHITE PVC CHANNEL SECTIONS/ CLEAR SERRATED LENS COVER WHITE 10 GAUGE PARALLEL WIRE WITH LAMP SOCKET AND END PLUG. UNROLL LIGHTSTRIP AND PRESS INTO GROOVE IN CHANNEL. SEAL END OF RUN AND ANY CONNECTIONS WITH SILICONES OR OTHER MOISTURE RESISTANT SEALANT. 24V INCANDESCENT LAMP. PROVIDE REMOTELY LOW VOLTAGE TRANSFORMER AS REQUIRED. UL LISTED FOR WET LOCATION, LAMP TYPE AND LAMP SPACE PER LANDSCAPE ARCHITECT.

CELESTIAL LIGHTING: SNY SERIES

(LG) 1.5"Wx8"Lx3.75"D LINEAR DIFFUSED LED FIXTURE CONSISTS OF AN OUTER 'ROUGH-IN' HOUSING AND INTERNAL LAMP HOUSING BOTH CONSTRUCTED OF EXTRUDED ALUMINUM WITH DIE CAST ALUMINUM END CAPS. 0.250" THICK TEMPERED CLEAR GLASS WITH INTERNAL WHITE TRANSLUCENT CERAMIC COATING. AN ARRAY OF 18 WHITE LED's ARE ENCAPSULATED AGAINST ANY MOISTURE OR DUST INTRUSION. PROVIDE A REMOTELY LOCATED 24V, DC, CLASS 2 SAFETY ISOLATION TRANSFORMER SUITABLE FOR INTENDED WATTAGE. UL LISTED FOR WET LOCATION.

BEGA: 8623 SERIES

LANDSCAPE LIGHTING FIXTURE SCHEDULE NOTES

1. ALL LANDSCAPE LIGHTING FIXTURES SHALL BE UL LISTED FOR WET LOCATION.
2. ALL LANDSCAPE LIGHTING FIXTURES'S FFINISH SHALL BE SPECIFIED BY LANDSCAPE ARCHITECT.

REGISTERED PROFESSIONAL ENGINEER VINCENT W. S. CHOW No. 18904 RENEWAL 3/31/2006 ELECTRICAL STATE OF CALIFORNIA

PRELIMINARY

0" VERIFY SCALES 1" — VERIFY SCALES BAR IS ONE INCH LONG ON FULL SIZE DRAWING. IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

SCE ENGINEERS
600 MONTGOMERY BLVD, 3RD FLOOR
SAN FRANCISCO, CA 94107
TEL: (415) 397-0776
FAX: (415) 397-0778
EMAIL: sceeng@pacbell.net

RMC
Raines, Melton & Carella, Inc.

Michael Willis Architects

REV	DATE	BY	APVD	DESCRIPTION

DESIGNED WH
DRAWN IL
CHECKED VC

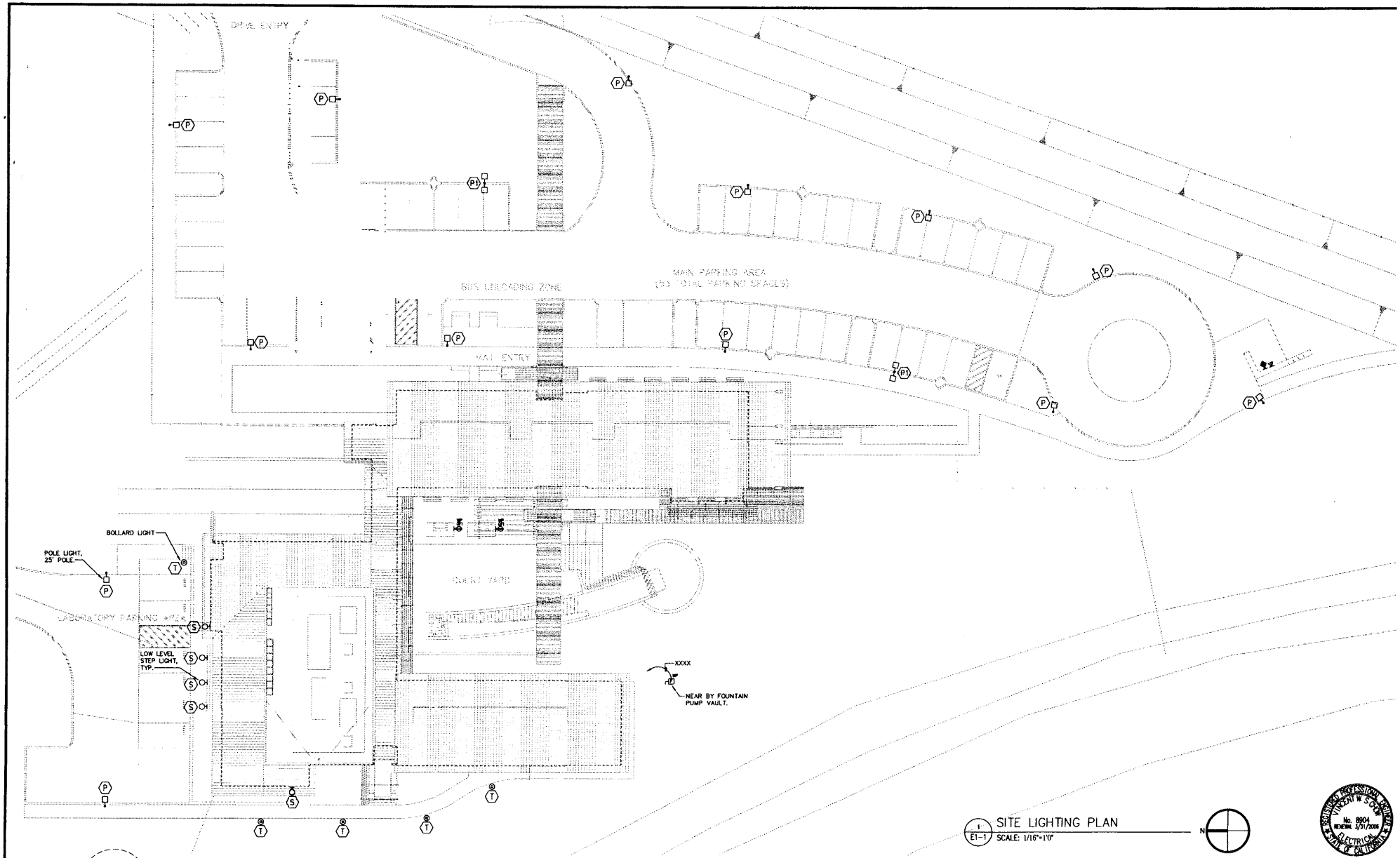
OPERATIONS CENTER FACILITY

LIGHTING FIXTURE SCHEDULE

DWG NO E0-5
SHEET NO 3 OF 21
PROJ NO 039-3
DATE AUGUST 1, 2005

EXHIBIT A

51



1 / E1-1 SITE LIGHTING PLAN
SCALE: 1/16"=1'0"

N

PRELIMINARY

" — VERIFY SCALES — BAR IS ONE INCH LONG ON FULL SIZE DRAWING. IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

SCE ENGINEERS
TEL: (415) 927-0778
FAX: (415) 927-0778
EMAIL: sceengr@pacbell.net

RMC
Rainne, Melton & Carella, Inc.

Michael Willis Architects

REV	DATE	BY	APVD	DESCRIPTION

DESIGNED	WH
DRAWN	TL
CHECKED	VC

OPERATIONS CENTER FACILITY

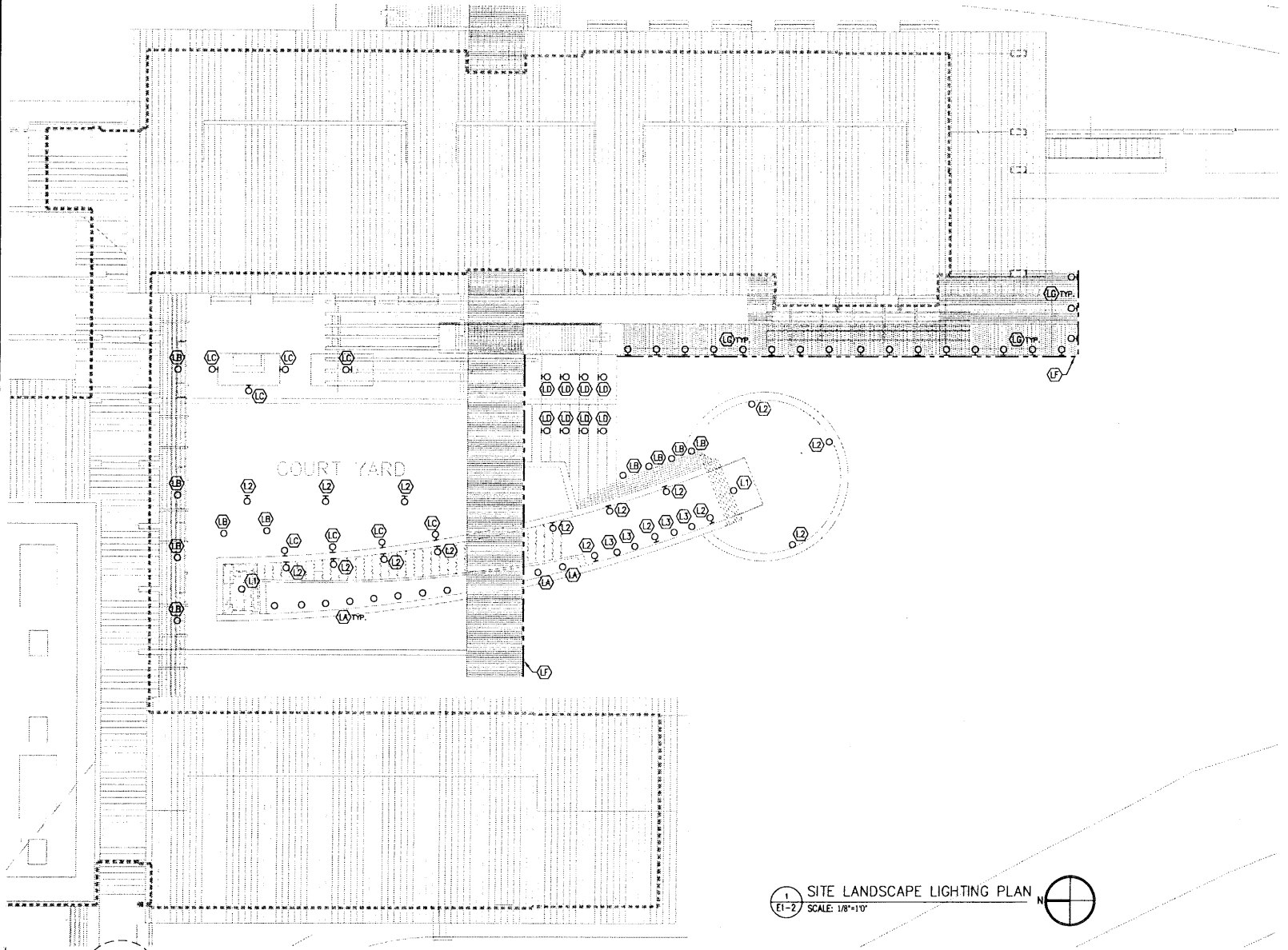
SITE LIGHTING PLAN

DWG NO	E1-1
SHEET NO	6 OF 21
PROJ NO	039-
DATE	AUGUST 1, 200

REGISTERED PROFESSIONAL ENGINEER VINCENT W. SOONG No. 8904 RENEWAL 3/31/2006 ELECTRICAL STATE OF CALIFORNIA

52

EXHIBIT A



SHEET NOTES

1. xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
   xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
2.
3.
4.

1 / E1-2 SITE LANDSCAPE LIGHTING PLAN
SCALE: 1/8"=1'0"

N

REGISTERED PROFESSIONAL ENGINEER VINCENT W. SOO No. 8904 RENEWAL 3/31/2006 ELECTRICAL STATE OF CALIFORNIA

PRELIMINARY

0" — 1" VERIFY SCALES BAR IS ONE INCH LONG ON FULL SIZE DRAWING. IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

SCE ENGINEERS
600 MONTGOMERY ST., 3RD FLOOR
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EMAIL: sceengr@pacbell.net

RMC
Rainse, Melton & Carella, Inc.

Michael Willis Architects

REV	DATE	BY	APVD	DESCRIPTION

DESIGNED	WH
DRAWN	IL
CHECKED	VC

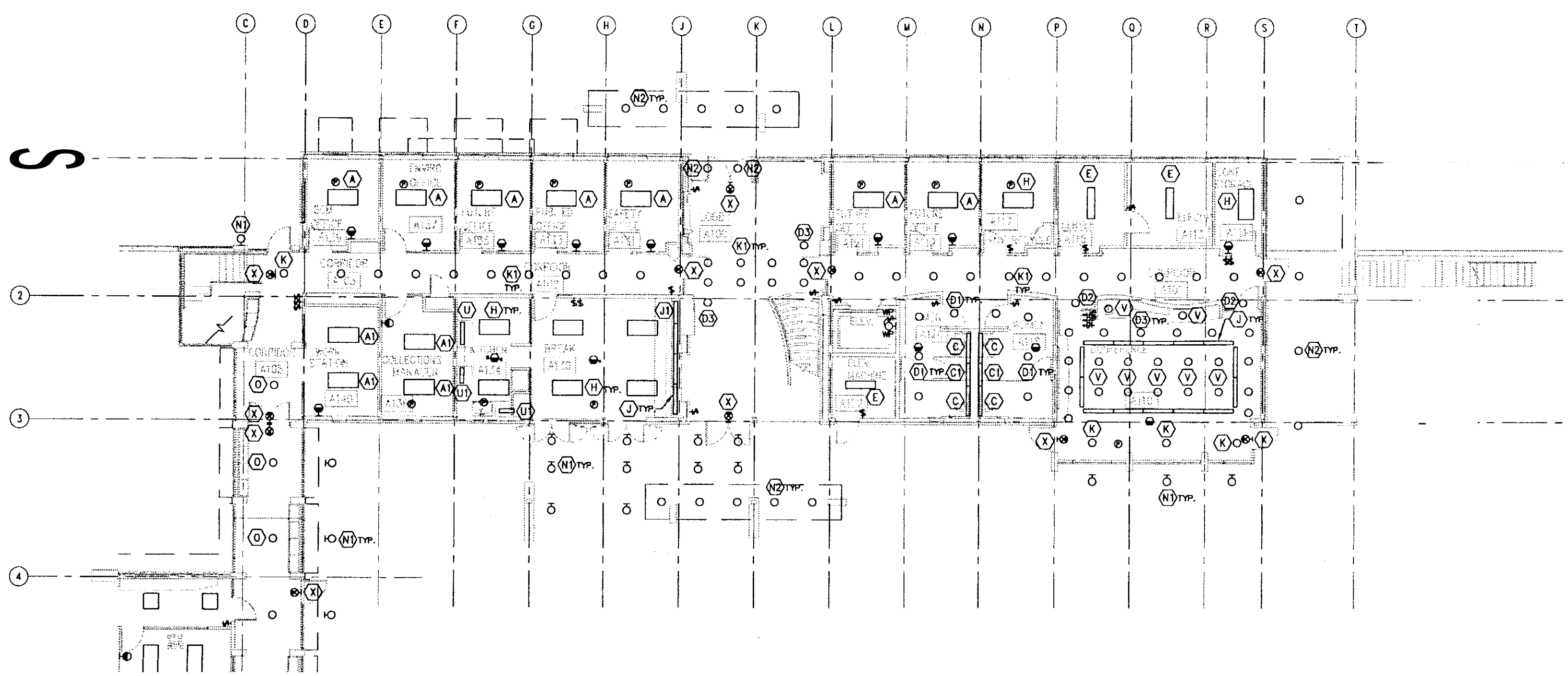
OPERATIONS CENTER FACILITY

SITE LANDSCAPE LIGHTING PLAN

DWG NO	E1-2
SHEET NO	6 OF 21
PROJ NO	039-5
DATE	AUGUST 1, 2005

53

EXHIBIT A



OPERATIONS CENTER GROUND FLOOR LIGHTING PLAN

1/8"=1'-0"

CONFORMED DRAWING

THIS RECORD DRAWING HAS BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. IT IS NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT, NOR MANNER OF CONSTRUCTION OF THE PROJECT. INCORPORATES ADDENDA AND SUBSEQUENTLY ADDED DRAWING.

VERIFY SCALES: BAR IS ONE INCH LONG ON FULL SIZE DRAWING. IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

SCE ENGINEERS

RMC — Raines, Melton & Carella, Inc.

Michael Willis Architects

REV	DATE	BY	APVD	DESCRIPTION

DESIGNED	WH
DRAWN	IL
CHECKED	VC

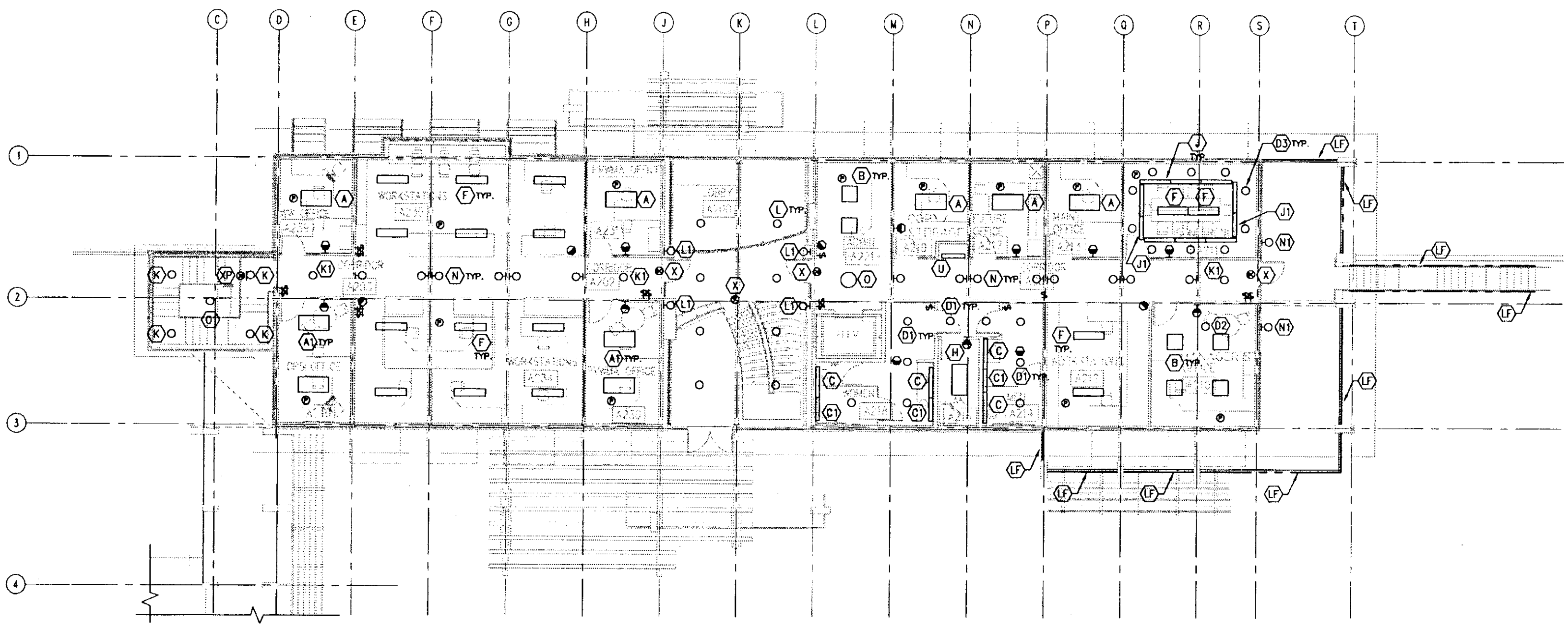
OPERATIONS CENTER FACILITY

OPERATIONS CENTER GROUND FLOOR LIGHTING PLAN

DWG NO	E2-1
SHEET NO	7 OF 21
PROJ NO	039-3
DATE	AUGUST 1, 2005

REGISTERED PROFESSIONAL ENGINEER — VINCENT W. S. CHOW — No. 8904 — RENEWAL 3/31/2006 — ELECTRICAL — STATE OF CALIFORNIA

EXHIBIT A



OPERATIONS CENTER SECOND FLOOR LIGHTING PLAN
1/8"=1'-0"

CONFORMED DRAWING
THIS RECORD DRAWING HAS BEEN PREPARED IN PART ON THE BASIS OF INFORMATION COMPILED BY OTHERS. IT IS NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT, NOR MANNER OF CONSTRUCTION. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR DISCREPANCIES OR OMISSIONS WHICH MAY BE INCORPORATED INTO IT.

0" — 1"
VERIFY SCALES
BAR IS ONE INCH LONG ON FULL SIZE DRAWING. IF NOT ONE INCH LONG ON THIS DRAWING, ADJUST SCALES ACCORDINGLY

J O H
SCE ENGINEERS

RMC
Raines, Melton & Carella, Inc.

Michael Willis Architects

REV	DATE	BY	APVD	DESCRIPTION
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DESIGNED	WH
DRAWN	IL
CHECKED	VC

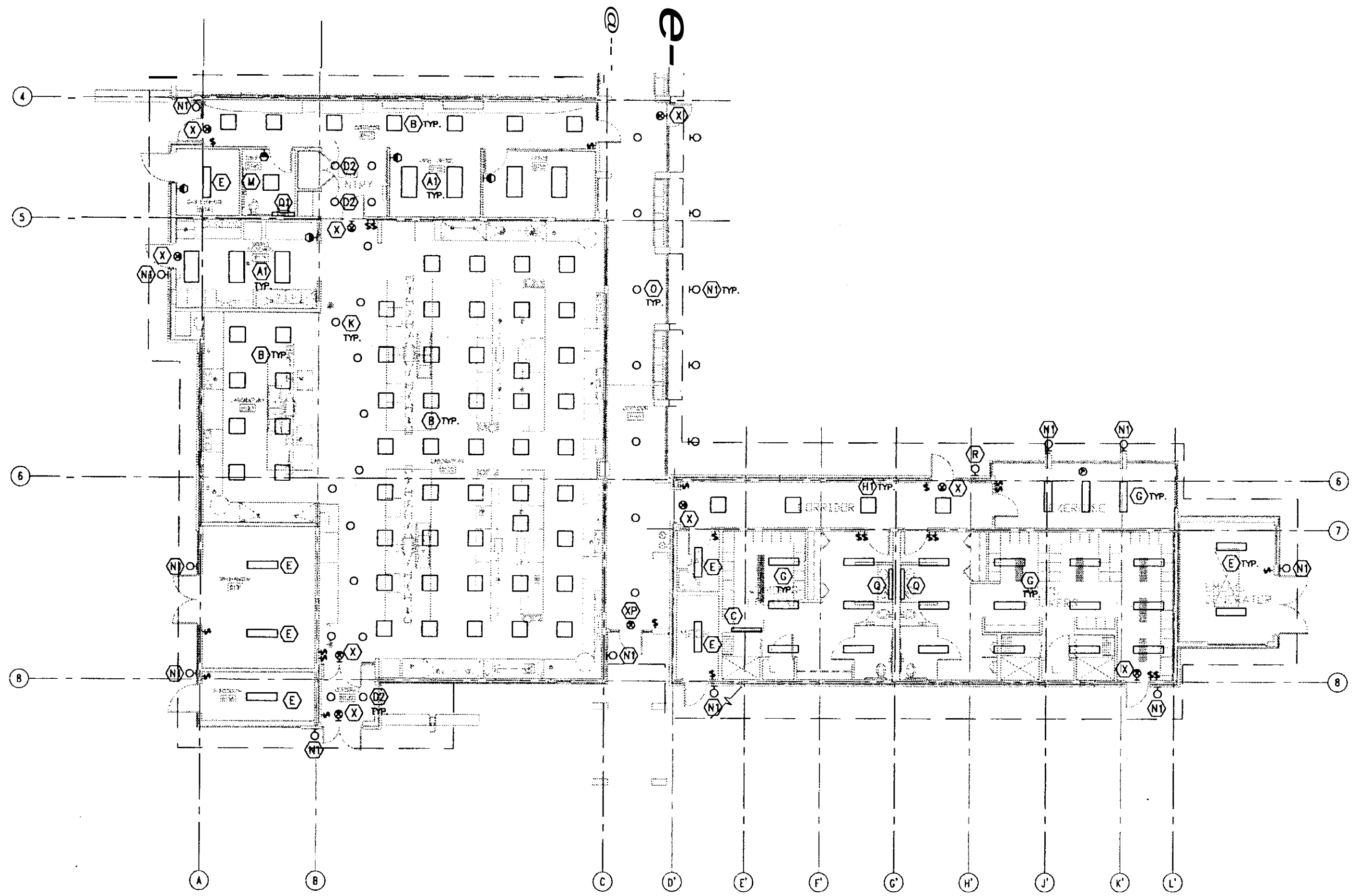
OPERATIONS CENTER FACILITY

OPERATIONS CENTER SECOND FLOOR LIGHTING PLAN

DWG NO	E3-1
SHEET NO	11 OF 21
PROJ NO	039-3
DATE	AUGUST 1, 2005

REGISTERED PROFESSIONAL ENGINEER
VINCENT W. S. CHOW
No. 8904
RENEWAL 3/31/2006
ELECTRICAL
STATE OF CALIFORNIA

EXHIBIT A



LAB AND LOCKER LIGHTING PLAN

1/8"=1'-0"

CONFORMED DRAWING	THIS RECORD DRAWING HAS BEEN PREPARED IN PART ON THE BASIS OF INFORMATION COMPILED BY OTHERS. IT IS NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR DISCREPANCIES OR ERRORS WHICH HAVE BEEN INCORPORATED INTO THIS RECORD DRAWING.

0" — 1"
VERIFY SCALES
BAR IS ONE INCH LONG ON FULL SIZE DRAWING.
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J D H
SCE ENGINEERS

RMC
Raines, Melton & Carella, Inc.

Michael Willis Architects

REV	DATE	BY	APVD	DESCRIPTION

DESIGNED	WH
DRAWN	IL
CHECKED	VC

OPERATIONS CENTER FACILITY

LAB AND LOCKER LIGHTING PLAN

DWG NO	E4-1
SHEET NO	15 OF 21
PROJ NO	039-3
DATE	AUGUST 1, 2005

REGISTERED PROFESSIONAL ENGINEER
VINCENT W. S. CHOW
No. 8904
RENEWAL 3/31/2006
ELECTRICAL
STATE OF CALIFORNIA

EXHIBIT A

Coastal Development Permit Findings

1. That the project is a use allowed in one of the basic zone districts, other than the Special Use (SU) district, listed in section 13.10.170(d) as consistent with the General Plan and Local Coastal Program LUP designation.

Because the Watsonville Recycled Water Facility (RWF) is proposed to be built upon land that is zoned Commercial Agriculture ("CA"), and public facilities such as the RWF are not an allowed use on CA-zoned land, the proposed facility is not currently consistent with the Zoning Ordinance (County Code Chapter 13.10). However, it will be consistent if the County Code amendments that are being proposed as **part** of this project are approved by the County and the Coastal Commission. These changes, including an amendment, to County Code Section Sections 13.10.312 (Agricultural Uses Chart) and the addition of a new Section 13.10.635 (Regulations for Special Uses – Agricultural Uses), would designate recycled water facilities that are used solely in support of agriculture and subject to specific criteria, as a type of agricultural use, and thus an allowed use on agricultural land (see Exhibit I).

2. That the project does not conflict with any existing easement or development restrictions such as public access, utility, or open space easements.

This finding can be made, in that the proposal does not conflict with any existing easement or development restriction such as public access, utility, or open space easements in that no such easements or restrictions are known to encumber the project site.

3. That the project is consistent with the design criteria and special use standards and conditions of this chapter pursuant to section 13.20.130 et seq.

This finding can be made, in that the proposed development is consistent with the surrounding area in terms of architectural style in that it shall be located toward the rear of the parcel and no riparian vegetation shall be disturbed, landscaping shall be compatible with surrounding vegetation and shall be suitable to the climate, soil and ecological characteristics of the area. The landscaping shall mitigate the visual impact in the agricultural view shed. The visual impact of large structures shall be minimized by locating structures within or near an existing group of buildings and by using materials and colors which blend with the building cluster or natural vegetative cover of the site. Any signage and lighting shall minimize disruption of the scenic qualities of the agricultural vistas.

4. That the project conforms with the public access, recreation, and visitor-serving policies, standards and maps of the General Plan and Local Coastal Program land use plan, specifically Chapter 2: figure 2.5 and Chapter 7, and, as to any development between and nearest public road and the sea or the shoreline of any body of water located within the coastal zone, such development is in conformity with the public access and public recreation policies of Chapter 3 of the Coastal Act commencing with section 30200.

The RWF project site is located within the Coastal Zone but not between the shoreline and the first public road, and it is not identified as a priority coastal acquisition site in the General Plan/LCP. Consequently, the proposed RWF project will not interfere with public access to the beach, ocean, or other nearby body of water. Moreover, public access to the Pajaro River levee (north side) is planned

EXHIBIT B

to be made available from the RWF site. However, General Plan/LCP policies 7.7.27 & 28 require that access ways adjacent to agricultural lands be minimized in number to minimize any potential negative impact to the agricultural operations, and General PladLCP policy 5.15.4 requires minimizing the amount of impervious surfaces. The proposed new RWF entrance road would be parallel to Panabaker Lane and is in the location of an existing farm road.

5. That the proposed development is in conformity with the certified local coastal program.

The RWF project is not currently consistent with the allowed uses of the "A" (Agriculture) General Plan designation. However, it will be consistent if the General Plan/LCP amendment that is being proposed in conjunction with this project is approved by the County and the Coastal Commission. This amendment to General Plan/LCP Policies 5.13.6 (Conditional Uses on CA-Zoned Lands) and 5.13.7 (Agriculturally Oriented Structures) would designate recycled water facilities that are used solely in support of agriculture as a type of agricultural use, and thus an allowed use on agricultural land (see Exhibit I).

The proposed Watsonville RWF project would currently be consistent with General Plan/LCP Objective 5.8b (Overdrafted Groundwater Basins), which requires the County to "act directly and coordinate and work with relevant water purveyors and agencies to eliminate long-term groundwater overdraft in all water basins where overdraft has been documented." Program "c" under that objective requires the County to "work with water purveyors and water management agencies to augment natural groundwater recharge where it is environmentally and fiscally acceptable." Moreover, Program "h" under that objective requires the County to "continue to work with the Pajaro Valley Water Management Agency to eliminate overdraft and salt water intrusion through implementation of their Basin Management Plan."

The proposed RWF would also be consistent with General PladLCP Policy 5.17.9, which requires sewage treatment and solid waste disposal projects to utilize sewage and solid waste reclamation and conversion techniques to provide resource conservation and net energy benefits to the County. It would also be consistent with General Plan Program 5.17.p which requires that the County cooperate with other local government agencies, special districts and contiguous counties to explore (and implement) joint efforts to develop sewage and solid waste reclamation and conservation alternatives which will provide a net energy benefit to the County and conserve resources.

The proposed RWF project is also consistent with General Plan/LCP Water Supply Policy 7.18.5 to promote water management in the Pajaro Valley groundwater basin, and Policy 7.18.7 to encourage the reuse and recycling of water where feasible. Program 7.18.b requires the establishment of an active public education program and Program 7.18.j requires review and evaluation of proposals by water agencies to develop supplemental sources of water supply (such as wastewater reclamation and water conservation) to reverse overdraft and seawater intrusion. General Plan Policy 7.22.2 requires support for the concept of building and upgrading sewage treatment facilities capable of producing reusable water for reclamation and agricultural use within the Pajaro Valley.

The proposed RWF is consistent with General Plan/LCP visual resource protection policies, in that the proposed RWF plant is sited and designed to be visually compatible, in scale with, and integrated with the agricultural character of the surrounding area by screening one of the large existing settling tanks with a new operations building that has agricultural-area architectural styling (as viewed from Highway 1 - See visual simulation, Exhibit G). The site is within the scenic corridor of Highway One, San Andreas Road and West Beach Road. The visual impact of the proposal is mitigated by

landscaping and the use of natural materials and colors, consistent with General Plan/LCP policy 5.10.11.

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Development Permit Findings

1. That the proposed location of the project and the conditions under which it would be operated or maintained will not be detrimental to the health, safety, or welfare of persons residing or working in the neighborhood or the general public, and will not result in inefficient or wasteful use of energy, and will not be materially injurious to properties or improvements in the vicinity.

This finding can be made, in that the project is located in an area designated for agriculture, and the public wastewater recycling plant use would support this use as the recycled water is to be used specifically for agricultural purposes. Construction of the operations center and processing/treatment tanks and levees will comply with prevailing building technology, the Uniform Building Code, and the County Building ordinance to insure the optimum in safety and the conservation of energy and resources. The proposed Recycled Water Facility (RWF) will not deprive adjacent properties or the neighborhood of light, air, or open space, in that the structure meets all current setbacks that ensure access to light, air, and open space in the vicinity. The project shall not be materially injurious to properties or improvements in the area in that the project does not increase capacity at the City's existing wastewater treatment plant, but will reduce discharge to the Monterey Bay National Marine Sanctuary. The use of recycled water reduces the amount of energy used to pump new water from the aquifer and allows a reduction in existing groundwater pumping in the areas affected by seawater intrusion.

2. That the proposed location of the project and the conditions under which it would be operated or maintained will be consistent with all pertinent County ordinances and the purpose of the zone district in which the site is located.

Because the RWF is proposed to be built upon land that is zoned Commercial Agriculture ("CA"), and public facilities such as the RWF are not an allowed use on CA-zoned land, the proposed RWF is not currently consistent with the Zoning Ordinance (County Code Chapter 13.10). However, it will be consistent if the County Code amendments that are being proposed as part of this project are approved by the County and the Coastal Commission. These changes, including an amendment, to County Code Section Sections 13.10.312 (Agricultural Uses Chart) and the addition of a new Section 13.10.635 (Regulations for Special Uses – Agricultural Uses), would designate recycled water facilities that are used solely in support of agriculture and subject to specific criteria, as a type of agricultural use, and thus an allowed use on agricultural land (see Exhibit I). The additional water provided as a result of the RWF would potentially provide sufficient water to irrigate approximately 2,000 acres of farmland.

3. That the proposed use is consistent with all elements of the County General Plan and with any specific plan which has been adopted for the area.

The RWF project is not currently consistent with the allowed uses of the "A" (Agriculture) General Plan designation. However, it will be consistent if the General Plan/LCP amendment that is being proposed in conjunction with this project is approved by the County and the Coastal Commission. This amendment to General Plan/LCP Policies 5.13.6 (Conditional Uses on CA-Zoned Lands) and 5.13.7 (Agriculturally Oriented Structures) would designate recycled water facilities that are used solely in support of agriculture as a type of agricultural use, and thus an allowed use on agricultural land (see Exhibit I).

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The proposed RWF would also be consistent with General Plan/LCP Policy 5.17.9, which requires sewage treatment and solid waste disposal projects to utilize sewage and solid waste reclamation and conversion techniques to provide resource conservation and net energy benefits to the County. It would also be consistent with General Plan Program 5.17.p which requires that the County cooperate with other local government agencies, special districts and contiguous counties to explore (and implement) joint efforts to develop sewage and solid waste reclamation and conservation alternatives which will provide a net energy benefit to the County and conserve resources.

The proposed RWF project is also consistent with General Plan/LCP Water Supply Policy 7.18.5 to promote water management in the Pajaro Valley groundwater basin, and Policy 7.18.7 to encourage the reuse and recycling of water where feasible. Program 7.18.b requires the establishment of an active public education program and Program 7.18.j requires review and evaluation of proposals by water agencies to develop supplemental sources of water supply (such as wastewater reclamation and water conservation) to reverse overdraft and seawater intrusion. General Plan Policy 7.22.2 requires support for the concept of building and upgrading sewage treatment facilities capable of producing reusable water for reclamation and agricultural use within the Pajaro Valley.

The proposed RWF is consistent with General Plan/LCP visual resource protection policies, in that the proposed RWF plant is sited and designed to be visually compatible, in scale with, and integrated with the agricultural character of the surrounding area by screening one of the large existing settling tanks with a new operations building that has agricultural-area architectural styling (as viewed from Highway 1 - See visual simulation, Exhibit G). The site is within the scenic corridor of Highway One, San Andreas Road and West Beach Road. The visual impact of the proposal is mitigated by landscaping and the use of natural materials and colors, consistent with General PladLCP policy 5.10.11.

The proposed wastewater recycling facility will not adversely impact the light, solar opportunities, air, and/or open space available to other structures or properties, and meets all current site and development standards for the zone district in that the RWF will not adversely shade adjacent properties, and will meet current setbacks for the zone district that ensure access to light, air, and open space in the vicinity. A specific plan has not been adopted for this portion of the County.

4. That the proposed use will not overload utilities and will not generate more than the acceptable level of traffic on the streets in the vicinity.

This finding can be made because the expected level of traffic generated by the proposed project is anticipated to be only 6 additional peak trips per day (1 peak trip per new staff member), such an increase will not adversely impact existing roads and intersections in the surrounding area. There will be a total of 34 employees working in the facility. The proposed RWF is not expected to

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overload utilities because The additional **6** trips per day shall not cause Beach Road to operate below an acceptable level of service.

5. That the proposed project will complement and harmonize with the existing and proposed land uses in the vicinity and will be compatible with the physical design aspects, land use intensities, and dwelling unit densities of the neighborhood.

This finding can be made, in that the proposed water recycling structures shall be located in a rural agricultural neighborhood containing open fields and structures associated with commercial agricultural operations. With adequate landscaping to screen development, the proposed wastewater recycling facility adjacent to the existing wastewater treatment plant shall be consistent with the land use intensity and density of the neighborhood.

6. The proposed development project is consistent with the Design Standards and Guidelines (sections 13.11.070 through 13.11.076), and any other applicable requirements of this chapter.

This finding can be made, in that the proposed RWF will be of an appropriate scale and design that will enhance the aesthetic qualities of the surrounding agricultural properties. It shall be landscaped and will use natural colors and materials to minimize disruption to agricultural vistas visible fiom adjacent scenic corridors. Signage and lighting shall be consistent with County regulations and shall minimize any negative impacts to the rural scenic qualities of the surrounding area.

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Lot Line Adjustment Findings

1. The lot line adjustment will not result in a greater number of parcels than originally existed.

This finding can be made, in that there were four parcels prior to the adjustment and there will be three parcels subsequent to the adjustment.

2. The lot line adjustment conforms with the county zoning ordinance (including, without limitation, County Code section 13.10.673), and the county building ordinance (including, without limitation, County Code section 12.01.070).

This finding can be made, in that no additional building sites will be created by the transfer. Assessor's Parcel Numbers 052-571-01,052-571-09 and 052-581-12 will continue in commercial agricultural operation. APN 052-571-08 is the site of the existing City of Watsonville municipal wastewater treatment plant and is proposed to be expanded to incorporate a recycled water treatment facility which would provide water for agricultural irrigation purposes only. The project complies with the General Plan designation of the parcels (A - Agriculture) per 13.10.673(e) in that APN 052-571-01 at 84.5 acres remains above the minimum 20-acre parcel size for commercial agricultural lands in the coastal zone. APN's 052-571-09 and 052-581-12 are 14.48 and 16.47 acres respectively and shall be required to be combined in order to satisfy minimum acreage requirements established by General Plan 5.13.

3. No affected parcel may be reduced or further reduced below the minimum parcel size required by the zoning designation, absent the grant of a variance pursuant to County Code section 13.10.230.

This finding can be made, in that none of the parcels included in the proposal will be reduced below the minimum parcel size required by the zone district as a result of this lot line adjustment. APN 052-571-01 at 84.5 acres remains above the minimum 20-acre parcel size for commercial agricultural lands in the coastal zone. APN's 052-571-09 and 052-581-12 are 14.48 and 16.47 acres respectively and shall be combined into one parcel to be consistent with the minimum 20 acres required for Type 3 Commercial Agricultural land in the Coastal Zone.

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Riparian Exception Findings

1. That there are special circumstances or conditions affecting the property.

The portion of the project that encroaches into the riparian corridor is a pedestrian pathway that is intended to provide access to the river for recreation and passive enjoyment. The path is necessarily located within the riparian corridor.

2. That the exception is necessary for the proper design and function of some permitted or existing activity on the property.

The wastewater treatment facility, to which the proposed Recycled Water Facility and pedestrian pathway to the river are attached, is existing on the property.

3. That the granting of the exception will not be detrimental to the public welfare or injurious to other property downstream or in the area in which the project is located.

The pedestrian pathway will not be detrimental to the public welfare or injurious to other property downstream or in the area in which the project is located. It is a largely an at grade pathway, without railings or other features that could become entrained in or inhibit passage of floodwaters.

4. That the granting of the exception, in the coastal zone, will not reduce or adversely impact the riparian corridor, and there is no feasible less environmentally damaging alternative.

The project is inside the Coastal Zone. The granting of the exception will not reduce or adversely impact the riparian corridor in that any vegetation that is removed will be replaced with native plantings that will be maintained over time. The disturbance area is limited to ten feet in width, and the exception does not authorize the removal of any trees. Erosion control is required and no winter work is allowed.

5. That the granting of the exception is in accordance with the purpose of this chapter, and with the objectives of the general plan and elements thereof, that the granting of the exception is in accordance with the purpose of this chapter, and with the objectives of the general plan and elements thereof, and the local coastal program land use plan.

The granting of the exception is in accordance with the purpose of this chapter, and with the objectives of the general plan and the local coastal program land use plan. The exception will allow a pedestrian pathway to be built to facilitate public access for recreational purposes and passive enjoyment of the riparian corridor and the Pajaro River. Public appreciation of natural areas and controlled public access to coastal resource areas are objectives of the General Plan and LCP.

EXHIBIT B

CEQA Findings Regarding a Proposed Recycled Water Facility at the City of Watsonville Wastewater Treatment Plant.

This Statement of Findings sets forth the findings of the Santa Cruz County Board of Supervisors regarding the potentially significant environmental effects of constructing and operating the proposed Recycled Water Facility (RWF) at the end of Panabaker Lane in the unincorporated area of Santa Cruz County. (The Final Environmental Impact Report (EIR) for the PVWMA Revised Basin Management Plan and Addenda 1-3 identify potentially significant environmental impacts in the following areas: Land Use and Planning, Geology and Soils, Cultural Resources, Traffic and Circulation, Noise, and Visual/Aesthetic.)

The California Environmental Quality Act (CEQA) and County Environmental Review Guidelines require that when an EIR has been completed for a project which identifies one or more significant environmental effects of the project, the public agency shall not approve said project unless it makes one or more written findings for each of the significant effects, accompanied by a brief explanation of the rationale for each finding. These findings are:

1. Changes or alterations have been required in, or incorporated into the project, which avoid or substantially lessen the environmental effect as identified in the FEIR.

2. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such agency or can and should be adopted by such other agency.

3. Specific economic, social, or other considerations make infeasible the mitigation measures or project alterations identified in the FEIR, and that such significant effects are acceptable due to the overriding considerations because specific benefits of the project outweigh the policy of reducing or avoiding significant environmental impacts of the project.

Land Use and Planning

Impact 4.A.l-2: Construction of the proposed Recycled Water Facility (RWF) would result in the loss of up to approximately 14 acres of prime farmland.

Finding: This would be a significant and unavoidable impact. The proposed location adjacent to the existing City of Watsonville Wastewater Treatment Facility (WWTF) is the most reasonable, logical and cost-effective location for the RWF. Locating the RWF away from the WWTF would create operational inefficiencies, would require construction of additional processes and facilities (i.e., new power, sewer, pumping, and conveyance facilities), would require more than fourteen acres of land, and would substantially increase the cost for the project. Further, as stated in the EIR, most of the alternatives to the project also would result in the loss of prime farmland. But most importantly, construction of this project will result in maintaining the viability of agricultural operations along the coastal portion of the Pajaro Valley through replacing the current source of irrigation water (over-drafted groundwater). Therefore, in accordance with Section 15093 of the **CEQA** Guidelines, the County of Santa Cruz Board of Supervisors is adopting a Statement of Overriding Considerations for this impact prior to approving the project.

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Geology and Soils

Impact 4.A.2-1: Construction of the proposed facilities could result in accelerated erosion and sedimentation. The impact would be significant on slopes over two percent and in areas with soils having moderate or greater erosion hazard. Proposed facilities could incur damage as a result of sub-optimal soil properties.

Mitigation Measures:

Measure 4.A.2-la: Implement Measures 5.A.2-3a through 5.A.2-3f.

Measure 5.A.2-3a: All grading and construction will conform to requirements of the Santa Cruz County Grading Ordinance.

Measure 5.A.2-3b: Site grading and construction work areas will expose as little new ground surface as possible. Vegetation cover should be left intact to the extent practical.

Measure 5.A.2-3c: To the extent possible, grading activities in non-cropped areas will be limited to the period between April 15 and October 15.

Measure 5.A.2-3d: Implement best construction practices at all grading sites, regardless of soil erodibility hazard.

Measure 5.A.2-3e: Upon completion of construction at all sites, loose soils shall be removed or spread and all areas shall be re-soiled and reseeded to ensure that a stable soil cover will remain.

Measure 5.A.2-3f: The permit holder will prepare and implement an inspection and maintenance program for the right-of-way and all facility sites.

Finding: The 7 mitigation measures listed above have been incorporated into the Development Permit Conditions of Approval as Condition I.A. These Conditions of Approval will reduce the potential impact to less than significant.

Impact 4.A.2-2: Large earthquakes may damage the proposed facility, impairing and/or disrupting intended operations.

Mitigation Measure 4.A.2-2: Conduct geologic investigations of all project facilities and pipeline alignments prior to the final design, and implement design recommendations. The investigations will specify hazards related to ground movements and co-seismic effects, especially liquefaction. The recommendations of an engineering geologist will be incorporated into the design and specifications and shall be implemented by the construction contractor.

Finding: Mitigation measure 4.A.2-2 is incorporated into the Development Permit Conditions of Approval as Condition 1-C. This Condition of Approval will reduce the potential impact to less than significant.

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Hydrology and Water **Quality**

Impact **4.A.3-1:** Construction of proposed water recycling facilities and associated pipelines could result in increased erosion and subsequent sedimentation, with adverse impacts to water quality. Additionally, release of fuels or other hazardous materials associated with construction activities could degrade water quality.

Mitigation Measure **4.A.3-1a–Storm** Water Pollution Prevention Plan (SWPPP): The permit holder shall require contractors to develop a SWPPP for construction of proposed facilities, as required by the RWQCB. The objectives of the SWPPP are to identify pollutant sources that may affect the quality of stormwater discharge and to implement BMPs to reduce pollutants in stormwater discharges.

Finding: Mitigation measures 4.A.3-1 and 1a are incorporated into the Development Permit Conditions of Approval as Condition II.A.3. These Conditions of Approval will reduce the potential impact to less than significant.

Impact **4.A.3-2:** Without proper management, irrigation with recycled water could affect crop yields and result in a degradation of surface water or groundwater quality.

Mitigation Measures:

Measure **4.A.3-2a:** Above-ground irrigation systems shall be operated in accordance with the requirements of Title 22 of the California Code of Regulations and any reclamation permits issued by the RWQCB, Central Coast Region. Title 22 requires that irrigation rates match the evapotranspirationrates of the plants or crops being irrigated, and that application of reclaimed water be prohibited within 50 feet of any domestic water supply wells.

Measure **4.A.3-2b:** Monitoring of crop productivity should be performed, and if adverse impacts to the yields of sensitive crops (e.g., strawbemes) occurs, the blending ratio should be adjusted to decrease the fraction of recycled water in the applied irrigation water.

Finding: Mitigation measures 4.A.3-2a and 2b are incorporated into the Conditions of Approval as Condition III.C. These Conditions of Approval will reduce the potential impact to less than significant.

Impact 4.A.3-3: Development at the project site may expose people and structures to flood hazards.

Mitigation Measure 4.A.3-3: The facilities shall be designed to comply with FEMA and County of Santa Cruz requirements to flood-proof the facilities and not increase upstream or downstream flood hazards.

Finding: Mitigation measure 4.A.3-3 is incorporated into the Development Permit Conditions of Approval as Condition II.A.4. This Condition of Approval will reduce the potential impact to less than significant.

Cultural Resources

Impact **4.A.5-1:** Ground-disturbing activities associated with the proposed Recycled Water Facility and associated pipelines could reveal unknown buried or otherwise obscured prehistoric

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and historic cultural resources.

Mitigation Measure 4.A.5-1: Should any as yet undiscovered cultural resources, such as structural features, or unusual amounts of bone or shell, artifacts, human remains, or architectural remains be encountered during any development activities, work will be suspended and the permit holder will be contacted. A qualified cultural resource specialist shall be retained and will perform any necessary investigations to determine the significance of the find.

Finding: Mitigation measure 4.A.5-1 is incorporated into the Development Permit Conditions of Approval as Condition II.H. This Condition of Approval will reduce the potential impact to less than significant.

Traffic and Circulation

Impact 4.A.6-2: Project construction would increase wear and tear on area roadways used by construction vehicles.

Mitigation Measure 4.A.6-2: Conduct a preconstruction survey of road conditions on key access routes to the project sites (e.g., San Andreas Road). The pavement conditions of local streets judged to be in good condition for use by heavy truck traffic shall be monitored. Roads damaged by construction shall be repaired to a structural condition equal to, or better than, that which existed prior to construction activity.

Finding: Mitigation measure 4.A.6-2 is incorporated into the Development Permit Conditions of Approval as Condition III.G. This Condition of Approval will reduce the potential impact to less than significant .

Impact 4.A.6-3: Project construction would increase potential traffic safety hazards for vehicles and pedestrians in the construction area.

Mitigation Measures:

Measure 4.A.6-3a: The construction contractor shall prepare traffic safety and control plans to show specific methods for maintaining traffic flows.

Measure 4.A.6-3b: The contractor shall provide advanced public notification of construction activity and roadway/access closures.

Finding: Mitigation measures 4.A.6-3a and 3b are incorporated into the Development Permit Conditions of Approval as Condition III.H. These Conditions of Approval will reduce the potential impact to less than significant.

Air Quality

Impact 4.A.7-1: Construction of the Recycled Water Facility components would temporarily generate criteria air pollutants, particularly PM_{10}, over the duration of the construction period.

Mitigation Measure 4.A.7-1: The construction contractor shall implement a dust control program.

Finding: Mitigation measure 4.A.7-1 is incorporated into the Conditions of Approval as Condition 111.1. This Condition of Approval will reduce the potential impact to less than

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significant.

Noise

Impact 4.A.8-1: Construction activities associated with the project would intermittently and temporarily generate noise levels above existing ambient noise levels in the project vicinity.

Mitigation Measure 4.A.8-1: The permit holder shall incorporate into contract specifications the following measures:

- Comply with all local sound control and noise level rules, regulations, and ordinances.
- Equipment and trucks used for project construction shall utilize the best available noise control techniques.
- Impact equipment (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically- or electrically-powered wherever possible.

Finding: Mitigation measure 4.A.8-1 is incorporated into the Development Permit Conditions of Approval as Condition 3.J. This Condition of Approval will reduce the potential impact to less than significant.

Impact 4.A.8-2: Operation of proposed RWF and pumping facilities associated with Blending Facilities would result in noise increases in the vicinity of project facilities.

Mitigation Measure 4.A.8-2: The permit holder shall incorporate into contract specifications the following measures:

- The pumping facilities shall be designed with acoustical treatments (building enclosures, louvered vents, noise walls, etc.) that are adequate to maintain potential noise generation to levels at or below ambient levels.
- The blending facilities shall be built with enclosures that provide maximum feasible noise attenuation, to ensure that sensitive receptors would not be affected.

Finding: Mitigation measure 4.A.8-2 is incorporated into the Conditions of Approval as Condition III.J. This Condition of Approval will reduce the potential impact to less than significant.

Visual/Aesthetic and Recreational Resources

Impact 4.A.10-1: Development of the proposed Recycled Water Facility would alter the visual character of, and views of, the project area.

