THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS
ACTION AGENDA SUMMARY

DEPT: Chief Executive Office **BOARD AGENDA #** *B-5

Urgent ☐ **Routine** ☒ **AGENDA DATE** June 17, 2014

CEO Concurs with Recommendation YES ☒ **NO** ☐ **4/5 Vote Required YES** ☒ **NO** ☐
(Information Attached)

SUBJECT:

Approval to Initiate the Surplus and Disposition Plan for the Former Honor Farm Located at 8224 West Grayson Road, Modesto and Authorize the Project Manager to Proceed with Maintenance and Decommissioning Activities for the Property, and Related Actions

STAFF RECOMMENDATIONS:

1. Approval to initiate the surplus and disposition plan of the former Honor Farm located at 8224 West Grayson Road, Modesto, California 95358.

2. Authorize the Project Manager to adjust, finalize and record the necessary lot line adjustment for development of the former Honor Farm parcel in preparation for the surplus property disposition process.

(Continued on Page 2)

FISCAL IMPACT:

This action will initiate the final disposition of the former Honor Farm located at 8224 West Grayson Road, Modesto which is no longer used or needed by the County. The Honor Farm was closed following completion of construction of Unit Two at the Public Safety Center funded by insurance proceeds from a fire at the Honor Farm that occurred in June 2010. The costs for the vacated site average $12,500 monthly for site security to prevent vandalism and for the ongoing operation of the existing Wastewater Treatment Facility (WWTF).

(Continued on Page 2)

BOARD ACTION AS FOLLOWS:

No. 2014-290

On motion of Supervisor Withrow , **Seconded by Supervisor** Chiesa
and approved by the following vote,
Ayes: Supervisors: O'Brien, Chiesa, Withrow, Monteith, and Chairman De Martini
Noes: Supervisors: None
Excused or Absent: Supervisors: None
Abstaining: Supervisor: None

1) X **Approved as recommended**
2) _____ **Denied**
3) _____ **Approved as amended**
4) _____ **Other:**
MOTION:

Christine Ferraro

ATTEST: **CHRISTINE FERRARO TALLMAN, Clerk** **File No.**

STAFF RECOMMENDATIONS: (Continued)

3. Accept the engineering report prepared by Black Water Consulting Engineers, Inc., in association with R.B. Welty Engineering, Inc., for the decommissioning of the former Honor Farm property and active Wastewater Treatment Facility.

4. Authorize the Project Manager to proceed with all actions necessary to perform various maintenance and decommissioning activities for the site to prepare the property for disposition, as long as project costs are within the Project Budget.

5. Approve the use of up to $300,000 in Fiscal Year 2014-2015 of existing appropriations from deferred maintenance funds in the Chief Executive Office-Plant Acquisition Budget for the costs of maintenance and decommissioning activities, consistent with the recommendation in the engineering report.

6. Direct the Auditor-Controller to perform an operating transfer out from the Chief Executive Office-Plant Acquisition Budget in the amount of up to $300,000 and to transfer in to the Honor Farm Wastewater Treatment Facility Capital Project Budget; and to increase appropriations in the Honor Farm Wastewater Treatment Facility Capital Project fund for associated project costs.

7. Authorize the Project Manager to negotiate and sign contracts, work authorizations and purchase orders necessary for the Project as long as they are within the Project Budget.

8. Authorize the Project Manager to negotiate and sign change orders up to $25,000, consistent with the County's Change Order Policy, and as long as they are within the Project Budget.

FISCAL IMPACT: (Continued)

On April 1, 2014, the Board of Supervisors approved a professional services agreement with Black Water Consulting Engineers, Inc. to engineer the site and wastewater facility decommissioning activities and provide land surveying services. Funding for the engineering work was paid for using existing appropriations in the Honor Farm Wastewater Treatment Facility Capital Project fund in the lump sum amount of $171,276. The Consultant has provided the County with an Engineering Report that details the immediate task and cost exposure for surplus, decommissioning and disposition of the site.

The Project Manager anticipates to undertake the selective demolition of Barracks No. 4, removal of the existing automotive paint booth and perform a wastewater sludge removal maintenance project as part of the decommissioning effort prior to, or

concurrent with, the disposition of the former Honor Farm property. Based on the engineering report prepared by Black Water Consulting Engineers, the initial construction phase related cost exposure for the recommended property decommissioning activities is estimated at $651,745. The cost of project engineering is an additional cost of up to $171,276, for an estimated total exposure for the County of $823,021.

Chief Executive Office staff contracted with an independent property appraiser to establish the fair market value of the former Honor Farm. Staff will return to the Board of Supervisors to seek approval to declare the property surplus, approve the County's intent to sell and set the minimum sale price in late July 2014. The proceeds from the sale could be used to support the necessary maintenance and decommissioning efforts that will performed at the site.

At this time, staff is seeking Board of Supervisors approval to use up to $300,000 in Fiscal Year 2014-2015 existing appropriations from deferred maintenance funds in the Chief Executive Office-Plant Acquisition Budget for the costs of maintenance and decommissioning activities at the former Honor Farm. The Project Manager seeks Board of Supervisors authorization to proceed with all actions necessary to perform various maintenance and decommissioning activities for the site to prepare the property for disposition, as long as project costs are within the Project Budget.

The maintenance and decommission activities recommended in the Engineering Report currently exceed the available funding set aside. Concurrent with these activities, staff will recommend the Board of Supervisors approve the surplus of the property and use the proceeds from the sale to offset the final decommissioning costs. Ultimately, the cost to decommission and sale the Property may exceed available one-time sources of funding from its sale. As quick a resolution as possible will allow the security and other ongoing operating costs to end.

As the Project progresses, staff will return to the Board of Supervisors to ensure sufficient funding is available for the project. At this time, staff will seek to perform the maintenance and decommissioning activities concurrent with the surplus and sale of the site in order to expedite and minimize the carrying and maintenance costs of the property.

DISCUSSION:

Background

The Stanislaus County Men's Honor Farm, located at 8224 West Grayson Road, Modesto, California, was originally constructed in the late 1950's with (3) 86-bed housing units (Barracks 1, 2, and 3) and (1) 112-bed housing unit (Barracks 4). The

Honor Farm was one of three (3) detention facility sites managed by the Sheriff's Department including the Downtown Men's Jail and Public Safety Center.

On June 26, 2010, a fire erupted at the Stanislaus County Sheriff's Honor Farm completely destroying Barracks 1 and 2 and all of its contents. On April 26, 2011, the Board of Supervisors authorized the Chief Executive Officer and County Counsel to finalize and execute a settlement agreement with the County's Insurer for the payout of insurance proceeds to fund the replacement of the Honor Farm capacity at the Public Safety Center.

On July 17, 2012, the Board of Supervisors awarded the construction contract for the Honor Farm Jail Bed Replacement Project to Deide Construction, Inc. of Lodi, California for the construction of 192 new, modern jail beds located at the Stanislaus County Public Safety Center. This action was an important step in the Master Plan effort to consolidate Sheriff's Office detention functions at the Public Safety Center. Construction of 192 replacement jail beds allowed for the closure of the outdated Honor Farm.

With the dedication of the Honor Farm Jail Bed Replacement on September 10, 2013, the former Honor Farm located at 8224 W. Grayson Road, Modesto, California was vacated by the Sheriff's Office. On October 15, 2013, the Board of Supervisors approved the final acceptance and completion for the Honor Farm Jail Bed Replacement Facility (Minimum Security Unit No. 2). Closure of the Honor Farm at 8224 W. Grayson Road, Modesto was approved allowing detention services to be provided two sites instead of three.

Honor Farm Disposition Plan

The former Honor Farm site is currently unoccupied and remains in an "as-is" condition from when the Sheriff's Office vacated in July 2013. On April 1, 2014, the Board of Supervisors approved a professional services agreement with Black Water Consulting Engineers, Inc. of Modesto, California to prepare necessary closure and decommissioning documentation for the Honor Farm by performing a site survey and parcel boundary adjustment, utility investigations, site condition assessment, Wastewater Treatment Facility (WWTF) plan, site engineering report and engineering master plan. The Engineering Report (Attachment C) contains and discloses adequate information for the County and potential purchasers of the property relating to all aspects of decommissioning and disposition.

The Project Manager and Project Team have developed a proposed property disposition plan for review and approval by the Board of Supervisors to declare the property as surplus pursuant to Government Code 25520, with the intent to sell the property and call for bids to purchase. Staff will seek, upon approval by the Board of

Supervisors, an expeditious approach to providing for the surplus, decommissioning and disposition of the site by issuing a Request for Offers (RFO) for interested purchasers of the site while concurrently undertaking maintenance and decommissioning activities as long as they are within the established budget of Wastewater Treatment Facility Capital Project fund.

The Board of Supervisors will set a minimum bid price for the property in late July 2014. The RFO will include all disclosures for the property based on the Consultant's Engineering Report and additional information provided by the County. Prospective bidders will submit their bids in sealed envelope on the established due date. Bids will be reviewed by the County and the bidder that provides for the highest purchase price will be given the opportunity to negotiate a Purchase Agreement for the property. Staff anticipates returning to the Board of Supervisors throughout the surplus and disposition for major property and funding decisions for approval at each step of the process.

A lot line adjustment will be completed to redefine the former Honor Farm property (APN 017-060-002) to include a portion of adjacent Laird Regional Park parcel (APN 016-026-010) that comprises a portion of the actual constructed Honor Farm facilities (Attachment A). A third small parcel (APN 017-060-013) would also be included in the Honor Farm disposition. Work is underway to finalize the exact location of the property split. These two parcels will be sold with fee simple interest to a new property owner through the disposition process.

An additional approximate 19.5 acres of Laird Regional Park property is not currently fully developed by the County Parks and Recreation Department. This 19.5 acre portion of Laird Regional Park is contained within the Stanislaus County Parks Master Plan for future development. The County may consider granting an option to access this future park acreage through a Lease and Use Agreement between the County and a prospective purchaser that would own the former Honor Farm property after completion of the disposition process. This portion of Laird Regional Park is directly within the 100 year flood plain and is limited by primary vehicle access through the Honor Farm property. Staff will develop the terms of this prospective agreement during the disposition process, if beneficial to the County through the expanded use and maintenance of Laird Regional Park.

The former Honor Farm is served by utility services and domestic well water that traverse or are located within Laird Regional Park. Staff will create and record access and maintenance easements for the necessary domestic utilities to serve the former Honor Farm site with no impact to the operation of Laird Regional Park. An access agreement will also be required between the future Honor Farm owner and County to grant the County vehicular access to the 19.5 acre peninsula portion of Laird Regional Park previously discussed in this report for maintenance and fire support activities.

Honor Farm Maintenance and Decommissioning Activities

Black Water Consulting Engineers, Inc. has provided the necessary closure and decommissioning documentation for the Honor Farm by performing a site survey and parcel boundary adjustment, utility investigations, site condition assessment, Wastewater Treatment Facility (WWTF) plan, site engineering report and engineering master plan. Additionally, the Consultant at the direction of the Project Manager, will provide plans, specifications, cost estimating and construction administration services to address aspects of site demolition and/or closure of the WWTF, as applicable to closure and disposition of the property.

The former Honor Farm currently contains eighteen structures: nine permanent metal, wooden or block; and nine temporary or modular buildings. Most of the remaining structures are in adequate condition and could be potentially useful after repair. Standing structures including Barracks 3 and Barracks 4, the office administration and dining hall building, shop buildings and various modular buildings. Barracks 4 is in a deteriorated condition and requires demolition. The existing vehicle paint booth, once used by the Sheriff's Office for inmate programming purposes, will also be removed. The estimated cost of demolition and waste disposal is $131,250.

Additionally, the site has an active Wastewater Treatment Facility (WWTF), a domestic water well, water well storage tank and a propane tank. The County will be required to undertake the significant clean-up work and decommissioning associated with the active WWTF. The Honor Farm is serviced by a stand-alone Class I WWTF that processes domestic wastewater. The County is the responsible party for the maintenance and operation of this Class I WWTF. For the past several years, the County has contracted with a California Registered WWTF Contract Operator to perform Chief Plant Operator services including compliance of effluent and meeting all waste discharge requirements required by the Regional Water Quality Control Board (RWQCB). At this time, the County is required, regardless of the continued or future use of the WWTF to undertake a WWTF maintenance project to remove bio-solids ("sludge") that have accumulated in the effluent ponds. The engineers estimate for the maintenance project is $405,495 including significant project cost contingencies for the removal of 5,126 tons of dried, accumulated bio-solids. To minimize the cost exposure for the bio-solids removal, it is recommended that this work be initiated during the summer months to expedite drying of the material to be transported offsite. The Project Manager seeks authorization to seeks bids and proceed with concurrently performing this maintenance project with the former Honor Farm disposition process as long as the bids are within the established project budget.

Upon completion of the WWTF maintenance project and during the disposition process, the County will negotiate with a prospective property purchaser to decide if an active WWTF will be needed to occupy the facility, or the prospective purchaser no longer

requires an active WWTF and the facility can be converted to an on-site septic system, or similar. If the WWTF is no longer required, the County will perform a regulatory decommissioning which includes performing additional soil sampling, grading the WWTF ponds with clean fill dirt and providing a WWTF Decommissioning Report to the RWQCB for review and approval. The engineers estimate for the decommissioning of the WWTF is $115,000, which is included in the overall total project cost projection described in the Fiscal Impact section of this report.

The County will also consult with the RWQCB to seek an option to transfer the active WWTF operator permit to a prospective buyer, if deemed necessary during the disposition process to keep the active WWTF operational after completion of the property sale. Therefore, staff will be coordinating closely with the County engineering consultant and RWQCB to find a cost effective, reasonable solution that meets the needs of the County and its prospective purchaser. The County will disclose all WWTF reuse related issues and costs as part of the property disposition process.

Schedule

With today's action, the Project Manager will move aggressively to seek bids to perform the maintenance and decommissioning activities associated with the disposition of the former Honor Farm property. The Project Manager anticipates returning to the Board of Supervisors in late July 2014 to declare the property as surplus, authorize the issuance of a Request for Offers (RFO) and set the minimum bid price. By late Summer, the County will receive offers for sale of the property. The County will then negotiate a Purchase Agreement with a potential purchaser and then return to the Board of Supervisors to approve the Purchase Agreement and authorize the Project Manager to proceed with any final re-use or decommissioning activities of the site. The County and prospective purchaser will enter into escrow by Fall 2014 and will close escrow after all terms of the Purchase Agreement are met. Staff anticipates being complete with all project activities by or before early Spring 2015 and to close escrow with a Purchaser at that time.

On June 4, 2014, staff reviewed the property surplus and disposition plan with the Board's Capital Facilities Committee comprised of Supervisors O'Brien and Monteith who support this plan and encouraged staff to aggressively pursue its quick disposition and sale. Staff will seek, upon approval by the Board of Supervisors, an expeditious approach to providing for the surplus, decommissioning and disposition of the site by issuing a Request for Offers (RFO) for interested purchasers of the site while concurrently undertaking maintenance and decommissioning activities as long as they are within the established budget of Wastewater Treatment Facility Capital Project fund.

POLICY ISSUES:

These actions support the Board of Supervisors priority to provide Efficient Delivery of Public Services through disposition of this property asset that is no longer required for County use, elimination of the cost for on-going security and utilities, and resolution of the County's ongoing responsible for cleanup of the Wastewater Treatment Facility.

STAFFING IMPACTS:

Existing Chief Executive Office staff will continue to manage the aspects of the Former Honor Farm Site and Wastewater Treatment Facility closure and decommissioning.

CONTACT PERSON:

Patricia Hill Thomas, Chief Operations Officer. Telephone: 209-525-6333

Database		FMSDBPRD.CO.STANISLAUS.CA.US.PROD	DO NOT CHANGE
Balance Type		Budget	DO NOT CHANGE
Data Access Set		County of Stanislaus	DO NOT CHANGE
Ledger	* List - Text	County of Stanislaus	DO NOT CHANGE
Budget	List - Text	LEGAL BUDGET	DO NOT CHANGE
Category	* List - Text	Budget - Upload	DO NOT CHANGE
Source	* List - Text		
Currency	* List - Text	USD	DO NOT CHANGE
Period	List - Text		ENTER AS MMM-YY (ALL CAPS FOR MMM) EX: NOV-11
Batch Name	Text		
Journal Name	Text		
Journal Description	Text		
Journal Reference	Text		
Organization	List - Text	Stanislaus Budget Org	DO NOT CHANGE
Chart Of Accounts		Accounting Flexfield	DO NOT CHANGE

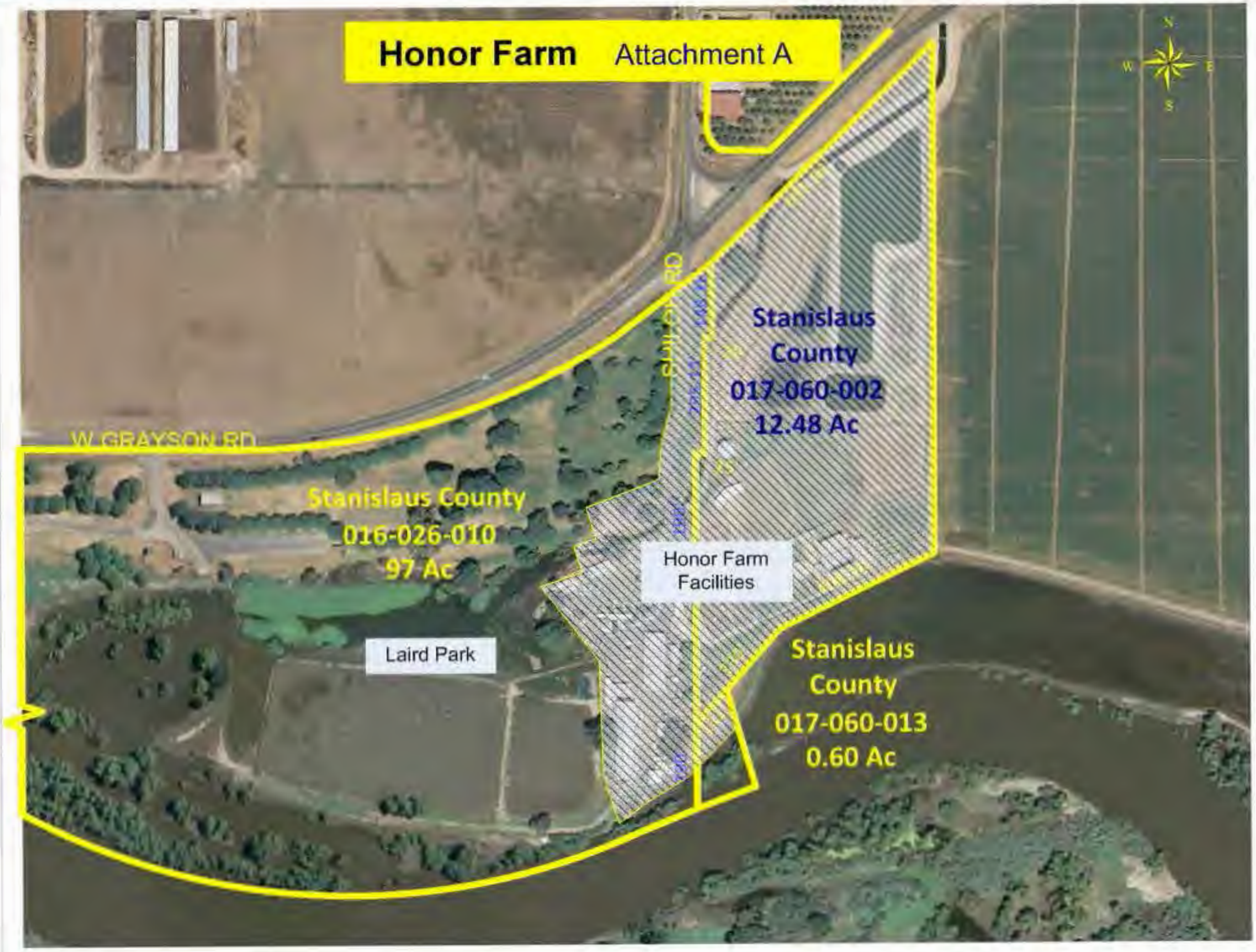
Upl	Fund (4 char) * List - Text	Org (7 char)	Account (5 char)	GL Project (7 char)	Location (6 char)	Misc. (6 char)	Other (5 char)	Debit incr appropriations decr est revenue * Number	Credit decr appropriations incr est revenue * Number	Line Description Text
	0100	0016031	61830	0000000	000000	000000	00000		300000	Decr Appro
	0100	0016031	85850	0000000	000000	000000	00000	300000		Transfer Out
	2072	0061131	46600	0000000	000000	000000	00000		300000	transfer In
	2072	0061131	80300	0000000	000000	000000	00000	300000		Inc. Approp.
Totals:								600000	600000	

Tip: This is not the end of the Template. Unprotect the sheet and insert as many rows as needed.

Explanation: Honor Farm Closure and Decommissioning Effort, operating transfer from CEO-Plant Ac. To WWTF Capital Fund

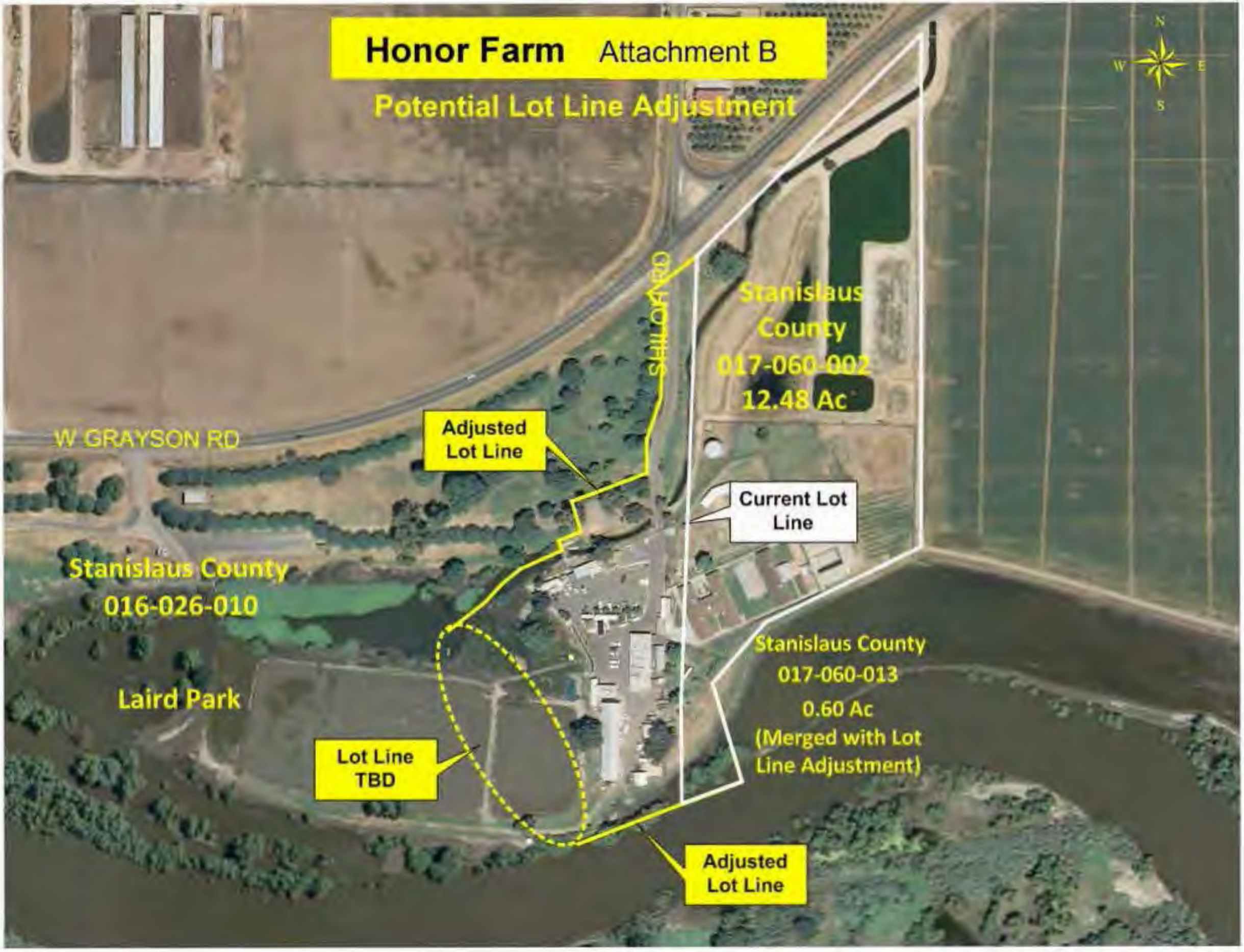
Requesting Department	CEO	Data Entry	Auditors Office Only
JE/CEO			
Prepared by	Supervisor's Approval	Keyed by	Prepared By / Approved By
12-Jun-14	6/13/14		6/13/14
Date	Date	Date	Date / Date

Honor Farm Attachment A



Honor Farm Attachment B

Potential Lot Line Adjustment



ATTACHMENT C

STANISLAUS COUNTY HONOR FARM
DRAFT ENGINEERING REPORT

June 2014

Prepared for:

Stanislaus County
Chief Executive Office
1010 Tenth Street
Modesto, CA 95354

Prepared by:

605 Standiford Avenue, Suite N
Modesto, CA 95350
(209) 322-1820

in association with:
R.B. WELTY & ASSOCIATES, INC.

Table of Contents

Section 1 Purpose 1

Section 2 Background 1

Section 3 Property Description 2

Section 4 Existing Facilities 2

- Structures 2
- Water 6
- Sewer 8
- Storm Drain 12
- Dry Utilities 12
- Access and Security 13
- Other Improvements 13

Section 5 Condition Assessment 13

- Structures 13
- Water 17
- Sewer 19
- Storm Drainage 22
- Dry Utilities 23
- Access and Security 23
- Other Utilities 23

Section 6 Property Assessment 23

Section 7 Decommissioning Plan Outline 24

- Tasks 24
- Regulations 24
- Sequence and Schedule 25
- Cost Estimate 26

Section 8 Reuse Plan Outline 26

- Tasks 26
- Regulations 27

Sequence and Schedule 28
Cost Estimates 28
Section 9 Exhibits & Appendixes 30

Section 1 Purpose

On November 20, 2013, the Stanislaus County Chief Executive Office advertised a Request for Qualifications and Proposals for consultant services to develop options for the closure and reuse of the Stanislaus County Honor Farm (Honor Farm), a minimum security County jail located in rural Stanislaus County. The Honor Farm was vacated on August 1, 2013. Black Water Consulting Engineers and R.B. Welty & Associates (Consultant) have been retained by Stanislaus County (County) to conduct a condition assessment of the Honor Farm and provide the County with a plan for reuse or decommission in order to sell the property at its highest and best use. The purpose of this engineering report is to 1) document the results of the condition assessment of existing buildings, facilities, and utilities; 2) identify the agencies and permits required to comply with regulations and code; 3) outline recommended improvements for reuse of the facility; and 4) outline a plan for decommission and reuse of the facility. This engineering report will serve as the technical document to provide the County and prospective buyers with information for the disposition and potential future development of the property.

The information provided in this Engineering Report is based on the existing land use as an institutional facility under the existing Stanislaus County General Plan zoning designation A-2-40 (General Agriculture). The scope of this report does not include improvement recommendations or information for use of the property other than its existing use as an institutional facility.

The evaluations and recommendations made in this report are based on field observations, previous studies, written and verbal communications, and other record information made available to the Consultant. The best effort was made to verify and confirm the information contained in this report. It shall not be construed as a document that is comprehensive or completely identifies all of the conditions of the Honor Farm facility. It is incumbent on the reviewer to verify the evaluations, conditions, and recommendations in this report.

Section 2 Background

The Honor Farm was constructed in the 1960's and was used as a minimum-security facility for sentenced and qualifying un-sentenced adult male inmates. The highest use population occurred from the mid 1970's to late 1990's with between 370 inmates to 426 inmates, with weekend inmates. On weekends, visitors accounted for approximately 150 people. At maximum capacity at its highest use estimate, the facility accommodated approximately 620 people.

The On June 26, 2010, Barracks 1 and 2 were damaged by fire. Since then, Stanislaus County has increased its inmate housing capacity at the Public Safety Center and no longer has the need for the Honor Farm. Barracks buildings 1 and 2 were demolished and removed from the site in 2010. Stanislaus County currently hires a private security company to secure the facility as theft and vandalism is an issue.

Section 3 Property Description

Stanislaus County is the owner and operator of the Honor Farm located at 8224 West Grayson Road, approximately 8 miles west of Modesto, California. The site is bordered by West Grayson Road and Turlock Irrigation District (TID) Lateral No. 2 to the north, the San Joaquin River to the south and west, and Laird Park to the west, refer to the Project Location exhibit in Section 9. Highway 33 and Interstate 5 are located west of the Honor Farm. Shiloh Road extends to and serves as the main access road to the Honor Farm site. The surrounding area consists of privately owned agricultural land.

There are three parcels which make up the Honor Farm and Laird Park. APN 016-026-010 is a 97 acre parcel which contains Laird Park and a portion of the Honor Farm. APN 017-060-002 is a 12.48 acre parcel which is entirely used by the Honor Farm. APN 017-060-013 is a 0.6 acre parcel located adjacent to the San Joaquin River. All parcels are designated as zone A-2-40 (General Agriculture).

The County is in the process of completing a lot line adjustment to separate the developed area of the Honor Farm from Laird Park. APN 017-060-013 will be used to create a larger parcel to encompass the Honor Farm. Refer to the Lot Line Adjustment Exhibit for a preliminary representation of the new parcel lines. The County will require an access easement from the new owner of the Honor Farm property for maintenance access to Laird Park.

Section 4 Existing Facilities

Existing facilities at the Honor Farm site include various structures, electrical, gas, propane, water, sewer, and storm drainage utilities, open fields, and a wastewater treatment facility. This section describes the existing facilities in detail.

Structures

Existing structures at the Honor Farm include modular, temporary, and permanent structures. This section describes each structures use and other known information observed in the field and from County information. Refer to the Table 4.1 for the existing structures inventory and descriptions and the Existing Structures exhibit in Section 9 to reference the structure location with the structure identification letter

.

Table 4.1– Existing Structures Inventory and Descriptions

ID	Function	Year Built	Building Description	Square Footage	Foundation	HVAC Type	Roof Type	Flooring Type
A	Modular Locker Rm	1996	Staff Locker	500	No	Package	Metal	Carpet
B	K/9 (FTO)	2005	K/9 Staff	160	No	Package	Metal	Carpet
C	Mess Hall & Kitchen	1969	Kitchen/Din	6,500	Yes	Package	Tar	Vinyl
D	Building Maintenance Shop	1975	(Gym)	648	Yes	Package	Tar	Rubber
E	Maintenance Building	1969	Repair/Storage	1,680	Yes	No	Metal	Concrete
E	Shop/Paint Booth	1970	Misc Shops/Bay	6270	Yes	No	Metal	Concrete
G	Classroom "Gee"	2003	I/M Programs	576	No	Package	Metal	Carpet
H	Walk-In Refrigerator	1996	Food Storage	120	No	No	Metal	Metal
I	Staff Break Room/Library	1998	Staff Dinning	760	No	Package	Metal	Vinyl
J	Sign-In Shed/Guard Shack	--	--	--	--	--	--	--
K	Barracks 3/Mechanical Room	1968	86-Bed Living Unit	4,235	Yes	Package	Tar	Concrete
L	Barracks 4	1982	120-Bed Living Unit	9036	YES	Package	Tar	Vinyl
M	Green House (Tree Project?)	2008	Tree Prog/Vacant	1800	No	No	Plastic	Dirt
N	Greenhouse	1975	Plant Prep	1466	No	No	Metal	Dirt
P	Medical Modular	1992	Med. Off/Satellite	540	No	Package	Metal	Vinyl
Q	Clothing Room	1970	I/M Property	960	Yes	No	Metal	Concrete
R	Conference Trailer	2009	Interview Rm	720	No	Package	Metal	Concrete
S	Visitor's Modular	1995	I/M Programs	720	No	Package	Metal	Carpet
T	Gazebo	1996	Staff Break Room	264	Slab	No	Metal	Carpet
U	Staff Restroom	1972	Bathrooms	264	Yes	Package	Shingle	Concrete
W	Probation Modular	1972	H/F Lt. / Ops Dep	600	No	Package	Shingle	Concrete
X	Shed (Tractor Parking)	2006	Covered Patio	680	No	No	Metal	Laminate
Y	Supply/Storage	1986	I/M Processing	2,000	Yes	Package	Metal	Dirt
	"Programs" Office (Landscape)	2006	Vacant	160	No	Package	Metal	Concrete

Modular Locker Room – A

This structure was used to facilitate the changing of uniforms and clothes as required by the institutional agency and is approximately 500 square feet (SF). This secured modular allowed items to be stored that should not be available within the facility in proximity to inmates. It was built in 1996 and constructed of typical lightweight modular materials. It is framed in wood and lightweight metal members. The foundation is raised and supported by typical point load supports from beneath. The roof is metal. The flooring is carpet. The building is equipped with a packaged heating, ventilation, and air conditioning (HVAC) unit.

K/9 FTO – B

This structure was used as a staff office and is approximately 160 S. It was built in 2005 and constructed of typical lightweight modular materials. It is framed in wood and lightweight metal members. The foundation is raised and supported by typical point load supports from beneath. The roof is metal. The flooring is carpet. The building is equipped with a packaged heating, ventilation, and air conditioning (HVAC) unit.

Mess Hall & Kitchen/Walk-In Refrigerator – C

This structure was used to facilitate the coordination of meals and access control for the institutional agency. It was built in 1969 and constructed of concrete block and structural steel frame. The foundation is a standard concrete pour with footings.

Workout/Gym – D

This structure was used to facilitate exercise for onsite personnel. It was built in 1970 and constructed of concrete block material. The foundation is a standard concrete pour with footings.

Maintenance Building/Shop/Paint Booth – E

This structure was used for preparation and painting of various items. It was built in 1970 and constructed of metal. This structure is a multi-purpose facility with several bays. The Paint Booth bay is planned to be demolished by the County.

Shop Awning-River – F

This structure was used for congregating near the river. It was built in 1970 and constructed of wood.

Classroom "Gee" - G

This structure was used to facilitate the coordination and meeting of staff for program development and processing. It was built in 1986 and constructed of typical lightweight modular materials. It is framed in wood and lightweight metal members. The foundation is raised and supported by typical point load supports from beneath.

Kitchen Refrigerator – H

This structure was used as a kitchenette. It was built in 1996 and constructed of typical lightweight modular materials. It appears to have recently been remodeled. It is framed in wood and lightweight metal members. The foundation is raised and supported by typical point load supports from beneath.

Staff Break Room/Library - I

This structure was used as a break room. It was built in 1998 and constructed of typical lightweight modular materials. It is framed in wood and lightweight metal members. The foundation is raised and supported by typical point load supports from beneath.

Sign-In Shed/Guard Shack - J

This structure was used for observation and supervision of personnel. It was built in 1982 and constructed of typical lightweight modular materials. This facility is scheduled to be demolished by the County.

Barracks 3 - K

This structure was used to house personnel. It was built in 1968 and constructed of concrete block material. The foundation is a standard concrete pour with footings.

Barracks 4 - L

This structure was used for housing of personnel. It was built in 1982 and constructed of typical lightweight wood and metal materials. This facility is planned to be demolished by the County.

Greenhouse – N

This Greenhouse structure was used for agricultural use and training. It was built in 2008 and constructed of wood.

Yard Awning - M

This structure was used for shade in the courtyard area. It was built in 2006 and constructed of structural steel.

Medical Modular - P

This structure was used to facilitate the coordination and the onsite medical needs for the institution. It was mainly used as storage. It was built in 1992 and constructed of typical lightweight modular materials. It is framed in wood and lightweight metal members. The foundation is raised and supported by typical point load supports from beneath.

Clothing Room - Q

This structure was used to facilitate the coordination of personnel clothing requirements for the institution. It was mainly used as storage. It was built in 1970 and constructed of typical lightweight modular materials. It is framed in wood and lightweight metal members. The foundation is raised and supported by typical point load supports from beneath.

Conference Trailer/Visitors Trailer – R, S

This structure was used to facilitate the coordination and visitation of personnel and outside persons. It was built in 1995 and constructed of typical lightweight modular materials. It is framed in wood and lightweight metal members. The foundation is raised and supported by typical point load supports from beneath.

Gazebo – T

This structure was used as a staff break area. The gazebo was built in 1996. It is framed in structural timber. It equipped with a ceiling fan.

Staff Restroom – U

This structure is a restroom facility. It was built in 1972 and constructed of concrete block material. The foundation is a standard concrete pour with footings.

Probation Modular – W

The staff office structure was used to facilitate the coordination and meeting of staff for the institutional agency and is approximately 164 SF. The office was built in 2005 and constructed of typical lightweight modular materials. The restroom is constructed of concrete block and was built in 1972 and is approximately 100 SF. It is framed in wood and lightweight metal members. The foundation is raised and supported by typical point load supports from beneath.

Shed (Tractor Parking) -X

This structure is constructed out of structural steel.

Supply/Storage Y

This structure is constructed out of structural steel and is in excellent condition.

Water

The existing water facilities at the Honor farm include the water distribution system, groundwater well site, and emergency storage facility. Refer to the Water Utility exhibit and Appendix A in Section 9 for public information on the water system obtained from Stanislaus County Department of Environmental Resources.

Water Distribution System

The water distribution system at the Honor Farm includes a water supply pipe network providing potable water to the various buildings and barracks. The water distribution system pipe network size and materials of construction are unknown. Five water valve boxes were identified in the field. Based on conversations with County maintenance staff, the water valves are not effective or in working condition.

Groundwater Well Site


Groundwater Well Site

Water facilities at the Honor Farm include a water distribution system supplied by a groundwater well located on the Laird Park parcel APN 016-026-010 approximately 400 feet west of the Shiloh Road entrance road. The well site is equipped with a submersible pump mounted on a concrete pedestal, two pressure tanks on a concrete equipment pad with 3 inch piping to the tanks from the well discharge pipe, above grade 6 inch discharge piping and valving, electrical panels and controls, and a power service utility pole. The area surrounding the equipment is bare ground. The site is enclosed by a chain link fence with a gate.

There are two abandoned wells. A small well, abandoned in 1991, is located on the south side of the emergency water storage tank. The pipe network of this well still loops from this location and an existing above grade 6 inch diameter ductile iron pipeline traverses Shiloh Road and extends to the active well site in Laird Park.


Abandoned Well Site

A larger well site, abandoned in 2002, is located just east of Shiloh Road near the water storage tank site.


Abandoned Well

Emergency Water Storage Tank

There is an emergency water storage tank for fire protection located northeast of the Honor Farm entrance. The storage tank has a capacity of approximately 700,000 gallons and is fabricated of steel. The storage tank site is enclosed with a chain-link fence topped with circular barbed wire. There are four fire hydrants on the site and two fire department connection points (FDC).


Emergency Water Storage Tank

Sewer

Sewer facilities at the Honor Farm include a wastewater treatment facility, sewer collection and conveyance pipes, and a sewer pump station. The following describes the sewer facilities and provides a condition assessment. Refer to the Sewer/Storm Utility exhibit in Section 9.

Sewer Collection System

The sewer collection system at the Honor Farm consists of 4 inch, 6 inch, 8 inch, and 10 inch piping and manholes. The sewer system collects wastewater from the workout/gym building, kitchen, and Barracks 3 and 4. Wastewater is collected and conveyed by gravity to the WWTF influent pump station.

Wastewater Treatment Facility

The Wastewater Treatment Facility (WWTF) is a facultative pond system with a capacity of 50,000 gallon per day (gpd). The WWTF consists of an influent lift station, headworks, one aeration pond, and four percolation ponds, as shown in the WWTF Site exhibit in Section 9. The lift station is located in the southeast corner of the WWTF site and receives flow from the Honor Farm collection system. Influent from the lift station discharges directly to the aeration pond via an above ground pipe manifold with three outlet pipes. Pond aeration is accomplished using two 5-hp aerators and one 7-hp aerator that were installed in 2010.


Aeration Pond

There is a concrete structure headworks with a magnetic flow meter located immediately upstream and a stationary bar screen located within the structure, but it is currently not in use at the facility. There is an existing pipe below grade from the headworks to the aeration pond, but County maintenance staff redirected flow upstream of the headworks unit to prevent the accumulation of sludge in the immediate area of the outlet on the southeast corner due to low flows after the closure of the Honor Farm. The influent pump station, headworks, and aeration pond site area is enclosed by a chain-link with barbed wire fence. Ponds 1 through 4 are also enclosed within a barbed wire fence.


WWTF Headworks


Pond 2

Two groundwater monitoring wells are located at the facility. Quarterly reports of the groundwater quality in these wells is provided to the Regional Water Quality Control Board (RWQCB).

Recent total influent flows at the WWTF total 1,000 gallons, a daily average of 44 gallons per day or 0.087% of design capacity, as reported in the April 2014 monthly report to the RWQCB (refer to Appendix B in Section 9). Although the facility is closed, showers and sinks with constantly running water in barracks buildings 3 and 4 are left running in order to maintain flows to the collection system and WWTF to keep it in operation, as required by the permit.

The aerated pond/percolation pond wastewater treatment system operates under RWQCB Waste Discharge Requirements (WDRs) Order No. 5-01-018 since January 2001. Permit requirements are summarized in Table 4.2.

Table 4.2 – WWTF Waste Discharge Requirements

Specification	Requirement
Average daily dry weather flow	Shall not exceed 55,000 gpd
Dissolved oxygen levels in ponds	Minimum of 1.0 mg/L in upper 1 ft.
Freeboard	Minimum of two feet vertically from water surface to lower point of overflow
pH	Shall not be less than 6.5 or greater than 8.5
Biochemical Oxygen Demand, BOD_5	40 mg/L, 30-day average limit; 90 mg/L daily maximum limit

Previous violations date back to 1995 and consist of overflows at the influent lift station as a result of grease and solids accumulation in the sump, violations of the minimum freeboard requirements which are now mitigated with the construction of Ponds 3 and 4, and average effluent BOD5 concentrations up to 78 mg/L.

Historical records indicate that this facility was planned for operation in the 1950s and sized to serve 425 inmates, equating to an estimated flow of 120 gallons per day per capita (gpcd). The facility originally consisted of one aeration pond and two percolation ponds. Ponds identified as 3 and 4 in Figure 2 were added in 2001, and have not been used. Pond 2 is not currently being used and the sludge has been drying in the pond since Pond 2 was taken out of service around May 2013. Treated effluent from the aeration pond is currently diverted to Pond 1 for percolation. All ponds, including the aeration pond are unlined and have interconnection piping and valves. The measured biosolids (sludge) depths in the aeration pond, measured on May 16, 2014, are shown in the Aeration Pond Sludge Depth exhibit in Section 9.

Influent is piped above ground along the south side of the aeration pond from the influent pump station to the aeration pond. Ponds 1 through 4 are not being used at this time. With the Honor Farm being vacant (except for site security personnel), influent flow is a result of constantly running shower faucets and sinks in Barracks buildings 3 and 4.

Table 4.3 includes data for the ponds at the WWTF.

Table 4.3 – Wastewater Treatment Pond Data

Pond	Pond Surface Area (Acre)	Side Slope	Pond Depth (ft.)	Required Freeboard (ft.)	Volume Capacity (Million Gallons, MG)
Aeration Pond	0.25	4:1	8	2	0.20
Pond 1	1.68	4:1	6	2	1.60
Pond 2	0.60	4:1	6	2	0.45
Pond 3	0.37	2:1	7	2	0.90
Pond 4	0.43	2:1	7	2	0.75

The influent pump station is equipped with two submersible pumps manufactured by Crane/Barnes Model 3SE2094L, refer to Appendix C in Section 9 for the pump data sheets. Each pump is equipped with a two (2) horsepower, 1750 RPM motor. The design capacity is estimated to pump approximately 150 to 400 gallons per minute. One pump is capable of meeting the design capacity at the pump station, with the other pump serving as the redundant pump for back-up.

In 2010, the County hired a consultant to complete a master plan for phased improvements to the WWTF with the objective to improve safety for operating personnel, security, and to improve regulatory compliance. The improvements were not completed because the previously noted fire at barracks 1 and 2 occurred shortly after the report was finalized. Table 4.4 lists the recommended improvements identified in the Honor Farm Wastewater Treatment Facility Master Plan, June 2010, prepared by Nolte Associates, Inc., refer to Appendix D in Section 9 for the complete Master Plan Report, which also includes the WWTF WDRs permit.

Table 4.4 – Master Plan Recommended Improvements

Process Location	Recommended Improvement	Benefit
Influent Lift Station	Addition of back-up level float switch and/or alarm.	Increase system redundancy.
Aeration Pond	Conversion of Pond 4 to an aeration pond.	Improve operational flexibility; Increase residence time for treatment.
Electrical System	Replacement/upgrade of electrical panels and wiring.	Improve safety and reliability.
Site	Addition of fencing and signage around perimeter.	Improve safety and security.
Site	Addition of groundwater monitoring well on west side of WWTF in the down-gradient groundwater region.	Improve monitoring of groundwater quality.

Sludge Removal Maintenance Project

The County intends on completing a maintenance project to remove biolsolids (sludge) from the existing aeration pond, Pond 1, and Pond 2 now that the Honor Farm facility is not in use and influent flow is low. There is no documented maintenance for removal of biosolids at the WWTF. In order to complete the maintenance project, influent flows will be diverted to Pond 4, where the aerators can be installed if necessary. The aeration pond will be dewatered in order to prepare biosolids for removal. Contingent on the dry summer weather, it is estimated that sludge in the aeration pond will take approximately 2 weeks to dewater to a point where it can effectively be removed from the pond for drying. Pond 2 has been shut down for approximately one year and sludge is dry enough for removal at this time, After dewatering the aeration pond, sludge will be dredged to Pond 1 that currently contains dried sludge. Pond 1 will be bermed to contain the new sludge from spreading from the specified drying area. It is anticipated that it will take a minimum of three months for the sludge to dry, depending on the weather, to meet Environmental Protection Agency (EPA) 503 regulations. All required testing will be performed after drying and prior to disposal. After the sludge is dry, it will be hauled off to a disposal facility in Merced, CA. It is estimated that approximately 5,126 tons of dried sludge will be hauled for disposal. The longer the sludge dries the less weight that will need to be disposed of and this is dependent on the amount of time the County allows for drying and dry weather. Refer to Appendix E in Section 9 for a detailed costs estimate and outline for the maintenance project.

Storm Drain

Existing storm drain facilities at the Honor Farm include catch basins and collection system piping. Refer to the Sewer/Storm Utility exhibit in Section 9. Site runoff from the paved areas of the site is currently directed to catch basins/drain inlets with grated covers that connect to pipes which discharge to nearby grassy areas where it percolates into the natural soil, refer to Sewer/Storm Utility. The storm drain system consists of either 4 inch or 6 inch diameter pipes. No designated runoff conveyance or detention/retention systems exist on site.

The 15+/- acre site will produce approximately 2.4 acre feet of runoff water based on preliminary calculations for a 100-year storm. The calculations are based on the most current Stanislaus County Storm Drain Standards.

Dry Utilities

Existing dry utilities at the Honor Farm include overhead utility lines for power and telephone, various power poles and utility poles, electrical panels and lighting, refer to the Dry Utility exhibit in Section 9. A 350 kVA emergency generator set was removed from the site in July 2013. However, electrical connection for a generator is available. The existing electrical/power system at the site is sized to


Generator Pad

provide service for the existing use population at the facility.

Access and Security

There is one main roadway access to the Honor Farm site at the northern side of the site at Shiloh Road off Grayson Road. The site is enclosed by a chain link fence with circular barbed wire on the northern boundary of the site. There is an access key pad for automatic opening of the gate at the entrance that is not currently in use. The southern and western end of the site near the portable buildings and maintenance shops is unsecured and bordered by the San Joaquin River bank.

The Honor Farm facility is equipped with an alarm system.

Other Utilities

There is a 9,350 gallon on-site propane tank. The propane tank is mounted on a concrete equipment pad. The propane gas main that serves Barracks 3 and 4 was replaced by County staff in 1997.

Propane Tank

Section 5 Condition Assessment

A condition assessment was completed for the existing facilities described in Section 4. This section includes the results of the condition assessment and makes recommendations for facilities needing improvement.

Structures

The scope of the structural inspection consisted of a visual evaluation of the project site, building exteriors, roofs, and interior common areas. This condition assessment was prepared in accordance to general provisions of the California Building Code and general construction guidelines. Specific emphasis has been placed on structural issues.

The existing facility is currently under the "Institutional" designation of the California Building Code (I-3). This designation may and will most likely be changed with the new use of the property. Upon determination of this use, application will need to be made with the County to bring the facility up to the current standards and codes of public safety.

The condition assessment for structures identified in the Existing Structures exhibit in section 9, are summarized in Table 5.1. The majority of the buildings are in fair to good condition and can be easily adapted for multiple uses. The older modular buildings are unfortunately in poor to bad condition and are beyond salvage due to water damage, age and general deterioration. Barracks 4 is also planned for

demolition by the County, as it has extensive material damage throughout. The Paint Shop (E) is also planned for demolition by the County.