Mitigation Measures:

Measure 4.A.10-1a: The permit holder shall revegetate disturbed natural areas to minimize textural contrasts with the surrounding vegetation using grasses, shrubs and trees typical of the immediately surrounding area.

Finding: Mitigation Measure 4.10.1a is incorporated into the Conditions of Approval as Condition 11.5. This Condition of Approval will reduce the potential impact to less than significant.

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Measure 4.A.10-1b: The permit holder shall use design elements to enhance visual integration of the proposed above-ground facilities with their surroundings. Proposed facilities shall be painted low-glare earth-tone colors that blend with the surrounding terrain.

Finding: Mitigation Measure 4.10.1b is incorporated into the Conditions of Approval as Condition II.A.6. This Condition of Approval will reduce the potential impact to less than significant.

Growth Inducement Potential

Impact 7-1: Implementation of the project would reduce groundwater supply reliability as a constraint to growth. The project could accommodate an amount of growth that is consistent with regional growth projections, but could indirectly result in potentially significant secondary effects of growth. Some of these secondary effects of growth could be significant and unavoidable, while others are significant but mitigable. Significant but mitigable impacts that could occur as a result of planned growth include impacts regarding: transportation/circulation, air quality, noise, public services, geology and soils, open space, recreation, scenic resources, hydrology, flooding/drainage, vegetation and wildlife, health and safety, cultural resources, cumulative impacts, and growth inducement. Significant unavoidable impacts that could occur as a result of planned growth include: loss of agricultural land and open space, increased demand on groundwater resources, and change in visual character.

Mitigation Measures:

Measure 7-1: The Basin Management Plan (BMP) project EIR stated that the lead agency (PVWMA) does not have the authority to make land use and development decisions in their service area, but that implementation of their BMP would partially mitigate the secondary effects of growth induced by the RWF project. The BMP EIR noted that, since 90% of the anticipated population growth would occur inside Watsonville, the significant but mitigatable impacts liusted above would be addressed by implementation of the City's 2002 General Plan and EIR mitigations. To address the significant but unavoidable impacts listed above PVWMA adopted a Statement of Overriding Considerations. However, the County of Santa Cruz, acting in the capacity of responsible agency, has added Condition of Approval III.B to address this concern. That condition would prohibit the water savings attributable to the project from being used as a justification for freeing up a like amount of water to accommodate future urban growth.

Finding: Inclusion of Condition of Approval III.B. will reduce the significant but unavoidable secondary growth impacts associated with the project to a less-than-significant level.

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Conditions of Approval

Exhibit A: Proposed lot Line Adjustment, City of Watsonville, 1 Sheet, by Public Works & Utilities Department Engineering Division, dated 9-06-05.
Project plans, Overall Site, Grading and Paving Plan, Recycled Water Treatment Facility, and Operations Center Facility, 25 sheets, dated July, August, October 2005.

This permit authorizes a lot line adjustment, construction of a Recycled Water Facility (RWF) for the tertiary-level treatment of the secondary-level wastewater effluent fiom the existing Watsonville Wastewater Treatment Plant (WWTP). The proposed RWF project site is located on unicorporated County land adjacent to the WWTP, which lies within incorporated City of Watsonvillejurisdiction. Prior to exercising any rights granted by this permit including, without limitation, any construction or site disturbance, the applicant/owner shall comply with the following:

Lot Line Adjustment Conditions of Approval:

No parcel map is required. File deed(s) of conveyance (which must result in parcel configurations that match the approved Exhibit "A" for this permit) with the County Recorder to exercise this approval. Parcels or portions of parcels to be combined must be in identical ownership.

II. The deed(s) of conveyance must contain the following statement after the description of the property(ies) or portion(s) of property to be transferred:

A. "The purpose of the deed is to adjust the boundaries between Assessor's Parcel Number 052-571-01 and Assessor's Parcel Numbers 052-571-08, 051-571-09, and 052-581-12 as approved by the County of Santa Cruz under Application 05-0145. APN's 052-571-09 and 052-581-12 shall be combined into one parcel. This conveyance may not create a separate parcel, and is null and void unless the boundary is adjusted as stated."

III. The applicant shall record a notice on the property deed stating that pursuant to County Code Chapter 16.10.100 an exception was granted to flood regulations in order to construct the ring levee and other improvements within the floodplain of the Pajaro River. The notice will state that insurance premiums may be higher and that flood risks may be higher than they might be if an exception was not granted. This notice will be prepared by the Planning Department and shall be recorded prior to exercising this approval.

IV Return a conformed copy of the deed(s) to the Planning Department.

V If a map is also to be recorded with the County Surveyor's office (which is not required to implement this approval), you must include a copy of these Conditions of Approval to the County Surveyor with the map to be recorded.

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Riparian Exception Conditions of Approval:

I. Prior to exercise of this approval:

A. Submit a revised site plan and cross section(s) showing the pathway fiom the top of the levee to the termination, for review and approval by Environmental Planning staff. The site plan shall show the final routing of the pathway such that no trees are removed. The maximum finished width of the path shall be six feet with a maximum disturbance area for construction of ten feet (path width plus two feet on either side). The path shall be constructed without the import of fill. The surface shall be permeable material. In order to minimize structures in the flood hazard area there shall be no railings, light standards, etc., though interpretative and directional signing west of the levee is allowed.

B. Prior to any disturbance in the riparian corridor, the centerline of the pathway shall be staked in the field and the applicant shall call for inspection by Environmental Planning staff.

C. Submit a Riparian Corridor Landscape and Restoration Plan for review and approval by Environmental Planning staff. This plan shall show native riparian plantings in the area that is disturbed to create the path and a plan for maintenance of same. Plan shall include provision for erosion control such that no siltation of the corridor or river occurs, and any cleared area is covered with weed free materials prior to October 15. Plan shall state that no work other than planting shall occur in the riparian corridor between October 15 and April 15.

D. Revise the project plans to show that signage will be erected on Beach Road to indicate public access to the river corridor and signage for the pathway at the facility. Provide information on how the public can gain access to the pathway given entry controls at the facility.

E. Erosion control measures must be in place at all times during construction. All disturbed soils shall be stabilized, as identified in the site plans to prevent siltation in the watercourse.

F. A site inspection is required prior to final Planning Department approval of the proposed work; notify Environmental Planning at (831) 454-3178 upon project completion for final inspection and clearance

Coastal Development Permit Conditions of Approval:

I. Sign, date, and return to the Planning Department one copy of the approval to indicate acceptance and agreement with the conditions thereof.

A. All grading and construction will conform to the requirements of the Santa Cruz County Grading Ordinance. Site grading and construction work areas will expose as little new ground surface as possible. Vegetation cover should be left intact to the extent practical. To the extent possible, grading activities in non-cropped areas will be limited to the period between April 15 and October 15. Implement best

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construction practices at all grading sites, regardless of soil erodibility hazard.

Upon completion of construction at all sites, loose soils shall be removed or spread and all areas shall be re-soiled and reseeded to ensure that a stable soil cover will remain. The permit holder will prepare and implement an inspection and maintenance program for the right-of-way and all facility sites.

B. Obtain an Encroachment Permit from the Department of Public Works for all off-site work performed in the County road right-of-way.

C. Conduct geological investigations of all project facilities to determine pipeline alignments prior to the final design, and implement design recommendations. The investigations will specify hazards related to ground movements and co-seismic effects, especially liquefaction. The recommendations of an engineering geologist will be incorporated into the design and specifications and shall be implemented by the construction contractor.

11. Prior to Construction Bid Award the applicant/owner shall:

A. Submit Final Plans for review and approval by the Planning Department. The final plans shall be in substantial compliance with the plans marked Exhibit "A" on file with the Planning Department. The final plans shall include the following additional information:

1. Identify finish of exterior materials and color of roof covering for Planning Department approval. Any color boards must be in 8.5" x 11" format.

2. Grading, drainage, and erosion control plans.

3. The City of Watsonville shall require contractors to develop a Storm Water Pollution Prevention Plan (SWPPP) for construction of proposed facilities, as required by the RWQCB. The objectives of the SWPPP are to identify pollutant sources that may affect the quality of stormwater discharge and to implement BMPs to reduce pollutants in stormwater discharges.

4. The Recycled Water Facility shall be designed to comply with FEMA and County of Santa Cruz requirements to floodproof the facilities and not increase upstream or downstream hazards.

5. The Landscape Plan shall be consistent with Exhibit A. The permit holder shall re-vegetate disturbed natural areas to minimize textural contrasts with the surrounding vegetation using grasses, shrubs and trees typical of the immediately surrounding area.

6. Exterior structural surfaces shall be consistent with Exhibit **A.** Low glare, earth-tone colors shall be utilized.

B. Submit four copies of the approved Discretionary Permit with the Conditions of Approval attached. The Conditions of Approval shall be recorded prior to submittal.

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C. Meet all requirements of and pay any required Zone **7A** drainage fees to the County Department of Public Works, Drainage. Drainage fees will be assessed on the net increase in impervious area.

D. Obtain any required permits from the County Department of Environmental Health Services, the Certified Unified Program Agency (CUPA) for this project.

E. Meet all requirements and pay any applicableplan check fee of the Pajaro Valley Fire Protection District.

F. Provide required off-street parking for 53 cars. Parking spaces must be 8.5 feet wide by 18 feet long and must be located entirely outside vehicular rights-of way. Parking must be clearly designated on the plot plan.

G. The project must comply with all recommendations of any required soils/geology reports.

H. Pursuant to Sections 16.40.040 and 16.42.100 of the County Code, if at any time during site preparation, excavation, or other ground disturbance associated with this development, any artifact or other evidence of **an** historic archaeological resource or a Native American cultural site is discovered, the responsible persons shall immediately cease **and** desist from all further site excavation and notify the Sheriff-Coroner if the discovery contains human remains, or the Planning Director if the discovery contains no human remains. The procedures established in Sections 16.40.040 and 16.42.100, shall be observed.

III. Operational Conditions

A. In the event that future County inspections of the subject property disclose noncompliance with any Conditions of this approval or any violation of the County Code, the owner shall pay to the County the full cost of such County inspections, including any follow-up inspections and/or necessary enforcement actions, up to and including permit revocation.

B. All recycled water produced by the Recycled Water Facility (RWF) shall be used solely for agricultural irrigation. Moreover, none of the amount of groundwater that no longer has to be pumped due to the supplemental irrigation and/or recharge water being provided by the RWF nor any additional water necessary as "blend water" (i.e., "groundwater pumping offset") shall be counted or considered by the City of Watsonville or the County as being available to support urban growth in Watsonville or other areas reliant upon the Pajaro Valley groundwater basin for water supply (i.e., all of the groundwater pumping offset shall be used for overdraft reduction).

C. Above-ground irrigation systems shall be operated in accordance with the requirements of Title 22 of the California Code of Regulations and any reclamation permits issued by the RWQCB, Central Coast Region. Title 22 requires that irrigation rates match the evapotranspiration rates of the plants or crops being irrigated, and that application of reclaimed water be prohibited within 50 feet of any

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domestic water supply wells. Monitoring of crop productivity should be performed, and if adverse impacts to the yields of sensitive crops (e.g., strawberries) occurs, the blending ratio should be adjusted to decrease the fraction of recycled water in the applied irrigation water.

D. Signage shall be limited to one identification sign, not internally illuminated, not larger than twelve (12) square feet in area and one access sign. Signs and supports shall be set back a minimum of five feet from the edge of the right of way or roadway, whichever is greater, and shall not obstruct vehicular sight distance or pedestrian/bicycle circulation.

E. All site, building, security and landscape lighting shall be directed onto the site and away from adjacent properties and the riparian corridor of the Pajaro River. Light sources shall not be visible from adjacent properties. Light sources can be shielded by landscaping, structures, fixture design or other physical means. Building and security lighting shall be integrated into the building design. All lighted parking and circulation areas shall utilize low-rise light standards or light fixtures attached to the building. Light standards to a maximum height of 15 feet are allowed. Area lighting shall be energy efficient lighting.

F. Site design shall reduce the visual impact and scale of interior driveways, parking and paving. Parking lot landscaping shall be designed to visually screen parking from public streets and adjacent commercial agricultural operations. Parking lots shall be landscaped with large canopy trees and a landscape strip shall be provided at the end of each parking aisle. A minimum of one tree for every five parking spaces is required along rows of parking. Trees shall be dispersed throughout the parking lot to maximize shade and visual relief. Eighteen bicycle parking spaces shall be provided and shall be appropriately located in relation to the major activity area.

G. Any roadway damage caused by construction activity to Beach Road or other key access streets in the vicinity shall be repaired.

H. The contractor shall provide advanced public notification of construction activity and roadway/access closures. The construction contractor shall prepare traffic safety and control plans to show specific methods for maintaining traffic flows.

I. The contractor shall implement a dust control program.

J. During construction, noise levels shall not exceed limits set by the General Plan. Stationary noise sources shall be located as far from sensitive receptors as possible. Pumping facilities shall be designed with acoustical treatments (Building enclosures, louvered vents, noise walls etc.) that are adequate to maintain potential noise generation to levels at or below ambient levels. Equipment and trucks used for project construction shall utilize the best available noise control techniques. Impact equipment (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically- or electrically-powered wherever possible.

IV. As a condition of this development approval, the holder of this development approval ("Development Approval Holder"), is required to defend, indemnify, and hold harmless the COUNTY, its officers, employees, and agents, from and against any claim (including

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attorneys' fees), against the COUNTY, it officers, employees, and agents to attack, set aside, void, or annul this development approval of the COUNTY or any subsequent amendment of this development approval which is requested by the Development Approval Holder.

A. COUNTY shall promptly notify the Development Approval Holder of any claim, action, or proceeding against which the COUNTY seeks to be defended, indemnified, or held harmless. COUNTY shall cooperate fully in such defense. If COUNTY fails to notify the Development Approval Holder within sixty (60) days of any such claim, action, or proceeding, or fails to cooperate fully in the defense thereof, the Development Approval Holder shall not thereafter be responsible to defend, indemnify, or hold harmless the COUNTY if such failure to notify or cooperate was significantly prejudicial to the Development Approval Holder.

B. Nothing contained herein shall prohibit the COUNTY from participating in the defense of any claim, action, or proceeding if both of the following occur:

1. COUNTY bears its own attorney's fees and costs; and
2. COUNTY defends the action in good faith.

C. Settlement. The Development Approval Holder shall not be required to pay or perform any settlement unless such Development Approval Holder has approved the Settlement. When representing the County, the Development Approval Holder shall not enter into any stipulation or settlement modifying or affecting the interpretation or validity of any of the terms or conditions of the development approval without the prior written consent of the County.

D. Successors Bound. "Development Approval Holder" shall include the applicant and the successor'(s) in interest, transferee(s), and assign(s) of the applicant.

Minor variations to this permit which do not affect the overall concept or density may be approved by the Planning Director at the request of the applicant or staff in accordance with Chapter 18.10 of the County Code.

Please note: This permit expires two years from the effective date unless you obtain the required permits and commence construction.

Approval Date: _____

Effective Date: _____

Expiration Date: _____

Cathy Graves Principal Planner	Joan Van der Hoeven Project Planner

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Appeals: Any property owner, or other person aggrieved, or any other person whose interests are adversely affected by any act or determination of the Planning Commission, may appeal the act or determination to the Board of Supervisors in accordance with chapter 18.10 of the Santa Cruz County Code.

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EXHIBIT D

STATEMENT OF OVERRIDING CONSIDERATIONS FOR THE WATSONVILLE RECYCLED WATER FACILITY (APPLICATION 05-0145)

CEQA Requirements

The California Environmental Quality Act (CEQA) requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, those adverse environmental effects may be considered acceptable.

Pursuant to Section 15096 of the CEQA Guidelines, the Santa Cruz County Board of Supervisors intends to approve the Watsonville Recycled Water Facility Project as a "responsible agency," in reliance upon an EIR and Addendum completed and certified by the Pajaro Valley Water Management Agency (PWMA). That EIR and Addendum determined that construction of the Recycled Water Facility would result in loss of prime farmland, a significant unavoidable impact. While the PWMA Board of Directors adopted a Statement of Overriding Considerations related to this impact, CEQA Guidelines Section 15096(h) requires that the County of Santa Cruz, as a responsible agency, adopt its own Statement of Overriding Considerations prior to approving the project.

Significant Unavoidable Impact: Loss of Prime Farmland

The proposed Recycled Water Facility (RWF) would occupy approximately 14 acres of agricultural land that is designated as prime farmland on the Santa Cruz County Agricultural Resources Map. This site is located adjacent to the Watsonville Wastewater Treatment Facility (WWTF) and is currently farmed. Development of the proposed facilities would result in the permanent loss of this land from agricultural use, and would contribute to the cumulative loss of farmlands in the region.

The proposed site, adjacent to the Wastewater Treatment Facility, was determined by the CEQA lead agency to be the most logical and cost-effective location for the Recycled Water Facility. In addition, based on investigations in the Revised Basin Management Plan and the EIR, no feasible locations were identified that did not affect prime farmland.

Project Benefits

The facility is intended to provide tertiary treatment of water at the Watsonville sewage treatment plant. Upon treatment, this water will be piped to the PVWMA coastal distribution system for delivery to agricultural lands adjacent to the coast. The area to which this water will be delivered has experienced a significant degradation of groundwater quality as a result of seawater intrusion, placing continued agricultural operations here in jeopardy. Delivery of this water will allow recipient properties to continue to produce crops and to contribute to the important agricultural economy of the region.

In addition, a reduction in reliance on groundwater pumping in this area will play a role in preventing further landward migration of seawater intrusion in the Pajaro Valley. Therefore, implementation of this project will help to protect other at-risk agricultural properties from the effects of water quality degradation.

Statement of Overriding Considerations

In consideration of the fact that the project will help to preserve coastal agricultural operations and will contribute to the overall plan by the P W M A to combat seawater intrusion in the Pajaro Valley, the Santa Cruz County Board of Supervisors finds that the unavoidable loss of prime agricultural land attributable to construction of the Watsonville Recycled Water Facility is outweighed by the benefits of the project, and hence, is acceptable.

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Resolution 2005-19

A Resolution of the Board of Directors of the
Pajaro Valley Water Management Agency

A Resolution Of The Board Of Directors Of The Pajaro Valley Water Management Agency Approving Addendum No. 3 To The Final Environmental Impact Report For The PVWMA Revised Basin Management Plan Projects

The Board of Directors of the Pajaro Valley Water Management Agency does resolve as follows:

WHEREAS, in 2002 the Pajaro Valley Water Management Agency (PVWMA) Board of Directors certified a Final Environmental Impact Report (FEIR) for the PVWMA Revised Basin Management Plan Projects ("Project") (State Clearinghouse #2000062030); and

WHEREAS, an Addendum to the FEIR was completed in August, 2003 ("First Addendum"); and

WHEREAS, an Addendum to the FER was completed in May, 2005 ("Second Addendum"); and

WHEREAS, the FER, First Addendum, and Second Addendum described and evaluated four alternativss that included combinations of key elements for addressing the problem of basin overdraft and identified a Recommended Alternative that included the following Projects: (1) Coastal Distribution System; (2) conservation measures; *(3)* Harkins Slough Project; (4) Import Water Project with out-of-basin banking; (5) Recycled Water Project; and (6) Watershed Management Programs. Chapters 1 and 3 of the FEIR describe the purpose of and need for the projects, project background, and the construction and operating characteristics of these projects; and

WHEREAS? PVWMA is proposing some modifications to the Project based on engineering and design efforts subsequent to EIR certification and the adoption of First Addendum and Second Addendum: and

WHEREAS, the proposed modifications are described in the PVWMA REVISED BASIN MANAGEMENT **PLAN** PROJECTS EIR ADDENDUM #3 ("Third Addendum") dated August, 2005 attached hereto and incorporated herein by reference; and

WHEREAS, PVWMA, as Lead Agency for the Project, has evaluated the potential environmental impacts of these modifications in comparison with impacts analyzed in the FEIR. First Addendum, arid Second Addendum as set forth in Section 3 of the Third Addendum; and

WHEREAS, CEQA Guidelines (Sections 15162-15164) require preparation of an addendum to a previously certified EIR if some changes or additions to the environmental evaluation of a project are necessary but none of the following occurs:

1. There are no substantial changes in the project which require major revisions to the EIR or a substantial increase in the severity of previously identified significant effects;

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2. There are no substantial changes with respect to the circumstances under which the project is undertaken which require major revisions to the EIR; or

3. No new information of substantial importance, which could not have been known with the exercise of reasonable diligence at the time of EIR certification, shows any of the following:

   i. the project will have one or more significant effects not discussed in the EIR;

   ii. the project will result in impacts substantially more adverse than those disclosed in the EIR;

   iii. mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponent declines to adopt it, or

   iv. mitigation measures or alternatives that are considerably different from those analyzed in the EIR would substantially reduce one or more significant effects on the environment, but the project proponent declines to adopt it; and

WHEREAS, as set forth in Section 4 of the Third Addendum. the Agency has carefully analyzed the proposed changes to the Project and, based on said analysis, concluded that they do not trigger any of the conditions described above;

NOW, THEREFORE, BE IT RESOLVED, by the Pajaro Valley Water Management Agency Board of Directors as follows:

SECTION 1. As the decision- making body and Lead Agency for the Project, the Board of Directors has reviewed and considered the information contained in the Third Addendum and supporting documentation. The Board of Directors finds that the Third Addendum contains a complete and accurate reporting of the environmental impacts associated with the proposed modifications to the Project. The Board of Directors further finds that the Addendum has been completed in compliance with **CEQA** and the State **CEQA** Guidelines. The Board of Directors finds that the Addendum reflects the independent judgment of the Board of Directors.

SECTION 2. Findings on Environmental Impacts. Based on the Addendum arid all related information presented to the Board of Directors, the Board of Directors finds that the preparation of a subsequent or supplemental EIR is not required for the minor modifications to the Project described in the Addendum because such modifications:

(1) do not constitute substantial changes to the Project that will require major revisions of the FEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

(2) do not constitute substantid changes with respect to the circumstances under which the Project is undertaken that will require major revisions of the FEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of the previously identified significant effects; and

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(3) do not contain new information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the FEIR was certified, that shows any of the following:

(a) The Proposed Project will have one or more significant effects not discussed in the FER and First and Second Addenda;

(b) Significant effects previously examined will be substantially more severe than shown in the FEIR and First and Second Addenda;

(c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the lead agency declined to adopt such measures; or

(d) Mitigation measures or alternatives considerably different from those analyzed in the FEIR and First and Second Addenda would substantially reduce one or more significant effects on the environment, but which lead agency declined to adopt.

SECTION 3. Approval of Third Addendum. The Board of Directors hereby approves the Third Addendum.

SECTION 4. Custodian of Records. The documents and materials that constitute the record of proceedings on which these findings are based are located at the PVWMA office located at ***36*** Brennan Street, Watsonville, California 95076.

SECTION 5. Execution of Resolution. The President of the Board of Directors shall sign this Resolution and the Secretary of the Board of Directors shall certify this Resolution was duly and properly adopted by the Board.

PASSED AND ADOPTED by the Pajaro Valley Water Management Agency, County of Santa Cruz, State of California, the 17th day of August, 2005, by the following vote:

AYES: **Directors:** Capurro, Carroll, Eiskamp, Miljanich

NOES: **Directors:** None

ABSENT: **Directors:** Dobler , Gallino, Imazio

ABSTAIN: **Directors:** None

Frank Capurro, Chair

Attest:

Linda Contreras, Secretary

PVWMA REVISED BASIN MANAGEMENT PLAN PROJECTS EIR ADDENDUM #3

Recycled Water Facility Site Plan Revisions

Prepared for:
Pajaro Valley Water Management Agency

August 2005

Prepared by:

RMC Water and Environment

2001 N. Main Street, Suite 400, Walnut Creek, CA 94596, (925) 627-4100
2290 N. First Street, Suite 212, San Jose, CA 95131, (408) 943-1501
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SECTION 1
BACKGROUND AND PURPOSE OF THIS ADDENDUM

1.1 BACKGROUND

Pajaro Valley Water Management Agency (PVWMA) was the lead agency in developing the PVWMA Revised Basin Management Plan (Revised BMP) Final Environmental Impact Report (FEIR) (State Clearinghouse # 2000062030). PVWMA published the F E R in January 2002, and the PVWMA Board of Directors subsequently certified it as complete and adequate under the California Environmental Quality Act (CEQA). Addendums to the EIR were completed in August 2003 (Addendum 1) and May 2005 (Addendum 2). This document is an addendum to that EIR (the Revised BMP EIR) and Addendums 1 and 2, whch are incorporated by reference. The Findings for the Project and the Mitigation Monitoring and Reporting Program (MMRP), prepared in accordance with CEQA Guidelines Sections 15091 and 15097, are also incorporated by reference. The Findings document identifies impacts resulting from the project, and the MMRP outlines mitigation measures to reduce significant impacts to less-than-significant levels. All potential project-related significant impacts will be mitigated to less-than-significant levels, with the exception of the following significant and unavoidable impacts: loss of prime agricultural land, construction of facilities across active fault traces, generation of criteria air pollutants during construction (PM_{10}), and secondary effects of growth.

The Revised BMP E R evaluated four alternatives that included combinations of key elements, including development of local surface water projects, water conservation, land retirement, recycled water, supplemental injection/extraction wells, and supplemental surface water supplies. In December 2001, the PVWMA Board of Directors directed preparation of a Final Revised BMP and identified a Recommended Alternative that included the following projects, as well as a list of potential projects for consideration after 2007:

- Coastal Distribution System
- Conservation (5,000 acre-feet per year [afy])
- Harkins Slough Project (1,100 afy)
- Groundwater Banking with Import Pipeline (13,400 afy)
- Out-of-Basin Storage
- Recycled Water Project (4,000 afy)
- Watershed Management Programs

Chapters 1 and 2 of the Revised BMP EIR describe the purpose of and need for the project, project background, and the construction and operating characteristics of these projects,

PVWMA is proposing some modifications to the Revised BMP Project based on engineering and design efforts subsequent to Revised BMP EIR certification and adoption of Addendums 1 and 2. These

modifications only affect the Recycled Water Project portion of the BMP and include an increase in the land area needed for the RWF from approximately 8 to 14 acres. Section 2 of this document describes these proposed modifications. Section 3 of this document presents an evaluation of the environmental impacts of these design modifications in comparison with impacts analyzed in the Revised BMP EIR, while overall conclusions are presented in Section 4.

1.2 PURPOSE OF THIS ADDENDUM

The CEQA Guidelines (Sections 15162 and 15164) require that a lead agency prepare an addendum to a previously certified EIR if some changes or additions to the environmental evaluation of a project are necessary but none of the following occurs:

1. There are no substantial changes in the project which require major revisions io the EIR or a substantial increase in the severity of previously identified significant effects;

2. There are no substantial changes with respect to the circumstances under which the project is undertaken which require major revisions to the EIR; or

3. No new information of substantial importance, which could not have been known with the exercise of reasonable diligence at the time of EIR certification, shows any of the following:

   (i) the project will have one or more significant effects not discussed in the EIR,

   (ii) the project will result in impacts substantially more adverse than those disclosed in the EIR,

   (iii) mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponent declines to adopt it, or

   (iv) mitigation measures or alternatives that are considerably different from those analyzed in the EIR would substantially reduce one or more significant effects on the environment, but the project proponent declines to adopt it.

This Addendum documents that the changes to the Revised BMP projects do not trigger any of the conditions described above.

SECTION 2
DESCRIPTION OF PROPOSED CHANGES

PVWMA is the regional agency in charge of ensuring long term supply of water for the Pajaro Valley Region. The valley has been experiencing seawater intrusion in some of the aquifers near the coast, due to overdraft in the basin. In order to help preserve water supply for all the interests in the valley, including agricultural, PVWMA developed the BMP to identify a variety of projects to augment the area's water supply and reduce impacts of seawater intrusion caused by over pumping the aquifers. One of the initial projects identified in the plan is the joint development of the Recycled Water Facility (RWF) with the City of Watsonville, which will allow the City's wastewater treatment plant to treat a portion of the effluent at a tertiary level. This process will supply approximately 4,000 acre-feet of recycled water per year to local farmers for crop Irrigation, which will allow a reduction in the existing groundwater pumping in the areas affected by seawater intrusion. The project does not increase capacity of the plant, but will reduce discharge to the Monterey Bay National Marine Sanctuary. The environmental impacts of the project were evaluated under CEQA in an Environmental Impact Report (EIR) (PVWMA 2002) and under NEPA in an Environmental Impact Statement (EIS) (US Bureau of Reclamation 2003).

2.1 OVERVIEW OF THE RECYLED WATER FACILITY

The Watsonville Area Water Recycling Project (WAWRP) is a joint project by the City of Watsonville (City) and the Pajaro Valley Water Management Agency (PVWMA) to deliver a reliable, water supply to agricultural users in the coastal zone of the Pajaro Valley. The project was selected to develop a sustainable and reliable water supply to offset the over-pumping of the groundwater basin and to minimize the future demand from imported supplies. The recycled water will be used for agricultural irrigation in the coastal zone, where typical crops include strawberries, row-crop vegetables and other edible food crops. Strawberries and some of the other crops grown in the area are sensitive to the salinity in the water used for irrigation. The City and PVWMA, in coordination with area growers and landowners, developed a project water quality objective. The objective is to deliver a reliable water supply with a total dissolved solids (TDS) concentration of approximately 500 mg/L.

The recycled water will have an estimated TDS concentration of 800 – 900 mg/L and, therefore, requires either blending with a water supply of higher quality or additional treatment to achieve the water quality objective. The project was originally planned and designed to provide a blend supply to achieve the dilution necessary. The blend supply would be a combination of imported supplies and water from supplemental groundwater wells. However, due to financial and legal constraints, construction of the import pipeline has been delayed. If the pipeline is never constructed, it would have a significant impact on the overall quality of the delivered water as the pipeline water is necessary to provide dilution for the higher level salinity in the recycled water. If the low salinity import supply is not developed, an alternative means of mitigation for the salinity levels in the recycled water will be required. It is

recommended that the RWF be designed and constructed to accommodate desalination (microfiltration/reverse osmosis) to the treatment process to reduce the salinity in the recycled water to an acceptable quality, if necessary in the future.

Also, without an import supply to help meet demands in the valley, the use of the recycled water supply would have to be maximized. This could be accomplished through groundwater recharge of the recycled water during the non-irrigation season. This would require additional treatment to remove the nitrates prior to groundwater recharge. It is recommended that the RWF be designed and constructed to accommodate nitrification and denitrification facilities to the treatment process, if necessary in the future.

The RWF project is intended to supplement water supply for the agriculture industry, which has been identified by all the parties as important to preserve.

2.2 PROPOSED CHANGES

This addendum analyzes the change in the RWF site plan and the increase in land needed for the RWF from approximately 8 to 14 acres. Figure 1 shows the boundary of the existing WWTP, the eight-acre area analyzed in the BMP EIR, and the new 14-acre area analyzed in this addendum. The RWF site plan provided in the BMP EIR (as Figure 2-6) is shown on Figure 2 and the new RWF site plan is shown on Figure 3.

As the facility design has moved forward, the site plans have been refined. The additional land is needed to accommodate the potential future nitrate removal facilities and/or desalination facilities. Since the future nitrification and denitrification facilities would be constructed to treat the effluent water from the trickling filters, and would include features that would integrate with the RWF, the RWF site plan has been modified to include space for these facilities within the facility layout. Similarly, the desalination facilities would be an integral component of the treatment process, and therefore accommodations for these facilities in the future, are shown on the new site facility plan.

In addition, an access road to the RWF is included and the sludge drying beds have been relocated.

Figure 1 WWTP Boundary with Previously Analyzed and New RWF Boundary

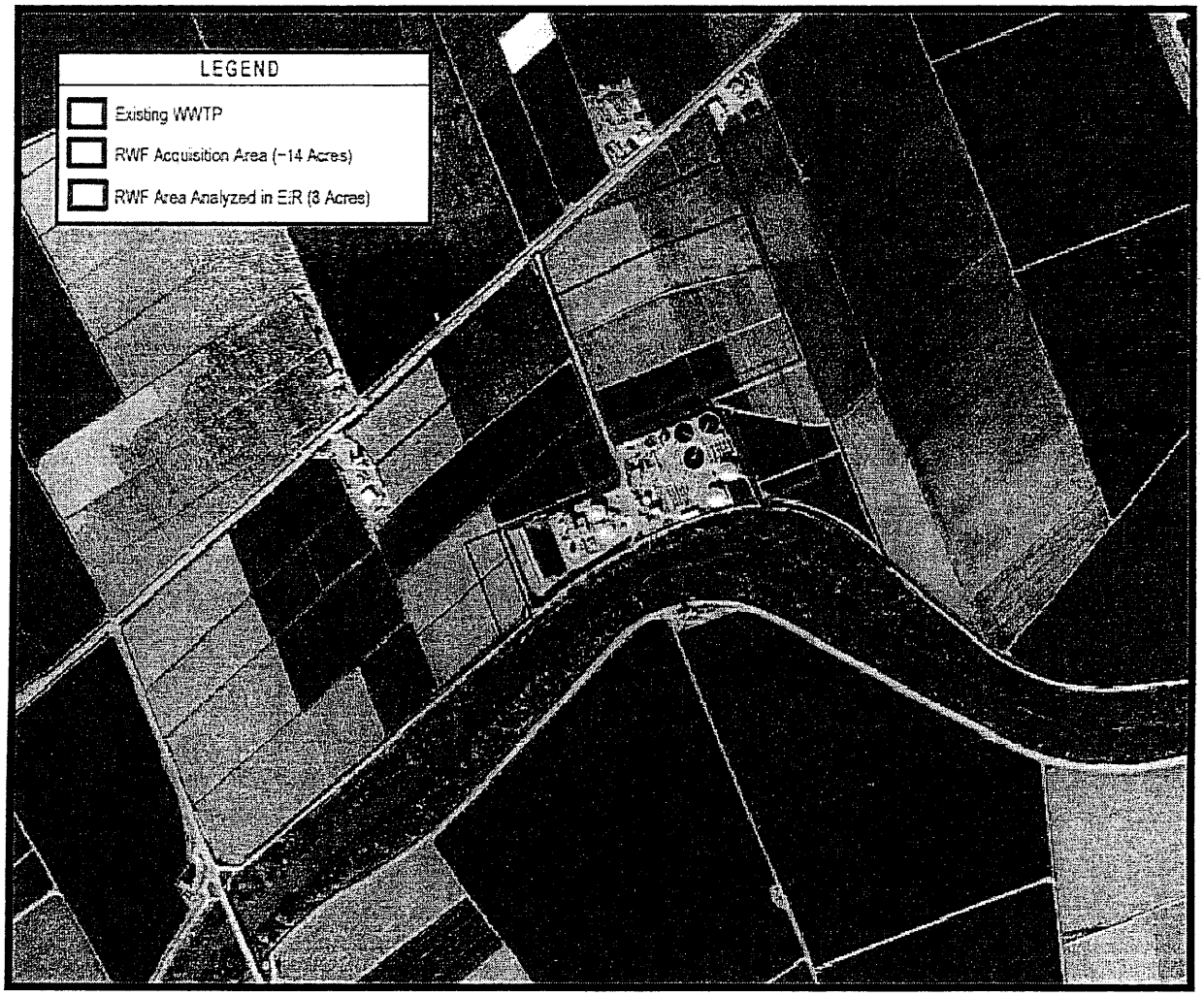

EXHIBIT E

Figure 2 Previous Recycled Water Facility Site Plan (analyzed in EIR)

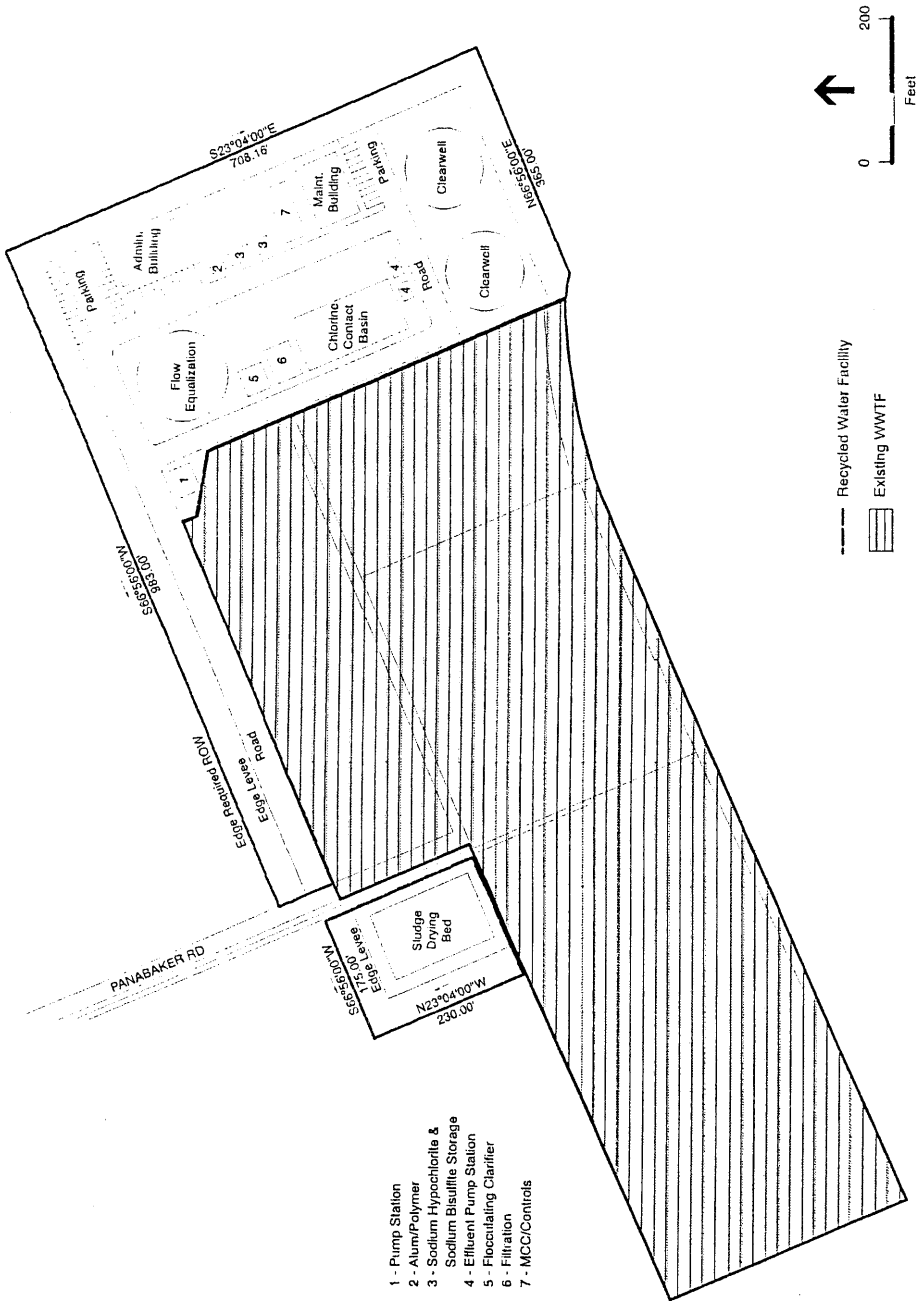

Figure *3* New Recycled Water Facility Site Plan

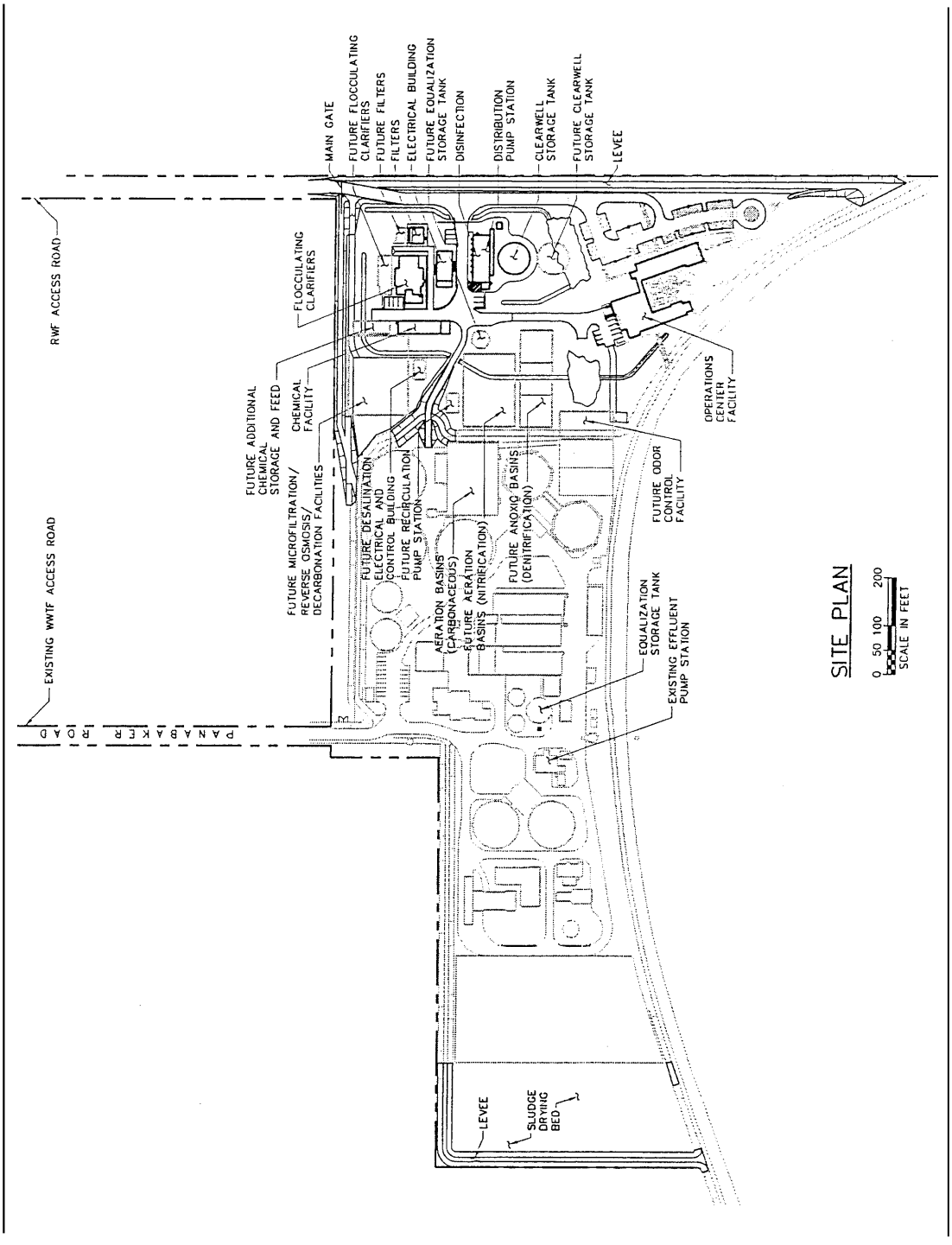

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EXHIBIT E

SECTION 3

ANALYSIS OF POTENTIAL ENVIRONMENTAL EFFECTS

The Revised BMP EIR evaluated the following environmental issues: land use and planning (including agricultural resources); geology, soils and seismicity; hydrology and water quality; vegetation. fish and wildlife; cultural resources; traffic and circulation; air quality; noise; public services; and visuallaesthetic and recreational resources. These issues are re-evaluated in this Addendum for the proposed changes to the RWF. This evaluation determines whether, with the changes to the RWF, the Revised BMP Project would result in any new significant impacts or substantially more severe impacts than identified in the Revised BMP EIR. The Draft EIR (Chapter 4) describes the criteria used in determining the significance of environmental impacts.

3.1 LAND USE AND AGRICULTURAL RESOURCES

Land uses in the vicinity consist of the existing Waste Water Treatment Plant (WWTP), planned RWF, and agriculture (primarily fruit and vegetable croplands), and are the same as described and analyzed in the Revised BMP EIR. The lands adjacent to the WWTP are considered Prime Farmland, specifically Type 3 agricultural lands, which are prime agricultural lands located within the Coastal Zone. The proposed site for the Recycled Water Facility is zoned "Commercial Agriculture" (CA).

The WWTF is designated as a Public Facility in the Santa Cruz County General Plan/Local Coastal Program. The Public Facility designation includes schools, fire stations, churches, hospitals, cemeteries, sanitary landfills, and water supply and treatment facilities. The Recycled Water Facility site is designated Agriculture in the Santa Cruz County General Plan/Local Coastal Plan.

Construction of the RWF facilities will involve short-term construction-related impacts at the proposed RWF site. Short-term disturbance to adjacent land uses during construction of the RWF would be similar to that identified under impact 4.A.1-1 (pp. 4.A.1-3) and mitigation measures to reduce these impacts also would apply to this proposed project change. The facilities associated with the proposed RWF would be similar in scale to those previously evaluated in the EIR and therefore would not result in new or more severe impacts on land use than those analyzed in the Revised BMP EIR.

Construction of the proposed RWF would result in the conversion of approximately 14 acres of Prime Farmland from agricultural use to water treatment and storage facilities, thereby precluding farming on the project site. The BMP EIR analyzed the conversion of a total of 8.5 acres of Prime Farmland (eight acres from the RWF and .5 acres from the supplemental wells area) and concluded that because all surrounding lands are considered Prime Fadand, no feasible alternative site is available that would reduce or avoid the conversion of Prime Farmland. Development of the site would therefore contribute *to*

the cumulative loss of Prime Farmland in the region. This would be considered a significant and unavoidable impact. A statement of overriding considerations was adopted by PVWMA for the impact identified in the E R. The changes in the RWF site plan would result in the conversion of approximately an additional 6.0 acres of Prime Farmland. The impact would be substantially the same as identified in the EIR.

The mitigation measure identified in the Final EIR (Measure 4.A.1-2 on page 33) states:

"Measure 4.A.1-2: In order to compensate for the loss of prime agncultural land, PVWMA will cause up to 8.5 acres of prime agricultural land that is no longer farmed to be restored or otherwise brought back into production. This can be accomplished through contribution to a fund dedicated to the restoration of agricultural land.

If this measure can be successfully implemented then this impact could be mitigated to a less than significant level. However, the feasibility of this measure has not been ascertained. Therefore, this impact is considered significant and unavoidable."

This mitigation measure would remain in effect and would be implemented by PVWMA as feasible to reduce this impact if possible.

3.2 GEOLOGY, SEISMICITY, AND SOILS

Geologic and seismic hazards would be the same as those analyzed in the Revised BMP EIR. Construction of the proposed facilities could result in accelerated erosion and attendant loss of soil resources and effects on sediment discharges in water courses. The impact would be Significant on slopes over two percent and in areas with soils having moderate or greater erosion hazard. Proposed facilities could incur damage as a result of underlying soil properties (subsidence, high shrink-swell potential, and corrosivity). Seismic hazards would include strong ground shaking and liquefaction.

The impacts and mitigation measures identified on DEIR pp. 4.A.2-3 through 4.A.2-4 would apply to the proposed changes and would reduce impacts from the proposed changes to less-than-significant levels.

3.3 HYDROLOGY AND WATER QUALITY

Impacts to groundwater and surface water of the RWF were analyzed in Section 4.A.3 of the Revised BMP EIR. The proposed changes would introduce no new impacts, and no impacts would be substantially more adverse. The Revised BMP EIR identified several significant impacts, including Measures identified in the Revised BMP EIR that required implementation of a Storm Water Pollution Prevention Plan (DEIR p. 4.A.3-5).

The proposed changes to the RWF would not result in new or more severe impacts than those identified in the Revised BMP EIR. As stated in Section 2.2.1 (on page 2-11), the Revised BMP assumes a curtailment of pumping in the coastal zone, and development of supplemental water supplies (including the RWF) to meet water demand. This would provide a beneficial impact to groundwater hydrology by reducing the basin overdraft and subsequent seawater intrusion. The RWF analyzed in this Addendum would be

expected to contribute incrementally to this beneficial impact, as this project would be a part of an overall strategy to reduce groundwater pumping along the coast, thereby resulting in higher coastal groundwater levels that reduce/eliminate seawater intrusion.

The BMP EIR identified significant impacts from construction of the proposed water recycling facilities and associated pipelines that could result in increased erosion and subsequent sedimentation, with adverse impacts to water quality. Additionally, release of fuels or other hazardous materials associated with construction activities could degrade water quality. These impacts would be minimally increased with the increase in acreage developed from eight acres to 14 acres and the addition of impervious surfaces (parking lot) could increase runoff. However, the mitigation measures identified would continue to reduce these impacts to less than significant.

3.4 VEGETATION, FISH AND WILDLIFE

Potential impacts to biological resources were identified in the BMP EIR from construction of the pipeline connecting the Import Pipeline to the RWF. These impacts are not affected by the increased land area needed for the RWF analyzed in this addendum.

The RWF site analyzed in the BMP EIR and in this addendum would not result in adverse impacts to vegetation, fish or wildlife.

3.5 CULTURAL RESOURCES

While no known or previously recorded cultural resources sites were identified in the project area, significant unknown cultural resources may be buried or obscured by vegetation, and therefore construction of the proposed project could result in degradation and destruction of undiscovered cultural resources. Mitigation Measure 4.A.5-1 (DEIR page 4.A.5-3) addresses impacts from ground-disturbing activities associated with the proposed RWF and associated pipelines. Measure 4.A.5-1 would apply to the proposed changes to the RWF site plan and would reduce impacts to cultural resources to a less-than significant level.

3.6 TRAFFIC AND CIRCULATION

Section 4.A.6 of the Revised BMP EIR analyzed traffic impacts associated with the RWF. Similar to the original RWF site plan, construction of the proposed RWF temporarily would result in impacts to traffic on West Beach Road, cause delays on area roadways, impede access to adjacent land uses, increase wear and tear on area roadways, increase traffic safety hazards, and increase demand for construction worker and construction vehicle parking spaces. The proposed RWF changes would not change the type or severity of traffic impacts generated by the project. With mitigation measures identified in the DEIR (Measures 4.A.6-1 through 4.A.6-3), traffic impacts would be reduced to less-than-significant levels.

In addition, the revised site plan for the RWF includes a parking area for the RWF. This would result in a beneficial impact to parking at the new facility.

3.7 AIR QUALITY

Section 4.A.7.3 of the Revised BMP EIR analyzed air quality impacts associated with construction and operation of the RWF. Similar to the old site plan, construction of the proposed RWF would have impacts involving temporary generation of criteria air pollutants during construction and an increase in emissions of criteria air pollutants resulting from maintenance and operation of the RWF. The proposed site plan for the RWF would not result in any new air quality impacts, and no impacts would be more adverse than those identified in the Revised BMP EIR.

3.8 NOISE

Section 4.A.8 of the Revised BMP EIR analyzed rioise impacts associated with the RWF. Similar to the old site plan, Construction activities associated with the project would intermittently and temporarily generate noise levels above existing ambient noise levels in the project vicinity. The noise level and anticipated duration would remain the same. The RWF would result in an increase in noise-generating equipment at the plant. Operation of a pumping plant would be consistent with the types of noise-generating sources currently operating at the WWTF. The proposed changes to the RWF would not affect the severity of noise impacts and would not affect the distance to sensitive receptors. With mitigation measures 4.A.8-1 and 4.A.8-2 identified in the D E R (pages 4.A.8-2 and 4.A.8-3), noise impacts will be reduced to less-than-significant levels.

3.9 PUBLIC SERVICES AND UTILITIES

Section 4.A.9 of the Revised BMP EIR analyzed potential impacts to public services associated with the construction of RWF pipelines that could result in temporary, planned or accidental disruption of utility services provided by underground lines. In addition, Section 3.9 of Addendum 2 analyzed additional impacts on City utilities. Mitigation Measure 4.A.9-1 (pp. 4.A.9-1 through 4.A.9-2 of the Revised BMP DEIR) would apply to the RWF project and would reduce potential construction phase impacts to public services to a less-than-significant level.

3.10 VISUAL/AESTHETIC AND RECREATIONAL RESOURCES

Section 4.A. 10 of the Revised BMP EIR analyzed aesthetic and recreational impacts associated with construction of RWF components. The proposed RWF would be on agricultural land adjacent to the WWTF. Views of this site would be available from Beach Road, approximately 500 feet to the north; San Andreas Road, approximately 2,500 feet to the west; and from Highway 1, approximately 3,000 feet to the east. Beach Road and San Andreas Road are designated scenic roads in the Santa Cruz County General Plan/LCP. Highway 1 is a designated scenic road in the City of Watsonville General Plan and the Santa Cruz County General Plan/LCP, and it is eligible for official State Scenic Highway designation by Caltrans. The project area, which contains expansive croplands and little urban development, exhibits a rural visual landscape; however, the existing WWTF is a dominant industrial feature.

Development of the RWF generally would be consistent with the applicable policies of the Santa Cruz County General Plan/LCP and the City of Watsonville General Plan presented in Section 3.10 of the EIR.

The proposed change to the site plan for the RWF would not substantially alter the visual character of the RWF. As noted in the DEIR, it is not uncommon for industrial features (such as pumps) to appear in rural landscapes. Implementation of Mitigation Measures 4.A.10-1a, b, and c identified in the DEIR (p. 4.A.10-3) would reduce impacts of the RWF to visual resources to a less than significant level.

Construction of the proposed RWF pipelines could disrupt bicycle traffic along San Andreas Road and Beach Road, which are included in the Santa Cruz County bikeway system. Construction activities and related truck traffic could damage the bikeways, creating minor inconvenience to bicyclists. This would be a temporary impact during project construction. Implementation of Measures 4.A.6-2, 4.A.6-3a and 4.A.6-3b would ensure that damaged roads would be repaired to pre-construction conditions, and that detours would be provided for bicyclists and motorists during the construction period. Therefore, this impact would be less than significant.

SECTION 4
CONCLUSION

On the basis of the evaluation presented in Section 3, the proposed changes would not trigger any of the conditions listed in Section 1.2 of this Addendum, requiring preparation of a subsequent or supplemental EIR. This Addendum satisfies the requirements of CEQA Guidelines Sections 15162 and 15164.

REFERENCES

County of Santa Cruz, *General Plan and Local Coastal Program*, adopted May 24, 1994.

Environmental Science Associates, *Pajaro Valley Water Management Agency Revised Basin Management Plan Draft EIR*, prepared for the Pajaro Valley Water Management Agency, Watsonville, CA, 2001.

Environmental Science Associates, *Pajaro Valley Water Management Agency Revised Basin Management Plan Final EIR*, prepared for the Pajaro Valley Water Management Agency, Watsonville, CA, 2002.

Pajaro Valley Water Management Authority, Revised Basin Management Plan, February 2002.

RMC, Watsonville Recycled Water Facility Overall Site Plan, July 2005.

.Resolution2002-04

A Resolution of the Board of Directors of the
Pajaro Valley Water Management Agency

Certifying the Environmental Impact Report for the Revised Basin Management Plan and Adopting Findings Regarding Significant and Potentially Significant Impacts, a Statement of Overriding Considerations, and a Mitigation Monitoring Plan for the Recommended Alternative

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WHEREAS, the Board of Directors of the Pajaro Valley Water Management Agency (the "Agency") has proposed implementation of the Recommended Alternative of the Revised Basin Management Plan ("Project") for the purposes of addressing problems of groundwater overdraft and seawater intrusion, and augmenting water supplies in the Pajaro Valley groundwater basin; and

WHEREAS, the Board of Directors determined to prepare an Environmental Impact Report (EIR) in accordance with the California Environmental Quality Act (CEQA) to evaluate the Project's potentially significant environmental impacts; and

WHEREAS, the Board of Directors has reviewed and considered the information contained in the EIR, finds that it reflects the independent judgment of the Agency as lead agency, and determines that it was prepared in compliance with CEQA; and

WHEREAS, based on the EIR and other information in the record, there are certain significant and potentially significant environmental impacts of the Project which could be mitigated to a level of insignificance, therefore mitigation findings are required pursuant to CEQA 52 1081 and CEQA Guidelines § 15091 upon Project approval (Exhibit **A);** and

WHEREAS, based on the EIR and other information in the record, there are significant and potentially significant environmental impacts of the Project which could not be mitigated to a level of insignificance, therefore the alternatives to the Project were examined to determine if they would avoid any of the unmitigated significant impacts (Exhibit A); and

WHEREAS, based on the EIR and other information in the record, there are significant and potentially significant environmental impacts of the Project which could not be reduced to a level of insignificance, therefore a Statement **of** Overriding Considerations is required upon Project approval (Exhibit B); and

WHEREAS, CEQA 521081.6 requires that where mitigation findings are made for significant and potentially significant environmental impacts, a mitigation monitoring program shall be adopted upon Project approval to ensure compliance with the mitigations during Project implementation (Exhibit C); and

WHEREAS, the location and custodian of the documents which constitute the record of proceedings upon which the Board of Director's decision the Project relating to the EIR is the General Manager, Pajaro Valley Water Management Agency, 36 Brennan Street, Watsonville, California, 95076; and

EXHIBIT E

WHEREAS, the mitigation measures identified in the EIR will be applied as conditions of Project approval.

NOW, THEREFORE, **BE IT RESOLVED,** that the Board of Directors of the Pajaro Valley Water Management Agency does hereby find:

The foregoing Recitals are true and correct and made part of this resolution. The Board of Directors has reviewed and considered the information contained in the EIR, finds that it reflects the independent judgment of the Agency as lead agency, and hereby certifies it as complete, adequate, and in compliance with CEQA.

The following are adopted relating to the Project only:

A. The impact and mitigation findings, and mitigation measures, and findings regarding alternatives identified in Exhibit A. Adopt the mitigation measures identified in Exhibit A as conditions of Project approval.

B. The Statement of Overriding Considerations in Exhibit B.

C. The Mitigation Monitoring Plan in Exhibit C.

The following Exhibits, attached hereto, are hereby incorporated by reference.

Exhibit A: Statement of Findings for the Pajaro Valley Water Management Agency Recommended Alternative of the Revised Basin Management Plan

Exhibit B: Statement of Overriding Considerations for the Pajaro Valley Water Management Agency Recommended Alternative of the Revised Basin Management Plan

Exhibit C: Mitigation Monitoring and Reporting Program

PASSED AND ADOPTED by the Pajaro Valley Water Management Agency, County of Santa Cruz, State of California, the 6th day of February, 2002, by the following vote:

AYES: **Capurro, Carroll, Dobler, Eiskamp, Gallino, Imazio, Koenig**

NOES: **None**

ABSENT: **None**

ABSTAIN: **None**

Frank W. Capurro

Frank W. Capurro, Chair

Attest:

Linda Contreras

Linda Contreras, Secretary

EXHIBIT E

EXHIBIT A
PVWMA BOARD OF DIRECTORS FINDINGS REGARDING THE RECOMMENDED ALTERNATIVE OF THE REVISED **BASIN** MANAGEMENT PLAN

February 6,2002

1.0 INTRODUCTION

This document is the findings document adopted by the Pajaro Valley Water Management Agency ("PVWMA") Board of Directors for the Recommended Alternative of the Revised Basin Management Plan (the "Project"). This document has been prepared in compliance with Section 15091 of the California Environmental Quality Act (CEQA) Guidelines

Part 1.1 describes the Project. This section also discusses changes incorporated into the Project during and following the public review period of the PVWMA Revised Basin Management Plan Draft Environmental Impact Report ("Draft EIR").

Part 2 describes the requirements under the California Environmental Quality Act ("CEQA") regarding Project impacts.

Part **3** contains the findings regarding the independent review and judgment of the Board of Directors.

Part 4 contains the findings regarding Project impacts. Impact numbering is the same as in the Final EIR. This section is divided into three sections. Section 4.1 contains findings regarding the Water Recycling component of the Project. Section 4.2 contains findings regarding the Groundwater Banking (Import Water Project) component of the Project. Sections 4.3, 4.4, and 4.5 contain findings for the following topics: Change in Place of Use, Growth Inducement Potential and Secondary Effects of Growth, and Cumulative Impacts, respectively.

Part 5 contains the findings concerning the alternative Project configurations considered in the Draft EIR. The Board of Directors finds that the selected alternative is feasible, and that the other alternatives are either infeasible or do not provide any clear environmental, economic, social or other benefit beyond those of the proposed Project.

The findings presented here also summarize the mitigation measures set forth in the EIR and agreed to by PVWMA or incorporated into the Project. The mitigation measures are summarized below for drafting convenience, but the summary is not intended to change any aspects of the mitigation measures recommended by the Final EIR (FEIR). [This Board intends and finds that each mitigation measure recommended in the FEIR is agreed to or incorporated into the Project as such mitigation is stated in the FEIR, unless such a measure is specifically rejected or expressly modified in these findings.]

1.1 The Project

In December 2001, after a rigorous process consisting of public outreach, coordination with regulatory and jurisdictional agencies and stakeholders, and other factors, the PVWMA Board of Directors directed preparation of a Final Revised BMP with a Recommended Alternative. The Recommended Alternative is the Modified BMP 2000 Alternative evaluated in the Draft EIR, with some changes incorporated after publication of the Draft EIR. The Recommended Alternative would be constructed in three phases, as follows:

PHASE I - CURRENTLY UNDERWAY, COMPLETION IN 2002

- Conservation: 7-year plan (5,000 AFY)
- Harkins Slough Project with Harkins Slough Recharge Basin and Supplemental Wells and Connections (1,100 AFY)
- Coastal Distribution System, Harkins Slough portion
- CVP Contract Assignment from Mercy Springs Water District for the Import Water Project
- Watershed Management Programs
  - Water Metering Program
  - Water Resources Monitoring Program

All projects in Phase I have been approved by previous actions of the Board.

PHASE II – 2004-2007

- Coastal Distribution System, remaining portion
- 54-inch Import Water Project (13,400 AFY)
  - Out of Basin Banking
  - Acquisition of CVP Water Supplies
  - Inland-alignment turnouts (to interested parties) and supplemental wells
- Recycled Water Project (4,000 AFY)
- Watershed Management Programs
  - Nitrate Management Program
  - Wells Management Program
  - Recharge Area Protection Program

PHASE III – FUTURE (POTENTIAL PROJECTS)

- Aquifer Storage and Recovery (ASR) of CVP Water
- Inland Distribution System
- Watsonville Slough Project and North Dunes Recharge Basin
- Murphy Crossing Project with Murphy Crossing Recharge Basins
- College Lake Project in coordination with U.S. Army Corps of Engineers flood protection project

This document presents findings to support approval of the following components of the Recommended Alternative: Import Water Project, and the Recycled Water Project. The decision to approve all other components of the Recommended Alternative either has already occurred (Phase I projects and the Coastal Distribution System) and separate findings have been adopted by PVWMA, or is being deferred. The phased approach of the Recommended Alternative allows

PVWMA to modify future project components based on actual (future) demand conditions and performance of Phase 1 and 2 projects.

Both as a result of public input on the Draft EIR and continued Project engineering efforts, PVWMA incorporated several changes into the Modified BMP 2000 Alternative to create the Recommended Alternative. All the components of the Recommended Alternative either have been evaluated in a previous EIR or are evaluated in the Revised BMP Draft EIR with the following exceptions:

Import of 13,400 acre-feet per year (afy) of CVP Water. Under the Modified BMP 2000 Alternative, the total amount of CVP water proposed to be imported is 11,900 afy. In the course of developing a recommended alternative, in order to maximize public support for the project, PVWMA decided to provide turnouts on the Import Pipeline to those inland parcels on the pipeline alignment. Under the Recommended Alternative, the 18,500 afy demand would be met by increasing the amount of imported water from 11,900 afy to 13,400 afy; the diameter of the pipeline would remain the same as under the Modified BMP 2000 Alternative—54 inches. The total quantity of additional water supplies required to meet current and future (2040) demand would not change (see Table 2.2, DEIR p. 2-10). PVWMA would supply 3,000 afy of CVP water to inland agricultural lands adjacent to the Import Pipeline via turnouts along the pipeline. Pumped groundwater would be delivered to the Coastal Distribution System. Mitigation measures related to construction of the Import Pipeline would also apply to construction of the turnouts, which are not expected to result in any new or more adverse impacts than disclosed in the Draft EIR since they would be located in agricultural land. This modification to the Modified **BMP** 2000 Alternative does not materially alter the conclusions in this EIR.

Findings: With respect to the import of 13,400 afy of CVP Water, the Board finds that there are no new significant impacts or other circumstances requiring recirculation of the Draft EIR pursuant to Public Resources Code Section 21092.1 and CEQA Guidelines Section 15088.5. The Board also finds that there are no new significant impacts or other circumstances requiring additional environmental review pursuant to Public Resources Code Section 21166 and CEQA Guidelines Section 15162.

Out-of-Basin Banking. PVWMA is not approving this project component at this time; therefore, no findings for out-of-basin banking are necessary. Out-of-basin banking is one of several prospective methods of storing water. Construction of the Import Water Project does not commit PVWMA to implementing out-of-basin banking. Out-of-basin banking is not a reasonably foreseeable consequence of the Import Water Project, nor does it change the scope or nature of the Import Water Project. Currently, PVWMA has no agreement with another CVP contractor to bank PVWMA's CVP water; consequently, no meaningful information is available on out-of-basin banking, nor is such information necessary for PVWMA to approve the Import Water Project. **As** currently envisioned, out-basin-banking would not require construction of any facilities and is not expected to result in any environmental impacts. If out-of-basin banking is implemented, PVWMA will conduct additional environmental review if needed pursuant to CEQA that will tier off of the Revised BMP EIR prior to taking an approval action on out-of-basin banking.

Watershed Management Programs. The Watershed Management Programs have not yet been developed and, consequently, PVWMA is not approving the Watershed

Management Programs at this time and no findings are necessary. No meaningful information is currently available on Watershed Management Programs, nor is such information necessary for PVWMA to approve the Import Water Project, Recycled Water Project, or ASR wells for CVP water. As currently envisioned, the Watershed Management Programs would not require construction of any facilities and are expected to result in beneficial (not adverse) environmental effects. If the Watershed Management Programs are implemented, PVWMA will conduct additional environmental review if needed pursuant to CEQA that will tier off of the Revised BMP EIR prior to taking an approval action on Watershed Management Programs.

2.0 CEQA REQUIREMENTS REGARDING PROJECT **IMPACTS**

The California Environmental Quality Act (CEQA), Public Resources Code, Section 21000 et seq., requires written findings of project impacts, pursuant to Section 21081. Regarding these findings, CEQA Guidelines, Title 14, California Code of Regulations (CEQA Guidelines), Section 15091, state the following:

a. No public agency shall approve or carry out a project for which an EIR has been certified which identified one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those Significant Effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:

   (1) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

   (2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such agency or can and should be adopted by such agency.

   (3) Specific economic, legal, social, technological, or other considerations make infeasible the mitigation measures or project alternatives identified in the FEIR.

b. The findings required by subsection (a) above shall be supported by substantial evidence in the record.

c. The finding in subsection (a)(2) shall not be made if the agency making the finding has concurrent jurisdiction with another agency to deal with identified feasible mitgation measures or alternatives. The finding in subsection (a)(3) shall describe the specific reasons for rejecting identified mitigation measures and project alternatives.

The changes or alterations referred to in State law, as quoted above, may be mitigation measures, alternatives to the project or changes to the project by the project proponent. The FEIR identifies mitigation measures that are proposed to minimize significant effects of the project. These mitigation measures will be incorporated into the design of the project. **A** Mitigation Monitoring and Reporting Plan (MMRP) will also be adopted by the PVWMA Board of Directors to insure that all mitigation measures identified in the FEIR and these Findings will be implemented.

3.0 FINDINGS REGARDING INDEPENDENT REVIEW AND JUDGMENT

Each member of the PVWMA Board of Directors was provided a complete copy of the FEIR for the Project. The Board hereby finds that the FEIR reflects the independent judgment of PVWMA. The PVWMA Board also finds that the Board has independently reviewed and analyzed the FEIR prior to taking any final action with respect to the Project.

4.0 FINDINGS REGARDING THE PROJECT

Having reviewed and considered the information contained in the FEIR, and the drafts of the Findings, Facts in Support of Findings, Statement of Overriding Considerations, and the MMRP, the PVWMA Board of Directors hereby adopts the following findings regarding Project impacts.

4.1 Water Recycling

Land Use and Planning

Impact 4.A.l-2: Construction of the proposed Recycled Water Facility (RWF) and supplemental wells would result in the loss of up to approximately 8.5 acres of prime farmland.

Finding: This would be a significant and unavoidable impact. The proposed site, adjacent to the existing City of Watsonville Wastewater Treatment Facility (WWTF) is the most logical and cost-effective location for the RWF. The WWTF is surrounded by prime farmland. Remote siting of the RWF (away from the WWTF) would create operational inefficiencies, would require construction of additional processes and facilities (i.e., new power, sewer, pumping, and conveyance facilities), would require more than eight acres of land, and would substantially increase the cost for the project.

As stated in the DEIR, most of the alternatives to the project also would result in the loss of prime farmland. Although the No Project Alternative would not cause a loss of prime farmland, it would result in the possibility of major changes in agricultural uses in the Pajaro Basin. This would be inconsistent with the state and local land use plans and policies to support and maintain agriculture. Furthermore, the No Project Alternative would not meet the primary project objective: to address groundwater overdraft and seawater intrusion problems in the Basin. In accordance with Section 15093 of the CEQA Guidelines, the PVWMA Board of Directors adopts a Statement of Overriding Considerations for this impact prior to approving the project (attached).

> **Mitigation Measure 4.A.1-2:** In order to compensate for the loss of prime agricultural land, PVWMA will cause up to 8.5 acres of prime agricultural land that is no longer farmed to be restored or otherwise brought back into production. This can be accomplished through contribution to a fund dedicated to the restoration of agricultural land.
>
> If this measure can be successfully implemented then this impact could be mitigated to a less-than-significant level. However, the feasibility of this measure has not been ascertained. Therefore, this impact is considered significant and unavoidable.

Geology and Soils

Impact 4.A.2-1: Construction of the proposed facilities could result in accelerated erosion and attendant loss of soil resources and effects on sediment discharges in water courses. The impact would be significant on slopes over two percent and in areas with soils having moderate or

greater erosion hazard. Proposed facilities could incur damage as a result of underlying soil properties (subsidence, high shrink-swell potential, and corrosivity).

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measures that will reduce accelerated erosion and attendant loss of soil resources and effects on sediment discharges in water courses:

Measure 4.A.2-la: Implement Measures 5.A.2-3a through 5.A.2-3f.

Mitigation Measure 5.A.2-3a: All grading and construction will conform to requirements of the Santa Cruz County Grading Ordinance.

Measure 5.A.2-3b: Site grading and construction work areas will expose as little new ground surface as possible. Vegetation cover should be left intact to the extent practical.

Measure 5.A.2-3c: To the extent possible, grading activities in noncropped areas will be limited to the period between April 15 and October 15.

Measure 5.A.2-3d: Implement best construction practices at all grading sites, regardless of soil erodibility hazard.

Measure 5.A.2-3e: Upon completion of construction at all sites, loose soils shall be removed or spread and all areas shall be re-soiled and reseeded to ensure that a stable soil cover will remain.

Measure 5.A.2-3f: PVWMA will prepare and implement an inspection and maintenance program for the right-of-way and all facility sites.

Measure 4.A.2-lb: Implement Measures **5.A.2-2.**

Measure 5.A.2-2: All diversion and pipeline facilities will comply with applicable policies and appropriate engineering investigation practices necessary to reduce the potential detrimental effects of expansive soils, and corrosivity. Appropriate geotechnical studies will be conducted using generally accepted and appropriate engineering techniques for determining the susceptibility of the sites to unstable, weak or corrosive soils.

Impact 4.A.2-2: Large earthquakes would be expected to damage the proposed facilities, impairing and/or disrupting their intended operations.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measure that will reduce the risk of damage due to ground movements and co-seismic effects:

Measure 4.A.2-2: Conduct geologic investigations of all project facilities and pipeline alignments prior to the final design, and implement design recommendations. The investigations will specify hazards related to ground movements and co-seismic effects, especially liquefaction. The recommendations of an engineering geologist will be incorporated into the design and specifications and shall be implemented by the construction contractor.

Hydrology and Water Quality

Impact 4.A.3-1: Construction of proposed water recycling facilities and associated pipelines could result in increased erosion and subsequent sedimentation, with adverse impacts to water quality. Additionally, release of fuels or other hazardous materials associated with construction activities could degrade water quality.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measure that will reduce the potential for contaminants to adversely affect downstream receiving waters:

> **Measure 4.A.3-la–Storm Water Pollution Prevention Plan:** The PVWMA shall require contractors to develop a SWPPP for construction of proposed facilities, as required **by** the RWQCB. The objectives of the SWPPP are to identify pollutant sources that may affect the quality of stormwater discharge and to implement BMPs to reduce pollutants in stormwater discharges.

Impact 4.A.3-2: Without proper management, irrigation with recycled water could affect crop yields and result in a degradation of surface water or groundwater quality.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measure that will reduce the potential for contamination of surface water from application of recycled water:

> **Measure 4.A.3-2a:** Above-ground irrigation systems shall be operated in accordance with the requirements of Title 22 of the California Code of Regulations and any reclamation permits issued by the RWQCB, Central Coast Region. Title 22 requires that irrigation rates match the evapotranspiration rates of the plants or crops being irrigated, and that application of reclaimed water be prohibited within 50 feet of any domestic water supply wells.
>
> **Measure 4.A.3-2b:** Monitoring of crop productivity should be performed, and if adverse impacts to the yields of sensitive crops (e.g., strawberries) occurs, the blending ratio should be adjusted to decrease the fraction of recycled water in the applied irrigation water.

Impact 4.A.3-3: Development at the project site may expose people and structures to flood hazards.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measure that will reduce the potential for flood damage to the proposed facilities:

> **Measure 4.A.3-3:** The facilities shall be designed to comply with FEMA and County of Santa Cruz requirements to floodproof the facilities and not increase upstream or downstream flood hazards.

Impact 4.A.3-4: Construction activities associated with the conveyance pipelines included in this alternative could potentially compromise the structural integrity or water quality of active agricultural, production, or domestic wells located within proposed pipeline alignments.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measure that will reduce the potential for damage or contamination to existing wells:

Measure 4.B.3-4a: Implement measures to ensure that construction activities do not damage existing wells. Wells shall be capped in an appropriate manner to prevent soil and other contaminants from entering groundwater aquifers.

Measure 4.B.3-4b: PVWMA or its contractor shall correct any damage to wells and/or reimburse well owners for any loss of use of the well during construction.

Vegetation and Wildlife

Impact 4.A.4-I: Construction of the proposed pipeline to the blending facility component could result in temporary impacts to up to 0.6 acre of potentially jurisdictional wetlands/waters of the U.S. and streambeds and banks under the jurisdiction of the California Department of Fish and Game at the Pajaro River crossing near Highway 1. Potential impacts include sedimentation of the channels outside of the construction area during trenching activities, loss of riparian vegetation and stream function as wildlife and fishery habitat, and loss of a special status natural community.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measures that will reduce impacts to wetlands and riparian areas:

Measure 4.A.4-1a--Wetlands Avoidance: Wetlands and riparian habitat at the Highway 1 crossing of the Pajaro River will be avoided entirely by using bore and jack construction.

Impact 4.A.4-2: Construction of facilities at the Pajaro River crossing near Highway 1 would result in temporary impacts to up to 0.6 acre of habitat for special status animal species. Impacts could occur due to risk of increased sedimentation in streams, dewatering of pools, habitat loss through vegetation removal, destruction of nests and burrows and construction disturbance.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measures that will reduce impacts to habitat for special-status animal species:

Measure 4.A.4-2a--Avoidance of Habitat: Removal or damage to riparian vegetation within the levees of the Pajaro River will be avoided by constructing the pipeline crossing with bore and jack methods.

Measure 4.A.4-2b--Survey, Consultation, and Protection Measures for Special Status Wildlife Species: Potential habitat for the California red-legged frog was found as part of the site assessment. Thus, the following measures shall be implemented to avoid construction-related impacts to the species:

- **Pre-construction surveys for the red-legged frog within the construction zone shall be conducted by a qualified biologist. A** search shall be completed for juvenile and adult red-legged frogs that may occur within the project area. If no individuals of these species are detected during these surveys, then construction-related activities may proceed. If red-legged frogs are found within the construction disturbance zone they will immediately be moved passively, or captured and moved, to suitable sites by an appropriately permitted biologist.

- **Fencing shall be erected around the construction areas to exclude frogs from the sites.** Bore pits and pipeline segments shall be covered during the night to avoid accidental trapping of frogs.

- **A biological monitor shall be on site during construction activities.** The monitor shall be appropriately permitted to relocate frogs if necessary.

Measure 4.A.4-2c— Survey and Protection of Raptor and Passerine Nesting Sites: To avoid conflicts with nesting raptors and with riparian-dependent songbirds, including least Bell's vireos, yellow warblers, and yellow-breasted chats, construction activities within 500 feet of riparian habitat shall be performed prior to March 15 or after August 15 (July 15 for passerines), unless pre-construction surveys show that no special status birds are nesting within 500 feet of the construction zone. If the survey indicates that nesting birds are present, suitable avoidance measures would be developed in coordination with the California Department of Fish and Game (CDFG). Current CDFG avoidance guidelines require a minimum 500-foot buffer zone around raptor nests, and a 250-foot zone around the nests of other birds.

Measure 4.A.4-2e--Survey, Consultation, and Protection Measures for Special Status Wildlife Species: Because potential habitat for the California red-legged frog was found as part of the site assessment, reasonable and prudent measures for protection of the California red-legged frog contained in the Programmatic Biological Opinion for this species (USFWS, **1999)** shall be implemented.

Cultural Resources

Impact 4.A.5-1: Ground-disturbing activities associated with the proposed Recycled Water Facility and associated pipelines could reveal unknown buried or otherwise obscured prehistoric and historic cultural resources.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measure that will ensure proper actions are taken in the event that previously unknown cultural resources are encountered during project construction:

Measure 4.A.5-1: Should any as yet undiscovered cultural resources, such as structural features, or unusual amounts of bone or shell, artifacts, human remains, or architectural remains be encountered during any development activities, work will be suspended and PVWMA staff will be contacted. **A** qualified cultural resource specialist shall be retained and will perform any necessary investigations to determine the significance of the find.

Impact 4.A.5-2: Supplemental wells could potentially be sited in areas with underlying cultural resources.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measures which ensure that cultural resources will be avoided:

Measure 4.A.5-2: As part of the siting study for wells, PVWMA will retain an archaeologist to conduct archival research and surface reconnaissance of potential sites. The findings of the investigations will be incorporated into the selection of specific locations for wells and connecting pipelines such that PVWMA will avoid siting wells and attendant connecting pipelines at or through any significant cultural resources.

Traffic and Circulation

Impact 4.A.6-2: Project construction would increase wear and tear on area roadways used by construction vehicles.

Finding: Changes or alterations are' incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measures that ensure that roadway damage caused by the project will be repaired:

> **Measure 4.A.6-2:** Conduct **a** preconstruction survey of road conditions on key access routes to the project sites (e.g., San Andreas Road). The pavement conditions of local streets judged to be in good condition for use by heavy truck traffic shall be monitored. Roads damaged by construction shall be repaired to a structural condition equal to, or better than, that which existed prior to construction activity.

Impact 4.A.6-3: Project construction would increase potential traffic safety hazards for vehicles and pedestrians in the construction area.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measures that address traffic safety hazards:

> **Measure 4.A.6-3a:** The construction contractor shall prepare traffic safety and control plans to show specific methods for maintaining traffic flows.
>
> **Measure 4.A.6-3b:** The contractor shall provide advanced public notification of construction activity and roadway/access closures.

Air Quality

Impact 4.A.7-1: Construction of the Recycled Water Facility components would temporarily generate criteria air pollutants, particularly PM_{10}, over the duration of the construction period.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-thaw significant level. PVWMA adopts the following measure that addresses air quality impacts during project construction:

> **Measure 4.A.7-1:** The construction contractor shall implement a dust control program.

Noise

Impact 4.A.8-1: Construction activities associated with the project would intermittently and temporarily generate noise levels above existing ambient noise levels in the project vicinity.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to **a** less-than-significant level. PVWMA adopts the following measure that addresses noise impacts during project construction:

> **Measure 4.A.8-1:** PVWMA shall incorporate into contract specifications the following measures:
>
> - Comply with all local sound control and noise level rules, regulations, and ordinances.
> - Equipment and trucks used for project construction shall utilize the best available noise control techniques.

- Impact equipment (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically- or electrically-powered wherever possible.
- Stationary noise sources shall be located as far from sensitive receptors as possible. If they must be located near existing receptors, they shall be adequately muffled.
- Temporary walls may be erected at some locations to reduce noise impacts to residences adjacent to construction sites.

Impact 4.A.8-2: Operation of proposed RWF and pumping facilities associated with Blending Facilities would result in noise increases in the vicinity of project facilities.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measure that addresses noise increases due to operation of project facilities:

Measure 4.A.8-2: PVWMA shall incorporate into contract specifications the following measures:

- The pumping facilities shall be designed with acoustical treatments (building enclosures, louvered vents, noise walls, etc.) that are adequate to maintain potential noise generation to levels at or below ambient levels.
- The blending facilities shall be built with enclosures that provide maximum feasible noise attenuation, to ensure that sensitive receptors would not be affected.

Public Services

Impact 4.A.9-1: Construction of pipelines associated with the Recycled Water Facility could result in temporary, planned or accidental disruption to utility services provided by underground lines.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measure to minimize disruption of underground utility lines:

Measure 4.A.9-1: A detailed study identifying utilities along the proposed alignment shall be done during the pre-design stages of the project.

The following mitigations are required for segments identified in final design as having potential conflict with significant utilities.

a. Utility excavation and encroachment permits would be required from the appropriate agencies, including the Public Works Departments of Santa Cruz and Monterey Counties, City of Watsonville, Caltrans, and Union Pacific Railroad.

b. Utility locations would be verified through field survey (potholing) and use of an underground locating service.

c. **A** detailed engineering and construction plan shall be prepared as part of the design plans and specifications.

d. In areas where the pipeline would parallel wastewater mains, engineering and construction plans shall include trench wall support measures to guard against trench wall failure, and possible resulting loss of structural support for the wastewater main.

e. Residents and businesses in the project area shall be notified in writing by the contractor of planned utility service disruption two to four days in advance, in conformance with County and State standards.

Visual/Aesthetic and Recreational Resources

Impact 4.A.10-1: Development of the proposed Recycled Water Facility would alter the visual character of, and views of, the project area.

Finding: Changes or alterations are incorporated into the project that reduce this impact to a less-than-significant level. PVWMA adopts the following measure that will minimize adverse effects on the visual character of the project area:

Measure 4.A.10-la: The PVWMA shall revegetate disturbed natural areas to minimize textural contrasts with the surrounding vegetation using grasses, shrubs and trees typical of the immediately surrounding area.

Measure 4.A.10-lb: The PVWMA shall use design elements to enhance visual integration of the proposed above-ground facilities with their surroundings. Proposed facilities shall be painted low-glare earth-tone colors that blend with the surrounding terrain.

Measure 4.A.10-1c: The PVWMA shall ensure that its contractors restore disturbed areas along the pipeline alignment to their pre-project condition such that short-term construction disturbance does not result in long-term visual impacts.

4.2 Import Water Project (Groundwater Banking)

Geology and Soils

Impact 4.B.2-1: Segments of the proposed Import Pipeline would be located in areas of unstable slopes and slope failure that could interfere with project construction or damage facilities.

Finding: This is a significant and unavoidable impact. PVWMA adopts the following measure that will reduce the risk of darnage to proposed facilities due to slope failure hazards:

Measure 4.B.2-la: For pipeline segments that traverse the Sargent Hills in the foothills of the Santa Cruz Mountains or portions of the Cayetano Hills, a design-level geotechnical report that includes a slope stability evaluation shall be completed prior to construction.

Impact 4.B.2-2: The proposed transmission pipeline would extend across two active fault traces and could be damaged by surface fault rupture.

Finding: This is a significant and unavoidable impact. Both faults run in a northeast-southwest direction and lie between the Pajaro Valley and the Santa Clara Conduit of the Central Valley Project (San Felipe Division); consequently, any alignment of the Import Pipeline must cross these faults. The proposed project includes installation of isolation valves on both sides of the San Andreas Fault zone and Sargent fault to isolate water flow in the event of pipeline damage, along with other measures. These mitigation measures would reduce the impact of a pipeline

rupture due to earthquake fault surface rupture, but cannot eliminate the chance that the pipe would be damaged in a major earthquake. PVWMA adopts the following measure that will reduce the risk of damage due to ground movements and co-seismic effects:

Measure 4.B.2-2: For pipeline segments that cross the San Andreas and Sargent faults, incorporate the following elements into the design and construction of the proposed pipeline:

- Use ductile-grade steel pipe in conjunction with increased pipe wall thickness throughout the fault zones as depicted in Maps **A**1, A2, and **A3** in the Map Appendix. These materials are more flexible and can tolerate some deformation caused by ground failure.
- Install welded joints at the joints through the fault zones.
- Where possible, install pipelines across faults in a perpendicular direction.
- Install water-pressure-sensitive or pipe-movement-sensitive instruments linked to the isolation valves to shut down the system in the event of failure. The isolation valves could be automatically closed during a large earthquake.
- Construct a contingency route for pipe flow drainage in case of failure. Drainage of pipe flows to a culvert under the railroad track to the river or a detention basin should be considered.
- Design the water conveyance system to facilitate rapid or emergency repair.

Impact 4.B.2-3: The proposed pipeline would extend through areas that are susceptible to liquefaction and could damage project facilities in the event of a major earthquake.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measure that will reduce the risk of damage due to ground movements and co-seismic effects:

Measure 4.B.2-3: For pipeline segments located in low-lying areas a design-level geotechnical investigation, including collection of subsurface data shall **be** completed prior to construction of facilities.

Impact 4.B.2-4: Strong ground shaking could damage project facilities or result in long-term service interruptions.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measure that will reduce the risk of darnage due to ground movements and co-seismic effects:

Measure 4.B.2-4: PVWMA shall develop and implement an earthquake preparedness and emergency response program.

Impact 4.B.2-5: The proposed pipeline would extend through areas with soils subject to settlement and expansive soils that could damage the proposed facilities.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measure that will reduce the risk of damage to proposed facilities due to soil hazards:

Measure 4.B.2-5a: A site-specific investigation shall be conducted by a geotechnical engineer to determine the presence and characteristic of potentially compressible and/or expansive soils, the depth and thickness of soil layers, and the depth to groundwater.

Measure 4.B.2-5b: Any native or imported backfill shall be selected, placed, compacted, and inspected in accordance with plans and specifications prepared by a licensed civil engineer.

Impact 4.B.2-6: The proposed pipeline would extend through areas with corrosive soils that could damage the pipeline.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measure that will reduce the risk of damage to proposed facilities due to corrosive soils:

Measure 4.B.2-6a: A site-specific soil corrosion survey shall **be** conducted by a engineer certified to evaluate soils conditions along the pipeline.

Measure 4.B.2-6b: To maintain and extend the life of the pipeline, bonding jumpers shall be provided at all joints to facilitate periodic corrosion testing.

Impact 4.B.2-7: Construction of proposed pipeline could increase soil erosion during the pipe installation phase.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measures that will reduce accelerated erosion and attendant loss of soil resources and effects on sediment discharges in water courses:

Measure 4.B.2-7: The PVWMA shall design and implement a Temporary Erosion and Sediment Control Plan for the excavation and construction phase of the project that would, at a minimum, meet objectives consistent with the Final Program EIR for the Pajaro Valley Water Basin Management Plan (PVWMA, 1993).

Hydrology and Water Quality

Impact 4.B.3-2: Construction of the proposed pipelines could disturb potential jurisdictional wetlands/waters of the U.S. and streambeds and banks under the jurisdiction of the U.S. **Army** *Corps* of Engineers and California Department of Fish and Game. Potential impacts include adverse effects on water quality related to sedimentation of the channels outside of the construction area during trenching activities.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measure that will reduce the potential for contaminants to adversely affect downstream receiving waters:

Measure 4.B.3-2a: Implement Measure **4.A.3-**1 (Storm Water Pollution Prevention Plan).

Impact 4.B.3-4: Construction activities associated with the Import Pipeline could potentially compromise the structural integrity or water quality of active wells located within the proposed pipeline alignment.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measure that will reduce the potential for damage or contamination to existing wells:

> **Measure 4.B.3-4a:** Implement measures to ensure that construction activities do not damage existing wells. Wells shall be capped in an appropriate manner to prevent soil and other contaminants from entering groundwater aquifers.
>
> **Measure 4.B.3-4b:** PVWMA or its contractor shall correct any damage to wells and/or reimburse well owners for any loss of use of the well during construction.

Vegetation and Wildlife

Impact 4.B.4-1: Construction of the proposed project could disturb up to 2.5 acres of potential jurisdictional wetlands/waters of the U.S. and streambeds and banks under the jurisdiction of the California Department of Fish and Game. Potential impacts include sedimentation of the channels outside of the construction area during trenching activities, loss of riparian vegetation and stream function as wildlife and fishery habitat, and loss of special status natural communities.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measures that will reduce impacts to wetlands and riparian areas:

> **Measure 4.B.4-la:** Crossings of Corps jurisdictional areas shall be avoided by project construction. All facilities and construction activities shall be maintained outside the jurisdictional area defined by riparian vegetation. Bore and jack methods shall be used to install the pipeline under the Pajaro River. These methods also would avoid impacts to special status species and natural communities occurring in the Pajaro River.

Impact 4.B.4-2: Construction of facilities within the zone of riparian vegetation in the Pajaro River could result in impacts to special status animal species. Impacts could occur due to increased sedimentation in streams, dewatering of pools, habitat loss through vegetation removal, destruction of nests and burrows, and construction disturbance.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measures that will reduce impacts to habitat for special-status animal species:

> **Measure 4.B.4-2a--Avoidance of Habitat:** Removal or damage to riparian vegetation adjacent to the Pajaro River will be avoided by constructing the pipeline crossing with bore and jack methods. Also implement Measures 4.A.4-2b and 4.A.4-2c.

Impact 4.B.4-3: Construction of the Import Pipeline could disturb raptors that nest in coastal oak woodland habitat, as well as reduce the amount of available nesting habitat.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measures that will reduce impacts to coastal oak woodland habitat:

Measure 4.B.4-3a: Implement Measure 4.A.4-2c (survey and protection of raptor and passerine nest sites).

Measure 4.B.4-3b: To eliminate the need to fell most oaks in the stand of coastal oak woodland, realign the proposed pipeline along Stations 740+00 and 770+00 to the north so that the southern boundary of the pipeline easement is outside of the drip line of the oaks. If this is infeasible, implement Measure 4.B.4-c, below.

Measure 4.B.4-3c: Trees with unoccupied nests of raptor species may only **be** removed prior to March 1 or after September 1. Any loss of coastal oak woodland shall be followed by replacement plantings of coastal live oak seedlings at a ratio of 10 seedlings per mature tree lost.

Impact 4.B.4-4: Construction facilities at select project sites could disturb sensitive species found in annual grassland habitat.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measures that will reduce impacts to annual grassland habitat:

Measure 4.B.4-4a -- San Joaquin kit fox: Within 60 days prior to the commencement of construction activities, a qualified biologist shall survey all construction areas within kit **fox** habitat. During these surveys dens likely to be inhabited by kit **fox** shall be flagged for avoidance. Disturbance to all known San Joaquin kit fox dens shall be avoided to the maximum extent possible. Limited destruction of dens may be allowed if avoidance is not a reasonable option, provided that procedures consistent with USFWS requirements are followed.

Measure 4.B.4-4b: Burrowing owl: No more than two weeks before construction in any given milepost, a survey for burrowing owls and occupied burrows shall be conducted by a qualified biologist within 500 feet of the right-of-way (access permitting). The survey and follow-up procedure will conform to the protocol described by the California Burrowing Owl Consortium (1997) which includes **up** to four surveys on different dates if there are suitable burrows present.

Cultural Resources

Impact 4.B.5-1: Construction activities associated with the proposed Import Pipeline may result in the alteration or destruction of identified cultural resources.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measures which ensure that cultural resources will be avoided or:

Measure 4.B.5-la: Final pipeline and facility plans shall locate facilities and pipeline alignments away from identified cultural resource sites. A qualified cultural resource specialist shall be retained to assist in identifying the extent of important cultural resource sites to be avoided, which may include the preparation of detailed cultural resource evaluation reports and consultation with local, state, and federal agencies as well as the local Native American community and the Native American Heritage Commission.

Measure 4.B.5-lb: If important cultural resource sites cannot be avoided, PVWMA will coordinate with local, state, and federal agencies in the development of an appropriate mitigation plan for the cultural resource.

Impact 4.B.5-2: Ground-disturbing activities associated with the proposed Import Pipeline could reveal previously unknown buried or otherwise obscured significant prehistoric and historic cultural resources.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measure that will ensure proper actions are taken in the event that previously unknown cultural resources are encountered during project construction:

Measure 4.B.5-2: Implement Measure **4.A.5-**1.

Measure 4.A.5-1: Should any as yet undiscovered cultural resources, such as structural features, or unusual amounts of bone or shell, artifacts, human remains, or architectural remains be encountered during any development activities, work will be suspended and PVWMA staff will be contacted. **A** qualified cultural resource specialist shall be retained and will perform any necessary investigations to determine the significance of the find.

Impact 4.B.5-3: Potential indirect impacts to cultural resources, primarily vandalism, could result from the increased access to, and use of, the general area during construction. Such disturbance could adversely affect the integrity of important cultural resources.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measures that will ensure proper actions are taken in the event that previously unknown cultural resources are encountered during project construction:

Measure 4.B.5-3a: The resource boundaries should be marked as exclusion zones both on the ground and on construction maps.

Measure 4.B.5-3b: Construction supervisory personnel should be notified of the existence of these resources and be required to keep personnel and equipment away from these areas.

Measure 4.B.5-3c: Monthly monitoring of the cultural resources to be avoided should be completed to insure that no inadvertent damage to the resources occurs as a result of construction or construction-related activities.

Traffic and Circulation

Impact 4.B.6-2: Project construction would increase traffic delays for vehicles traveling past the construction zone.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measures that will reduce traffic delays near construction sites:

Measure 4.B.6-2a: Limit construction hours to off-peak traffic periods on commute streets.

Measure 4.B.6-2b: The contractor shall be required to prepare traffic control plans to show specific methods for maintaining traffic flows.

Impact 4.B.6-3: Project construction would temporarily affect access to adjacent land uses for both general and emergency access.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measures that ensure access for emergency vehicles and address driveway access:

> **Measure 4.B.6-3a:** To minimize disruption of emergency vehicle access and maintain access to driveways to adjacent land uses, PVWMA would require the contractors to maintain steel trench plates at the construction sites to restore access across open trenches. Construction trenches shall not be left open after work hours.
>
> **Measure 4.B.6-3b:** To minimize disruption of emergency vehicle access, affected jurisdictions will be asked to identify detours to be posted by contractor.
>
> **Measure 4.B.6-3c:** The contractor will notify the appropriate police, fire, and emergency services of the timing, location, and duration of construction activities and the locations of detours and lane closures prior to beginning construction in the immediate vicinity of affected roadways.

Impact 4.B.6-4: Project construction would increase wear and tear on area roadways used by construction vehicles.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measures that ensure that roadway damage caused by the project will be repaired:

> **Measure 4.B.6-4:** Implement Measure **4.A.6-2.**
>
> > **Measure 4.A.6-2:** Conduct a preconstruction survey of road conditions on key access routes to the project sites (e.g., San Andreas Road). The pavement conditions of local streets judged to be in good condition for use by heavy truck traffic shall be monitored. Roads damaged by construction shall be repaired to a structural condition equal to, or better than, that which existed prior to construction activity.

Impact 4.B.6-5: Project construction would increase potential traffic safety hazards for vehicles and pedestrians in the construction area.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measures that address traffic safety hazards:

> **Measure 4.B.6-5:** Implement Measures **4.A.6-3a** and **4.A.6-3b.**
>
> > **Measure 4.A.6-3a:** The construction contractor shall prepare traffic safety and control plans to show specific methods for maintaining traffic flows.
> >
> > **Measure 4.A.6-3b:** The contractor shall provide advanced public notification of construction activity and roadway/access closures.

Air Quality

Impact 4.B.7-1: Construction activities would temporarily generate criteria air pollutants, particularly PM_{10}, over the expected three-year construction period and could disturb existing contamination identified along sections of the Import Pipeline alignment.

Finding: Generation of Criteria Air Pollutants is a significant and unavoidable impact. The DEIR identifies a number of standard measures to reduce fugitive dust from construction (watering construction sites daily, covering loads of soils, et al), but PM_{10} emissions would remain above the significance threshold of **82** pounds per day. **As** stated in the DEIR, most of the alternatives of the project would result in significant **and** unavoidable PM_{10} emissions. Although the No Project Alternative would not cause an increase in PM_{10} emissions, it would result in the possibility of major changes in agricultural uses in the Pajaro Basin. This would be inconsistent with the state and local land use plans and policies to support and maintain agriculture. Furthermore, the No Project Alternative would not meet the primary project objective: to address groundwater overdraft and seawater intrusion problems in the Basin. PVWMA adopts the following measures that addresses air quality impacts during project construction:

Measure 4.B.7-la: Implement dust control program described in Measure **4.A.7**-1 to minimize potential public health impacts associated with exposure to contaminated soil dust.

Measure 4.A.7-1: The construction contractor shall implement a dust control program.

Measure 4.B.7-1b: Response Plan. Prepare a project-specific Response Plan that includes a project-specific contingency plan for hazardous materials and waste operations and submit the plan to the agency with jurisdiction before site activities could proceed.

Measure 4.B.7-lc: Reduction of Excavation Impacts. The contractor shall monitor for odors and analyze excavated material with a photoionization detector to determine the potential for soil contamination and the need for specialized soil-handling procedures to reduce excavation impacts in areas of suspected contamination.

Measure 4.B.7-ld: Disposal Characterization. Within high-risk areas identified in Table 4.B.7-1, excavations shall be observed by a trained health and safety professional equipped with an organic vapor analyzer to screen excavated materials and ensure worker safety. If contamination is encountered, excavated soils shall be segregated and sampled relative to the profiling requirements of the accepting landfill.

Measure 4.B.7-le: Groundwater and Soil Testing. Conduct groundwater and soil testing for hazardous materials at identified potentially contaminated sites prior to pipeline construction.

Measure 4.B.7-1f: Hazardous Materials Management/Spill Prevention Plan. **A** Hazardous Materials Management/Spill Prevention Plan shall be developed and given to all contractors working on the project.

Noise

Impact 4.B.8-1: Construction of the pipeline would temporarily increase noise levels in the project vicinity.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measure that addresses noise impacts during project construction:

Measure 4.B.8-1: Implement Measure **4.A.8**-1.

Measure 4.A.8-1: PVWMA shall incorporate into contract specifications the following measures:

- Comply with all local sound control and noise level rules, regulations, and ordinances.
- Equipment and trucks used for project construction shall utilize the best available noise control techniques (including mufflers, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds) in order to minimize construction noise impacts.
- Impact equipment (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically- or electrically-powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools.
- Stationary noise sources shall be located as far from sensitive receptors as possible. If they must be located near existing receptors, they shall be adequately muffled.
- Temporary walls may be erected at some locations to reduce noise impacts to residences adjacent to construction sites.

Public Services

Impact 4.B.9-1: Pipeline construction could result in temporary, planned or accidental disruption to utility services provided by underground lines.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measure to minimize disruption of underground utility lines:

Measure 4.B.9-1a: A detailed study identifying utilities along the proposed alignment will be prepared during the pre-design stages of the project.

Measure 4.B.9-1b: The following measures are required for segments identified in final design as having potential conflict with significant utilities:

- Utility excavation and encroachment permits would be required from the appropriate agencies, including the Public Works Departments of San Benito, Santa Clara, Santa Cruz and Monterey Counties, Pacific Bell, U.S. Sprint, PG&E, City of Watsonville, and UPRR.
- Utility locations would be verified through field survey (potholing) and use of an underground locating service.
- **A** detailed engineering and construction plan would be prepared as part of the design plans and specifications.

- In areas where the pipeline would parallel wastewater mains, engineering and construction plans will include trench wall support measures to guard against trench wall failure and possible resulting loss of structural support for the wastewater main.

- Residents and businesses in the project area would be notified by the contractor in writing of planned utility service disruption two to four days in advance in conformance with County and State standards.

Impact 4.B.9-2: Pipeline construction could temporarily impede vehicle access to emergency services as well as to collection and delivery services. This could affect sheriffs departments, fire departments, emergency services (e.g., ambulance companies), delivery and collection services.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measures that ensure access for emergency, collection, and delivery vehicles and address driveway access:

Measure 4.B.9-2: Implement Measures 4.B.6-3a through 4.B.6-3c in Section **4.B.6,** Traffic and Circulation.

Visual/Aesthetic and Recreational Resources

Impact 4.B.10-1: Installation of the proposed Import Pipeline would tear up roadways and remove crops and vegetation, temporarily altering the visual landscape.

Finding: Changes or alterations are incorporated into the project, which reduce this less-than-significant impact. PVWMA adopts the following measure that will minimize adverse effects on the visual character of the project area:

Measure 4.B.10-1a: PVWMA will revegetate disturbed natural areas to minimize textural contrasts with the surrounding vegetation using grasses, shrubs and trees typical of the immediately surrounding area. No trees will be planted above the pipeline. Topsoils will be stockpiled and reapplied after grading to enhance revegetation.

Measure 4.B.10-1b: PVWMA will ensure that its contractors shall restore the topography of disturbed areas along the pipeline alignment to a visually unobtrusive condition such that short-term construction disturbance does not result in long-term visual impacts.

Measure 4.B.10-lc: PVWMA will submit a revegetation plan to CDFG detailing the type of plants to be re-established, details of the preparatory measures, and methods of planting and maintenance. The plan shall include provisions for remedial action in the event the revegetation plan fails.

4.3 Change in Place of Use

Impact 4.C-1: Including PVWMA within the CVP Place of Use and importing and using CVP water within the PVWMA service area is designed to serve, and would support existing agricultural activities on existing agricultural acreage. The project would not require nor result in direct land use changes with associated significant environmental effects, such as the conversion of undeveloped, "native" lands that might affect biological resources. However, the proposed Place of Use includes the entire PVWMA service area, which does include non-irrigated lands. Thus, although not proposed as part of the Recommended Alternative, with approval of the proposed CVP Place of Use, it would be possible in the future, and authorized within the CVP

water rights permit, for PVWMA to extend CVP water service to currently non-irrigated lands. This raises the potential for land use changes to occur in the future, such as conversion of native lands to agricultural uses, which could have potentially significant environmental impacts.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measure that will reduce the risk of land use changes due to importing and using CVP water:

> **Measure 4.C-1:** CEQA Compliance. Delivery of CVP water for use in areas beyond the 30,200 acres of agricultural lands shown in Figure 4.C-2 shall be permitted only in accordance with the terms for delivery to Contractor's Service Area pursuant to any contract for the delivery of CVP water between Reclamation and PVWMA, and in accordance with any and all laws, including CEQA and NEPA.
>
> **Measure 4.C-2:** Endangered Species Act Compliance. PVWMA will not deliver water for the purpose of converting any native lands to agriculture uses unless and until the project sponsor has complied with the Endangered Species Act and has determined that such conversion will not likely affect listed species or that appropriate mitigation has been provided.

4.4 Growth Inducement Potential and Secondary Effects of Growth

Impact 7.1: Implementation of the Recommended Alternative would reduce groundwater supply reliability as a constraint to growth. The project could accommodate an amount of growth that is consistent with regional growth projections, but that could indirectly result in potentially significant secondary effects of growth.