The *Asbestos Sampling Report July 2013* prepared by J.W. Mach Consulting reports that asbestos exists in the roofs of the Modular Locker Room (A), asbestos, Building Maintenance Shop (D), and Staff Break Room (I), and Classroom "Gee" (G) structures. Refer to Appendix F.

Repairs identified in Table 5.1 will require drawings and/or specifications for construction. Permits and agency approvals are required if the site is rezoned. Additional Building Code requirements such as ADA accessibility will need to be addressed and approved by the local building official. It is not anticipated that building repairs will State agency review. Additional specialty reports to address seismic, wood destroying organisms, etc. are not deemed necessary, as prior investigations have been performed.

Table 5.1– Structures Condition Assessment

ID	Function	Recommended Improvements
A	Modular Locker Rm	Fair Condition, Roof Rebuild
B	K/9 (FTO)	Good Condition
C	Mess Hall & Kitchen	Good Condition
D	Building Maintenance Shop	Good Condition
E	Maintenance Building	Roof Repair
E	Shop/Paint Booth	Roof Repair, Demo Paint Booth Bay
G	Classroom "Gee"	Demolition
H	Walk-In Refrigerator	Good Condition
I	Staff Break Room/Library	Good Condition
J	Sign-In Shed/Guard Shack	Demolition
K	Barracks 3/Mechanical Room	Repair Roof and Restroom
L	Barracks 4	Demolition
M	Yard Awning	Paint
N	Greenhouse	Demolition
P	Medical Modular	Inaccessible
Q	Clothing Room	Inaccessible
R	Conference Trailer	Demolition
S	Visitor's Modular	Demolition
T	Gazebo	Good Condition
U	Staff Restroom	Good Condition
W	Probation Modular	Good Condition
X	Shed (Tractor Parking)	Good Condition
Y	Supply/Storage	Good Condition
	"Programs" Office (Landscape)	Unknown

Additional information for some of the structures is summarized is included in the next section for additional reference.

Mess Hall & Kitchen/Walk-In Refrigerator – C

This facility is in good condition. The typical lifespan of a block and steel building can well exceed 50 years depending on maintenance. The interior of the building is functional.

Workout/Gym – D

The facility is in good condition and can be adapted. The typical lifespan of a block building can well exceed 50 years depending on maintenance. The interior of the building is functional. Asbestos was found in the roofing material and will need to be handled appropriately.

Maintenance Building/Shop/Paint Booth – E

Insulation beneath the roof needs repair/replacement.

Shop Awning-River – F

It is recommended that this structure be demolished.

Classroom "Gee" - G

This building is in poor condition and demolition is recommended. The roof needs replacement. The floor is structurally failing and water damage in walls ceilings and floors is evident. The stairs and landings are structurally failing. Asbestos should be handled appropriately during demolition.

Kitchen Refrigerator – H

This facility appears to have recently been remodeled and in good condition. It is framed in wood and lightweight metal members. The typical lifespan of a modular commercial building may span 20-30 years depending on maintenance. The interior of the building is functional.

Staff Break Room/Library - I

This structure appears to have recently been remodeled and in good condition. It is framed in wood and lightweight metal members. The typical lifespan of a modular commercial building may span 20-30 years depending on maintenance. The interior of the building is functional. Asbestos was found in the roofing material and will need to be handled appropriately.

Barracks 3 - K

The structure is in fair condition with roof and restroom damage. The typical lifespan of a block building can well exceed 50 years depending on maintenance. The interior of the building is functional.

Yard Awning - M

This structure is in good condition. Painting of this structure is warranted.

Medical Modular - P

The typical lifespan of a modular commercial building may span 20-30 years depending on maintenance. The interior of the building is functional. Asbestos was also found in the roof material and will need to be handled appropriately.

Clothing Room - Q

The typical lifespan of a modular commercial building may span 20-30 years depending on maintenance. The interior of the building is functional.

Conference Trailer/Visitors Trailer – R, S

The floor in this structure is failing and water damage in walls, ceilings and floors is evident. The stairs and landings are structurally failing. It is recommended that this structure be demolished.

Gazebo – T

This structure is in good condition.

Staff Restroom – U

The facility is in good condition. The typical lifespan of a block building can well exceed 50 years depending on maintenance. The interior of the building is functional. No asbestos was found in this building.

Shed (Tractor Parking) -X

This structure is in excellent condition.

Although the scope of this assessment does not include impacts to improvement requirements for the existing structures for a new use of the facility from its current designation as an institutional facility the following briefly summarizes some issues that may result:

- Handicapped Accessibility will need to be addressed for each building and bathroom facilities. Most restroom facilities do not meet current standards nor do buildings without accessibility ramps.
- Seismic evaluation may not be required after the demolition of suggested buildings. The remaining structures are structural steel framed, reinforced concrete block and modular buildings in fair to good condition.

- Non-structural repairs consist mostly of insulation and interior finishes that will need to be replaced or upgraded.
- Structural repairs will need be used to replace most wooden; stairs, platforms, overhead shade structures if not demolished.
- Energy efficiency requirements will need to be addressed such as replacement of single pane windows and probable outdated HVAC systems.

Water

This section describes the condition of the water facilities at the Honor Farm based on visual inspection, record information, and communication from County staff. Utilities described as "fair" are in working condition, but in need of repair. Utilities describes as "good" condition are in working condition and can continue to be in use with regular maintenance. Utilities described as "unknown" were inaccessible and no information is known on the condition.

Water Distribution System

The water distribution system is in an overall fair condition. Maintenance staff has indicated that the existing water valves for the existing buildings are all broken or not useable. It is recommended that all the water valves be replaced. Hydrants and fire department connection are in good condition. The condition of the water pipe, all but one water meters, and valves is unknown as they were not accessible.

Groundwater Well

The groundwater well site is in good condition. There is evidence of erosion due to storm water runoff or gopher holes that should be filled in or compacted. Vegetation and weeds within the well site should be removed. There is no evident drain to waste line for use during inspections or repairs. A drain to waste line should be installed that discharges to a County approved location. The pressure tanks and well appear to be in good condition and in compliance with current water well standards.


Erosion at Well Site

An access and maintenance easement will be required for the continued use of the well at Laird Park. An easement agreement will need to be written and a legal description of the easements will need to be created to allow the owner of the Honor Farm the ability to access their water source and maintain it as necessary.

Permits to operate groundwater wells are non-transferable. In order for a new owner/developer to continue operation of the well, a new application for a permit would need to be completed and

submitted to the County Department of Environmental Resources. Additional requirements will be issued once the County has reviewed the application and the type and class of the water system is determined. Additional requirements are based on the water system's newly assigned type and class, and could include (but are not limited to) a bacteriological sample site plan, laboratory tests, and technical reports. See Small Community Temporary Public Water Supply Permit in Appendix A.

Emergency Storage Tank

The emergency water storage tank is in good condition. There are no signs of rust on the tank and the valving appears to be in working order. The interior of the tank has not been inspected.

Valves

Maintenance indicates that the existing water valves are stripped and are not in working condition to isolate water service to various buildings. One of the water valves was inspected in the field. The valve box is full of dirt and the valve is not easily accessible. Replacement of each valve is recommended.


Existing Water Valve

Hose Bibs

In general, the hose bibs are in fair condition and operated as desired during field inspections. A few hose bibs had leaks and some had the water supply shut off and the working condition is unknown.

Fire Hydrants

Visual inspections of the fire hydrant suggest they are in fair condition. Fire hydrant locations vary from paved road to open fields, refer to the Water Utility Exhibit. The fire hydrants should be inspected by the Fire Department to determine if they are in acceptable working condition.


Existing Fire Hydrant


Existing Fire Hydrant

Fire Department Connections (FDC)

Visual inspections of the FDCs suggest they are in fair condition. One FDC is located west of the dining hall and includes a storage container for a fire hose. The other FDC is located in the open field north of the barracks; refer to the Water Utility exhibit. FDCs should be inspected by the Fire Department to determine if they are in acceptable working condition.


Existing FDC


Existing FDC with Fire Hose Storage

Sewer

This section describes the condition of the sewer facilities at the Honor Farm based on visual inspection, record information, and communication from County staff. Utilities described as “fair” are in working condition, but in need of repair or some improvement. Utilities describes as “good” condition are in working condition and can continue to be in use with regular maintenance. Utilities described as “unknown” were inaccessible and no information is known on the condition.

Sewer Collection System

Table 4.2 summarized the condition assessment for the sewer collection system.

Table 4.2 – Sewer Distribution System Condition Assessment

Manhole		Inlet/Outlet Pipes			Notes	Improvement Recommendation
ID	Condition	Size (in)	Material	Condition		
SSMH-1	Fair	10	Clay	Fair	E	Rehabilitate manhole (aggregate exposed in manhole wall), flush pipeline, clean debris in manhole, clear overgrown weeds at manhole cover.
		10	Clay	Fair	SW	
		6	Clay	Fair	W	
SSMH-2	Fair	8	Clay	Fair	E	Rehabilitate manhole (aggregate exposed in manhole wall), flush pipeline, clean debris in manhole
		6	Clay	Fair	NW	
		6	Clay	Fair	W	
SSMH-3	Fair	10	Clay	Fair	N	Rehabilitate manhole (aggregate exposed in manhole wall), flush pipeline, clean debris in manhole
		8	Clay	Fair	SW	
SSMH-4	Good	12	Clay	Good	N	Remove outhouse, install manhole cover, clean debris out of wet well, flush pipeline.
		12	Clay	Good	SW	
		4	Clay	Fair	S	
SSMH-5	Fair	12	Clay	Fair	NE	Rehabilitate manhole (aggregate exposed in manhole wall), flush pipeline, clean debris in manhole, clear overgrown weeds at manhole cover and bring to grade.
		10	Clay	Fair	SW	
		4	Clay	Fair	SE	
SSMH-6	Fair	12	Clay	Fair	NE	Clean debris in wet well, flush pipeline.
		12	Clay	Fair	S	
		4	Clay	Fair	SE	
SSPS-1	Fair	12	Clay	Fair	NE	Clean debris in wet well, flush pipeline.
		12	Clay	Fair	S	

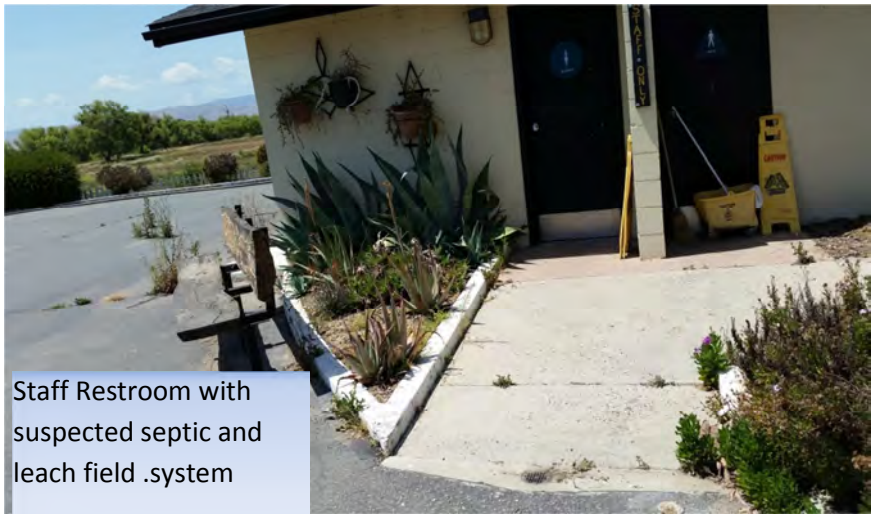
Manholes with visible aggregate on the manhole walls are considered in fair condition and rehabilitation of the manhole is recommended. This improvement consists of lining the manhole to prevent further degradation of the manhole walls. Collection system piping was visually inspected at manholes. Pipes with visible obstructions of debris or build up are considered in fair condition. It is recommended that all sewer lines are flushed.


Typical buildup and exposed aggregate in manhole (SSMH-

There is an existing outhouse building in the field south of the WWTF that discharges directly to a sanitary sewer manhole (SSMH-4), refer to the Sewer/Storm Utility exhibit. It is recommended that the outhouse is removed, a manhole cover installed and the manhole debris is cleaned and pipe are flushed


SSMH-4 Outhouse

Field inspection and a dye test conducted on May 7, 2014, indicate that the Staff Restroom does not connect to the sewer collection system. The area surrounding the restroom building has various plants that appear to be thriving although there is no sprinkler system providing water service. Based on these observations, it is assumed that there is a septic system with a leach field at this location. Verification of a septic system and termination of the sewer collection system at the staff restroom (U) is recommended.


Staff Restroom with suspected septic and leach field .system

WWTF

It is assumed that the County will complete the maintenance project described in Section 4 of this engineering report. Recommended improvements to the WWTF after the maintenance project is complete are consistent with the improvements recommended in the Master Plan Summarized in Table 4.4.

Storm Drainage

Overall the condition of the storm drain collection is fair. Most of the drain inlets are covered by vegetation and contain debris which may cause blockage in the system and, as a result, flooding and ponding of storm water. It is recommended that all storm water pipelines in the system are flushed. Storm drain inlets/outlets in the Barrack 4 area will be demolished with the structure.


SDDI-9

There is one catch basin identified on the Sewer/Storm Utility exhibit labeled SDDI-9 that does not drain to any known outlet. This is in the vicinity of the staff restroom (U) facility described in the previous section and is assumed to be connected to a septic system with a leach field. Verification of a septic system and termination of storm water collection system at SDDI-9 is recommended.

The west side of the site currently drains off of the developed area and onto the low lying grass land where it is naturally treated and allowed to percolate into the surrounding soil. Site drainage is not allowed to cross property lines. In order to mitigate this, there are three recommended options. The first option is to place the new property line in a location which will allow the current storm drainage system to work without modifications. To accomplish this, the property line will need to be placed in a location to allow all site drainage to stay on site. Option two is to collect and pump the storm water to a retention basin on site. Potential site locations for a storm water retention basin include the area south of the WWTF aeration pond and Pond 4, or the area west of Ponds 3 and 4 at the WWTF at the north end of the property. A pump station would be required to convey storm water to the retention basin. Option three would be to construct vertical and/or horizontal drains to capture and store the storm water under the existing paved parking lot. Vertical and horizontal drains capture storm water and store it underground in large rock filled basins. The water is stored in the void spaces between the rocks. Over time the water will percolate into the surrounding soil. The sites depth to groundwater is fairly shallow. Based on the WWTF Wastewater Discharge Permit information, groundwater is approximately 20 feet below ground surface. Due to the proximity of groundwater to the surface will require the use of horizontal drains.

The design of either of these systems will require soil testing by a Geotechnical Engineer. Critical information required to design either of the above mentioned retention systems is groundwater depth and existing soil percolation rates.

Preliminary calculations indicate that three horizontal drains are required for each of the catch basins on the west side of the site in the paved area. This assumption is based on a groundwater depth of 20 feet below ground surface, a soil percolation rate of 2.5 gallons/minute/square-foot, and a 10-foot deep by 8-foot wide trench. The northern drainage area would require a 185-foot long trench, the middle drainage area would require a 94-foot long trench, and the southern drainage area would require a 66-foot long trench (refer to the Horizontal Drain exhibit in Section 9).

Dry Utilities

No improvements are recommended for the existing dry utilities. Should the facility be used for a larger population than for the existing use, power supply, electrical equipment and other dry utilities should be evaluated.

Access and Security

Overall access and security is in good condition and no improvements are recommended. Access to the groundwater well site at Laird Park will require an access easement with the Stanislaus County Parks Departments. Additionally, based on the final lot line adjustment discussed in Section 3, the County will required an access easement through the property for maintenance of the southern portion of Laird Park.

Other Utilities

The propane tank is in good condition and no improvements are recommended.

Section 6 Property Assessment

Portions of the Honor Farm and Laird Park are located in a Federal Emergency Management Agency (FEMA) special flood hazard area Zone A on the community's National Flood Insurance Program (NFIP) map, refer to 100-year FEMA Flood Line exhibit in Section 9 . Zone A identifies a special flood hazard area for which no Base 100-year Flood Elevation (BFE) has been provided. New development or change of the existing land use will require determination of the BFE by the new property owner/developer. FEMA allows two methods to be used to determine the BFE: the Simplified Method and the Detailed Method. To use the simplified method, a site survey must be performed to determine ground elevations. Using the surveyed information and the U.S. Geological Survey (USGS) Quadrangle (Quad) map, and the FEMA Flood Insurance Rate Map (FIRM) a comparison is made to determine an approximate BFE. An attempt to use the Simplified Method was performed to determine the BFE. During the process it was discovered the Quad map is substantially different than field measurements on the east side of APN 016-026-010. The difference is large enough to not allow the use of the

Simplified Method. Further coordination with FEMA and the Community Flood Plain Administrator will be required to determine an accurate 100-year BFE.

Section 7 Decommissioning Plan Outline

Decommissioning of the Honor Farm facility entails demolition of the Barracks 4 (I) and Paint Shop (E) structures and leaving the remaining existing facilities in their current conditions with the exception of the WWTF. This section describes the tasks and costs estimated for decommissioning of the WWTF.

Tasks

As discussed in previous sections, Stanislaus County intends on completing the WWTF maintenance project and the demolition of Barracks 4 (L) Paint Shop (E). The remaining task to decommission the facility is the decommissioning of the WWTF.

In order to decommission the WWTP, a report detailing the project to close the facility is required to be completed and submitted for review and approval by the Regional Water Quality Control Board (RWQCB). The following outlines components of the WWTF closure project to be completed by the County and reported to the RWQCB:

- Turn off all sources of flow to the WWTF.
- Dewater pond receiving influent flow and remove all accumulated and stored sludge in the ponds (will be complete with the planned County maintenance project for removal of sludge).
- Site soil sampling and testing for various metal constituents: Requires composite samples to be collected from each pond and from areas upstream and downstream of the WWTF (background samples). Acceptable test results must show that the test results do not vary significantly between pond samples and with the results from the background samples. It is anticipated that 8 background samples and 6 composite pond samples for each pond will be sufficient, for a total of 38 samples.
- Pond closure: Inlets to ponds are permanently closed by placing a concrete plug in each inlet pipe. Concrete caps are placed on each of the inlet valve operating nuts.
- Pond area is graded to prevent runoff from leaving the site.
- Pump station closure: Inlet to pond permanently closed by placing concrete plug at inlet. Disconnection and removal of pumps and equipment.

Regulations

Correspondence with RWQCB indicate that there is no specific State Water Resources Control Board or Environmental Protection Agency regulations or permits that are required for closure of the WWTF.

Sequence and Schedule

The following is the anticipated sequencing and schedule for the disposition of County milestones for the decommissioning of the Honor Farm facility:

June 17, 2014 **Board of Supervisors Meeting**

- ✓ Approve Process for Disposition of the Site
- ✓ Accept the Engineering Reports for Site
- ✓ Authority to record Lot Line Adjustment
- ✓ Authorize Project Manager to proceed with Reuse/Decommissioning activities of WWTF
- ✓ Authorize Project Manage to issue bids for various maintenance and decommissioning activities

July 22, 2014 **Board of Supervisors Meeting**

- ✓ Authorize the Issuance of Request for Offers (RFO)
- ✓ Set minimum bid price
- ✓ Award low bid contract for Sludge Maintenance Project and commence Project (**subject to bid results*) (**Alternate No. 1**)

August 15, 2014 Completion of Demolition of Barracks 4 Structure

August 20, 2014 ***Receive Offers for Property***

August 21 to Sep. 10, 2014 Negotiate Purchase Agreement with Potential Purchaser

September 16, 2014 **Board of Supervisors Meeting**

- ✓ Approve Purchase Agreement with recommended Buyer
- ✓ Authority to open an escrow account
- ✓ Award low bid contract for Sludge Maintenance Project and commence Project (**subject to bid results)* (**Alternate No. 2)**

September 17, 2014 to March 31, 2015 Escrow Period and Planning Review

- ✓ Purchaser submits Earnest Money Deposit
- ✓ County coordinates with Regional Water Quality Control Board (RWQCB)
- ✓ County close-out all construction activities
- ✓ *RWQCB requires lining for reuse of WWTF pond facility, and Closure Report for decommissioning/full closure of WWTF
- ✓ Transfer/Relinquish Wastewater Operator Permit
- ✓ Application for Conditional Use Permit (Buyer)

- ✓ Approval by Planning Commission (Buyer)
- ✓ Close escrow upon completion of deal terms

Cost Estimate

Table 7.1 lists the estimated costs associated with tasks for the decommissioning of the WWTF and demolition of the Barracks 4 (L) and Paint Shop (E) structures.

Table 7.1 Decommissioning Plan Cost Estimate

Item No.	Item	Quantity	Unit	Unit Cost	Cost
WWTF Improvements					
1	Soil Sampling and Testing	38	EA	$ 1,500.00	$57,000
2	Site Grading	1	LS	$15,000.00	$15,000
3	Concrete plug at pipes	15	EA	$500.00	$7,500
4	Concrete cap at valves	15	EA	$150.00	$2,250
5	Equipment removal	1	LS	$10,000.00	$10,000
				WWTF Improvements Sub-Total	$91,750
Structure Demolition					
6	Barracks 4	1	LS	$ 80,000.00	$80,000
7	Paint Shop	1	LS	$25,000.00	$25,000
				Structure Demolition Improvements Sub-Total	$105,000
				Sub-Total	$196,750
				25% Contingency	$49,188
				TOTAL	**$245,938**

Section 8 Reuse Plan Outline

Reuse of the Honor Farm facility entails making the recommended improvements to the existing facilities, as discussed in Section 5. This section describes the tasks and costs required for reuse of the Honor Farm facility.

Tasks

As discussed in previous sections, Stanislaus County intends on completing the WWTF maintenance project and the demolition of Barracks Building 4 (L). The remaining tasks to reuse the facility are to make recommended improvements to the existing facilities as summarized below (also refer to Tables 4.4, 5.1, 5.2, 5.3, and 5.4):

Existing Structures

- Roof Repair: Structures A, E, K
- Asbestos Roof Mitigation: Structures A, D, I
- Demolition: Structure ID E (Paint Booth only), G, J, L, N, R, S
- Restroom Repair: Structure ID K
- Paint: Structure M

Existing Water System

- Replacement of all water valves.
- Add a drain to waste line at groundwater well.

Existing Sewer System

- Manhole Rehabilitation: SSMH-1, 2, 3, 5.
- Install Manhole Cover: SSMH-4
- Clearing of Debris: All manholes.
- Flushing of all pipes.
- Install float and alarm at WWTF influent pump station.
- Upgrade electrical system at WWTF.
- Install new fencing and signage.
- Conversion of Pond 3 to aeration pond.
- Install groundwater monitoring well.
- Potential lining of WWTF aeration pond, and Ponds 1-4, if required by the RWQCB.

Existing Storm Drainage System

- Replace grate: SDDI-1, 2, 3, 4, 5, 6, 9
- Clearing of Debris: All drain inlets and outlets
- Flush all pipes.

Regulations

Coordination with the SWRCB will be required for reuse of the WWTF, as the permit will be need to be re-written for a new owner. The new owner/developer will be required to submit an Ownership Change Form with the SWRCB. The form can be found at: http://www.waterboards.ca.gov/water_issues/programs/ewrims/ownership/index.php

Lining of the ponds may be a requirement of a new permit, as this is standard for new facilities.

Should the County decommission the WWTF and the new property owner/developer require sewer collection and treatment services at the property, other options include a septic system or packaged treatment facility depending on the type of facility use, population served, and facility activities.
The Honor Farm is located within Stanislaus A-2-40 zoning which may allow for certain uses to utilize a septic system under Stanislaus County Measure X. Implementation Guidelines under Measure X can be found at http://www.stancounty.com/ER/lw-20-measure-x.shtm. Use of the site with a planned septic system would require architectural and engineering design work to determine an appropriate locate of septic facilities with a leach field located a minimum of 200 feet from the San Joaquin River and percolation testing. The septic system project would require submittal and approval by the Stanislaus County Department of Environmental Resources.

Expansion of more than 50% of the existing square footage may result in the use of a package treatment system. Package treatment plants may be required for sites with wastewater generation of over 5,000 GPD and are regulated by Stanislaus County. Flows of more than 5,000 GPD may trigger an on site wastewater treatment facility and would be regulated by the RWQCB. AB 885 would expand these numbers to 10,000 GPD.

Sequence and Schedule

The County schedule and sequence for reuse of the facility is the same as the schedule for decommissioning of the facility.

Cost Estimates

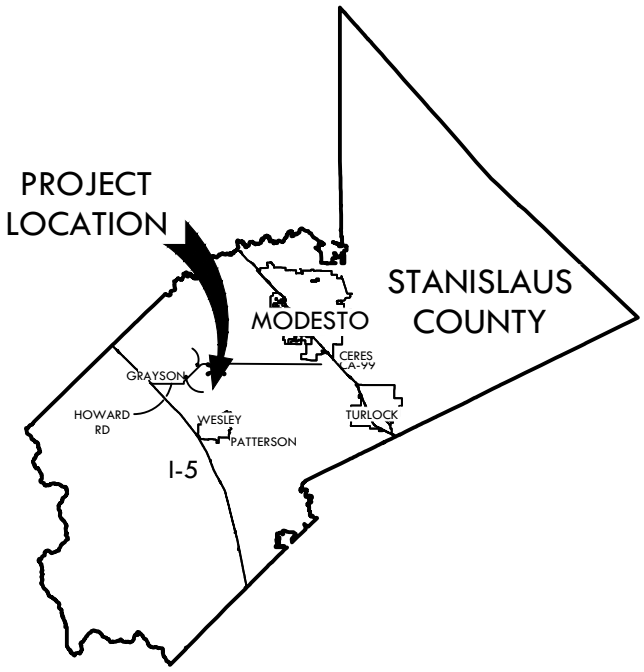
Table 8.1 lists the estimated costs associated with the recommended improvements for reuse of the Honor Farm Facility. Planned demolition of the Paint Shop (ID E) and Barracks 4 (ID L) to be completed by the County are not included in the cost estimate. Making all or some of the recommended improvements is at the discretion of the new developer/owner and are based on reuse of the property as an institutional facility.

Table 8.1 Reuse Plan Cost Estimate

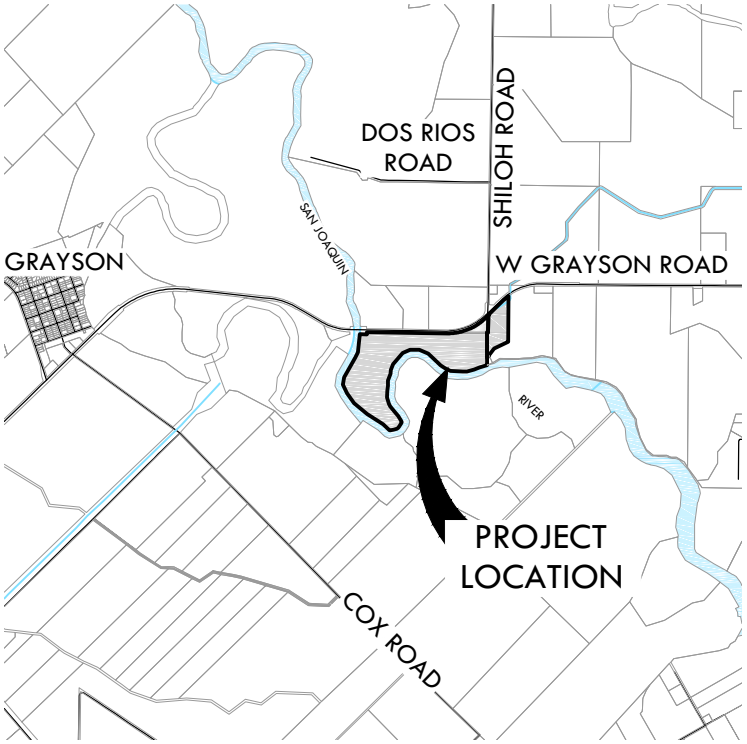
Item No.	Item	Quantity	Unit	Unit Cost	Cost
Structure Improvements					
1	Roof Repair	1	LS	$35,000.00	$35,000
2	Asbestos Roof Mitigation	1	LS	$30,000.00	$30,000
3	Demolition	1	LS	$50,000.00	$50,000
4	Restroom Repair	1	LS	$20,000.00	$20,000
5	Paint	1	LS	$5,000.00	$5,000
				Structure Improvements Sub-Total	$140,000

Water System Improvements					
6	Water valve replacement	15	EA	$1,000.00	$15,000
7	Groundwater Well Drain to Waste Line	1	LS	$2,500.00	$2,500
				Water System Improvements Sub-Total	$17,500
Sewer System Improvements					
8	Manhole Rehabilitation	4	EA	$1,250.00	$5,000
9	Manhole Cover	1	EA	$500.00	$500
10	Clearing Debris	1	LS	$5,000.00	$5,000
11	Flush Pipelines	1	LS	$5,000.00	$5,000
12	WWTF - Back Up Float and Alarm at Pump Station	1	LS	$4,500.00	$4,500
13	WWTF Electrical System Upgrade	1	LS	$65,000.00	$65,000
14	WWTF Fencing and Signage	1	LS	$10,000.00	$10,000
15	WWTF Conversion of Pond 3 to Aeration Pond	1	LS	$135,000.00	$135,000
16	WWTF Groundwater Monitoring Well	1	LS	$10,000.00	$10,000
17	WWTF Pond Lining	1	LS	$100,000.00	$100,000
				Sewer System Improvements Sub-Total	$340,000
Storm Drainage Improvements					
18	Manhole Rehabilitation	4	EA	$1,250.00	$5,000
19	Manhole Cover	1	EA	$500.00	$500
20	Clearing Debris	1	LS	$5,000.00	$5,000
				Storm Drainage System Improvements Sub-Total	$10,500
				Sub-Total Construction Cost	$508,000
				25% Contingency	$127,000
				TOTAL CONSTRUCTION COST	**$635,000**
				Engineering, Administration, Construction Management, 15% of Construction Cost	$95,250
				TOTAL PROJECT COST	**$730,250**

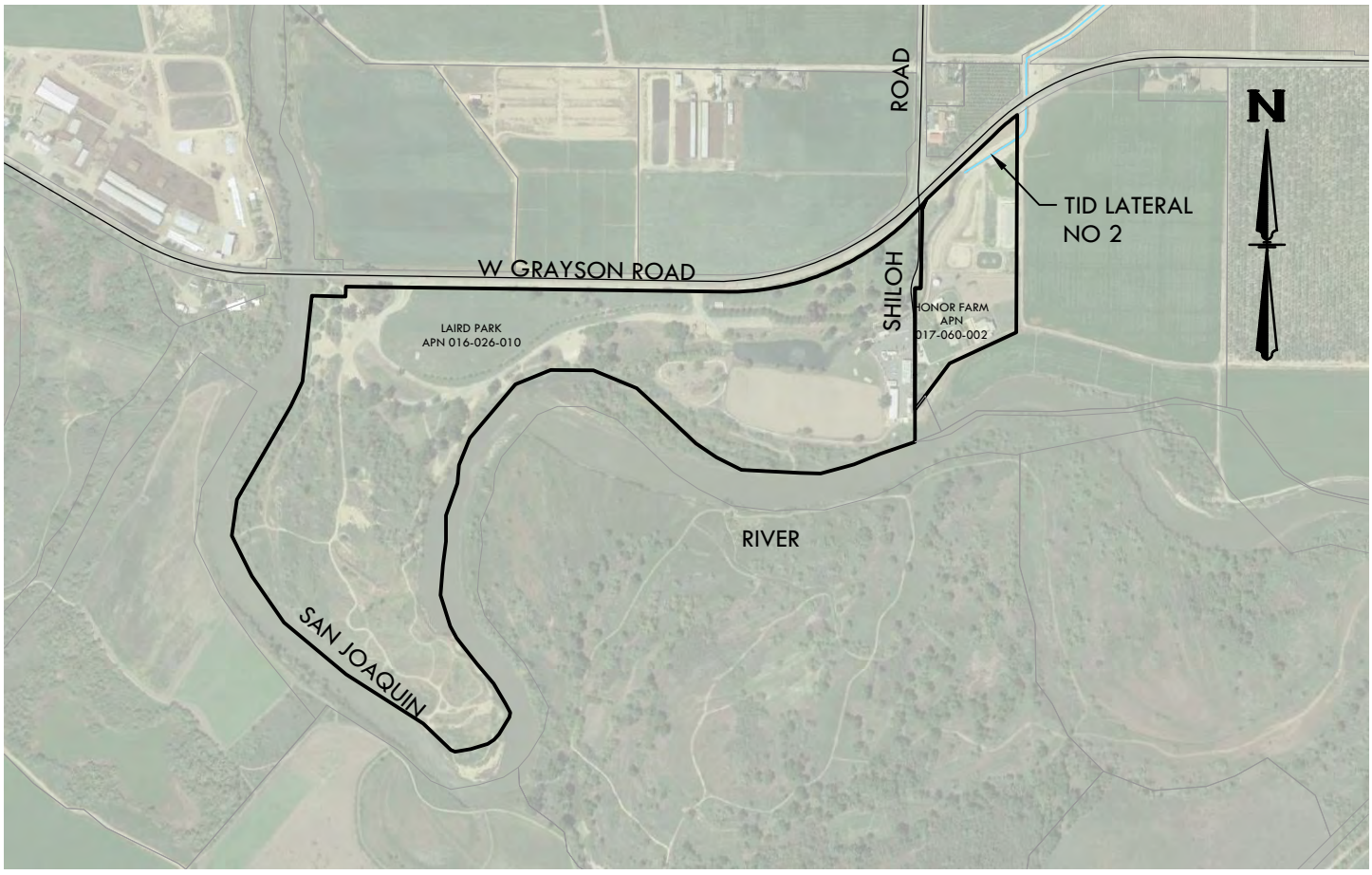
Section 9 Exhibits & Appendixes



VICINITY MAP



LOCATION MAP



PROJECT SITE

NTS

BLACKWATER
CONSULTING ENGINEERS, INC.
AND
R.B.WELTY & ASSOCIATES, INC.

PROJECT LOCATION

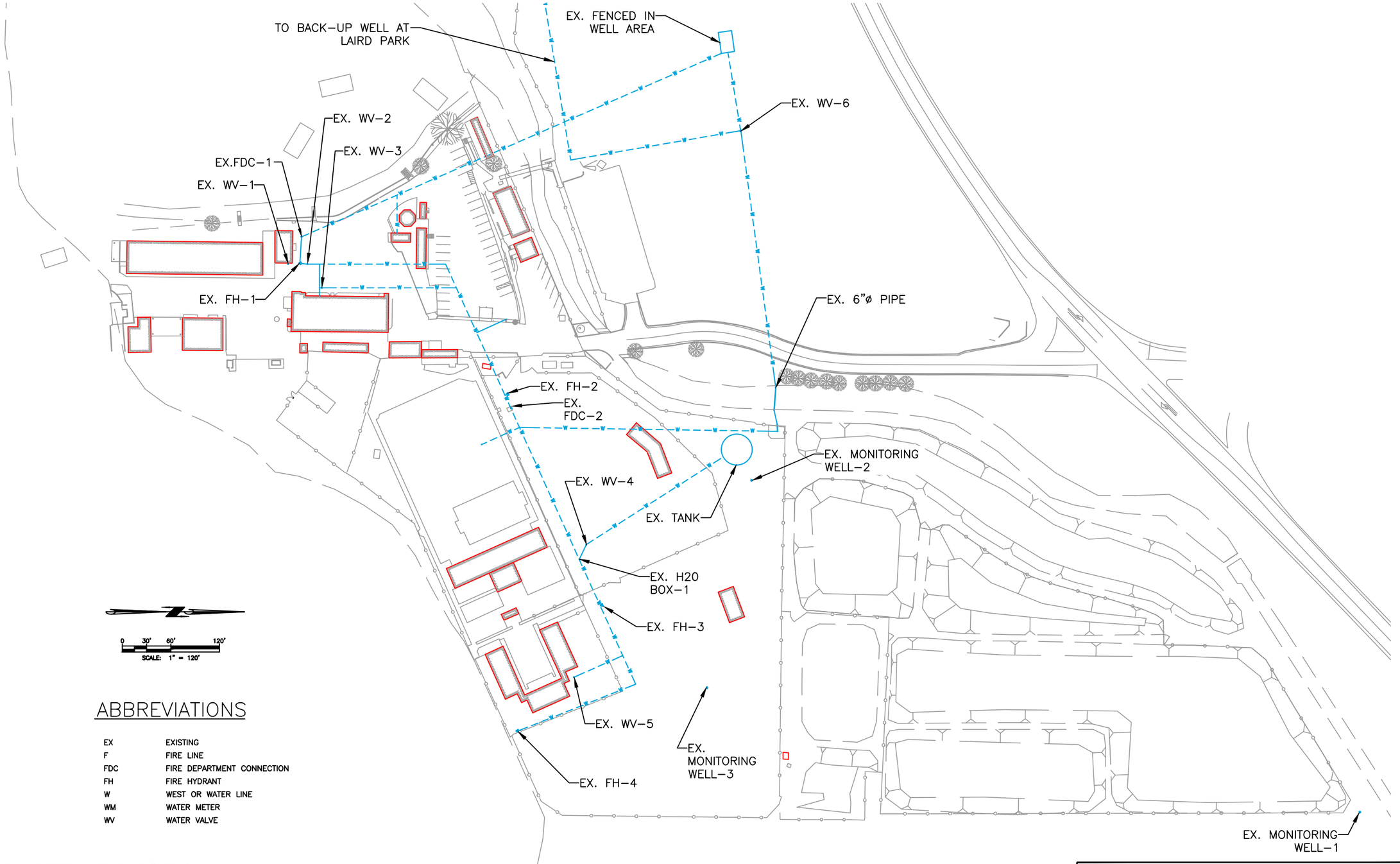
STANISLAUS COUNTY HONOR FARM ENGINEERING REPORT

SCALE: N.T.S.

BLACKWATER
CONSULTING ENGINEERS, INC.
AND
R.B.WELTY & ASSOCIATES, INC.

EXISTING STRUCTURES

STANISLAUS COUNTY HONOR FARM ENGINEERING REPORT



0 30' 60' 120'
SCALE: 1" = 120'

ABBREVIATIONS

EX	EXISTING
F	FIRE LINE
FDC	FIRE DEPARTMENT CONNECTION
FH	FIRE HYDRANT
W	WEST OR WATER LINE
WM	WATER METER
WV	WATER VALVE

BLACKWATER
CONSULTING ENGINEERS, INC.

WATER UTILITY

STANISLAUS COUNTY HONOR FARM ENGINEERING REPORT

EX. SDDI-2
±18X18
4" OUT, RIM=47.7

EX. SDDI-4
±18X18
4" OUT, RIM=48.0

EX. SDDI-5
±18X18
4" OUT, 4" IN FROM DS
RIM=48.4

EX. SSCO
RIM=48.63

EX. GREASE TRAP
TOP=48.9

SDO-5

EX. SDDI-6
12"X12" COVER
4' OUT @ END VALLEY
EX.RIM=47.95
EX.10"ø INV.(N)=43.05±
EX.8"ø INV.(SW)=43.05±

EX. SSMH-2
EX.RIM=49.0
EX.6"ø INV.(W)=45.3±
EX.8"ø INV.(NE)=45.05±
EX.6"ø INV.(NW)=45.2±

EX. SSMH-3
EX.RIM=49.58
EX.10"ø INV.(N)=44.68±
EX.8"ø INV.(SW)=44.68±

EX. SDDI-1
±18X18
4" IN, 4" OUT
RIM=47.7

SDO-1

SDO-2

EX. SDD1-3
4" PVC
RIM=47.5

SDO-4

UNVERIFIED SEPTIC TANK W/
LEACH FIELD FOR
TRAILER/RESTROOMS

EX. SSMH-1
EX.RIM=49.25
EX.10"ø INV.(E)=43.5±
EX.6"ø INV.(NW)=43.55±
EX.6"ø INV.(W)=46.25±

EX. SSMH-5
EX.RIM=49.14
EX.10"ø INV.(SW)=42.04±
EX.12"ø INV.(NE)=41.99±
EX.4"ø INV.(SE)=43.74±

EX. SDDI-9
RIM=47.7±, 6" OUT
UNKNOWN TERMINATION
POSSIBLY INTO SEPTIC TANK

EX. SDDI-7
12X12 BOLTED GRATE
4" OUT
RIM=49.08

EX. SDDI-8
12X12 BOLTED GRATE
RIM=49.16
4" IN, 4" OUT

EX. SDO-6
4" OUT

EX. SSMH-4
EX.RIM=48.82±
EX.12"ø INV.(N)=41.07±
EX.12"ø INV.(W)=41.07±
EX.4"ø INV.=43.62±

EX. SSMH-6
EX.RIM=48.91
EX.12"ø INV.(NE)=40.21±
EX.12"ø INV.(S)=40.21±

EX. SSPS-1
12"øINV. 12.85±
EX.RIM=47.80
EX.12"ø INV.(SW)=39.95±

POND 4

POND 3

AERATION
POND

POND 1

POND 2

EX. 8" PIPE
TOP=49.23

EX. PIPE
TOP=48.98

EX. PIPE
TOP=44.47

EX. 10" PIPE
TOP=50.78

EX. PIPE
TOP=45.20

EX. CONTROL PANEL SHED

0 30' 60' 120'
SCALE: 1" = 120'

LEGEND

- EXISTING CATCH BASIN
- EXISTING CLEAN OUT
- EXISTING DOWN SPOUT
- EXISTING MANHOLE
- EXISTING STORM DRAIN LINE
- EXISTING SEWER LINE

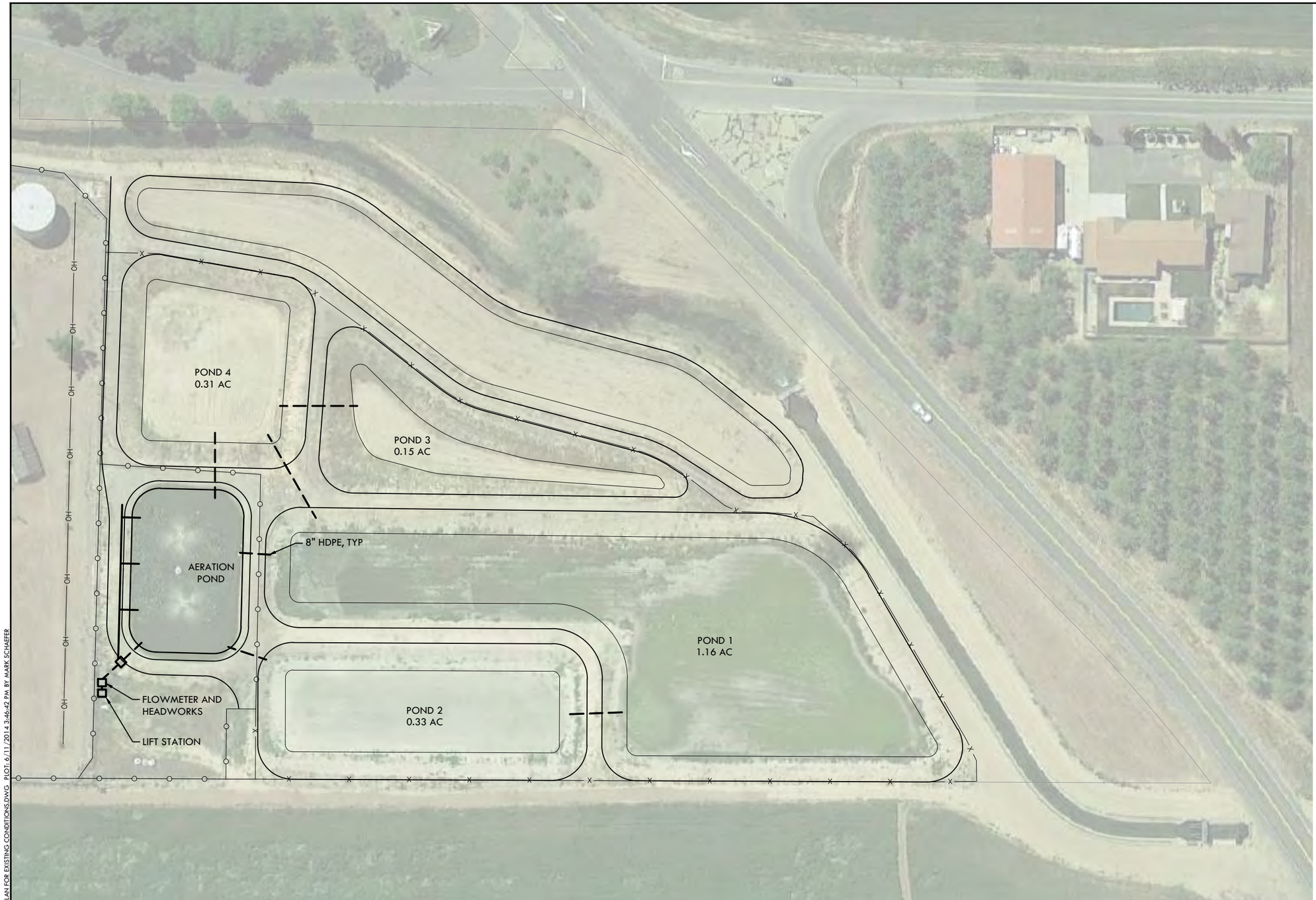
ABBREVIATIONS

BLDG	BUILDING
CB	CATCH BASIN
CO	CLEAN OUT
DI	DRAIN INLET
DIA OR ø	DIAMETER
DS	DOWN SPOUT
EX	EXISTING
INV	INVERT
MH	MANHOLE
S	SOUTH, SEWER OR SLOPE
SD	STORM DRAIN LINE
SS	SEWER
SSMH	SANITARY SEWER MAN HOLE
W/	WITH

BLACKWATER
CONSULTING ENGINEERS, INC.
AND
R.B.WELTY & ASSOCIATES, INC.

SEWER/STORM UTILITY

STANISLAUS COUNTY HONOR FARM ENGINEERING REPORT



N

0 80 160

SCALE: 1" = 80'

BLACKWATER
CONSULTING ENGINEERS, INC.
AND
R.B.WELTY & ASSOCIATES, INC.