Findings: PVWMA finds that mitigation of the secondary effects of growth is primarily within the authority and jurisdiction of other public agencies and looks to those agencies to implement such measures as appropriate and consistent with their authorities. Some of these secondary effects of growth could be significant and unavoidable, while others are significant but mitigable. Significant unavoidable impacts that could occur as a result of planned growth include: loss of agricultural land and open space, increased demand on groundwater resources, and change in visual character. PVWMA adopts the following measures that will reduce growth inducement impacts of the proposed project:

> **Mitigation:** See Measure 4.C-1, which deals with processing CEQA and NEPA on any future proposals to extend CVP surface water supply to areas beyond those proposed as part of this alternative.
>
> **Mitigation:** See Measure **4.C-2,** which deals with Endangered Species Act compliance for any future proposals to extend CVP surface water supply to areas beyond those proposed as part of this alternative.

4.5 Cumulative Impacts

Impact: Construction of the components proposed under the Recommended Alternative would contribute to the cumulative loss of prime farmland in the PVWMA service area.

Finding: This would be a significant and unavoidable impact. In accordance with Section 15093 of the CEQA Guidelines, the PVWMA Board of Directors adopts a Statement of Overriding

Considerations for this impact prior to approving the project (attached). If feasible, PVWMA adopts the following measure to reduce the impact of loss of prime farmland.

> **Mitigation:** Implementation of Measure **4.A.**1-2 would reduce the project's contribution to this impact to less-than-cumulatively considerable. However, the feasibility of this measure has not been ascertained. Therefore, this impact is considered significant and unavoidable.

Impact: Construction of the Recommended Alternative would result in potentially significant short-term cumulative erosion hazards.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measure that will reduce the risk of cumulative erosion hazards:

> **Mitigation:** Implementation of erosion and sedimentation control measures (specified in Sections 4.1, 4.2, and 4.3 of these findings) would reduce the project's contribution to this cumulative impact to a less-than-significant level.

Impact: Construction of the Recommended Alternative would result in potentially significant short-term cumulative soil erosion, sedimentation, and construction-related contaminant accumulation and runoff.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measure that will reduce the risk of cumulative water quality degradation:

> **Mitigation:** Best Management Practices such as revegetation and stabilization of construction areas would control and eliminate the sources of sedimentation and surface water contaminants. Implementation of the measures cited above under Geology, Soils and Seismicity would reduce the project's contribution to this cumulative impact to a less-than-significant level.

Jmpact: Construction of the Recommended Alternative would result in the disturbance of a significant amount of natural vegetation and wildlife habitat in the PVWMA service area and its vicinity.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measure that will reduce the risk of cumulative disturbance to natural vegetation and wildlife habitat:

> **Mitigation:** PVWMA has committed to implementing bore and jack construction at pipeline crossings of the Pajaro River and Watsonville Slough, thereby avoiding direct impacts to riparian and aquatic habitat at those locations.

Impact: The Recycled Water Facility (the clearwell storage tanks), together with the proposed high school development, could result in a cumulatively considerable visual impact that would affect views from Highway 1, Beach Road and San Andreas Road by incrementally increasing the presence of urban and industrial structures into a rural agricultural landscape.

Finding: Changes or alterations are incorporated into the project, which reduce this impact to a less-than-significant level. PVWMA adopts the following measure that will reduce the risk of cumulative visual impacts:

Mitigation: Implementation of Measures **4.A.**10-1a through **4.A.** 10-1c would minimize, visual contrast of the facilities with the surrounding rural landscape.

5.0 Project Alternatives

The PVWMA Board of Directors is approving a modified version of the Modified BMP 2000 Alternative. The Recommended Alternative is considered environmentally superior to the Local-Only, Modified Local-Only and No Project alternatives for reasons given in DEIR Section **6.3** and summarized below. The alternatives other than the Modified BMP 2000 Alternative that were also evaluated in the Revised BMP DEIR include:

- **BMP 2000 Alternative.** Includes Recycled Water Facility; Coastal Distribution System; Central Valley Project (CVP) Import Pipeline with Inland Distribution System; Harkins Slough; Murphy Crossing; and supplemental wells. The Recommended Alternative currently includes, or may in the future include, all of the components of this alternative. Consequently, no findings rejecting this alternative are required.

- **Local-Only Alternative.** Includes Recycled Water Facility; Coastal Distribution System; Expanded College Lake with Corralitos Creek and Pinto Lake diversion facilities; Watsonville Slough diversion; Harkins Slough diversion; and Aquifer Storage and Recovery Project.

- **Modified Local-Only Alternative.** Supplements Local-Only Alternative with CVP water; blends recycled water prior to recharge; and adds another recharge basin for recycled water.

- **Alternative Alignments to the Import Pipeline.** Several pipeline local route variations were considered by the PVWMA for specific segments of the Import Pipeline. The alternative routes were proposed because of engineering design considerations (e.g., availability of easements) and flexibility in final site selection, and are not complete alternatives to the project as their implementation would still involve construction of the Import Pipeline to bring water into the PVWMA service area.

- **No Project Alternative.** Per CEQA Section 15126[e], the No Project Alternative was evaluated in the EIR. The No Project Alternative would not develop any projects to increase PVWMA's water supply and would allow groundwater overdraft and seawater intrusion to continue in the Pajaro Basin.

Findings: The PVWMA Board of Directors hereby finds that the Local-Only, Modified Local-Only, No Project, and Alternative Alignments to the Import Pipeline alternatives, discussed in the EIR, are either infeasible because they do not meet overall Project goals, or have the potential to generate greater significant adverse impacts on the environment than the preferred alternative.

- **Local-Only Alternative.** In comparison with the Recommended Alternative, the Local-Only Alternative has the potential to generate greater-magnitude environmental impacts to water quality (groundwater), permanent conversion of agricultural land, aquatic habitat, wetlands/waters of the U.S./riparian habitat, and visual quality, and as a result of land fallowing. This alternative does not meet the project's basic objectives without substantial land fallowing and is considered infeasible based on economic and social considerations.

- **Modified Local-Only Alternative.** In comparison with the Recommended Alternative, the Modified Local-Only Alternative has the potential to generate greater-magnitude

environmental impacts to water quality (groundwater), permanent conversion of agricultural land, geology, soils and seismicity, aquatic habitat, wetlands/waters of the U.S./riparian habitat, and visual quality. This alternative is considered infeasible based on economic considerations.

- **No Project Alternative.** In comparison with the Recommended Alternative, the No Project Alternative has the potential to generate greater-magnitude environmental impacts by not addressing the seawater-intrusion problem, and thereby precipitating major changes in agricultural uses in the Pajaro Basin. This alternative does not meet the project's basic objectives, and is infeasible based on economic and social considerations.

- **Alternative Alignments to the Import Pipeline.** In comparison with the proposed alignment of the Recommended Alternative, the alternative alignment segments have the potential to generate greater-magnitude environmental impacts to upland species (wildlife), geology, soils and seismicity, sensitive receptors, riparian vegetation, and traffic.

Deferred Alternatives

- **Regional Serving Alternative.** PVWMA would acquire and distribute a water supply of approximately 2,000 afy to SCWD in order to meet its long-term water supply needs, and provide a net gain of water to the Pajaro Valley. The SCWD is presently conducting planning studies regarding the procurement of a supplemental source of supply of up to 2,000 afy. The SCWD is examining both local and regional alternatives, in proposed partnership with the PVWMA and/or City of Santa Cruz. Should PVWMA and SCWD choose to pursue a regional water project in the future, supplemental environmental review pursuant to CEQA would be required. Because no decision is being made on this alternative at this time, no findings are necessary.

Alternatives Eliminated From Further Analysis

The following alternatives were considered and eliminated from further consideration. The reasons for not carrying them forward are described briefly below and in Section 6.4 of the Draft EIR.

- **River Conveyance of CVP Water.** Water would be obtained from the existing turnout located on the Santa Clara Conduit east of Gilroy. **A** pipeline would be constructed along the Import Pipeline alignment to a location in the vicinity of Bolsa Road (Highway 25), where water would be discharged to the Pajaro River. Water would then flow in the Pajaro River to a point within the Pajaro Valley where it would be diverted and pumped into the proposed water distribution system. In comparison to the Import Pipeline, this alternative would generate greater environmental impacts to water quality, riparian and aquatic habitat, and endangered species.

- **Desalination.** A desalination project would consist of a reverse osmosis plant, an onshore pumping station and chemical treatment unit, a seawater intake structure, an onshore/offshore seawater supply pipeline between the onshore pump station and offshore seawater intake, pipelines to transport seawater and chemicals between the desalination plant and onshore pump station/chemical treatment area, and a pipeline to transport concentrated seawater brine from the desalination plant site to an ocean outfall (or use of the WWTF's existing outfall). **A** desalination project could also require construction of a power substation. In comparison to the Recommended Alternative, this alternative would generate greater environmental impacts to water quality, and is currently considered infeasible on economic grounds.

- **Alternative requiring fallowing of 10,000 acres of prime farmland along the coast.** In comparison to the Recommended Alternative, this alternative would generate greater environmental impacts resulting from land fallowing and is considered infeasible based on economic and social considerations. This alternative does not meet the project's basic objectives.

EXHIBIT B

STATEMENT OF OVERRIDING CONSIDERATIONS FOR THE PVWMA RECOMMENDED ALTERNATIVE OF THE REVISED BASIN MANAGEMENT PLAN

February 6,2002

The California Environmental Quality Act (CEQA) requires decision-makers to balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve the project. Pursuant to Section 15093 of the CEQA Guidelines, the Pajaro Valley Water Management Agency Board of Directors intends to approve the Revised Basin Management Plan (Revised BMP) Project and states herein its specific reasons for doing so in light of the associated unavoidable significant impacts. Such reasons are termed a "statement of overriding considerations".

SIGNIFICANT AND UNAVOIDABLE IMPACTS

The Final Environmental Impact Report (EIR) for the Revised BMP identified topical areas where the environmental impacts could be mitigated to less-than-significant levels, with four exceptions:

1. Loss of prime farmland
2. Generation of criteria air pollutants
3. Pipeline crossing of active faults
4. Secondary effects of growth

The reasons why these impacts could not or may not be mitigated are provided in the Findings. The Findings also discuss the alternatives to the project that would avoid or lessen environmental impacts. These Findings, including but not limited to these reasons and this discussion of alternatives, are incorporated herein by reference. The Board of Directors has rejected the alternatives because they do not substantially meet the project objectives, or they are not as reliable as the Recommended Alternative and are infeasible because of other specific economic, legal, social, technological and other considerations.

Loss of Prime Farmland

The proposed Recycled Water Facility (RWF) would occupy approximately eight acres of agricultural land that is designated as prime farmland on the Santa Cruz County Agricultural Resources Map. This site is located adjacent to the Watsonville Wastewater Treatment Facility (WWTF) and is currently farmed. Development of the proposed facilities would result in the permanent Ioss of this land from agricultural use, and would contribute to the cumulative loss of farmlands in the region. These facilities are intended to provide tertiary treatment, pumping, and storage of recycled water for irrigation purposes.

The proposed site is part of a large expanse of prime farmland consisting of most land southeast of the City of Watsonville to the coast. The proposed site is the most logical and cost-effective location for the RWF. Remote siting of the RWF (away from the WWTF) would create operational inefficiencies, would require construction of additional processes and facilities (i.e., new power, sewer, pumping, and conveyance facilities), would require more than eight acres of land, and would substantially increase the cost for the project.

The proposed wells would convert approximately 0.5 acres of prime farmland along the Import Pipeline alignment, contributing to the cumulative loss of farmlands in the region. These facilities would allow PVWMA to bank surplus CVP water available during wet weather years. In order to deliver water for blending, the proposed wells must be located near the Import Pipeline. Because all of the lands surrounding the Import Pipeline are designated as prime farmland, no alternative sites are available that would reduce or avoid the conversion of prime farmland.

Based on investigations in the Revised BMP and the DEIR, no feasible locations that do not affect prime farmland or other businesses were identified. **As** stated in the DEIR, most of the alternatives to the project also would result in the loss of prime farmland. The Local-Only Alternative would affect considerably more prime fannland than the Recommended Alternative. Although the No Project Alternative would not cause a loss of prime farmland, it would result in the possibility of major changes in agricultural uses in the Pajaro Basin. This would be inconsistent with the state and local land use plans and policies to support and maintain agriculture. Furthermore, the No Project Alternative would not meet the primary project objective: to address groundwater overdraft and seawater intrusion problems in the Basin.

Generation of Criteria Air Pollutants

Construction of the components of the Recommended Alternative would generate fugitive dust (including PM_{10}) and other criteria air pollutants from exhaust emissions and excavation and grading activities in excess of Monterey Bay Unified Air Pollution Control District (MBUAPCD) standards. The DEIR identifies a number of standard measures to reduce fugitive dust from construction (watering construction sites daily, covering loads of soils, et al), but PM_{10} emissions would remain above the significance threshold of 82 pounds per day. **As** stated in the DEIR, most of the alternatives of the project would result in significant and unavoidable PM_{10} emissions. Although the No Project Alternative would not cause an increase in PM_{10} emissions, it would result in the possibility of major changes in agricultural uses in the Pajaro Basin. This would be inconsistent with the state and local land use plans and policies to support and maintain agriculture. Furthermore, the No Project Alternative would not meet the primary project objective: to address groundwater overdraft and seawater intrusion problems in the Basin.

Pipeline Crossing of Active Faults

Portions of the Import Pipeline alignment cross the active San Andreas and Sargent faults. Surface fault rupture associated with seismic activity on these faults could result in pipeline rupture. However, both faults run in a northeast-southwest direction, and lie between the Pajaro

Valley and the Santa Clara Conduit of the Central Valley Project (San Felipe Division); consequently, any alignment of the Import Pipeline must cross these faults. The proposed project includes installation of isolation valves on both sides of the San Andreas Fault zone and Sargent fault to isolate water flow in the event of pipeline damage, along with other measures. These mitigation measures would reduce the impact of a pipeline rupture due to earthquake fault surface rupture, but cannot eliminate the chance that the pipe would be damaged in a major earthquake.

Secondary Effects of Growth

Although the Recommended Alternative does not require or directly result in increased population growth and urban development, it does accommodate potential growth that might be planned and approved by jurisdictions in the service area. PVWMA does not have the authority to make land use and development decisions, nor does it have the authority or jurisdiction to implement mitigation measures necessary to address the potentially significant secondary effects of planned growth. Authority to implement such measures lies with the land use jurisdictions – City of Watsonville, Monterey County, Santa Cruz County, and San Benito County, which enforce local, state, and federal regulations and mitigation requirements through the development approval and permit process. Through the CEQA process and the development permit process, these local land use agencies impose mitigation requirements on development projects to address the secondary effects of growth and identify measures that must be implemented by other agencies, such as the Regional Water Quality Control Board, air quality management districts, California Department of Transportation, California Department of Fish and Game, and the State Department of Health Services, among others. PVWMA finds that mitigation of the secondary effects of growth is primarily within the authority and jurisdiction of other public agencies and looks to those agencies to implement such measures as appropriate and consistent with their authorities.

As stated in the DEIR, most of the alternatives of the project would result in growth impacts. Although the No Project Alternative would not result in growth impacts, it would result in the possibility of major changes in agricultural uses in the Pajaro Basin. This would be inconsistent with the state and local land use plans and policies to support and maintain agriculture. Furthermore, the No Project Alternative would not meet the primary project objective: to address groundwater overdraft and seawater intrusion problems in the Basin.

FINDINGS

The Board of Directors has reviewed the Final EIR, staff reports, correspondence, public hearing testimony, and the public record for the EIR, and has stated its Findings regarding significant effects of the project. In approving the project, the Board of Directors finds that the following benefits of the project, taken as a whole, outweigh the significant unavoidable environmental effects of the project:

1. The project will allow PVWMA to reduce groundwater overdraft by constructing facilities to import Central Valley Project water and to produce recycled water and distribute it to farmland within its service area.

2. The project will allow PVWMA to increase groundwater recharge, which, in turn, will reduce seawater intrusion and improve groundwater quality.

3. The project will allow PVWMA to provide a high quality water supply.

EXHIBIT C
PAJARO VALLEY WATER MANAGEMENT AGENCY MITIGATION MONITORING AND REPORTING PROGRAM FOR THE RECOMMENDED ALTERNATIVE OF THE REVISED BASIN MANAGEMENT PLAN

INTRODUCTION

This is the Mitigation Monitoring and Reporting Program (MMRP) for the Recommended Alternative of the Revised Basin Management Plan ("Project") approved by the Pajaro Valley Water Management Agency (PVWMA).

This project has been analyzed in accordance with the California Environmental Quality Act (CEQA) requirements in the Environmental Impact Report (EIR) for the Revised Basin Management Plan (certified February 6, 2002). This MMRP is required by Public Resources Code Section 21081.6 and Section 15087 of the CEQA *Guidelines*.

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MITIGATION MONITORING AND REPORTING PROGRAM

The MMRP includes the mitigation measures identified in the EIR required to address the significant impacts associated with the project being approved. The mitigation measures included in this program are those adopted by the PVWMA Board of Directors in its Findings of Fact, as required by CEQA.

The MMRP is organized in a table format, keyed to each significant impact and each adopted EIR mitigation measure. The mitigation measures are presented in the tables and are coded by number to the appropriate EIR section. The column headings in the tables are defined as follows:

- Mitigation Measure: This column contains mitigation measures to be implemented.
- Monitoring and Reporting Actions: This column contains an outline of the appropriate steps to verify compliance with the mitigation measure.
- Monitoring / Reporting Responsibility: This column contains an assignment of responsibility for the monitoring and reporting tasks

EXHIBIT E

- Monitoring / Reporting Schedule: The general schedule for conducting each monitoring and reporting task, identifying where appropriate both the timing and the frequency of the action.

Tables 1 through 3 indicate the mitigation measures required for the Recommended Alternative. Compliance with these mitigation measures will be monitored and verified at different stages in the project implementation process.

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TABLE 1 – MITIGA ON MONITORING AND REPORTING PROGRAM FOR THE IMPORT WATER PROJECT

Land Use and Planning			
Measure 4.B.1-1 (Recommended): Implement **Measure 4.A.1-1**. **Measure 4.A.1-1 (Recommended):** Advance notification of construction activities should be provided to all property owners, residents, and businesses in the vicinity of construction areas. See also mitigation measures in Sections 4.A.6, Traffic and Circulation, 4.A.7, Air Quality, and 4.A.8, Noise, of this EIR.	1)	Send notices to all property owners, residents, and businesses in the project area vicinity at least one week in advance of construction. Publish notices in local newspapers at least one week in advance of construction. Place large signs along roads in the project vicinity at least one week in advance of construction. Submit copies of public notices to the project file to document compliance.	PVWMA	Prior to project construction
Geology and Soils					
Measure 4.B.2-1a: For pipeline segments that traverse the Sargent Hills in the foothills of the Santa Cruz Mountains or portions of the Cayetano Hills, a design-level geotechnical report that includes a slope stability evaluation shall be completed prior to construction. Pipeline installation specifications should incorporate all slope stability recommendations contained in the geotechnical evaluation. Slope stabilization measures may include drainage, slope benching, buttresses, and vegetation restoration.	1)	Review construction specifications to ensure that design recommendations for pipeline installation were included.	PVWMA	Prior to project construction
	2)	Monitor project construction activities to verify compliance with the recommendations of the geotechnical report. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA's consulting engineering geologist	During and immediately following project construction
Measure 4.B.2-1b: For pipeline segments at stream crossings, a detailed hydraulic and scour analysis shall be conducted to ensure that pipelines and tunnels are installed at an adequate depth to prevent scour during flood flows. Bank erosion and channel stability should also be evaluated in the vicinity of Station 590+00 (Pajaro River and UPRR crossing). Recommendations of the hydraulic and scour analysis shall be incorporated into the project design and specifications.	1)	Review construction specifications to ensure that design recommendations for pipeline installation were included.	PVWMA	Prior to project construction
	2)	Monitor project construction activities to verify compliance with the recommendations of the geotechnical report. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA's consulting engineering geologist	During and immediately following project construction

MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Measure 4.B.2-2: For pipeline segments that cross the San Andreas and Sargent faults, incorporate the following elements into the design and construction of the proposed pipeline: ▪ Use ductile-grade steel pipe in conjunction with increased pipe wall thickness throughout the fault zones as depicted in **Maps A1, A2, and A3** in the Map Appendix. These materials are more flexible and can tolerate some deformation caused by ground failure. Install welded joints at the joints through the fault. ▪ Where possible, install pipelines across faults in a perpendicular direction. ▪ Install water-pressure-sensitive or pipe-movement-sensitive instruments linked to the isolation valves to shut down the system in the event of failure. The isolation valves could be automatically closed during a large earthquake. ▪ Construct a contingency route for pipe flow drainage in case of failure. Drainage of pipe flows to a culvert under the railroad track to the river or a detention basin should be considered. ▪ Design the water conveyance system to facilitate rapid or emergency repair.	1) Review construction specifications to ensure that design recommendations listed in **Measure 4.B.2-2** are included. 2) Monitor project construction activities to verify compliance with construction specifications. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA PVWMA or PVWMA's consulting engineer	Prior to project construction During and immediately following project construction

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EXHIBIT E

MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Measure 4.B.2-3: For pipeline segments located in low-lying areas (Stations 0+00 to about 450+00 and Stations 650+00 to 1127+00) a design-level geotechnical investigation, including collection of subsurface data shall be completed prior to construction of facilities. The geotechnical evaluation should include identification of density profiles, determination of maximum shallow groundwater levels, and characterization of the vertical and lateral extent of saturated sand/silt layers that could undergo liquefaction during strong ground shaking. When facility-specific testing indicates that conditions are present that could result in liquefaction and damage to project facilities, appropriate, feasible measures should be included in the site-specific soil analysis and incorporated into the project design. These measures could include the following, unless the site-specific soils analysis dictates otherwise: ▪ Densification or dewatering of surface or subsurface soils. ▪ Construction of concrete foundations to support pipelines or pile foundations to support buildings. ▪ Removal of material that could undergo liquefaction in the event of an earthquake and replacement with stable material.	1) Review construction specifications to ensure that design recommendations for pipeline installation are included. 2) Monitor project construction activities to verify compliance with the recommendations of the geotechnical report. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA PVWMA's consulting engineering geologist	Prior to project construction During and immediately following project construction

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MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Measure 4.B.2-4: PVWMA shall develop and implement an earthquake preparedness and emergency response program. The program should be detailed and should include, at a minimum, the following elements: ▪ dentify specific pipeline locations, through site-specific geologic tudies, that would be vulnerable to damage in an earthquake and efine priorities for system repairs. ▪ Provide appropriate PVWMA facilities staff, sheriff and fire departments with emergency response training. Conduct practice drills, using simulated earthquake scenarios, of emergency response procedures annually.	1) Prepare contract specifications for the construction contractor that require implementation of an earthquake preparedness and emergency response program. 2) M e p n actions and the deadline for compliance.	PVWMA PVWMA or PVWMA's consulting engineer	Prior to project construction During project construction
leasure 4.B.2-5a: A site-specific investigation shall be conducted by a eotechnical engineer to determine the presence and characteristic of otentially compressible and/or expansive soils, the depth and thickness of il layers, and the depth to groundwater. Soils shall be sampled and boratory tested to determine the expansion potential. The results of the vestigation shall include mitigation measures that would reduce settlement a less-than-significant level. Feasible mitigation measures could include moval and replacement of soil or deep mixing of compressible soils with ibilizing agents, as identified below: ▪ Expansive soils can be excavated and replaced with non-expansive materials. The required depth of excavation should be specified by a registered civil engineer based on actual soil conditions. ▪ Expansive soils may be treated in place by mixing them with lime. Lime-treatment alters the chemical composition of the expansive clay minerals such that the soil becomes non-expansive.	1) Review construction specifications to ensure that the geotechnical engineer's design recommendations for pipeline installation are included. 2) Monitor project construction activities to verify compliance with the recommendations of the geotechnical report. If non-compliance is noted, notify the construction contractor of required	PVWMA PVWMA's consulting engineering geologist	Prior to project construction During project construction

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EXHIBIT

MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Measure 4.B.2-5b: Any native or imported backfill shall be selected, placed, compacted, and inspected in accordance with plans and specifications prepared by a licensed civil engineer.	1) Monitor project construction activities to verify compliance with the construction specifications. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA's consulting engineering geologist	During project construction
Measure 4.B.2-6a: A site-specific soil corrosion survey shall be conducted by an engineer certified to evaluate soils conditions along the pipeline.. The investigation shall define the need for, and the location of, insulating couplings, electrolysis test stations, and hot spot areas where there should be either galvanic or impressed current cathodic protection. This will assure a high degree of corrosion suppression to cement and uncoated steel or ductile iron pipes. All buried structures should be designed and constructed to withstand corrosive subsurface conditions.	2) Review construction specifications to ensure that design recommendations for pipeline installation were included.	PVWMA's consulting engineering geologist	Prior to construction
	2) Monitor project construction activities to verify compliance with the recommendations of the geotechnical report. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA's consulting engineering geologist	Periodically during project construction
Measure 4.B.2-6b: To maintain and extend the life of the pipeline, bonding jumpers shall be provided at all joints to facilitate periodic corrosion testing.	1) Monitor project construction activities to verify compliance with the recommendations of the soils report. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA's consulting engineering geologist	Periodically during project construction
Measure 4.B.2-7: The PVWMA shall design and implement a Temporary Erosion and Sediment Control Plan for the excavation and construction phase of the project that would, at a minimum, meet the following objectives, consistent with the Final Program EIR for the Pajaro Valley Water Basin Management Plan (PVWMA, 1993): The Temporary Erosion and Sediment Control Plan would be prepared by a registered civil engineer or a certified erosion and sediment control specialist using the concepts such as those developed by the Association of Bay Area Governments' Manual of Standards for Erosion and Sediment Control Measures (1995)	1) Prepare contract specifications for the construction contractor that require implementation of a Temporary Erosion and Sediment Control Plan.	PVWMA	Prior to construction
	2) Monitor project construction activities to verify Temporary Erosion and Sediment Control Plan implementation. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA's consulting engineering geologist	Periodically during project construction

EXHIBIT 3

MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE

Measure 4.B.2-7 (continued)

- The Plan would be based on the specific erosion and sediment transport control needs of each pipeline segment.
- The Plan would specify the means to reduce the velocity of water leaving the pipeline alignment.
- The elements of the Plan would be maintained in working condition during the excavation, grading, and construction phases.
- The Plan would be required, submitted, reviewed, implemented, and inspected as part of a general grading plan for the project.

Other erosion and sediment control measures include:

- Confine grading and excavation to the dry season (April 15 through October 15), whenever possible. If grading is scheduled for the wet season, ensure that erosion and sediment control structures are in place prior to the onset of the first major storm of the season.
- Keep disturbed areas (from grading and related activities) to the minimum necessary for demolition or construction.
- Direct runoff away from disturbed areas during grading and related activities.
- Locate staging areas and spoil sites outside major stream and drainage ways and such that they do not drain directly into the waterways. If a spoil site drains into the creek, temporary catch basins will be constructed to intercept sediment before it reaches the channels. Spoil sites will be graded to reduce the potential for erosion.

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MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Measure 4.B.2-7 (continued) ▪ Place sediment curtains upstream and downstream of the construction zone to prevent sediment disturbed during trenching activities from being transported and deposited outside of the construction zone. ▪ Prevent runoff from flowing over unprotected slopes. Place sediment traps on downhill slopes whenever construction activities such as trenching, grading, etc. occur on slopes along rivers or streams. ▪ Following construction, creek banks will be covered with erosion control blankets and replanted with locally indigenous species using locally collected materials (seed, plugs, willow or cottonwood wattles). These will be planted according to a revegetation plan approved by the resource agencies.			
Hydrology and Water Quality			
Measure 4.B.3-2a: Implement **Measure 4.A.3-1** (Storm Water Pollution Prevention Plan).		Construction contractor	Prior to construction
Measure 4.A.3-1a: The PVWMA shall require contractors to develop a SWPPP for construction of proposed facilities, as required by the RWQCB. The objectives of the SWPPP are to identify pollutant sources that may affect the quality of stormwater discharge and to implement BMPs to reduce pollutants in stormwater discharges. The SWPPP for this proposed action would include the implementation, at a minimum, of the following elements: ▪ Source identification; ▪ Preparation of a site map; ▪ Description of construction materials, practices, and equipment storage and maintenance; ▪ List of pollutants likely to contact stormwater; ▪ Estimate of the construction site area and percent impervious area;	1) Prepare contract specifications for the construction contractor that require implementation of a Storm Water Pollution Prevention Plan. 2) Monitor project construction activities to verify Storm Water Pollution Prevention Plan implementation. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA	Periodically during project construction

MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Measure 4.A.3-1a (continued) ▪ Erosion and sedimentation control practices, including soils stabilization, revegetation, and runoff control to limit increases in sediment in stormwater runoff, such as detention basins, straw bales, silt fences, check dams, geofabrics, drainage swales, and sandbag dikes; ▪ Proposed construction dewatering plans and ▪ List of provisions to eliminate or reduce discharge of materials to stormwater; ▪ Description of waste management practices; and ▪ Maintenance and training practices.			
Measure 4.B.3-2b: Implement **Measure 4.A.4-1a** (construction within potentially jurisdictional wetlands/waters of the U.S. and streambeds). **Measure 4.A.4-1a--Wetlands Avoidance:** Wetlands and riparian habitat at the Highway 1 crossing of the Pajaro River may be avoided entirely by using bore and jack construction.	1) Prepare construction specifications that require bore and jack construction techniques be used to cross the Pajaro River. 2) Monitor project construction activities to ensure that the bore and jack construction is used at the Pajaro River crossing. If non-compliance is noted, notify the contractor of required actions and the deadline for compliance.	PVWMA PVWMA or PVWMA's consulting engineer	Prior to project construction During projec construction
Measure 4.B.3-3: Obtain a National Pollutant Elimination Discharge System (NPDES) permit for construction dewatering and implement conditions of the permit. An NPDES permit will be required from the RWQCB for all discharges for construction dewatering. Discharges must meet all applicable water quality objectives. The RWQCB may require certain conditions of the permit, such as treatment of the flows prior to discharge.	1) Prepare and submit an application for an NPDES permit to the RWQCB. 2) Monitor construction activities to verify compliance with BMP water quality objectives and any conditions of the NPDES permit. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA PVWMA	Prior to project construction Periodically during project construction

MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Measure 4.B.3-4a: Implement measures to ensure that construction activities do not damage existing wells. Wells shall be capped in an appropriate manner to prevent soil and other contaminants from entering groundwater aquifers.	1) Review construction plans and maps to ensure that the wells are identified.	PVWMA	Prior to project construction
	2) Monitor construction activities to verify that wells in and near the project area are avoided. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA	Periodically during project construction
Measure 4.B.3-4b: PVWMA or its contractor shall correct any damage to wells and/or reimburse well owners for any loss of use of the well during construction.	1) Inspect wells in the construction area prior to, and immediately following, project construction. Document any damage to wells resulting from construction activities. Repair any damage to the wells.	PVWMA	Prior to and immediately following construction
	2) If access to existing wells in the construction area will be affected, notify well operators in writing of the loss of use of the well and the dates during which access to the well(s) will not be available. Reimburse well operators for loss of well use based on historical water use.	Construction contractor and PVWMA	Prior to and immediately following construction
<u>Vegetation and Wildlife</u>			
Measure 4.B.4-1a: Crossings of Corps jurisdictional areas shall be avoided by project construction. All facilities and construction activities shall be maintained outside the jurisdictional area defined by riparian vegetation. Bore and jack methods shall be used to install the pipeline under the Pajaro River. These methods also would avoid impacts to special status species and natural communities occurring in the Pajaro River.	1) Monitor construction activities to verify that Corps jurisdictional areas are avoided and appropriate construction methods are implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA's consulting biologist	During project construction

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MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Measure 4.B.4-2a--Avoidance of Habitat: Removal or damage to riparian vegetation adjacent to the Pajaro River may be avoided by constructing the pipeline crossing with bore and jack methods. Also implement **Measures 4.A.4-2b** and **4.A.4-2c**.			
Measure 4.A.4-2b--Survey, Consultation, and Protection Measures for Special Status Wildlife Species: Potential habitat for the California red-legged frog was found as part of the site assessment. Thus, the following measures shall be implemented to avoid construction-related impacts to the species: **Pre-construction surveys for the red-legged frog within the construction zone shall be conducted by a qualified biologist.** A search shall be completed for juvenile and adult red-legged frogs that may occur within the project area. If no individuals of these species are detected during these surveys, then construction-related activities may proceed. If red-legged frogs are found within the construction disturbance zone they will immediately be moved passively, or captured and moved, to suitable sites by an appropriately permitted biologist. **Fencing shall be erected around the construction areas to exclude frogs from the sites.** Bore pits and pipeline segments shall be covered during the night to avoid accidental trapping of frogs. **A biological monitor shall be on site during construction activities.** The monitor shall be appropriately permitted to relocate frogs if necessary.	1) Monitor construction activities to verify compliance with these requirements to protect the California red-legged frog. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA's consulting biologist	During project construction
Measure 4.A.4-2c— Survey and Protection of Raptor and Passerine Nesting Sites: To avoid conflicts with nesting raptors and with riparian-dependent songbirds, including least Bell's vireos, yellow warblers, and yellow-breasted chats, construction activities within 500 feet of riparian habitat shall be performed prior to March 15 or after	1) Monitor construction activities to ensure that work does not occur within 500 feet of riparian habitat during the nesting season. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA's consulting biologist	Periodically during project construction

MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Measure 4.A.4-2b (continued) August 15 (July 15 for passerines), unless pre-construction surveys show that no special status birds are nesting within 500 feet of the construction zone. If the survey indicates that nesting birds are present, suitable avoidance measures would be developed in coordination with the California Department of Fish and Game (CDFG). Current CDFG avoidance guidelines require a minimum 500-foot buffer zone around raptor nests, and a 250-foot zone around the nests of other birds.			
Measure 4.B.4-3a: Implement **Measure 4.A.4-2c**, above (survey and protection of raptor and passerine nest sites).	S e above	See above	See above
Measure 4.B.4-3b: To eliminate the need to fell most oaks in the stand of coastal oak woodland, realign the proposed pipeline along Stations 740+00 and 770+00 to the north so that the southern boundary of the pipeline easement is outside of the drip line of the oaks. If this is infeasible, implement **Measure 4.B.4-c**, below.	1) Review construction plans and maps to ensure that the pipeline alignment has been realigned to avoid the drip line of oaks.	PVWMA	Prior to project construction
	2) Monitor construction activities to verify compliance with these requirements to protect raptor species. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA"s consulting biologist	During project construction

MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING R	MONITORING / REPORTING SCHEDULE
Measure 4.B.4-3c: Trees with unoccupied nests of raptor species may only be removed prior to March 1 or after September 1. Any loss of coastal oak woodland shall be followed by replacement plantings of coastal live oak seedlings at a ratio of 10 seedlings per mature tree lost. This measure would be consistent with applicable policies of local general plans, including Policy 5.1.12 of the Santa Cruz County General Plan/LCP, Policy C-RC 34 and Objective 3 of the Santa Clara County General Plan, and Policy 5 of the San Benito County General Plan Open Space and Conservation Element. Pipe installation shall include wire screens or other protective devices, regular inspection and maintenance, and eventually removal of all hardware. Details of the revegetation of coast live oak woodland, including monitoring, maintenance, and remedial actions, will be developed as part of revegetation plan approved by CDFG.	**4.B.4-3c:** Monitor construction activities to verify compliance with these requirements to protect raptor species. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA's consulting biologist	During project construction
Measure 4.B.4-4a: San Joaquin kit fox: Within 60 days prior to the commencement of construction activities, a qualified biologist shall survey all construction areas within kit fox habitat. During these surveys dens likely to be inhabited by kit fox shall be flagged for avoidance. Disturbance to all known San Joaquin kit fox dens shall be avoided to the maximum extent possible. Limited destruction of dens may be allowed if avoidance is not a reasonable option, provided the following procedures are implemented: ▪ Occupied natal or pupping dens will not be destroyed until the pups and adults have vacated and then only after consultation with the USFWS. Flagged dens occurring within the construction area shall be monitored for three days with tracking medium or an infra-red beam camera to determine current usage. If no kit fox activity is observed during this period, the den should be destroyed immediately to preclude subsequent use. If kit fox activity is observed, the den shall be monitored for at least five consecutive days from the time of observation to allow any resident kit fox to move to another den. Use	**4.B.4-4a:** Monitor construction activities to verify compliance with these requirements to protect the San Joaquin kit fox. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA's consulting biologist	During project construction

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MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE

Measure 4.B.4-4a (continued)

of the den can be discouraged during this period by partially plugging its entrance(s) with soil in such a manner that any resident animal can escape easily. Only when the den is determined to be unoccupied may the den be excavated under the direction of a qualified biologist. If the kit fox is still present after five or more consecutive days of plugging and monitoring, the den may have to be excavated when, in the judgment of a qualified biologist, it is temporarily vacant (e.g., during normal foraging period). Hand excavation is the preferred method, however, excavating equipment may be required due to soil conditions. Destruction of the kit fox den shall be accomplished by careful excavation until it is certain that no kit foxes are inside. The den shall be fully excavated and filled with dirt and compacted to ensure that kit foxes cannot reenter or use the den during the construction period. If a kit fox is observed to reenter an excavated den, construction activity in the vicinity shall cease and monitoring activities as described above shall be implemented until the biologist has determined that the kit fox has escaped.

- If a take authorization / permit has not been obtained from the USFWS, potential dens shall be treated in the same manner as known kit fox dens, as described above.

- During construction, project related vehicles will observe a 20 mph speed limit in habitat areas, except as posted on County roads and State and Federal highways. To the extent possible, nighttime construction is prohibited on UP ROW and will be minimized elsewhere. Off-road traffic outside the designated project area will be prohibited.

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MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE

Measure 4.B.4-4a (continued)

- To prevent accidental entrapment of kit fox or other animals during construction, all excavated or deep-walled holes or trenches greater than two feet will be covered at the end of each work day by plywood or similar materials, or provided with escape routes constructed of earth fill or wooden planks. Before such holes are filled they will be thoroughly inspected for trapped animals. If trapped animals are discovered, the procedures below will be followed.

- Kit fox are attracted to den-like structures such as pipes and may enter stored pipe and become trapped or injured. All construction pipes, culverts, or similar structures with a diameter of four inches or greater that are stored at construction sites for one or more overnight periods will be thoroughly inspected for kit foxes before the pipe is subsequently buried, capped, or other wise used or moved in any way. Other pipes or casings located in the trench will be inspected each morning prior to construction. If a kit fox is discovered inside a pipe, that section of pipe shall not be moved until the USFWS has been consulted. If necessary, and under the direct supervision of a qualified biologist, the pipe may be moved once to remove it from the path of construction activity, until the fox has escaped.

- All food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of in closed containers and removed at least once a week from the project site.

- No firearms will be allowed on the project site.

- To prevent harassment, mortality of kit foxes or destruction of dens, no pets will be allowed on project sites.

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MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Measure 4.B.4-4a (continued) ▪ In the case of trapped animals, escape ramps or structures will be installed immediately to allow the animal(s) to escape, or the USFWS should be contacted for advice. ▪ Any contractor, employee, or agency personnel who inadvertently kills or injures a San Joaquin kit fox shall immediately report the incident to the USFWS Sacramento Field Office and CDFG will be notified in writing within three working days of the accidental death or injury to a San Joaquin kit fox during project related activities. ▪ After construction, all areas subject to temporary ground disturbances, including storage and staging areas, temporary roads, pipeline corridors, etc. will be recontoured if necessary, and revegetated to promote restoration of the area to pre-project conditions. An area subject to "temporary" disturbance means any area that is disturbed during the project, but that after project completion will not be subject to further disturbance and has the potential to be revegetated. Appropriate methods and plant species used to revegetate such areas will be determined on a site-specific basis in consultation with the USFWS, CDFG, and revegetation experts.			
Measure 4.B.4-4b: Burrowing owl: No more than two weeks before construction in any given milepost, a survey for burrowing owls and occupied burrows shall be conducted by a qualified biologist within 500 feet of the ROW (access permitting). The survey will conform to the protocol described by the California Burrowing Owl Consortium (1997) which includes up to four surveys on different dates if there are suitable burrows present.	**4.B.4-4b:** Monitor construction activities to verify compliance with these requirements to protect the burrowing owl. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA's consulting biologist	During project construction

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MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE

Measure 4.B.4-4b (continued)

- If occupied owl burrows are found within the survey area, a determination shall be made by a qualified biologist in consultation with CDFG whether or not construction will impact the occupied burrows or disrupt reproductive behavior.

- If it is determined that construction will not impact occupied burrows or disrupt breeding behavior, construction will proceed without any restriction or mitigation measures.

- If it is determined that construction will physically impact occupied burrows or disrupt reproductive behavior during the nesting season (March through August) then avoidance is the only mitigation available (California Burrowing Owl Consortium 1993; CDFG 1995). Construction will be delayed within 300 feet of occupied burrows until it is determined that the owls are not nesting or until a qualified biologist determines that juvenile owls are self-sufficient or are no longer using the natal burrow as their primary source of shelter.

- If it is determined that construction will impact occupied burrows during August through February, mitigation procedures will be developed in consultation with the CDFG. These measures may include passively relocating owls from the occupied burrow(s) using one-way doors. Under current practice, prior to undertaking this procedure, there shall be at least two unoccupied burrows suitable for burrowing owls within 300 feet of the occupied burrow prior to installation of the one-way doors. The unoccupied burrows can be natural burrows or artificial burrows constructed according to currently accepted designs (e.g. as shown at www.ucsc.edu/~scpbrg). Artificial burrows shall be in place at least one-week before one-way doors are installed on occupied burrows. One-way doors will be in place for a minimum of 48 hours before burrows are excavated.

MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING	MONITORING / REPORTING
Measure 4.B.4-4c: Prior to construction activity in any areas where there would be direct project impacts to grasslands, a qualified biologist will survey for California tiger salamanders with the permits to move individuals of this species. This survey will be conducted to identify suitable burrow aestivation areas. Aestivation habitat would be defined as the presence of two or more small mammal burrows greater than one inch diameter within a 10 foot diameter area and within 10 feet of proposed construction sites (i.e., the presence of a single isolated gopher hole would not be considered habitat). Aestivation areas would be temporarily fenced and avoided; fencing would consist of silt fence material strung between temporary stakes, with the lower edge set in a six-inch deep trench and back-filled. Fencing would be monitored daily for gaps or undermining burrows, and would be maintained in good condition. At locations where aestivation burrows are identified and cannot be avoided, aestivation burrows would be excavated by hand prior to construction and any tiger salamanders found would be moved, while in a torpid state, to artificial burrows constructed of PVC pipe and located within 0.25 miles of the construction site. To ensure compliance with these measures, and that no inadvertent mortality occurs, a qualified biological monitor shall be present during all construction operations at locations with suitable aestivation burrows. These measures may be further developed or modified in consultation with the appropriate agencies.	1) Survey grasslands in project area to ensure suitable burrow aestivation habitat is not present. If present, implement measures to protect the California tiger salamander and its habitat. 2) Monitor construction activities to verify compliance with these requirements to protect the California tiger salamander. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA's consulting biologist PVWMA's consulting biologist	Prior to project construction During project construction

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MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Cultural Resources			
Measure 4.B.5-1a: Final pipeline and facility plans shall locate facilities and pipeline alignments away from identified cultural resource sites. A qualified cultural resource specialist shall be retained to assist in identifying the extent of important cultural resource sites to be avoided, which may include the preparation of detailed cultural resource evaluation reports and consultation with local, state, and federal agencies as well as the local Native American community and the Native American Heritage Commission.	1) Determine the areal extent of important cultural resources sites within the project area. Review project plans to verify that project facilities would not be located within these sites.	PVWMA's consulting archaeologist	Prior to final engineering design
Measure 4.B.5-1b: If important cultural resource sites cannot be avoided, PVWMA will coordinate with local, state, and federal agencies in the development of an appropriate mitigation plan for the cultural resource. Possible mitigation measures for important cultural resources may include documentation and recordation of the resource, relocation, or stabilization of the resource.	1) Prepare contract specifications for the construction contractor that require implementation of the cultural resources mitigation plan developed under the Programmatic Agreement.	PVWMA's consulting archaeologist	Prior to requesting construction bids
	2) Monitor construction activities to ensure that the cultural resources mitigation plan is implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA's consulting archaeologist	During project construction

MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Measure 4.B.5-2: Implement **Measure 4.A.5-1**.			
Measure 4.A.5-1: Should any as yet undiscovered cultural resources, such as structural features, or unusual amounts of bone or shell, artifacts, human remains, or architectural remains be encountered during any development activities, work will be suspended and PVWMA staff will be contacted. A qualified cultural resource specialist shall be retained and will perform any necessary investigations to determine the significance of the find. PVWMA will then implement any mitigation deemed necessary for the recordation and/or protection of the cultural resources. In addition, pursuant to Sections 5097.97 and 5097.98 of the State Public Resources Code and Section 7050.5 of the State Health and Safety Code, in the event of the discovery of human remains, all work must be halted and the County Coroner shall be immediately notified. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission shall be adhered to in the treatment and disposition of the remains.	1) Prepare a resource recovery plan for the site including findings and recommendations and submit it to PVWMA, the U.S. Army Corps of Engineers, the State Historic Preservation Officer, the Advisory Council on Historic Preservation and the project file. 2) Submit a document verifying that evaluation of the materials and their recovery occurred. Prepare a report of findings and submit it to PVWMA, the State Historic Preservation Officer, the Advisory Council on Historic preservation and the project file.	PVWMA's consulting archaeologist PVWMA's consulting archaeologist	During project construction, if potential resources are encountered During project construction, if potential resources are encountered
Measure 4.B.5-3a: The resource boundaries should be marked as exclusion zones both on the ground and on construction maps.	1) Review construction maps and monitor construction sites to ensure that resource boundaries are marked as exclusion zones.	PVWMA's consulting archaeologist	Prior to, and during, project construction
Measure 4.B.5-3b: Construction supervisory personnel should be notified of the existence of these resources and be required to keep personnel and equipment away from these areas. During construction and operations, personnel and equipment will be restricted to the surveyed corridor.	1) Prepare contract specifications for the construction contractor that require all construction personnel and equipment remain within the surveyed corridor.	PVWMA	Prior to requesting construction bids
Measure 4.B.5-3c: Monthly monitoring of the cultural resources to be avoided should be completed to insure that no inadvertent damage to the resources occurs as a result of construction or construction-related activities. If damage is detected a guard will be posted to patrol the site and adjacent important resources (such as gravestones and churches).	1) Monitor cultural resources to be avoided on a monthly basis during project construction to verify that no damage occurs. 2) If damage to a cultural resource is detected, hire a guard to patrol the site and adjacent important resources.	PVWMA's consulting archaeologist PVWMA	Monthly during project construction During project construction, if damage is detected

MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Traffic and Circulation			
Measure 4.B.6-1 (Recommended): Implement **Measures 4.A.6-1a** and 4.A.6-1b. **Measure 4.A.6-1a (Recommended):** Schedule truck trips outside of peak commute hours. **Measure 4.A.6-1b (Recommended):** Use haul routes that minimize truck traffic on local roadways to the extent possible.	1) Prepare contract specifications for the construction contractor that require construction truck trips be scheduled during off-peak hours and that haul routes be selected to minimize truck traffic on local roadways.	PVWMA	Prior to requesting construction bids
Measure 4.B.6-2a: Limit construction hours to off-peak traffic periods on commute streets.	1) Prepare contract specifications for the construction contractor that limit construction hours to off-peak traffic periods.	PVWMA	Prior to requesting construction bids
Measure 4.B.6-2b: The contractor shall be required to prepare traffic control plans to show specific methods for maintaining traffic flows. This shall include identifying roadway locations where special trenching techniques would be used to minimize impacts to traffic flow and operations. The traffic control plan shall be reviewed for appropriateness, and approved by Caltrans and the governing Public Works Departments.	1) Prepare contract specifications for the construction contractor that require preparation of a traffic control plan.	PVWMA	Prior to requesting construction bids
	2) Review the proposed traffic control plan to ensure that measures to maintain traffic flows are included. Notify the construction contractor if any modifications are required.	PVWMA, Caltrans, Santa Cruz County Public Works Department	Prior to project construction
Measure 4.B.6-3a: To minimize disruption of emergency vehicle access and maintain access to driveways to adjacent land uses, PVWMA would require the contractors to maintain steel trench plates at the construction sites to restore access across open trenches. Construction trenches shall not be left open after work hours.	1) Monitor construction activities to ensure that steel trench plates are placed on construction trenches along driveways. If non-compliance is noted, notify construction contractor of required actions and the deadline for compliance.	PVWMA	Periodically during project construction
Measure 4.B.6-3b: To minimize disruption of emergency vehicle access, affected jurisdictions will be asked to identify detours to be posted by contractor.	1) Place a large sign along roadways in the project vicinity at least one week in advance of construction.	PVWMA	Prior to project construction

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MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Measure 4.B.6-3c: The contractor will notify the appropriate police, fire, and emergency services of the timing, location, and duration of construction activities and the locations of detours and lane closures prior to beginning construction in the immediate vicinity of affected roadways.	1) Send notices to police, fire, and emergency service providers at least one week in advance of construction.	PVWMA	Prior to project construction
Measure 4.B.6-4: Implement **Measure 4.A.6-2**.			
Measure 4.A.6-2: Conduct a preconstruction survey of road conditions on key access routes to the project sites (e.g., San Andreas Road). The pavement conditions of local streets judged to be in good condition for use by heavy truck traffic shall be monitored. Roads damaged by construction shall be repaired to a structural condition equal to, or better than, that which existed prior to construction activity.	1) Prepare contract specifications for the construction contractor that require that a preconstruction survey of key routes to the project site be conducted, and that roads damaged by construction be repaired. 2) Inspect access roads to the project site to ensure that roads are repaired following project construction, if necessary. If roads are not repaired, notify the construction contractor of required actions and the deadline for compliance.	PVWMA PVWMA	Prior to project construction Following project construction
Measure 4.B.6-5: Implement **Measures 4.A.6-3a** and **4.A.6-3b**.	1) Implement the Monitoring and Reporting Action for **Measure 4.B.6-2b**, above.	See above	See above
Measure 4.A.6-3a: The construction contractor shall prepare traffic safety and control plans to show specific methods for maintaining traffic flows. This shall include identifying roadway locations where special trenching techniques would be used to minimize impacts to traffic flow and operations. The traffic control plans prepared by the contractor shall include recommended detours for bicyclists. The traffic control plan shall be reviewed for appropriateness, and approved by the governing Public Works Department.			
Measure 4.A.6-3b: The contractor shall provide advanced public notification of construction activity and roadway/access closures.	1) Implement the Monitoring and Reporting Action for **Measure 4.B.1-1**, above.	See above	See above

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MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Air Quality			
Measure 4.B.7-1a: Implement dust control program described in **Measure 4.A.7-1** to minimize potential public health impacts associated with exposure to contaminated soil dust. **Measure 4.A.7-1:** The construction contractor shall implement a dust control program that includes the following elements: ▪ Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard. ▪ Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites. ▪ Sweep daily (with water sweepers) all paved access roads, paved parking areas and paved staging areas at construction sites. ▪ Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets. ▪ Hydroseed or apply (non-toxic) soil binders to inactive construction areas. However, do not apply these measures in operating agricultural fields under cultivation unless requested by the grower. ▪ Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.). ▪ Limit traffic on unpaved roads to 15 mph. ▪ Install sandbags or other erosion control measures to prevent silt runoff to public roadways.	1) Prepare contract specifications for the construction contractor that require implementation of a dust control program. 2) Monitor construction activities to verify that the measures of the dust control program are implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA PVWMA	Prior to requesting construction bids Periodically during project construction

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MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Measure 4.A.7-1 (continued): ▪ Replant vegetation in disturbed areas as quickly as possible.			
Measure 4.B.7-1b: Response Plan. Prepare a project-specific Response Plan that includes a project-specific contingency plan for hazardous materials and waste operations and submit the plan to the agency with jurisdiction before site activities could proceed. The Response Plan, applicable to all excavation activities, shall establish policies and procedures to protect workers and the public from potential hazards posed by hazardous wastes. The plan shall be prepared according to federal and California OSHA regulations. The plan shall also provide for proper storage and/or disposal of any contaminated soils that meet the definition of a hazardous waste. Such a protocol could include off-site treatment of contaminated materials or disposal at an appropriate landfill.	1) Prepare contract specifications for the construction contractor that require implementation of a Response Plan for hazardous materials and waste operations.	PVWMA	Prior to
	2) Monitor project construction activities to verify Response Plan implementation. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA	During project construction
Measure 4.B.7-1c: Reduction of Excavation Impacts. The contractor shall monitor for odors and analyze excavated material with a photoionization detector to determine the potential for soil contamination and the need for specialized soil-handling procedures to reduce excavation impacts in areas of suspected contamination.	1) Prepare contract specifications for the construction contractor that require use of a photoionization detector to determine the potential for soil contamination.	Construction contractor	Prior to construction
	2) Monitor project construction activities to determine the potential for soil contamination. If soil contamination is detected, notify PVWMA immediately and remove contaminated soils using appropriate procedures.	Construction contractor	During project construction
Measure 4.B.7-1d: Disposal Characterization. Within high-risk areas identified in Table 4.B.7-1, excavations shall be observed by a trained health and safety professional equipped with an organic vapor analyzer to screen excavated materials and ensure worker safety. If contamination is encountered, excavated soils shall be segregated and sampled relative to the profiling requirements of the accepting landfill.	1) Monitor construction activities in high-risk areas to ensure worker safety and screen excavated materials.	PVWMA's consulting health and safety professional	During project construction
	2) If contamination is encountered, conduct soil sampling and submit soil testing results to PVWMA and the accepting landfill.	PVWMA's consulting health and safety professional	During project construction, if necessary

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MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Measure 4.B.7-1e: Groundwater and Soil Testing. Conduct groundwater and soil testing for hazardous materials at identified potentially contaminated sites prior to pipeline construction. Treatment would be applied, in consultation with the Regional Water Quality Control Board, Department of Toxic Substances Control, and/or other regulatory agencies, to ensure that all discharges meet applicable regulations.	1) Conduct soil and groundwater testing and submit results to PVWMA and appropriate regulatory agencies. If hazardous materials are encountered, implement treatment measures in consultation with the regulatory agencies.	PVWMA's consulting hazardous materials specialist and PVWMA	Prior to construction
Measure 4.B.7-1f: Hazardous Materials Management/Spill Prevention Plan. A Hazardous Materials Management/Spill Prevention Plan shall be developed and given to all contractors working on the project. At least one copy shall be on-site with the construction manager at all times. The purpose of the plan is to provide on-site construction managers, environmental compliance monitors, and regulatory agencies with a detailed description of hazardous materials management, spill prevention, and spill response/cleanup measures associated with the construction of project elements. The primary objective of the plan is to prevent the spill of hazardous materials. Elements of the plan shall include, but not be limited to, the following: ▪ A discussion of hazardous materials management, including delineation of hazardous material and hazardous waste storage areas, access and egress routes, waterways, emergency assemble areas, temporary hazardous waste storage areas; ▪ Spill control and countermeasures, including employee spill prevention/response training; and ▪ Notification and documentation procedures.	1) Prepare contract specifications for the construction contractor that require implementation of a Hazardous Materials Management/Spill Prevention Plan. 2) Monitor project construction activities to verify implementation of the Hazardous Materials Management/Spill Prevention Plan. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA PVWMA	Prior to construction During project construction

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MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Noise			
Measure 4.B.8-1: Implement **Measure 4.A.8-1**.	1) Prepare contract specifications for the construction contractor that require implementation of noise mitigation measures listed in **Measure 4.A.8-1**.		Prior to requesting construction bids
Measure 4.A.8-1: PVWMA shall incorporate into contract specifications the following measures: ▪ Comply with all local sound control and noise level rules, regulations, and ordinances. ▪ Equipment and trucks used for project construction shall utilize the best available noise control techniques (including mufflers, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds) in order to minimize construction noise impacts. Impact equipment (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically- or electrically-powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves would be used where feasible, and this could achieve a reduction of 5 dbA. Quieter procedures shall be used (such as drilling rather than impact equipment) whenever feasible. ▪ Stationary noise sources shall be located as far from sensitive receptors as possible. If they must be located near existing receptors, they shall be adequately muffled. ▪ Temporary walls may be erected at some locations to reduce noise impacts to residences adjacent to construction sites.	2) Monitor construction activities to verify that the measures of the noise control measures are implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA	Periodically during project construction

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MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Public Services			
Measure 4.B.9-1a: A detailed study identifying utilities along the proposed alignment will be prepared during the pre-design stages of the project.	1) Conduct a detailed study of utilities along the project alignment and submit a report documenting the results of the study to PVWMA.	PVWMA's consulting engineer	Prior to final engineering design
Measure 4.B.9-1b: The following measures are required for segments identified in final design as having potential conflict with significant utilities: ▪ Utility excavation and encroachment permits would be required from the appropriate agencies, including the Public Works Departments of San Benito, Santa Clara, Santa Cruz and Monterey Counties, Pacific Bell, U.S. Sprint, PG&E, City of Watsonville, and UPRR. These permits include measures to minimize utility disruption. PVWMA and its contractors would comply with permit conditions. Permit requirements would be included in construction contract specifications. ▪ Utility locations would be verified through field survey (potholing) and use of an underground locating service. ▪ A detailed engineering and construction plan would be prepared as part of the design plans and specifications. This plan should include procedures for the excavation, support, and fill of areas around utility cables and pipes. All affected utility services would be notified of PVWMA's construction plans and schedule. Arrangements would be made with these entities regarding protection, relocation, or temporary disconnection of services. ▪ In areas where the pipeline would parallel wastewater mains, engineering and construction plans will include trench wall support measures to guard against trench wall failure and possible resulting loss of structural support for the wastewater main.	1) Prepare contract specifications for the construction contractor that include measures listed in **Measure 4.B.9-1b**. 2) Monitor construction activities to verify that the measures are implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA PVWMA	Prior to final engineering design Periodically during project construction

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MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Measure 4.B.9-1b (continued)			
▪ Residents and businesses in the project area would be notified by the contractor in writing of planned utility service disruption two to four days in advance in conformance with County and State standards.			
Measure 4.B.9-2: Implement **Measures 4.B.6-3a** through **4.B.6-3c** in Section 4.B.6, Traffic and Circulation.	1) Implement the Monitoring and Reporting Actions for **Measures 4.B.6-3a** through **4.B.6-3c**, above.		
Measure 4.B.9-3 (Recommended): Implement **Measures 4.B.6-2a** and **4.B.6-2b** in Section 4.B.6, Traffic and Circulation.	1) Implement the Monitoring and Reporting Actions for **Measures 4.B.6-2a** and **4.B.6-2b**, above.		
Visual/Aesthetic and Recreational Resources			
Measure 4.A.10-1a: The PVWMA shall revegetate disturbed natural areas to minimize textural contrasts with the surrounding vegetation using grasses, shrubs and trees typical of the immediately surrounding area.	1) Prepare contract specifications for the construction contractor that require revegetation of disturbed areas.	PVWMA	Prior to requesting construction bids
	2) Inspect construction areas to verify that disturbed natural areas are revegetated following construction. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA or PVWMA's consulting biologist	Following project construction
Measure 4.A.10-1b: The PVWMA shall use design elements to enhance visual integration of the proposed above-ground facilities with their surroundings. Proposed facilities shall be painted low-glare earth-tone colors that blend with the surrounding terrain.	1) Review project plans to ensure that they include design elements such as low-glare earth-tone paint to visually integrated the proposed facilities with their surroundings.	PVWMA	Prior to final engineering design

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MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Measure 4.A.10-1c: The PVWMA shall ensure that its contractors restore disturbed areas along the pipeline alignment to their pre-project condition such that short-term construction disturbance does not result in long-term visual impacts.	1) Prepare contract specifications for the construction contractor that require revegetation of disturbed areas along the pipeline alignment.	PVWMA	Prior to requesting construction bids
	2) Inspect construction areas to verify that disturbed natural areas are revegetated following construction. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA	Following project construction .
Measure 4.B.10-2 (Recommended): Implement **Measure 4.A.10-2**.			
Measure 4.A.10-2 (Recommended): The PVWMA shall ensure that all exterior lighting if used is directed downward and oriented to insure that no light source is directly visible from neighboring residential areas. If necessary, landscaping shall be provided around proposed facilities. This vegetation shall be selected, placed, and maintained to minimize off-site light and glare onto surrounding areas. In addition, highly reflective building materials and/or finishes shall not be used in the designs for proposed structures.	1) Prepare contract specifications for the construction contractor that include exterior lighting mitigation listed in **Measure 4.A.10-2**.	PVWMA	Prior to requesting construction bids
	2) Monitor construction activities to verify that the measures are implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA	During and following construction
Measure 4.C-1: CEQA Compliance. Delivery of CVP water for use in areas beyond the 30,200 acres of agricultural lands shown in **Figure 4.C-2** shall be permitted only in accordance with the terms for delivery to Contractor's Service Area pursuant to any contract for the delivery of CVP water between Reclamation and PVWMA, and in accordance with any and all laws, including CEQA and NEPA. The appropriate local land use agency will be the lead agency for preparation of an environmental document for any proposed land use changes; PVWMA will be the lead agency for any actions specific to water system improvements or other PVWMA actions needed to provide CVP water to areas beyond those shown in **Figure 4.C-2**.	1) Complete CEQA documentation for any water system improvements to serve areas beyond the 30,200 acres.	PVWMA	Prior to delivering CVP water beyond the 30,200 acres

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MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Measure 4.C-2: Endangered Species Act Compliance. PVWMA will not deliver water for the purpose of converting any native lands to agriculture uses unless and until the project sponsor has complied with the Endangered Species Act and has determined that such conversion will not likely affect listed species or that appropriate mitigation has been provided. PVWMA intends to provide CVP water to existing irrigated agricultural lands. PVWMA currently is not proposing to provide any CVP water for M&I purposes, nor is it proposing to provide CVP water outside of the approximately 30,200 acres of agricultural lands shown in **Figure 4.C-2**. If PVWMA is the lead agency for development of water system improvements and construction or operation of those improvements or any other PVWMA actions that could adversely affect threatened or endangered species, PVWMA will consult with the appropriate resource agency (California Department of Fish and Game, US Fish and Wildlife Service, and/or National Marine Fisheries Service) pursuant to all applicable laws, including CEQA and NEPA. PVWMA will implement project-specific mitigation measures and permit conditions as appropriate.	1) Obtain proof of compliance with the Endangered Species Act prior to providing water to areas beyond the 30,200 acres. 2) Comply with the Endangered Species Act for any water system improvements needed to serve areas beyond the 30,200 acres	PVWMA PVWMA	Prior to delivering CVP water beyond the 30,200 acres Prior to delivering CVP water beyond the 30,200 acres

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TABLE 2 – MITIGATION MONITORING AND REPORTING PROGRAM FOR THE RECYCLED WATER PROJECT

Land Use and Planning			
Measure 4.A.1-1 (Recommended): Advance notification of construction activities should be provided to all property owners, residents, and businesses in the vicinity of construction areas. See also mitigation measures in Sections 4.A.6, Traffic and Circulation, 4.A.7, Air Quality, and 4.A.8, Noise, of this EIR.	1) Send notices to all property owners residents, and businesses in the project area vicinity at least one week in advance of construction. Publish notices in local newspapers at least one week in advance of construction. Place large signs along roads in the project vicinity at least one week in advance of construction. Submit copies of public notices to the project file to document compliance.	PVWMA	Prior to project construction
Measure 4.A.1-2: In order to compensate for the loss of prime agricultural land, PVWMA will cause up to 8.5 acres of prime agricultural land that is no longer farmed to be restored or otherwise brought back into production. This can be accomplished through contribution to a fund dedicated to the restoration of agricultural land.	1) Identify 8.5 acres of prime agricultural land that is no longer farmed and return it to production, or alternatively, contribute to a fund dedicated to the restoration of agricultural land. Submit documentation of agricultural land restoration or appropriate contribution to the project file and the Santa Cruz County Planning Department.	PVWMA	
Geology and Soils			
Measure 4.A.2-1a: Implement **Measures 5.A.2-3a** through **5.A.2-3f**. **Measure 5.A.2-3a:** All grading and construction will conform to requirements of the Monterey and Santa Cruz Counties Grading Ordinances. **Measure 5.A.2-3b:** Site grading and construction work areas will expose as little new ground surface as possible. Vegetation cover should be left intact to the extent practical.	1) Review construction specifications to ensure that design recommendations for RWF construction and pipeline installation listed in **Measures 5.A.2-3a** through **5.A.2-3f** are included. 2) Monitor project construction activities to verify compliance with the construction specifications. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA PVWMA's consulting engineering geologist	Prior to project construction During and immediately following project construction

MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Measure 5.A.2-3c: To the extent possible, grading activities in noncropped areas will be limited to the period between April 15 and October 15. If dry conditions persist after October 15, one-week extensions of grading activities will be obtained from the County Public Works Department. In areas where the soil is tilled, grading activities will be coordinated with the local farmers to ensure consistency between their erosion control and farming practices and construction disturbance.			
Measure 5.A.2-3d: Implement best construction practices at all grading sites, regardless of soil erodibility hazard.			
Measure 5.A.2-3e: Upon completion of construction at all sites, loose soils shall be removed or spread and all areas shall be re-soiled and reseeded to ensure that a stable soil cover will remain.			
Measure 5.A.2-3f: PVWMA will prepare and implement an inspection and maintenance program for the right-of-way and all facility sites. The plan will include routine inspection plans and reporting, and prescriptive methods for correcting erosion or soil instability problems.			

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MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Measure 4.A.2-1b: Implement **Measure 5.A.2-2**.			
Measure 5.A.2-2: All diversion and pipeline facilities will comply with applicable policies and appropriate engineering investigation practices necessary to reduce the potential detrimental effects of expansive soils, and corrosivity. Appropriate geotechnical studies will be conducted using generally accepted and appropriate engineering techniques for determining the susceptibility of the sites to unstable, weak or corrosive soils. A licensed geotechnical engineer will prepare recommendations applicable to foundation design, earthwork, and site preparation prior to or during the project design phase. Recommendations will address mitigation of site-specific, adverse soil and bedrock conditions that could hinder development. Project engineers will implement the recommendations. Geotechnical design and design criteria will comply with applicable codes and requirements of the 1994 or 1997 UBC with California additions (CCR Title 24), applicable City construction and grading ordinances.	1) Include geotechnical report with recommendations as an appendix to construction specifications.	PVWMA	Prior to requesting construction bids
	2) Review construction specifications to ensure that design recommendations were included.	PVWMA	Prior to project construction
	3) Monitor project construction activities to verify compliance with the recommendations of the geotechnical report. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA's consulting engineering geologist	During and immediately following project construction
Measure 4.A.2-2: Conduct geologic investigations of all project facilities and pipeline alignments prior to the final design, and implement design recommendations. The investigations will specify hazards related to ground movements and co-seismic effects, especially liquefaction. The recommendations of an engineering geologist will be incorporated into the design and specifications and shall be implemented by the construction contractor. The construction manager will conduct inspections and certify that all design criteria have been met. While these measures would not eliminate the potential for damage to the facilities, they would ensure that the hazards have been reduced to an acceptable level of risk and, therefore, the impact would be reduced to a less-than-significant level.	1) Review construction specifications to ensure that the engineering geologist's design recommendations for RWF construction and pipeline installation are included.	PVWMA	Prior to project construction
	2) Monitor project construction activities to verify compliance with the recommendations of the engineering geologist. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA's consulting engineering geologist	During and immediately following project construction

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MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Hydrology and Water Quality			
Measure 4.A.3-1a: The PVWMA shall require contractors to develop a SWPPP for construction of proposed facilities, as required by the RWQCB. The objectives of the SWPPP are to identify pollutant sources that may affect the quality of stormwater discharge and to implement BMPs to reduce pollutants in stormwater discharges. The SWPPP for this proposed action would include the implementation, at a minimum, of the following elements: ▪ Source identification; ▪ Preparation of a site map; ▪ Description of construction mat[illegible]als [illegible]ra tic s, [illegible] pm[illegible] [illegible]orage and maintenance; ▪ List of pollutants likely to contact stormwater; ▪ Estimate of the construction site area and percent impervious area; ▪ Erosion and sedimentation control practices, including soils stabilization, revegetation, and runoff control to limit increases in sediment in stormwater runoff, such as detention basins, straw bales, silt fences, check dams, geofabrics, drainage swales, and sandbag dikes; ▪ Proposed construction dewatering plans and ▪ List of provisions to eliminate or reduce discharge of materials to stormwater; ▪ Description of waste management practices; and ▪ Maintenance and training practices.	1) Prepare contract specifications for the construction contractor that require preparation and implementation of a Storm Water Pollution Prevention Plan.	PVWMA	Prior to construction
	2) Monitor project construction activities to verify Temporary Erosion and Sediment Control Plan implementation. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA	Periodically during project construction
Measure 4.A.3-1b: Refer to **Measure 4.A.4-1a** in Section 4.A.4, Vegetation and Wildlife, regarding pipeline construction within potentially jurisdictional wetlands/waters of the U.S. and streambeds and at the Pajaro River.	1) Implement Monitoring and Reporting Actions for **Measure 4.A.4-1a**, below.		

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MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Measure 4.A.3-2a: Above-ground irrigation systems shall be operated in accordance with the requirements of Title 22 of the California Code of Regulations and any reclamation permits issued by the RWQCB, Central Coast Region. Title 22 requires that irrigation rates match the evapotranspiration rates of the plants or crops being irrigated, and that application of reclaimed water be prohibited within 50 feet of any domestic water supply or wells.	1) Prepare and submit an application for an NPDES permit to the RWQCB.	PVWMA	Prior to project construction
	2) Monitor operation of irrigation systems to verify compliance with applicable regulations and permits. If non-compliance is noted, notify the operator of required actions and the deadline for compliance.	PVWMA	Periodically following project implementation
Measure 4.A.3-2b: Monitoring of crop productivity should be performed, and if adverse impacts to the yields of sensitive crops (e.g., strawberries) occurs, the blending ratio should be adjusted to decrease the fraction of recycled water in the applied irrigation water.	1) Monitor crop productivity and submit documentation of crop yields to the project file. Adjust blending ratios if necessary.	PVWMA	Periodically following project implementation
Measure 4.A.3-3: The facilities shall be designed to comply with FEMA and County of Santa Cruz requirements to floodproof the facilities and not increase upstream or downstream flood hazards.	1) Review project plans to ensure they comply with FEMA and County of Santa Cruz requirements concerning floodproofing. If non-compliance is noted, revise plans as necessary.	PVWMA or PVWMA's consulting engineer	Prior to final engineering design
	2) Monitor project construction activities to verify compliance with FEMA and County of Santa Cruz requirements. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA	Periodically during project construction
Measure 4.A.3-4a: Implement measures to ensure that construction activities do not damage existing wells. Wells shall be capped in an appropriate manner to prevent soil and other contaminants from entering groundwater aquifers.	) Review construction plans and maps to ensure that the wells are identified.	PVWMA	Prior to project construction
	) Monitor construction activities to verify that wells in and near the project area are avoided. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA	Periodically during project construction

MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Measure 4.A.3-4b: PVWMA or its contractor shall correct any damage to wells and/or reimburse well owners for any loss of use of the well during construction.	1) Inspect wells in the construction area prior to, and immediately following, project construction. Document any damage to wells resulting from construction activities. Repair any damage to the wells.	PVWMA	Prior to and immediately following construction
	2) If access to existing wells in the construction area will be affected, notify well operators in writing of the loss of use of the well and the dates during which access to the well(s) will not be available. Reimburse well operators for loss of well use based on historical water use.	Construction contractor and PVWMA	Prior to and immediately following construction
Vegetation and Wildlife			
Measure 4.A.4-1a--Wetlands Avoidance: Wetlands and riparian habitat t the Highway 1 crossing of the Pajaro River will be avoided entirely by using bore and jack construction.	1) Review construction specifications to ensure that bore and jack construction is the specified method to cross the Pajaro River.	PVWMA	Prior to project construction
	2) Monitor project construction activities to ensure that bore and jack construction methods are used at the Pajaro River crossing. If non-compliance is noted, notify the contractor of required actions and the deadline for compliance.	PVWMA or PVWMA's consulting biologist	During project construction
Measure 4.A.4-2a--Avoidance of Habitat: Removal or damage to riparian vegetation adjacent to the Pajaro River may be avoided by constructing the pipeline crossing with bore and jack methods. Also implement **Measures 4.A.4-2b** and **4.A.4-2c.**	1) Monitor construction activities to verify compliance with these requirements to protect the California red-legged frog. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA's consulting biologist	During project construction

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MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Measure 4.A.4-2b--Survey, Consultation, and Protection Measures for Special Status Wildlife Species: Potential habitat for the California red-legged frog was found as part of the site assessment. Thus, the following measures shall be implemented to avoid construction-related impacts to the species: **Pre-construction surveys for the red-legged frog within the construction zone shall be conducted by a qualified biologist.** A search shall be completed for juvenile and adult red-legged frogs that may occur within the project area. If no individuals of these species are detected during these surveys, then construction-related activities may proceed. If red-legged frogs are found within the construction disturbance zone they will immediately be moved passively, or captured and moved, to suitable sites by an appropriately permitted biologist. **Fencing shall be erected around the construction areas to exclude frogs from the sites.** Bore pits and pipeline segments shall be covered during the night to avoid accidental trapping of frogs. **A biological monitor shall be on site during construction activities.** The monitor shall be appropriately permitted to relocate frogs if necessary.	1) Monitor construction activities to verify compliance with these requirements to protect the California red-legged frog. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA's consulting biologist	During project construction

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MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Measure 4.A.4-2c— Survey and Protection of Raptor and Passerine Nesting Sites: To avoid conflicts with nesting raptors and with riparian-dependent songbirds, including least Bell's vireos, yellow warblers, and yellow-breasted chats, construction activities within 500 feet of riparian habitat shall be performed prior to March 15 or after August 15 (July 15 for passerines), unless pre-construction surveys show that no special status birds are nesting within 500 feet of the construction zone. If the survey indicates that nesting birds are present, suitable avoidance measures would be developed in coordination with the California Department of Fish and Game (CDFG). Current CDFG avoidance guidelines require a minimum 500-foot buffer zone around raptor nests, and a 250-foot zone around the nests of other birds.	1) Monitor construction activities to ensure that work does not occur within 500 feet of riparian habitat during the nesting season. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA's consulting biologist	Periodically during project construction
Measure 4.A.4-2e--Survey, Consultation, and Protection Measures for Special Status Wildlife Species: Because potential habitat for the California red-legged frog was found as part of the site assessment, reasonable and prudent measures for protection of the California red-legged frog contained in the Programmatic Biological Opinion for this species (USFWS, 1999) shall be implemented if the U.S. Army Corps of Engineers finds that impact to this species is likely.	1) Monitor construction activities to verify compliance with these requirements to protect special status wildlife species. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA's consulting biologist	Periodically during project construction

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MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Cultural Resources			
Measure 4.A.5-1: Should any as yet undiscovered cultural resources, such as structural features, or unusual amounts of bone or shell, artifacts, human remains, or architectural remains be encountered during any development activities, work will be suspended and PVWMA staff will be contacted. A qualified cultural resource specialist shall be retained and will perform any necessary investigations to determine the significance of the find. PVWMA will then implement any mitigation deemed necessary for the recordation and/or protection of the cultural resources. In addition, pursuant to Sections 5097.97 and 5097.98 of the State Public Resources Code and Section 7050.5 of the State Health and Safety Code, in the event of the discovery of human remains, all work must be halted and the County Coroner shall be immediately notified. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission shall be adhered to in the treatment and disposition of the remains.	1) Prepare a resource recovery plan for the site including findings and recommendations and submit it to PVWMA, the U.S. Army Corps of Engineers, the State Historic Preservation Officer, the Advisory Council on Historic Preservation and the project file. 2) Submit a document verifying that evaluation of the materials and their recovery occurred. Prepare a report of findings and submit it to PVWMA, the State Historic Preservation Officer, the Advisory Council on Historic preservation and the project file.	PVWMA's consulting archaeologist PVWMA's consulting archaeologist	During project construction, if potential resources are encountered During project construction, if potential resources are encountered
Measure 4.A.5-2: As part of the siting study for wells, PVWMA will retain an archaeologist to conduct archival research and surface reconnaissance of potential sites. The findings of the investigations will be incorporated into the selection of specific locations for wells and connecting pipelines such that PVWMA will avoid siting wells and attendant connecting pipelines at or through any significant cultural resources.	1) Determine the areal extent of important cultural resources sites within the project area. Review project plans to verify that project facilities would not be located within these sites.	PVWMA's consulting archaeologist	Prior to final engineering design
Traffic and Circulation			
Measure 4.A.6-1a (Recommended): Schedule truck trips outside of peak commute hours. **Measure 4.A.6-1b (Recommended):** Use haul routes that minimize truck traffic on local roadways to the extent possible.	1) Prepare contract specifications for the construction contractor that require construction truck trips be scheduled during off-peak hours and that haul routes be selected to minimize truck traffic on local roadways.	PVWMA	Prior to requesting construction bids

MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Measure 4.A.6-2: Conduct a preconstruction survey of road conditions on key access routes to the project sites (e.g., San Andreas Road). The pavement conditions of local streets judged to be in good condition for use by heavy truck traffic shall be monitored. Roads damaged by construction shall be repaired to a structural condition equal to, or better than, that which existed prior to construction activity.	1) Prepare contract specifications for the construction contractor that require that a preconstruction survey of key routes to the project site be conducted, and that roads damaged by construction be repaired.	PVWMA	Prior to project construction
	2) Inspect access roads to the project site to ensure that roads are repaired following project construction, if necessary. If roads are not repaired, notify the construction contractor of required actions and the deadline for compliance.	PVWMA	Following project construction
Measure 4.A.6-3a: The construction contractor shall prepare traffic safety and control plans to show specific methods for maintaining traffic flows. This shall include identifying roadway locations where special trenching techniques would be used to minimize impacts to traffic flow and operations. The traffic control plans prepared by the contractor shall include recommended detours for bicyclists. The traffic control plan shall be reviewed for appropriateness, and approved by the governing Public Works Department.	1) Prepare contract specifications for the construction contractor that require preparation of a traffic control plan.	PVWMA	Prior to requesting construction bids
	2) Review the proposed traffic control plan to ensure that measures to maintain traffic flows are included. Notify the construction contractor if any modifications are required.	PVWMA, Caltrans, Santa Cruz County Public Works Department	Prior to project construction
Measure 4.A.6-3b: The contractor shall provide advanced public notification of construction activity and roadway/access closures.	1) Implement the Monitoring and Reporting Action for **Measure 4.A.1-1**, above.		

EXHIBIT E

MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Air Quality			
Measure 4.A.7-1: The construction contractor shall implement a dust control program that includes the following elements: ▪ Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard. ▪ Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites. ▪ Sweep daily (with water sweepers) all paved access roads, paved parking areas and paved staging areas at construction sites. ▪ Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets. ▪ Hydroseed or apply (non-toxic) soil binders to inactive construction areas. However, do not apply these measures in operating agricultural fields under cultivation unless requested by the grower. ▪ Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.). ▪ Limit traffic on unpaved roads to 15 mph. ▪ Install sandbags or other erosion control measures to prevent silt runoff to public roadways. ▪ Replant vegetation in disturbed areas as quickly as possible.	1) Prepare contract specifications for the construction contractor that require implementation of a dust control program. 2) Monitor construction activities to verify that the measures of the dust control program are implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA PVWMA	Prior to requesting construction bids Periodically during project construction

MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Noise			
Measure 4.A.8-1: PVWMA shall incorporate into contract specifications the following measures: ▪ Comply with all local noise control noise levels, regulations, and ordinances. ▪ Equipment and trucks used for project construction shall utilize the best available noise control techniques (including mufflers, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds) in order to minimize construction noise impacts. ▪ Impact equipment (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically- or electrically-powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves would be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used (such as drilling rather than impact equipment) whenever feasible. ▪ Stationary noise sources shall be located as far from sensitive receptors as possible. If they must be located near existing receptors, they shall be adequately muffled. • Temporary walls may be erected at some locations to reduce noise impacts to residences adjacent to construction sites.	1) Prepare contract specifications for the construction contractor that require implementation of noise mitigation measures listed in **Measure 4.A.8-1**. 2) Monitor construction activities to verify that the measures of the noise control measures are implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA PVWMA	Prior to requesting construction bids Periodically during project construction

MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Measure 4.A.8-2: PVWMA shall incorporate into contract specifications the following measures: ▪ The pumping facilities shall be designed with acoustical treatments (building enclosures, louvered vents, noise walls, etc.) that are adequate to maintain potential noise generation to levels at or below ambient levels. ▪ The blending facilities shall be built with enclosures that provide maximum feasible noise attenuation, to ensure that sensitive receptors would not be affected.	1) Prepare contract specifications for the construction contractor that include measures listed in **Measure 4.A.8-2**.	PVWMA	Prior to final engineering design
	2) Monitor construction activities to verify that the measures are implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA	Periodically during project construction
Public Services			
Measure 4.A.9-1: A detailed study identifying utilities along the proposed alignment will be prepared during the pre-design stages of the project. The following measures are required for segments identified in final design as having potential conflict with significant utilities: ▪ Utility excavation and encroachment permits would be required from the appropriate agencies, including the Public Works Departments of San Benito, Santa Clara, Santa Cruz and Monterey Counties, Pacific Bell, U.S. Sprint, PG&E, City of Watsonville, and UPRR. These permits include measures to minimize utility disruption. PVWMA and its contractors would comply with permit conditions. Permit requirements would be included in construction contract specifications. ▪ Utility locations would be verified through field survey (potholing) and use of an underground locating service.	1) Conduct a detailed study of utilities along the project alignment and submit a report documenting the results of the study to PVWMA.	PVWMA's consulting engineer	Prior to final engineering design
	2) Prepare contract specifications for the construction contractor that include measures listed in **Measure 4.A.9-1**.	PVWMA	Prior to final engineering design
	3) Monitor construction activities to verify that the measures are implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA	Periodically during project construction

MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Measure 4.A.9-1 (continued) ▪ A detailed engineering and construction plan would be prepared as part of the design plans and specifications. This plan should include procedures for the excavation, support, and fill of areas around utility cables and pipes. All affected utility services would be notified of PVWMA's construction plans and schedule. Arrangements would be made with these entities regarding protection, relocation, or temporary disconnection of services. ▪ In areas where the pipeline would parallel wastewater mains, engineering and construction plans will include trench wall support measures to guard against trench wall failure and possible resulting loss of structural support for the wastewater main. ▪ Residents and businesses in the project area would be notified by the contractor in writing of planned utility service disruption two to four days in advance in conformance with County and State standards.			
Visual/Aesthetic and Recreational Resources **Measure 4.A.10-1a:** The PVWMA shall revegetate disturbed natural areas to minimize textural contrasts with the surrounding vegetation using grasses, shrubs and trees typical of the immediately surrounding area.	1) Prepare contract specifications for the construction contractor that require revegetation of disturbed areas.	PVWMA	Prior to requesting construction bids
	2) Inspect construction areas to verify that disturbed natural areas are revegetated following construction. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA or PVWMA's consulting biologist	Following project construction

MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPO	MONITORING / REPORTING SCHEDULE
Measure 4.A.10-1b: The PVWMA shall use design elements to enhance visual integration of the proposed above-ground facilities with their surroundings. Proposed facilities shall be painted low-glare earth-tone colors that blend with the surrounding terrain.	1) Review project plans to ensure that they include design elements such as low-glare earth-tone paint to visually integrated the proposed facilities with their surroundings.	PVWMA	Prior to final engineering design
Measure 4.A.10-1c: The PVWMA shall ensure that its contractors restore disturbed areas along the pipeline alignment to their pre-project condition such that short-term construction disturbance does not result in long-term visual impacts.	1) Prepare contract specifications for the construction contractor that require revegetation of disturbed areas along the pipeline alignment.	PVWMA	Prior to requesting construction bids
	2) Inspect construction areas to verify that disturbed natural areas are revegetated following construction. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA	Following project construction
Mitigation Measure 4.A.10-2 (Recommended): The PVWMA shall ensure that all exterior lighting if used is directed downward and oriented to ensure that no light source is directly visible from neighboring residential areas. If necessary, landscaping shall be provided around proposed facilities. This vegetation shall be selected, placed, and maintained to minimize off-site light and glare onto surrounding areas. In addition, highly reflective building materials and/or finishes shall not be used in the designs for proposed structures.	1) Prepare contract specifications for the construction contractor that include exterior lighting mitigation listed in **Measure 4.A.10-2**.	PVWMA	Prior to requesting construction bids
	2) Monitor construction activities to verify that the measures are implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compli	PVWMA	During and following construction

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TABLE 3 – MITIGATION MONITORING AND REPORTING PROGRAM FOR THE SUPPLEMENTAL WELLS PROJECT

MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Land Use and Planning			
Measure 5.D.1-1 (Recommended): Implement **Measure 4.A.1-1**. **Measure 4.A.1-1 (Recommended):** Advance notification of construction activities should be provided to all property owners, residents, and businesses in the vicinity of construction areas. See also mitigation measures in Sections 4.A.6, Traffic and Circulation, 4.A.7, Air Quality, and 4.A.8, Noise, of this EIR.	Send notices to all property owners residents, and businesses in the project area vicinity at least one week in advance of construction. Publish notices in local newspapers at least one week in advance of construction. Place large signs along roads in the project vicinity at least one week in advance of construction. Submit copies of public notices to the project file to document compliance.	PVWMA	Prior to project construction
Geology and Soils			
Measure ASR-1: Implement **Measure 5.A.2-2**. **Measure 5.A.2-2:** All diversion and pipeline facilities will comply with applicable policies and appropriate engineering investigation practices necessary to reduce the potential detrimental effects of expansive soils, and corrosivity. Appropriate geotechnical studies will be conducted using generally accepted and appropriate engineering techniques for determining the susceptibility of the sites to unstable, weak or corrosive soils. A licensed geotechnical engineer will prepare recommendations applicable to foundation design, earthwork, and site preparation prior to or during the project design phase. Recommendations will address mitigation of site-specific, adverse soil and bedrock conditions that could hinder development. Project engineers will implement the recommendations. Geotechnical design and design criteria will comply with applicable codes and requirements of the 1994 or 1997 UBC with California additions (CCR Title 24), applicable City construction and grading ordinances.	1) Include geotechnical report with recommendations as an appendix to construction specifications.	PVWMA	Prior to requesting construction bids
	2) Review construction specifications to ensure that design recommendations were included.	PVWMA	Prior to project construction
	3) Monitor project construction activities to verify compliance with the recommendations of the geotechnical report. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA's consulting engineering geologist	During and immediately following project construction

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M G ON ME URE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Measure ASR-2: Implement **Measures 5.A.2-3a** through **5.A.2-3f**. **Measure 5.A.2-3a:** All grading and construction will conform to requirements of the Monterey and Santa Cruz Counties Grading Ordinances. **Measure 5.A.2-3b:** Site grading and construction work areas will expose as little new ground surface as possible. Vegetation cover should be left intact to the extent practical. **Measure 5.A.2-3c:** To the extent possible, grading activities in noncropped areas will be limited to the period between April 15 and October 15. If dry conditions persist after October 15, one-week extensions of grading activities will be obtained from the County Public Works Department. In areas where the soil is tilled, grading activities will be coordinated with the local farmers to ensure consistency between their erosion control and farming practices and construction disturbance. **Measure 5.A.2-3d:** Implement best construction practices at all grading sites, regardless of soil erodibility hazard. **Measure 5.A.2-3f:** PVWMA will prepare and implement an inspection and maintenance program for the right-of-way and all facility sites. The plan will include routine inspection plans and reporting, and prescriptive methods for correcting erosion or soil instability problems.	1) Obtain Monterey and Santa Cruz County Grading Permits. 2) Review construction specifications to ensure that design recommendations for ASR construction and pipeline installation were included. 3) Monitor project construction activities to verify compliance with the construction specifications. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA PVWMA PVWMA's consulting engineering geologist	Prior to project construction Prior to project construction During and immediately following project construction
Hydrology and Water Quality **Measure ASR-3:** All groundwater discharges associated with injection/extraction well development, initial pumping, and backwashing as well as long-term operational maintenance shall be conducted in accordance with NPDES permit issued through the RWQCB to ensure that degradation of surface water does not occur.	1) Monitor project construction activities to verify compliance with NPDES permit requirements. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA	During project construction

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MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Measure ASR-4a: The PVWMA will operate the proposed project in compliance with the Surface Water Treatment Rule, Safe Drinking Water Act, where applicable, the SWRCB's Antidegradation Policy, and applicable DHS regulations regarding drinking water quality. Water injected into the groundwater aquifers from surface sources would be required to comply with federal and state water quality standards for drinking water and those set forth by SWRCB's Antidegradation Policy. The RWQCB has regulatory authority over injection and will require that groundwater degradation not occur and that injectate water meet both primary and secondary Title 22 standards. Federal and state drinking water standards, developed by EPA and DHS, dictate acceptable concentrations for many constituents, including fecal coliform, heavy metals, TDS, and nitrates.	1) Review engineering design to ensure that design meets regulations listed in **Measure 5.D.3-4a**.	PVWMA	Prior to final engineering design
	2) Monitor project operation to verify compliance with regulations listed in **Measure 5.D.3-4a**. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA	During, and following, project construction
Measure ASR-4b: The PVWMA will prepare and implement a treatment and monitoring program to ensure that surface water intended for injection is monitored and adequately treated so that applicable federal and state drinking water standards are not exceeded. Proposed injectate will require treatment to meet Surface Water Treatment Rule provisions and to remove, among other potential constituents, nitrate, iron, manganese, and potentially aluminum and arsenic. Treatment of the water to meet regulatory requirements could require multiple treatment technologies. Given the variable and sometimes high levels of turbidity in the College Lake injectate, compliance with the Surface Water Treatment Rule could require conventional treatment, consisting of coagulation, flocculation, sedimentation, filtration, and disinfection. Removal of dissolved constituents, including metals that exceed primary and secondary Title 22 standards, will require additional treatment technologies, such as reverse osmosis and ion exchange. The PVWMA will prepare and implement a plan that addresses regular monitoring of surface water sources and defines adequate treatment methods to reduce concentrations of contaminant, if present, to levels below the federal and state drinking water standards.	1) Monitor surface water intended for injection to determine compliance with applicable federal and state regulations. If non-compliance is noted, notify regulatory agencies and, in consultation with the agencies, adjust water treatment methods to reduce contaminants to levels below the federal and state drinking water standards.	PVWMA or PVWMA's consulting engineer	Following project completion

MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Measure ASR-5: PVWMA will complete a hydrogeologic feasibility study and testing for the proposed injection/extraction well field prior to design. PVWMA will develop a groundwater monitoring plan to monitor the groundwater elevations in the vicinity of the injection/extraction wells. The program will include procedures to adjust, if necessary, the injection/extraction rates to avoid adverse aquifer response such as mounding or drawdown.	1) Prepare hydrogeologic feasibility study. 2) Review the groundwater monitoring plan to ensure that it includes procedures to adjust, if necessary, injection/extraction rates to avoid mounding and drawdown.	PVWMA PVWMA	Following conceptual well field delineation Prior to final engineering design
<u>Cultural Resources</u>			
Measure ASR-6a: As part of the siting study for wells, PVWMA will retain an archaeologist to conduct archival research and surface reconnaissance of potential sites. The findings of the investigations will be incorporated into the selection of specific locations for wells and connecting pipelines such that PVWMA will avoid siting wells and attendant connecting pipelines at or through any significant cultural resources.	1) Determine the areal extent of important cultural resources sites within the project area. Review project plans to verify that project facilities would not be located within these sites.	PVWMA's consulting archaeologist	Prior to final engineering design
Measure ASR-6b: Implement **Measures 4.B.5-1a** and **4.B.5-1b**. **Measure 4.B.5-1a:** Final pipeline and facility plans shall locate facilities and pipeline alignments away from identified cultural resource sites. A qualified cultural resource specialist shall be retained to assist in identifying the extent of important cultural resource sites to be avoided, which may include the preparation of detailed cultural resource evaluation reports and consultation with local, state, and federal agencies as well as the local Native American community and the Native American Heritage Commission. **Measure 4.B.5-1b:** If important cultural resource sites cannot be avoided, PVWMA will coordinate with local, state, and federal agencies in the development of an appropriate mitigation plan for the cultural resource. Possible mitigation measures for important cultural resources may include documentation and recordation of the resource, relocation, or stabilization of the resource.	**4.B.5-1a:** Determine the areal extent of important cultural resources sites within the project area. Review project plans to verify that project facilities would not be located within these sites. **4.B.5-1b:** 1) Prepare contract specifications for the construction contractor that require implementation of the cultural resources mitigation plan developed under the Programmatic Agreement. 2) Monitor construction activities to ensure that the cultural resources mitigation plan is implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA's consulting archaeologist PVWMA's consulting archaeologist PVWMA's consulting archaeologist	Prior to final engineering design Prior to requesting construction bids During project construction

MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Measure ASR-7: Implement **Measure 4.A.5-1**.			
Measure 4.A.5-1: Should any as yet undiscovered cultural resources, such as structural features, or unusual amounts of bone or shell, artifacts, human remains, or architectural remains be encountered during any development activities, work will be suspended and PVWMA staff will be contacted. A qualified cultural resource specialist shall be retained and will perform any necessary investigations to determine the significance of the find. PVWMA will then implement any mitigation deemed necessary for the recordation and/or protection of the cultural resources. In addition, pursuant to Sections 5097.97 and 5097.98 of the State Public Resources Code and Section 7050.5 of the State Health and Safety Code, in the event of the discovery of human remains, all work must be halted and the County Coroner shall be immediately notified. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission shall be adhered to in the treatment and disposition of the remains.	1) Prepare a resource recovery plan for the site including findings and recommendations and submit it to PVWMA, the U.S. Army Corps of Engineers, the State Historic Preservation Officer, the Advisory Council on Historic Preservation and the project file. 2) Submit a document verifying that evaluation of the materials and their recovery occurred. Prepare a report of findings and submit it to PVWMA, the State Historic Preservation Officer, the Advisory Council on Historic preservation and the project file.	PVWMA's consulting archaeologist PVWMA's consulting archaeologist	During project construction, if potential resources are encountered During project construction, if potential resources are encountered
Measure ASR-8: Implement **Measures 4.B.5-3a** through **4.B.5-3c**.			
Measure 4.B.5-3a: The resource boundaries should be marked as exclusion zones both on the ground and on construction maps.	**4.B.5-3a:** Review construction maps and monitor construction sites to ensure that resource boundaries are marked as exclusion zones.	PVWMA's consulting archaeologist	Prior to, and during, project construction
Measure 4.B.5-3b: Construction supervisory personnel should be notified of the existence of these resources and be required to keep personnel and equipment away from these areas. During construction and operations, personnel and equipment will be restricted to the surveyed corridor.	**4.B.5-3b:** Prepare contract specifications for the construction contractor that require all construction personnel and equipment remain within the surveyed corridor.	PVWMA	Prior to requesting construction bids

MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Measure 4.B.5-3c: Monthly monitoring of the cultural resources to be avoided should be completed to insure that no inadvertent damage to the resources occurs as a result of construction or construction-related activities. If damage is detected a guard will be posted to patrol the site and adjacent important resources (such as gravestones and churches).	1) Monitor cultural resources to be avoided on a monthly basis during project construction to verify that no damage occurs.	PVWMA's consulting archaeologist	Monthly during project construction
	2) If damage to a cultural resource is detected, hire a guard to patrol the site and adjacent important resources.	PVWMA	During project construction, if damage is detected
Traffic and Circulation			
Measure 5.D.6-1 (Recommended): Implement **Measures 4.A.6-1a** and **4.A.6-1b**.	1) Prepare contract specifications for the construction contractor that require construction truck trips be scheduled during off-peak hours and that haul routes be selected to minimize truck traffic on local roadways.	PVWMA	Prior to requesting construction bids
Measure 4.A.6-1a (Recommended): Schedule truck trips outside of peak commute hours.			
Measure 4.A.6-1b (Recommended): Use haul routes that minimize truck traffic on local roadways to the extent possible.			
Measure ASR-9: Implement **Measures 4.B.6-2a** and **4.B.6-2b**.			
Measure 4.B.6-2a: Limit construction hours to off-peak traffic periods on commute streets.	1) Prepare contract specifications for the construction contractor that limit construction hours to off-peak traffic periods.	PVWMA	Prior to requesting construction bids
Measure 4.B.6-2b: The contractor shall be required to prepare traffic control plans to show specific methods for maintaining traffic flows. This shall include identifying roadway locations where special trenching techniques would be used to minimize impacts to traffic flow and operations. The traffic control plan shall be reviewed for appropriateness, and approved by Caltrans and the governing Public Works Departments.	1) Prepare contract specifications for the construction contractor that require preparation of a traffic control plan.	PVWMA	Prior to requesting construction bids
	2) Review the proposed traffic control plan to ensure that measures to maintain traffic flows are included. Notify the construction contractor if any modifications are required.	PVWMA, Caltrans, Santa Cruz County Public Works Department	Prior to project construction

MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Measure ASR-10: Implement **Measures 4.B.6-3a** through **4.B.6-3c**.			
Measure 4.B.6-3a: To minimize disruption of emergency vehicle access and maintain access to driveways to adjacent land uses, PVWMA would require the contractors to maintain steel trench plates at the construction sites to restore access across open trenches. Construction trenches shall not be left open after work hours.	1) Monitor construction activities to ensure that steel trench plates are placed on construction trenches along driveways. If non-compliance is noted, notify construction contractor of required actions and the deadline for compliance.	PVWMA	Periodically during project construction
Measure 4.B.6-3b: To minimize disruption of emergency vehicle access, affected jurisdictions will be asked to identify detours to be posted by contractor.	1) Place a large sign along roadways in the project vicinity at least one week in advance of construction.	PVWMA	Prior to project construction
Measure 4.B.6-3c: The contractor will notify the appropriate police, fire, and emergency services of the timing, location, and duration of construction activities and the locations of detours and lane closures prior to beginning construction in the immediate vicinity of affected roadways.	1) Send notices to police, fire, and emergency service providers at least one week in advance of construction.	PVWMA	Prior to project construction
Measure ASR-11: Implement **Measure 4.A.6-2**.			
Measure 4.A.6-2: Conduct a preconstruction survey of road conditions on key access routes to the project sites (e.g., San Andreas Road). The pavement conditions of local streets judged to be in good condition for use by heavy truck traffic shall be monitored. Roads damaged by construction shall be repaired to a structural condition equal to, or better than, that which existed prior to construction activity.	1) Prepare contract specifications for the construction contractor that require that a preconstruction survey of key routes to the project site be conducted, and that roads damaged by construction be repaired. 2) Inspect access roads to the project site to ensure that roads are repaired following project construction, if necessary. If roads are not repaired, notify the construction contractor of required actions and the deadline for compliance.	PVWMA PVWMA	Prior to project construction Following project construction

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MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Measure ASR-12: Implement **Measures 4.A.6-3a** and **4.A.6-3b**.			
Measure 4.A.6-3a: The construction contractor shall prepare traffic safety and control plans to show specific methods for maintaining traffic flows. This shall include identifying roadway locations where special trenching techniques would be used to minimize impacts to traffic flow and operations. The traffic control plans prepared by the contractor shall include recommended detours for bicyclists. The traffic control plan shall be reviewed for appropriateness, and approved by the governing Public Works Department.	1) Prepare contract specifications for the construction contractor that require preparation of a traffic safety and control plan.	PVWMA	Prior to requesting construction bids
	2) Review the proposed traffic control plan to ensure that measures to maintain traffic flows are included. Notify the construction contractor if any modifications are required.	PVWMA	Prior to construction
Measure 4.A.6-3b: The contractor shall provide advanced public notification of construction activity and roadway/access closures.	1) Send notices to all property owners, residents, and businesses in the project area vicinity at least one week in advance of construction. Publish notices in local newspapers at least one week in advance of construction. Place a large sign along each affected roadway at least one week in advance of construction. Submit copies of public notices to the project file to document compliance.	Construction contractor	Prior to project construction
Measure ASR-13: Implement **Measure 5.A.6-7**.			
Measure 5.A.6-7: The traffic control plan shall include consideration of any other planned traffic detours related to nearby and concurrent construction projects.	1) Review the traffic control plan to ensure that it considers other planned traffic detours related to concurrent construction projects. If the plan does not consider other planned detours, notify the construction contractor of required actions and the deadline for compliance.	PVWMA	Prior to project construction
<u>Air Quality</u>			
Measure 5.D.7-1: Implement dust control program described in **Measure 4.A.7-1**.			