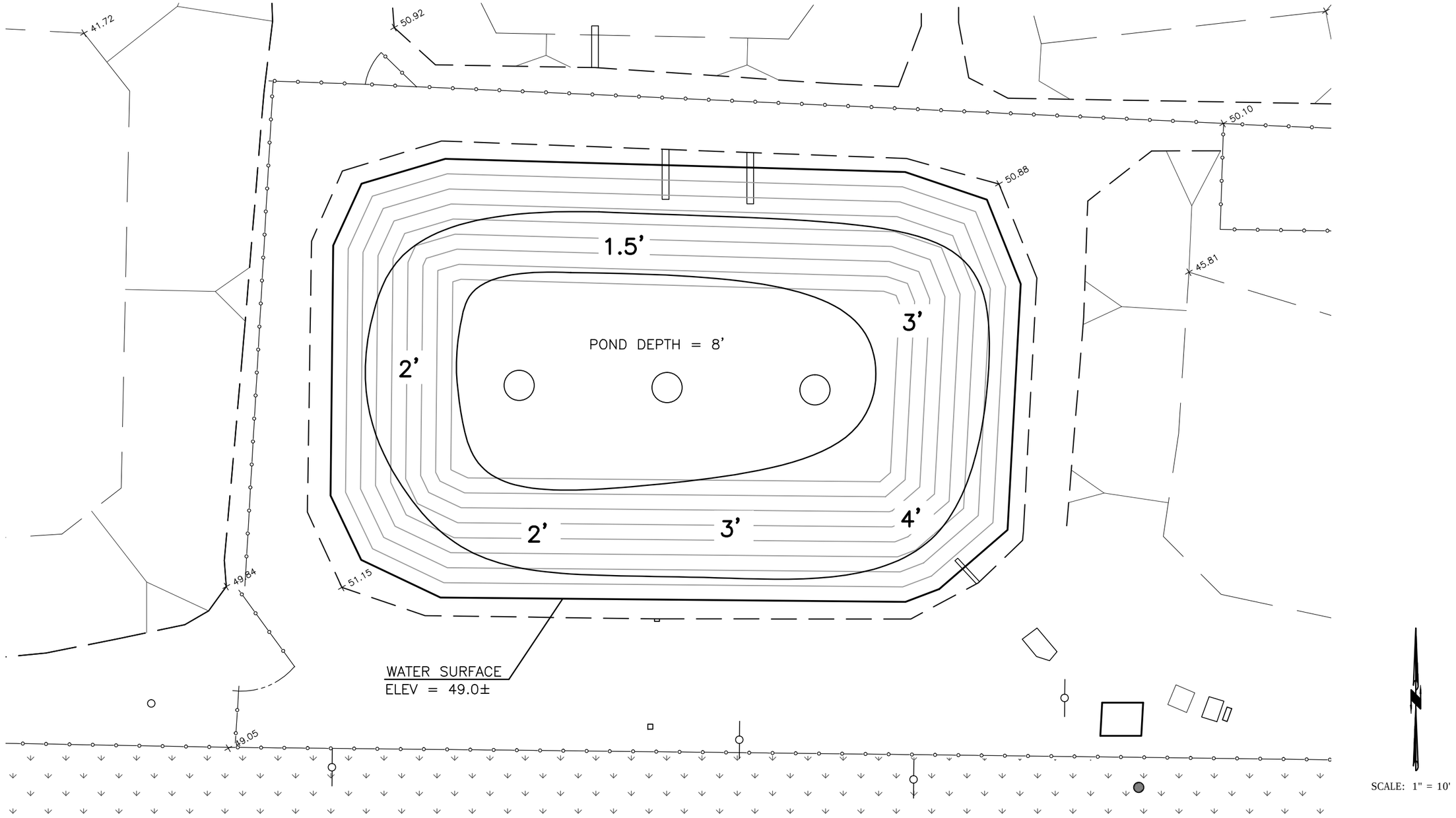
BELOW GRADE EXISTING PIPING

ABOVE GRADE EXISTING PIPING

WWTF SITE

STANISLAUS COUNTY HONOR FARM ENGINEERING REPORT

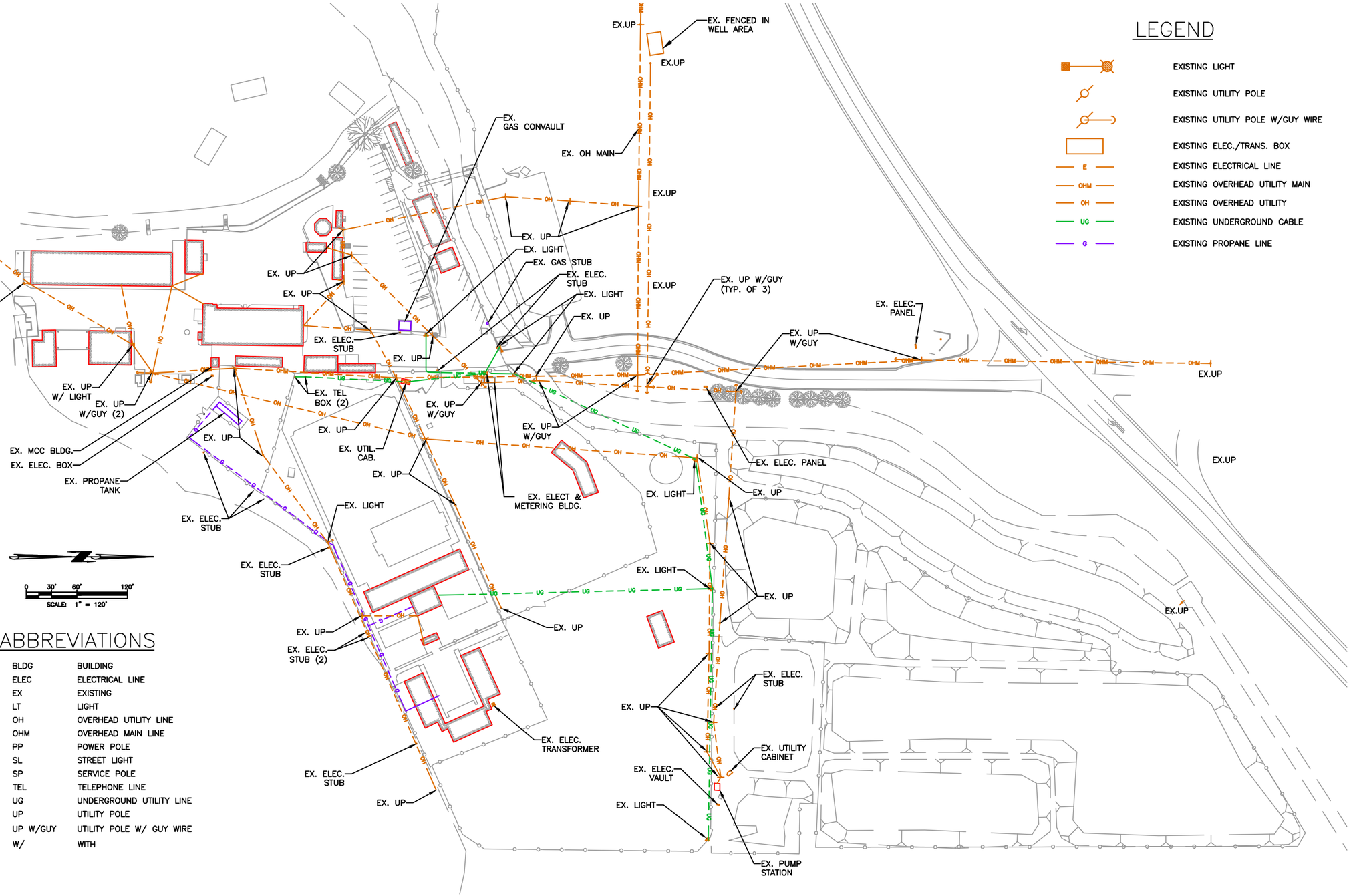
J:\DRAFTING_SHEET SETS\2 SITE PLAN FOR EXISTING CONDITIONS.DWG PLOT:6/11/2014 3:46:42 PM BY MARK SCHAEFER



BLACKWATER
CONSULTING ENGINEERS, INC.
AND
R.B.WELTY & ASSOCIATES, INC.

AERATION POND SLUDGE DEPTH

STANISLAUS COUNTY HONOR FARM ENGINEERING REPORT



LEGEND

- EXISTING LIGHT
- EXISTING UTILITY POLE
- EXISTING UTILITY POLE W/GUY WIRE
- EXISTING ELEC./TRANS. BOX
- E — EXISTING ELECTRICAL LINE
- OHM — EXISTING OVERHEAD UTILITY MAIN
- OH — EXISTING OVERHEAD UTILITY
- UG — EXISTING UNDERGROUND CABLE
- G — EXISTING PROPANE LINE

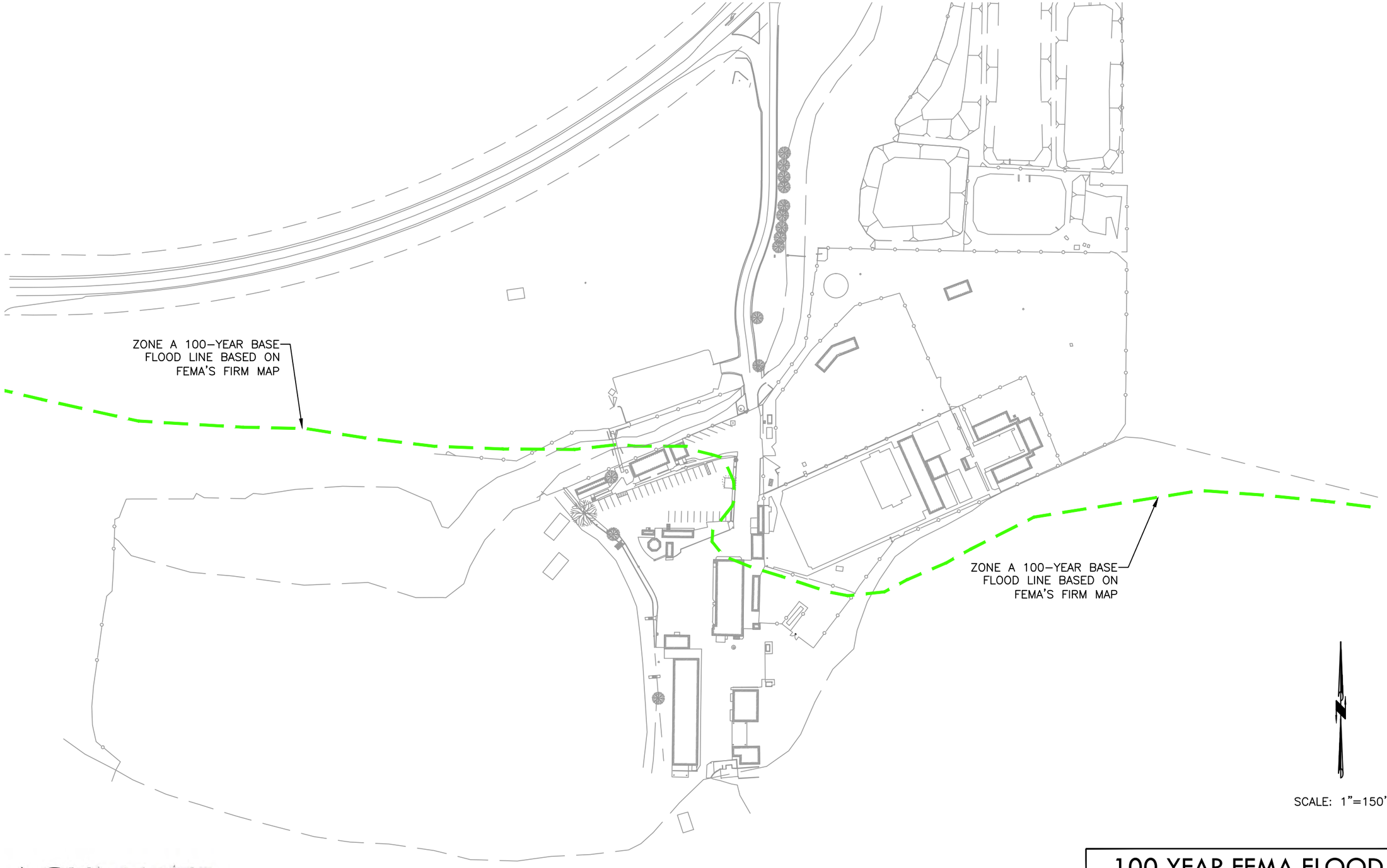
ABBREVIATIONS

BLDG	BUILDING
ELEC	ELECTRICAL LINE
EX	EXISTING
LT	LIGHT
OH	OVERHEAD UTILITY LINE
OHM	OVERHEAD MAIN LINE
PP	POWER POLE
SL	STREET LIGHT
SP	SERVICE POLE
TEL	TELEPHONE LINE
UG	UNDERGROUND UTILITY LINE
UP	UTILITY POLE
UP W/GUY	UTILITY POLE W/ GUY WIRE
W/	WITH

BLACKWATER CONSULTING ENGINEERS, INC.
AND
R.B.WELTY & ASSOCIATES, INC.

DRY UTILITY

STANISLAUS COUNTY HONOR FARM ENGINEERING REPORT



BLACKWATER
CONSULTING ENGINEERS, INC.

R.B.WELTY & ASSOCIATES, INC.

100 YEAR FEMA FLOOD LINE

STANISLAUS COUNTY HONOR FARM ENGINEERING REPORT

Appendix A

Drinking Water Source Assessment

Water System

STAN COUNTY HONOR FARM/LAIRD PARK

Stanislaus County

Water Source

PARK WELL #2

Assessment Date

October, 2002

California Department of Health Services
Drinking Water Field Operations Branch
LPA Stanislaus County

District No.	**80**
System No.	**5000167**
Source No.	**003**
PS Code	**5000167-003**

Appendix N

Checklist for Drinking Water Source Assessment – Ground Water Source

Public water system: Stanislaus Co. Honor Farm/Laird Park ID No.: System# 5000167

Name of source: Park Well #2 ID No.: PSCode# 5000167-003

Assessment date: 11/02 Assessment conducted by Jan Lopez R.E.H.S.

The following information should be contained in the drinking water source assessment submittal:

If another report that is the functional equivalent to the drinking water assessment (e.g., parts of a Ground Water Management Plan) is included in this assessment, the part of that report that fulfills the components of the source water assessment should be clearly indicated.

J.L. 11/02 Source name, system name, source and system identification numbers, date of assessment, name of person and/or organization conducting the assessment (Appendix N, this form)

J.L. 11/7/02 Assessment map with source location, source area (if known), and protection zones.

J.L. 10/29/02 Drinking water source location coordinates and accuracy of method used (Appendix H or equivalent)

J.L. 10/02 Delineation of protection zones (Appendix I or equivalent)

J.L. 10/02 Drinking water Physical Barrier Effectiveness Checklist (Appendix J)

J.L. 11/7/02 Well Data Sheet

J.L. 10/02 Possible contaminating activities (PCA) inventory form (Appendix K).

J.L. 10/02 Vulnerability ranking (Appendix M)

J.L. 10/02 Additional maps (optional) (e.g. local maps of zones and PCAs, recharge area maps, or maps indicating direction of ground water flow)

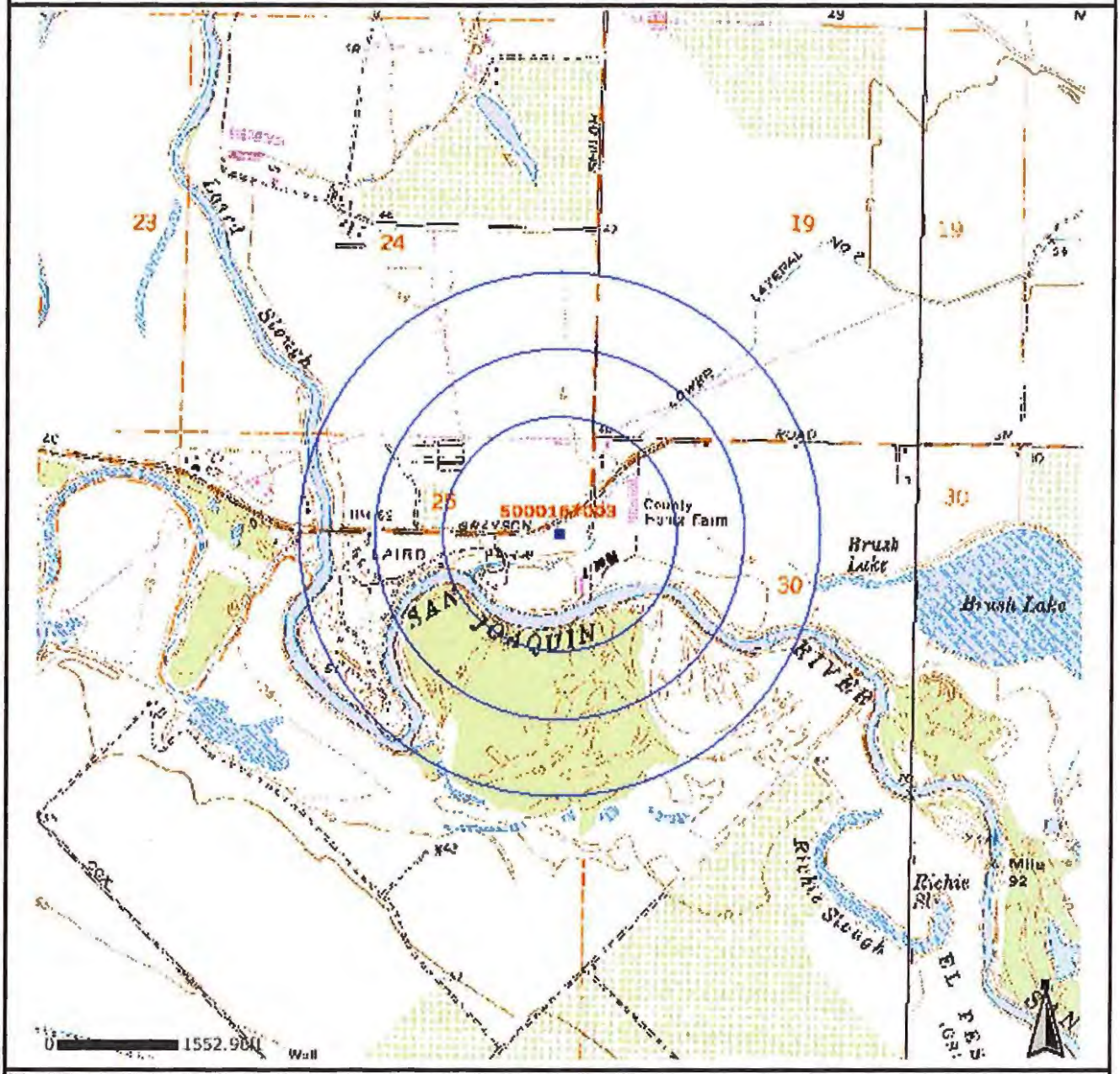
_____ Means of Public Availability of Report (indicate those that will be used)

_____ Notice in the annual consumer confidence report* (minimum)
✓ Copy in DHS district office (minimum) Submitted to D.H.S. on 11/7/02 J.L.
_____ Copy in public water system office (recommended)
_____ Copy in public library/libraries
_____ Internet (indicate Internet address: _____)
✓ Other (describe) DER files

*The annual report should indicate where customers can review the assessments.

_____ ⇒ COMPLETION DATE: INITIALS for EACH TASK

DWSAP Ground Water Zone Interface



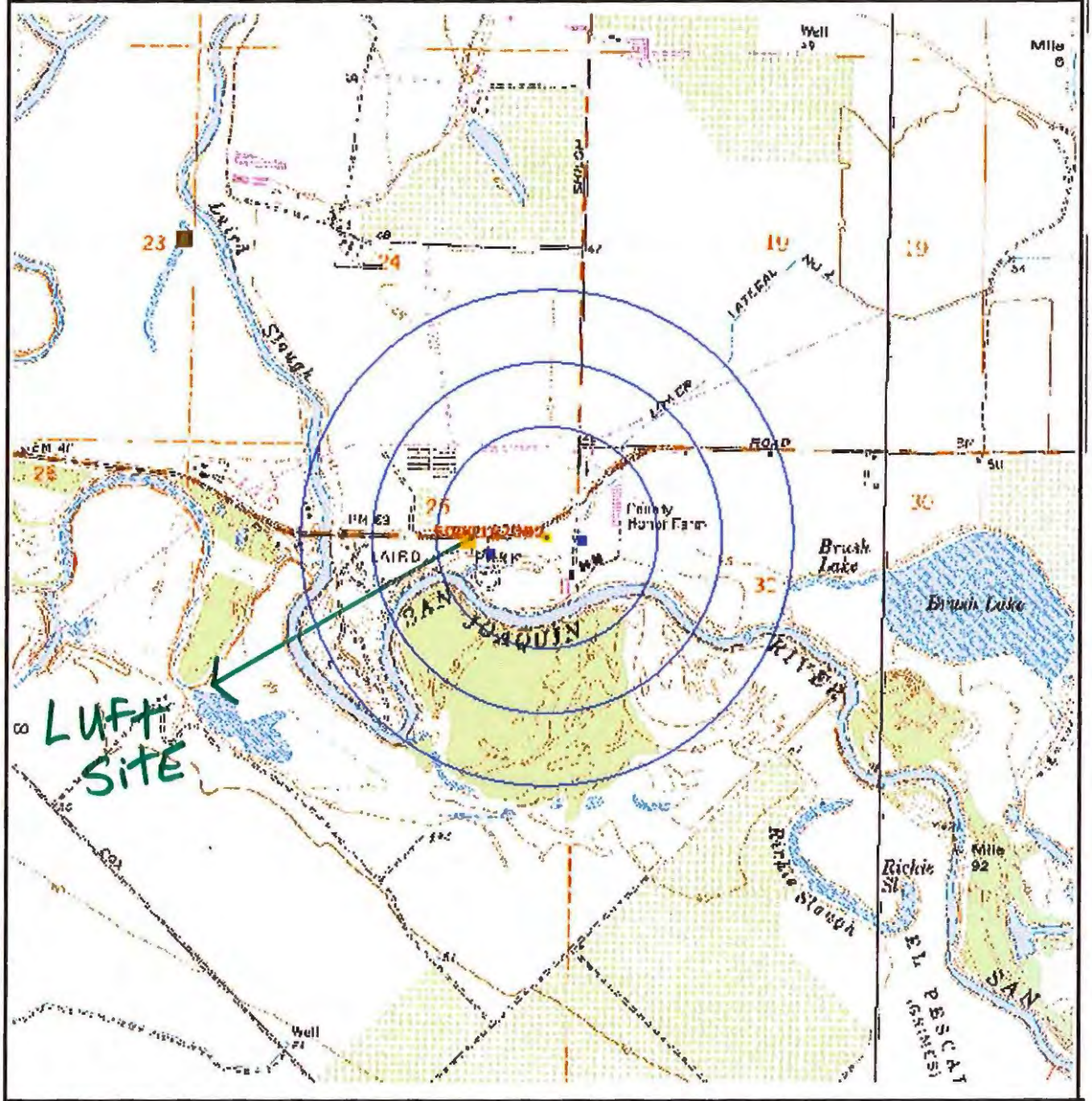
Well Identification Information					
Well Number	**Longitude ***	**Latitude ***	**GPS'd**	* Well location coordinates have been rounded to 3 decimal places due to security concerns.	
5000167003	-121.142	37.563	Yes		
System Number	**System Name**	**Source Number**	**Source Name**	**District Number/Name**	**County Number/Name**
5000167	STAN COUNTY HONOR FARM/LAIRD PARK	003	PARK WELL #2	80/Stanislaus County	50/Stanislaus County
Well Zone Delineation Information					
Media Type	**System Type**	**Effective Porosity (n)**	**Screened Interval (h)**	**Pumping Capacity (q)**	**Azimuth of Flow (a)**
Porous Media	All Other System	.2	22	220 gpm	0 - No Translation
Radii Measures					
Defaults Used	**R2**	**R5**	**R10**		
No	1496 ft	2365 ft	3343 ft		

DWSAP Ground Water Zone Interface

Tools

Navigation	Query	Resetting
	Quad Index Find Well: Find	Restart Application Select New Quad by Method: Well Number | Quad Name | Quad Spatial

Center of Map is Currently within Quadrangle: WESTLEY Zoom to Quad



Well Zone Delineation Tool (Select Well using Select Tool, Set Values, and Click 'Add/Update' button)	
Well Number:	5000167003
Porosity:	(•) Porous Media ( ) Fractured Rock

System:	○ Transient Non-Community Systems ◉ All Other Systems		
Radii Calculation:	○ Default ◉ Calculated		
Effective Porosity (n , 0 - 1)		.2	
Screened Interval (H , feet)		22	
Pumping Capacity (Q , gpm|cubic ft/yr|acre ft/yr)		220	gpm
Azimuth of Flow (a , 0 - 360)		0	0=No Translation
Add/Update			

Drinking Water Source Assessment and Protection (DWSAP) Program

GPS Field Data Sheet

Data Dictionary File: DD20021029.TXT

District Name: Stanislaus County | District No.: 80 | County: Stanislaus

System Name: STAN COUNTY HONOR FARM/LAIRD PARK | System No.: 5000167

Source Name: PARK WELL #2 | Source No.: 003 | PS Code: 5000167-003

Your Name: STAFF | Date: 10/29/02

Rover File Name: X102920A | Time: 12:22:08 am (pm)

Nearest Base Station (select one)
- [x] Fresno [Fresno Base Station]
- [ ] Sacramento [Sacramento USFS Base Station]
- [ ] Sunnyvale [Sunnyvale Base Station]

Site Sketch

Offset Location? [ ] Offset Angle _____ degrees

Offset Distance _____ meters

SEE MAP in "DWSAP" file

Site Description: Well has adequate, sanitary surface seal. Well site is fenced/secure.

- 30' x 30' [illegible]
- [illegible]
- [illegible] 18" / 5' x 3'

Comments: Positions used: 250.

Stanislaus County
Striving to be the Best

OFFICIAL NOTICE

DEPARTMENT OF ENVIRONMENTAL RESOURCES
3800 Cornucopia Way, Suite C, Modesto, CA 95358-9492
Phone: 209.525.6700 Fax: 209.525.6774

Name Stanislaus Co. Honor Farm/Laird Park Date 10/29/02
Address 8224 Grayson Rd. Purpose DWSAP
Modesto zip
Time In Time Out By Jon Lopez
Environmental Health Specialist

System # 5000167
PS Code # 5000167-003
Source 003 (Park Well #2)

- GPS reading was taken this date.
- Well has adequate, sanitary/surface seal.
- Well site is fenced/secure.
- See "DWSAP" file for complete P.C.A. List.

NOTE: This source is to replace the well that services the Honor Farm (Well 01, source 001). Pump from source 001 was pulled and located at Source 003. (H.P. is 10/MAX pump capacity is 220 gpm)

You are hereby notified to correct the above violations of the _____ immediately.

A reinspection will be made on _____. Failure to correct the violation(s) may result in legal action.

Stanislaus County Ordinance requires a charge of $ _____ per reinspection of your facility if violations are not corrected by the referenced date.

Accepted by _____ Date 10/29/02

4019-80 L

Adm. 29

Drinking Water Source Assessm and Protection (DWSAP) Program

Delineation of Ground Water Protection Zones

District Name LPA Stanislaus County **District No.** 80 **County** Stanislaus

System Name STAN COUNTY HONOR FARM/LAIRD PARK **System No.** 5000167

Source Name PARK WELL #2 **Source No.** 003 **PS Code** 5000167-003

Completed by Jan Lopez R.E.H.S. **Date** October, 2002

Method Used to Delineate Protection Zones

X 1. Calculated Fixed Radius

2. Modified Calculated Fixed Radius (Attach documentation for direction of ground water flow.)
3. More Detailed Methods
4. Arbitrary Fixed Radius (For use only by or permission of DHS)

Maximum Pumping Rate of Well (Q)	220	gallons/minute	
	355	acre feet/year	
	15,458,740	cubic feet/year	
Effective Porosity	0.20		[X] Default Value
Screened Interval of Well	22	feet	[X] Default Value

Protection Zone	Calculated Value	Minimum Value	Radius of Protection Zone
Zone A - 2 Year TOT*	1,496 Feet	600 Feet	**1,496** Feet
Zone B5 - 5 Year TOT*	2,365 Feet	1,000 Feet	**2,365** Feet
Zone B10 - 10 Year TOT*	3,344 Feet	1,500 Feet	**3,344** Feet

Drinking Water Source Assessment and Protection (DWSAP) Program

Physical Barrier Effectiveness (PBE)

District Name LPA Stanislaus County **District No.** 80 **County** Stanislaus

System Name STAN COUNTY HONOR FARM/LAIRD PARK **System No.** 5000167

Source Name PARK WELL #2 **Source No.** 003 **PS Code** 5000167-003

Completed by Jan Lopez R.E.H.S. **Date** October, 2002

Parameter		Possible Points	This Source	Score
Type of Aquifer Confinement				
1. Unconfined, Semi-confined, Fractured Rock, Unknown Aquifer		0	X	0
2. Confined		50		
Aquifer Material (Unconfined Aquifers) Type of material within aquifer				
1. Porous Media (Interbedded sands, silts, clays, gravels) with continuous clay layer minimum 25' thick above water table within Zone A		20		
2. Porous Media (Interbedded sands, silts, clays, gravels)		10	X	10
3. Fractured rock (Low Physical Barrier Effectiveness - no further questions required)		0		
Pathways of Contamination (All Aquifers) Presence of Abandoned or Improperly Destroyed Wells				
1. Present within Zone A (2 year TOT distance)	Yes	0		
	No	5	X	5
	Unknown	0		
2. Present within Zone B5 (2 -5 year TOT distance)	Yes	0		
	No	3		
	Unknown	0	X	0
3. Present within Zone B10 (5-10 year TOT distance)	Yes	0		
	No	2		
	Unknown	0	X	0
Static Water Conditions (Unconfined Aquifers)				
Depth to Static Water (DTW) 20 feet	0 to 20 feet	0		
	20 to 50 feet	2	X	2
	50 to 100 feet	6		
	Greater than 100 feet	10		
	Unknown	0		
Well Operation (Unconfined Aquifers)				
Depth to Uppermost Perforations (DUP) 50 feet Maximum Pumping Rate of Well (Q) 220 gallons/minute Length of Screened Interval (H) 22 feet				
	Less than 5	0	X	0
[DUP - DTW / Q/H] 3.00	Between 5 and 10	5		
	Greater than 10	10		
	Unknown	0		

Physical Barrier Effectiveness (PBE)

System Name STAN COUNTY HONOR FARM/LAIRD PARK **System No.** 5000167

Source Name PARK WELL #2 **Source No.** 003 **PS Code** 5000167-003

Parameter		Possible Points	This Source	Score
Well Construction (All Aquifers)				
Sanitary Seal (Annular Seal) Depth 50 feet	None or less than 20 feet	0		
	Between 20 and 50 feet	6		
	50 feet or greater	10	X	10
	Unknown	0		
Surface Seal (concrete cap)	Not present or improperly constructed	0		
	Watertight, slopes away from well at least 2' laterally in all directions	4	X	4
	Unknown	0		
Flooding potential at well site	Subject to localized flooding (i.e. in low area or unsealed pit or vault) or within 100 year flood plain	0		
	Not subject to flooding	1	X	1
	Unknown	0		
Security at well site	Not secure	0		
	Secure	5	X	5
	Unknown	0		

Score	Effectiveness
0 to 35	Low
36 to 69	Moderate
70 to 100	High

Maximum Score = 70

Score 37

Effectiveness Moderate

Drinking Water Source Assessment and Protection (DWSAP) Program

Inventory of Possible Contaminating Activities (PCA Inventory)

District Name LPA Stanislaus County **District No.** 80 **County** Stanislaus

System Name STAN COUNTY HONOR FARM/LAIRD PARK **System No.** 5000167

Source Name PARK WELL #2 **Source No.** 003 **PS Code** 5000167-003

Completed by Jan Lopez R.E.H.S. **Date** October, 2002

PCA (Risk Ranking)	PCA in Zone A	PCA in Zone B5	PCA in Zone B10	*	Comments
Agricultural/Rural Activities					
Grazing (> 5 large animals or equivalent per acre) (H in Zone A, otherwise M)	Y	Y	Y		
Concentrated Animal Feeding Operations (CAFOs) as defined in federal regulation1 (VH in Zone A, otherwise H)	N	N	N		
Animal Feeding Operations as defined in federal regulation2 (VH in Zone A, otherwise H)	N	Y	Y		Poultry houses
Other Animal operations (H in Zone A, otherwise M)	N	N	N		
Farm chemical distributor/ application service (H)	N	N	N		
Farm machinery repair (H)	Y	Y	Y		
Septic systems - low density (<1/acre) (H in Zone A, otherwise L)	Y	Y	Y		
Lagoons / liquid wastes (H)	Y	Y	Y		On-site aeration/evaporation ponds for sewage disposal
Machine shops (H)	Y	Y	Y		On-site
Pesticide/fertilizer/ petroleum storage & transfer areas (H)	N	N	N		
Agricultural Drainage (H in Zone A, otherwise M)	N	N	N		
Wells - Agricultural/ Irrigation (H)	U	U	U		
Managed Forests (M)	N	N	N		
Crops, irrigated (Berries, hops, mint, orchards, sod, greenhouses, vineyards, nurseries, vegetable) (M)	Y	Y	Y		
Fertilizer, Pesticide/ Herbicide Application (M)	Y	Y	Y		
Sewage sludge/biosolids application (M)	N	N	N		
Crops, nonirrigated (e.g., Christmas trees, grains, grass seeds, hay, pasture) (L) (includes drip-irrigated crops)	N	N	N		
Other Activities					
NPDES/WDR permitted discharges (H)	N	N	N		
Underground Injection of Commercial/Industrial Discharges (VH)	N	N	N		
Historic gas stations (VH)	N	N	N		
Historic waste dumps/ landfills (VH)	N	N	N		
Illegal activities/ unauthorized dumping (H)	U	U	U		
Injection wells/ dry wells/ sumps (VH)	Y	Y	Y		Parking lot

Y = Yes N = No U = Unknown
*** = A contaminant potentially associated with this activity has been detected in the water supply.**

Inventory of Possible Contaminating Activities (PCA Inventory)

System Name STAN COUNTY HONOR FARM/LAIRD PARK **System No.** 5000167

Source Name PARK WELL #2 **Source No.** 003 **PS Code** 5000167-003

PCA (Risk Ranking)	PCA in Zone A	PCA in Zone B5	PCA in Zone B10	*	Comments
Other Activities					
Known Contaminant Plumes (VH)	N	N	N		
Military installations (VH)	N	N	N		
Mining operations - Historic (VH)	N	N	N		
Mining operations - Active (VH)	N	N	N		
Mining - Sand/Gravel (H)	N	N	N		
Wells - Oil, Gas, Geothermal (H)	N	N	N		
Salt Water Intrusion (H)	N	N	N		
Recreational area - surface water source (H)	Y	Y	Y		Laird Park River Access
Underground storage tanks - Confirmed leaking tanks (VH)	Y	Y	Y		As per mapping tool
Underground storage tanks - Decommissioned - inactive tanks (L)	N	N	N		
Underground storage tanks - Non-regulated tanks (tanks smaller than regulatory limit) (H)	U	U	U		
Underground storage tanks - Not yet upgraded or registered tanks (H)	N	N	N		
Underground storage tanks - Upgraded and/or registered - active tanks (L)	U	U	U		
Above ground storage tanks (M)	Y	Y	Y		
Wells - Water supply (M)	Y	Y	Y		
Construction/demolition staging areas (M)	N	N	N		
Contractor or government agency equipment storage yards (M)	N	N	N		
Dredging (M)	N	N	N		
Transportation corridors - Freeways/state highways (M)	N	N	N		
Transportation corridors - Railroads (M)	N	N	N		
Transportation corridors - Historic railroad right-of-ways (M)	N	N	N		
Transportation corridors - Road Right-of-ways (herbicide use areas) (M)	N	N	N		
Transportation corridors - Roads/ Streets (L)	Y	Y	Y		
Hospitals (M)	N	N	N		
Storm Drain Discharge Points (M)	U	U	U		
Storm Water Detention Facilities (M)	U	U	U		
Artificial Recharge Projects - Injection wells (potable water) (L)	N	N	N		

Y = Yes N = No U = Unknown
*** = A contaminant potentially associated with this activity has been detected in the water supply.**

Inventory of Possible Contaminating Activities (PCA Inventory)

System Name STAN COUNTY HONOR FARM/LAIRD PARK **System No.** 5000167

Source Name PARK WELL #2 **Source No.** 003 **PS Code** 5000167-003

PCA (Risk Ranking)	PCA in Zone A	PCA in Zone B5	PCA in Zone B10	*	Comments
Other Activities					
Artificial Recharge Projects - Injection wells (non-potable water) (M)	N	N	N		
Artificial Recharge Projects - Spreading Basins (potable water) (L)	N	N	N		
Artificial Recharge Projects - Spreading Basins (non-potable water) (M)	N	N	N		
Medical/dental offices/clinics (L)	Y	Y	Y		Honor Farm Facility
Veterinary offices/clinics (L)	N	N	N		
Surface water - streams/ lakes/rivers (L)	Y	Y	Y		San Joaquin River
Wells - monitoring, test holes (L)	N	N	N		

Y = Yes N = No U = Unknown
*** = A contaminant potentially associated with this activity has been detected in the water supply.**

ELL DATA SHEET (Page 1 of 3)

Complete as much information as possible. Leave blank if information is not available, use N.A. if not applicable.		
* *Indicates items required for Source Water Assessment*		
** *Indicates additional items required for assessments and Ground Water Rule*		
	(separate multiple entries in field with semi-colon)	Actual, Estimated or Default?
DATA SHEET GENERAL INFORMATION		
System Name	County files/DER water database/TurboSWAP files	*from DHS database*
System Number	5000167	*from DHS database*
Source of Information *(well log, DHS/County files, system, etc)*	County files/DER water database/TurboSWAP files	
Organization Collecting Information *(DHS, County, System, other)*	Stanislaus County	
Date Information Collected/Updated	11/7/2002	
WELL IDENTIFICATION		
* Well Number or Name	Park Well #2	*from DHS database*
* DHS Source Identification Number (**FRDS ID No.**)	5000167-003	
DWR Well Log on File? ("YES" or "NO")	"To be faxed by Driller"	
State Well Number (from DWR)		
Well Status (Active, Standby, Inactive)	Active	*from DHS database*
WELL LOCATION		
Latitude		*from DHS database*
Longitude		*from DHS database*
Ground Surface Elevation (ft above Mean Sea Level)		
Street Address	Grayson Road	
Nearest Cross Street	Shiloh Road	
City	Modesto	
County	Stanislaus County	
* Neighborhood/Surrounding Area *(see Note 1)*		
Site plan on file? ("YES" or "NO")	Yes	
DWR Ground Water Basin		*to come from DWR*
DWR Ground Water Sub-basin		*to come from DWR*
SANITARY CONDITIONS		
** Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft)	100+	Estimated
Distance to Active Wells (ft)		
Distance to Abandoned Wells (ft)		
Distance to Surface Water (ft)	1000	Estimated
** Size of controlled area around well (square feet)	900	Estimated
* Type of access control to well site *(fencing, building, etc)*	Fencing	
* Surface Seal? (Concrete slab)("YES", "NO" or "UNKNOWN")	Yes	
* Dimensions of concrete slab: Length(ft)/ Width(ft)/ Thick(in)	Raised pedestal/slab	3x3x18 & 7x25x4
* Within 100 year flood plain? ("YES", "NO" or "UNKNOWN")	Unk	
* Drainage away from well? ("YES" or "NO")	Yes	
ENCLOSURE/HOUSING		
Enclosure Type *(building, vault, none, etc.)*	Fencing	
Floor material	Slab/soil	
Located in Pit? ("YES" or "NO")	No	
Pit depth (feet) (if applicable)	N/A	
WELL CONSTRUCTION		
Date drilled	Aug-02	Actual
Drilling Method		
Depth of Bore Hole (feet below ground surface)	180	Estimated
Casing Beginning Depth/Ending Depth(ft below surface); 2nd Casing Beginning Depth/Ending Depth; 3rd Casing, etc.	165	Estimated
Casing Diameter (inches); 2nd Casing Diameter; 3rd Casing, etc.		

Complete as much information as possible. Leave blank if information is not available, use N.A. if not applicable.		
* *Indicates items required for Source Water Assessment*		
** *Indicates additional items required for assessments and Ground Water Rule*		
Casing Material; 2nd Casing Material; 3rd Casing, etc.		

WELL DATA SHEET (Page 3 of 3)

Complete as much information as possible. Leave blank if information is not available, use N.A. if not applicable.		
** Indicates items required for Source Water Assessment*		
*** Indicates additional items required for assessments and Ground Water Rule*		
	(separate multiple entries in field with semi-colon)	Actual, Estimated or Default?
WELL CONSTRUCTION (continued)		
Conductor casing used? ("YES", "NO" or "UNKNOWN") *(See Note 2)*	Unk	
Conductor casing removed? ("YES", "NO" or "UNKNOWN")	Unk	
* Depth to highest perforations/screens (ft below surface) (or "UNKNOWN")		
Screened Interval Beginning Depth/Ending Depth (ft below surface); 2nd Screened Interval Beg. Depth/Ending Depth; 3rd Screened Interval, etc.		
* Total length of screened interval (ft) *(default = 10% pump capacity in gpm)* (or "UNKNOWN")	22	Default
* Annular Seal?("YES", "NO" or "UNKNOWN") *(See Note 3)*	Yes	
* Depth of Annular Seal (ft)	50+	Estimated
Material of Annular Seal *(cement grout, bentonite, etc.)*		
Gravel pack, Depth to top (ft below ground surface)		
Total length of gravel pack (ft)		
AQUIFER		
* Aquifer Materials *(list all that apply: sand, silt, clay, gravel, rock, fractured rock)*		
* Effective porosity (decimal percent) *(default = 0.2)* (or "UNKNOWN")	0.2	Default
* Confining layer (Impervious Strata) above aquifer? ("YES", "NO" or "UNKNOWN")	Unk	
Thickness of confining layer, if known (ft)	Unk	
Depth to confining layer, if known (ft below ground)		
* Static water level (ft below ground surface)	26	Estimated
Static water level measurement: Date/Method		
Pumping water level (ft below ground surface)		
Pumping water level measurement: Date/Method		
WELL PRODUCTION		
Well Yield (gpm)		
Well Yield Based On (i.e., pump test, etc.)		
Date measured		
Is the well metered? ("YES" or "NO")		
Production (gallons per year)		
Frequency of Use (hours/year)		
Typical pumping duration (hours/day)		
PUMP		
Make		
Type	Submersible	
Size (hp)	10	
* Capacity (gpm)	220	Actual
Depth to suction intake (ft below ground surface)		
Lubrication Type		
Type of Power: *(i.e., electric, diesel, etc.)*		
Auxiliary power available? ("YES" or "NO")		
Operation controlled by: *(i.e., level in tank, pressure, etc.)*		
Pump to Waste capability? ("YES" or "NO")		
Discharges to: *(i.e., distribution system, storage, etc.)*		
REMARKS AND DEFECTS (use additional sheets as necessary)		

ELL DATA SHEET (Page 4 of 3)

Complete as much information as possible. Leave blank if information is not available, use N.A. if not applicable.		
** Indicates items required for Source Water Assessment*		
*** Indicates additional items required for assessments and Ground Water Rule*		
NOTES		
1. Neighborhood/Surrounding Area (list all that apply): A= Agricultural, Ru = Rural, Re = Residential, Co = Commercial, I = Industrial, Mu = Municipal, P = Pristine, O = Other		
2. Conductor Casing - Oversized casing used to stabilize bore hole during well construction. Should be removed during installation of annular seal.		
3. Annular Seal - Seal of grout in the space between the well casing and the wall of the drilled hole. Sometimes called "sanitary seal".		

Drinking Water Source Assessment and Protection (DWSAP) Program

Vulnerability Ranking

District Name LPA Stanislaus County **District No.** 80 **County** Stanislaus

System Name STAN COUNTY HONOR FARM/LAIRD PARK **System No.** 5000167

Source Name PARK WELL #2 **Source No.** 003 **PS Code** 5000167-003

Completed by Jan Lopez R.E.H.S. **Date** October, 2002

Zone	PCA (Risk Ranking)	*	PCA Risk Points	Zone Points	PBE Points	Vulnerability Score
A	Injection wells/ dry wells/ sumps (VH)		7	5	3	15
A	Underground storage tanks - Confirmed leaking tanks (VH)		7	5	3	15
A	Farm machinery repair (H)		5	5	3	13
A	Grazing (> 5 large animals or equivalent per acre) (H in Zone A, otherwise M)		5	5	3	13
A	Lagoons / liquid wastes (H)		5	5	3	13
A	Machine shops (H)		5	5	3	13
A	Recreational area - surface water source (H)		5	5	3	13
A	Septic systems - low density (<1/acre) (H in Zone A, otherwise L)		5	5	3	13
B5	Injection wells/ dry wells/ sumps (VH)		7	3	3	13
B5	Underground storage tanks - Confirmed leaking tanks (VH)		7	3	3	13
A	Above ground storage tanks (M)		3	5	3	11
A	Crops, irrigated (Berries, hops, mint, orchards, sod, greenhouses, vineyards, nurseries, vegetable) (M)		3	5	3	11
A	Fertilizer, Pesticide/ Herbicide Application (M)		3	5	3	11
A	Wells - Water supply (M)		3	5	3	11
B5	Animal Feeding Operations as defined in federal regulation2 (VH in Zone A, otherwise H)		5	3	3	11
B5	Farm machinery repair (H)		5	3	3	11
B5	Lagoons / liquid wastes (H)		5	3	3	11
B5	Machine shops (H)		5	3	3	11
B5	Recreational area - surface water source (H)		5	3	3	11
B10	Injection wells/ dry wells/ sumps (VH)		7	1	3	11
B10	Underground storage tanks - Confirmed leaking tanks (VH)		7	1	3	11
A	Medical/dental offices/clinics (L)		1	5	3	9
A	Surface water - streams/ lakes/rivers (L)		1	5	3	9
A	Transportation corridors - Roads/ Streets (L)		1	5	3	9
B5	Above ground storage tanks (M)		3	3	3	9
B5	Crops, irrigated (Berries, hops, mint, orchards, sod, greenhouses, vineyards, nurseries, vegetable) (M)		3	3	3	9

*** = A contaminant potentially associated with this activity has been detected in the water supply.**

Vulnerability Ranking

System Name STAN COUNTY HONOR FARM/LAIRD PARK **System No.** 5000167

Source Name PARK WELL #2 **Source No.** 003 **PS Code** 5000167-003

Zone	PCA (Risk Ranking)	*	PCA Risk Points	Zone Points	PBE Points	Vulnerability Score
B5	Fertilizer, Pesticide/ Herbicide Application (M)		3	3	3	9
B5	Grazing (> 5 large animals or equivalent per acre) (H in Zone A, otherwise M)		3	3	3	9
B5	Wells - Water supply (M)		3	3	3	9
B10	Animal Feeding Operations as defined in federal regulation2 (VH in Zone A, otherwise H)		5	1	3	9
B10	Farm machinery repair (H)		5	1	3	9
B10	Lagoons / liquid wastes (H)		5	1	3	9
B10	Machine shops (H)		5	1	3	9
B10	Recreational area - surface water source (H)		5	1	3	9
A	Illegal activities/ unauthorized dumping (H)		5	0	3	8
A	Underground storage tanks - Non-regulated tanks (tanks smaller than regulatory limit) (H)		5	0	3	8
A	Wells - Agricultural/ Irrigation (H)		5	0	3	8
B5	Illegal activities/ unauthorized dumping (H)		5	0	3	8
B5	Underground storage tanks - Non-regulated tanks (tanks smaller than regulatory limit) (H)		5	0	3	8
B5	Wells - Agricultural/ Irrigation (H)		5	0	3	8
B10	Illegal activities/ unauthorized dumping (H)		5	0	3	8
B10	Underground storage tanks - Non-regulated tanks (tanks smaller than regulatory limit) (H)		5	0	3	8
B10	Wells - Agricultural/ Irrigation (H)		5	0	3	8

*** = A contaminant potentially associated with this activity has been detected in the water supply.**

Drinking Water Source Assessment and Protection (DWSAP) Program

Vulnerability Summary

District Name LPA Stanislaus County **District No.** 80 **County** Stanislaus

System Name STAN COUNTY HONOR FARM/LAIRD PARK **System No.** 5000167

Source Name PARK WELL #2 **Source No.** 003 **PS Code** 5000167-003

Completed by Jan Lopez R.E.H.S. **Date** October, 2002

THE FOLLOWING INFORMATION MUST BE INCLUDED IN THE SYSTEM CONSUMER CONFIDENCE REPORT

A source water assessment was conducted for the **PARK WELL #2**

of the **STAN COUNTY HONOR FARM/LAIRD PARK** water system in **October, 2002**.

The source is considered most vulnerable to the following activities not associated with any detected contaminants:

Injection wells/ dry wells/ sumps
Underground storage tanks - Confirmed leaking tanks

Discussion of Vulnerability

Water quality analyses on file, indicate that this source is in compliance with State Standards.

There have been no contaminants detected in the water supply, however the source is still considered vulnerable to activities located near the drinking water source.

A copy of the complete assessment may be viewed at:

Stanislaus County, DER
3800 Cornucopia Way, Suite C
Modesto, CA 95358

You may request a summary of the assessment be sent to you by contacting:

Tom Wolfe
Senior Environmental Health Specialist - Water
(209) 525-6700

Assessment Summary

District Name LPA Stanislaus County **District No.** 80 **County** Stanislaus

System Name STAN COUNTY HONOR FARM/LAIRD PARK **System No.** 5000167

Source Name PARK WELL #2 **Source No.** 003 **PS Code** 5000167-003

Completed by Jan Lopez R.E.H.S. **Date** October, 2002

Description of System and Source

The STAN COUNTY HONOR FARM/LAIRD PARK water system is located in Stanislaus County, near the community of Grayson. There are approximately 7 service connections serving a population of 300.

The drinking water source for the STAN COUNTY HONOR FARM/LAIRD PARK water system is ground water. The nearest surface waters are the San Joaquin River, the Laird Slough, Brush Lake, and an unlined T.I.D. (Turlock Irrigation District) canal. General land use is agricultural, with the exception of the Honor Farm and Laird park, which has river access.