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MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING REPORTING SCHEDULE
Measure 4.A.7-1: The construction contractor shall implement a dust control program that includes the following elements: ▪ Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard. ▪ Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites. ▪ Sweep daily (with water sweepers) all paved access roads, paved parking areas and paved staging areas at construction sites. ▪ Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets. ▪ Hydroseed or apply (non-toxic) soil binders to inactive construction areas. However, do not apply these measures in operating agricultural fields under cultivation unless requested by the grower. ▪ Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.). ▪ Limit traffic on unpaved roads to 15 mph. ▪ Install sandbags or other erosion control measures to prevent silt runoff to public roadways. ▪ Replant vegetation in disturbed areas as quickly as possible.	1) Prepare contract specifications for the construction contractor that require implementation of a dust control program. 2) Monitor construction activities to verify that the measures of the dust control program are implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA PVWMA	Prior to requesting construction bids Periodically during project construction

MITIGATION MEASURE	ON ORING ND REPOR NG ON	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Noise			
Measure 5.D.8-1: Implement **Measure 4.A.8-1.**			
Measure 4.A.8-1: PVWMA shall incorporate into contract specifications the following measures: ▪ Comply with all local sound control and noise level rules, regulations, and ordinances. ▪ Equipment and trucks used for project construction shall utilize the best available noise control techniques (including mufflers, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds) in order to minimize construction noise impacts. ▪ Impact equipment (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically- or electrically-powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves would be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used (such as drilling rather than impact equipment) whenever feasible. ▪ Stationary noise sources shall be located as far from sensitive receptors as possible. If they must be located near existing receptors, they shall be adequately muffled.	1) Prepare contract specifications for the construction contractor that require implementation of noise mitigation measures listed in **Measure 4.A.8-1**. 2) Monitor construction activities to verify that the measures of the noise control measures are implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA PVWMA	Prior to requesting construction bids Periodically during project construction

MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Measure 5.D.8-1 (continued) ▪ Temporary walls may be erected at some locations to reduce noise impacts to residences adjacent to construction sites.			
Measure 5.D.8-2: Implement **Measure 5.B.8-2.**	1) Prepare contract specifications for the construction contractor that include measures listed in **Measure 5.B.8-2.**	PVWMA	Prior to final engineering design
Measure 5.B.8-2: PVWMA shall incorporate into contract specifications the following measures: The pumping facilities shall be designed with acoustical treatments (building enclosures, louvered vents, noise walls, etc.) that are adequate to maintain potential noise generation to levels at or below ambient levels.	2) Monitor construction activities to verify that the measures are implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA	Periodically during project construction
Public Services			
Measure 5.D.9-3: The design of all pump facilities with a potential to exceed the capacity of existing PG&E systems will be coordinated with PG&E to ensure adequate capacity is available.	1) Submit documentation of consultation with PG&E to the project file to ensure that adequate capacity is available.	PVWMA	Prior to final engineering design

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EXHIBIT E

MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Visual/Aesthetic and Recreational Resources			
Measure 5.D.10-1: Implement **Measure 4.A.10-1a** through **4.A.10-1c**.			
Measure 4.A.10-1a: The PVWMA shall revegetate disturbed natural areas to minimize textural contrasts with the surrounding vegetation using grasses, shrubs and trees typical of the immediately surrounding area.	1) Prepare contract specifications for the construction contractor that require revegetation of disturbed areas.	PVWMA	Prior to requesting construction bids
	2) Inspect construction areas to verify that disturbed natural areas are revegetated following construction. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA or PVWMA's consulting biologist	Following project construction
Measure 4.A.10-1b: The PVWMA shall use design elements to enhance visual integration of the proposed above-ground facilities with their surroundings. Proposed facilities shall be painted low-glare earth-tone colors that blend with the surrounding terrain.	1) Review project plans to ensure that they include design elements such as low-glare earth-tone paint to visually integrated the proposed facilities with their surroundings.	PVWMA	Prior to final engineering design
Measure 4.A.10-1c: The PVWMA shall ensure that its contractors restore disturbed areas along the pipeline alignment to their pre-project condition such that short-term construction disturbance does not result in long-term visual impacts.	1) Prepare contract specifications for the construction contractor that require revegetation of disturbed areas along the pipeline alignment.	PVWMA	Prior to requesting construction bids
	2) Inspect construction areas to verify that disturbed natural areas are revegetated following construction. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA	Following project construction

MITIGATION MEASURE	MONITORING AND REPORTING ACTIONS	MONITORING / REPORTING RESPONSIBILITY	MONITORING / REPORTING SCHEDULE
Mitigation Measure 5.D.10-2 (Recommended): Implement **Measure 4.A.10-2.**			
Mitigation Measure 4.A.10-2 (Recommended): The PVWMA shall ensure that all exterior lighting if used is directed downward and oriented to insure that no light source is directly visible from neighboring residential areas. If necessary, landscaping shall be provided around proposed facilities. This vegetation shall be selected, placed, and maintained to minimize off-site light and glare onto surrounding areas. In addition, highly reflective building materials and/or finishes shall not be used in the designs for proposed structures.	1) Prepare contract specifications for the construction contractor that include exterior lighting mitigation listed in **Measure 4.A.10-2.** 2) Monitor construction activities to verify that the measures are implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	PVWMA PVWMA	Prior to requesting construction bids During and following construction

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EXHIBIT E

SANTA CRUZ COUNTY AGRICULTURAL POLICY ADVISORY COMMISSION REGULAR MEETING

MINUTES – September 15,2005

Members Present	Staff Present	Others Present
Bruce Dau	Joan Van der Hoeven	Zack Dahl
Sam Earnshaw	Lisa LeCoump	Charlie McNiesh
Ken Kimes	Nell Sulborski	Bob Geyer
	Glenda Hill	Ron Tyler
	Randall Adams	Mary Bannister
	Frank Barron	

1. The meeting was called to order by Bruce Dau at 1:35 p.m.

2. (a) Approval of August 18,2005 Minutes

M/S/P to approve the minutes of August 18,2005

(b) Additions/Corrections to Agenda

None

3. Review of APAC correspondence:

- Letter from the State of California, Office of Historic Preservation to the County of Santa Cruz, Board of Supervisors informing them that the Redman House had been placed on the National Register of Historic Places.

4. Commissioner's Presentations:

None

5. Oral Communications:

None

CONSENT AGENDA:

Notice of Pending Action pursuant to County Code Section 16.50.095(g).

6. Proposal to divide a 24.69-acre parcel into three parcels. Requires a Minor Land Division and an Agricultural Setback Determination; a Lot Line Adjustment to transfer approximately 0.14 acres from APN 099-111-06 to APN's 099-081-07 & -12 (which will be combined into one parcel with the transferred area); a Residential Development Permit for the creation of a less than 40-foot right-of-way to serve the existing residence on the proposed Parcel A; a Geologic Report Review; and a Soils Report Review. Property located on the east side of Soquel/San Jose Road about 650 feet south of Hoover Road in the Summit Planning Area at 5378 Soquel/San Jose Road in Soquel.
Application: #04-0232
APN's: 099-081-07, -12 and 099-111-01, 06
Applicant: Stephen Graves & Associates
Owner: Sloan Ranch LLC
Project Planner: Randall Adams, phone 454-3218

This item was continued from the August 18,2005 meeting.

Joan Van der Hoeven gave the staff report. Randall Adams, project planner for this project, described the changes to the project from the previous meeting. A revised plan has been submitted which limits the building envelope and will provide a 66-foot buffer from the adjacent agricultural property.

The Commissioners discussed the revised proposal and the need for a vegetative barrier.

A proposal was made that a vegetative barrier be required from the north property line, along the right-of-way, to half way through the building envelope between the building envelope and the right-of-way.

M/S/P to accept consent agenda with this proposal.

REGULAR AGENDA:

7. Proposal to amend General Plan/Local Coastal Program and Zoning Ordinance (Chapter 13.10 of County Code) to make tertiary-level wastewater treatment facilities, located adjacent to existing municipal wastewater treatment plants and to be used solely for the production of supplemental agricultural irrigation water, an allowed use on agriculturally-zoned land, subject to specific criteria. County Code Chapter 13.10 is a Coastal Implementing Ordinance.
Application: #05-0145
APN's: County-wide
Applicant: County of Santa Cruz
Project Planner: Frank Barron, phone 454-2530

Commissioner Dau asked if there were any provisions that would prevent other water that is currently used for agriculture from being taken for other uses once the water from this project is available. Charlie McNiesh, General Manager, Pajaro Valley Water Management Agency, explained that the agency only provides water for agriculture, so they would not be providing water for other uses once the increased water from the project was available. He also described the water usage discussions taking place between various agencies, and the long term water usage planning.

M/S/P to accept the staffs recommendation to approve the project.

8. Proposal to expand the City of Watsonville's wastewater treatment plant to accommodate a tertiary-level treatment Recycled Water Facility, which is to be used solely for the provision of supplemental agricultural irrigation water in coastal portions of Pajaro Valley. Project requires:

(a) Lot line adjustments on four parcels resulting in a net transfer of 34.41 acres from the lands of Tom Mine & Sons to the City of Watsonville (i.e., to unincorporated land owned by the City), as follows: 15.61 acres transferred from APN 052-571-01 (Mine & Sons) to APN 052-571-08 (Watsonville Treatment Plant site), 14.51 acres transferred from APN 052-571-09 (Mine & Sons) to APN 052-571-08 (Watsonville Treatment Plant site), and 16.47 acres of APN 052-581-12 (Watsonville) transferred from City of Watsonville ownership to Mine & Sons ownership with the remaining 4.29 acres of APN 052-581-12 (Watsonville) being transferred to APN 052-571-08 (Watsonville Treatment Plant site); resulting in four newly configured parcels: APN 052-571-08 (Watsonville Treatment

Plant site) increasing to 56.65 acres and belonging to the City of Watsonville (i.e., a single parcel that would now be partially within and partially outside the City limits), and APNs 052-581-12 decreasing to 16.47 acres, 052-571-09 decreasing to 14.48 acres, and 052-571-01 decreasing to 84.5 acres, all three belonging to Tom Mine & Sons; and

(b) A Coastal Development Permit for the construction of the proposed Recycled Water Facility to be located immediately east of and adjacent *to* the existing Watsonville Wastewater Treatment Plant at 401 Panabaker Lane, to include the following structures: two equalization storage tanks, two flocculating clarifiers, two filters, ultraviolet disinfection facilities, a distribution pump station, two clearwell storage tanks, a chemical storage facility and additional chemical storage and feed, an electrical building, an operations center facility with operations, maintenance, laboratory and locker wings, a sludge drying bed, a new access road parallel of Panabaker Road and parking lot to allow truck delivery and public access to the wastewater facility, a main gate, flood protection levee, public access trail to the Pajaro River, anoxic denitrification and aeration nitrification basins sized to maintain the existing secondary treatment capacity of 12 million gallons/day, a recirculation pump station, microfiltration/reverse osmosis and desalination facilities, desalination electrical control building, and an odor control facility on site with the existing Watsonville Wastewater Treatment Plant.
Application: #05-0145
APN's: 052-571-01, 052-571-08, 052-571-09, & 052-581-12.
Applicant: City of Watsonville
Owners: APN's 052-571-01, 052-571-09 Torn I. Mine & Sons
APN's 052-571-08 & 052-581-12 City of Watsonville
Project Planner: Joan Van der Hoeven, phone 454-5174

Joan Van der Hoeven gave the staff report. Staff is recommending approval of the project.

The Commissioners discussed their concerns about the number of visitors and the parking, and asked about the possibility of a vegetative barrier or fencing. They had questions about the reason that the lab and support facilities were located on the site and about what steps would be taken to limit the conflicts between the public visitors and the adjacent farmland.

Bob Geyer, Assistant Director of Public Works and Utilities, City of Watsonville, answered questions that the Commissioners had concerning the project.

Ron Tyler, former Farm Advisor, was asked for his opinion on the project, and commented that one should consider the greater good and the overall gain with the project.

M/S/P to approve staffs recommendation.

There being no further business, the meeting was adjourned at 2:37 p.m.

Respectfully submitted,

David W. Moeller by Mary Lou Nicoletti

David W. Moeller, Executive Secretary

DWM:11

Staff Report to the Agricultural Policy Advisory Commission

Application Number: 05-0145

Applicant: City of Watsonville, Steve Palmisano
Owners: Tom Mine & Sons, City of Watsonville
APN's: 052-571-01,-08,-09; 052-581-12

Date: September 15,2005
Agenda Item #: 8
Time: 1:30 p.m.

Project Description: Proposal to modify the City of Watsonville's wastewater treatment plant to accommodate a tertiary-level treatment Recycled Water Facility, which is to be used solely for the provision of 4,000 acre feet of treated wastewater for supplemental agricultural irrigation in coastal portions of Pajaro Valley. Project requires:

A Lot Line Adjustment on four parcels resulting in a net transfer of 34.31 acres from the lands of Tom Mine & Sons to the City of Watsonville (i.e., to unincorporated land owned by the City). This is the subject of the Commission's review; and

A Coastal Development Permit for the construction of the proposed Recycled Water Facility and appurtenant facilities to be located immediately east of and adjacent to the existing Watsonville Wastewater Treatment Plant.

Location: Located at the end of Panabaker Lane, off West Beach Road, at 401 Panabaker Lane in Watsonville.

Permits Required: Agricultural Viability Determination, Lot Line Adjustment, Coastal Development Permit.

Exhibits

A.	Lot Line Adjustment Plan
B.	Findings
C.	Conditions
D.	Assessor's parcel map, Location map
E.	Zoning map, General Plan map
F.	Comments & Correspondence
G.	Project Description by City of Watsonville
H.	Agricultural Viability Report by Ron Tyler dated December 2004
I.	Technical Memorandum, Watsonville Recycled Water Facility, RMC Matt Van Horn dated August 19,2005
J.	PVWMA Revised Basin Management Plan Projects EIR Addendum #3, RMC, August 2005

EXHIBIT F

Parcel Information

Parcel Size:	Various – see Exhibit **A**
Existing Land Use - Parcel:	City wastewater treatment plant, commercial agriculture
Existing Land Use - Surrounding:	Commercial Agriculture
Project Access:	West Beach Road
Planning Area:	San Andreas
Land Use Designation:	AG (Agriculture)
Zone District:	CA (Commercial Agriculture)
Supervisorial District:	Second (District Supervisor: Pirie)
Within Coastal Zone:	X Inside __ Outside
Appealable to Calif. Coastal Comm.	X *Yes* __ No

Environmental Information

Geologic Hazards:	Mapped/portions in floodway/floodplain
Soils:	Clear Lake clay, Fluvaquentic Haploxerolls-Aquic Xerofluvents
Fire Hazard:	Not a mapped constraint
Slopes:	0-15 percent
Env. Sen. Habitat:	Not mapped/no physical evidence on site
Grading:	No grading proposed
Tree Removal:	No trees proposed to be removed
Scenic:	Mapped resource, landscaping/neutral colors required
Drainage:	Existing drainage adequate
Traffic:	No significant impact
Roads:	Existing roads adequate
Parks:	Existing park facilities adequate
Archaeology:	Not mappedlno physical evidence on site

Services Information

Inside Urban/Rural Services Line:	__ Yes X No
Water Supply:	City of Watsonville
Sewage Disposal:	City of Watsonville
Fire District:	Pajaro Valley Fire Protection District
Drainage District:	Zone 7 Flood Control/Water Conservation District

Analysis and Discussion

The proposed project by the City of Watsonville is to construct a Recycled Water Facility to supply approximately 4,000 acre-feet of recycled water per year to local farmers for crop irrigation and potentially reduce groundwater pumping and reduce seawater intrusion.

The proposed project is located at 401 Panabaker Lane, south of West Beach Road in Watsonville. The subject properties may be characterized by relatively flat topography, engaged in commercial

agricultural operation and an existing City wastewater facility immediately adjacent to the Pajaro River to the south. Assessor's Parcel Numbers 052-571-01,052-571-09 and 052-581-12 are actively farmed and carry an Agriculture (A) General Plan designation and the implementing zoning is (CA) Commercial Agriculture. The parcels are further classified as Type 3, Viable Agricultural land within the coastal zone, APN 052-571-08 is the site of the existing wastewater treatment plant within the jurisdiction of the City of Watsonville.

The proposed lot line adjustment (see Lot Line Adjustment Plan, Exhibit A) will transfer approximately 34.41 acres from the lands of Tom Mine & Sons to the City of Watsonville as follows: 15.61 acres transferred from APN 052-571-01 (Mine & Sons) to APN 052-571-08 (Watsonville Treatment Plant site), 14.51 acres transferred from APN 052-571-09 (Mine & Sons) to APN 052-571-08 (Watsonville Treatment Plant site), and 16.47 acres of APN 052-581-12 (Watsonville) transferred from City of Watsonville ownership to Mine & Sons ownership with the remaining 4.29 acres of APN 052-581-12 (Watsonville) being transferred to APN 052-571-08 (Watsonville Treatment Plant site); resulting in four newly configured parcels: APN 052-571-08 (Watsonville Treatment Plant site) increasing to 56.65 acres and belonging to the City of Watsonville (i.e., a single parcel that would now be partially within and partially outside the City limits), and APN's 052-581-12 decreasing to 16.47 acres, 052-571-09 decreasing to 14.48 acres, and 052-571-01 decreasing to 84.5 acres, all three belonging to Tom Mine & Sons.

The three agricultural parcels will be reconfigured so that APN 052-571-01, belonging to Mine? removes 15.61 acres of land immediately adjacent to the Pajaro River and levee. This portion of the land is not intensively farmed due to riparian setbacks and a change in grade at the levee and would become an area for a sludge drying bed with the levee reconfigured. The final parcel acreage would be 84.5 acres and would continue in commercial agricultural production for the Mines.

APN 052-571-09, belonging to Mine, would be reduced from 28.99 acres of farmland in an irregular configuration of two parcels joined by a narrow connecting sliver of land, to 14.48 acres. The 14.51 acre portion of this parcel adjacent to the Pajaro River and the existing wastewater treatment plant, is proposed to be transferred to the City of Watsonville and 3s proposed would be developed with a roadway parallel to (east of) Panabaker Lane, an array of water treatment and storage facilities (see Exhibit A), and non-process buildings including an operations building and laboratory of approximately 18,000 square feet, a 52-space parking lot and public river access trails.

APN 052-581-12, belonging to the City of Watsonville, would be reduced from 20.76 acres to 16.47 acres. The 4.29-acre portion would be combined with the existing wastewater treatment plant site for some of the new water treatment facilities. The 16.47 acre portion would transfer to Mine, and would be combined with the adjacent to the existing Mine farm at APN 052-571-09, consolidating commercial crop production in that the parcels are immediately adjacent to each other and both share Beach Road frontage, whereas a significant portion of the existing parcel adjacent to the Pajaro River was not used for production because of the levee and riparian areas. The transfer of this property from the City of Watsonville to Mine shall not increase the development potential on the agricultural properties as there is no change proposed in existing agricultural zoning or General Plan designation of this combined parcel.

No new building sites will be created on lands outside of the City of Watsonville as a result of this application. There are four parcels currently and there will be three parcels as a result of this permit.

EXHIBIT

No new parcels will be created. The proposed transfers accommodate expansion of the existing City of Watsonville Wastewater Treatment Plant, and consolidate Mine fanning operations into a more regular configuration of adjacent/contiguous parcels set back from the immediate levee area of the Pajaro River.

Agricultural Viability Considerations

Of the total 34.41 acres of land proposed to be transferred from Mine to the City of Watsonville, approximately 10 acres is cultivated cropland. An agricultural viability report was prepared for the lot line adjustment application as per General Plan Policy 5.13.21 (Exhibit H). The econoinic analysis based on strawberry and head lettuce data, determined that the ten acres of cropland would yield a net return of $11,535 per year which would be economically viable as a part of the larger Mine fanning operation, but taken independently, would not constitute a viable economic unit.

In summary the report prepared by Ronald H. Tyler, University of California Agricultural Extension Service, Farm Advisor, Emeritus, concluded that the proposed project would provide 4,000 acre feet of treated water to help offset salt water intrusion in an area that generates over $600 million in gross agricultural income. Professor Tyler concludes that there are no conflicts between the current wastewater treatment plant and adjacent agricultural operations and that the additional facility will serve agriculture.

Zoning and General Plan/LCP Consistency

The proposed lot line adjustment on the Commercial Agricultural (CA) parcels is consistent with zoning in that the use will remain commercial agriculture on all parcels. Zoning Ordinance Amendments to County Code Sections 13.10.312 and 13.10.635 are being processed concurrently with this application to allow the recycled water facility adjacent to the existing municipal wastewater treatment plant as a permitted use and that the use be conditioned so as not to create conflicts with surrounding agricultural uses: that the recycled water be used only for agricultural irrigation, and that any development be of a minimal footprint on prime agricultural land.

Environmental Review

An Addendum #3 to the Pajaro Valley Water Management Agency Basin Management Plan EIR was certified by the PVWMA Board of Directors on September 6, 2005 (Exhibit J). The addendum analyzes the change in the recycled water facility site plan and an increase in the land needed for the proposed expansion of facilities froin approximately 8 to 14 acres. The additional land is needed to accominodate the full range of facilities and appurtenant structures planned. Construction of the original import pipeline has been delayed and blending of the recycled wastewater resource with higher quality water is required to reduce high levels of total dissolved solids. In addition, a second access road parallel to Panabaker Lane, an 18,000 square foot operations building and laboratory, a 52-space car parking lot and public access trails are included in the project and the sludge drying beds have been located to the west of the existing facility.

Consti-uction of the proposed wastewater recycling facility would result in the conversion of approximately 14 acres of Type 3 prime coastal farmland from agricultural use to water treatment and storage facilities, thereby precluding farming on the site. The original EIR concluded that

EXHIBIT F

because all surrounding lands are considered to be Prime Fannland, no feasible alternative site is available that would reduce or avoid the conversion of Pnme Farmland. Conversion of the existing farmland to a part of the wastewater treatment facility would therefore contribute to the cumulative loss of farmland in the region, This would be considered to be a significant and unavoidable impact. **A** statement of overriding considerations was adopted by the PVWMA for the impact identified in the EIR. The mitigation measure identified in the final Environmental Impact Report states:

"*Measure 4.A.1-2: In order to compensate for the loss of prime agricultural land, PVWMA will cause up to 8.5 acres of prime agricultural land that is no longer farmed to be restored or otherwise brought back into production. This can be accomplished through contribution to a fund dedicated to the restoration of agricultural land. If this measure can be successfully implemented then this impact could be mitigated to a less than significant level. However, the feasibility of this measure has not been ascertained. Therefore this impact is considered significant and unavoidable.*"

This mitigation measure would remain in effect and would be implemented by PVWMA as feasible to reduce this impact if possible (Exhibit J).

Recommendation

Staff RECOMMENDS that the Commission:

- Accept and file the Agricultural Viability Report; and
- Recommend **APPROVAL** of the proposed Lot Line Adjustment, and forward your review and recommendations to the Planning Commission for consideration with the required Coastal Development Permit.

Supplementary reports and **information referred *to*** in **this** report **are** on file and available for **viewing at** the Santa Cruz County **Planning Department,** and are **hereby made a** part of **the administrative record for** the proposed **project.**

The County Code and General Plan, as **well** as **hearing** agendas and additional information **are available online at:** www.co.santa-cruz.ca.us

Report Prepared By: Joan Van der Hoeven, AICP
Santa Cruz County Planning Department
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Santa Cruz CA 95060
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Report Reviewed By: _____
Mark Deming, AICP
Assistant Planning Director
Planning Department
County of Santa Cruz

EXHIBIT F

Required Findings for Development on Land Zoned Commercial Agriculture or Agricultural Preserve
County Code Section 13.10.314(A)

1. The establishment or maintenance of this use will enhance or support the continued operation of coinmercial agriculture on the parcel and will not reduce, restrict or adversely affect agricultural resources, or the economic viability of commercial agricultural operations, of the area.

The establishment of an expansion to the existing City of Watsonville Wastewater Treatment Plant to incorporate a recycled water element which would add approximately 4,000 acre-feet of water per year to be used for agricultural irrigation purposes, will enhance and support continued operation of commercial agriculture in the vicinity and will not adversely affect agncultural resources. The economic viability of commercial agricultural operations of the area shall be enhanced in that the supplemental water supplies will aid in the prevention of further sea water intrusion into the Pajaro River basin caused by excessive pumping of groundwater for crop irrigation.

2. The use or structure is ancillary, incidental or accessory to the principal agricultural use of the parcel or no other agricultural use of the parcel is feasible for the parcel; or

Subject to concurrent approval of recommended Zoning Ordinance and General Plan/LCP Amendments, the recycled wastewater facility would be a permitted use on CA land only adjacent to the existing municipal wastewater treatment plant. Provision of additional water for crop irrigation purposes is clearly ancillary to the continued agricultural use of the adjacent CA zoned parcels.

3. The use consists of an interim public use which does not impair long-term agricultural viability; and

The recycled wastewater plant constitutes a public use in that it treats municipal effluent, and with dilution, this recycled water is utilized for commercial agricultural irrigation. This reduces the flow of effluent into Monterey Bay. The proposed use enhances long-term agricultural viability in that it provides an additional 4,000 acre-feet of water to farmers, that does not have to be pumped from the aquifer, thereby decreasing the potential for sea water intrusion into the Pajaro River basin.

4. Single family residential uses will be sited to minimize conflicts, and that all other uses will not conflict with commercial agricultural activities on site, where applicable, or in the area.

Not applicable.

5. The use will be sited to remove no land froin production (or potential production) if any non-farmable potential building site is available, or if this is not possible, to remove as little land as possible from production.

EXHIBIT B

PC EXHIBIT F

The proposed lot line adjustment removes approximately 34.41 acres fiom production to be transferred to the City of Watsonville Municipal Wastewater Treatment Plant site, APN 052-571-08. The Environmental Impact Report prepared for the proposal cites a statement of overriding considerations, which seeks to mitigate for the loss of prime agricultural lands by restoring up to 8.5 acres of other prime agricultural land to production. Proposal of a duplicate road parallel to Panabaker Lane, a public trail system, a 52-car space and 5 bus space parking lot, and an 18,000 square foot operations building and water quality lab, in addition to the required infrastructure to support the recycled water component of the municipal plant, may not support the concept of removing as little land as possible from agricultural production.

EXHIBIT B

PC EXHIBIT F

Lot Line Adjustment Findings

1. The lot line adjustment will not result in a greater number of parcels than originally existed.

This finding can be made, in that there were four parcels prior to the adjustment and there will be three parcels subsequent to the adjustment.

2. The lot line adjustment conforms with the county zoning ordinance (including, without limitation, County Code section 13.10.673), and the county building ordinance (including, without limitation, County Code section 12.01.070).

This finding can be made, in that no additional building sites will be created by the transfer, as all parcels are currently developed. APN's 052-571-01, 052-571-09 and 052-581-12 will continue in commercial agricultural operation. APN 052-571-08 is the site of the existing City of Watsonville municipal wastewater treatment plant and is proposed to be expanded to incorporate a recycled water treatment facility which would provide water for agricultural imgation purposes only. The agricultural parcels have a General Plan designation of 'Agriculture' and the wastewater plant has a 'Public Facility' designation. None of the parcels are zoned 'TP' or have a designated Timber Resource as shown on the General Plan maps. An Agricultural Viability determination has been prepared for the project (Exhibit H), which concludes that the ten acres of cropland to be removed from production would not constitute a viable economic unit. The project complies with the General Plan designation of the parcels (A - Agriculture) per 13.10.673(e) in that APN 052-571-01 at 84.5 acres remains above the minimum 20-acre parcel size for coinrnercial agricultural lands in tlie coastal zone. APN's 052-571-09 and 052-581-12 are 14.48 and 16.47 acres respectively and shall be required to be combined in order to satisfy minimum acreage requirements established by General Plan 5.13.

3. No affected parcel may be reduced or further reduced below the minimum parcel size required by the zoning designation, absent tlie grant of a variance pursuant to County Code section 13.10.230.

This finding can be made, in that none of the parcels included in the proposal will be reduced below the minimum parcel size required by the zone district as a result of this lot line adjustment. APN 052-571-01 at 84.5 acres remains above the minimum 20-acre parcel size for commercial agricultural lands in the coastal zone. APN's 052-571-09 and 052-581-12 are 14.48 and 16.47 acres respectively and shall be combined into one parcel to be consistent with the minimum 20 acres required for Type 3 Commercial Agricultural land in the Coastal Zone.

EXHIBIT B

PC EXHIBIT F

Conditions of Approval

I. No parcel map is required. File deed(s) of conveyance (which must result in parcel configurations that match the approved Exhibit "A" for this permit) with the County Recorder to exercise this approval. Parcels or portions of parcels to be combined must be in identical ownership,

11. The deed(s) of conveyance must contain the following statement after the description of the property(ies) or portion(s) of property to be transferred:

A. "The purpose of the deed is to adjust the boundaries between Assessor's Parcel Number 052-571-01 and Assessor's Parcel Numbers 052-571-08, 051-571-09, and 052-581-12 as approved by the County of Santa Cruz under Application 05-0145. APN's 052-571-09 and 052-581-12 shall be combined into one parcel. This conveyance may not create a separate parcel: and is null and void unless the boundary is adjusted as stated."

III. Return a conformed copy of the deed(s) to the Planning Department.

IV. If a map is also to be recorded with the County Surveyor's office (which is not required to implement this approval), you must include a copy of these Conditions of Approval to the County Surveyor with the map to be recorded.

V. In the event that future County inspections of the subject property disclose noncompliance with any Conditions of this approval or any violation of the County Code, the owner shall pay to the County the full cost of such County inspections, including any follow-up inspections and/or necessary enforcement actions, up to and including permit revocation.

In accordance with Chapter 18.10 of the County Code, minor variations to this permit which do not affect the overall concept, intensity, or density may be approved by the Planning Director at the request of the applicant or staff,

Note: This permit expires two years from the effective date unless you record your deed prior to that time.

Approval Date: 9-15-05

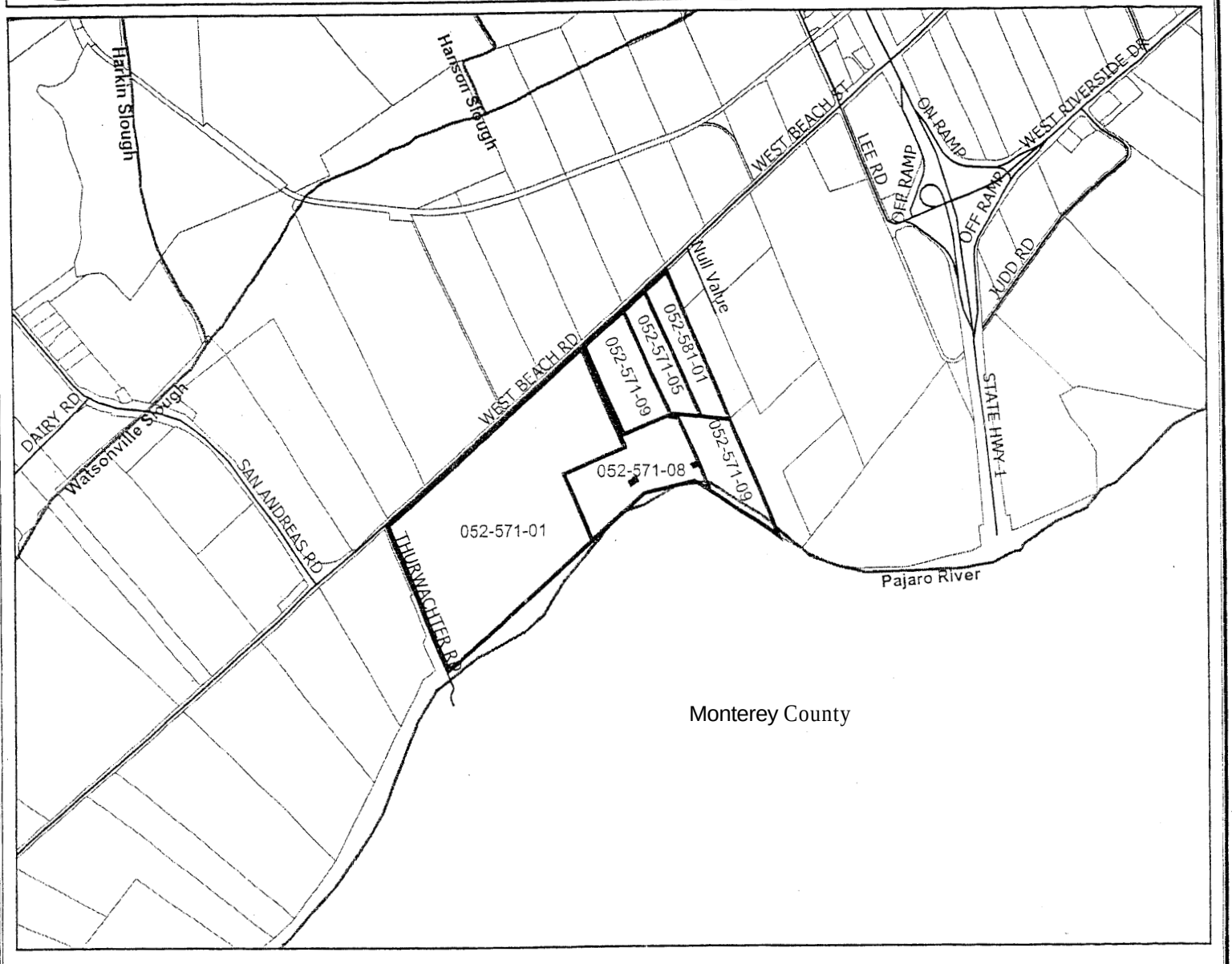
Effective Date: 9-29-05

Expiration date: 9-29-07

Appeals: Any property owner, or other person aggrieved, or any other person whose interests are adversely affected by any act or determination of the Agricultural Policy Advisory Commission under the provisions of County Code Chapter 16.50, may appeal the act or determination to the Board of Supervisors in accordance with chapter 18.10 of the Santa Cruz County Code.

EXHIBIT C
PC EXHIBIT F

Location Map



5,500 2,750 0 5,500 Feet

Legend

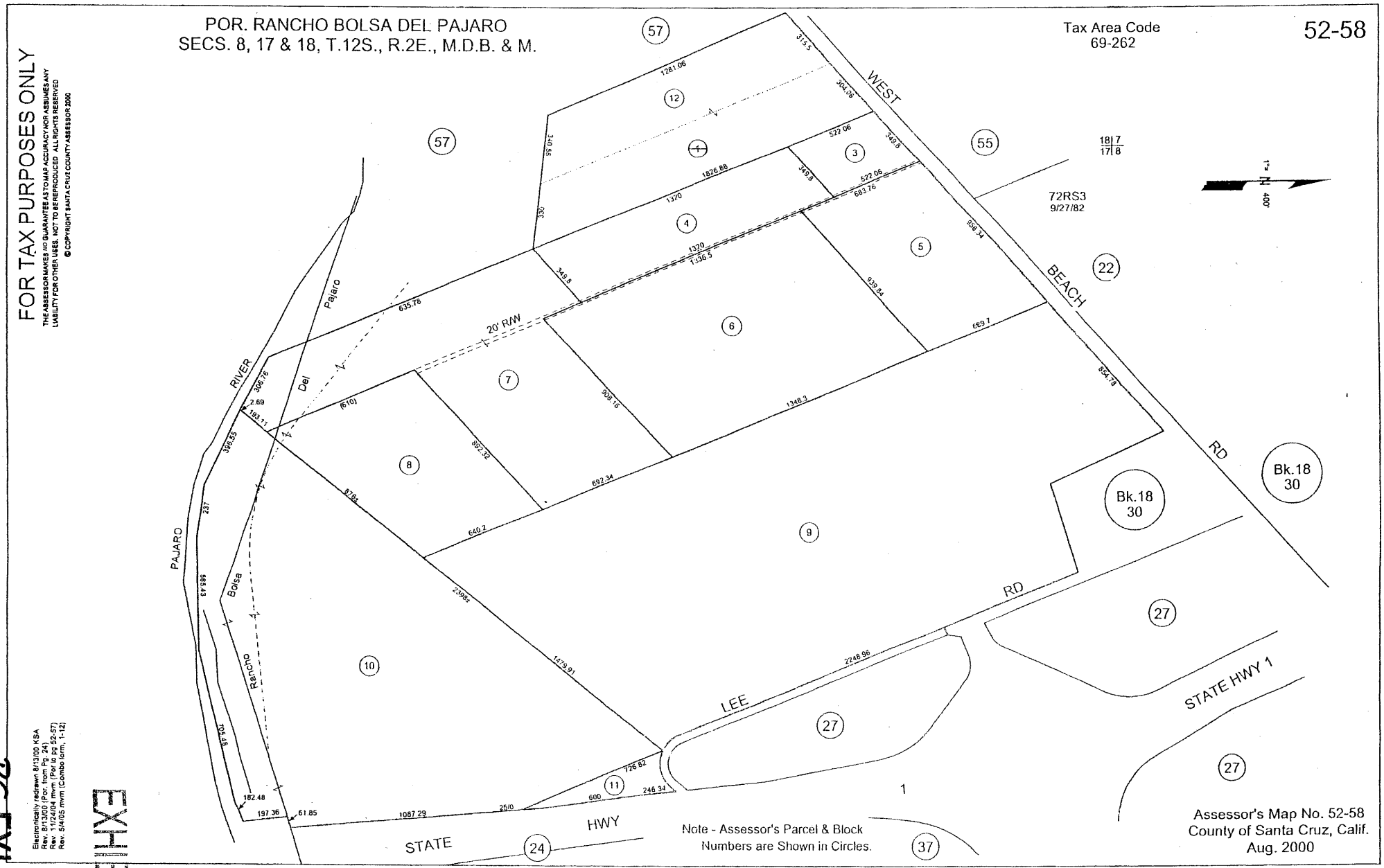
- Subject Parcels
- Streets
- Assessors Parcels
- PERENNIAL STREAM

N
W E
S

Map Created by
County of Santa Cruz
Planning Department
March 2005

EXHIBIT D

EXHIBIT F



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PC EXHIBIT F

EXHIBIT D

FOR TAX PURPOSES ONLY

THE ASSESSOR MAKES NO GUARANTEE AS TO MAP ACCURACY NOR ASSUMES ANY LIABILITY FOR OTHER USES. NOT TO BE REPRODUCED. ALL RIGHTS RESERVED.

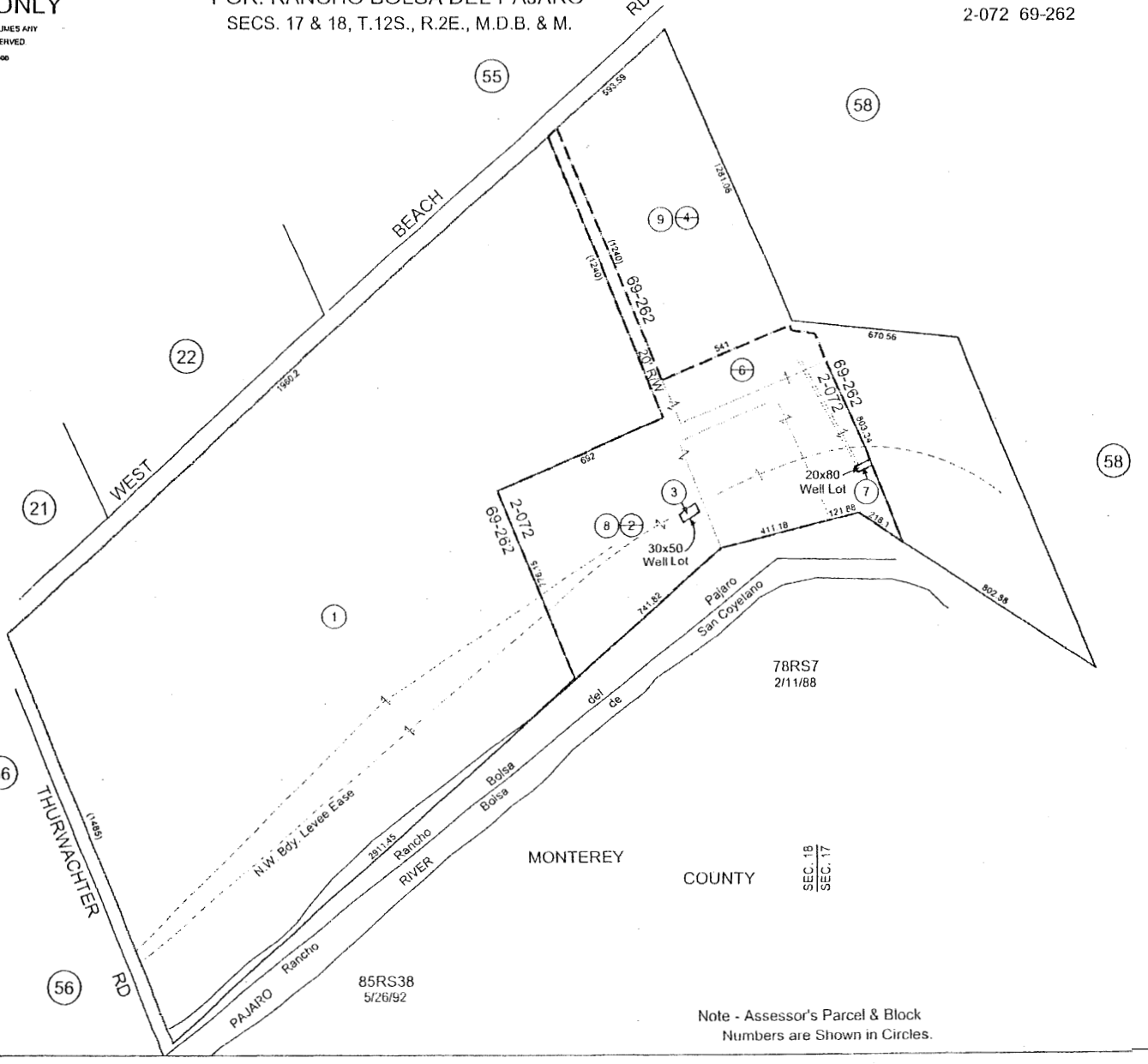
POR. RANCHO BOLSA DEL PAJARO

SECS. 17 & 18, T.12S., R.2E., M.D.B. & M.

Tax Area Code
2-072 69-262

52-57

1" = 400'



Note - Assessor's Parcel & Block Numbers are Shown in Circles.

Assessor's Map No. 52-57
County of Santa Cruz, Calif.
Aug. 2000

Electronically redrawn 8/13/00 KSA
Rev. 4/13/00 KSA (Por. from Pg. 23)
Rev. 11/24/04 mvm (Por. from Pg. 52-58)
Rev. 11/24/04 mvm (223/599, Corrs. 1-08 & 09)
Rev. 5/4/05 mvm (Por. to pg 52-58)

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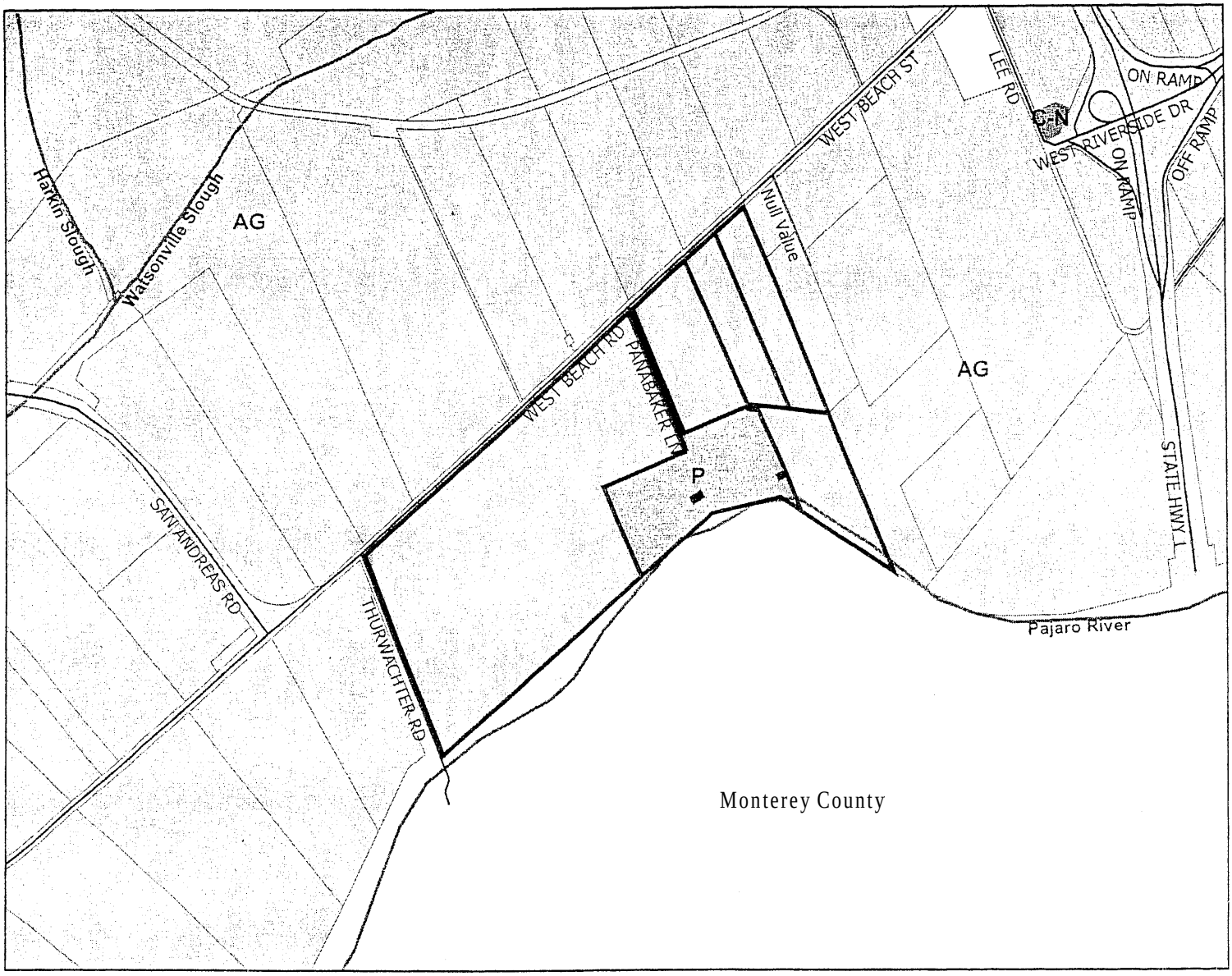
PC EXHIBIT F

EXHIBIT [illegible]

General Plan Designation Map



4,200 2,100 0 4,200 Feet

Legend

- Subject Parcels
- Assessors Parcels
- Streets
- PERENNIAL STREAM
- Agriculture (AG)
- Commercial-Neighborhood (C-N)
- Public Facilites (P)

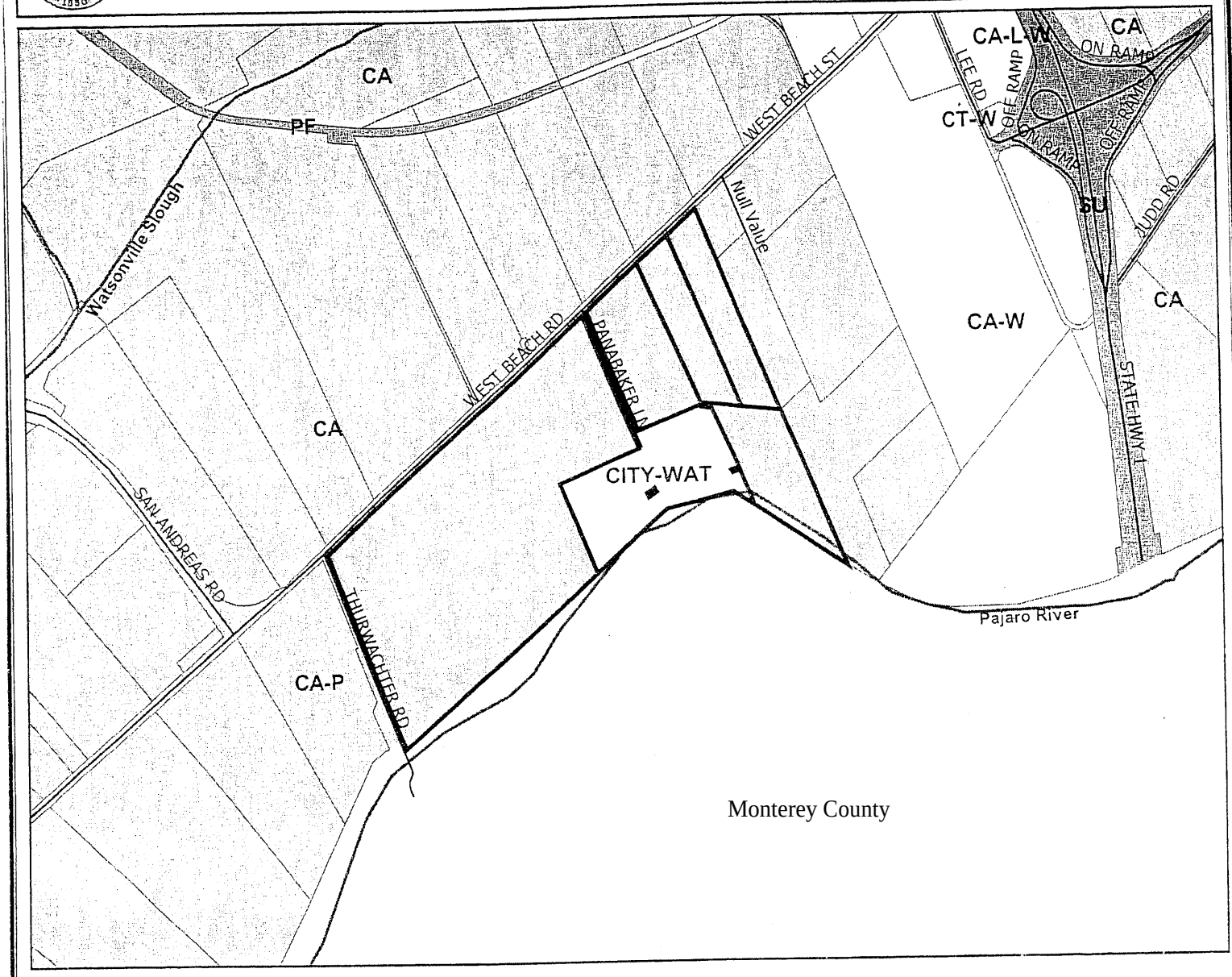
N
W E
S

Map Created by
County of Santa Cruz
Planning Department
March 2005

EXHIBIT E

PC EXHIBIT F

Zoning Map



4,200 2,100 0 4,200 Feet

Legend

- Subject Parcels
- Streets
- Assessors Parcels
- PERENNIAL STREAM
- AGRICULTURE COMMERCIAL (CA)
- PUBLIC FACILITY (PF)
- SPECIAL USE (SU)
- CITY PROPERTY

N
W E
S

Map Created by
County of Santa Cruz
Planning Department
March 2005

EXHIBIT E

PC EXHIBIT F

Comments on Application 05-0145
Lot Line Adjustment at Wastewater Treatment Plant
401 Panabaker Lane, Watsonville

Thank you for routing this proposal to me. Currently, the 22.24-acre treatment plant is within the city limits of Watsonville. State law allows islands of municipally-owned and municipally-used land to be annexed to the city, and for existing islands to be expanded for municipal uses only. Any annexations are subject to the discretionary review of LAFCO.

The proposal would result in 34.41 acres being added to the treatment plant site. These acres include farmland, levee, and riparian area along the Pajaro River. The lot line adjustment does not automatically change the city limits. An annexation process through LAFCO would have to occur in order for the expanded treatment plant site to be wholly within the city limits.

Also, the "high school" memorandum of understanding among the City, County, and Coastal Commission will require amendment in order to the annexation to occur. The City, County, Coastal Commission, and LAFCO should continue to discuss the conditioning of the various steps in the proposed process to allow for a logical sequence of reviews, including the 34-acre annexation review at LAFCO.

Since LAFCO is a responsible agency under CEQA, I would be happy to respond to any lead agency's request for consultation in the preparation of environmental documents.

5/12/05

Patrick McCormick
Executive Officer
Santa Cruz Local Agency Formation Commission
454-2055
pat@santacruzlafco.org

EXHIBIT F
PC EXHIBIT F

COUNTY OF **SAMTA** CRUZ

INTER-OFFICE CORRESPONDENCE

DATE: May 5,2005

TO: Joan Van Der Hoeven, Planning Department

FROM: Carl Rom, Department of Public Works

SUBJECT: APPLICATION 05-0145, APN 052-571-01,-08,-09 AND 052-581-12,LOT LINE ADJUSTMENT

Since my March 29, 2005 memo regarding this project, the City of Watsonville has asked the Assessor's office to combine its two adjoining parcels into one. This will result in the application being reduced to four parcels, eliminating the conflict with the Subdivision Map Act. That will eliminate any concerns that the County Surveyor has with this application.

If you have any questions or need any clarification of the information in this memo, please call me at extension 2806.

CDR:cdr

EXHIBIT F

PC EXHIBIT F

COUNTY OF SANTA CRUZ
DISCRETIONARY APPLICATION COMMENTS

Project Planner: Joan Van Der Hoeven
Application No.: 05-0145
APN: 052-571-01

Date: September 6, 2005
Time: [redacted]
Page: 1

Environmental Planning Completeness Comments

LATEST COMMENTS HAVE NOT YET BEEN SENT TO PLANNER FOR THIS AGENCY

========== REVIEW ON APRIL 4, 2005 BY ROBERT S LOVELAND ==========

NOTES TO PLANNER:

1. The following parcels border riparian resources as identified on the County GIS system: 052-571-01, 052-571-08 and 052-571-09.

2. All parcels associated with this application are mapped within the 100-year floodplain.

3. The following parcel is mapped completely within the floodway: 052-571-01

Environmental Planning Miscellaneous Comments

LATEST COMMENTS HAVE NOT YET BEEN SENT TO PLANNER FOR THIS AGENCY

========== REVIEW ON APRIL 4, 2005 BY ROBERT S LOVELAND ==========
NO COMMENT

Project **Review Completeness** Comments

LATEST COMMENTS HAVE NOT YET BEEN SENT TO PLANNER FOR THIS AGENCY

========== REVIEW ON APRIL 8, 2005 BY JOAN VAN DER HOEVEN ==========
Lot line adjustment cannot exceed an exchange between more than four parcels. With revision please submit a concise table showing APN transfers to and from specific parcels i.e. before and after proposal.

Project **Review Miscellaneous** Comments

LATEST COMMENTS HAVE NOT YET BEEN SENT TO PLANNER FOR THIS AGENCY

========== REVIEW ON APRIL 8, 2005 BY JOAN VAN DER HOEVEN ==========
NO COMMENT

Environmental Health **Completeness Comments**

LATEST COMMENTS HAVE NOT YET BEEN SENT TO PLANNER FOR THIS AGENCY

========== REVIEW ON APRIL 13, 2005 BY JIM G SAFRANEK ========== Applicant's proposal may require a septic system permit application to address the history of sewage disposal issues noted on septic pumper's reports. Contact Ruben Sanchez for consultation at 454-2751, 8-9:30 am.

========== UPDATED ON APRIL 13, 2005 BY JIM G SAFRANEK ==========
========== UPDATED ON MAY 11, 2005 BY JIM G SAFRANEK ==========

EXHIBIT F

PC EXHIBIT F

NO COMMENT

Environmental Health Miscellaneous Comments

LATEST COMMENTS HAVE NOT YET BEEN SENT TO PLANNER FOR THIS AGENCY

---------- REVIEW ON APRIL 13, 2005 BY JIM G SAFRANEK ==========
NO COMMENT
---------- UPDATED ON APRIL 13, 2005 BY JIM G SAFRANEK ==========
NO COMMENT
---------- UPDATED ON MAY 11, 2005 BY JIM G SAFRANEK ==========
NO COMMENT

EXHIBIT F
PC EXHIBIT

Project Description

The City of Watsonville owns and operates a wastewater treatment plant located at 401 Panabaker Road. in Watsonville. The plant is situated off of Beach Road, adjacent to the Pajaro River. The plant currently treats approximately 7 million gallons per day or 8,000 acre feet per year of wastewater to secondary standards which is then discharged to the ocean. The City plans to construct needed improvements to the wastewater treatment plant to achieve tertiary levels of treatment. Approximately 4,000 acre feet per year of highly treated effluent will then be delivered to the Pajaro Valley Water Management Agency for distribution to coastal farmers in order to reduce over pumping of the groundwater basin and reduce seawater intrusion.

In order to construct the needed improvements it is necessary for the City to acquire additional land adjacent to the current wastewater treatment plant (APN 052-571-08). The City has purchased two parcels APN's 052-571-05 and 052-581-01 (20.96 acres). A portion of these parcels (4.29 acres) *is* to be combined with APN 052-577-09 (28.29 acres). A portion of this revised parcel (14.48 acres) will then be combined with 052-571-08 (22.24 acres). In addition (1.61 acres) of APN 052-571-01 is to be combined with APN 052-571-08. Approximately 3 acres of this merger is for the water recycling plant and the remainder (12.61 acres) is to be used for public access along the Pajaro River. After the lotline adjustments are completed the City will then trade the remainder of APN's 052-571-05 and 052-581-01 for that portion of parcel APN 052-571-09 that was merged with APN 052-571-08.

The net result is to add approximately 10 acres of land to the actual plant site for constructing the water recycling facilities. In addition, approximately 20 acres of land along the Pajaro River will be used for public access.

After the lotline adjustments are completed, the City will then submit an application to LAFCO *for* annexing the portions of APN 052-571-08 that are outside the city limits of Watsonville. Upon completion of the annexation, the City will then process a local coastal plan amendment placing all of APN 052-571-08 within the City's local coastal plan. The City will then acquire the required permits for the construction of the water recycling plant and Pajaro River public access projects. It is anticipated that the water recycling project will be completed *and* supplying water to farmers during the 2007 irrigation season.

EXHIBIT G
PC EXHIBIT F

AGRICULTURAL VIABILITY REPORT

Annexation of Agricultural Lands for the

City of Watsonville Wastewater Treatment Plant Expansion

Recycle Water Facility

Prepared by Ronald H. Tyler

University of California Agricultural Extension Service
Farm Advisor, Emeritus

December 2004

EXHIBIT H
PC EXHIBIT F

SUMMARY

The land the City of Watsonville proposes to annex consists of 34.38 acres, of which approximately 10 acres is cultivated cropland. The soil type on the cultivated ten acres is capable of producing a variety of crops.

The cropping system with the greatest net return is a rotation of strawberries and head lettuce. This can produce a net return of $11,535 per year for the ten acres.

The cultivated land is part of a larger farming operation and is economically viable for agricultural production. However, the ten acres alone are not an economically viable agricultural entity.

The project will provide 4000 acre feet of treated water to help offset salt water intrusion in an area that generates over $600,000,000 in gross agricultural income. There are no conflicts between the current facility and the adjoining agricultural production. The additional facility will serve agriculture.

EXHIBIT H
PC EXHIBIT E

PURPOSE OF PROJECT

To provide 4000 Acre Feet of tertiary treated water for crop irrigation in the Pajaro Valley.

LOCATION

The sewer plant is located in middle of the Pajaro valley next to the Pajaro River and is bordered by agricultural land on three sides. There is currently no conflict between the facility and agricultural use of the adjoining land.

THE LAND

The annexation of 34.41 acres is proposed for the construction of a recycle water facility to provide water for irrigation to help reduce salt water intrusion in the Pajaro Valley.

Parcels to be annexed

A	13.38 Acres	APN 052-571-01
B	2.10	APN 052-571-01
C	0.13	APN 052-571-01
D	14.51	APN 052-581-04
E	0.91	APN 052-581-05
F	3.38	APN 052-581-01

Of the 34.41 Acres, 13.38 acres in Parcel A and approximately 9.51 acres of Parcel D are levee and river bottom. The remaining parcels will be removed from agricultural production for a total of approximately 11.54 Acres. A portion of this is currently roadway and will be used to access the facility. Approximately 10 acres will be removed from cultivation of agricultural crops.

The agricultural soil is mapped as Fluvaquentic Haploxerolls-Aquic Zerofluvents complex, 0 to 15 % slopes. These are deep, moderately well drained soils formed in alluvium. The capability unit is III and the Storie index varies from 30 to 69. The soils are used for various vegetable crops and strawberries.

EXHIBIT H
PC EXHIBIT F

ECONOMIC ANALYSIS

The following analysis is based on data from the Santa Cruz County Agricultural Commissioner Reports and University of California Cooperative Extension Cost Studies for Monterey and Santa Cruz Counties.

Land costs have been excluded as per the Santa Cruz County LCP policy 5.13.21 Determining Agricultural Viability.

Strawberries and head lettuce, two of the main crops grown in the vicinity have been selected for this analysis. They fit a crop rotation scheme for a two year cycle of one crop of lettuce and one crop of strawberries.

The average gross returns per acre for strawberries for the last five years was $31,006, and the cash costs per acre are $29,646, giving a net return per acre of $1,360. The average gross returns per acre for head lettuce for the last five years was $6,490, and the cash costs per acre are $5543, giving a net return of $947.

The net return per acre for these two crops is $2307 for the two year cycle or $1153.50 per year.

Ten acres of crop land yield a net return of $11,535 per year. These parcels are currently part of a larger farming operation and, as such, are economically viable. However, taken independently, the ten acres are not an economically viable unit.

EXHIBIT H

PC EXHIBIT F

GROSS REVENUE PER ACRE for VARIOUS CROPS in SANTA CRUZ COUNTY

		1999	2000	2001	*2002*	2003
Strawberries	Acres	4430	4580	3906	3586	3201
	Value $/A	31578	27624	27859	29952	38019
Head Lettuce	Acres	*3634*	3069	**3222**	2158	*2548*
	Value $/A	3833	9775	*7690*	6840	4313
Leaf Lettuce	Acres	1456	1956	1787	1479	1952
	Value $/A	3655	***5964***	*5560*	10116	4672
Cauliflower	Acres	698	512	685	*296*	413
	Value $/A	287	642	552	*767*	379
Other Vegetables	Acres	2750	2542	2080	2973	2900
	Value $/A	3720	4818	4776	5000	5000
Raspberries	Acres	457%	1711	1627	1514	2074
	Value $/A	a8745	25964	27604	25837	51455
Apples	Acres	3182	2977	2975	2756	2800
	Value $/A	4547	2931	4218	3323	3832

Source: Santa Cruz Agricultural Commissioners Reports.

EXHIBIT H
PC EXHIBIT F

Technical Memorandum

Watsonville Recycled Water Facility

Subject: Site Elements Description

Prepared For: Steve Palmisano, Bob Geyer (City of Watsonville)

Prepared by: Matt Van Horne (RMC)

Reviewed by: Marc Nakamoto, 'Dennis Gellerman, Lidia Gutierrez (RMC)

Date: August 19, 2005

Reference: 039-003

Overview of the Recycled Water Facility

PVWMA is the regional agency in charge of ensuring long term supply of water for the Pajaro Valley Region. The valley has been experiencing seawater intrusion in some of the aquifers near the coast, due to overdraft in the basin. In order to help preserve water supply for all the interests in the valley, including agricultural, PVWMA developed the BMP to identify a variety of projects to augment the area's water supply and reduce impacts of seawater intrusion caused by over pumping the aquifers. One of the initial projects identified in the plan is the joint development of the Recycled Water Facility (RWF) with the City of Watsonville, which will allow the City's wastewater treatment plant to treat a portion of the effluent at a tertiary level, This process will supply approximately 4,000 acre-feet of recycled water per year to local farmers for crop imgation, which will allow a reduction in the existing groundwater pumping in the areas affected by seawater intrusion. The project does not increase capacity of the plant, but will reduce discharge to the Monterey Bay National Marine Sanctuary. The environmental impacts of the project were evaluated under CEQA in an Environmental Impact Report (EIR) (PVWMA 2002) and under NEPA in an Environmental Impact Statement (EIS) (US Bureau of Reclamation 2003).

The Watsonville Area Water Recycling Project (WAWRP) is a joint project by the City of Watsonville (City) and the Pajaro Valley Water Management Agency (PVWMA) to deliver a reliable, water supply to agricultural users in the coastal zone of the Pajaro Valley. The project was selected to develop a sustainable and reliable water supply to offset the over-pumping of the groundwater basin and to minimize the future demand from imported supplies. The recycled water will be used for agricultural imgation in the coastal zone, where typical crops include strawberries, row-crop vegetables and other edible food crops.. Strawberries and some of the other crops grown in the area are sensitive to the salinity in the water used for irrigation. The City and PVWMA, in coordination with area growers and landowners, developed a project water quality objective. The objective is to deliver a reliable water supply with a total dissolved solids (TDS) concentration of approximately 500 mg/L.

The recycled water will have an estimated TDS concentration of 800 – 900 mg/L and, therefore, requires either blending with a water supply of higher quality or additional treatment to achieve the water quality objective. The project was Originally planned and designed to provide a blend supply to achieve the dilution necessary, The blend supply would be a combination of imported supplies and water from

PC EXHIBIT F
EXHIBIT

supplemental groundwater wells. However, due to financial and legal constraints, construction of the import pipeline has been delayed. If the pipeline is never constructed, it would have a significant impact on the overall quality of the delivered water as the pipeline water is necessary to provide dilution for the higher level salinity in the recycled water. If the low salinity import supply is not developed, an alternative means of mitigation for the salinity levels in the recycled water will be required. It is recommended that the RWF be designed and constructed to accommodate desalination (microfiltratiodreverse osmosis) to the treatment process to reduce the salinity in the recycled water io an acceptable quality, if necessary in the future.

Also, without an import supply to help meet demands in the valley, the use of the recycled water supply would have to be maximized. This could be accomplished through groundwater recharge of the recycled water during the non-irrigation season. This would require additional treatment to remove the nitrates prior to groundwater recharge. It is recommended that the RWF be designed and constructed to accommodate nitrification and denitrification facilities to the treatment process, if necessary in the future.

The RWF project is intended to supplement water supply for the agriculture industry, which has been identified by all the parties as important to preserve.

Site Elements Description

The following is a description of the various components of the Recycled Water facility, as shown on the attached site plan.

Existing Effluent Pump Station

The Existing Effluent Pump Station is to be used as a diversion point to convey secondary effluent from the existing Wastewater Treatment Facility (WWTF) to the tertiary treatment process at the Recycled Water Facility (RWF). This is an existing structure that will have two new pumps added to it in space previously allocated for future expansion.

Phase 1 Equalization **Storage** Tank

An existing unused sludge digester tank, located near the Effluent Pump Station will be used for flow equalization on the influent to the RWF. Flow equalization stores raw water when the WWTF flow exceeds the capacity of the RWF, and returns that water when the WWTF flows are less than the RWF capacity. Flow equalization allows for the minimization of treatment process sizing by providing a means to mitigate the peak flows into the RWF. It also helps to provide more constant output from the RWF by releasing the peak influent flows during low influent flow periods thereby maintaining a higher minimum flow through the RWF. The size of the existing tank to be used for RW does not allow for full equalization, and results in variations in the RWF plant flows.

Phase 2 Equalization Storage Tank

This tank would serve the same purpose as the Equalization Tank but would increase the volume of recycled water produced and reducing the variation in RWF flows.

Phase 1 Flocculating Clarifiers

The flocculating clarifiers provide solids removal from the secondary effluent. The technologies under consideration use a ballasted system in conjunction with chemical coagulation and flocculation to bind

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EXHIBIT

Phase I only

small suspended solid particles together, fonning a large enough mass to allow the solids to settle out and be removed. These units produce a product water stream that is sent to the filters and a sludge stream that is returned to the existing WWTF solids processing units for digestion, dewatering, drying and ultimate disposal. The flocculating clarifiers are sized to produce treated water at a flow rate of 7.9 million gallons per day (mgd).

Phase 2 Flocculating Clarifiers

The future flocculating clarifiers will provide for increased recycled water production. The future units would add 50% of the Phase 1 capacity, 3.95 mgd, to the overall process capacity.

Phase 1 Filters

The filters provide additional solids removal and polishing for the treated wastewater. The selected technology utilizes a woven cloth panel to provide a bamsr for the treated water. The filtered particles and the carrier water will be returned to the influent of the flocculating clarifiers for re-treatment while the product water is conveyed to the disinfection facilities. The filters are sized to produce treated water at a flow rate of 7.7 mgd.

Phase 2 Filters

The future filters will provide additional recycled water production.

Phase 7 UV Disinfection

The disinfection facilities provide bacterial and viral inactivation to provide a water supply that will meet the public health criteria. Ultraviolet (UV) lamps have been chosen as the preferred disinfection technology. The lamps operate by producing light at a wavelength that has been proven to provide maximum inactivation of harmful virus or bacteria initially present in the treated wastewater. The disinfection facilities will be constructed with two channels for lamp installation, one of whch will be populated in the project to provide up to 7.7 mgd of disinfection. The second channel would be populated in the future to increase the disinfection capacity of the facility.

Phase I Distribution Pump Station

The distribution pump station will serve to convey the disinfected tertiary recycled water from the RWF to the distribution system. A series of four pumps, with capabilities for two additional pumps, pressurize the water to allow for use throughout the distribution system. In addition, two smaller pumps, with expansion capability for one additional pump, provide recycled water for in-plant uses such as sludge processing, process wash-down, and on-site irrigation. The capacity of the distribution pumps is 13.5 mgd, expandable to 16.9 mgd, while the in-plant use pumps can initially provide 1.3 mgd of flow, expandable to 1.95 mgd in the future. The distribution pump station is also sized to provide approximately 0.3 million gallons of storage for the fully treated water.

Phase I Clearwell Storage Tank

The clearwell storage tank is sized to hold 0.5 million gallons of treated water. Clearwell storage allows the RWF to continue production during periods of the day when recycled demands are low. As currently sized, the RW users will need to adhere to demand schedule which requires considerable cooperation among the many growers.

Phase 2 Clearwell Storage Tank

The future clearwell storage tank would 'provide more recycled water production, and allow for more variation in RW demand and allow the growers to have water on a less restrictive schedule.

PC EXHIBIT F
EXHIBIT 11

Phase 1 Chemical Facility

Tertiary treatment using the selected processes requires several chemicals, mostly to enhance the solids removal through the flocculating clarifier process. The chemical facility includes storage and feed facilities for a coagulant, a coagulant aid, a polymer and sodium hypochlorite. The sodium hypochlorite is used for occasional process maintenance and cleaning.

Phase 1 Electrical Building

A set of transformers, motor control centers and electrical panels will be located in a central electrical building. This building is designed to serve the both current and future facilities. This building will also serve as a junction point for the control wiring prior to it being sent to the Operations Center Facility for monitoring.

Phase 1 Operations Center Facility

The Operations Center Facility will contain an operation and maintenance wing, a laboratory wing and a locker wing. The facility will house the City of Watsonville WWTF/RWF staff, the Pajaro Valley Water Management Agency (PVWMA) distribution system staff. The laboratory will be state certified for analysis of wastewater and recycled water quality parameters.

Phase 1 Sludge Drying Bed

The sludge drying bed is planned to handle the increase in sludge production as a result of the flocculating clarifier process.

Existing WWTF Access Road

Panabaker Road is the existing access to the WWTF.

RWF Access Road

The new RWF will have only limited access from Panabaker Road. The new access road for the RWF will allow delivery truck, staff, and public access to the RWF site.

Main Gate

The main gate on the RWF access road will be open during normal business hours to allow public access to the operations center parking area and the Pajaro River Levee Trail. There is an additional gate to the treatment area that will be operated by intercom or access card to prevent unauthorized access.

Levees

For flood protection, a system of levees will be built around the RWF site. The height of the levees is based on a flood study, The sludge drying bed will be surrounded by levees matching the height of the levees surrounding the existing WWTF.

Public Access Levee Trail

To provide public access to the Pajaro River, a trail will be constructed from the southern end of the parking area. This trail will include a lookout platform near the river and interpretative signage along the way.

Phase 2 Anoxic Basins (Denitrification)

This process would be needed to use recycled water for groundwater recharge. The anoxic denitrification basins utilize specific bacteria and non-aerated conditions to convert nitrate into nitrogen gas. The basins have been sized to maintain the existing secondary treatment capacity of 12 mgd.

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Existing Aeration Basins (Carbonaceous)

These basins are currently used to provide solids contact for the wastewater after primary sedimentation and trickling filter treatment. The solids contact allows bacteria in the wastewater to further remove the biological oxygen demand from the wastewater prior to discharge. These basins would provide approximately half of tlie aeration basin volume needed for nitrification of the secondary effluent. Nitrification converts ammonia in the wastewater into nitrates that can be removed via denitrification.

Phase 2 Aeration Basins (Nitrification)

To provide sufficient nitrification volume the existing aeration basin volume would need to be doubled to treat 12 mgd of wastewater. These basins provide the second half of that required volume.

Phase 2 Recirculation Pump Station

The recirculation pump station is used to recycle water from the effluent of the aeration (nitrification) basins to the influent of the denitrification basins where the nitrate produced in the nitrification process can be converted to nitrogen gas. This pump station would be sized to recirculate a flow of several times the influent flow of the plant, providing a long solids retention time resulting in enhanced treatment.

Phase 2 Microfiltration/Reverse Osmosis/Desalination Facilities

This process would need to be added if the high TDS of the RW could not be blended with low TDS imported water. Unlike the nutrient removal facilities, which are designed to be inserted into the middle of the treatment process train to handle the entire projected flow, the desalination facilities are an additional treatment module that would be added to the end of the treatment train. Also, since the purpose of these facilities would be to reduce, not necessarily eliminate, the TDS in the recycled water, they would likely only be sized to treat a portion of tlie flow based on the desired salinity goal. The current TDS concentration range is 800 - 900 mg/L. Reducing this concentration by half, to 400 - 450 mg/L, would make the water significantly more desirable for use by growers in the service area. To achieve this reduction, a microfiltration/reverse osmosis facility with a capacity of 4.0 mgd would be required.

The microfiltration facility serves to remove larger particles from the recycled water and to protect the reverse osmosis membranes from fluctuations in influent turbidity. The reverse osmosis membranes utilize high pressure pumps to overcome to osmotic pressure between the salts and the water which allows the pure water to be pushed across a semi-permeable membrane while the salts are prevented from entering the product water.

Phase 2 Additional Chemical Storage and Feed

The desalination process requires several chemicals for maintenance and cleaning of the units. These additional chemicals are planned to be stored adjacent to the Phase 1 chemical facility, so that delivery trucks have a single destination within the RWF.

Phase 2 Desalination Electrical and Control Building

Due to the amount of equipment to be installed and the large number of control signals that need to be monitored an additional electrical/control building would be needed for the desalination facilities.

Phase 2 Odor Control Facility

This facility would allow for a higher level of odor removal from the existing WWTF.

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MEMORANDUM

DATE:	September 6, 2005
MEETING OF:	August 17,2005
TO:	Board of Directors
FROM:	General Manager
RE:	**ACTION** ITEM 5A: Consider approval of Resolution 2005-19, Adopting Addendum No. 3 to Revised Basin Management Plan Final EIR

BACKGROUND

The PVWMA Board of Directors certified a Final Environmental Impact Report (Final EIR) on the Revised Management Plan in February 2002. Addenda No. 1 and No. 2 to the Final EIR were approved by the Board in August 2003 and May 2005, respectively At its August 17 meeting, the Board will consider approving Addendurn No. 3 to this Final EIR.

Addendum No. 3 describes a change in the Recycled Water Facility site plan and the increase in land needed for the new site plan. Resolution 2005-18 summarizes why an addendum to the Final EIR is the appropriate CEQA action for these changes.

FISCAL IMPACT

No financial impact of this CEQA action.

STAFF RECOMMENDATION

Approve Resolution 2005-19, adopting Addendum No. 3 to the Revised Basin Management Plan Final EIR.

ATTACHMENTS

- Resolution 2005-19
- Revised Basin Management Plan Final EIR Addendum No. 3

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Resolution 2005-19

A Resolution of the Board of Directors of the
Pajaro Valley Water Management Agency

A Resolution Of The Board Of Directors Of The Pajaro Valley Water Management Agency Approving Addendum No. 3 To The Final Environmental Impact Report For The PVWMA Revised Basin Management Plan Projects

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The Board of Directors of the Pajaro Valley Water Management Agency does resolve as follows:

WHEREAS, in 2002 the Pajaro Valley Water Management Agency (PVWMA) Board of Directors certified a Final Environmental Impact Report (FEIR) for the PVWMA Revised Basin Management Plan Projects ("Project") (State Clearinghouse #2000062030); and

WHEREAS, an Addendum to the FER was completed in August, 2003 ("First Addendum"}; and

WHEREAS, an Addendum to the FER was completed in May, 2005 ("Second Addendum"); and

WHEREAS, the FEIR, First Addendum, and Second Addendum described and evaluated four alternatives that included combinations of key elements for addressing the problem of basin overdraft and identified a Recommended Alternative that included the following Projects: (1) Coastal Distribution System; (2) conservation measures; (3) Harkins Slough Project; (4) Import Water Project with out-of-basin banking; (5) Recycled Water Project; and (6) Watershed Management Programs. Chapters 1 and 2 of the FER describe the purpose of and need for the projects, project background, and the construction and operating characteristics of these projects; arid

WHEREAS, P W M A is proposing some modifications to the Project based on engineering and design efforts subsequent to EIR certification and the adoption of First Addendum and Second Addendum; and

WHEREAS, the proposed modifications are described in the PVWMA REVISED BASIN MANAGEMENT PLAN PROJECTS EIR ADDENDUM #3 ("Third Addendum'') dated August, 2005 attached hereto and incorporated herein by reference; and

WHEREAS, PVWMA, as Lead Agency for the Project, has evaluated the potential environmental impacts of these modifications in comparison with impacts analyzed in the FEIR, First Addendum, and Second Addendum as set forth in Section 3 of the Third Addendum; and

WHEREAS, CEQA Guidelines (Sections 15162-15164) require preparation of an addendum to a previously certified EIR if some changes or additions to the environmental evaluation of a project are necessary but none of the following occurs:

1. There are no substantial changes in the project which require major revisions to the EIR or a substantial increase in the seventy of previously identified significant effects;

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2. There are no substantial changes with respect to the circumstances under which the project is undertaken which require major revisions to the EIR; or

3. No new information of substantial importance, which could not have been known with the exercise of reasonable diligence at the time of EIR certification, shows any of the following:

   i. the project will have one or more significant effects not discussed in the EIR;

   ii. the project will result in impacts substantially more adverse than those disclosed in the EIR;

   iii. mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponent declines to adopt it, or

   iv. mitigation measures or alternatives that are considerably different from those analyzed in the EIR would substantially reduce one or more significant effects on the environment, but the project proponent declines to adopt it; and

WHEREAS, as set forth in Section 4 of the Third Addendum: the Agency has carefully analyzed the proposed changes to the Project and, based on said analysis, concluded that they do not trigger any of the conditions described above;

NOW, THEREFORE, BE IT **RESOLVED**, by the Pajaro Valley Water Management Agency Board of Directors as follows:

SECTION 1. As the decision- making body and Lead Agency for the Project, the Board of Directors has reviewed and considered the information contained in the Third Addendum and supporting documentation. The Board of Directors finds that the Third Addendum contains a complete and accurate reporting of the environmental impacts associated with the proposed modifications to the Project. The Board of Directors further finds that the Addendum has been completed in compliance with CEQA and the State CEQA Guidelines. The Board of Directors finds that the Addendum reflects the independent judgment of the Board of Directors.

SECTION 2. Findings on Environmental Impacts. Based on the Addendum and all related information presented to the Board of Directors, the Board of Directors finds that the preparation of a subsequent or supplemental EIR is not required for the minor inodifications to the Project described in the Addendum because such modifications:

(1) do not constitute substantid changes to the Project that will require major revisions of the FEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

(2) do not constitute substantial changes with respect to the circuinstances under which the Project is undertaken that will require major revisions of the FER due to the involvement of new significant environmental effects or a substantial increase in the seventy of the previously identified significant effects; and

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(3) do not contain new information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the FEIR was certified, that shows any of the following:

(a) The Proposed Project will have one or more significant effects not discussed in the FEIR and First and Second Addenda;

(b) Significant effects previously examined will be substantially more severe than shown in the FEIR and First and Second Addenda;

(c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the lead agency declined to adopt such measures; or

(d) Mitigation measures or alternatives considerably different from those analyzed in the FEIR and First and Second Addenda would substantially reduce one or more significant effects on the environment, but which lead agency declined to adopt.

SECTION 3. Approval of Third Addendum. The Board of Directors hereby approves the Third Addendum.

SECTION 4. Custodian of Records. The documents and materials that constitute the record of proceedings on which these findings are based are located at the PVWMA office located at 36 Brennan Street, Watsonville, California 95076.

SECTION 5. Execution of Resolution. The President of the Board of Directors shall sign this Resolution and the Secretary of the Board of Directors shall certify this Resolution was duly and properly adopted by the Board.

PASSED AND ADOPTED by the Pajaro Valley Water Management Agency, County of Santa Cruz, State of California, the 17th day of August: 2005, by the following vote:

AYES: Directors:

NOES: Directors:

ABSENT: Directors:

ABSTAIN: Directors:

_____

Frank Capurro, Chair

Attest:

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_____

Linda Contreras, Secretary

PVWMA REVISED BASIN MANAGEMENT PLAN PROJECTS EIR ADDENDUM #3

Recycled Water Facility Site Plan Revisions

Prepared for:
Pajaro Valley Water Management Agency

August 2005

Prepared by:

RMC Water and Environment

2001 N. Main Street, Suite 400, Walnut Creek, CA 94596, (925) 627-4100
2290 N. First Street, Suite 212, San Jose, CA 95131, (408) 943-1501
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SECTION 1
BACKGROUND AND PURPOSE OF THIS ADDENDUM

1.1 BACKGROUND

Pajaro Valley Water Management Agency (PVWMA) was the lead agency in developing the PVWMA Revised Basin Management Plan (Revised BMP) Final Environmental Impact Report (FEIR)(State Clearinghouse # 2000062030). PVWMA published the FEIR in January 2002, and the PVWMA Board of Directors subsequently certified it as complete and adequate under the California Environmental Quality Act (CEQA). Addendums to the EIR were completed in August 2003 (Addendum 1) and May 2005 (Addendum 2). This document is an addendum to that EIR (the Revised BMP EIR) and Addendums 1 and 2, which are incorporated by reference. The Findings for the Project and the Mitigation Monitoring and Reporting Program (MMRP), prepared in accordance with CEQA Guidelines Sections 15091 and 15097, are also incorporated by reference. The Findings document identifies impacts resulting from the project, and the MMRP outlines mitigation measures to reduce significant impacts to less-than-significant levels. All potential project-related significant impacts will be mitigated to less-than-significant levels, with the exception of the following significant and unavoidable impacts: loss of prime agricultural land, construction of facilities across active fault traces, generation of criteria air pollutants during construction (PM_{10}), and secondary effects of growth.

The Revised BMP EIR evaluated four alternatives that included combinations of key elements, including development of local surface water projects, water conservation, land retirement, recycled water, supplemental injection/extraction wells, and supplemental surface water supplies. In December 2001, the PVWMA Board of Directors directed preparation of a Final Revised BMP and identified a Reconmended Alternative that included the following projects, as well as a list of potential projects for consideration after 2007:

- Coastal Distribution System
- Conservation (5,000 acre-feet per year [afy])
- Harkins Slough Project (1,100 afy)
- Groundwater Banking with Import Pipeline (13,400 afy)
- Out-of-Basin Storage
- Recycled Water Project (4,000 afy)
- Watershed Management Programs

Chapters 1 and 2 of the Revised BMP EIR describe the purpose of and need for the project, project background, and the construction and operating characteristics of these projects.

PVWMA is proposing some modifications to the Revised BMP Project based on engineering and design efforts subsequent to Revised BMP EIR certification and adoption of Addendum 1 and 2. These

modifications only affect the Recycled Water Project portion of the BMP and include an increase in the land area needed for the RWF from approximately 8 to 14 acres. Section 2 of this document describes these proposed modifications. Section 3 of this document presents an evaluation of the environmental impacts of these design modifications in comparison with impacts analyzed in the Revised BMP EIR, while overall conclusions are presented in Section 4.

1.2 PURPOSE OF THIS ADDENDUM

The CEQA Guidelines (Sections 15162 and 15164) require that a lead agency prepare an addendum to a previously certified EIR if some changes or additions to the environmental evaluation of a project are necessary but none of the following occurs:

1. There are no substantial changes in the project which require major revisions to the EIR or a substantial increase in the severity of previously identified significant effects;

2. There are no substantial changes with respect to the circumstances under which the project is undertaken which require major revisions to the EIR; or

3. No new information of substantial importance, which could not have been known with the exercise of reasonable diligence at the time of EIR certification, shows any of the following:

   (i) the project will have one or more significant effects not discussed in the EIR,

   (ii) the project will result in impacts substantially more adverse than those disclosed in the EIR,

   (iii) mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponent declines to adopt it, or

   (iv) mitigation measures or alternatives that are considerably different from those analyzed in the EIR would substantially reduce one or more significant effects on the environment, but the project proponent declines to adopt it.

This Addendum documents that the changes to the Revised BMP projects do not trigger any of the conditions described above.

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SECTION 2
DESCRIPTION OF PROPOSED CHANGES

PVWMA is the regional agency in charge of ensuring long term supply of water for the Pajaro Valley Region. The valley has been experiencing seawater intrusion in some of the aquifers near the coast, due to overdraft in the basin. In order to help preserve water supply for all the interests in the valley, including agncultural, PVWMA developed the BMP to identify a variety of projects to augment the area's water supply and reduce impacts of seawater intrusion caused by over pumping the aquifers. One of the initial projects identified in the plan is the joint development of the Recycled Water Facility (RWF) with the City of Watsonville, which will allow the City's wastewater treatment plant to treat a portion of the effluent at a tertiary level. This process will supply approximately 4,000 acre-feet of recycled water per year to local farmers for crop irrigation, which will allow a reduction in the existing groundwater pumping in the areas affected by seawater intrusion. The project does not increase capacity of the plant, but will reduce discharge to the Monterey Bay National Marine Sanctuary. The environmental impacts of the project were evaluated under CEQA in an Environmental Impact Report (EIR) (PVWMA 2002) and under NEPA in an Environmental Impact Statement (EIS) (US Bureau of Reclamation 2003).

2.1 OVERVIEW OF THE RECYLED WATER FACILITY

The Watsonville Area Water Recycling Project (WAWRP) is a joint project by the City of Watsonville (City) and the Pajaro Valley Water Management Agency (PVWMA) to deliver a reliable, water supply to agricultural users in the coastal zone of the Pajaro Valley. The project was selected to develop a sustainable and reliable water supply to offset the over-pumping of the groundwater basin and to minimize the future demand from imported supplies. The recycled water will be used for agricultural irrigation in the coastal zone, where typical crops include strawberries, row-crop vegetables and other edible food crops. Strawberries and some of the other crops grown in the area are sensitive to the salinity in the water used for irrigation. The City and PVWMA, in coordination with area growers and landowners, developed a project water quality objective. The objective is to deliver a reliable water supply with a total dissolved solids (TDS) concentration of approximately 500 mg/L.

The recycled water will have an estimated TDS concentration of 800 – 900 mg/L and, therefore, requires either blending with a water supply of higher quality or additional treatment to achieve the water quality objective. The project was originally planned and designed to provide a blend supply to achieve the dilution necessary. The blend supply would be a coinbination of imported supplies and water from supplemental groundwater wells, However, due to financial and legal constraints, construction of the import pipeline has been delayed. If the pipeline is never consti-ucted, it would have a significant impact on the overall quality of the delivered water as the pipeline water is necessary to provide dilution for the higher level salinity in the recycled water. If the low salinity import supply is not developed, an alternative means of mitigation for the salinity levels in the recycled water will be required. It is

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recommended that the RWF be designed and constructed to accommodate desalination (microfiltratiodreverse osmosis) to the treatment process to reduce the salinity in the recycled water to an acceptable quality, if necessary in the future.

Also, without an import supply to help meet demands in the valley, the use of the recycled water supply would have to be maximized. This could be accomplished through groundwater recharge of the recycled water during the non-irrigation season. This would require additional treatment to remote the nitrates prior to groundwater recharge. It is recommended that the RWF be designed and constructed to accommodate nitrification and denitrification facilities to the treatment process, if necessary in the future.

The RWF project is intended to supplement water supply for the agriculture industry, which has been identified by all the parties as important to preserve.

2.2 PROPOSED CHANGES

This addendum analyzes the change in the RWF site plan and the increase in land needed for the RWF from approximately 8 to 14 acres. Figure 1 shows the boundary of the existing WWTP, the eight-acre area analyzed in the BMP EIR, and the new 14-acre area analyzed in this addendum. The RWF site plan providsd in the BMP EIR (as Figure 2-6) is shown on Figure 2 and the new RWF site plan is shown on Figure 3.

As the facility design has moved forward, the site plans have been refined. The additional land is needed to accommodate the potential future nitrate removal facilities and/or desalination facilities. Since the future nitrification and denitrification facilities would be constructed to treat the effluent water from the trickling filters, and would include features that would integrate with the RWF, the RWF site plan has been modified to include space for these facilities within the facility layout. Similarly, the desalination facilities would be an integral component of the treatment process, and therefore accommodations for these facilities in the future, are shown on the new site facility plan.

In addition, an access road to the RWF is included and the sludge drying beds have been relocated.

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Figure 1 WWTP Boundary with **Previously Analyzed and New RWF Boundary**

Figure 2 Previous Recycled Water **Facility** Site **Plan** (analyzed in EIR)

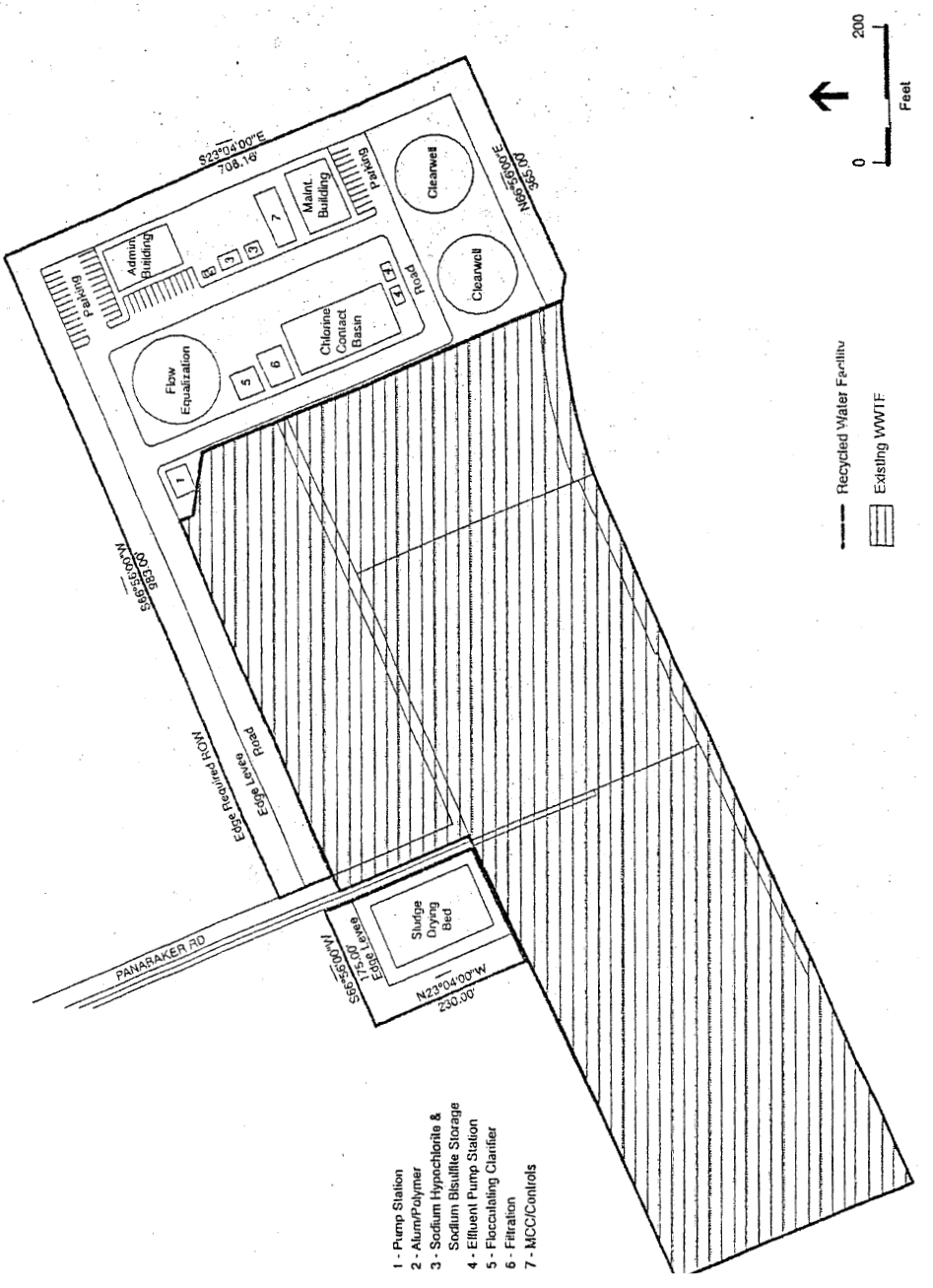

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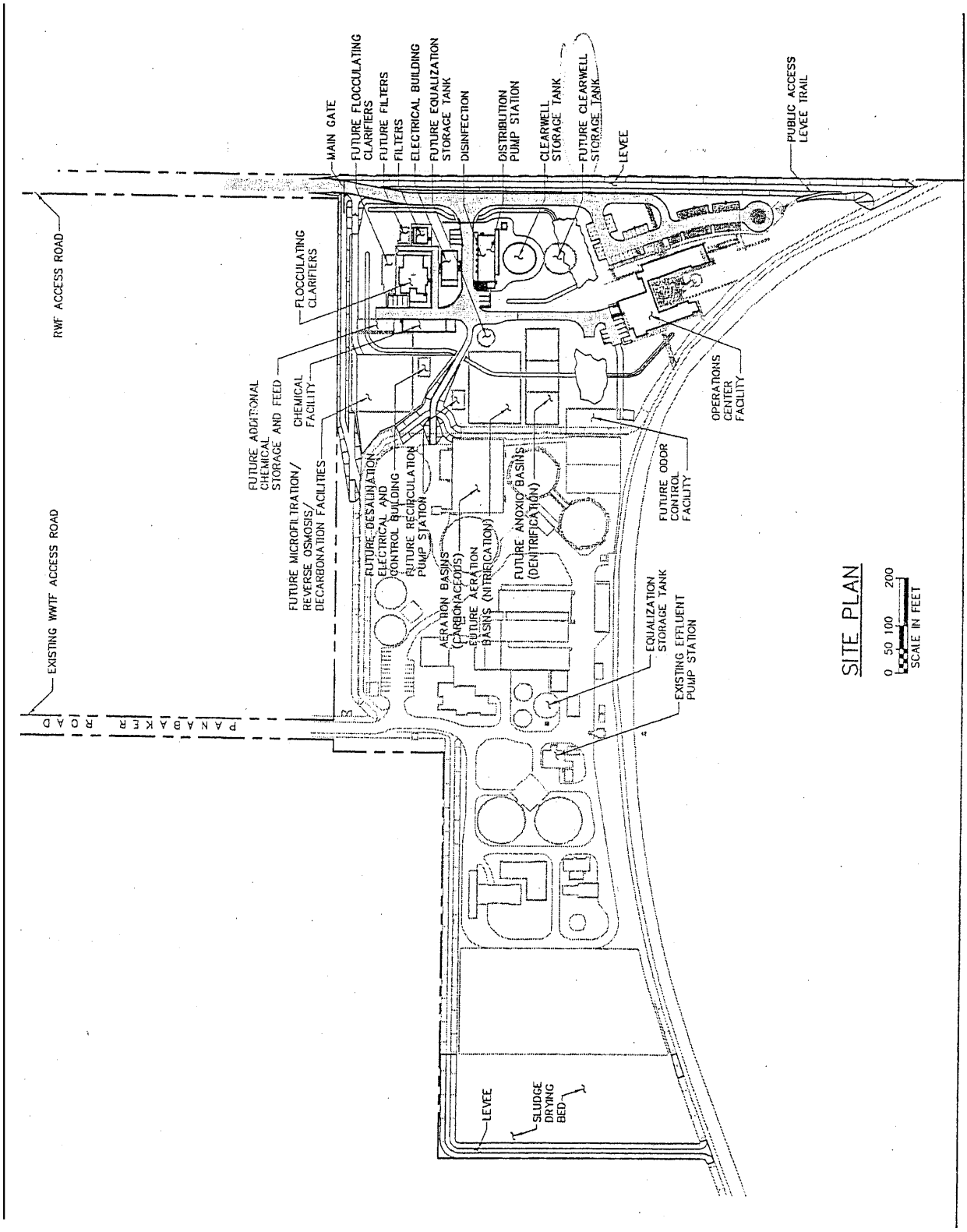
figure 3 New Recycled **Water Facility Site Plan**



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SECTION 3

ANALYSIS OF POTENTIAL ENVIRONMENTAL EFFECTS

The Revised BMP EIR evaluated the following environmental issues: land use and planning (including agricultural resources); geology, soils and seismicity; hydrology and water quality; vegetation, fish and wildlife; cultural resources; traffic and circulation; air quality; noise; public services; and visuallaesthetic and recreational resources. These issues are re-evaluated in this Addendum for the proposed changes to the RWF. This evaluation determines whether, with the changes to the RWF, the Revised BMP Project would result in any new significant impacts or substantially more severe impacts than identified in the Revised BMP EIR. The Draft EIR (Chapter 4) describes the criteria used in determining the significance of environmental impacts.

3.1 LAND USE AND AGRICULTURAL RESOURCES

Land uses in the vicinity consist of the existing Waste Water Treatment Plant (WWTP), planned RWF, and agriculture (primarily fruit and vegetable croplands), and are the same as described and analyzed in the Revised BMP EIR. The lands adjacent to the WWTP are considered Prime Fannland, specifically Type 3 agricultural lands, which are prime agricultural lands located within the Coastal Zone. The proposed site for the Recycled Water Facility is zoned "Commercial Agriculture" (CA).

The WWTF is designated as a Public Facility in the Santa Cruz County General Plan/Local Coastal Program. The Public Facility designation includes schools, fire stations, churches, hospitals, cemeteries, sanitary landfills, and water supply and treatment facilities. The Recycled Water Facility site is designated Agriculture in the Santa Cruz County General Plan/Local Coastal Plan.

Construction of the RWF facilities will involve short-term construction-related impacts at the proposed RWF site, Short-term disturbance to adjacent land uses during construction of the RWF would be similar to that identified under impact 4.A.1-1 (pp. 4.A.1-3) and mitigation measures to reduce these impacts also would apply to this proposed project change. The facilities associated with the proposed RWF would be similar in scale to those previously evaluated in the EIR and therefore would not result in new or more severe impacts on land use than those analyzed in the Revised BMP EIR.

Construction of the proposed RWF would result in the conversion of approximately 14 acres of Prime Farmland from agricultural use to water treatment and storage facilities, thereby precluding fanning on the project site. The BMP EIR analyzed the conversion of a total of 8.5 acres of Prime Fannland (eight acres from the RWF and .5 acres from the supplemental wells area) and concluded that because all surrounding lands are considered Prime F a d a n d , no feasible alternative site is available that would reduce or avoid the conversion of Prime Farmland. Development of the site would therefore contribute to

the cumulative loss of Prime Farmland in the region. This would be considered a significant and unavoidable impact, A statement of overriding considerations was adopted by PVWMA for the impact identified in the EIR. The changes in the RWF site plan would result in the conversion of approximately an additional 6.0 acres of Prime Farmland. The impact would be substantially the same as identified in the EIR.

The mitigation measure identified in the Final EIR (Measure 4.A.1-2 on page 3-4) states:

"Measure 4.A.1-2: In order to compensate for the loss of prime agricultural land, PVWMA will cause up to 8.5 acres of prime agricultural land that is no longer famied to be restored or otherwise brought back into production. This can be acconiplished through contribution to a fund dedicated to the restoration of agricultural land.

If this measure can be successfully implemented then this impact could be mitigated to a less than significant level. However, the feasibility of this measure has not been ascertained. Therefore, this impact is considered significant and unavoidable."

This mitigation measure would remain in effect and would be implemented by PVWMA as feasible to reduce this impact if possible.

3.2 GEOLOGY, SEISMICITY, AND SOILS

Geologic and seismic hazards would be the same as those analyzed in the Revised BMP EIR. Construction of the proposed facilities could result in accelerated erosion and attendant loss of soil resources and effects on sediment discharges in water courses. The impact would be significant on slopes over two percent and in areas with soils having moderate or greater erosion hazard. Proposed facilities could incur damage as a result of underlying soil properties (subsidence, high shrink-swell potential, and corrosivity). Seismic hazards would include strong ground shaking and liquefaction.

The impacts and mitigation measures identified on DEIR pp. 4.A.2-3 through 4.A.2-4 would apply to the proposed changes and would reduce impacts from the proposed changes to less-than-significant levels.

3.3 HYDROLOGY AND WATER QUALITY

Impacts to groundwater and surface water of the RWF were analyzed in Section 4.A.3 of the Revised BMP EIR. The proposed changes would introduce no new impacts, and no impacts would be substantially more adverse. The Revised BMP EIR identified several significant impacts, including Measures identified in the Revised BMP EIR that required implementation of a Storm Water Pollution Prevention Plan (DEIR p. 4.A.3-5).

The proposed changes to the RWF would not result in new or more severe impacts than those identified in the Revised BMP EIR. As stated in Section 2.2.1 (on page 2-11), the Revised BMP assumes a curtailment of pumping in the coastal zone, and development of supplemental water supplies (including the RWF) to meet water demand. This would provide a beneficial impact to groundwater hydrology by reducing the basin overdraft and subsequent seawater intrusion. The RWF analyzed in this Addendum would be

expected to contribute incrementally to this beneficial impact, as this project would be a **part** of an overall strategy to reduce groundwater pumping along the coast, thereby resulting in higher coastal groundwater levels that reduce/eliminate seawater intrusion.

The BMP EIR identified significant impacts from construction of the proposed water recycling facilities and associated pipelines that could result in increased erosion. and subsequent sedimentation, with adverse impacts to water quality. Additionally, release of fuels or other hazardous materials associated with construction activities could degrade water quality. These impacts would be minimally increased with the increase in acreage developed from eight acres to 14 acres and the addition of impervious surfaces (parking lot) could increase runoff. However, the mitigation measures identified would continue to reduce these impacts to less than significant.

3.4 VEGETATION, FISH AND WILDLIFE

Potential impacts to biological resources were identified in the BMP EIR from construction of the pipeline connecting the Import Pipeline to the RWF. These impacts are not affected by the increased land area needed for the RWF analyzed in this addendum.

The RWF site analyzed in the BMP EIR and in this addendum would not result in adverse impacts to vegetation, fish or wildlife.

3.5 CULTURAL RESOURCES

While no known or previously recorded cultural resources sites were identified in the project area, significant unknown cultural resources may be buried or obscured by vegetation, and therefore construction of the proposed project could result in degradation and destruction of undiscovered cultural resources. Mitigation Measure 4.A.5-1 (DEIR page 4.A.5-3) addresses impacts from ground-disturbing activities associated with the proposed RWF and associated pipelines. Measure 4.A.5-1 would apply to the proposed clianges to the RWF site plan and would reduce impacts to cultural resources to a less-than significant level.

3.6 TRAFFIC AND CIRCULATION

Section 4.A.6 of the Revised BMP EIR analyzed traffic impacts associated with the RWF. Similar to the original RWF site plan, construction of the proposed RWF temporarily would result in impacts to traffic on West Beach Road, cause delays on area roadways, impede access to adjacent land uses, increase wear and tear on area roadways, increase traffic safety hazards, and increase demand for construction worker and construction vehicle parking spaces. The proposed RWF changes would not change the type or severity of traffic impacts generated by the project. With mitigation measures identified in the DEIR (Measures 4.A.6-1 through 4.A.6-3), traffic impacts would be reduced to less-than-significant levels.

In addition, the revised site plan for the RWF includes a parking area for the RWF. This would result in a beneficial impact to parking at the new facility.

3.7 AIR QUALITY

Section 4.A.7.3 of the Revised BMP EIR analyzed air quality impacts associated with construction and operation of the RWF. Similar to the old site plan, construction of the proposed RWF would have impacts involving temporary generation of criteria air pollutants during construction and an increase in emissions of criteria air pollutants resulting from maintenance and operation of the RWF. The proposed site plan for the RWF would not result in any new air quality impacts, and no impacts would be more adverse than those identified in the Revised BMP EIR.

3.8 NOISE

Section 4.A.8 of the Revised BMP EIR analyzed noise impacts associated with the RWF. Similar to the old site plan, Construction activities associated with the project would intermittently and temporarily generate noise levels above existing ambient noise levels in the project vicinity. The noise level and anticipated duration would remain the same. The RWF would result in an increase in noise-generating equipment at the plant. Operation of a pumping plant would be consistent with the types of noise-generating sources currently operating at the WWTF. The proposed changes to the RWF would not affect the seventy of noise impacts and would not affect the distance to sensitive receptors. With mitigation measures 4.A.8-1 and 4.A.8-2 identified in the DEIR (pages 4.A.8-2 and 4.A.8-3), noise impacts will be reduced to less-than-significant levels.

3.9 PUBLIC SERVICES AND UTILITIES

,Section 4.A.9 of the Revised BMP EIR analyzed potential impacts to public services associated with the construction of RWF pipelines that could result in temporary, planned or accidental disruption of utility services provided by underground lines. In addition, Section 3.9 of Addendum 2 analyzed additional impacts on City utilities, Mitigation Measure 4.A.9-1 **(pp.** 4.A.9-1 through 4.A.9-2 of the Revised BMP DER) would apply to the RWF project and would reduce potential construction phase impacts to public services to a less-than-significant level.

3.10 VISUAL/AESTHETIC AND RECREATIONAL RESOURCES

Section 4.A.10 of the Revised BMP EIR analyzed aesthetic and recreational impacts associated with construction of RWF components. The proposed RWF would be on agricultural land adjacent to the WWTF. Views of this site would be available from Beach Road, approximately 500 feet to the north; San Andreas Road, approximately 2,500 feet to the west; and from Highway 1, approximately 3,000 feet to the east. Beach Road and San Andreas Road are designated scenic roads in the Santa Cruz County General Plan/LCP. Highway 1 is a designated scenic road in the City of Watsonville General Plan and the Santa Cruz County General Plan/LCP, and it is eligible for official State Scenic Highway designation by Caltrans. The project area, which contains expansive croplands and little urban development, exhibits a rural visual landscape; however, the existing WWTF is a dominant industrial feature.