Assessment Procedures

The assessment of the source PARK WELL #2 was conducted by Jan Lopez R.E.H.S. The LPA is Stanislaus County, Department Of Environmental Resources. The following sources of information were used in the assessment:

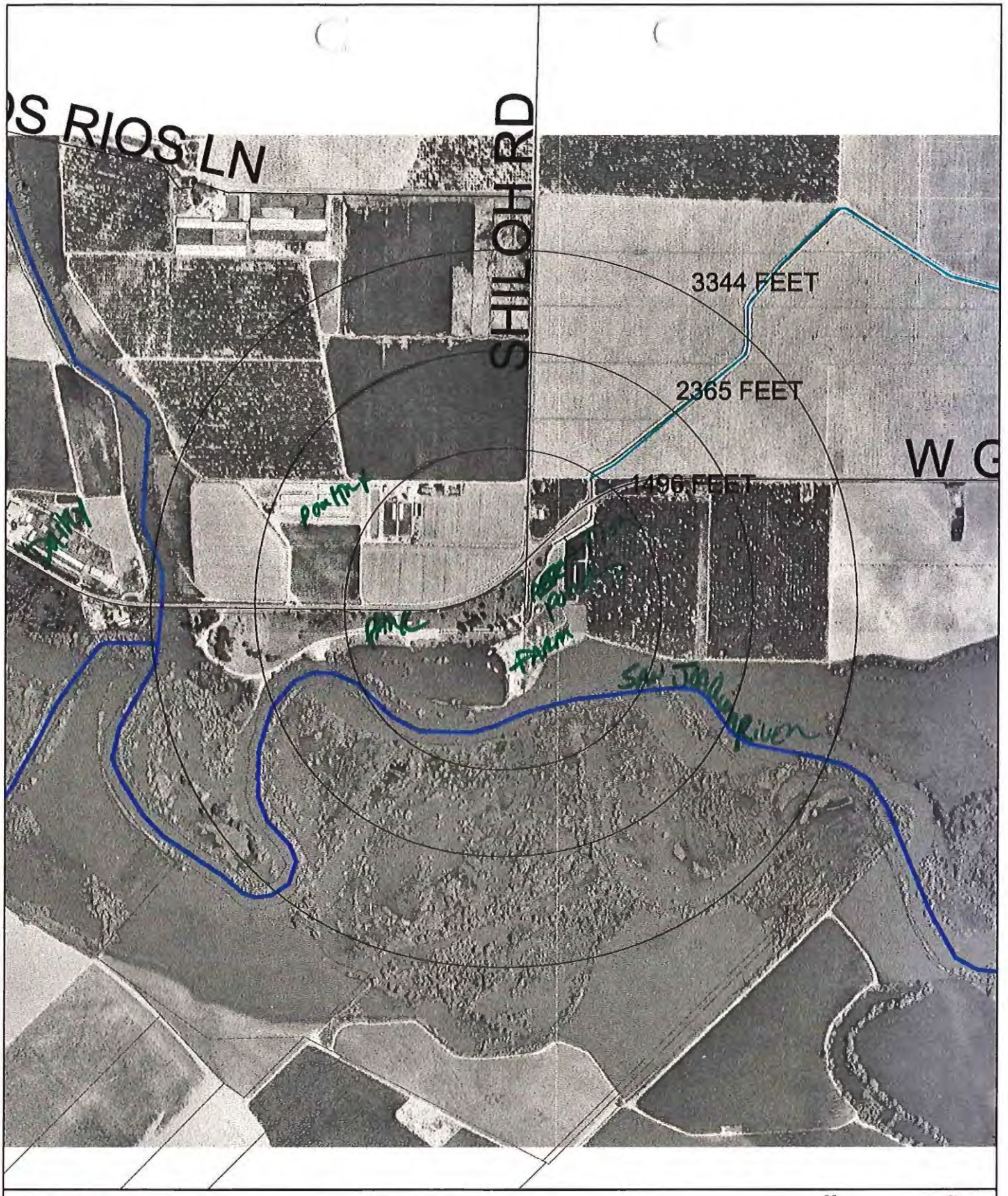
County files/DER water database/TurboSWAP files

Procedures used to conduct the assessment include:

Field assessment/Aerial map review/Correspondence with Stanislaus County Sherriff's Department

Contents of this Assessment

Yes ☒	No ☐	**Assessment Summary**
Yes ☒	No ☐	**Vulnerability Summary**
Yes ☐	No ☒	**Source Location Form**
Yes ☒	No ☐	**Delineation of Ground Water Protection Zones**
Yes ☒	No ☐	**Physical Barrier Effectiveness Checklist**
Yes ☒	No ☐	**Source Data Sheet**
Yes ☒	No ☐	**Inventory of Possible Contaminating Activities**
Yes ☒	No ☐	**Vulnerability Ranking**
Yes ☒	No ☐	**Assessment Map**



Stanislaus County

Assessor Parcel Number: 017-60-02

Stanislaus Co. Honor Farm/Laird

#5000167-003/Park Well #2 - 003

575 0 575 1150 Feet

This map is for display purposes only.

N W E S

Public Works Stanislaus County

GIS

Map printed: 10/29/2002

Drinking Water Source Assessment

Water System

STAN COUNTY HONOR FARM/LAIRD PARK

Stanislaus County

Water Source

WELL 01

Assessment Date

July, 2002

California Department of Health Services
Drinking Water Field Operations Branch
LPA Stanislaus County

District No.	**80**
System No.	**5000167**
Source No.	**001**
PS Code	**04S/08E-30D01 M**

Appendix N

Checklist for Drinking Water Source Assessment – Ground Water Source

Public water system: Stanislaus Co. Honor Farm ID No.: System# 5000167

Name of source: Well 01 ID No.: PSCode# 04S/08E-30D01-M

Assessment date: 5/31/01 Assessment conducted by: Jan Lopez R.E.H.S

The following information should be contained in the drinking water source assessment submittal.

If another report that is the functional equivalent to the drinking water assessment (e.g., parts of a Ground Water Management Plan) is included in this assessment, the part of that report that fulfills the components of the source water assessment should be clearly indicated.

J.L. 5/11/01 Source name, system name, source and system identification numbers, date of assessment, name of person and/or organization conducting the assessment (Appendix N, this form)

J.L. 7/25/02 Assessment map with source location, source area (if known), and protection zones.

JM 11/16/01 Drinking water source location coordinates and accuracy of method used (Appendix H or equivalent)

J.L. 8/7/01 Delineation of protection zones (Appendix I or equivalent)

J.L. 5/15/01 Drinking water Physical Barrier Effectiveness Checklist (Appendix J)

J.L. 5/15/01 Well Data Sheet updated 7/25/02

J.L. 7/25/02 Possible contaminating activities (PCA) inventory form (Appendix K).

J.L. 9/25/02 Vulnerability ranking (Appendix M)

J.L. 8/7/01 Additional maps (optional) (e.g. local maps of zones and PCAs, recharge area maps, or maps indicating direction of ground water flow)

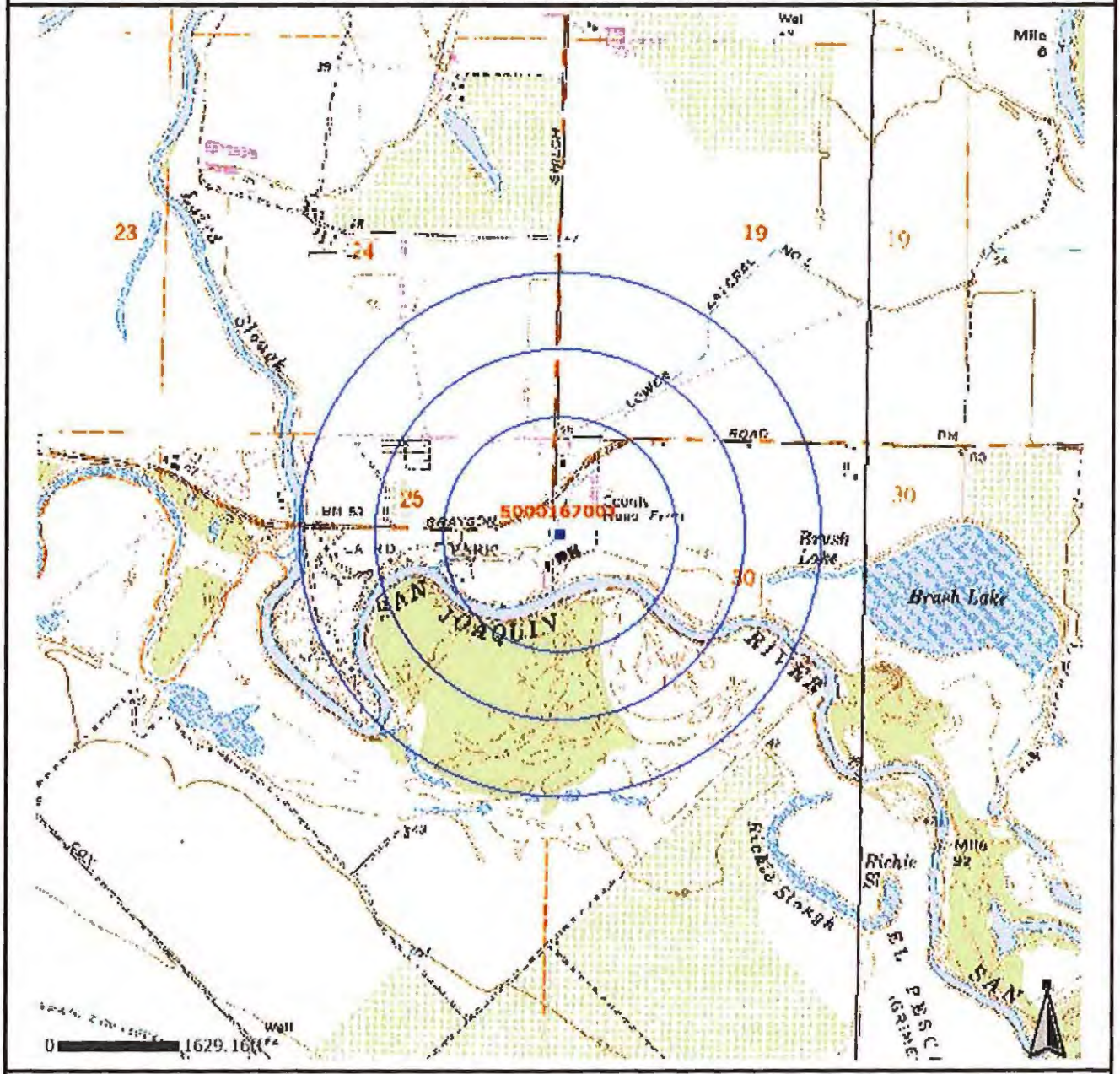
_____ Means of Public Availability of Report (indicate those that will be used)

_____ Notice in the annual consumer confidence report* (minimum)
✓ Copy in DHS district office (minimum)
_____ Copy in public water system office (recommended)
_____ Copy in public library/libraries
_____ Internet (indicate Internet address: _____)
✓ Other (describe) D.E.R. files

*The annual report should indicate where customers can review the assessments.

_____ → COMPLETION DATE; INITIALS for EACH TASK

DWSAP Ground Water Zone Interface



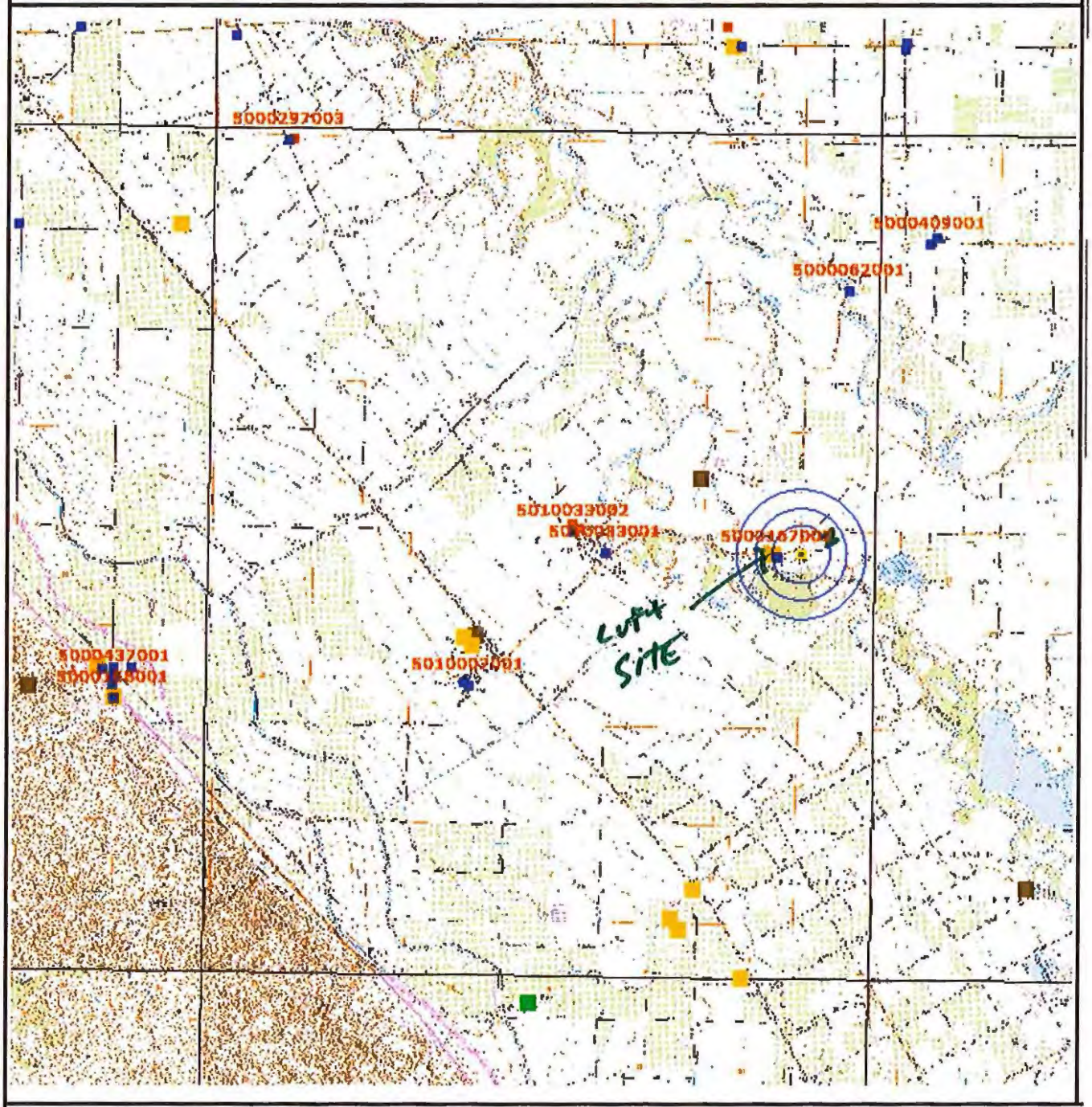
Well Identification Information					
Well Number	**Longitude ***	**Latitude ***	**GPS'd**	* Well location coordinates have been rounded to 3 decimal places due to security concerns.	
5000167001	-121.140	37.562	Yes		
System Number	**System Name**	**Source Number**	**Source Name**	**District Number/Name**	**County Number/Name**
5000167	STAN COUNTY HONOR FARM/LAIRD PARK	001	WELL 01	80/Stanislaus County	50/Stanislaus County
Well Zone Delineation Information					
Media Type	**System Type**	**Effective Porosity (n)**	**Screened Interval (h)**	**Pumping Capacity (q)**	**Azimuth of Flow (a)**
Porous Media	All Other System	.2	20	220 gpm	0 - No Translation
Radii Measures					
Defaults Used	**R2**	**R5**	**R10**		
No	1568 ft	2480 ft	3507 ft		

DWSAP Ground Water Zone Interface

Tools

Navigation	Query	Resetting
	Quad Index Find Well: Find	Restart Application Select New Quad by Method: Well Number / Quad Name / Quad Spatial

Center of Map is Currently within Quadrangle: WESTLEY Zoom to Quad



Well Zone Delineation Tool (Select Well using Select Tool, Set Values, and Click 'Add/Update' button)

Well Number:	5000167001
Porosity:	(•) Porous Media ( ) Fractured Rock

System:	○ Transient Non-Community Systems ◉ All Other Systems		
Radii Calculation:	○ Default ◉ Calculated		
Effective Porosity (n , 0 - 1)		.2	
Screened Interval (H , feet)		20	
Pumping Capacity (Q , gpm|cubic ft/yr|acre ft/yr)		220	gpm
Azimuth of Flow (a , 0 - 360)		0	0=No Translation
Add/Update			

GPS Field Data Sheet

Data Dictionary File: DD20011116B.TXT

District Name: Stanislaus County | District No.: 80 | County: Stanislaus

System Name: STAN COUNTY HONOR FARM/LAIRD PARK | System No.: 5000167

Source Name: WELL 01 | Source No.: 001 | PS Code: 04S/08E-30

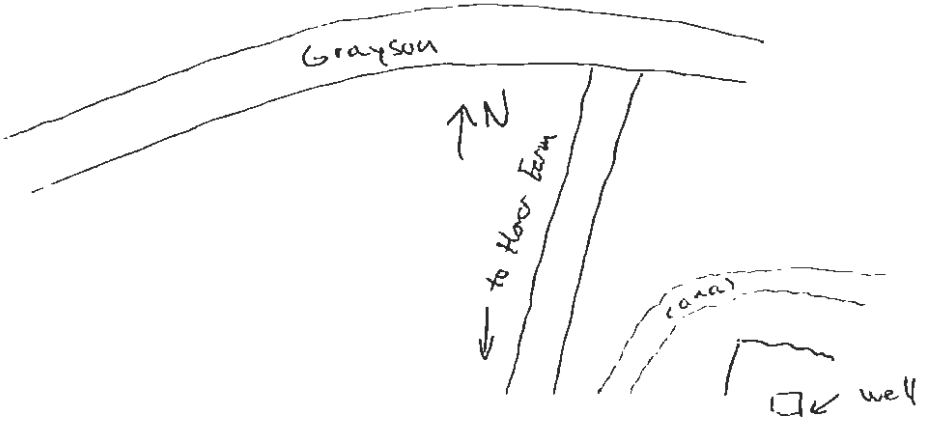
Your Name: staff | Date: 11/16/01

Rover File Name: R111621A | Time: 1:09:56 am (pm)

Nearest Base Station (select one)
- ☐ Fresno [Fresno Base Station]
- ☑ Sacramento [Sacramento USFS Base Station]
- ☐ Sunnyvale [Sunnyvale Base Station]

Site Sketch

Offset Location? ☑ | Offset Angle: 135 degrees | Offset Distance: 10 meters



Site Description: Well sits to N of exercise yard next to a small canal, large fire tank sits nearby

Comments: Well head secure, concrete seal secure

Stanislaus County
Striving to be the Best

OFFICIAL NOTICE

DEPARTMENT OF ENVIRONMENTAL RESOURCES
3800 Cornucopia Way, Suite C, Modesto, CA 95358-9492
Phone: 209.525.6700 Fax: 209.525.6774

Name Stan. County Honor Farm / Laird Park 167 Date 10/29/01

Address _____ Purpose DWSAP

_____ zip _____

Time In _____ Time Out _____ By _____ Env Tech
Environmental Health Specialist

Well 1 - PCA's - visual check, small canal, ag w/in 600 ft
Well - head secure, seal secure
GPS - successful
Well 2 (Laird) PCA's - visual check, river w/in 600' ft
Well - head secure, seal secure - some leaking
GPS - successful

You are hereby notified to correct the above violations of the _____ immediately.

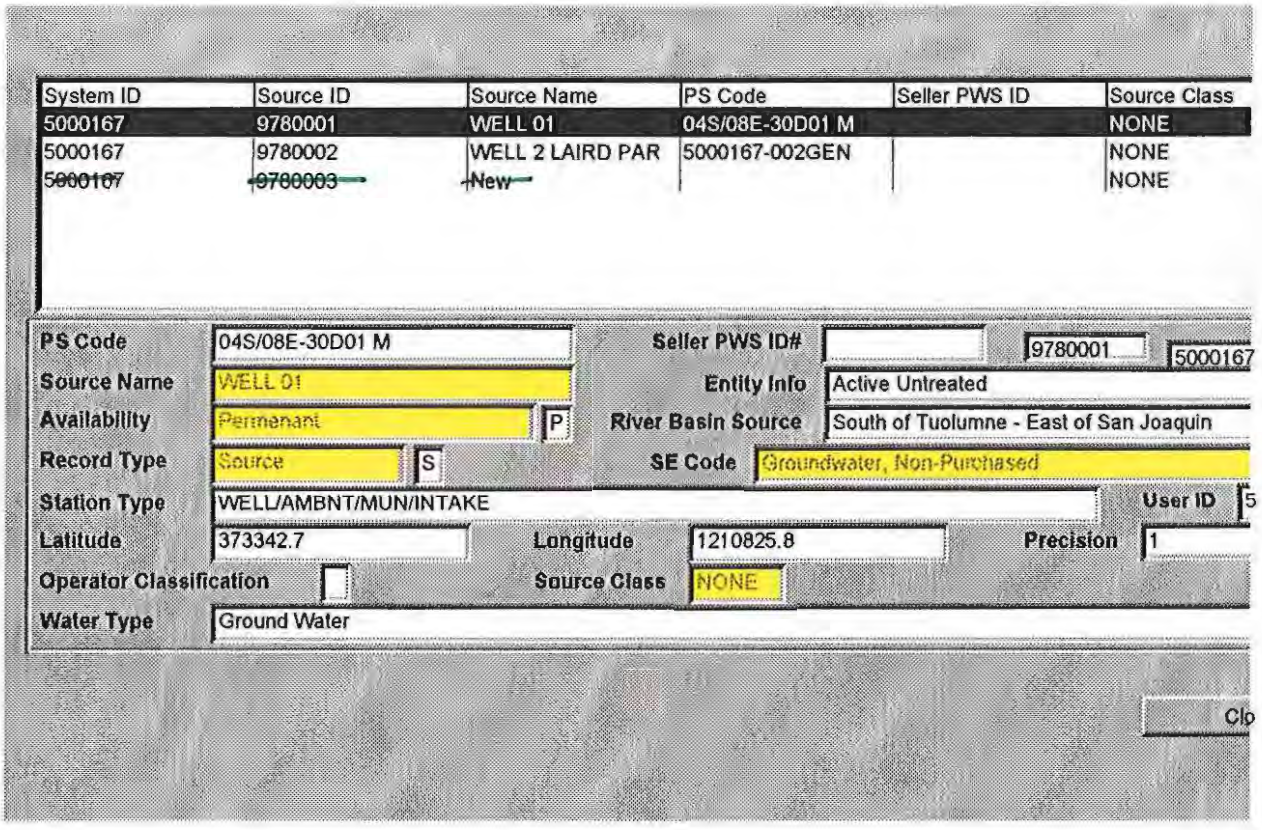
A reinspection will be made on _____. Failure to correct the violation(s) may result in legal action.

Stanislaus County Ordinance requires a charge of $ _____ per reinspection of your facility if violations are not corrected by the referenced date.

Accepted by _____ Date 10/29; 11/16

4019-80 L

Adm. 29



System ID	Source ID	Source Name	PS Code	Seller PWS ID	Source Class
5000167	9780001	WELL 01	04S/08E-30D01 M		NONE
5000167	9780002	WELL 2 LAIRD PAR	5000167-002GEN		NONE
~~5000167~~	~~9780003~~	~~New~~			NONE

PS Code	04S/08E-30D01 M	Seller PWS ID#		9780001	5000167
Source Name	WELL 01	Entity Info	Active Untreated		
Availability	Permenant P	River Basin Source	South of Tuolumne - East of San Joaquin		
Record Type	Source S	SE Code	Groundwater, Non-Purchased		
Station Type	WELL/AMBNT/MUN/INTAKE			User ID	5
Latitude	373342.7	Longitude	1210825.8	Precision	1
Operator Classification		Source Class	NONE		
Water Type	Ground Water				

Clo

Drinking Water Source Assessment and Protection (DWSAP) Program

Delineation of Ground Water Protection Zones

District Name LPA Stanislaus County **District No.** 80 **County** Stanislaus

System Name STAN COUNTY HONOR FARM/LAIRD PARK **System No.** 5000167

Source Name WELL 01 **Source No.** 001 **PS Code** 04S/08E-30D01 M

Completed by staff **Date** August, 2001

Method Used to Delineate Protection Zones

X 1. Calculated Fixed Radius

2. Modified Calculated Fixed Radius (Attach documentation for direction of ground water flow.)
3. More Detailed Methods
4. Arbitrary Fixed Radius (For use only by or permission of DHS)

Maximum Pumping Rate of Well (Q)	220	gallons/minute	
	355	acre feet/year	
	15,458,740	cubic feet/year	
Effective Porosity	0.20		[X] Default Value
Screened Interval of Well	20	feet	[ ] Default Value

Protection Zone	Calculated Value	Minimum Value	Radius of Protection Zone
Zone A - 2 Year TOT*	1,569 Feet	600 Feet	**1,569** Feet
Zone B5 - 5 Year TOT*	2,480 Feet	1,000 Feet	**2,480** Feet
Zone B10 - 10 Year TOT*	3,507 Feet	1,500 Feet	**3,507** Feet

Drinking Water Source Assessment and Protection (DWSAP) Program

Physical Barrier Effectiveness (PBE)

District Name LPA Stanislaus County **District No.** 80 **County** Stanislaus

System Name STAN COUNTY HONOR FARM/LAIRD PARK **System No.** 5000167

Source Name WELL 01 **Source No.** 001 **PS Code** 04S/08E-30D01 M

Completed by Jan Lopez R.E.H.S. **Date** July, 2002

Parameter		Possible Points	This Source	Score
Type of Aquifer Confinement				
1. Unconfined, Semi-confined, Fractured Rock, Unknown Aquifer		0	X	0
2. Confined		50		
Aquifer Material (Unconfined Aquifers) Type of material within aquifer				
1. Porous Media (Interbedded sands, silts, clays, gravels) with continuous clay layer minimum 25' thick above water table within Zone A		20		
2. Porous Media (Interbedded sands, silts, clays, gravels)		10	X	10
3. Fractured rock (Low Physical Barrier Effectiveness - no further questions required)		0		
Pathways of Contamination (All Aquifers) Presence of Abandoned or Improperly Destroyed Wells				
1. Present within Zone A (2 year TOT distance)	Yes	0		
	No	5	X	5
	Unknown	0		
2. Present within Zone B5 (2 -5 year TOT distance)	Yes	0		
	No	3		
	Unknown	0	X	0
3. Present within Zone B10 (5-10 year TOT distance)	Yes	0		
	No	2		
	Unknown	0	X	0
Static Water Conditions (Unconfined Aquifers)				
Depth to Static Water (DTW) 26 feet	0 to 20 feet	0		
	20 to 50 feet	2	X	2
	50 to 100 feet	6		
	Greater than 100 feet	10		
	Unknown	0		
Well Operation (Unconfined Aquifers)				
Depth to Uppermost Perforations (DUP) 120 feet Maximum Pumping Rate of Well (Q) 220 gallons/minute Length of Screened Interval (H) 20 feet				
	Less than 5	0		
[DUP - DTW / Q/H] 8.55	Between 5 and 10	5	X	5
	Greater than 10	10		
	Unknown	0		

Physical Barrier Effectiveness (PBE)

System Name STAN COUNTY HONOR FARM/LAIRD PARK **System No.** 5000167

Source Name WELL 01 **Source No.** 001 **PS Code** 04S/08E-30D01 M

Parameter		Possible Points	This Source	Score
Well Construction (All Aquifers)				
Sanitary Seal (Annular Seal) Depth **98** feet	None or less than 20 feet	0		
	Between 20 and 50 feet	6		
	50 feet or greater	10	X	10
	Unknown	0		
Surface Seal (concrete cap)	Not present or improperly constructed	0		
	Watertight, slopes away from well at least 2' laterally in all directions	4	X	4
	Unknown	0		
Flooding potential at well site	Subject to localized flooding (i.e. in low area or unsealed pit or vault) or within 100 year flood plain	0		
	Not subject to flooding	1	X	1
	Unknown	0		
Security at well site	Not secure	0		
	Secure	5	X	5
	Unknown	0		

Score	Effectiveness
0 to 35	Low
36 to 69	Moderate
70 to 100	High

Maximum Score = 70

Score 42

Effectiveness Moderate

WELL DATA SHEET (Page 1 of 3)

Complete as much information as possible. Leave blank if information is not available, use N.A. if not applicable.		
* *Indicates items required for Source Water Assessment*		
** *Indicates additional items required for assessments and Ground Water Rule*		
	(separate multiple entries in field with semi-colon)	Actual, Estimated or Default?
DATA SHEET GENERAL INFORMATION		
System Name	Stanislaus County Honor Farm/Laird Park	*from DHS database*
System Number	5000167	*from DHS database*
Source of Information *(well log, DHS/County files, system, etc)*	County Files/DER water data base/TurboSWAP files	
Organization Collecting Information *(DHS, County, System, other)*	Stanislaus County	
Date Information Collected/Updated	7/25/02	
WELL IDENTIFICATION		
* Well Number or Name	Well 01 H.F.	*from DHS database*
* DHS Source Identification Number (**FRDS ID No.**)	04S/08E-30D01_M	
DWR Well Log on File? ("YES" or "NO")	Yes	
State Well Number (from DWR)		
Well Status (Active, Standby, Inactive)	Active	*from DHS database*
WELL LOCATION		
Latitude		*from DHS database*
Longitude		*from DHS database*
Ground Surface Elevation (ft above Mean Sea Level)		
Street Address	West Grayson Road	
Nearest Cross Street	Shilo Road	
City	Modesto	
County	Stanislaus	
* Neighborhood/Surrounding Area *(see Note 1)*		
Site plan on file? ("YES" or "NO")	Yes	
DWR Ground Water Basin		*to come from DWR*
DWR Ground Water Sub-basin		*to come from DWR*
SANITARY CONDITIONS		
** Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft)	300	Actual
Distance to Active Wells (ft)		
Distance to Abandoned Wells (ft)		
Distance to Surface Water (ft)	500	Estimated
** Size of controlled area around well (square feet)		
* Type of access control to well site *(fencing, building, etc)*	Fencing	
* Surface Seal? (Concrete slab)("YES", "NO" or "UNKNOWN")	Yes	
* Dimensions of concrete slab: Length(ft)/ Width(ft)/ Thick(in)		
* Within 100 year flood plain? ("YES", "NO" or "UNKNOWN")	No	
* Drainage away from well? ("YES" or "NO")	Yes	
ENCLOSURE/HOUSING		
Enclosure Type *(building, vault, none, etc.)*	Fencing	
Floor material	Slab/soil	
Located in Pit? ("YES" or "NO")	No	
Pit depth (feet) (if applicable)	NA	
WELL CONSTRUCTION		
Date drilled	Dec-91	Actual
Drilling Method	Mud Rotary	Actual
Depth of Bore Hole (feet below ground surface)	182	Actual
Casing Beginning Depth/Ending Depth(ft below surface); 2nd Casing Beginning Depth/Ending Depth; 3rd Casing, etc.	140	Actual
Casing Diameter (inches); 2nd Casing Diameter; 3rd Casing, etc.	10 inches	Actual
Casing Material; 2nd Casing Material; 3rd Casing, etc.		

WELL DATA SHEET (Page 2 of 3)

Complete as much information as possible. Leave blank if information is not available, use N.A. if not applicable.		
** Indicates items required for Source Water Assessment*		
*** Indicates additional items required for assessments and Ground Water Rule*		
	(separate multiple entries in field with semi-colon)	Actual, Estimated or Default?
WELL CONSTRUCTION (continued)		
Conductor casing used? ("YES", "NO" or "UNKNOWN") *(See Note 2)*	No	
Conductor casing removed? ("YES", "NO" or "UNKNOWN")	No	
* Depth to highest perforations/screens (ft below surface) (or "UNKNOWN")	120	Actual
Screened Interval Beginning Depth/Ending Depth (ft below surface); 2nd Screened Interval Beg. Depth/Ending Depth; 3rd Screened Interval, etc.	120/140	Actual
* Total length of screened interval (ft) *(default = 10% pump capacity in gpm)* (or "UNKNOWN")	20	Actual
* Annular Seal?("YES", "NO" or "UNKNOWN") *(See Note 3)*	Yes	
* Depth of Annular Seal (ft)	98	Actual
Material of Annular Seal *(cement grout, bentonite, etc.)*	Bentonite	Actual
Gravel pack, Depth to top (ft below ground surface)		
Total length of gravel pack (ft)		
AQUIFER		
* Aquifer Materials *(list all that apply: sand, silt, clay, gravel, rock, fractured rock)*	Clay/sand/gravel	Actual
* Effective porosity (decimal percent) *(default = 0.2)* (or "UNKNOWN")	0.2	Default
* Confining layer (Impervious Strata) above aquifer? ("YES", "NO" or "UNKNOWN")	Unk	
Thickness of confining layer, if known (ft)	Unk	
Depth to confining layer, if known (ft below ground)	Unk	
* Static water level (ft below ground surface)	26	Estimated
Static water level measurement: Date/Method		
Pumping water level (ft below ground surface)		
Pumping water level measurement: Date/Method		
WELL PRODUCTION		
Well Yield (gpm)		
Well Yield Based On (i.e., pump test, etc.)		
Date measured		
Is the well metered? ("YES" or "NO")	No	
Production (gallons per year)		
Frequency of Use (hours/year)		
Typical pumping duration (hours/day)		
PUMP		
Make		
Type	Submersible	
Size (hp)	10	
* Capacity (gpm)	220	Actual
Depth to suction intake (ft below ground surface)		
Lubrication Type		
Type of Power: *(i.e., electric, diesel, etc.)*	Electric	
Auxiliary power available? ("YES" or "NO")		
Operation controlled by: *(i.e., level in tank, pressure, etc.)*	Automatic	
Pump to Waste capability? ("YES" or "NO")		
Discharges to: *(i.e., distribution system, storage, etc.)*	Pressure Tank	
REMARKS AND DEFECTS (use additional sheets as necessary)		

WELL DATA SHEET (Page 3 of 3)

Complete as much information as possible. Leave blank if information is not available, use N.A. if not applicable.		
** Indicates items required for Source Water Assessment*		
*** Indicates additional items required for assessments and Ground Water Rule*		
NOTES		
1. Neighborhood/Surrounding Area (list all that apply): A= Agricultural, Ru = Rural, Re = Residential, Co = Commercial, I = Industrial, Mu = Municipal, P = Pristine, O = Other		
2. Conductor Casing - Oversized casing used to stabilize bore hole during well construction. Should be removed during installation of annular seal.		
3. Annular Seal - Seal of grout in the space between the well casing and the wall of the drilled hole. Sometimes called "sanitary seal".		

Drinking Water Source Assessment and Protection (DWSAP) Program

Inventory of Possible Contaminating Activities (PCA Inventory)

District Name LPA Stanislaus County **District No.** 80 **County** Stanislaus

System Name STAN COUNTY HONOR FARM/LAIRD PARK **System No.** 5000167

Source Name WELL 01 **Source No.** 001 **PS Code** 04S/08E-30D01 M

Completed by Jan Lopez R.E.H.S. **Date** July, 2002

PCA (Risk Ranking)	PCA In Zone A	PCA in Zone B5	PCA in Zone B10	*	Comments
Agricultural/Rural Activities					
Grazing (> 5 large animals or equivalent per acre) (H in Zone A, otherwise M)	Y	Y	Y		
Concentrated Animal Feeding Operations (CAFOs) as defined in federal regulation1 (VH in Zone A, otherwise H)	N	N	N		
Animal Feeding Operations as defined in federal regulation2 (VH in Zone A, otherwise H)	N	Y	Y		Poultry Houses
Other Animal operations (H in Zone A, otherwise M)	N	N	N		
Farm chemical distributor/ application service (H)	N	N	N		
Farm machinery repair (H)	Y	Y	Y		
Septic systems - low density (<1/acre) (H in Zone A, otherwise L)	Y	Y	Y		
Lagoons / liquid wastes (H)	Y	Y	Y		On-site aeration/evaporation ponds for sewage disposal
Machine shops (H)	Y	Y	Y		On-site machine shop
Pesticide/fertilizer/ petroleum storage & transfer areas (H)	N	N	N		
Agricultural Drainage (H in Zone A, otherwise M)	N	N	N		
Wells - Agricultural/ Irrigation (H)	U	U	U		
Managed Forests (M)	N	N	N		
Crops, irrigated (Berries, hops, mint, orchards, sod, greenhouses, vineyards, nurseries, vegetable) (M)	Y	Y	Y		
Fertilizer, Pesticide/ Herbicide Application (M)	Y	Y	Y		
Sewage sludge/biosolids application (M)	N	N	N		
Crops, nonirrigated (e.g., Christmas trees, grains, grass seeds, hay, pasture) (L) (includes drip-irrigated crops)	N	N	N		
Other Activities					
NPDES/WDR permitted discharges (H)	N	N	N		
Underground Injection of Commercial/Industrial Discharges (VH)	N	N	N		
Historic gas stations (VH)	N	N	N		
Historic waste dumps/ landfills (VH)	N	N	N		
Illegal activities/ unauthorized dumping (H)	U	U	U		
Injection wells/ dry wells/ sumps (VH)	N	N	N		

Y = Yes N = No U = Unknown

* = A contaminant potentially associated with this activity has been detected in the water supply.

Inventory of Possible Contaminating Activities (PCA Inventory)

System Name STAN COUNTY HONOR FARM/LAIRD PARK **System No.** 5000167

Source Name WELL 01 **Source No.** 001 **PS Code** 04S/08E-30D01 M

PCA (Risk Ranking)	PCA In Zone A	PCA In Zone B5	PCA In Zone B10	*	Comments
Other Activities					
Known Contaminant Plumes (VH)	N	N	N		
Military installations (VH)	N	N	N		
Mining operations - Historic (VH)	N	N	N		
Mining operations - Active (VH)	N	N	N		
Mining - Sand/Gravel (H)	N	N	N		
Wells - Oil, Gas, Geothermal (H)	N	N	N		
Salt Water Intrusion (H)	N	N	N		
Recreational area - surface water source (H)	Y	Y	Y		Laird Park - river access
Underground storage tanks - Confirmed leaking tanks (VH)	Y	Y	Y		As per Mapping Tool
Underground storage tanks - Decommissioned - inactive tanks (L)	N	N	N		
Underground storage tanks - Non-regulated tanks (tanks smaller than regulatory limit) (H)	U	U	U		
Underground storage tanks - Not yet upgraded or registered tanks (H)	N	N	N		
Underground storage tanks - Upgraded and/or registered - active tanks (L)	U	U	U		
Above ground storage tanks (M)	Y	Y	Y		
Wells - Water supply (M)	Y	Y	Y		
Construction/demolition staging areas (M)	N	N	N		
Contractor or government agency equipment storage yards (M)	Y	Y	Y		
Dredging (M)	N	N	N		
Transportation corridors - Freeways/state highways (M)	N	N	N		
Transportation corridors - Railroads (M)	N	N	N		
Transportation corridors - Historic railroad right-of-ways (M)	N	N	N		
Transportation corridors - Road Right-of-ways (herbicide use areas) (M)	N	N	N		
Transportation corridors - Roads/ Streets (L)	Y	Y	Y		
Hospitals (M)	N	N	N		
Storm Drain Discharge Points (M)	U	U	U		
Storm Water Detention Facilities (M)	U	U	U		
Artificial Recharge Projects - Injection wells (potable water) (L)	N	N	N		

Y = Yes N = No U = Unknown

* = A contaminant potentially associated with this activity has been detected in the water supply.

Inventory of Possible Contaminating Activities (PCA Inventory)

System Name STAN COUNTY HONOR FARM/LAIRD PARK **System No.** 5000167

Source Name WELL 01 **Source No.** 001 **PS Code** 04S/08E-30D01 M

PCA (Risk Ranking)	PCA in Zone A	PCA in Zone B5	PCA in Zone B10	*	Comments
Other Activities					
Artificial Recharge Projects - Injection wells (non-potable water) (M)	N	N	N		
Artificial Recharge Projects - Spreading Basins (potable water) (L)	N	N	N		
Artificial Recharge Projects - Spreading Basins (non-potable water) (M)	N	N	N		
Medical/dental offices/clinics (L)	Y	Y	Y		Honor Farm Facility
Veterinary offices/clinics (L)	N	N	N		
Surface water - streams/ lakes/rivers (L)	Y	Y	Y		San Joaquin River
Wells - monitoring, test holes (L)	N	N	N		

Y = Yes N = No U = Unknown

* = A contaminant potentially associated with this activity has been detected in the water supply.

Drinking Water Source Assessment and Protection (DWSAP) Program

Vulnerability Ranking

District Name LPA Stanislaus County **District No.** 80 **County** Stanislaus

System Name STAN COUNTY HONOR FARM/LAIRD PARK **System No.** 5000167

Source Name WELL 01 **Source No.** 001 **PS Code** 04S/08E-30D01 M

Completed by Jan Lopez R.E.H.S. **Date** July, 2002

Zone	PCA (Risk Ranking)	*	PCA Risk Points	Zone Points	PBE Points	Vulnerability Score
A	Underground storage tanks - Confirmed leaking tanks (VH)		7	5	3	15
A	Farm machinery repair (H)		5	5	3	13
A	Grazing (> 5 large animals or equivalent per acre) (H in Zone A, otherwise M)		5	5	3	13
A	Lagoons / liquid wastes (H)		5	5	3	13
A	Machine shops (H)		5	5	3	13
A	Recreational area - surface water source (H)		5	5	3	13
A	Septic systems - low density (<1/acre) (H in Zone A, otherwise L)		5	5	3	13
B5	Underground storage tanks - Confirmed leaking tanks (VH)		7	3	3	13
A	Above ground storage tanks (M)		3	5	3	11
A	Contractor or government agency equipment storage yards (M)		3	5	3	11
A	Crops, irrigated (Berries, hops, mint, orchards, sod, greenhouses, vineyards, nurseries, vegetable) (M)		3	5	3	11
A	Fertilizer, Pesticide/ Herbicide Application (M)		3	5	3	11
A	Wells - Water supply (M)		3	5	3	11
B5	Animal Feeding Operations as defined in federal regulation2 (VH in Zone A, otherwise H)		5	3	3	11
B5	Farm machinery repair (H)		5	3	3	11
B5	Lagoons / liquid wastes (H)		5	3	3	11
B5	Machine shops (H)		5	3	3	11
B5	Recreational area - surface water source (H)		5	3	3	11
B10	Underground storage tanks - Confirmed leaking tanks (VH)		7	1	3	11
A	Medical/dental offices/clinics (L)		1	5	3	9
A	Surface water - streams/ lakes/rivers (L)		1	5	3	9
A	Transportation corridors - Roads/ Streets (L)		1	5	3	9
B5	Above ground storage tanks (M)		3	3	3	9
B5	Contractor or government agency equipment storage yards (M)		3	3	3	9
B5	Crops, irrigated (Berries, hops, mint, orchards, sod, greenhouses, vineyards, nurseries, vegetable) (M)		3	3	3	9
B5	Fertilizer, Pesticide/ Herbicide Application (M)		3	3	3	9

*** = A contaminant potentially associated with this activity has been detected in the water supply.**

Vulnerability Ranking

System Name STAN COUNTY HONOR FARM/LAIRD PARK **System No.** 5000167

Source Name WELL 01 **Source No.** 001 **PS Code** 04S/08E-30D01 M

Zone	PCA (Risk Ranking)	*	PCA Risk Points	Zone Points	PBE Points	Vulnerability Score
B5	Grazing (> 5 large animals or equivalent per acre) (H in Zone A, otherwise M)		3	3	3	9
B5	Wells - Water supply (M)		3	3	3	9
B10	Animal Feeding Operations as defined in federal regulation2 (VH in Zone A, otherwise H)		5	1	3	9
B10	Farm machinery repair (H)		5	1	3	9
B10	Lagoons / liquid wastes (H)		5	1	3	9
B10	Machine shops (H)		5	1	3	9
B10	Recreational area - surface water source (H)		5	1	3	9
A	Illegal activities/ unauthorized dumping (H)		5	0	3	8
A	Underground storage tanks - Non-regulated tanks (tanks smaller than regulatory limit) (H)		5	0	3	8
A	Wells - Agricultural/ Irrigation (H)		5	0	3	8
B5	Illegal activities/ unauthorized dumping (H)		5	0	3	8
B5	Underground storage tanks - Non-regulated tanks (tanks smaller than regulatory limit) (H)		5	0	3	8
B5	Wells - Agricultural/ Irrigation (H)		5	0	3	8
B10	Illegal activities/ unauthorized dumping (H)		5	0	3	8
B10	Underground storage tanks - Non-regulated tanks (tanks smaller than regulatory limit) (H)		5	0	3	8
B10	Wells - Agricultural/ Irrigation (H)		5	0	3	8

*** = A contaminant potentially associated with this activity has been detected in the water supply.**

Drinking Water Source Assessment and Protection (DWSAP) Program

Vulnerability Summary

District Name LPA Stanislaus County District No. 80 County Stanislaus

System Name STAN COUNTY HONOR FARM/LAIRD PARK System No. 5000167

Source Name WELL 01 Source No. 001 PS Code 04S/08E-30D01 M

Completed by Jan Lopez R.E.H.S. Date July, 2002

THE FOLLOWING INFORMATION MUST BE INCLUDED IN THE SYSTEM CONSUMER CONFIDENCE REPORT

A source water assessment was conducted for the **WELL 01**

of the **STAN COUNTY HONOR FARM/LAIRD PARK** water system in **July, 2002**

The source is considered most vulnerable to the following activities not associated with any detected contaminants:

Underground storage tanks - Confirmed leaking tanks

Discussion of Vulnerability

Water quality analyses on file indicate that this source is in compliance with State Standards.

There have been no contaminants detected in the water supply, however the source is still considered vulnerable to activities located near the drinking water source.

A copy of the complete assessment may be viewed at:

Stanislaus County, DER
3800 Cornucopia Way, Suite C
Modesto, CA 95358

You may request a summary of the assessment be sent to you by contacting:

Tom Wolfe
Senior Environmental Health Specialist
(209) 525-6700

Assessment Summary

District Name LPA Stanislaus County **District No.** 80 **County** Stanislaus

System Name STAN COUNTY HONOR FARM/LAIRD PARK **System No.** 5000167

Source Name WELL 01 **Source No.** 001 **PS Code** 04S/08E-30D01 M

Completed by Jan Lopez R.E.H.S. **Date** July, 2002

Description of System and Source

The STAN COUNTY HONOR FARM/LAIRD PARK water system is located in Stanislaus County, near the City Of Grayson. There are approximately 7 service connections serving a population of 300.

The drinking water source for the STAN COUNTY HONOR FARM/LAIRD PARK water system is ground water. The nearest surface waters are the San Joaquin River, the Laird Slough and Brush Lake. General land use is agricutural with the exception of this Honor Farm and Laird Park which has river access.

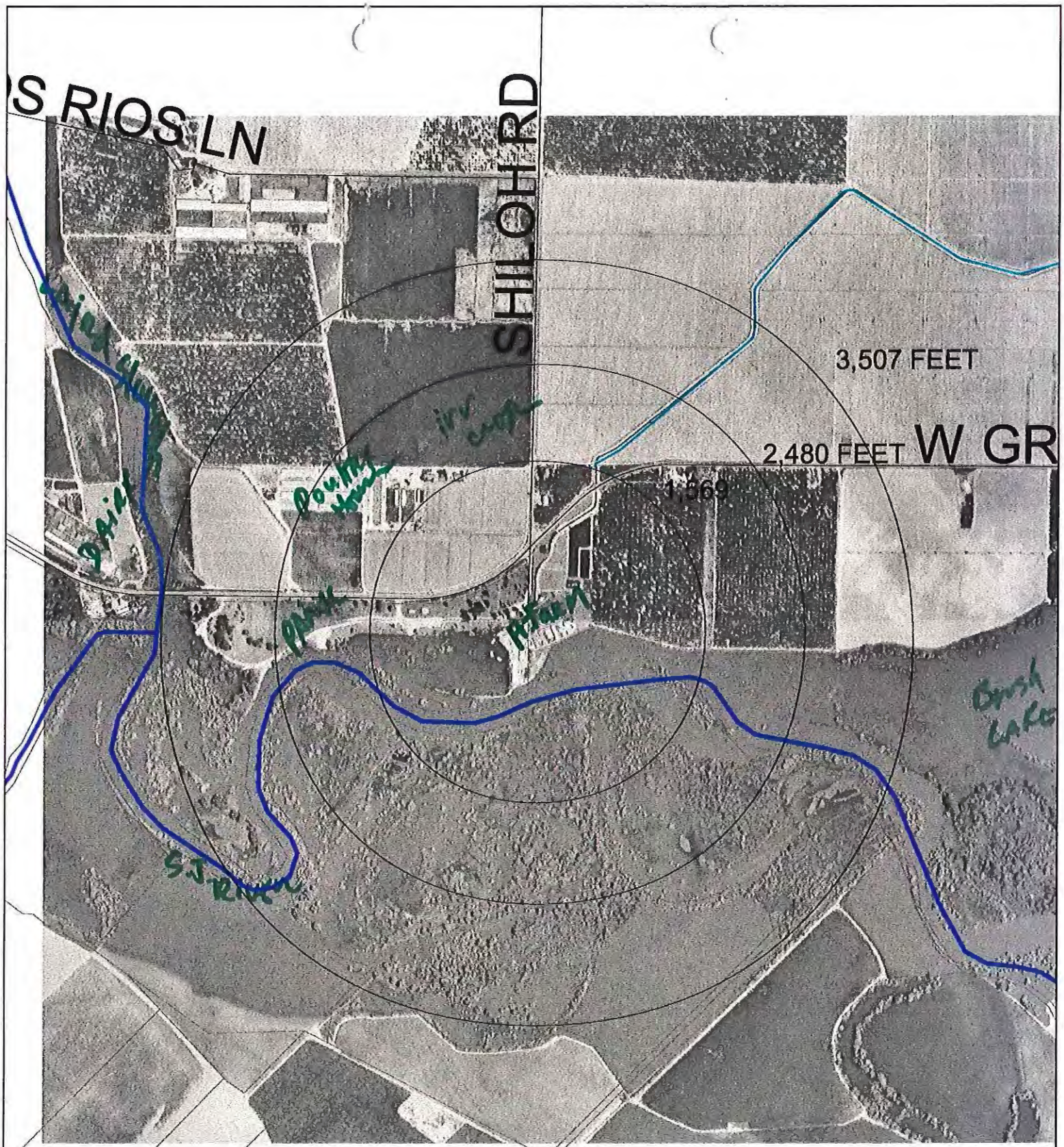
Assessment Procedures

The assessment of the source WELL 01 was conducted by Jan Lopez R.E.H.S. The LPA is Stanislaus County, Department Of Environmental Resources. The following sources of information were used in the assessment: County files/DER water data base/TurboSWAP files

Procedures used to conduct the assessment include:
Field assessment/Aerial map review/Mail correspondence with Stanislaus County Sherriff's Department

Contents of this Assessment

Yes [X]	No [ ]	**Assessment Summary**
Yes [X]	No [ ]	**Vulnerability Summary**
Yes [ ]	No [X]	**Source Location Form**
Yes [X]	No [ ]	**Delineation of Ground Water Protection Zones**
Yes [X]	No [ ]	**Physical Barrier Effectiveness Checklist**
Yes [X]	No [ ]	**Source Data Sheet**
Yes [X]	No [ ]	**Inventory of Possible Contaminating Activities**
Yes [X]	No [ ]	**Vulnerability Ranking**
Yes [X]	No [ ]	**Assessment Map**



Stanislaus County

Assessor Parcel Number: 017-60-02

Stan. Co. Honor Farm

System #5000167 - Well 01

602 0 602 1204 Feet

This map is for display purposes only.

N W E S

Public Works
Stanislaus County

GIS

Map printed: 8/7/2001

FAR WEST LABORATORIES
6602 2ND ST.
RIVERBANK, CA 95367

EDT

FarWest LABORATORIES, INC.
P. O. Box 355
6602 2nd Street
Riverbank, CA 95367
Phone 209-869-9260
Fax 209-869-2278
State Certification #1310

RECEIVED
APR 2014
STANISLAUS CO. ENVIRONMENTAL RESOURCES

GENERAL MINERAL & PHYSICAL & INORGANIC ANALYSIS (9/99)

ate of Report: 14/04/01 Sample ID No.24-0987
aboratory Signature Lab
ame: FAR WEST LABORATORIES Director:
ame of Sampler:A.MARTINEZ Employed By: FAR WEST LABORATORIES
ate/Time Sample ollected:14/03/28/1000 | Date/Time Sample Received @ Lab:14/03/28/1600 | Date Analyses Completed:14/03/28

8224 Grayson

ystem ame:STAN CNTY HONOR FARM WATER SYSTEM/LAIRD | System Number: 5000167
ame or Number of Sample Source:WELL 2 LAIRD PARK

4/18/14

User ID: 50C | Station Number: 5000167-002
Date/Time of Sample: |14|03|28|1000| YY MM DD TTTT | Laboratory Code: 4450
YY MM DD
Date Analysis completed: |14|03|28|
Submitted by: | Phone #:

MCL	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS	DLR
	mg/L	Total Hardness (as CaCO3) (mg/L)	00900		
	mg/L	Calcium (Ca) (mg/L)	00916		
	mg/L	Magnesium (Mg) (mg/L)	00927		
	mg/L	Sodium (NA) (mg/L)	00929		
	mg/L	Potassium (K) (mg/L)	00937		
Total Cations		Meq/L Value:			
	mg/L	Total Alkalinity (AS CaCO3) (mg/L)	00410		
	mg/L	Hydroxide (OH) (mg/L)	71830		
	mg/L	Carbonate (CO3) (mg/L)	00445		
	mg/L	Bicarbonate (HCO3) (mg/L)	00440		
*	mg/L+	Sulfate (SO4) (mg/L)	00945		.5
*	mg/L+	Chloride (Cl) (mg/L)	00940		
45	mg/L	Nitrate (as NO3) (mg/L)	71850	18.5	2.0
2 .	mg/L	Fluoride (F) (Natural-Source)	00951		.1
Total Anions		Meq/L Value:			
	Std.Units+	PH (Laboratory) (Std.Units)	00403		
***	umho/cm+	Specific Conductance (E.C.) (umhos/cm)	00095		
****	mg/L+	Total Filterable Residue@180C(TDS) (mg/L)	70300		
15	Units	Apparent Color (Unfiltered) (Units)	00081		
3	TON	Odor Threshold at 60 C (TON)	00086		1.
5	NTU	Lab Turbidity (NTU)	82079		
0.5	mg/L+	MBAS (mg/L)	38260		

* 250-500-600 ** 0.6-1.7 *** 900-1600-2200 **** 500-1000-1500

FAR WEST LABORATORIES
6602 2ND ST.
RIVERBANK, CA 9536.

Inspector RRuiz
Viol # 148000
Enf # 138500

FarWest LABORATORIES, INC.
P. O. Box 355
6602 2nd Street
Riverbank, CA 95367
Phone 209-869-9260
Fax 209-869-2278
State Certification #1310

RECEIVED JAN 2014 STANISLAUS ENVIRONMENTAL RESOURCES

GENERAL MINERAL & PHYSICAL & INORGANIC ANALYSIS (9/99)

Date of Report: 14/01/10 Sample ID No.23-3984
Laboratory Signature Lab
Name: BSK ANALYTICAL LABORATORIES Director:
Name of Sampler:A.MARTINEZ Employed By: FAR WEST LABORATORIES
Date/Time Sample Collected:13/12/16/1356 | Date/Time Sample Received @ Lab:13/12/19/1540 | Date Analyses Completed:13/12/30

System Name:CERES WEST MHP 2030 Grayson
Name or Number of Sample Source:SOUTH WELL
System Number: 5000077

ENTERED 1/15/14

User ID: 50C
Date/Time of Sample: |13|12|16|1356| YY MM DD TTTT
Station Number: 5000077-001
Laboratory Code: 5810 YY MM DD
Date Analysis completed: |13|12|30|
Submitted by:_____ Phone #:_____

PAGE 1 OF 1

INORGANIC CHEMICALS

MCL	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS	DLR
10	ug/L	Arsenic (As) (ug/L)	01002	20	2.0

+ Indicates Secondary Drinking Water Standards

FAR WEST LABORATORIES
6602 2ND ST.
RIVERBANK, CA 95367

FarWest LABORATORIES, INC.
P. O. Box 355
6602 2nd Street
Riverbank, CA 95367
Phone 209-869-9260
Fax 209-869-2278
State Certification #1310

GENERAL MINERAL & PHYSICAL & INORGANIC ANALYSIS (9/99)

Date of Report: 14/04/08 Sample ID No.24-0903

Laboratory Signature Lab
Name: BSK ANALYTICAL LABORATORIES Director:

Name of Sampler:A.MARTINEZ Employed By: FAR WEST LABORATORIES

Date/Time Sample Collected:14/03/19/1451	Date/Time Sample Received @ Lab:14/03/20/1519	Date Analyses Completed:14/03/31

System Name:CERES WEST MHP 2030 Grayson

System Number: 5000077

Name or Number of Sample Source:SOUTH WELL

User ID: 50C Station Number: 5000077-001

Date/Time of Sample: |14|03|19|1451| Laboratory Code: 5810
YY MM DD TTTT YY MM DD

Date Analysis completed: |14|03|31|

Submitted by:_____ Phone #:_____

PAGE 1 OF 1

INORGANIC CHEMICALS

MCL	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS	DLR
10	ug/L	Arsenic (As) (ug/L)	01002	17	2.0

+ Indicates Secondary Drinking Water Standards

DEPARTMENT OF ENVIRONMENTAL RESOURCES

3800 Cornucopia Way, Suite C Modesto, CA 95358-9492
Phone: 209.525.6700 Fax: 209.525.6774

NON TRANSIENT - NON COMMUNITY WATER SYSTEM BACTERIOLOGICAL SAMPLE SITE PLAN

Stanislaus County Honor Farm/laird Park

Westley, CA 95387 PWSID # 5000-167

1. **Routine Sampling** **Date** 8/03/12

Connections: 2-10

Population Served: 500/week

Number of Pressure Zones: 1

Sampling Frequency: Monthly

Treatment Facilities: None

Storage Facilities: One, 2000 gallon pressure tank at well #2.

Routine Sample Sites:

1. Hand Sink in Kitchen West Wall
2. Staff Kitchen Sink
3. Barracks #2 Hose Bib East Wall
4. Barracks #3 Restroom

Samplers: Far West Laboratories Inc,. / JSWWC

Laboratory: FWL

2. **Notification:**

Section 64423.1(b), California Code of Regulations, TITLE 22:
Laboratory to notify water owner/operators, designated below, within 24 hours whenever the presence of total coliform, fecal coliform or E. Coli has been demonstrated in a sample.

1.Jared Steeley_____ (work) ph. 620 - 1662
(home) ph. 883 - 9737
2.Scott Shook_____ (work) ph. 652-0480

Section 64426:
The water supplier will notify the Stanislaus County Department of Environmental Resources as soon as possible, but in no cases later than 24 hours, whenever there is a coliform positive bacteriological sample reported.

STANISLAUS COUNTY DEPARTMENT OF ENVIRONMENTAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH
3800 CORNUCOPIA WAY SUITE C
MODESTO, CA 95358
PHONE (209) 525-6700

---

3. **Routine and Repeat Sample Sites:**

CALENDAR QUARTER	ROUTINE SAMPLE SITE*	REPEAT SAMPLE SET *, **
JANUARY MAY SEPTEMBER	Barrack's #2	1.Barracks 2 2. Kitchen 3. Barracks 3 4. Staff Kitchen
FEBRUARY JUNE OCTOBER	Kitchen Sink	1.Barracks 2 2. Kitchen 3. Barracks 3 4. Staff Kitchen
MARCH JULY NOVEMBER	Barrack's #3	1.Barracks 2 2. Kitchen 3. Barracks 3 4. Staff Kitchen
APRIL AUGUST DECEMBER	Staff Kitchen Sink	1.Barracks 2 2. Kitchen 3. Barracks 3 4. Staff Kitchen

* Samples to be collected from frequently used out side hose faucets, when possible.

** Section 64424

Section 64424:

(a)(1) If a routine sample for coliform bacteria is total coliform positive, collect a repeat sample set consisting of at least four samples.

(b) Repeat samples to be collected from: the original coliform positive sample site, and upstream and downstream of the original coliform positive site. Repeat sample sets must be collected within 24 hours of laboratory reporting a positive sample.

(c) At least five (5) routine samples must be collected the following month after which a total coliform positive sample is collected.

---

4. **Map and Description of System:** (Attach system site map with sample locations)

Attached

Submitted by: Jared Steeley
Title: Water System Operator
Date: August 3, 2012

Google earth

feet 700
meters 200

Stanislaus County

Department of Environmental Resources

1716 Morgan Road
Modesto, California 95358-5894
FAX# (209) 525-4163
(209)

525-4154

February 17, 1993

SMALL COMMUNITY
TEMPORARY PUBLIC WATER SUPPLY PERMIT

Pursuant to the California Health and Safety Code, Section 4011-4019A, a public water supply permit is hereby issued.

PERMIT IS ISSUED TO: STANISLAUS COUNTY SHERIFF'S DEPT
1100 H STREET
MODESTO CA

PERMIT ALLOWS WATER SERVICE TO:

7 SERVICE CONNECTIONS AT
THE STANISLAUS COUNTY HONOR FARM
8224 W. GRAYSON RD
MODESTO CA

PERMIT ALLOWS WATER SERVICE FROM THE FOLLOWING FACILITIES:

1 WATER WELL

This permit is granted subject to the following provisions:

1. Water for domestic purposes shall, under all circumstances and conditions, be pure, wholesome, and potable, and shall not endanger the lives or health of human beings;

2. A program for the protection of the domestic water system against possible backflow from premises having dual or unsafe water systems shall be maintained in accordance with the Cross-Connection Regulations of the California State Board of Public Health;

3. Competent and adequate operation shall be provided at all times, and operating records,including water flow, quantity of water treated, chemicals used, and other data as may be required by the State Department of Public Health and/or the Stanislaus County Department of Environmental Resources, shall be maintained;

4. Bacteriological and chemical tests performed in compliance with the methods set forth in Title 22 of the California Code of Regulations (C.C.R.), Section 64447, shall be made in accordance with the requirements of the State Department of Public Health, or the Stanislaus County Department of Environmental Resources;

5. Necessary treatment works or improvements in operation, maintenance or construction, shall be provided when needed or when required by State Department of Public Health and/or the Stanislaus County Department of Environmental Resources;

6. Modifications, additions, or changes in the distribution system shall comply in all particulars with the provisions of State and County laws and regulations relating to public water systems.

7. Permit is non-transferrable.

8. An annual report providing specific information on water quality of all sources shall be distributed to each customer per C.C.R., Section 64431.

STANISLAUS COUNTY DEPARTMENT OF ENVIRONMENTAL RESOURCES

By: _____

BRYAN KUMIMOTO, SR. E.H.S.
SENIOR ENVIRONMENTAL HEALTH SPECIALIST
Division of Environmental Health

Date issued: 2/17/93

BK/lc

W-8

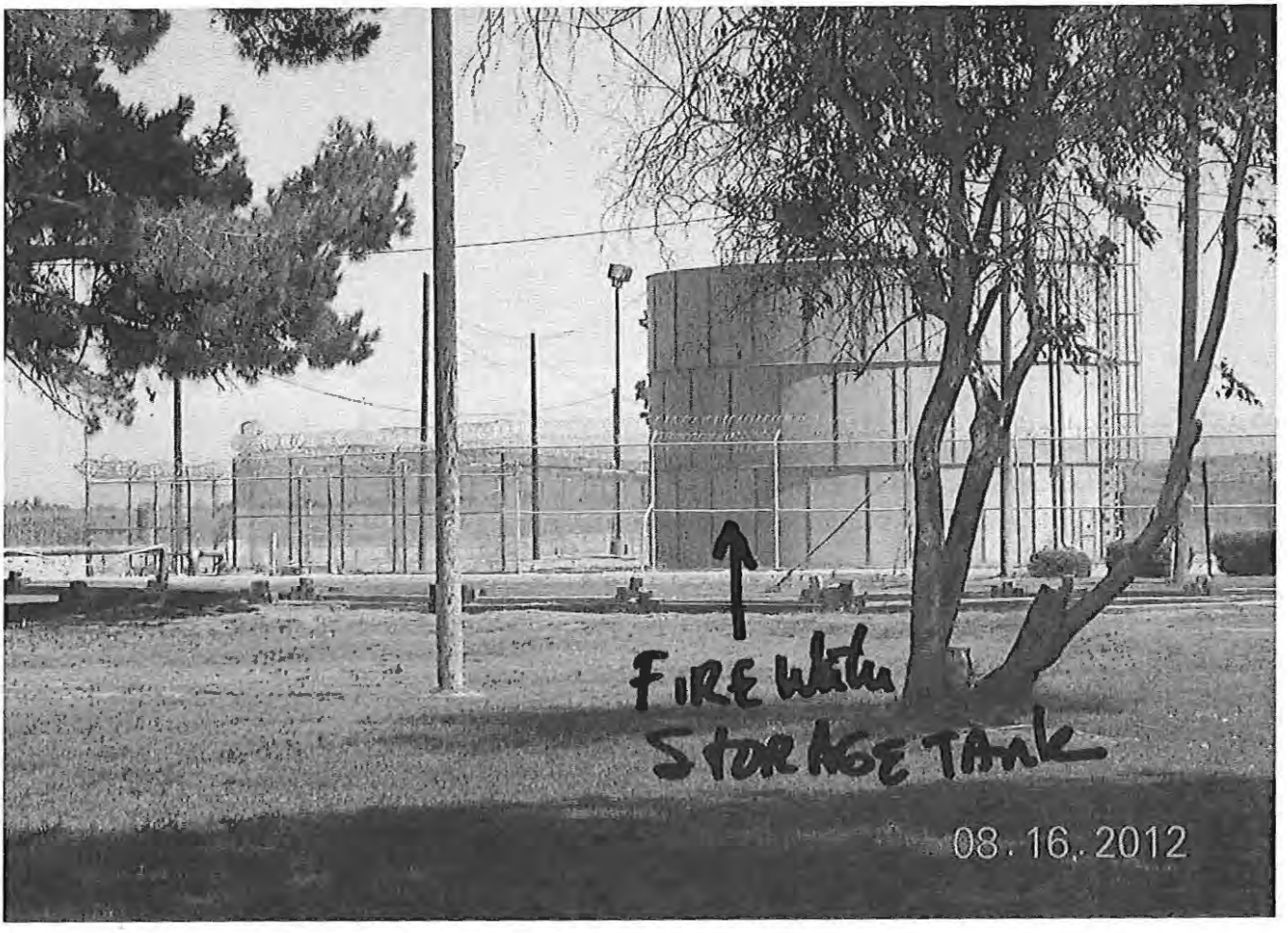
NO SCALE

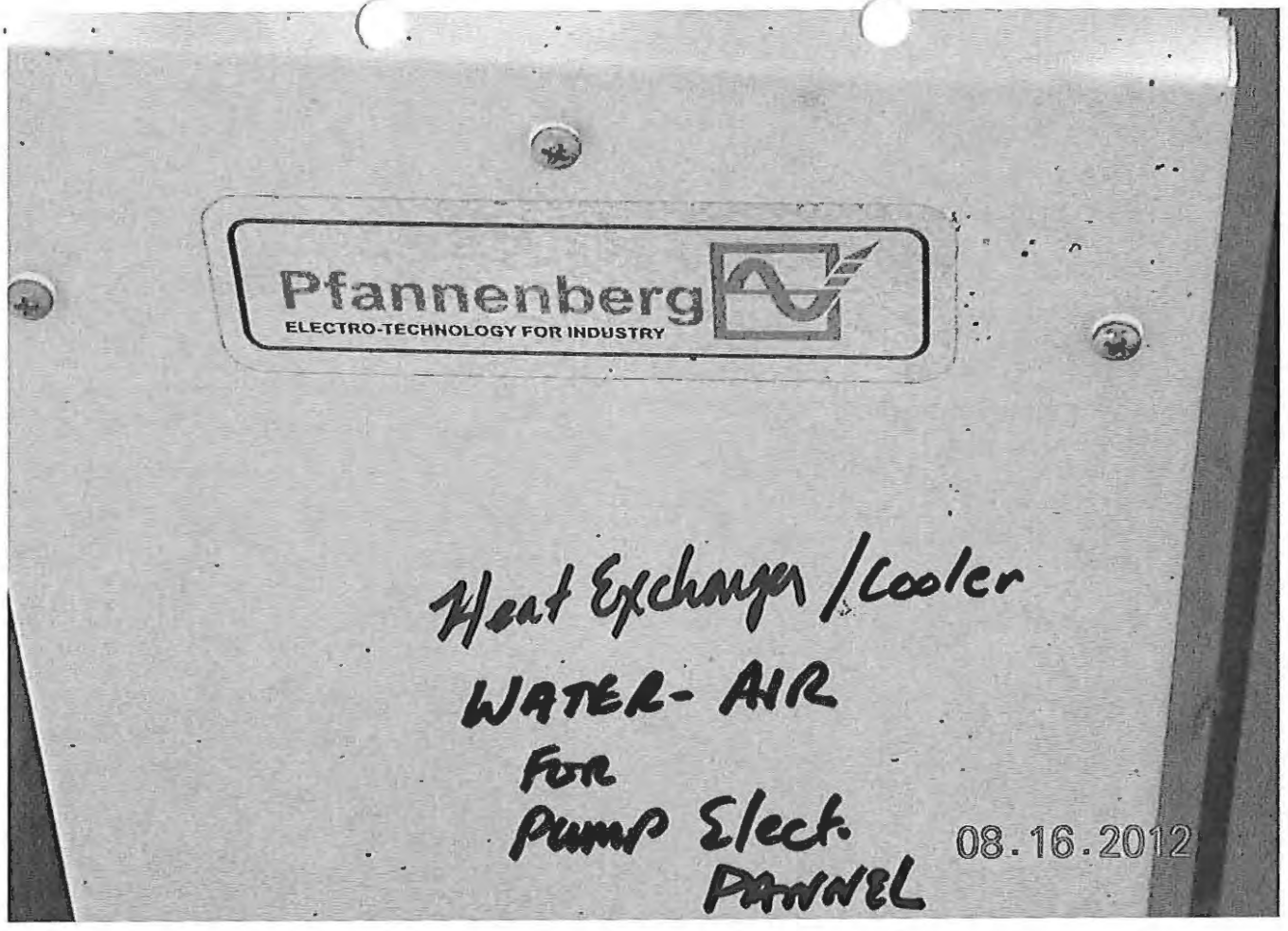
Approximate Location Honor farm Domestic Well w/ Submersible Pump

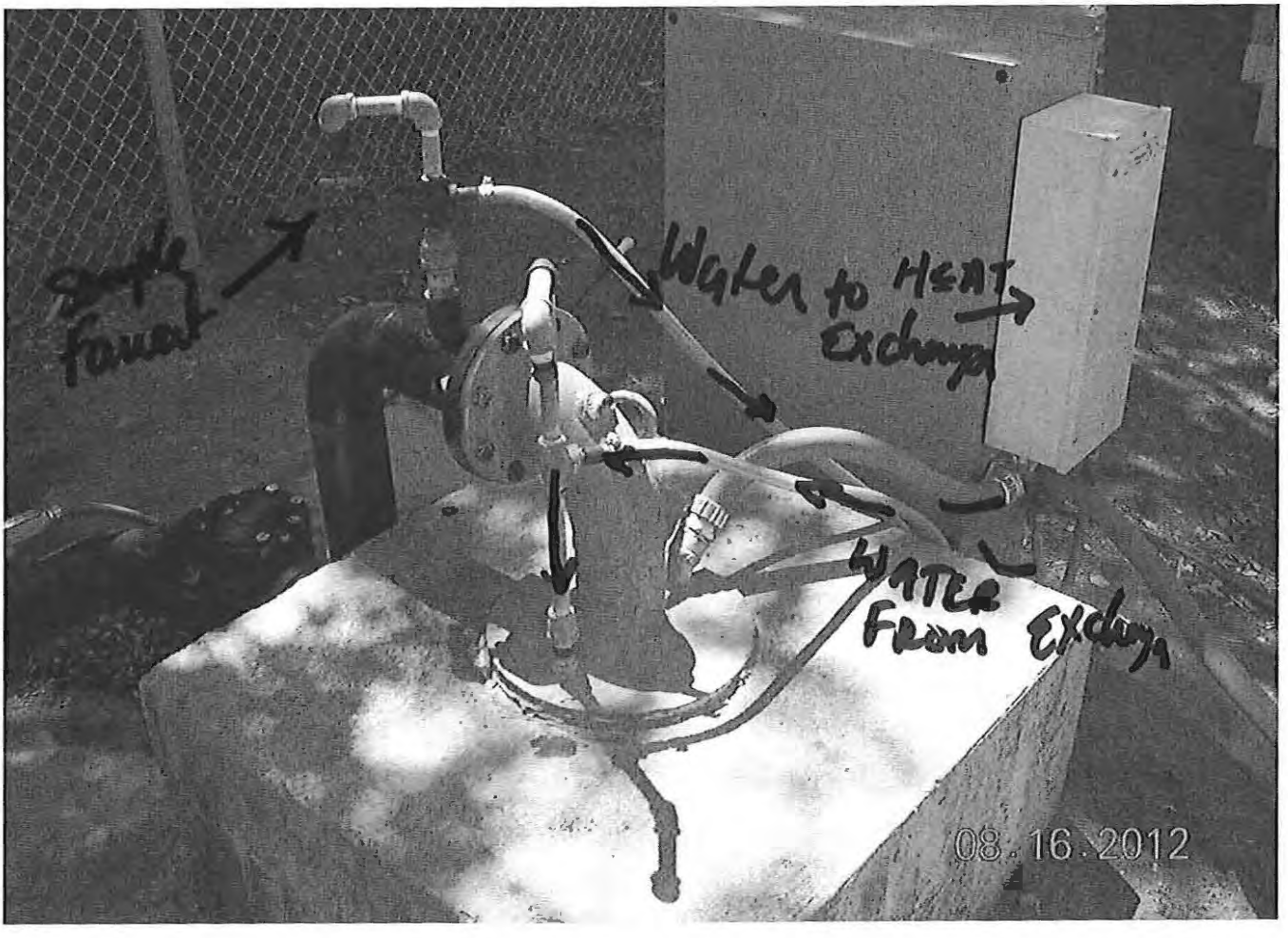
Approximate Location LAIRD PARK Well w/ Submersible Pump

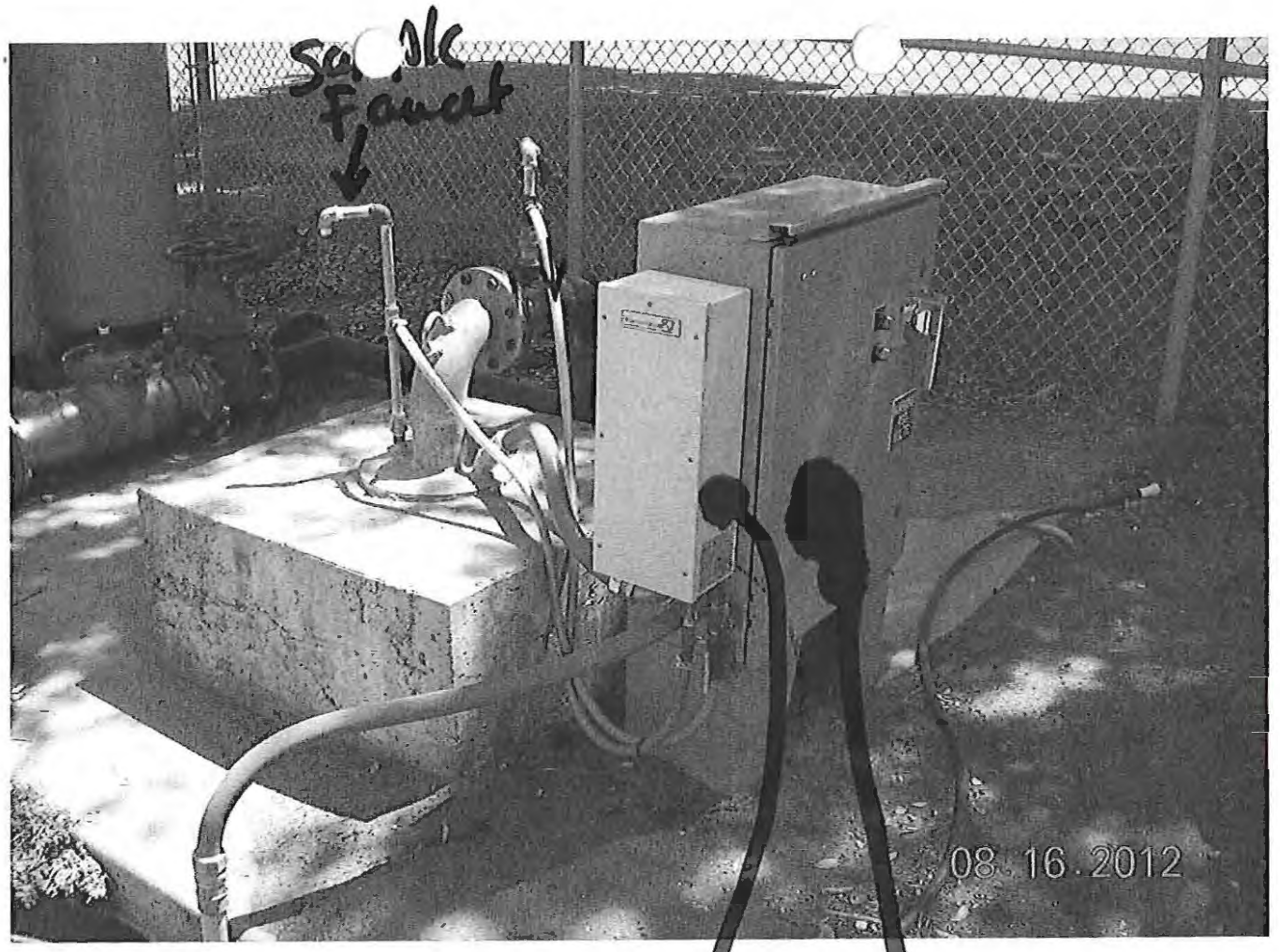
Approximate Location LAIRD PARK IRRIGATION Well W/TURBINE Pump

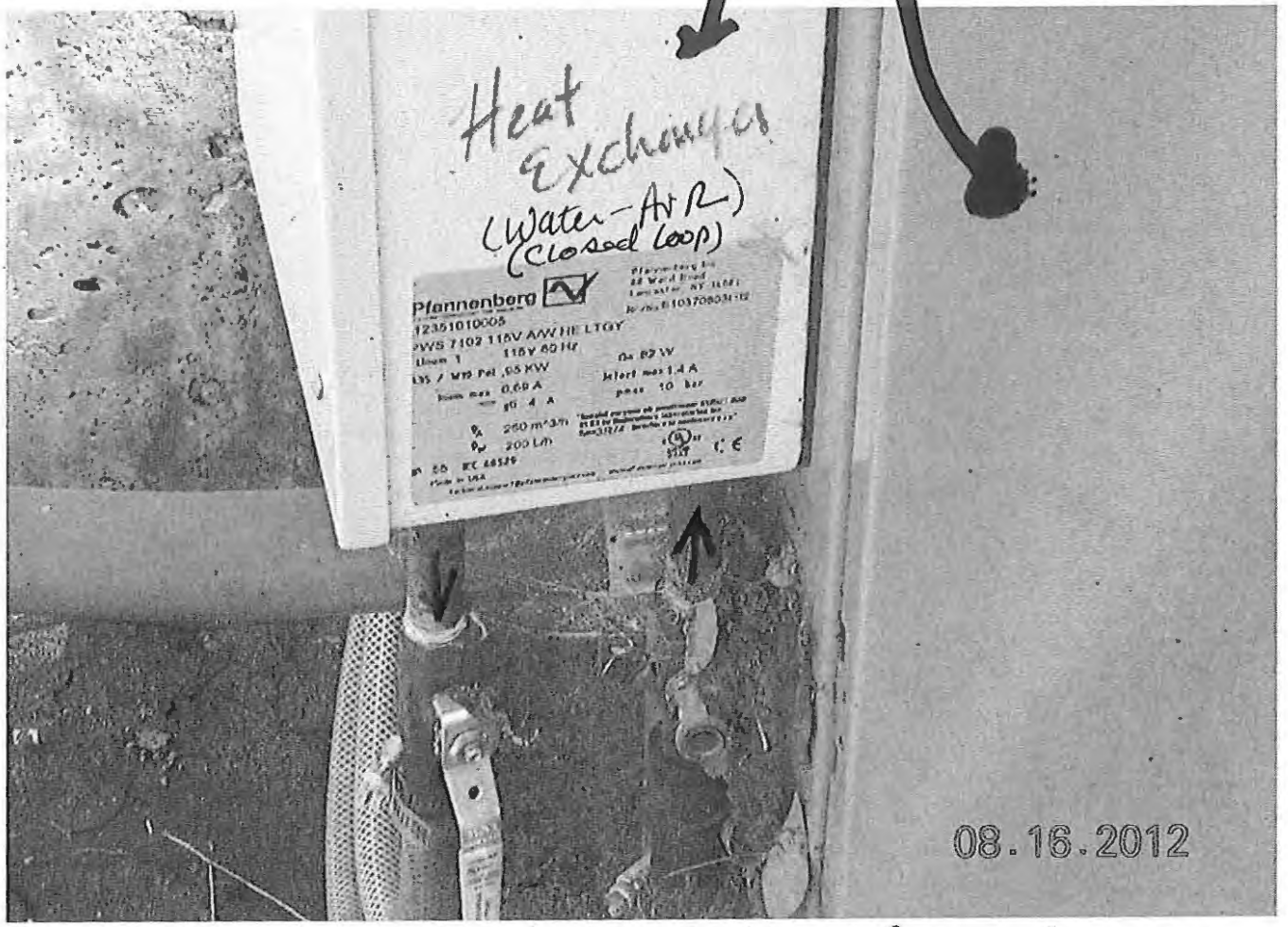

08.16.2012


FIRE with
STORAGE TANK
08.16.2012

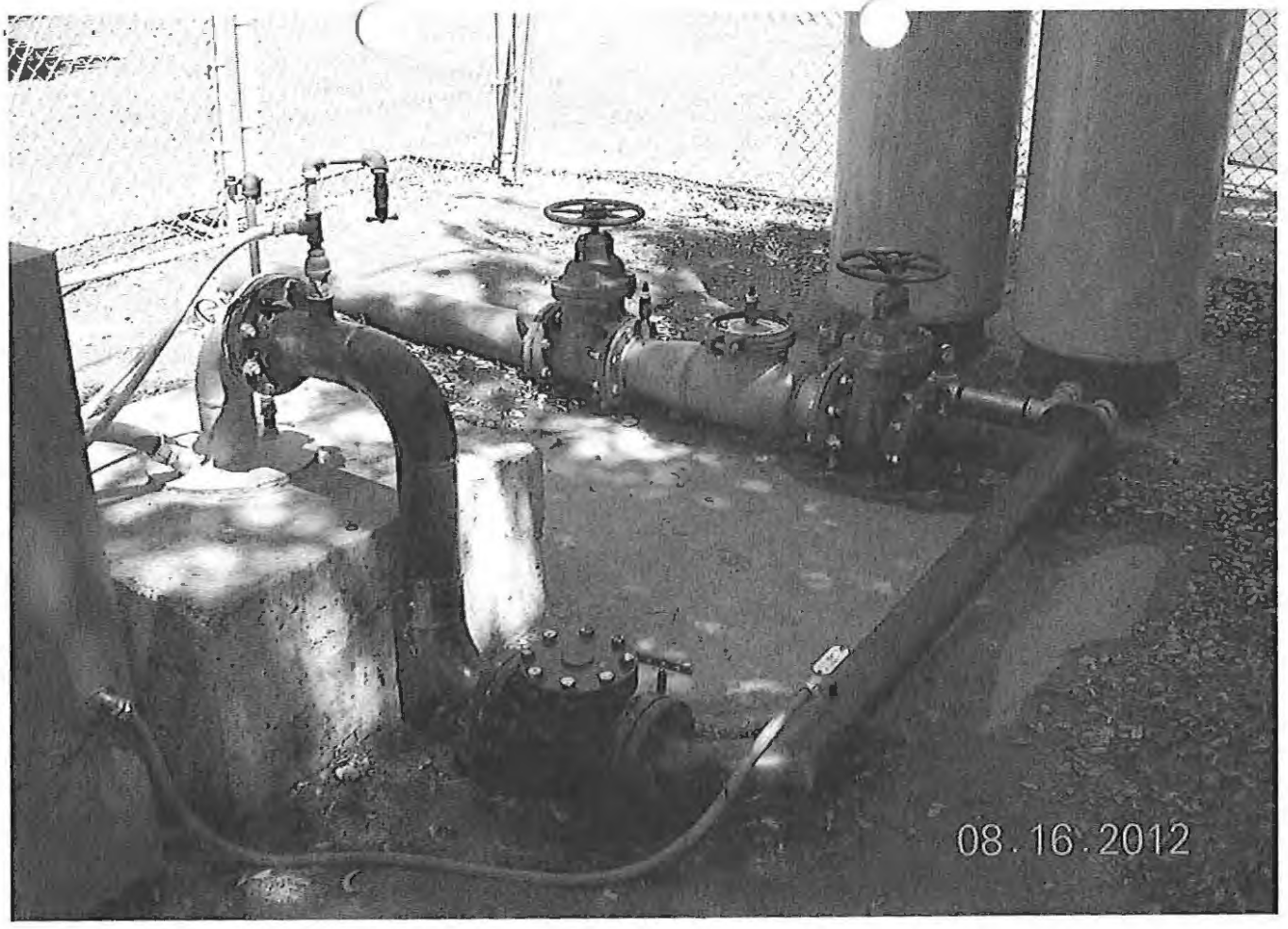

Pfannenberg
ELECTRO-TECHNOLOGY FOR INDUSTRY
Heat Exchanger / Cooler
WATER - AIR
FOR
Pump Elect.
PANNEL
08.16.2012

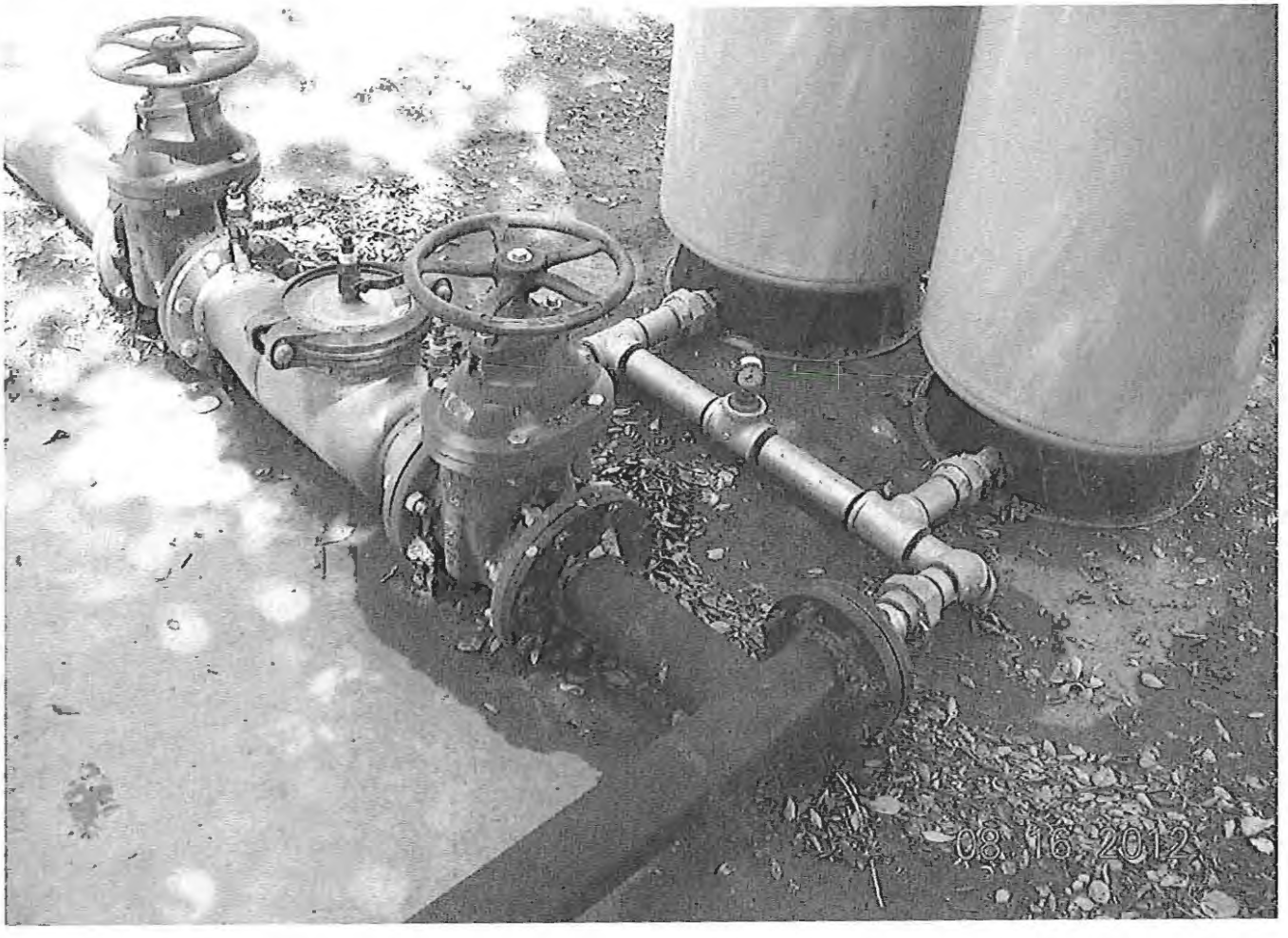

Water to HEAT
Exchanger
WATER
From Exchanger
08.16.2012

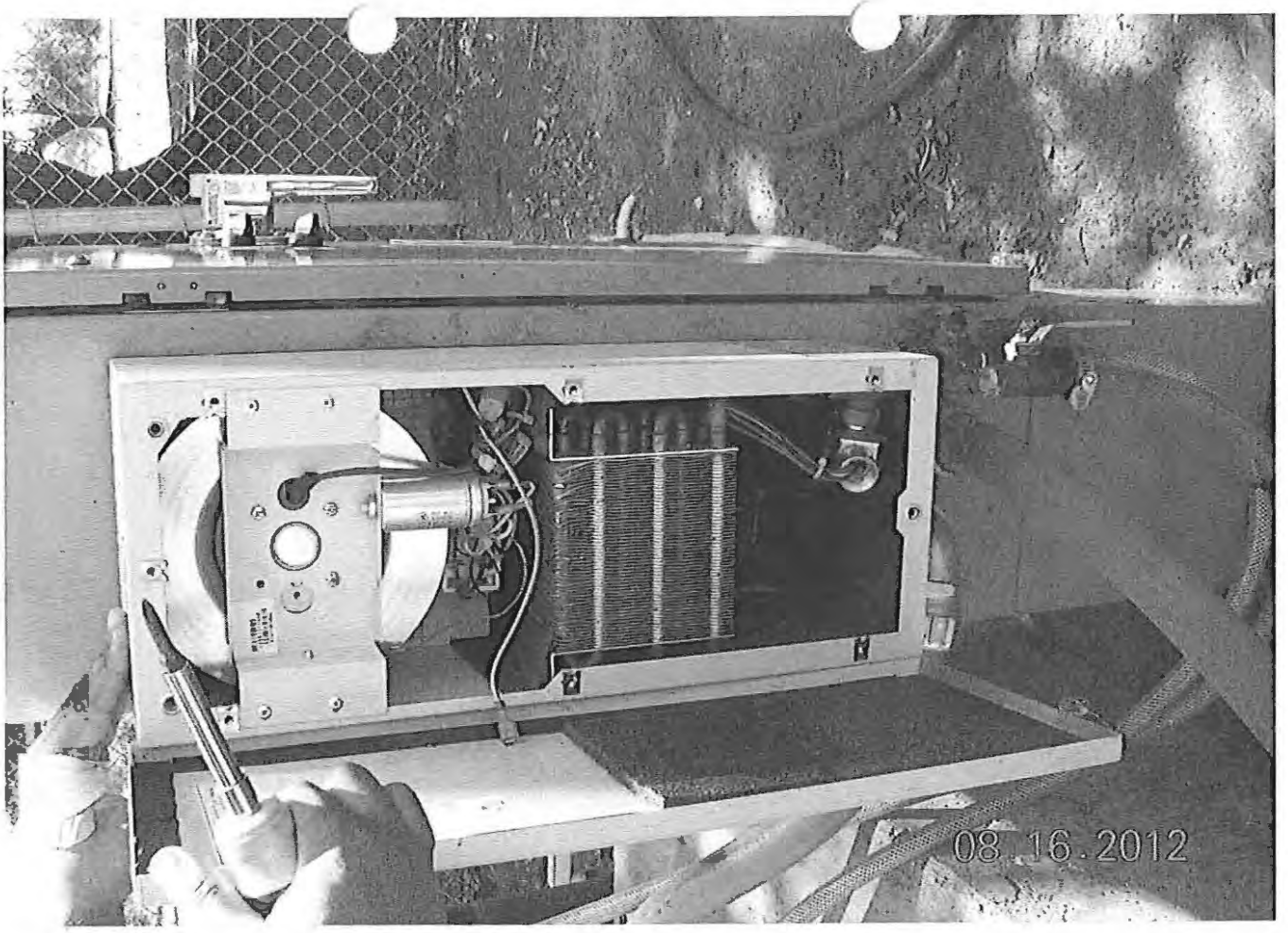




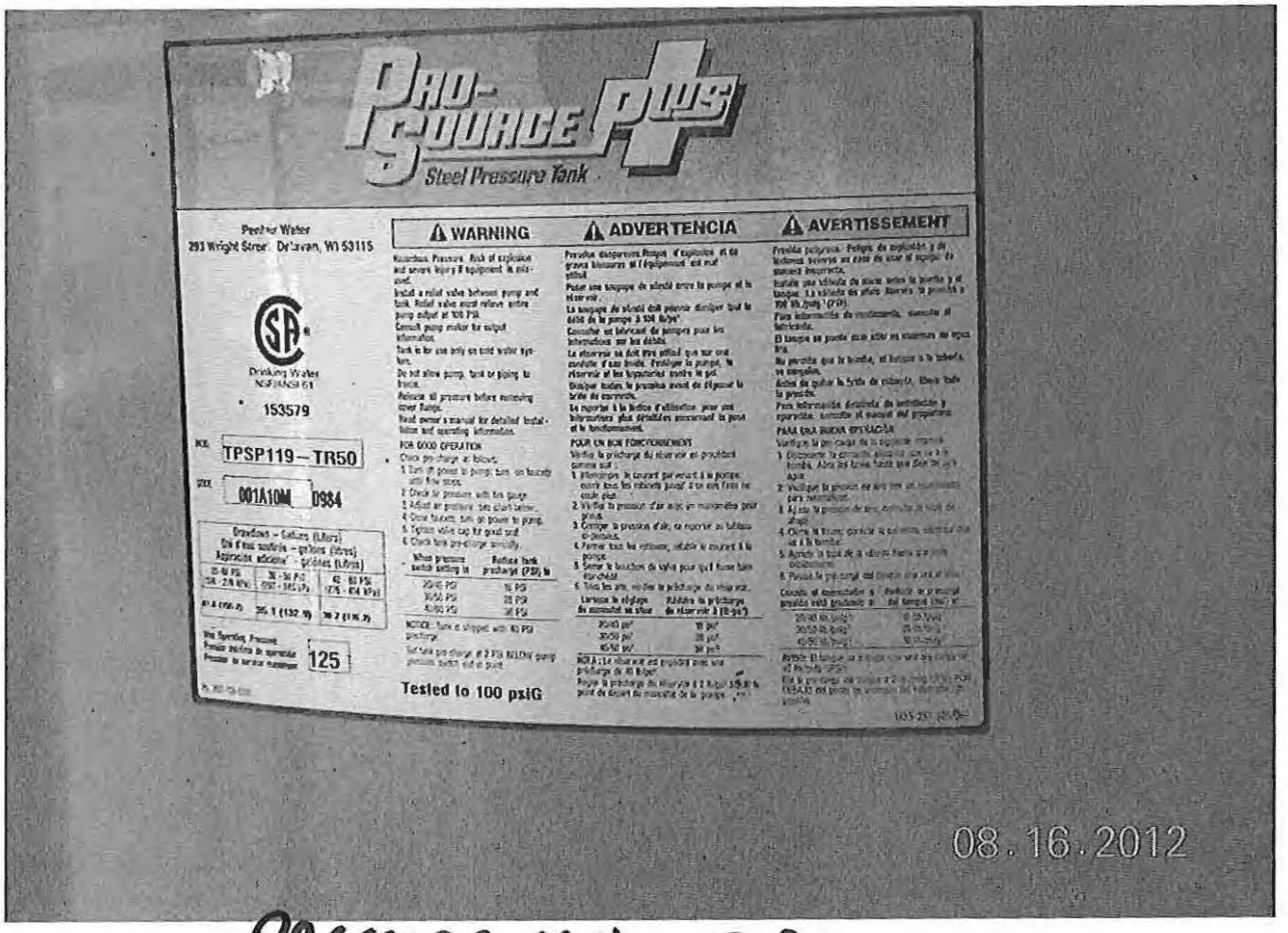
Water to Air Heat Exchanger for Pump Electrical Panel