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Development of the RWF generally would be consistent with the applicable policies of the Santa Cruz County General Plan/LCP and the City of Watsonville General Plan presented in Section 3.10 of the EIR.

The proposed change to the site plan for the RWF would not substantially alter the visual character of the RWF. As noted in the DEIR, it is not uncommon for industrial features (such as pumps) to appear in rural landscapes. Implementation of Mitigation Measures 4.A.10-1a, b, and c identified in the DER (p. 4.A.10-3) would reduce impacts of the RWF to visual resources to a less than significant level.

Construction of the proposed RWF pipelines could disrupt bicycle traffic along San Andreas Road and Beach Road, which are included in the Santa Cruz County bikeway system. Construction activities and related truck traffic could damage the bikeways, creating minor inconvenience to bicyclists. This would be a temporary impact during project construction. Implementation of Measures 4.A.6-2, 4.A.6-3a and 4.A.6-3b would ensure that damaged roads would be repaired to pre-construction conditions, and that detours would be provided for bicyclists and motorists during the construction period. Therefore, this impact would be less than significant.

pc EXHIBIT F

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EXHIBIT J

SECTION 4
CONCLUSION

On the basis of the evaluation presented in Section 3, tlie proposed changes would not trigger any of the conditions, listed in Section 1.2 of this Addendum, requiring preparation of a subsequent or supplemental EIR. This Addendum satisfies the requirements of CEQA Guidelines Sections 15162 and 15164.

REFERENCES

County of Santa Cruz, *General Plan and Local Coastal Program*, adopted May 24, 1994.

Environmental Science Associates, *Pajaro Valley Water Management Agency Revised Basin Management Plan Draft EIR*, prepared for the Pajaro Valley Water Management Agency, Watsonville, CA, 2001.

Environmental Science Associates, *Pajaro Valley Water Management Agency Revised Basin Management Plan Final EIR*, prepared for the Pajaro Valley Water Management Agency, Watsonville, CA, 2002.

Pajaro Valley Water Management Authority, Revised Basin Management Plan, February 2002.

RMC, Watsonville Recycled Water Facility Overall Site Plan, July 2005.

PC EXHIBIT F

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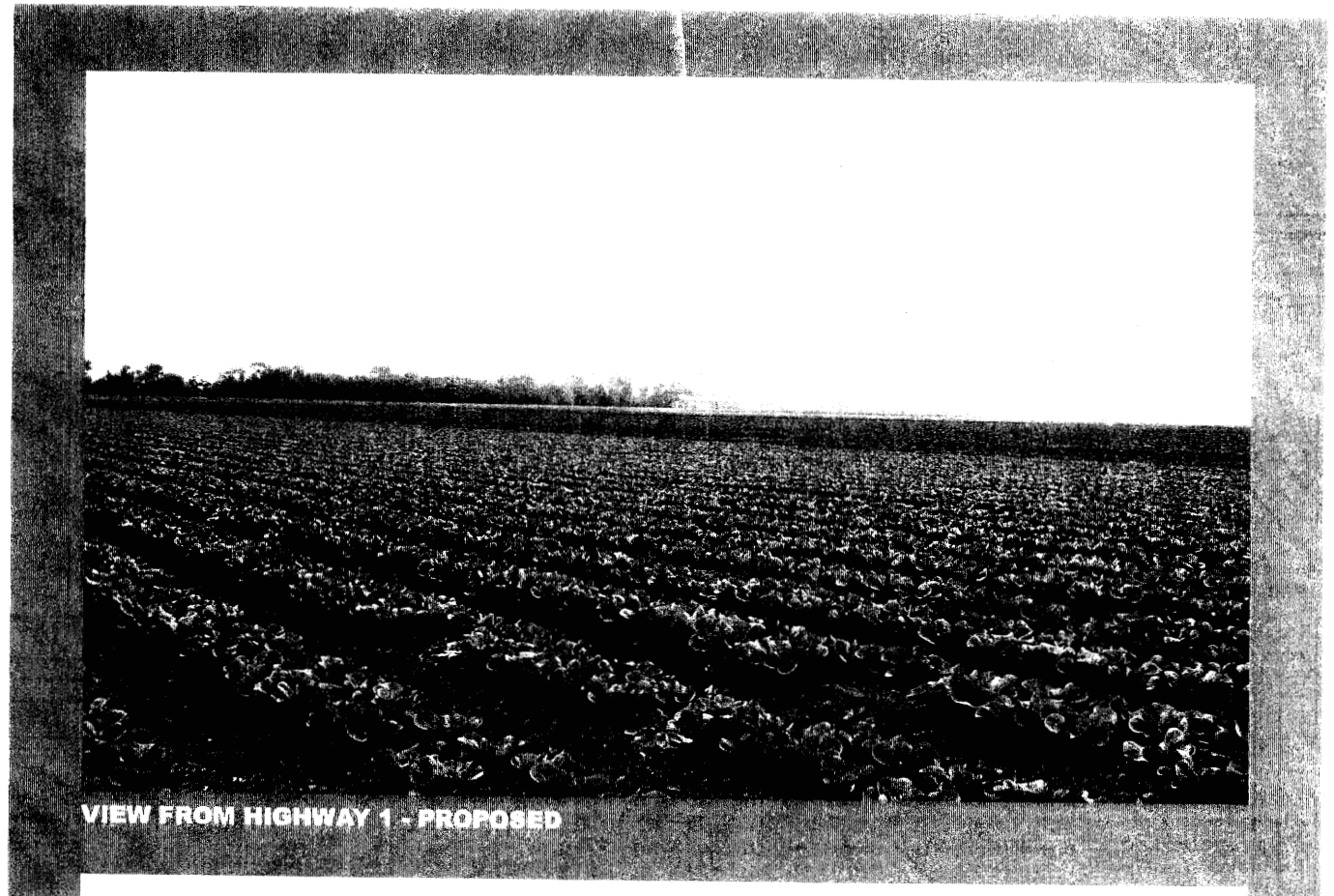
EXHIBIT J

VIEW FROM BEACH ROAD - PROPOSED
VIEW FROM BEACH ROAD - CURRENT
RMC
Water & Environment
MacGillivray Wills Architects

EXHIBIT G


VIEW FROM HIGHWAY 1 - PROPOSED

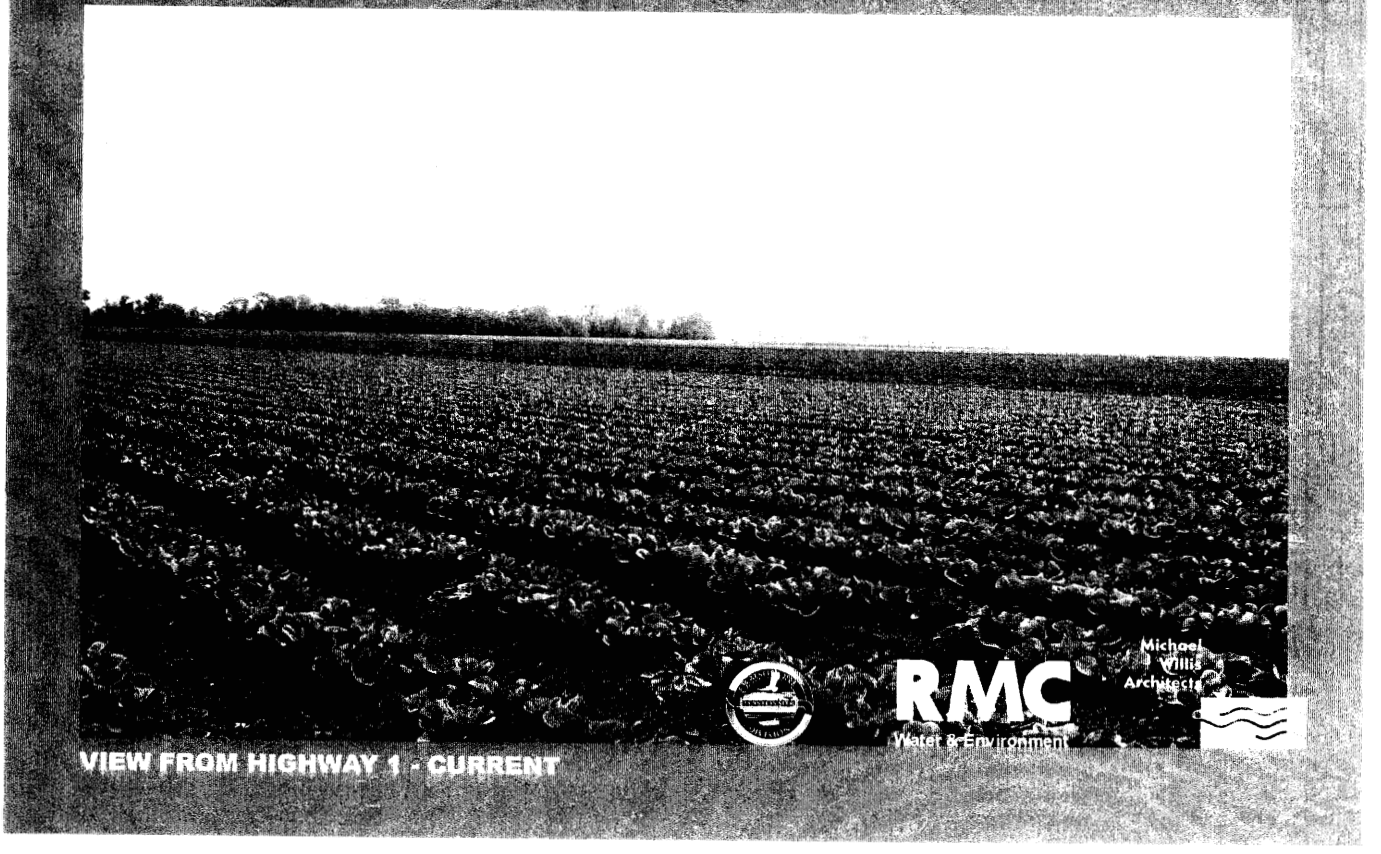

VIEW FROM HIGHWAY 1 - CURRENT
RMC
Water & Environment
Michael Willis Architects

EXHIBIT G

Program Statement for the

Watsonville Recycled Water Facility

Project Description

Need for the Project. The Pajaro Valley Water Management Agency (PWMA) is the regional agency that has responsibility for ensuring the availability of a long-term supply of water for the Pajaro Valley area. The Pajaro Valley is in a state of groundwater overdraft which has resulted in seawater intrusion in some of the coastal area aquifers. In order to address long-term water supply problems, the PVWMA developed the Basin Management Plan (BMP) which identifies a number of specific projects that are needed to augment the local water supply and reduce seawater intrusion. One of the key projects identified in the BMP is development of a Recycled Water Facility (RWF). This project involves the upgrading of the City of Watsonville wastewater treatment plant located off of Beach Road in Watsonville from secondary to a tertiary level treatment.

The City would operate the plant in order to provide PVWMA with approximately 4,000 acre-feet of recycled water per year initially, enough water to irrigate approximately 2,000 acres of farm land. The recycled water would be delivered to local farmers along the coast through a distribution system constructed by PWMA. The project would allow a reduction in the existing groundwater pumping in the areas affected by seawater intrusion. **The project does not increase capacity of the City's existing wastewater treatment plant,** but will reduce discharge to the Monterey Bay National Marine Sanctuary. The environmental impacts of the project were evaluated under CEQA in an Environmental Impact Report (EIR) (PWMA 2002) and under NEPA in an Environmental Impact Statement (EIS) (US Bureau of Reclamation 2003).

The project will provide a sustainable and reliable water supply to partially offset the over-pumping of the groundwater basin and to minimize the future demand from imported supplies. The recycled water will be used for agricultural irrigation in the coastal zone, where typical crops include strawberries, row-crop vegetables and other edible food crops. Strawberries and some of the other crops grown in the area are sensitive to the salinity in the water used for irrigation. The City and PWMA, in coordination with area growers and landowners, established a project water quality objective. The objective is to deliver a reliable water supply with a maximum total dissolved solids (TDS) (dissolved minerals) concentration of approximately 500 mg/L.

Project Site. The Recycled Water Facility project would be constructed adjacent to the existing wastewater treatment plant because this is the most feasible and cost-effective option identified. Alternative locations were evaluated and were found to be infeasible. The cost for the additional energy needed to pump the existing treatment plant effluent to a remote location and then back to the coastal area for distribution to the farmers would be cost-prohibitive, as well as a waste of limited energy resources. Further, the cost of hiring a significantly higher number of new staff to operate a remote facility would be excessive given that much of the required staffing can be provided by the existing staff at the City's wastewater treatment plant.

Project Phasing

Phase 1; Phase 1 components are required for the immediate project goal of providing 4,000 acre-feet per year. The Phase 1 components are described in more detail under the "Site Elements Description."

Phase 2: Additional Agricultural Water Supply. Phase 2 of the project includes additional components that could provide a total of 7,000 acre-feet of irrigation water per year. The Phase 2 components are described in more detail under the "Site Elements Description."

Phase 3: Additional Water Treatment. The recycled water will have an estimated TDS concentration of 800 – 900 mg/L and, therefore, requires either blending with a water supply having a lower TDS or additional treatment to achieve the water quality objective. The project was originally proposed to have a blend supply made up of a combination of imported supplies and water from supplemental groundwater wells. However, due to financial and legal constraints, construction of the import pipeline has been delayed. If the pipeline is never constructed, it would have a significant impact on the overall quality of the delivered water as the pipeline water is necessary to provide dilution for the higher level salinity in the recycled water. If the low salinity import supply is not developed, an alternative means of mitigation for the salinity levels in the recycled water will be required. It is proposed that the RWF be designed and constructed to accommodate the addition of demineralization (microfiltration/reverse osmosis) to the treatment process to reduce the salinity in the recycled water to an acceptable quality, if necessary in the future. Also, without an import supply to help meet demands in the valley, the use of the recycled water supply would have to be maximized. This could be accomplished through groundwater recharge of the recycled water during the non-irrigation season. This would require additional treatment to remove the nitrates prior to groundwater recharge. It is proposed that the RWF be designed and constructed to accommodate the addition of nitrification and denitrification facilities to the treatment process, if necessary in the future.

A number of the Phase 3 components would need to be integrated into the middle of the treatment process, and have been incorporated into the project design to facilitate their future construction while minimizing overall space requirements. Locating these components in other areas of the project site would require additional piping and pump stations, and would increase the project size and cost. The Phase 3 components are described in more detail under the "Site Elements Description."

Consistency with County General Plan and Local Coastal Program

The RWF project is consistent with the following elements of the County General Plan and/or Local Coastal Program:

Conservation and Open Space Element

***Objective 5.8b**: To act directly and coordinate and work with relevant water purveyors and agencies to eliminate long-term groundwater overdraft in all water basins where overdraft has been documented.*

***Program C:** Work with water purveyors and water management agencies to augment natural groundwater recharge where it is environmentally and fiscally acceptable.*

***Program H:** Continue to work with the Pajaro Valley Water Management Agency to eliminate overdraft and salt water intrusion through implementation of their Basin Management Plan.*

***Policy 5.13.6**: Conditional Uses on Commercial Agricultural (CA) Zoned Lands. All conditional uses shall be subject to standards which specify siting and development criteria, including size, location, and density. Allow conditional uses on CA zoned lands based upon the following conditions:*

a. The use constitutes the principal agricultural use of the parcel, or

b. The use is ancillary, incidental, or accessory to the principal agricultural use of the parcel, or

c. The use consists of an interim public use which does not impair long term agricultural viability, and

d. The use is sited to avoid conflicts with principal agricultural activities in the area, and

e. The use is sited to avoid, where possible, or otherwise minimize the removal of land from agricultural production.

***Program F:** Ensure a continued sustainable supply of water for agricultural use through conservation, protection, and development of surface and groundwater, utilization of excess domestic water, utilization of recycled wastewater, or importation of water from outside the County.*

Site Elements Description

The following is a description of the various components of the Recycled Water Facility, as shown on the attached site plan. Phase 1 components are required for the immediate project goal of providing 4,000 acre-feet per year. Phase 2 components would be added to allow for the production of up to 7,000 acre-feet of agricultural irrigation water per year. Phase 3 components would be implemented in the event that the water import pipeline project is not built, and would provided a higher level of treatment that would meet the water quality needs of the farmers.

Existing Effluent Pump Station

The Existing Effluent Pump Station is to be used as a diversion point to convey secondary effluent from the existing Wastewater Treatment Facility (WWTF) to the tertiary treatment process at the Recycled Water Facility (RWF). This is an existing structure that will have two new pumps added to supply secondary effluent to the RWF.

Phase I Equalization Storaae Tank

Flow equalization allows for the minimization of treatment process sizing by providing a means to reduce the peak flows into the RWF. Flow equalization stores secondary effluent when the WWTF flow exceeds the capacity of the RWF, and delivers that flow to the RWF when the WWTF flows are less than the RWF capacity. An existing sludge digester tank, located near the Effluent Pump Station will be retrofitted for use as flow equalization on the influent to the RWF. The size of the existing tank to be used for temporary secondary effluent storage does not allow for full equalization which will result in the loss of a small portion of the peak flow that could otherwise be recycled.

Phase 2 Equalization Storage Tank

This tank would serve the same purpose as the phase one equalization tank but would increase the equalization storage volume, which would allow full utilization of all available flow for the production of recycled water.

Phase I Flocculating Clarifiers

The flocculating clarifiers provide solids removal from the secondary effluent. The clarifiers will use a ballasted system in conjunction with chemical coagulation and flocculation to bind small-suspended solid particles together, forming a large enough mass to allow the solids to settle out and be removed. These units produce a product water stream that is sent to the filters and a sludge stream that is returned to the existing WWTF solids processing units for digestion, dewatering, drying and ultimate disposal.

Phase 2 Flocculating Clarifiers

The future flocculating ctarifiers will provide for increased recycled water production. The future units would add 50% of the Phase 1 capacity to the overall process capacity.

Phase I Filters

The filters provide additional solids removal and polishing for the treated wastewater. After filtration the water is conveyed to the disinfection facilities.

Phase 2 Filters

The future filters will provide additional recycled water production.

Phase 1 UV Disinfection

The disinfection facilities provide bacterial and viral inactivation to provide a water supply that will meet the public health criteria. Ultraviolet (UV) lamps have been chosen as the preferred disinfection technology. The lamps operate by producing light at a wavelength that has been proven to provide maximum inactivation of harmful virus or bacteria initially present in the treated wastewater. The disinfection facilities will be constructed with two channels for lamp installation, one of which will be populated in the project to provide up to 7.7 mgd of disinfection. The second channel would be populated in the future to increase the disinfection capacity of the facility.

Phase I Distribution Pump Station

The distribution pump station will serve to convey the disinfected tertiary recycled water from the RWF to the distribution system. **A** series of four pumps pressurize the water to allow for use throughout the distribution system. In addition, two smaller pumps provide recycled water for in-plant uses such as sludge processing, process wash-down, and on-site irrigation. The

distribution pump station is also sized to provide approximately 0.3 million gallons of storage for the fully treated water.

Phase 1 Clearwell Storage Tank

The clearwell storage tank **is** sized to hold 0.5 million gallons of treated water. Clearwell storage allows the RWF to continue production during periods of the day when recycled demands are low. **As** currently sized, the RW users will need to adhere to a demand schedule, which requires considerable cooperation among the many growers.

Phase 2 Clearwell Storage Tank

The future clearwell storage tank would provide more recycled water production, and allow for more variation in RW demand and allow the growers to have water on a less restrictive schedule.

Phase ▮Chemical Facility

Tertiary treatment requires the addition of several chemicals, mostly to enhance the solids removal through the flocculating clarifier process. The chemical facility includes storage and feed facilities for a coagulant, a coagulant aid, a polymer and sodium hypochlorite. The sodium hypochlorite is used for occasional process maintenance and cleaning.

Phase ▮Electrical Building

A set of transformers, motor control centers and electrical panels will be located in a central electrical building. This building is designed to serve both the current and phase 2 facilities.

Existing WWTF Access Road

Panabaker Road provides access to the existing wastewater treatment facility and adjacent farming operations.

RWF Entrance Road

The new RWF will have only limited access (pedestrian and pickup trucks) from the existing wastewater treatment facility. A new entrance road off of Beach Road, along with any needed safety improvements to Beach Road, will be constructed to allow staff and visitors access to the RWF. In addition the new entrance road will allow for the weekly delivery of chemicals delivered in 40-foot long tanker trucks, which cannot travel through the existing wastewater treatment facility. The proposed entrance road accommodates the required truck deliveries with the least impact to productive agricultural land. It utilizes an existing farm road, which would remain available for agricultural use. An alternative entrance road that paralleled the northern boundary of the existing WWTF was also evaluated, but would have resulted in the loss of more agriculturally productive land than the proposed location.

Main Gate

The main gate on the RWF entrance road will be open during normal business hours to allow public access to the operations center parking area. There is an additional gate to the treatment area that will serve as a service entrance and will be operated remote control to prevent unauthorized access.

Levees

For flood protection, a system of levees will be built around the RWF site. The height of the levees is based on a flood study. The sludge drying bed will be surrounded by levees matching the height of the levees surrounding the existing WWTF.

The Operations Center Facility

The Operations Center Facility (OCF) is being designed to meet the US Green Building Council's LEED gold standard. This facility will be the first of its kind in terms of its energy efficiency and environmental sustainability on the central coast of California. The Operations Center Facility is designed to keep the development footprint small and efficient. The parking area has been minimized to allow sufficient parking for staff and visitors to the RWF, including parking for two school buses.

The OCF will contain a two-story, 13,000 ft^2 operations wing, a single story 4,000 ft^2 water quality testing laboratory wing and a single story 1,000 ft^2 employee locker room wing. The total square footage of the OCF is 18,000 ft^2. The facility will house the current City of Watsonville WWTF staff of 27 plus two new staff for the RWF. In addition, four new coastal distribution system staff for PVWMA will also be included. The total number of employees at this location will be 34 *(27* existing and 6 new).

The WWTF currently hosts approximately 1,200 visitors per year and it is expected that the number of visitors will increase due to the building's LEED gold standard and the addition of the RWF. A significant portion of the OCF will be dedicated to educational and interpretive displays. The displays will highlight the water cycle and the importance of water recycling, water conservation, the need to preserve agricultural land, the impact of humans on the watershed and what they can do to help protect it, as well as the green building principles used in designing the building.

The OCF was placed in the southeast corner of the project because it is coincident with an existing farm road and the parcel boundary. In addition, this portion of the land could not be utilized for construction of the deep tanks needed, as a large existing influent sewer line passes through this location.

The laboratory will be State-certified for analysis of wastewater and recycled water quality parameters. It is important that the laboratory be located on the project site due to the large number of analyses **required** for process control and to ensure compliance with State health standards. The laboratory will handle over 8,000 samples per year. Transporting such a large number of samples off-site would not be feasible due to factors of timeliness, logistics, cost, and the unnecessary use of natural resources.

After completion of the new OCF the current operations building would be reconfigured into a maintenance shop that will serve both the WWTF and the RWF.

Phase 1 Sludge Drying Bed

The sludge drying bed is planned to handle the increase in sludge production as a result of the flocculating clarifier process.

Phase 2 Odor Control Facility

This facility would allow for a higher level of odor removal from the existing WWTF.

Public Access Trail

To provide public access to the Pajaro River, a trail will be constructed from the southern end of the parking area. This trail would include a lookout platform near the river and interpretative signage along the way.

Phase 3 Components

These components would be implemented in the event that the water import pipeline project is not built, and would provided a higher level of treatment that would meet the water quality needs of the farmers. A number of the Phase 3 components would need to be integrated into the middle of the treatment process, and have been incorporated into the project design to facilitate their future construction while minimizing overall space requirements. Locating these components in other areas of the project site would require additional piping and pump stations, and would increase the project size and cost.

Phase 3 Existing Aeration Basins Retrofit (Carbonaceous)

These basins are currently used to provide solids contact for the wastewater after primary sedimentation and trickling filter treatment. The solids contact allows bacteria in the wastewater to further remove the biological oxygen demand from the wastewater prior to discharge. These basins would provide approximately half of the aeration basin volume needed for nitrification of the secondary effluent. Nitrification converts ammonia in the wastewater into nitrates that can be removed via denitrification.

Phase 3 Aeration Basins (Nitrification)

To provide sufficient nitrification volume the existing aeration basin volume would need to be doubled to treat 12 mgd of wastewater to correspond with the existing secondary treatment capacity. These basins provide the second half of that required volume.

Phase 3 Anoxic Basins (Denitrification)

This process would be needed to use recycled water for groundwater recharge. The anoxic denitrification basins utilize specific bacteria and non-aerated conditions to convert nitrate into nitrogen gas. The basins have been sized to match the existing secondary treatment capacity of 12 mgd.

Phase 3 Recirculation Pump Station

The recirculation pump station is used to recycle water from the effluent of the aeration (nitrification) basins to the influent of the denitrification basins where the nitrate produced in the nitrification process can be converted to nitrogen gas. This pump station would be sized to recirculate a flow of several times the influent flow of the plant, providing a long solids retention time resulting in enhanced treatment.

Phase 3 Microfiltration/Reverse Osmosis/Desalination Facilities

This process would need to be added if the high TDS of the RW could not be blended with low TDS imported water. Unlike the nutrient removal facilities, which are designed to be inserted into the middle of the treatment process train to handle the entire projected flow, the desalination facilities are an additional treatment module that would be added to the end of the

treatment train. Also, since the purpose of these facilities would be to reduce, not necessarily eliminate, the TDS in the recycled water, they would likely be sized to treat only a portion of the flow based on the desired salinity goal. The current TDS concentration of the secondary effluent is 800 - 900 mg/L. Reducing this concentration by half, to 400 - 450 mg/L, would make the water significantly more desirable for use by growers in the service area. To achieve this reduction, a microfiltration/reverse osmosis facility with a capacity of 4.0 mgd would be required.

The microfiltration facility serves to remove larger particles from the recycled water and to protect the reverse osmosis membranes from fluctuations in influent turbidity. The reverse osmosis membranes utilize high-pressure pumps to overcome to osmotic pressure between the salts and the water, which allows the pure water to be pushed across a semi-permeable membrane while the salts are prevented from entering the product water.

Phase 3 Additional Chemical Storage and Feed

The desalination process requires several chemicals for maintenance and cleaning of the units. These additional chemicals would be stored adjacent to the Phase 1 chemical facility, so that delivery trucks have a single destination within the RWF.

Phase 3 Desalination Electrical and Control Building

Because of the amount of equipment to be installed and the large number of control signals that need to be monitored, an additional electrical/control building would be needed for the desalination facilities.

SANTA CRUZ COUNTY
GENERAL PLAN/LOCAL COASTAL PROGRAM

CHAPTER 5: CONSERVATION AND OPEN SPACE

Proposed Additions Shown in Highlight

AGRICULTURE

Objective 5.13 Commercial Agricultural Land

(LCP) To maintain for exclusive agricultural use those lands identified on the County Agricultural Resources Maps as best suited to the commercial production of food, fiber and ornamental crops and livestock and to prevent conversion of commercial agricultural land to non-agricultural uses. To recognize that agriculture is a priority land use and to resolve policy conflicts in favor of preserving and promoting agriculture on designated commercial agricultural lands.

Policies

5.13.1 Designation of Commercial Agriculture Land

(LCP) Designate on the General Plan and LCP Resources and Constraints Maps as Agricultural Resource all land which meets the criteria (as defined in the General Plan Glossary) for commercial agricultural land.

5.13.2 Types of Agriculture Land

(LCP) Maintain by County ordinance specific agricultural land type designations for parcels identified as commercial agricultural land based on the criteria set forth in the General Plan and LCP Land Use Plan* and maintain Agricultural Resources Maps, by County ordinance to identify the distribution of the following types of Commercial Agricultural Land in the County:

Type 1A – Viable Agricultural Land
Type 1B – Viable Agricultural Land in Utility Assessment Districts
Type 2A – Limited Agricultural Land
Type 2B – Limited Agricultural Land – Geographically Isolated
Type 2C – Limited Agricultural Land in Utility Assessment Districts
Type 2D – Limited Agricultural Land Experiencing Use Conflicts
Type 3 – Viable Agricultural Land Within the Coastal Zone

*See Glossary for detailed definition of Agricultural Land, Commercial.

5.13.3 Land Use Designations for Agricultural Resource Lands

(LCP) All lands designated as Agricultural Resource shall be maintained in an Agricultural Land Use designation, unless the property is included in a public park or biotic reserve and assigned as Parks, Recreation and Open Space (O-R), Resource Conservation (0-C), or Public Facility (P) land use designations.

5.13.4 Zoning of Agricultural Resource Land

(LCP) Maintain all lands designated as Agricultural Resource in the "CA", Commercial Agricultural Zone District, except for land in agricultural preserves zoned to the "AP", Agricultural Preserve Zone District or the "A-P", Agriculture Zone District and Agriculture Preserve Combining Zone District; timber resource land zoned to the "TP", Timber Production Zone District; or public parks and biotic conservation areas zoned to the "PR", Parks, Recreation and Open Space Zone District.

5.13.5 Principal Permitted Uses on Commercial Agricultural (CA) Zoned Land

(LCP) Maintain a Commercial Agricultural (CA) Zone District for application to commercial agricultural lands that are intended to be maintained exclusively for long-term commercial agricultural use. Allow principal permitted uses in the **CA** Zone District to include only agricultural pursuits for the commercial cultivation of plant crops, including food, flower, and fiber crops and raising of animals including grazing and livestock production and, outside the coastal zone, timber harvesting operations.

5.13.6 Conditional Uses on Commercial Agricultural (CA) Zoned Lands

(LCP) All conditional uses shall be subject to standards which specify siting and development criteria including: size, location and density. Allow conditional uses on CA zoned lands based upon the following conditions:

(a) The use constitutes the principal agricultural use of the parcel; or

(b) The use is ancillary incidental, or accessory to the principal agricultural use of the parcel; or

(c) The use consists of an interim public use which does not impair long: term agricultural viability, or consists of a permanent public use that will result in the production of recycled wastewater solely for agricultural irrigation; and

(d) The use is sited to avoid conflicts with principal agricultural activities in the area; and

(e) The use is sited to avoid, where possible, or otherwise minimize the removal of land from agricultural production.

5.13.6.1 Biomedical Livestock Operations

(LCP) Allow Biomedical Livestock Operations as a Level V Conditional Use on agriculturally zoned land, subject to all other provisions of the General Plan-Local Coastal Program, to the provisions of the Zoning Ordinance applicable to agriculturally zoned land, and to standards which assure protection of the public health, safety and welfare, while prohibiting Biomedical Laboratories on agriculturally zoned land. (Added by Res. 390-97)

5.13.7 Agriculturally Oriented Structures

Allow only agriculturally oriented structures or dwellings on Commercial Agricultural Land, including structures associated with recycled wastewater (i.e., tertiary treatment) facilities in the immediate proximity of existing municipal

wastewater treatment plants for the production of recycled wastewater to be used solely for agricultural irrigation; prohibit non-agricultural residential land use when in [illegible] objective of protecting agriculture

5.13.8 Location of Agricultural Support Facilities

Require agricultural support facilities, where permitted on designated Agricultural lands, to locate either off good agricultural soils, or when this is not feasible, on the perimeter of good agricultural soils.

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EXHIBIT 1

AGRICULTURAL USES CHART

County Code Section 13.10.312

Proposed addition shown in Highlight

KEY:
A = Use must be ancillary and incidental to a principal permitted use on the site
P = Principal permitted use (see Section 13.10.312(a)); no use approvai necessary if "P" appears alone
1 = Approval Level I (administrative, no plans required)
2 = Approval Level II (administrative, plans required)
3 = Approval Level III (administrative, field visit required)
4 = Approval Level IV (administrative, public notice required)
5 = Approval Level V (public hearing by Zoning Administrator required)
6 = Approval Level VI (public hearing by Planning Commission required)
7 = Approval Level VII (public hearing by Planning Commission and Board of Supervisors required)
-- = Use not allowed in this zone district
* = Level IV for projects of less than 2,000 square feet
Level V for projects of 2,000 to 20,000 square feet
Level VI for projects of 20,000 square feet and larger
** = For purposes of this section, "on-site" shall mean on the parcel on which the use is located, plus any other parcel(s) owned, leased and/or rented by the farm operator in this County or adjoining counties.
*** = Processed as a level 5 Coastal Zone Permit project when within the geographic area defined by Section 13.20.073.
**** = Soils dependent agricultural uses are those uses which use the in situ soils as the growing medium for all crops BP = Building permit only

AGRICULTURAL USES CHART

USE	CA	A	AP
Agricultural activities: crops and livestock			
Agricultural custom work occupations subject to the provisions of Section 13.10.638	P/4	P/4	P/4
Agricultural support facilities for processing, packing, drying, storage and refrigeration of produce above a total aggregate size of 2,000 square feet or 100 square feet per acre on-site** (whichever is greater) subject to the provisions of Section 13.10.632. Maximum aggregate size of such facilities shall be 50,020 square feet. Inside the coastal zone agricultural support facilities greater than 2,000 square feet shall be processed at Level 5 and shall not be considered a principal permitted use.			
Up to and including a maximum aggregate of 2,000 sq. ft. or 100 sq. ft. per acre on-site** (whichever is greater)	3	3	3
Greater than an aggregate of 2,000 sq. ft. or 100 sq. ft. per acre on-site** (whichever is greater)	4	4	4
Agricultural Service Establishments subject to the provisions of Section 13.10.633 (see Section 13.10.700-A definition)	--	5	--

Apiculture (beekeeping)	P	P	P
Biomedical Livestock Operations (subject to Section 13.10.647)	5	5	--
Berry and other vine crops	P	P	P
Commercial dairying, subject to the provisions of Section 16.22.060	3	5	3
Field crops, including hay, grain, seed, and turf crops	P	P	P
Livestock raising for food, fiber or animal production, including rabbits and other small animals under 100 per acre	P	P	P
Livestock raising involving hog farming or small animals over 100 per acre, subject to the provisions of Section 16.22.060	3	5	3
Nursery crops limited to open field grown ornamental plants, flowers and Christmas trees	P	P	P
Nursery crops, outdoor container grown, covering an area larger than 1 acre	5	5	5
Orchards, including fruit tree and nut crops	P	P	P
Poultry and other fowl raising, including egg production, under 100 birds per acre (see also "Barn" below)	P	P	P
Poultry and other fowl raising involving more than 100 birds per acre	P	5	P
Row crops, including fruit and vegetable raising	P	P	P
Agricultural Support and Related Facilities			
Aquaculture and Aquacultural Facilities	5	5	5
Barns, corrals, or pens used for animal husbandry, subject to the provisions of Section 16.22.060	3	3	3
Caretaker's quarters, permanent, subject to the provisions of Section 13.10.631	5	5	5
Commercial boarding of animals, subject to the provisions of Section 13.10.641(b)	P/5	P/5	P/5
Consumer harvesting, on site**	P	P	P
Dwelling unit, one detached single-family per parcel, subject to the provisions of Section 13.10.314			
Inside the Coastal Zone	5	3	5
Outside the Coastal Zone	3	3	3
Dwelling unit, one detached single-family for the owner, lessee or an employee of the owner or lessee of the land, not to exceed one dwelling unit for each forty acres of total site area, subject to the provisions of Section 13.10.314			
Inside the Coastal Zone	--	--	5
Outside the Coastal Zone	--	--	3
Dwelling unit, one detached single-family per parcel, 7,000 square feet or larger,, inclusive, of accessory structure(s) associated with the residential use. but specifically	5	5	5

EXHIBIT I

excluding barn or similar accessory structures subject to the provisions of Sections 13.10.314 and 13.10.325			
Dwelling units, accessory to the main dwelling used as agricultural caretakers' quarters subject to Section 13.10.631			
1--4 Units	5	5	5
5-49 Units	6	6	6
20+ Units	7	7	7
Dwelling units, dwelling groups subject to the provisions of Sections 13.10.313(f) and 13.10.314			
2--4 Units	5	5	5
5--19 Units	6	6	6
20+ Units	7	7	7
Energy facilities, community, subject to the provisions of Section 13.10.661 and .700-E (definition)	5	5	5
Facilities for fish and wildlife enhancement and preservation	P	P	P
Farm worker housing subject to Section 13.10.631 (see Caretakers housing, mobile homes and travel trailers, farm worker quarters and camps)	3-7	3-7	3-7
Farm outbuildings and other agricultural accessory structures for storage or equipment with or without a single room containing lavatory facilities	3	3	3
Fences, subject to the provisions of Section 13.10.525	P/3/5	P/3/5	P/3/5
Fire protection facilities	--	5	--
Flood control works, including channel rectification and alteration; dams, canals and aqueducts of any public water project	5	5	5
Foster homes for 6 or fewer children, not including those of the proprietary family (see Section 13.10.700-F definition)	P	P	P
Foster homes for seven or more children, not including those of the proprietary family (see Section 13.10.700-F definition)	5	5	5
Fuel storage tanks and pumps	2	2	2
Greenhouse structures, as accessory structures, under 500 square feet in area	2	2	2
Greenhouse structures, outside the coastal zone, subject to the provisions of Section 13.10.636(a).			
500--20,000 square feet	3	4	3
over 20,000 square feet	4	4	4
Greenhouse structures soil dependent****, include the zone, subject to the provisions of Section 13.10.636(a) and 13.20.073.			
500--20,000 square feet	3	3	3
over 20,000 square feet	P/4	P/4	P/4

EXHIBIT 1

Greenhouses, improvements and expansions up to 10,000 square feet in area, inside the coastal zone, subject to the provisions of Sections 13.10.636(a) and 13.20.073	3	4	3
Greenhouses, all others in the coastal zone.			
up to 20,000 sq. ft.	P/5	P/5	P/5
greater than 20,000 sq. ft.	5	5	5
Greenhouse replacement, reconstruction or structural alteration, pursuant to Section 13.10.636(b) and (c)	3	3	3
Habitable accessory structure, 640 square feet or less subject to the provisions of Section 13.10.611	3	3	3
Habitable accessory structures greater than 640 feet, subject to the provisions of Section 13.10.611 (see farm outbuildings)	5	5	5
Non-habitable accessory structure when incidental to a residential use and not for agricultural purposes (subject to the provisions of Section 13.10.611 and 13.10.313(a)).			
Total area of 1,000 square feet or less	BP Only	BP Only	BP Only
Total area of more than 1,000 square feet	3	3	3
Home occupations subject to the provisions of Section 13.10.613	P	P	P
Kennels, commercial or private, for five or more dogs or cats over the age of four months subject to the provision of 13.10.323	5	5	5
Farm Worker camps subject to the provisions of Section 13.10.631			
1--4 Units	5	5	5
5-19 Units	6	6	6
20+ Units	7	7	7
Lumber Mills	--	5	--
Manufactured homes, as farm labor housing, subject to the provisions of Section 13.10.631			
1--4 Units	5	5	5
5--19 Units	6	6	6
20+ Units	7	7	7
Manufactured home, as a single-family dwelling unit, subject to the provisions of Section 13.10.682			
Inside the Coastal Zone	5	5	5
Outside the Coastal Zone	3	3	3
Manufactured homes, for temporary occupancy as a caretaker's or watchman's quarters subject to the provisions of Section 13.10.631	3	3	3
Mushroom farms and other agriculture within structures, subject to the provisions of Section 13.10.634			
Additions, 500-20,000 square feet	1 3	5	3
New development and additions over 20,000 square feet	5	5	5

EXHIBIT I

Offices within existing structures operated in conjunction with an allowed use	2	2	2
Public utility facilities; energy facilities (see Section 13.10.700-E definition)	--	5	--
Publicly owned and operated sanitary landfill either by contract or by public forces, subject to the provisions of Section 13.10.639	7	7	7
Recreational activities: playfields not involving permanent structures or paving. Within the coastal zone allow this use only in the A (Non-commercial Agriculture) zone district.	5	5	5
Recycled municipal wastewater (i.e., tertiary treatment) facilities for the production of recycled water solely for agricultural irrigation use, subject to the provisions of Section 13.10.635	7	7	7
Reservoirs or ponds	3	3	3
Second Units, outside the Coastal Zone, subject to the provisions of Section 13.10.681	4	4	--
Septic tank sludge disposal sites that are approved by the Health Officer pursuant to Chapter 7.42 and that are located outside the Coastal Zone	--	4	--
[Signs in conjunction with principal permitted uses as described in Section 13.10.580(a) and (b)	P	P	P
Signs in conjunction with non-principal permitted uses as described in Section 13.10.580(c) and (d)	2	2	2
Stands for the display and sale of agricultural commodities produced on site**	2	2	2
Veterinary offices and animal hospitals subject to the provisions of Section 13.10.642	5	5	5
Visitor Accommodations, such as: Bed and breakfast inns (subject to Section 13.10.691)	--	5	--
Water pollution control facilities for agricultural purposes constructed to comply with waste discharge requirements or other orders of the Regional Water Quality Control Board, or erosion control facilities constructed to comply with County ordinances	3	3	3
Water wells, storage tanks and distribution lines, well covers and small pump houses utilized strictly for on-site agriculturally related activities	1***	1***	1***
Wineries under 1,000 gallons annual production as a home occupation, subject to the provisions of Section 13.10.637	P	P	P
Wineries, subject to the provisions of Section 13.10.637			
Under 1,000 gallons and not a home-occupation	3	3	pi
Over 1,000 gallons and under 20,000 gallons annual production:			
On parcels under 2.5 acres in size	3	5	3
On parcels 2.5 acres or larger	3	3	3
Over 20,000 aallons and under 50.000 aallons annual			

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EXHIBIT 1

production:			
On parcels under 10 acres in size	5	5	5
On parcels 10 acres or larger	3	3	3
Over 50,000 gallons and under 100,000 gallons annual production and on any size parcel	5	5	5
Over 100,000 gallons annual production on any size parcel	6	6	6
Wireless Communication Facilities, subject to Section 13.10.660 through 13.10.668, inclusive	5	5	5
Zoos and natural science museums	--	5	

(Ord. 1283, 1/2/68; Ord. 1703, 5/18/72; Ord. 1806, 12/12/72; Ord. 2769, 9/11/79; Ord. 2622, 1/23/79; Ord. 2771, 9/11/79; Ord. 3015, 12/2/80; Ord. 3632, 3/26/85; Ord. 4346, 12/13/94; Ord. 4406, 2/27/96; Ord. 4416, 6/11/96; Ord. 4471, 9/9/97; Ord. 4715 § 1, 4/29/03; Ord. 4738 § 1, 9/23/03; Ord. 4744 § 1, 11/18/03; Ord. 4751 § **4,** 11/25/03; Ord. 4770 § 1, 8/10/04)

EXHIBIT 1

Proposed County Code Amendment Adding a New Section 13.10.635

Added language shown in highlight

CHAPTER 13.10 – ZONING REGULATIONS

PART VI. REGULATION OF SPECIAL USES

Article III. Agricultural Uses

Section 13.10.635 – Recycled water facilities for the production of recycled municipal wastewater for agricultural irrigation use.

Construction and operation of recycled water (i.e., tertiary treatment) facilities on land zoned CA, A or AP shall be allowed, subject to the following regulations:

a. Such facilities shall be located adjacent to or in the immediate proximity of an existing publicly owned and operated municipal wastewater treatment plant.

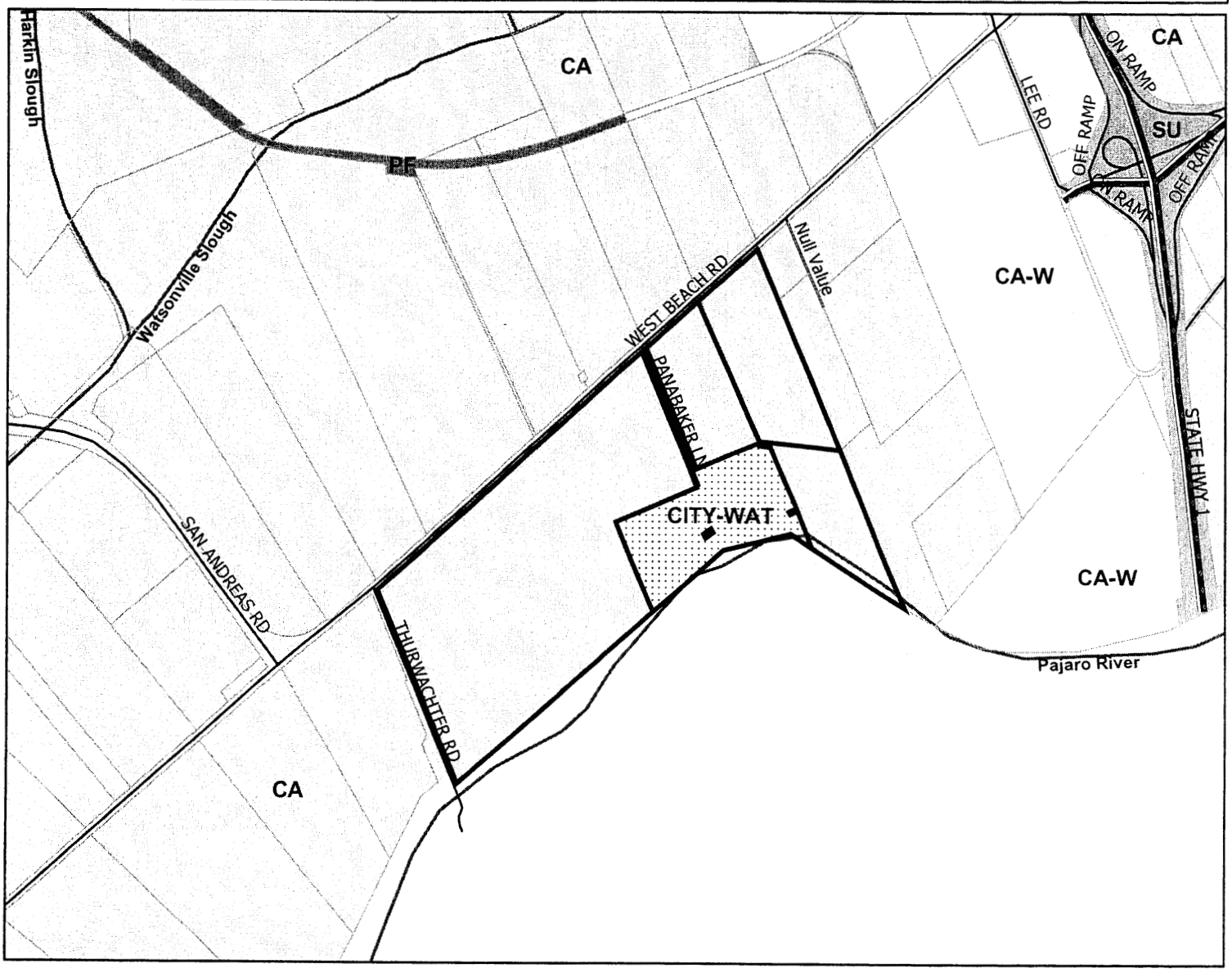
b. Such facilities shall be intended and used for the sole purpose of producing recycled municipal wastewater to be used for agricultural irrigation.

c. Minimal conflicts with adjacent commercial agricultural activities shall result from the wastewater recycling facility use, either during its operation or after closure.

d. The maximum amount possible of cultivated agricultural land shall be maintained in production,

EXHIBIT I

Zoning Map



Legend

- Project Parcels
- Assessors Parcels
- State Highways
- Streets
- PERENNIAL STREAM
- AGRICULTURE COMMERCIAL (CA)
- WATSONVILLE COMBINING DISTRICT (CA-W)
- SPECIAL USE (SU)
- PUBLIC FACILITY (PF)
- CITY PROPERTY

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Map Created by
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Planning Department
October 2005

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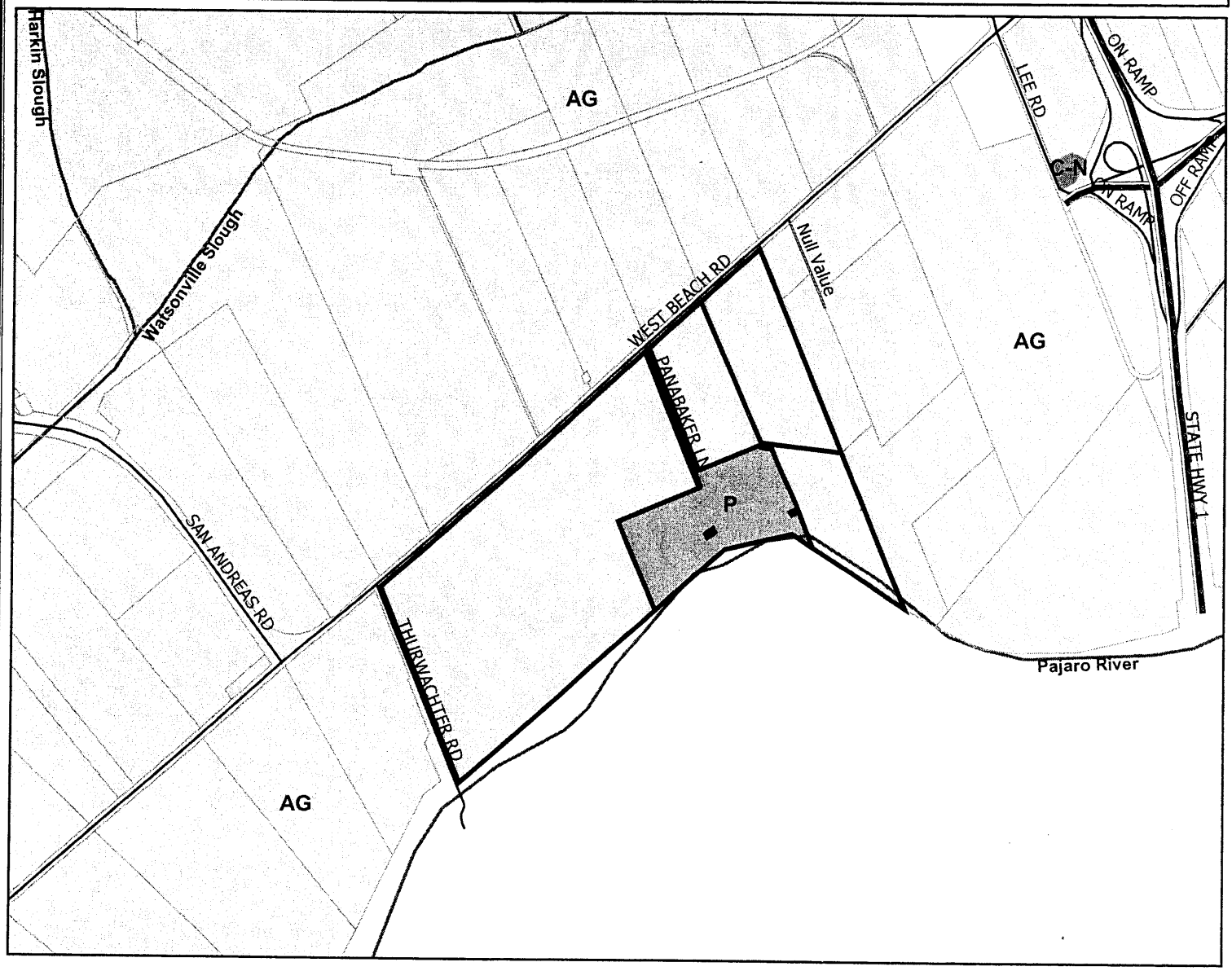
EXHIBIT J

General Plan Designation Map



0 1,050 2,100 4,200 6,300 8,400 Feet

Legend

- Project Parcels
- Assessors Parcels
- State Highways
- Streets
- PERENNIAL STREAM
- Agriculture (AG)
- Public Facilites (P)
- Commercial-Neighborhood (C-N)
- City of Watsonville

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EXHIBIT K