08.16.2012


08.16.2012

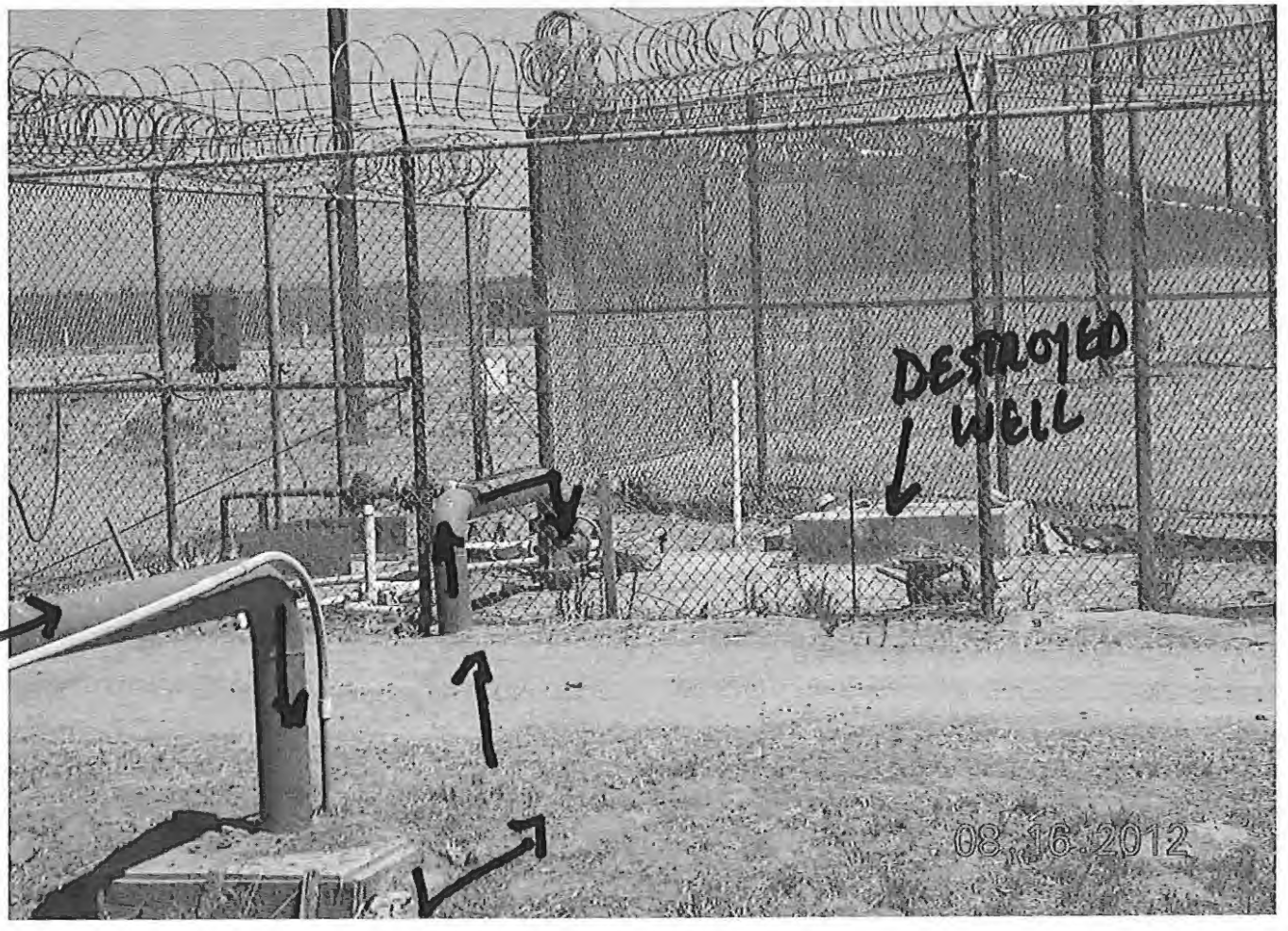


Heat Exchanger Water-Air

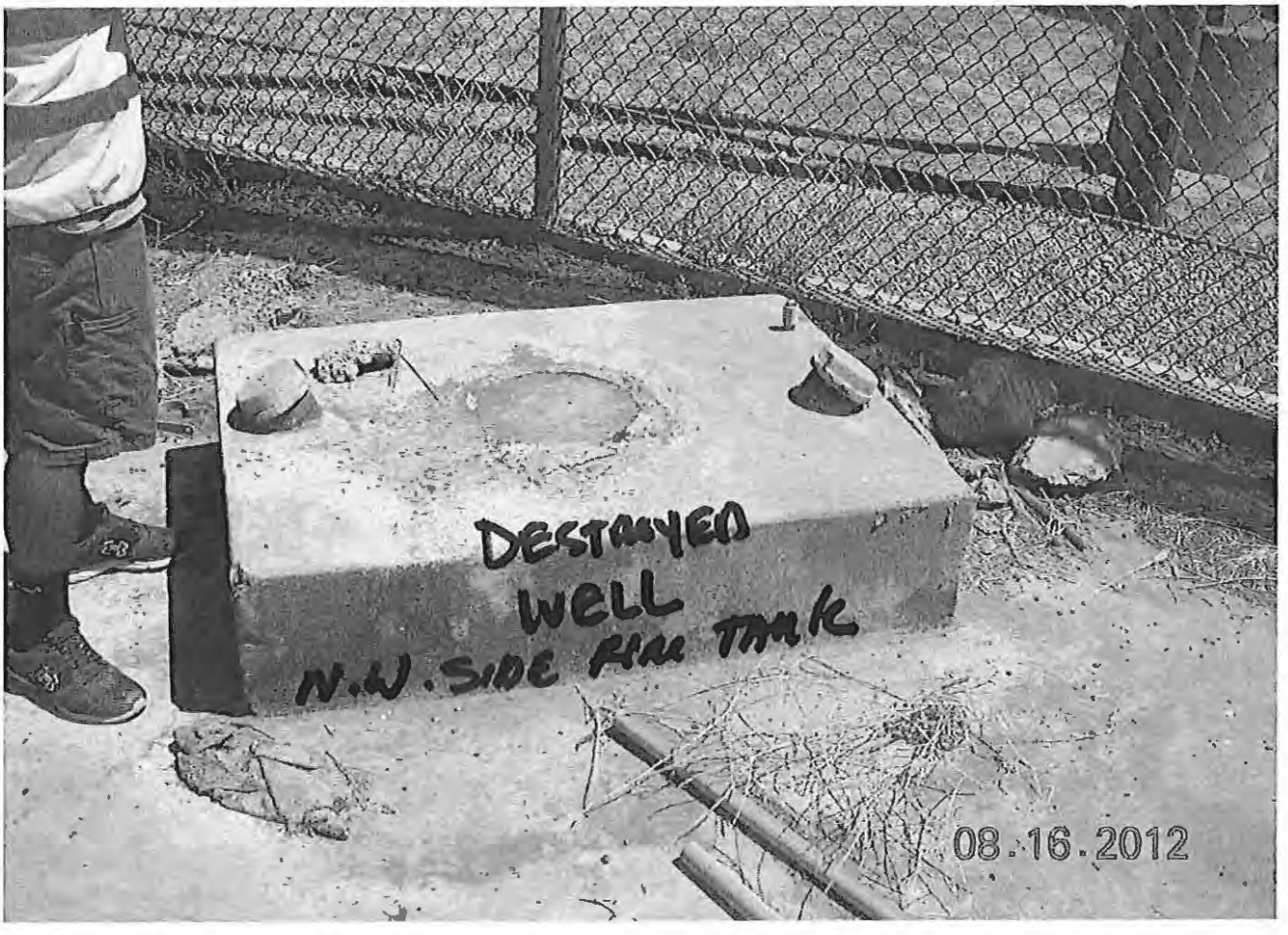


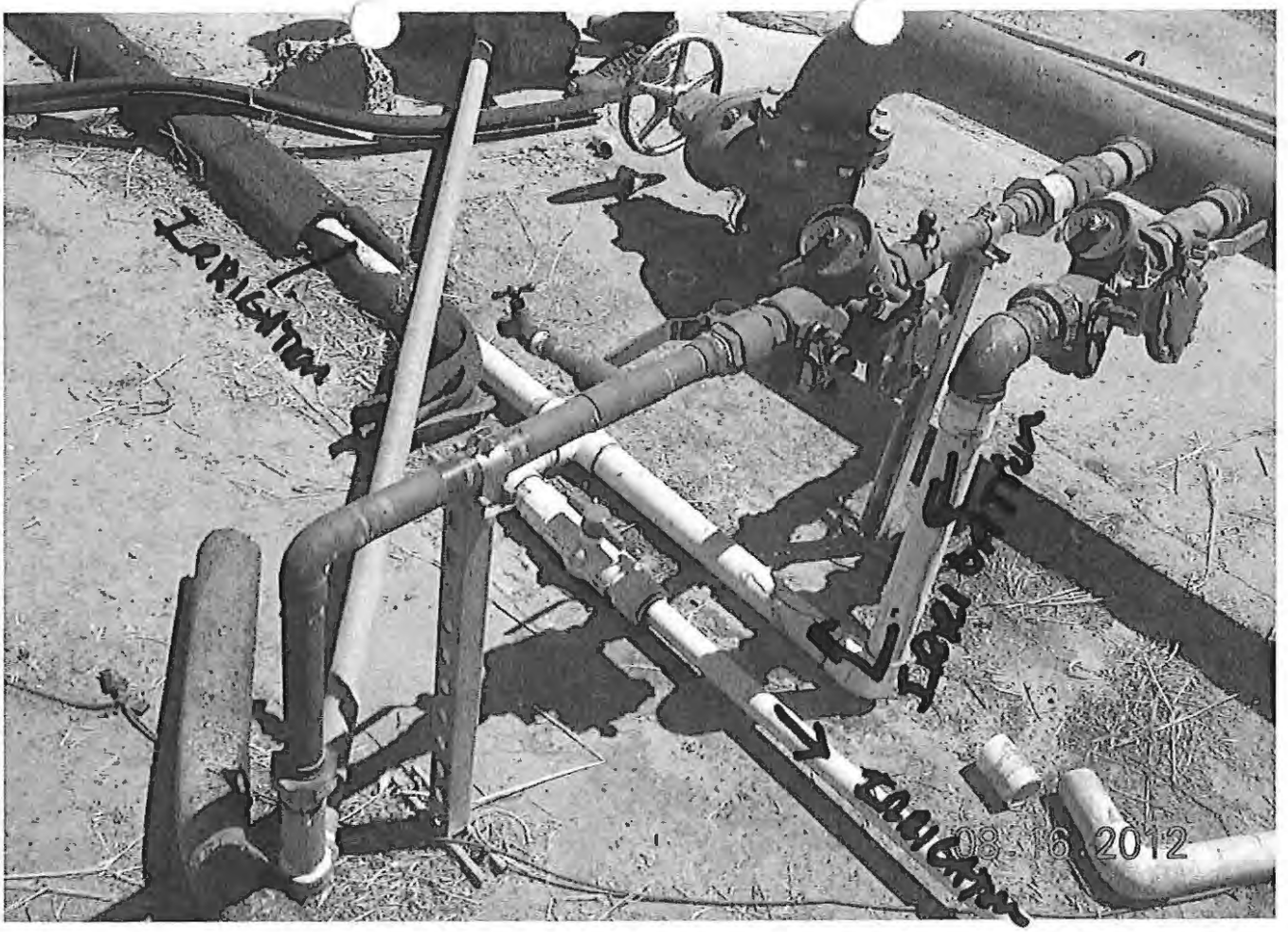
PRESSURE TANK INFO


Fill Water
Storage
From Well #
08 16 2012
- LAIRD PARK

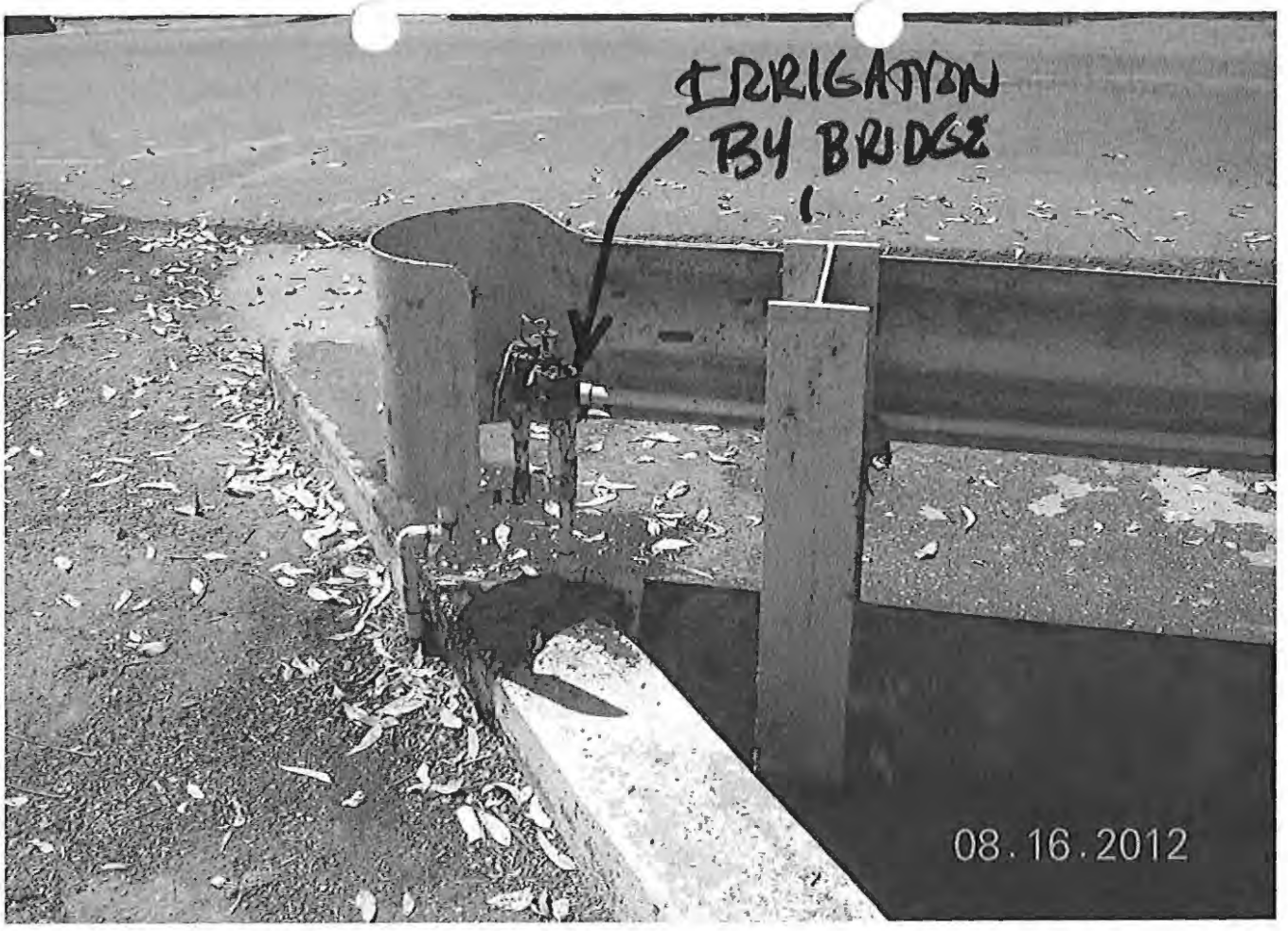

DESTROYED
WELL
08 16 2012

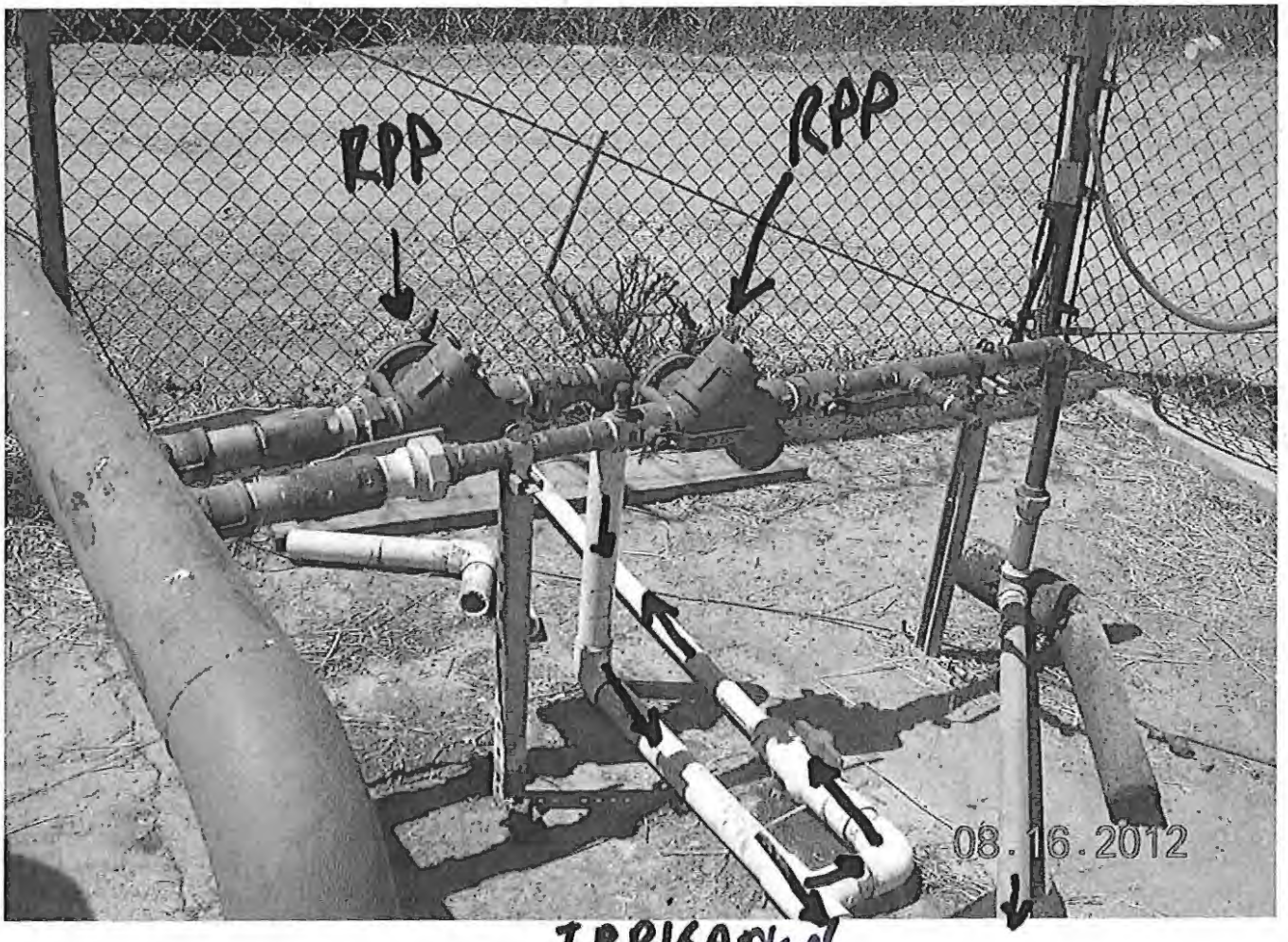

TO IRRIGATION
IRRIGATION
08.16.2012

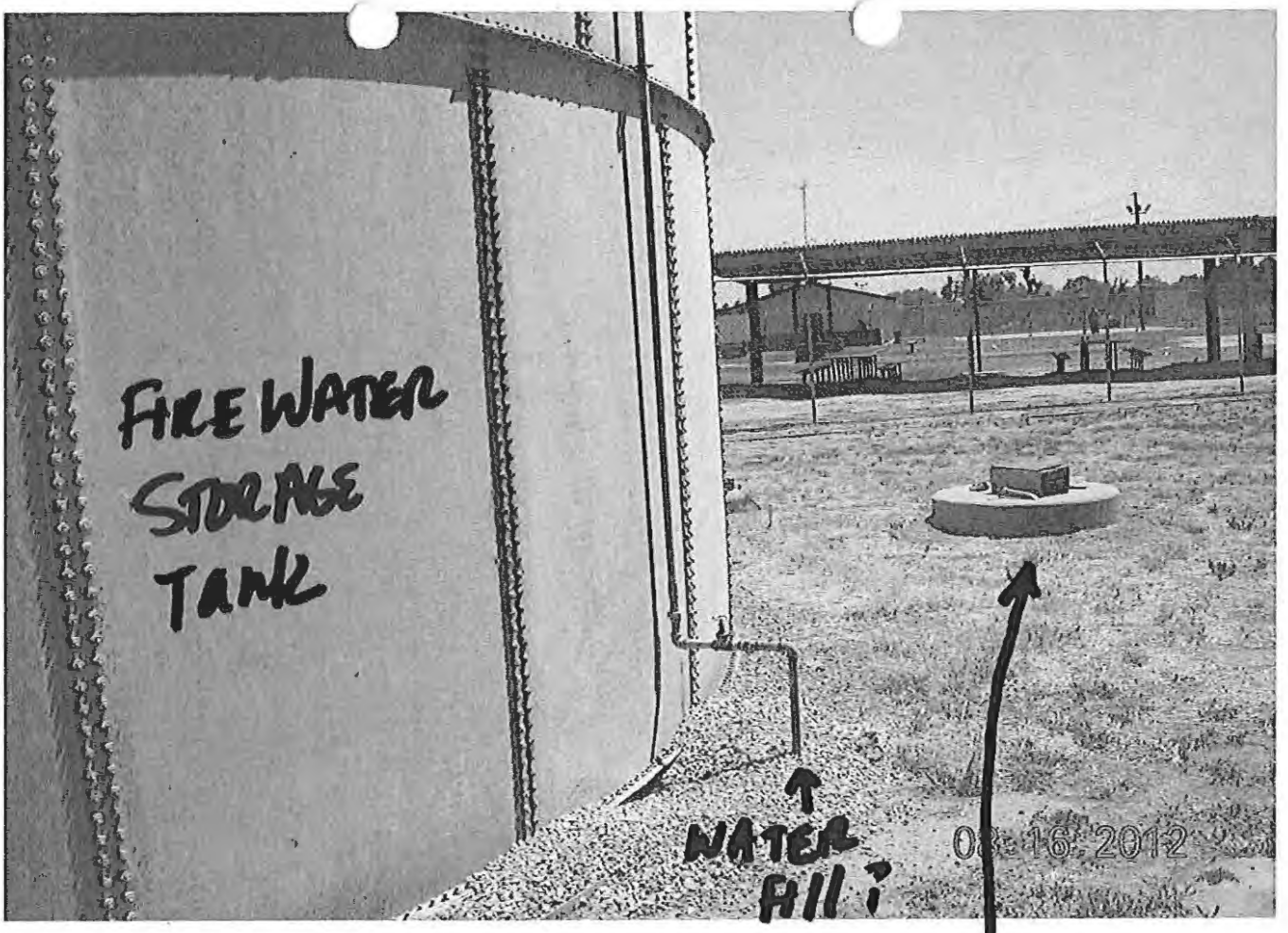

DESTROYED
WELL
N.W. SIDE REAR TANK
08.16.2012

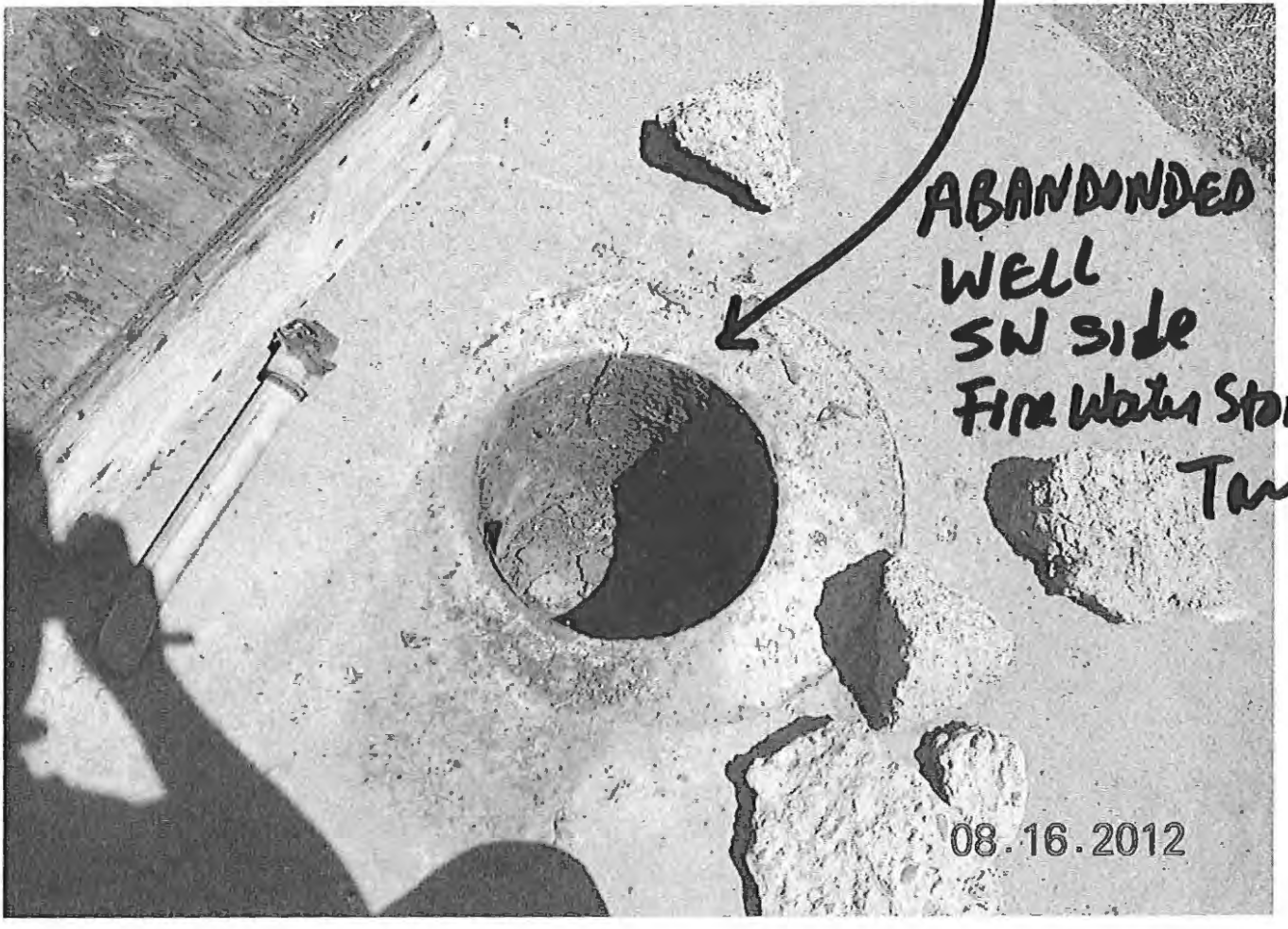

08.16.2012

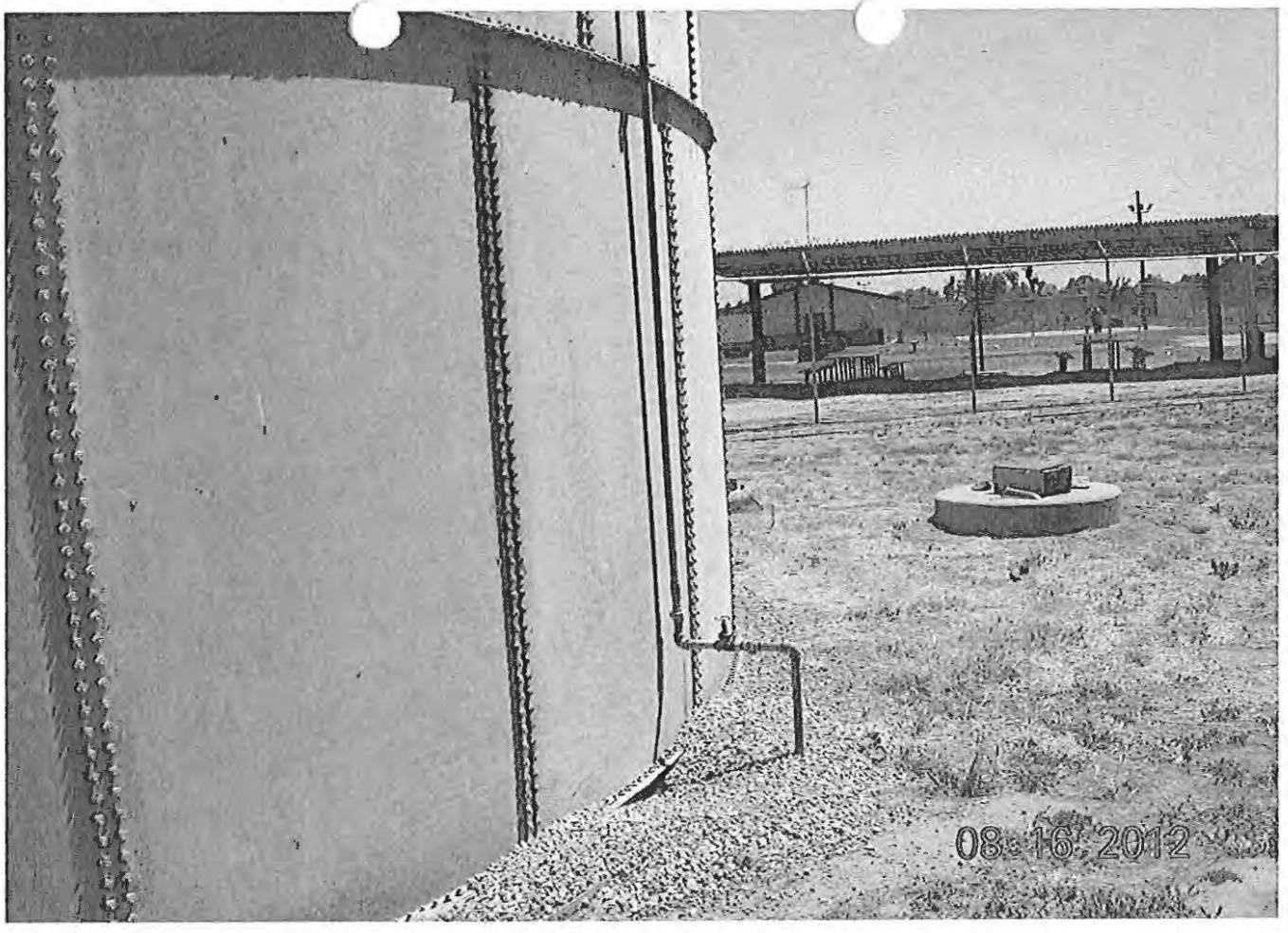

08.16.2012


IRRIGATION
BY BRIDGE
08.16.2012


RPP
RPP
08.16.2012
IRRIGATION


FIRE WATER
STORAGE
TANK
WATER
FILL
08.16.2012


ABANDONED
WELL
SW SIDE
FIRE WATER STORAGE
TANK
08.16.2012

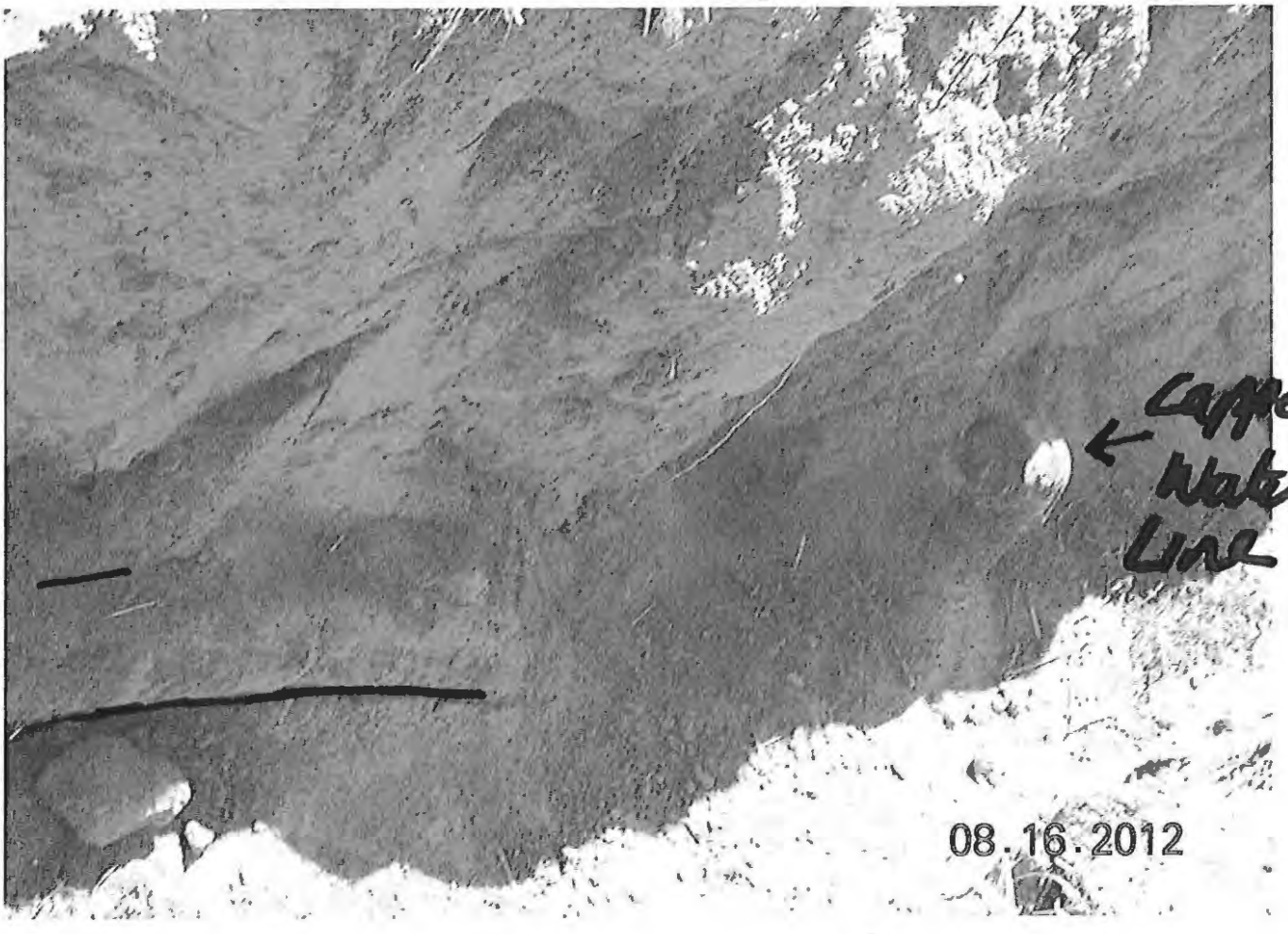

08.16.2012


08.16.2012

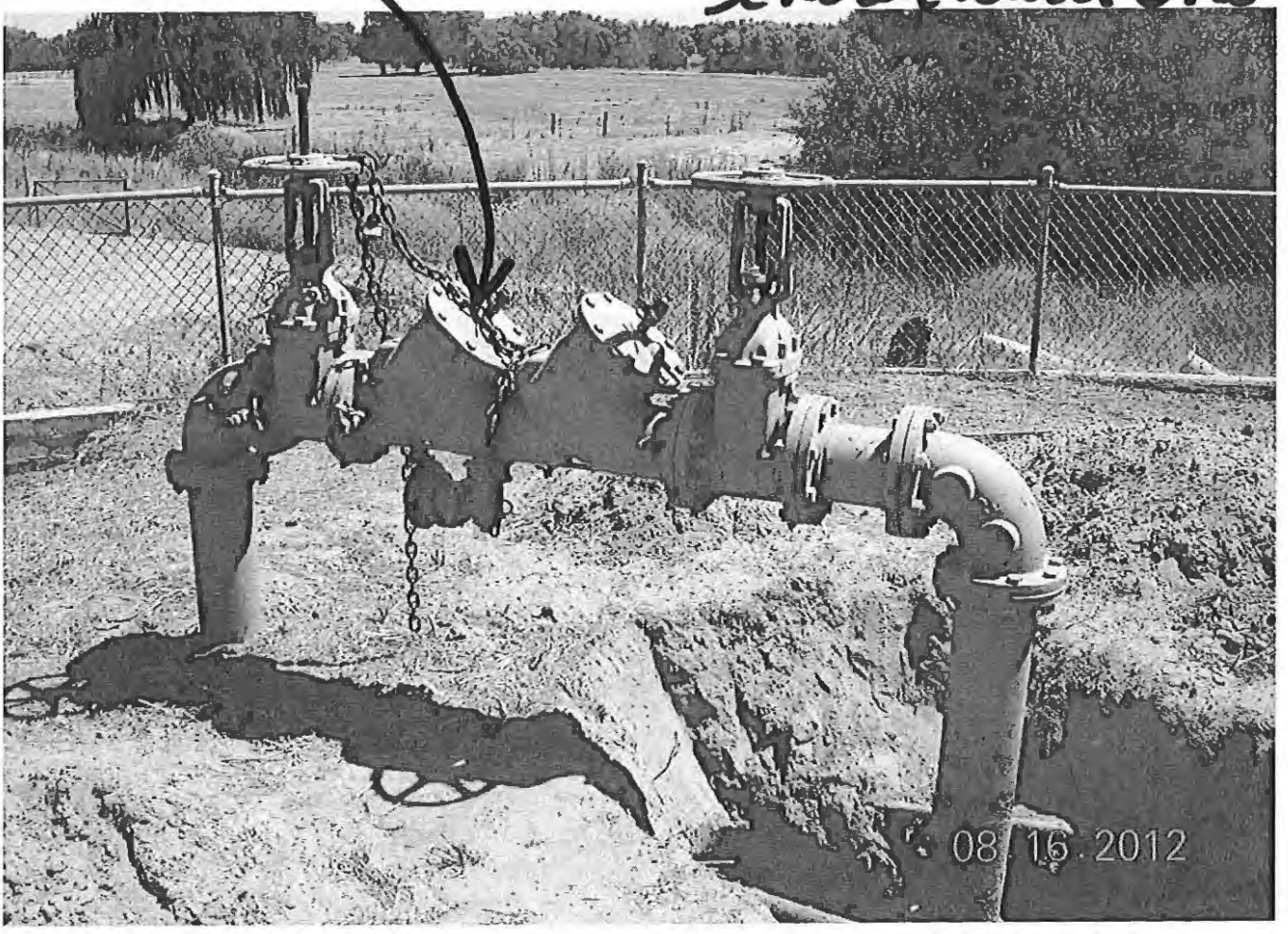
Monitoring Well
EAST SIDE Fire Water
STORAGE Tank

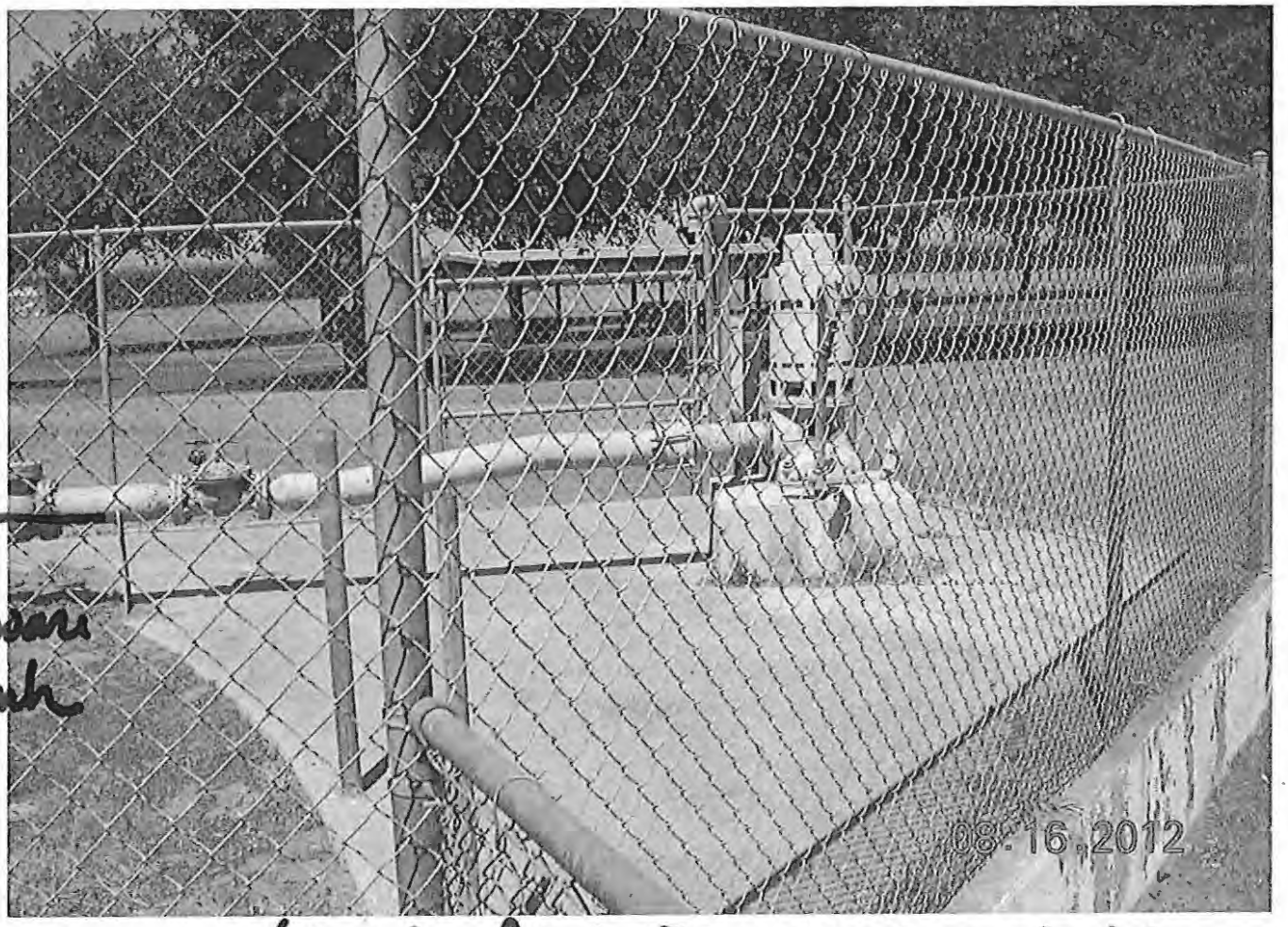
IRRIGATION WELL LAIRD PARK


CAPPED & SEVERED Water
Lines So. OF LAIRD Park IRR. WELL
08.16.2012


Capped
Water
Line
08.16.2012


08 . 16 . 2012
Severed water line


08 . 16 . 2012

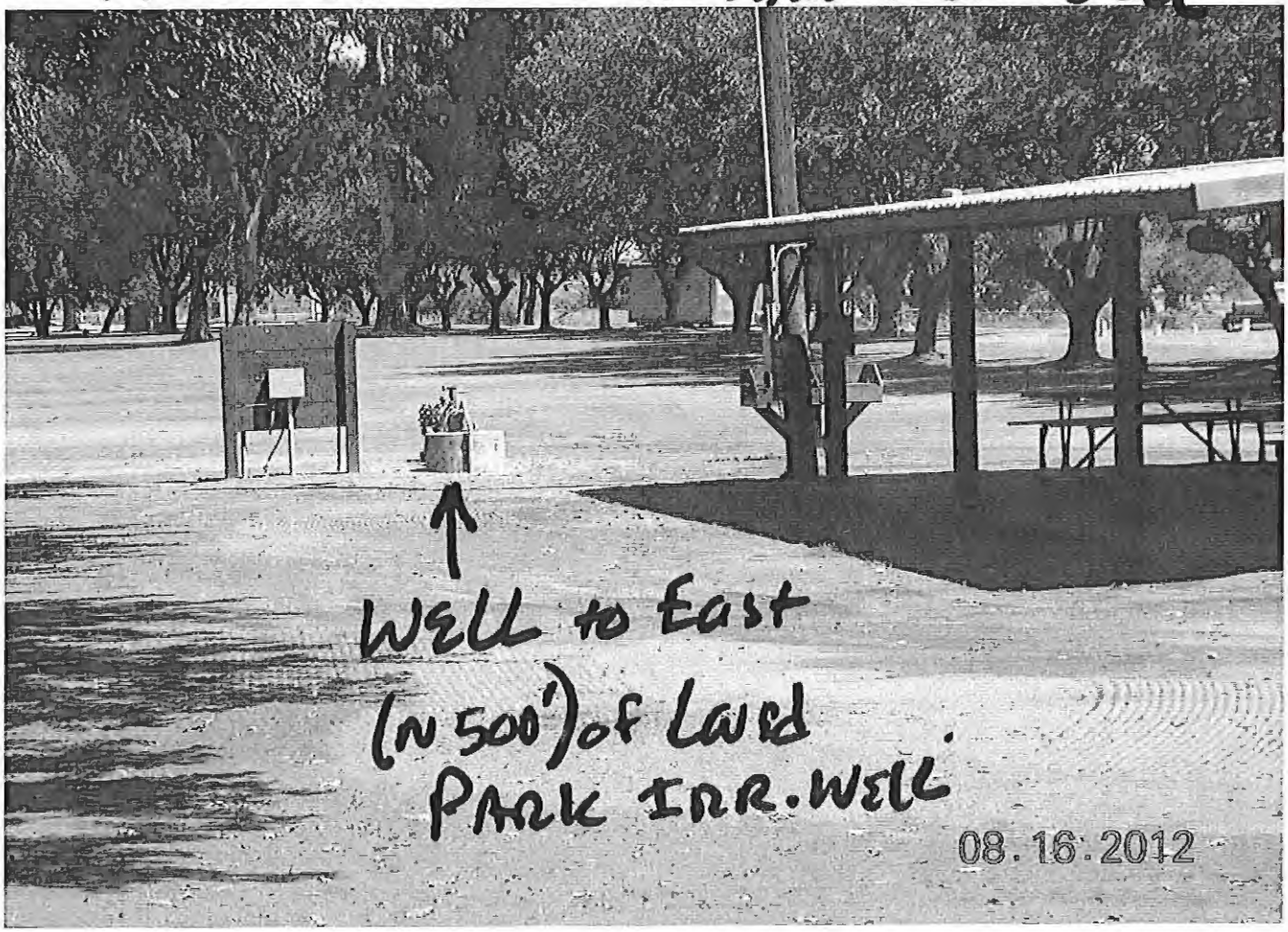


TO Pleasant Tank

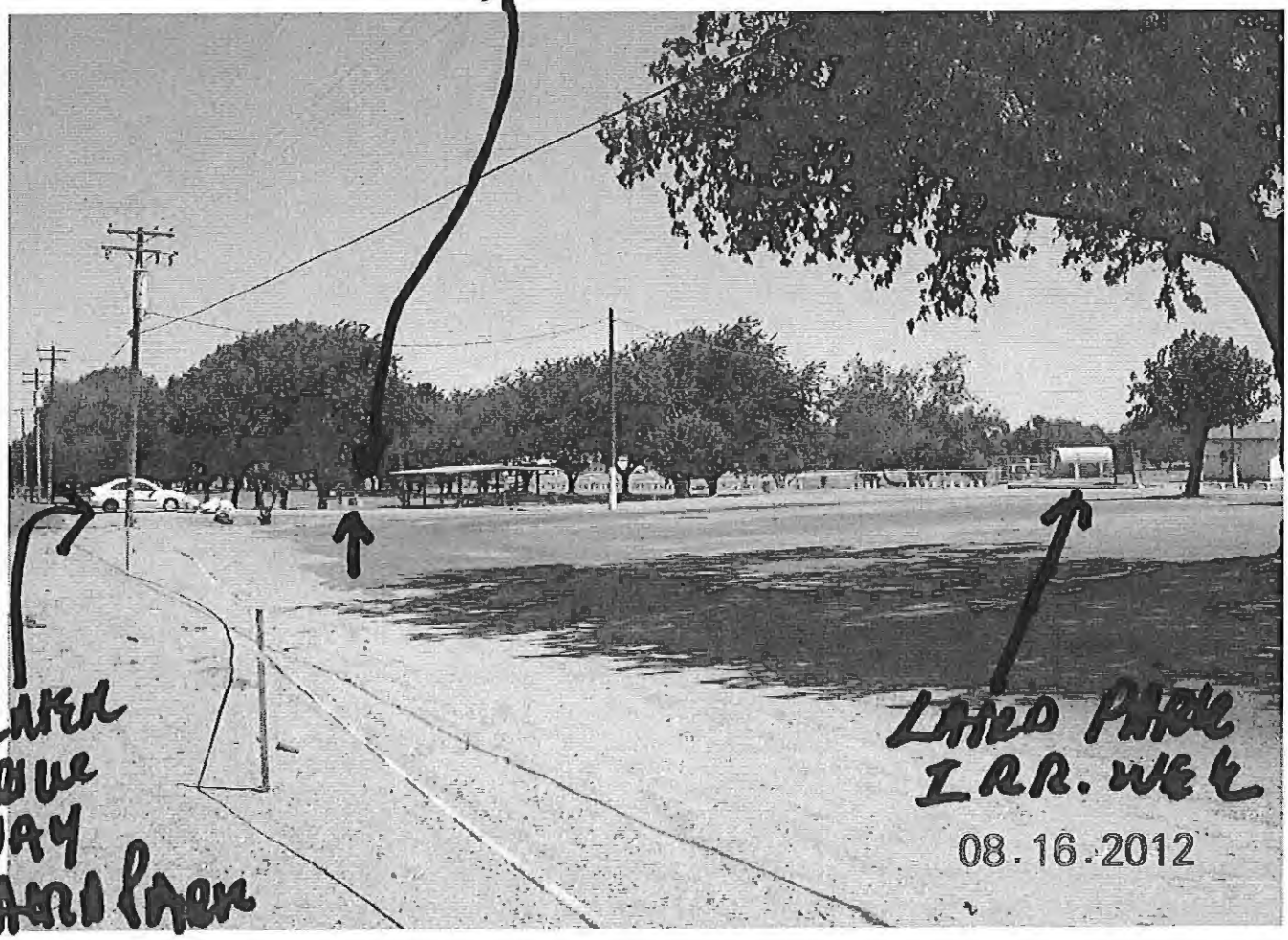
LAND PARK IRRIGATION WELL

A - from LAIRD PARK IRRIGATION Well

PRESSURE TANK LAND PARK IRR WELL



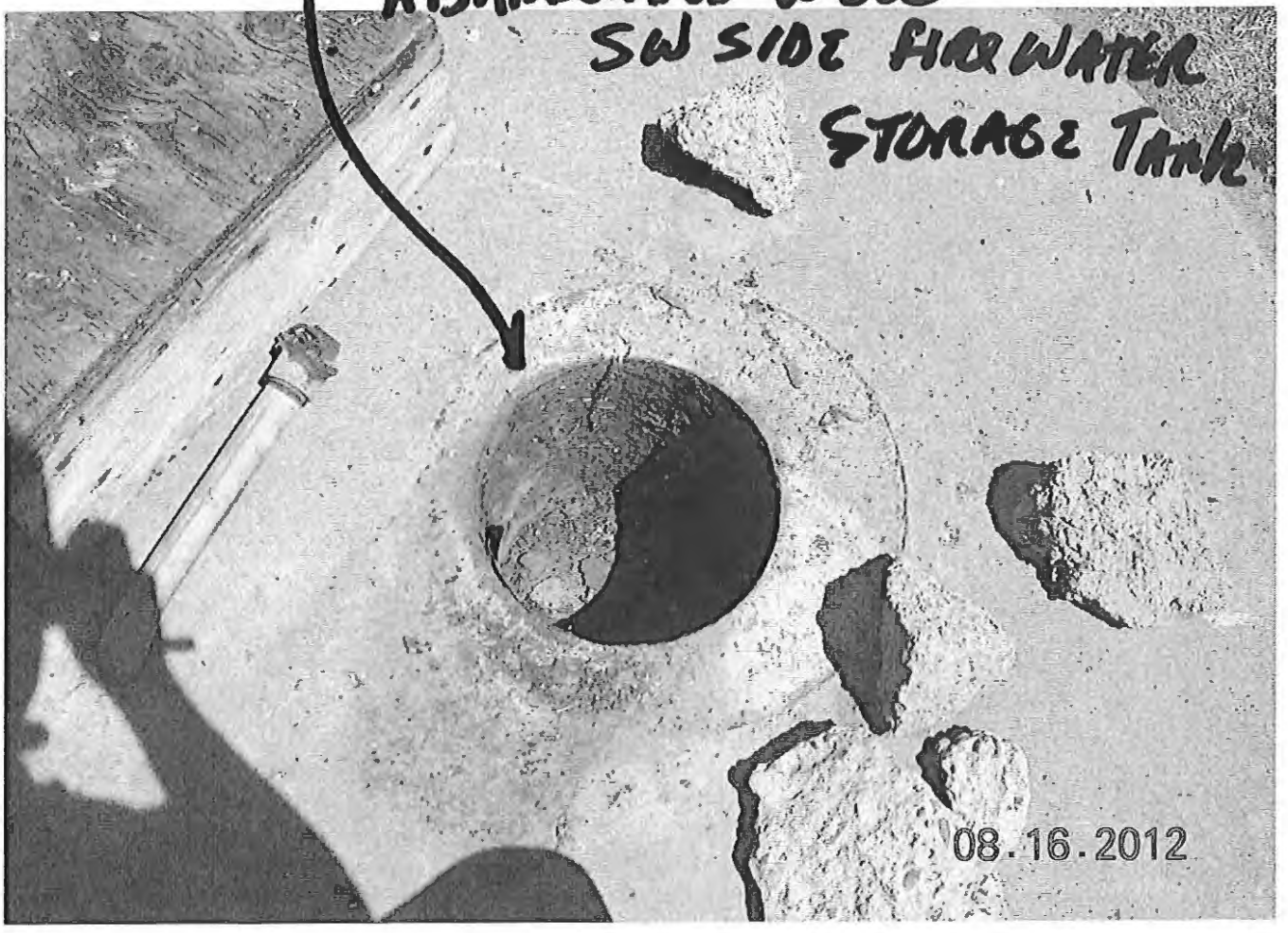

WELL to East (N 50ft)
of LAIRD PARK IRR. WELL.
08.16.2012

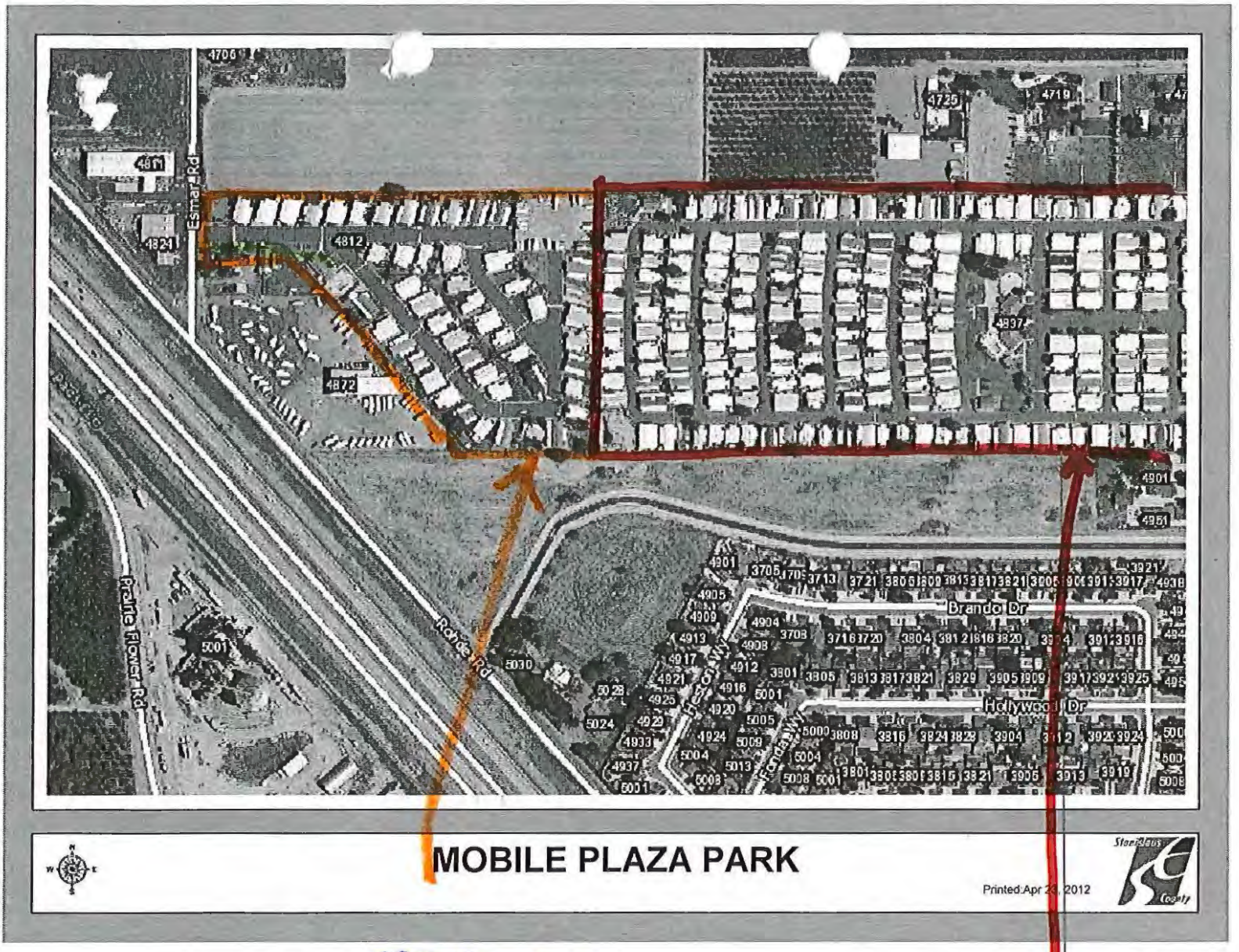

CENTER DRIVE WAY LAIRD PARK
LAIRD PARK IRR. WELL
08.16.2012


WELL N 50' to West
of LAND PARKER WELL
08.16.2012


08.16.2012


Fire
sprinklers
?
08.16.2012


ABANDONED WELL
SW SIDE FIRE WATER
STORAGE TANK
08.16.2012



4812 ESMAR
Gordon Baker Plumbing Contr. Inc
1666 Sugarloaf Dr.
San Mateo, CA 94307

4837 Faith Home Rd.
Mitchell Modesto
Western LP
10647 South
Blaney Ave
Cupertino, CA
95014

4/23/12

4/23/12:

Lee Fleming: (209) 723-2066

Keyes CSD Engineer.

- Prop 218 meeting & Vote property owners on protest.
  Prop 218 to raise water & Sewer rate
  - CSD vote 4/24.
- Would love to extend main from "Starlite" subdivision to south. (Cable, Monroe Drive)
- 2,692 ft. 8" water main - sounds right"
- Would love to obtain LAFCO approval

Condor Earth Technologies, Inc.
21663 Brian Lane Sonora CA 95370 (209) 532-0361
188 Frank West Circle Suite I Stockton CA 95206 (209) 234-0518
PO Box 53363 Irvine CA 92619-3363 (949) 551-0210

FAX

DATE: June 27, 2007

TO: **Debbie Cardoza**
Stanislaus County Department of Public Works

PH: **(209) 525-7515**

FAX: **(209) 525-7562**

FROM: **Lee Morse**

JOB #: **3300E** **SUBJECT: Transmittal of Report to Regulating Agency**

Agreement for Transmittal of Reports on Behalf of Client

Stanislaus County Department of Public Works hereinafter called CLIENT and Condor Earth Technologies, Inc hereinafter called CONSULTANT enter into this agreement for CONSULTANT to submit documents directly to governmental permitting agencies on behalf of CLIENT.

CONSULTANT provides a service to the CLIENT to act only as agent for the transmittal of documents directly to regulating agencies. CLIENT recognizes that CONSULTANT bears no legal responsibility, nor liability for activities at the CLIENT's facility, except as defined in the signed agreement or Contract for Consulting Services.

CLIENT recognizes that standard provisions of some permits require that all reports and transmittal letters shall be signed by duly authorized representatives of the CLIENT. Duly authorized representatives are specifically defined as:

For a corporation – a principal executive officer of at least the level of senior vice president.
For a partnership or sole proprietorship – a general partner or the proprietor.
For a municipality, state, federal, or other public agency – by either a principal executive officer or ranking elected or appointed official.

Many permits specify that any person signing a document shall make the following certification:

"I certify that under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

CLIENT acknowledges that CONSULTANT cannot act as the duly authorized representative of CLIENT and that it is CLIENT's responsibility to review and approve reports and documents submitted on their behalf. Approval for submittal of reports and documents can be accomplished by instructing

CONSULTANT via this agreement bearing the signature of an authorized representative as defined above. I, Robert Carpenter, a duly authorized representative of CLIENT, instruct Condor to submit the following report to the indicated agency(s) on my behalf.

Report/Document Title: Second Quarter 2007 Groundwater Monitoring Report June 2007

Report/Document Date: June 27, 2007

Submittal Agency(ies): California Regional Water Quality Control Board, Central Valley Region; Stanislaus County Department of Environmental Resources

Client Signature:

Date: 6-28-07

Condor Earth Technologies, Inc.

21663 Brian Lane Sonora CA 95370 (209) 532-0361
188 Frank West Circle Suite I Stockton CA 95206 (209) 234-0518
1739 Ashby Road Suite B Merced CA 95348 (209) 388-9601

June 27, 2007 **Condor Project No. 3300E**

SECOND QUARTER 2007
GROUNDWATER MONITORING REPORT
MAY 2007

Site Address: Stanislaus County Laird Park Honor Farm (WDR Order No. 5-01-018)
8224 West Grayson Road
Stanislaus County, California

Client: Debbie Cardoza
Stanislaus County Department of Public Works
1010 10th Street, Suite 2300
Modesto, California 95354
209-525-7515
SMR: BVV7-3C

Primary Agency: Alexis Phillips-Dowell, California Regional Water Quality Control Board, Central Valley Region (CRWQCB)

Copy to: Tom Wolfe, Stanislaus County Department of Environmental Resources (SCDER)

This second quarter 2007 groundwater monitoring report includes a description of groundwater monitoring conducted by Condor Earth Technologies, Inc. (Condor) at the above referenced site (Figure 1, attached) on May 16, 2007. Groundwater monitoring is conducted to evaluate potential impacts to groundwater from the operation of the domestic wastewater treatment facility at the site. This report is intended to meet the requirements for groundwater monitoring and reporting as described in items B1 – B8 of the Monitoring and Reporting Program (MRP) in the California Regional Water Quality Control Board, Central Valley Region, Waste Discharge Requirements (WDR) Order Number 5-01-018. This report has been submitted to the CRWQCB and the SCDER as indicated above.

The following are shown in Figures 1 through 6, which are attached to this report:

- site location
- site map with groundwater gradient and laboratory analytical results
- historical groundwater gradients
- a graph of groundwater elevations vs. time
- a graph of nitrogen concentrations vs. time
- a graph of total dissolved solids concentrations vs. time

CONDOR

Also attached are the following:

- historical groundwater monitoring data
- groundwater monitoring field forms
- laboratory analytical reports

FIELD PROCEDURES AND OBSERVATIONS

Groundwater samples were collected from the three site monitoring wells (MW-1 through MW-3) on May 16, 2007. Prior to sample collection, the static water level in each well was measured to the nearest 0.01 foot with a battery-powered, water-level meter. The water-level meter was decontaminated using a disposable isopropyl alcohol wipe before use in each well.

A Condor representative made field observations at the three monitoring wells. Field observations included sample odor, appearance (color and clarity of the samples), and water quality field parameters. The field inspection samples from MW-1, MW-2 and MW-3 were clear and had no noted odors. Groundwater monitoring field forms are attached.

Groundwater samples were collected from each monitoring well for analyses for constituents identified in the MRP [nitrate as nitrogen, total dissolved solids (TDS), pH, total coliform organisms, fecal coliform organisms, and ammonia as nitrogen]. Each water sample was collected in one 1-liter polyethylene bottle, one 100-ml sterile bottle preserved with sodium thiosulphate ($Na_2S_2O_3$), and one 0.5-liter polyethylene bottle preserved with sulfuric acid (H_2SO_4). Each bottle was labeled and placed in a cooler chilled with Blue Ice®. The water samples were delivered under chain-of-custody procedures to GeoAnalytical Laboratories, Inc., in Modesto, California.

GROUNDWATER ELEVATIONS AND GRADIENT

The average groundwater elevation is 77.33 feet; approximately 0.07 feet lower than during the previous monitoring event. The groundwater gradient is 0.0011 ft/ft to the west (Figure 2, attached). The gradient continues to be very flat, as it has been historically. Historical groundwater gradients are shown on Figure 3, attached. A graph of groundwater elevations vs. time is presented on Figure 4, attached.

Table 1 – Groundwater Elevation Data (May 16, 2007)

Monitoring Well	TOC Elevation[1]	Screened Interval (bgs)	Depth to Groundwater	Groundwater Elevation
MW-1	96.46	22-32	19.16	77.30
MW-2	97.00	22-32	19.80	77.20
MW-3	96.33	22-32	18.85	77.48

[1]Top of casing elevation: Elevations are measured from the monitoring well measuring point and are referenced to an arbitrary benchmark.
All measurements are in feet.

LABORATORY ANALYTICAL RESULTS

The groundwater samples collected from the monitoring wells were analyzed for nitrate as nitrogen, TDS, pH, total coliform organisms, and ammonia as nitrogen. The samples were not analyzed for fecal coliform organisms because total coliform organisms were not detected at or above the laboratory reported detection limit. The analytical parameters, methods, and detection limits are presented in Table 2, on the following page. The analytical results indicate an increase in nitrate as nitrogen in the groundwater samples collected from monitoring well MW-1, MW-2 and MW-3 since the previous monitoring event.

Ammonia as nitrogen was not detected at or above the laboratory reported detection limit in the groundwater samples collected from monitoring wells MW-1, MW-2, and MW-3. Graphs of nitrate as nitrogen concentrations vs. time and TDS concentrations vs. time (Figures 5 and 6 respectively) are attached. A table with historical groundwater monitoring data is also attached. Laboratory certificates of analysis and the chain-of-custody record are attached.

Table 2 – Laboratory Analytical Results (May 16, 2007)

CONSTITUENT	Analytical Method	Reporting Limit/Units	MW-1	MW-2	MW-3
Nitrate as Nitrogen	300.0	0.25 mg/L	11.5	15.2	5.27
Total Dissolved Solids	2450 C	10 mg/L	1,090	1,330	672
pH	4500-H+	Standard Units	6.6	7.1	6.8
Total Coliform Organisms	9221 B,C,E	2 MPN/100 ml	<2	<2	<2
Ammonia as Nitrogen	4500-NH3 C	1.0 mg/L	<1.0	<1.0	<1.0

MPN = Most probable number
mg/L = milligrams per liter

GROUNDWATER QUALITY

The results of the laboratory analyses for groundwater samples collected from the three monitoring wells during the second quarter 2007 are summarized as follows:

- Concentrations of nitrate as nitrogen are below the California Department of Health Services (DHS) and the U.S. Environmental Protection Agency (USEPA) Drinking Water Standards Primary Maximum Contaminant Level (MCL) of 10 mg/L in the groundwater sample collected from monitoring well MW-3, but above the MCL in the groundwater samples collected from monitoring wells MW-1 and MW-2.

- Ammonia as nitrogen was not detected at or above the laboratory reported detection limit in groundwater samples collected from monitoring wells MW-1, MW-2, and MW-3. These results are consistent with historical analytical results for monitoring wells MW-1, MW-2, and MW-3.

- Total coliform organisms were not detected at or above the laboratory reported detection limit in any of the groundwater samples collected from the three wells.

- TDS concentrations were highest in the groundwater sample collected from MW-2 and lowest in the groundwater sample collected from MW-3. Concentrations exceeded the secondary (taste and odor) MCL of 500 mg/L in the groundwater samples collected from MW-1, MW-2, and MW-3.

- The laboratory measurement of pH for the groundwater samples collected from monitoring wells MW-1, MW-2, and MW-3 are within the secondary drinking water standard range (6.5 to 8.5).

- The groundwater gradient has been predominantly in a westerly direction. There is a potential data gap in the area between monitoring wells MW-1 and MW-2, to the northwest of the evaporation ponds.

RECOMMENDATIONS

As previously documented, Condor continues to recommend:

- Use of field pH instead of laboratory pH to reduce analytical costs.
- Additional well(s) to the northwest.

LIMITATIONS AND SIGNATURES

This report was prepared under the direct supervision of a Professional Geologist in the State of California. The standard of care for all services performed or furnished by Condor is the care and skill ordinarily used by a member of the environmental profession practicing under similar conditions at the same time in the same locality. Condor is not responsible for the accuracy and completeness of information collected and developed by others.

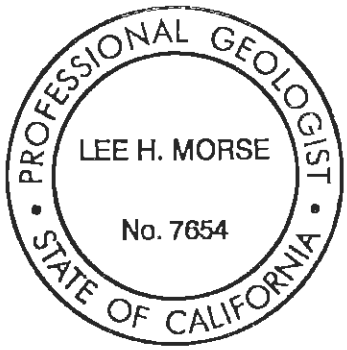
This report was prepared for the sole use of Stanislaus County, and may not be used or relied upon by any other person(s) without the express written consent and authorization of Stanislaus County and Condor. If any changes are made or errors found in the information used for this report, the interpretations and conclusions contained herein shall not be considered valid unless the changes or errors are reviewed by Condor and either appropriately modified or re-approved in writing. Any questions regarding the content of this document should be addressed to Lee Morse at (209) 388-9601.

Respectfully submitted,

CONDOR EARTH TECHNOLOGIES, INC.

Joyce R. Welsh
Staff Geologist

Lee H. Morse, P.G.
Associate Geologist



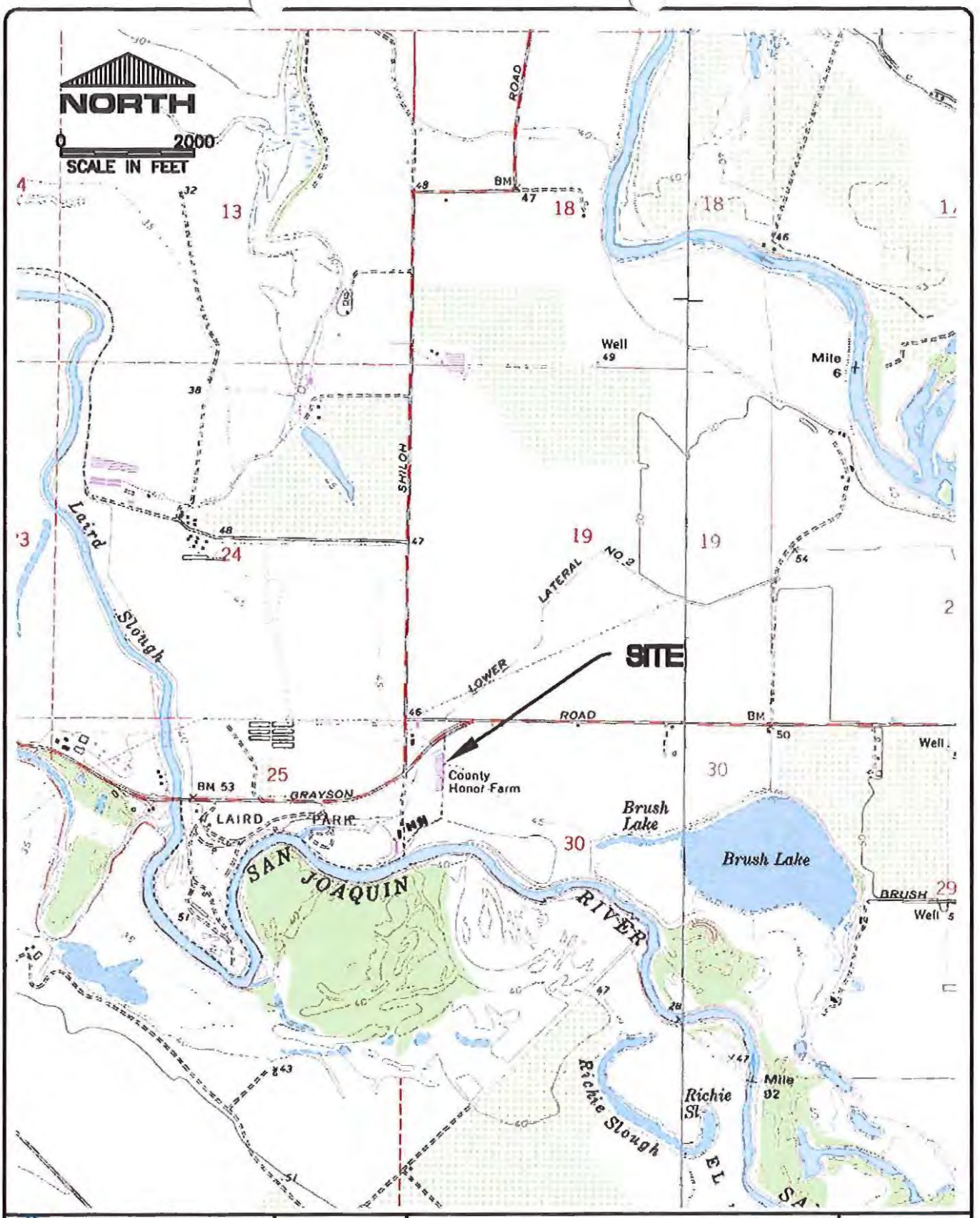
Attachments:

Figures

1. Vicinity Map
2. Site Map With Monitoring Well Locations, Groundwater Gradient, And Laboratory Analytical Results
3. Historical Groundwater Gradient Map
4. Groundwater Elevations vs. Time
5. Nitrate as Nitrogen Concentrations vs. Time
6. Total Dissolved Solids Concentrations vs. Time

Table of Historical Laird Park Honor Farm Groundwater Monitoring Data
Field Forms
Certificates of Analyses and Chain-of-Custody Record

CONDOR



CONDOR EARTH TECHNOLOGIES, INC. 188 Frank West Circle, Ste Stockton, CA 95206 (209) 234-0518 f(209) 234-0538 www.condorearth.com stockton@condorearth.com CONDOR	Job No. 3300E Date 15 SEP 2006 Scale AS SHOWN Drawn BEG / Chk'd LM	**VICINITY MAP** **LAIRD PARK HONOR FARM** **8224 WEST GRAYSON ROAD** **MODESTO, CALIFORNIA**	FIGURE 1 File No. 3300E_F1

P:\3000_prj\3300 Stanislaus County Honor Farm\3300E Honor Farm GW Monitoring 2006\3300E_LD\DWG\3300E_F1.dwg 9-15-06 12:59:55 PM bgarcia

MENT SYSTEM MONITORING WELL
R ELEVATION

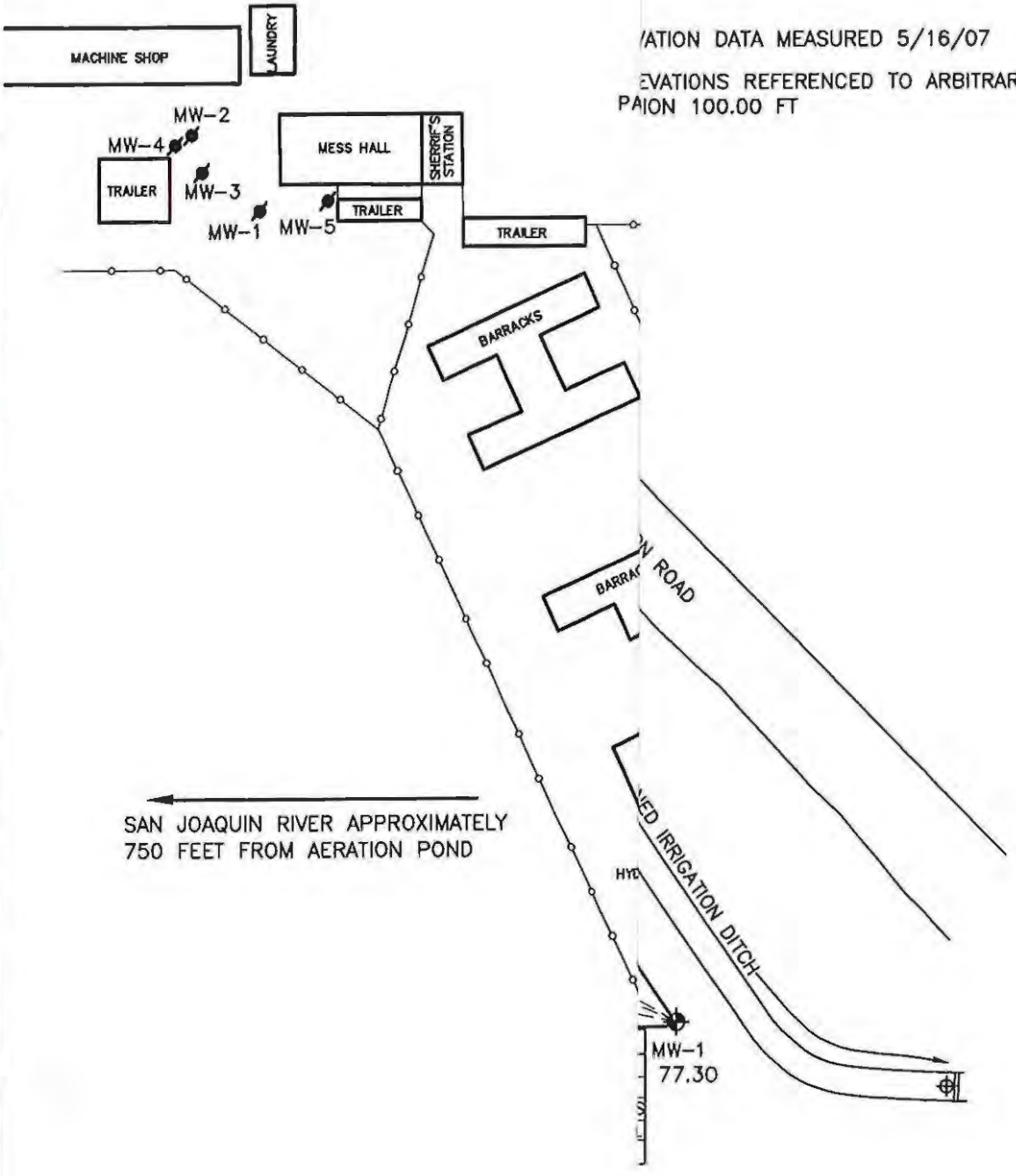
LL

ORING WELL LOCATIONS
ST INVESTIGATION

AMPLE LOCATIONS

/ATION DATA MEASURED 5/16/07

EVATIONS REFERENCED TO ARBITRARY
PAION 100.00 FT



SITE MAP WITH MONITORING WELL LOCATIONS, GROUNDWATER GRADIENT, AND LABORATORY ANALYTICAL RESULTS

LAIRD PARK HONOR FARM
8224 WEST GRAYSON ROAD
MODESTO, CALIFORNIA

CONDOR EARTH TECHNOLOGIES, INC.
188 Frank West Circle, Ste I
Stockton, CA 95206
(209) 234-0518
f(209) 234-0538
www.condorearth.com
stockton@condorearth.com

CONDOR®

Job No.	Date	Scale	Drawn	Chk'd
3300E	20 JUNE 2007	AS SHOWN	KGM	JW

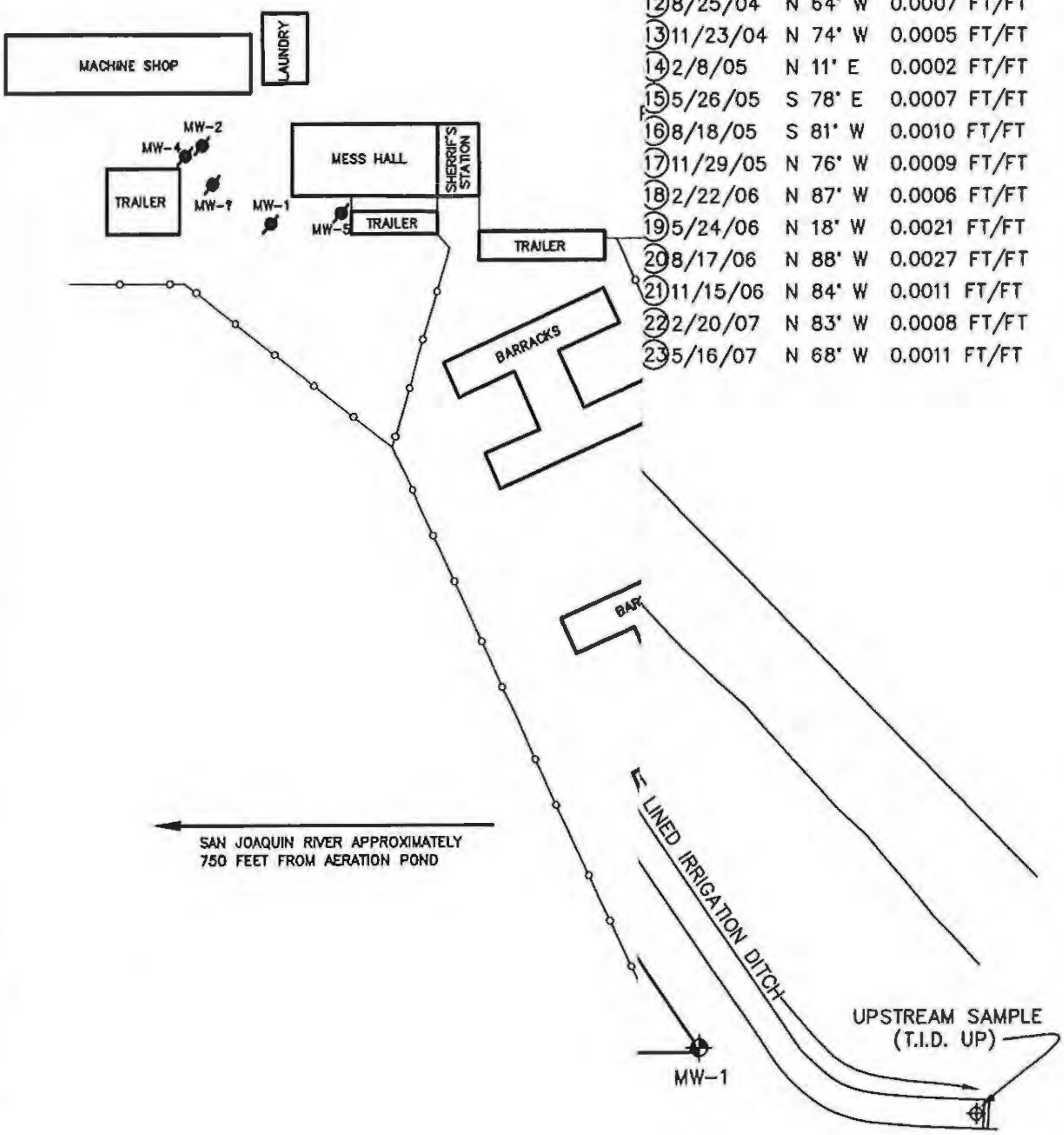
FIGURE
2

File No.
3300E_F2_2007

P:\3300 mh\3300 Stanislaus County Home Farm\3300E Home Farm GW Monitoring 2006\Reports\2007\3300E F2 2007.dwg 6-28-07 09:04:53 PM hmorin

TORICAL GRADIENT

1	12/27/01	N 34° W	0.001 FT/FT
2	3/14/02	N 69° E	0.0004 FT/FT
3	6/18/02	S 83° W	0.001 FT/FT
4	9/10/02	N 49° W	0.0004 FT/FT
5	12/30/02	N 25° E	0.0004 FT/FT
6	2/24/03	N 56° W	0.0005 FT/FT
7	5/29/03	N 12° E	0.0003 FT/FT
8	8/20/03	N 61° W	0.0005 FT/FT
9	11/11/03	N 29° W	0.0004 FT/FT
10	3/11/04	N 6° E	0.0003 FT/FT
11	6/3/04	N 87° W	0.0009 FT/FT
12	8/25/04	N 64° W	0.0007 FT/FT
13	11/23/04	N 74° W	0.0005 FT/FT
14	2/8/05	N 11° E	0.0002 FT/FT
15	5/26/05	S 78° E	0.0007 FT/FT
16	8/18/05	S 81° W	0.0010 FT/FT
17	11/29/05	N 76° W	0.0009 FT/FT
18	2/22/06	N 87° W	0.0006 FT/FT
19	5/24/06	N 18° W	0.0021 FT/FT
20	8/17/06	N 88° W	0.0027 FT/FT
21	11/15/06	N 84° W	0.0011 FT/FT
22	2/20/07	N 83° W	0.0008 FT/FT
23	5/16/07	N 68° W	0.0011 FT/FT



HISTORICAL GROUNDWATER GRADIANT MAP
LAIRD PARK HONOR FARM
8224 WEST GRAYSON ROAD
MODESTO, CALIFORNIA

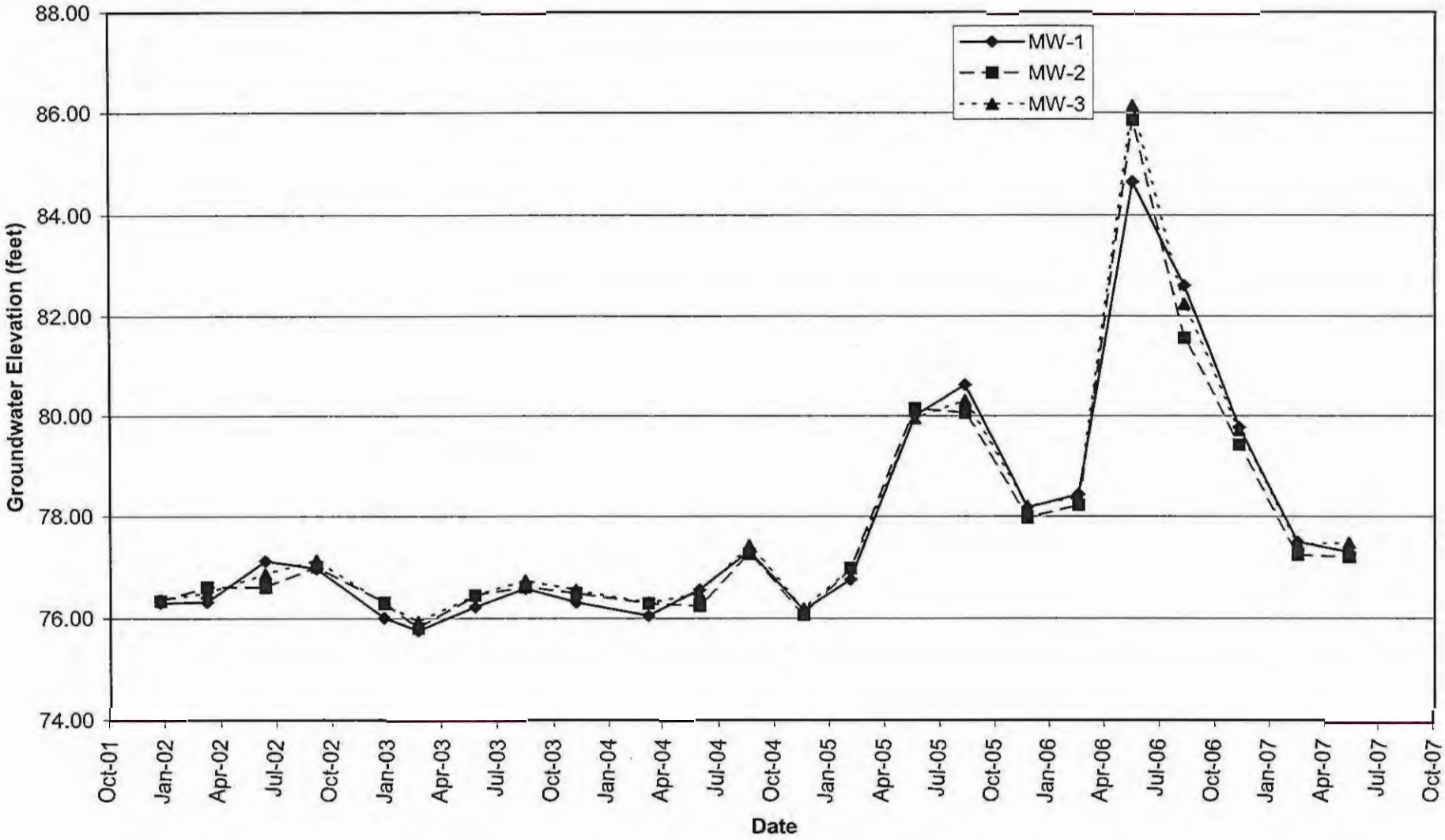
CONDOR EARTH TECHNOLOGIES, INC.
188 Frank West Circle, Ste I
Stockton, CA 95206
(209) 234-0518
f(209) 234-0538
www.condorearth.com
stockton@condorearth.com
CONDOR

Job No. 3300E
Date 20 JUNE 2007
Scale AS SHOWN
Drawn KGM
Chk'd JW

FIGURE 3

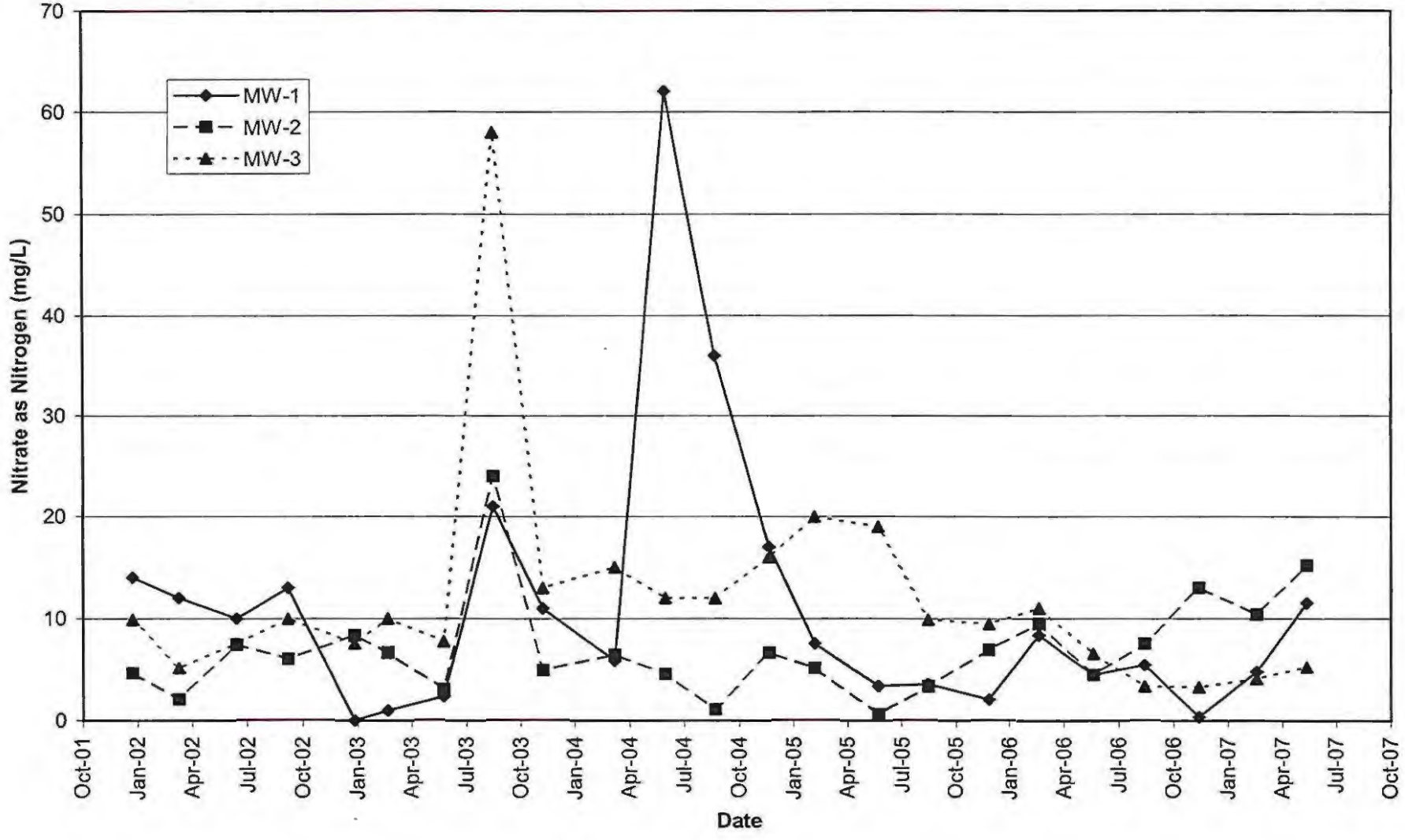
File No. 3300E_F3_2Q07

Figure 4 Groundwater Elevations vs. Time



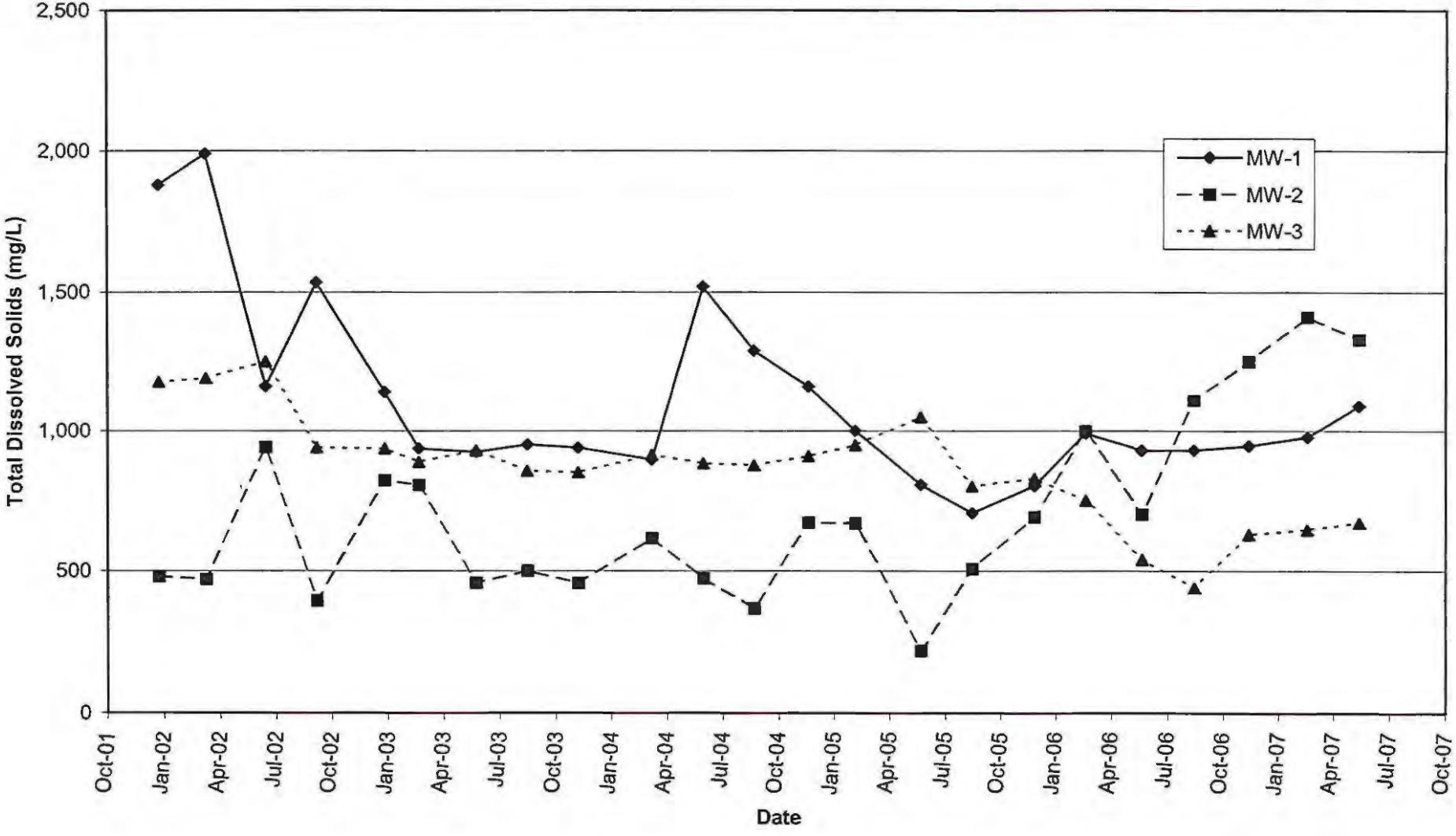
P:\3000_prj\3300 Stanislaus County Honor Farm\3300E Honor Farm GW Monitoring 2006\Reports\2Q07\Historical Data

Figure 5 Nitrate as Nitrogen Concentrations vs. Time



P:\3000_prj\3300 Stanislaus County Honor Farm\3300E Honor Farm GW Monitoring 2006\Reports\2Q07\Historical Data

Figure 6 Total Dissolved Solids Concentrations vs. Time



P:\3000_prj\3300 Stanislaus County Honor Farm\3300E Honor Farm GW Monitoring 2006\Reports\2Q07\Historical Data

Historical Laird Park County Honor Farm Groundwater Monitoring Data									
Well	Date	Nitrate as N	TDS	pH	TCO	FCO	Ammonia as N	DTW	GW Elevation
	Units	mg/L	mg/L	NA	MPN/100 ml		mg/L	feet	feet
MW-1	12/27/2001	14	1,880	7.0	80.0	22.0	<0.5	20.16	76.30
(96.46)	3/14/2002	12	1,990	6.9	4.0	<2	<0.5	20.14	76.32
	6/18/2002	10	1,160	6.6	<2	NA	<0.5	19.34	77.12
	9/10/2002	13	1,535	6.7	<2	NA	<0.5	19.49	76.97
	12/30/2002	<0.25	1,140	6.9	<2	<2	1.7	20.45	76.01
	2/24/2003	0.97	935	6.9	<2	NA	<1.0	20.70	75.76
	5/29/2003	2.4	923	6.5	<2	<2	<1.0	20.24	76.22
	8/20/2003	21	950	6.2	<2	NA	5.6	19.88	76.58
	11/11/2003	11	938	6.5	<2	NA	3.8	20.15	76.31
	3/11/2004	5.9	896	6.4	<2	NA	<1.0	20.41	76.05
	6/3/2004	62	1,520	6.6	<2	<2	4.6	19.90	76.56
	8/25/2004	36	1,290	6.3	<2	NA	<1.0	19.15	77.31
	11/23/2004	17	1,160	6.2	<2	NA	1.7	20.30	76.16
	2/8/2005	7.6	1,000	6.0	<2	NA	<1.0	19.70	76.76
	5/26/2005	3.4	806	6.3	<2	NA	<1.0	16.46	80.00
	8/18/2005	3.6	705	6.5	<2	NA	<1.0	15.84	80.62
	11/29/2005	2.1	801	6.6	<2	NA	<1.0	18.29	78.17
	2/22/2006	8.4	990	6.2	<2	NA	1.10	18.03	78.43
	5/24/2006	4.5	930	6.4	<2	NA	<1.0	11.81	84.65
	8/17/2006	5.5	930	6.4	<1	NA	<1.0	13.85	82.61
	11/15/2006	0.35	945	6.3	<2	NA	<1.0	16.69	79.77
	2/20/2007	4.80	977	6.8	<1	NA	<1.0	18.96	77.50
	5/16/2007	11.5	1,090	6.6	<2	NA	<1.0	19.16	77.30
MW-2	12/27/2001	4.7	480	8.0	17.0	<2	<0.5	20.66	76.34
(97.00)	3/14/2002	2.1	470	7.7	<2	NA	<0.5	20.39	76.61
	6/18/2002	7.5	940	7.3	<2	NA	<0.5	20.39	76.61
	9/10/2002	6.1	395	7.5	<2	NA	<0.5	19.99	77.01
	12/30/2002	8.4	821	7.3	<2	<2	<1.0	20.69	76.31
	2/24/2003	6.7	804	7.4	<2	NA	<1.0	21.19	75.81
	5/29/2003	3.1	458	7.1	<2	<2	<1.0	20.55	76.45
	8/20/2003	24	500	6.9	<2	NA	<1.0	20.39	76.61
	11/11/2003	5	457	7.3	<2	NA	<1.0	20.51	76.49
	3/11/2004	6.5	615	7.0	<2	NA	<1.0	20.71	76.29
	6/3/2004	4.6	473	7.0	<2	<2	<1.0	20.76	76.24
	8/25/2004	1.1	368	6.8	<2	NA	<1.0	19.74	77.26
	11/23/2004	6.7	671	7.0	<2	NA	<1.0	20.93	76.07
	2/8/2005	5.2	668	6.8	<2	NA	<1.0	20.02	76.98
	5/26/2005	0.63	219	7.5	<2	NA	<1.0	16.85	80.15
	8/18/2005	3.4	507	7.2	<2	NA	<1.0	16.94	80.06
	11/29/2005	7.0	690	6.9	<2	NA	<1.0	19.03	77.97
	2/22/2006	9.5	1,000	6.7	<2	NA	<1.0	18.78	78.22
	5/24/2006	4.5	700	6.9	<2	NA	<1.0	11.14	85.86
	8/17/2006	7.6	1,110	6.6	2.0	<1	<1.0	15.44	81.56
	11/15/2006	13.0	1,250	6.5	<2	NA	<1.0	17.58	79.42
	2/20/2007	10.4	1,410	7.2	<1	NA	<1.0	19.76	77.24
	5/16/2007	15.2	1,330	7.1	<2	NA	<1.0	19.80	77.20

Historical Laird Park County Honor Farm Groundwater Monitoring Data									
Well	Date	Nitrate as N	TDS	pH	TCO	FCO	Ammonia as N	DTW	GW Elevation
	Units	mg/L	mg/L	NA	MPN/100 ml		mg/L	feet	feet
MW-3	12/27/2001	9.9	1,176	7.0	34.0	<2	<0.5	19.97	76.36
(96.33)	3/14/2002	5.2	1,190	6.9	<2	NA	<0.5	19.83	76.50
	6/18/2002	7.6	1,250	6.8	<2	NA	<0.5	19.46	76.87
	9/10/2002	10	939	6.9	<2	NA	<0.5	19.19	77.14
	12/30/2002	7.6	935	6.9	22.0	<2	<1.0	20.04	76.29
	2/24/2003	10	888	7.0	<2	NA	<1.0	20.40	75.93
	5/29/2003	7.8	929	6.6	2.0	<2	<1.0	19.88	76.45
	8/20/2003	58	855	6.3	<2	NA	<1.0	19.59	76.74
	11/11/2003	13	850	6.9	<2	NA	<1.0	19.78	76.55
	3/11/2004	15	913	6.7	<2	NA	<1.0	20.03	76.30
	6/3/2004	12	882	6.4	<2	<2	<1.0	19.85	76.48
	8/25/2004	12	876	6.3	<2	NA	<1.0	18.90	77.43
	11/23/2004	16	908	6.7	<2	NA	<1.0	20.14	76.19
	2/8/2005	20	948	6.3	<2	NA	<1.0	19.35	76.98
	5/26/2005	19	1,050	6.6	<2	NA	<1.0	16.38	79.95
	8/18/2005	9.9	801	6.7	<2	NA	1.3	16.02	80.31
	11/29/2005	9.5	827	6.7	<2	NA	<1.0	18.13	78.20
	2/22/2006	11	750	6.5	<2	NA	<1.0	17.96	78.37
	5/24/2006	6.6	540	6.6	2.0	<2	<1.0	10.19	86.14
	8/17/2006	3.4	441	6.0	1.0	<1	<1.0	14.09	82.24
	11/15/2006	3.30	629	6.1	<2	NA	<1.0	16.62	79.71
	2/20/2007	4.13	646	6.9	<1	NA	<1.0	18.87	77.46
	5/16/2007	5.27	672	6.8	<2	NA	<1.0	18.85	77.48

Notes:
TDS = Total Dissolved Solids
TCO = Total Coliform Organisms
FCO = Fecal Coliform Organisms
N = nitrogen
NA = not analyzed because no coliform organisms were detected by the total coliform analyses
DTW = depth to water below monitoring well measuring point
GW = groundwater
mg/L = milligrams per liter
MPN/100 ml = Most Probable Number per 100 milliliters
( ) = Monitoring well measuring point elevation in feet referenced to an arbitrary benchmark.

DAILY FIELD REPORT

CONDOR
188 Frank West Circle, Suite I, Stockton, CA 95206
(209) 234-0518

PROJECT #: 3300 PERSONNEL: Jacob Collins

PROJECT ID: Honor Farm DATE: 5-16-07

CONDITIONS: Fair Breezy

REMARKS: onsite at 8:45. Check in at security office. Guard had to unlock gate so I could get fields where MW-2 and MW-3 are at. Fields around MW-3 were currently being irrigated by sprinklers. Guard turned off sprinklers near MW-3, but ground is saturated. Set up decon. Calibrated YSI 556 pH meter C.E.T #2 < 7.00; 4.00; 10.00 > pH = 7.00 @ 21.08°C. Purged & Sampled MW-2, 3, and 1. Decon equipment between wells. Deliver samples to Geoanalytical Labs in Monterey with in 6 hr hold time.

J Collins

Field Personnel (signature)

Reviewed by (signature)

GROUNDWATER MEASUREMENT FIELD FORM

CONDOR
188 Frank West Circle, Suite I, Stockton, CA 95206
(209) 234-0518

PROJECT #: 3300 PERSONNEL: Jacob Collins

PROJECT ID: Honor Farm DATE: 5-16-07

DECONTAMINATION METHOD: Standard Procedure / Alcohol / Other (specify): —

(standard decontamination procedure consists of washing gear with a solution of DI water and a phosphate free soap and then double rinsing with DI water)

WELL ID	WELL DIAMETER	WELL COLLAR ELEVATION	GROUNDWATER ELEVATION	TIME	DEPTH TO WATER 1	DEPTH TO WATER 2	DEPTH TO WATER 3	PRODUCT LAYER THICKNESS	TOTAL DEPTH	COMMENTS
MW-1	2"			10:37	19.16			—	35.51'	
MW-2	2"			9:30	19.80			—	35.41'	
MW-3	2"			9:57	18.85			—	35.40'	fields are wet

GROUNDWATER MONITORING FIELD FORM

CONDOR
188 Frank West Circle, Suite I, Stockton, CA 95206
(209) 234-0518

PROJECT #: 3300
PROJECT ID: Honor Farm
PERSONNEL: SCollins

WELL ID: MW-1
DATE: 5-16-07
CONDITIONS: FAIR BREEZY

DECONTAMINATION METHOD: Standard Procedure / Alcohol / Other (specify): —
(standard decontamination procedure consists of washing gear with a solution of DI water and a phosphate free soap and then double rinsing with DI water)

PRE-PURGE DATA: PURGE VOLUME PROTOCOL (# of casing volumes) 1 2 3 4 5 WELL CASING DIAMETER (in.) 2"
WELL CASING DEPTH: 35.51' (measured / detail) MEASURING POINT: MOC / NORTH SIDE CASING
DEPTH TO WATER: - 19.16 DEPTH TO PRODUCT: — PRODUCT LAYER: — multipliers: 0.75"= .0229, 2"= .163, 4"=.653, 6"= 1.02
WATER COLUMN: = 16.35 * MULTIPLIER: = 2.66 * VOLUME PROTOCOL: 7.99
80%RECOVERY: * 0.8 = 22.43 =1 casing volume total volume to be purged

PURGE DATE: PURGE DEVICE: Disposable Bailer If pumped, specify: discharge rate (gpm) — depth pump set (ft.) —
FIELD INSPECTION SAMPLE: clear (color) Good-Moderate-Poor (clarity) None-Sheen-Layer (sheen or product phase) — (thickness) ODOR: None-Slight-Moderate-Strong

TIME (24 hour)	VOL. PURGED	TEMP (F / C)	pH	EC	DO(mg/L)	ORP(Rel. MV)	TDS(g/L)	TURB. (NTU) Describe
10:39	0 GALLONS	16.89	6.76	1437	2.75	233.2	0.934	clear
10:45	2.75	17.04	6.70	1586	1.09	234.9	1.029	clear
10:51	5.50	17.16	6.73	1577	3.36	233.3	1.025	"
10:57	8.0	17.04	6.72	1570	2.59	230.2	1.020	"

Total Vol. Purged _____ if well purges dry: TIME — VOLUME PURGED — DTW —

SAMPLING DATA: DTW AT TIME OF SAMPLING _____
SAMPLE ID: MW-1 TIME: 11:08 COLLECTION DEVICE: Disposable Bailer
ANALYSIS REQUESTED: TDS, Nitrate as N, Ammonia as N, pH, Total and Fecal Coliform
CONTAINERS USED (LIST #, TYPE, PRESERVATIVE): 1-1L Plastic 1-.5L Plastic H2SO4 1 Bact

QA/QC SAMPLES: DUPLICATE SAMPLES: YES / NO SAMPLE ID: — TIME —
RINSATE SAMPLES: YES / NO SAMPLE ID: — TIME —

FIELD NOTES: _____

GROUNDWATER MONITORING FIELD FORM

CONDOR
188 Frank West Circle, Suite I, Stockton, CA 95206
(209) 234-0518

PROJECT #: 3300
PROJECT ID: Honor Farm
PERSONNEL: JCollins

WELL ID: MW-2
DATE: 5-16-07
CONDITIONS: Four Breezy

DECONTAMINATION METHOD: Standard Procedure / Alcohol / Other (specify): —
(standard decontamination procedure consists of washing gear with a solution of DI water and a phosphate free soap and then double rinsing with DI water)

PRE-PURGE DATA: PURGE VOLUME PROTOCOL (# of casing volumes) 1 2 3 4 5 WELL CASING DIAMETER (in.) 2"
WELL CASING DEPTH: 35.41' (measured / detail) MEASURING POINT: MOC / NORTH SIDE CASING
DEPTH TO WATER: - 19.80' DEPTH TO PRODUCT: — PRODUCT LAYER: — multipliers: 0.75"= .0229, 2"= .163, 4"=.653, 6"= 1.02
WATER COLUMN: = 15.61 * MULTIPLIER: = 2.54 * VOLUME PROTOCOL: 7.63
80%RECOVERY: * 0.8 = 22.92 =1 casing volume total volume to be purged

PURGE DATE: PURGE DEVICE: Disposable Bailer If pumped, specify: discharge rate (gpm) — depth pump set (ft.) —
FIELD INSPECTION SAMPLE: Clear Good-Moderate-Poor None-Sheen-Layer — ODOR: None-Slight-Moderate-Strong —
(color / clarity / sheen or product phase / thickness / Describe)

TIME (24 hour)	VOL. PURGED	TEMP (F / C)	pH	EC	DO(mg/L)	ORP(Rel. MV)	TDS(g/L)	TURB. (NTU)
9:32	0 GALLONS	17.78	7.15	1846	5.51	214.5	1.199	clear
9:35	2.5	17.50	7.23	1757	6.12	211.4	1.142	lt yellow brn/ good
9:39	5.0	17.46	7.24	1787	6.28	211.8	1.161	" " "
9:43	7.75	17.45	7.17	1864	4.43	209.6	1.212	" " "
	STOP							

Total Vol. Purged 7.75 g if well purges dry: TIME — VOLUME PURGED — DTW —

SAMPLING DATA: DTW AT TIME OF SAMPLING 19.91'
SAMPLE ID: MW-2 TIME: 9:51 COLLECTION DEVICE: Disposable Bailer
ANALYSIS REQUESTED: TDS, Nitrate as N, Ammonia as N, pH, Total and Fecal Coliform
CONTAINERS USED (LIST #, TYPE, PRESERVATIVE): 1-1L Plastic 1-.5L Plastic H2SO4 1 Bact

QA/QC SAMPLES: DUPLICATE SAMPLES: YES / NO SAMPLE ID: — TIME —
RINSATE SAMPLES: YES / NO SAMPLE ID: — TIME —

FIELD NOTES:

GROUNDWATER MONITORING FIELD FORM

CONDOR
188 Frank West Circle, Suite I, Stockton, CA 95206
(209) 234-0518

PROJECT #: 3300
PROJECT ID: Honor Farm
PERSONNEL: J. Collins

WELL ID: MW-3
DATE: 5-16-07
CONDITIONS: Fair Breezy

DECONTAMINATION METHOD: Standard Procedure / ~~Alcohol~~ / Other (specify): —
(standard decontamination procedure consists of washing gear with a solution of DI water and a phosphate free soap and then double rinsing with DI water)

PRE-PURGE DATA: PURGE VOLUME PROTOCOL (# of casing volumes) 1 2 (4) 5 WELL CASING DIAMETER (in.) 2"
WELL CASING DEPTH: 35.40' (measured / detail) MEASURING POINT: MOC / NORTH SIDE CASING
DEPTH TO WATER: - 18.85' DEPTH TO PRODUCT: — PRODUCT LAYER: — multipliers: 0.75"= .0229, 2"= .163, 4"=.653, 6"= 1.02
WATER COLUMN: = 16.55 * MULTIPLIER: = 2.69 * VOLUME PROTOCOL: 8.09
80%RECOVERY: * 0.8 = 22.16 =1 casing volume total volume to be purged

PURGE DATE: PURGE DEVICE: Disposable Bailer If pumped, specify: discharge rate (gpm) — depth pump set (ft.) —
FIELD INSPECTION SAMPLE: clear (color) Good-Moderate-Poor (clarity) None-Sheen-Layer (sheen or product phase) — (thickness) ODOR: None-Slight-Moderate-Strong (Describe)

TIME (24 hour)	VOL. PURGED	TEMP (F / C)	pH	EC	DO(mg/L)	ORP(Rel. MV)	TDS(g/L)	TURB. (NTU)
9:59	0 GALLONS	18.82	6.82	941	3.10	225.3	0.611	clear
10:04	2.75	18.26	6.94	916	5.24	234.3	0.594	H.yellow tint, cloudy
10:11	5.50	18.70	6.79	910	3.02	225.1	0.595	" " "
10:17	8.25	18.64	6.85	905	3.25	230.7	0.588	" " "
	STOP							

Total Vol. Purged 8.25 gallons if well purges dry: TIME — VOLUME PURGED — DTW —

SAMPLING DATA: DTW AT TIME OF SAMPLING
SAMPLE ID: MW-3 TIME: 10:19 COLLECTION DEVICE: Disposable Bailer
ANALYSIS REQUESTED: TDS, Nitrate as N, Ammonia as N, pH, Total and Fecal Coliform
CONTAINERS USED (LIST #, TYPE, PRESERVATIVE): 1-1L Plastic 1-.5L Plastic H2SO4 1 Bact

QA/QC SAMPLES: DUPLICATE SAMPLES: YES / (NO) SAMPLE ID: — TIME
RINSATE SAMPLES: YES / (NO) SAMPLE ID: — TIME
(Saturated)

FIELD NOTES: Fields are very wet from irrigation currently going on.

GeoAnalytical Laboratories, Inc.

1405 Kansas Avenue Modesto, CA 95351 Phone (209) 572-0900 Fax (209) 572-0916

Report # T7E1608 **Project:** 3300 Honor Farm **Date:** 05/23/07

Condor Earth Technologies - M
1739 Ashby Rd.
Merced, CA 95348

PO#

Date Rec'd: 05/16/07

CERTIFICATE OF ANALYSIS

Date Sampled: 05/16/07
Sampler: J.Collins

Sample ID	Time:	Lab ID	RL	Method	Analyte	Result	Units	Notes	Analyzed	Batch #
MW-1	11:08	T7E1608-01	1.25	300.0	Nitrate as N	11.5	mg/L		05/16/07	T001587
			10.0	SM 2540 C	Total Dissolved Solids (TDS)	1090	mg/L		05/17/07	T001582
			0.1	SM 4500-H+	pH	6.6	Std. Units		05/16/07	T001571
			1.00	SM4500-NH3 C	Ammonia as N	ND	mg/L		05/21/07	T001606
			2.0	SM9221B,C,E	Total Coliform	<2	MPN/100mL		05/16/07	T001551
MW-2	9:51	T7E1608-02	1.25	300.0	Nitrate as N	15.2	mg/L		05/16/07	T001587
			10.0	SM 2540 C	Total Dissolved Solids (TDS)	1330	mg/L		05/17/07	T001582
			0.1	SM 4500-H+	pH	7.1	Std. Units		05/16/07	T001571
			1.00	SM4500-NH3 C	Ammonia as N	ND	mg/L		05/21/07	T001606
			2.0	SM9221B,C,E	Total Coliform	<2	MPN/100mL		05/16/07	T001551
MW-3	10:29	T7E1608-03	0.25	300.0	Nitrate as N	5.27	mg/L		05/16/07	T001587
			10.0	SM 2540 C	Total Dissolved Solids (TDS)	672	mg/L		05/17/07	T001582
			0.1	SM 4500-H+	pH	6.8	Std. Units		05/16/07	T001571
			1.00	SM4500-NH3 C	Ammonia as N	ND	mg/L		05/21/07	T001606
			2.0	SM9221B,C,E	Total Coliform	<2	MPN/100mL		05/16/07	T001551

Jennifer Peet
Chemist

Donna Keller
Laboratory Director

Certification # 2585

GeoAnalytical Laboratories, Inc.

1405 Kansas Avenue Modesto, CA 95351 Phone (209) 572-0900 Fax (209) 572-0916

Report # T7E1608 **Project:** 3300 Honor Farm **Date:** 05/23/07

Condor Earth Technologies - M **Date Rec'd:** 05/16/07
1739 Ashby Rd. **PO#**
Merced, CA 95348

Inorganic Chemistry - Quality Control
GeoAnalytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch T001571 - NO PREP			**Prepared & Analyzed: 05/16/07**							
Duplicate (T001571-DUP1)			**Source: T7E1608-01**							
pH	6.6	0.1	Std. Units		6.6			0	20	
Batch T001582 - NO PREP			**Prepared & Analyzed: 05/17/07**							
Blank (T001582-BLK1)										
Total Dissolved Solids (TDS)	ND	10.0	mg/L							
Duplicate (T001582-DUP1)			**Source: T7E1608-01**							
Total Dissolved Solids (TDS)	1100	10.0	mg/L		1090			0.9	7	
Batch T001587 - NO PREP			**Prepared & Analyzed: 05/16/07**							
Blank (T001587-BLK1)										
Nitrate as N	ND	0.25	mg/L							
LCS (T001587-BS1)										
Nitrate as N	1.07	0.25	mg/L	1.13		95	85-115			
LCS Dup (T001587-BSD1)										
Nitrate as N	1.03	0.25	mg/L	1.13		91	85-115	4	20	
Matrix Spike (T001587-MS1)			**Source: T7E1506-01**							
Nitrate as N	7.88	0.25	mg/L	1.13	5.68	195	85-115			QM-02
Matrix Spike Dup (T001587-MSD1)			**Source: T7E1506-01**							
Nitrate as N	7.92	0.25	mg/L	1.13	5.68	198	85-115	0.5	20	QM-02

GeoAnalytical Laboratories, Inc.

1405 Kansas Avenue Modesto, CA 95351 Phone (209) 572-0900 Fax (209) 572-0916

Report # T7E1608 **Project:** 3300 Honor Farm **Date:** 05/23/07

Condor Earth Technologies - M
1739 Ashby Rd.
Merced, CA 95348

Date Rec'd: 05/16/07

PO#

Inorganic Chemistry - Quality Control
GeoAnalytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch T001606 - NO PREP				**Prepared & Analyzed: 05/21/07**						
Blank (T001606-BLK1)										
Ammonia as N	ND	1.00	mg/L							
LCS (T001606-BS1)										
Ammonia as N	20.0	1.00	mg/L	20.00		100	92-102			
LCS Dup (T001606-BSD1)										
Ammonia as N	20.2	1.00	mg/L	20.00		101	92-102	1	3	
Matrix Spike (T001606-MS1)	**Source: T7E1608-01**									
Ammonia as N	20.1	1.00	mg/L	20.00	ND	100	77-113			
Matrix Spike Dup (T001606-MSD1)	**Source: T7E1608-01**									
Ammonia as N	19.5	1.00	mg/L	20.00	ND	98	77-113	3	4	

GeoAnalytical Laboratories, Inc.

1405 Kansas Avenue Modesto, CA 95351 Phone (209) 572-0900 Fax (209) 572-0916

Report # T7E1608 **Project:** 3300 Honor Farm **Date:** 05/23/07

Condor Earth Technologies - M
1739 Ashby Rd.
Merced, CA 95348

Date Rec'd: 05/16/07

PO#

Microbiology of Wastewater - Quality Control
GeoAnalytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch T001551 - NO PREP				**Prepared & Analyzed: 05/15/07**						
Blank (T001551-BLK1)										
Total Coliform	<2	2.0	MPN/100mL							
Duplicate (T001551-DUP1)				**Source: T7E1504-01**						
Total Coliform	300	2.0	MPN/100mL		300			0	20	

GeoAnalytical Laboratories, Inc.

1405 Kansas Avenue Modesto, CA 95351 Phone (209) 572-0900 Fax (209) 572-0916

Report # T7E1608 **Project:** 3300 Honor Farm **Date:** 05/23/07

Date Rec'd: 05/16/07

Condor Earth Technologies - M
1739 Ashby Rd.
Merced, CA 95348

PO#

Notes and Definitions

QM-02	The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.
<2	<2
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference

Condor Earth Technologies, Inc.

CHAIN-OF-CUSTODY

13600

☐ 21663 Brian Lane
P.O. Box 3905 / Sonora, California 95370
209–532-0361
209–532-0773 (fax)
info@condorearth.com (e-mail)

☐ 188 Frank West Circle, Suite I
Stockton, CA 95206
209–234-0518
209–234-0538 (fax)
condor@condorstockton.com (e-mail)

SHIPPED TO: Geoanalytical Modesto CA

SEND RESULTS TO: T7E16058

NAME: Lee Morse

OFFICE: Merced CA

☒ PLEASE FAX RESULTS:

PROJECT: Honor Farm

PROJECT NO. 3300

SAMPLED BY: (Signature) Jacob Collins

Date	Time	Sample ID	NO. of containers	ANALYSIS: TDS	Nitrate as N	Ammonia as N	pH	Total Coliform	✓ Verification	REMARKS:	MISC.
5-16-07	11:08	MW-1	3	✓	✓	✓	✓	✓			-01
	9:51	MW-2									-02
	10:29	MW-3									-03

Relinquished By: (Signature) J Collins	Date: 5-16-07	Time: 11:31	Received By: (Signature) Jadan Barnett	Date: 5/16/07 Time: 11:31
Relinquished By: (Signature)	Date:	Time:	Received By: (Signature)	Date: Time:
Relinquished By: (Signature)	Date:	Time:	Received By: (Signature)	Date: Time:

Original-Send Yellow-File Pink-Log Book

Stanislaus County
Striving to be the Best

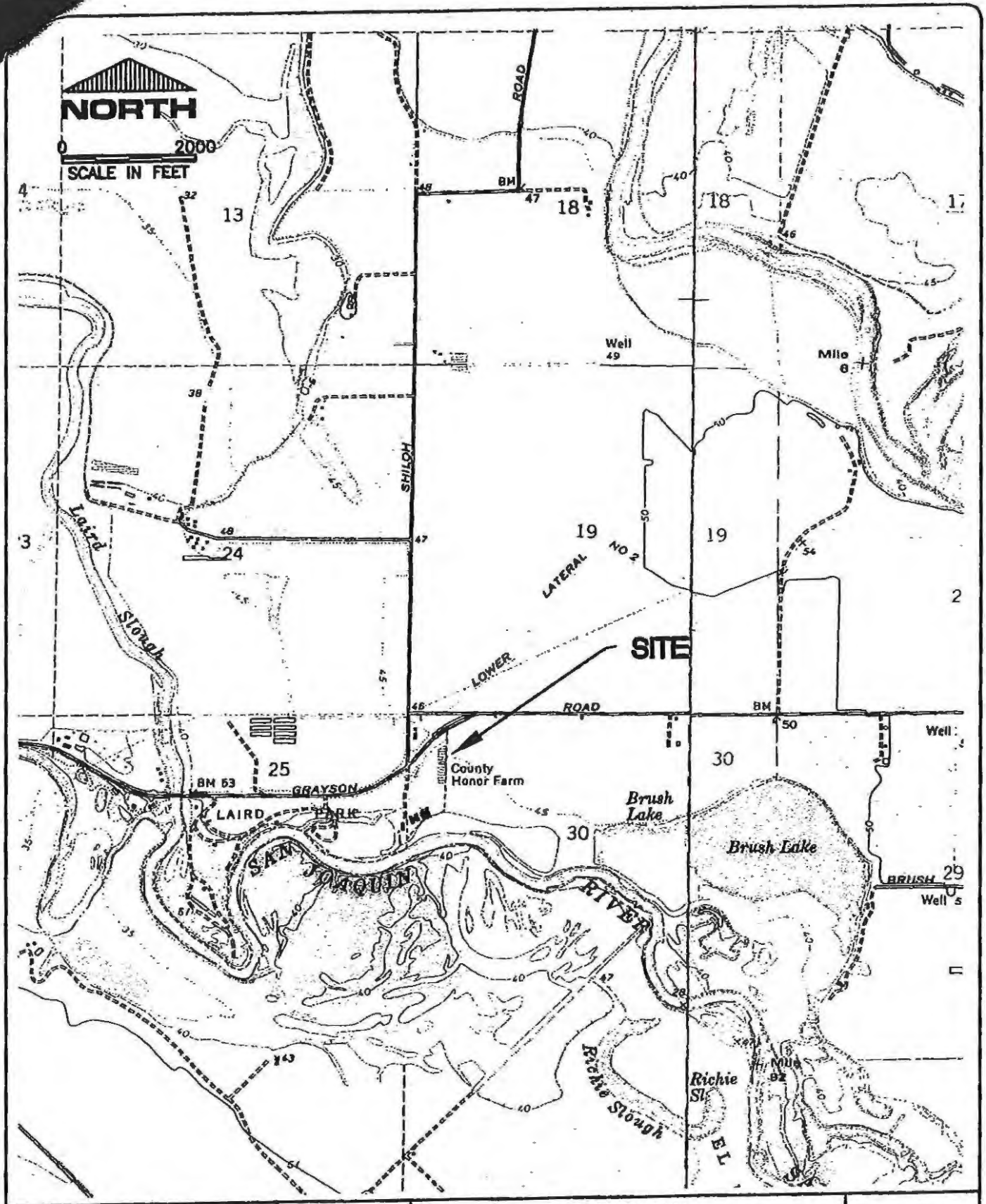
104 0 104 208 Feet

N
W E
S

This map is for display purposes only.

Map printed: 11/25/2009

Public Works
Stanislaus County
GIS



CONDOR EARTH TECHNOLOGIES, INC.
188 Frank West Circle, Ste
Stockton, CA 95206
(209) 234-0518
f(209) 234-0538
www.condorearth.com
stockton@condorearth.com

CONDOR

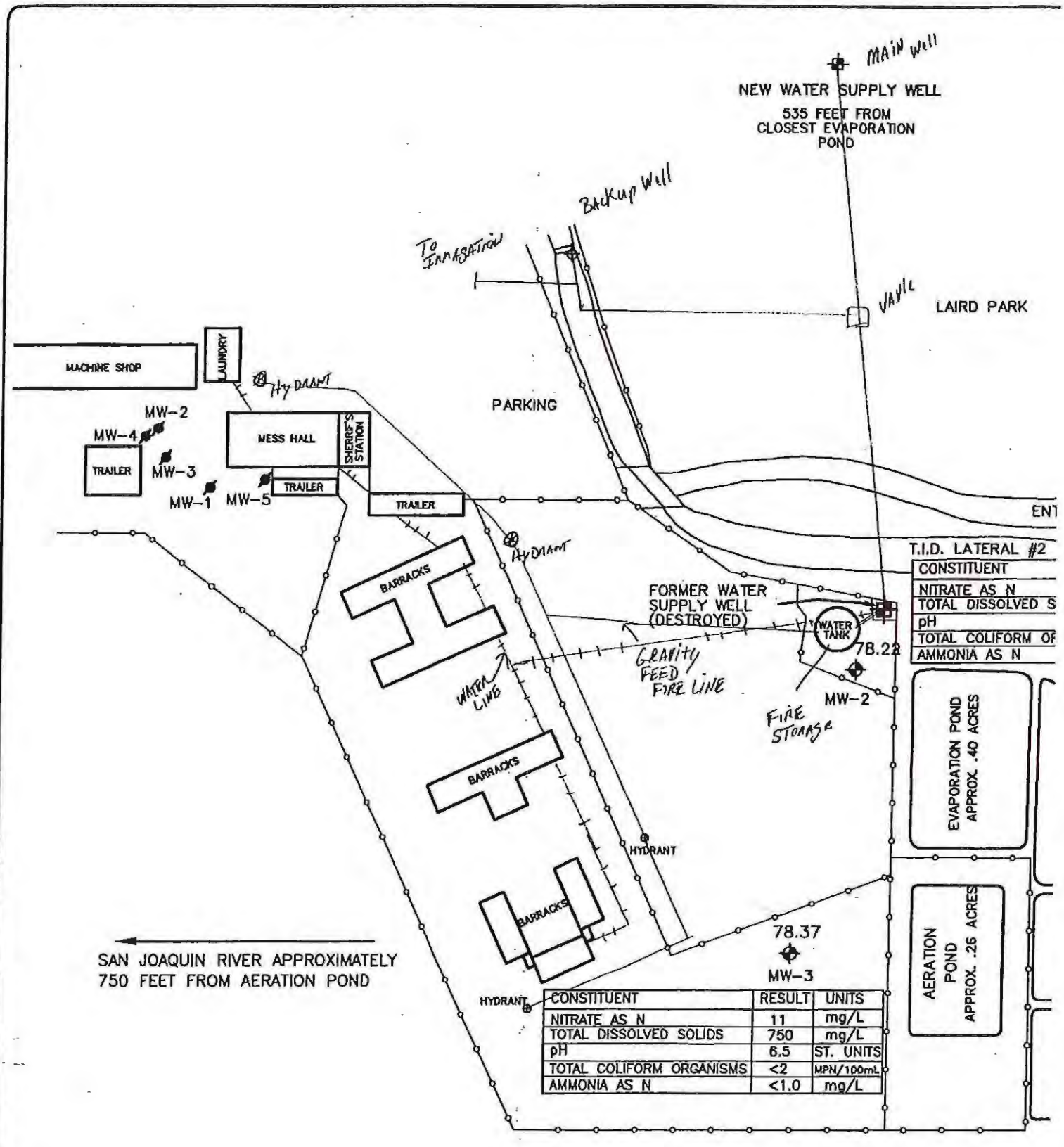
Job No.	3300D
Date	21 SEPT 2005
Scale	AS SHOWN
Drawn / Chk'd	KGM / LM

VICINITY MAP
LAIRD PARK HONOR FARM
8224 WEST GRAYSON ROAD
MODESTO, CALIFORNIA

FIGURE 1

File No. 3300DF1

P:\3000_prj\3300 Stanislaus County Honor Farm\3300D Honor Farm GW Monitoring 2005\3300D_LDD\DWG\3300DF1.dwg 9-21-05 09:20:10 AM kmckinley



T.I.D. LATERAL #2		
CONSTITUENT	RESULT	UNITS
NITRATE AS N	11	mg/L
TOTAL DISSOLVED S	750	mg/L
pH	6.5	ST. UNITS
TOTAL COLIFORM OF	<2	MPN/100mL
AMMONIA AS N	<1.0	mg/L

LEGEND

NORTH

0 120
SCALE IN FEET

MW-1
78.43 WASTEWATER TREATMENT SYSTEM MONITORING WELL WITH GROUNDWATER ELEVATION

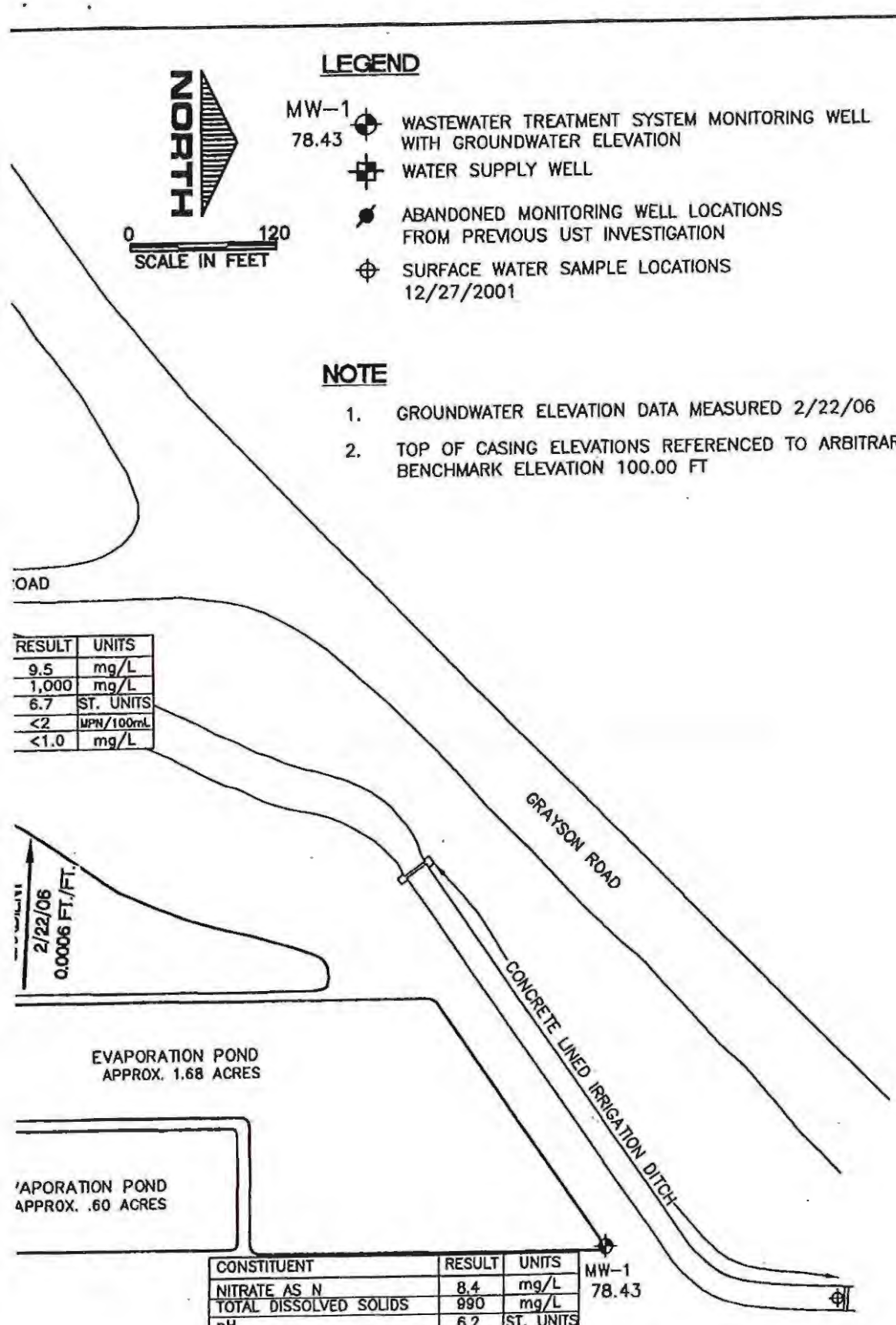
WATER SUPPLY WELL

ABANDONED MONITORING WELL LOCATIONS FROM PREVIOUS UST INVESTIGATION

SURFACE WATER SAMPLE LOCATIONS 12/27/2001

NOTE

1. GROUNDWATER ELEVATION DATA MEASURED 2/22/06
2. TOP OF CASING ELEVATIONS REFERENCED TO ARBITRARY BENCHMARK ELEVATION 100.00 FT



CONSTITUENT	RESULT	UNITS
NITRATE AS N	8.4	mg/L
TOTAL DISSOLVED SOLIDS	990	mg/L
pH	6.2	ST. UNITS
TOTAL COLIFORM ORGANISMS	<2	MPN/100mL
AMMONIA AS N	1.10	mg/L

SITE MAP WITH MONITORING WELL LOCATIONS, GROUNDWATER GRADIENT, AND LABORATORY ANALYTICAL RESULTS
LAIRD PARK HONOR FARM
8224 WEST GRAYSON ROAD
MODESTO, CALIFORNIA

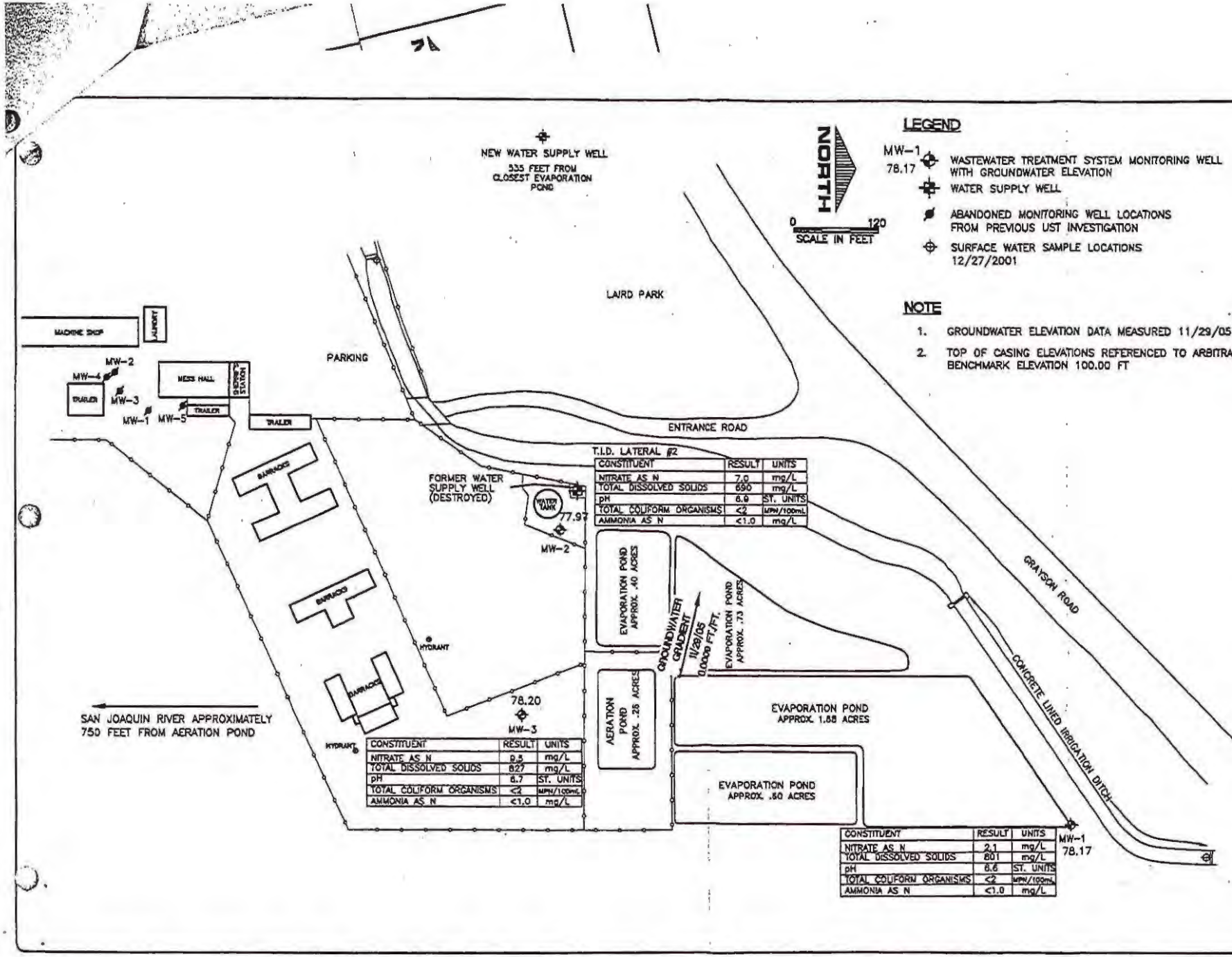
CONDOR EARTH TECHNOLOGIES, INC.
168 Frank West Circle, Ste I
Stockton, CA 95206
(209) 234-0518
f(209) 234-0538
www.condorearth.com
stockton@condorearth.com
CONDOR

Job No. 3300D
Date 11 APRIL 2006
Scale AS SHOWN
Drawn KGM Chk'd LM

FIGURE 2

File No. 33000F2_1Q06

P:\3000_pr\3300 Stanislaus County Honor Farm\3300 Honor Farm GW Monitoring 2005\Reports\1Q06\3300F2_1Q06.dwg 4-12-06 10:36:23 AM kmckinley



SITE MAP WITH MONITORING WELL LOCATIONS, GROUNDWATER GRADIENT, AND LABORATORY ANALYTICAL RESULTS
LAIRD PARK HONOR FARM
8224 WEST GRAYSON ROAD
MODESTO, CALIFORNIA

CONDOR EARTH TECHNOLOGIES, INC.
168 Frank West Circle, Ste 1
Stockton, CA 95206
(209) 234-0518
f(209) 234-0538
www.condorearth.com
stockton@condorearth.com

Job No. 33000
Date 29 DEC. 2005
Scale AS SHOWN
Drawn DNV
Chkd KW

FIGURE 2

File No. 33000F2_4005

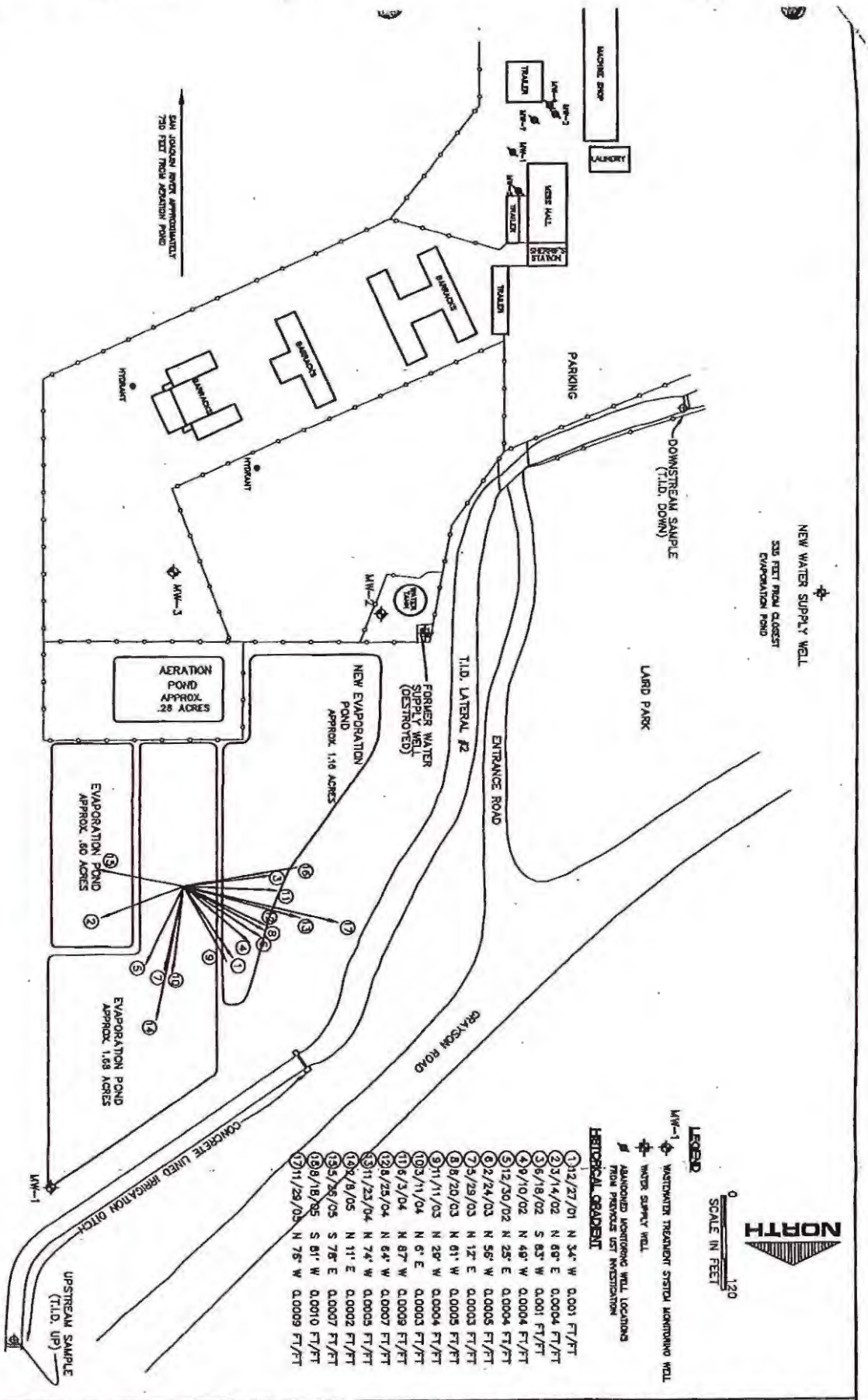


FIGURE 3

CONDOR EARTH TECHNOLOGIES, INC.
168 Frank West Circle, Ste 1
Stockton, CA 95206
(209) 234-0518
(209) 234-0538
www.condorearth.com
stockton@condorearth.com

CONDOR

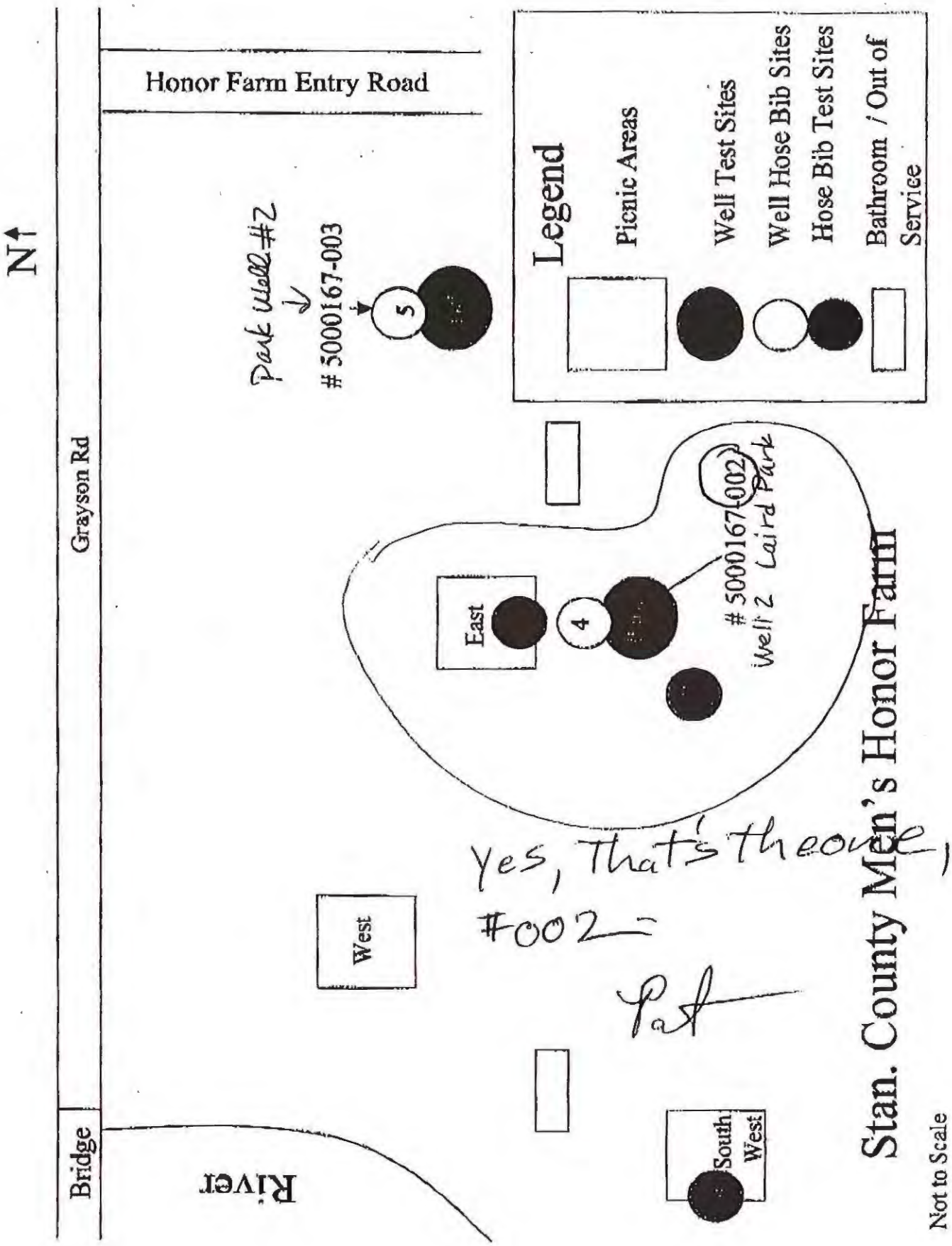
Job No.	3300D
Date	3 JAN 2006
Scale	AS SHOWN
Drawn	KGM
Ck'd	LM

HISTORICAL GROUNDWATER GRADIANT MAP
LAIRD PARK HONOR FARM
8224 WEST GRAYSON ROAD
MODESTO, CALIFORNIA

File No. 3300DF3_4005

P:\3300_or\3300 Stanislaus County Honor Farm\3300D Honor Farm GW Monitoring 2005\Reports\4005\3300DF3_4005.dwg 1-03-06 11:54 AM kmckinley

STAN. CO. HONOR FARM - Gregson Rd. 9/04


N
Honor Farm Entry Road
Grayson Rd
Bridge
River
Park well #2
5000167-003
5
Legend
Picnic Areas
Well Test Sites
Well Hose Bib Sites
Hose Bib Test Sites
Bathroom / Out of Service
East
4
5000167-002
Well 2 Laird Park
West
South West
Yes, That's the one, #002 -
Pat
Stan. County Men's Honor Farm
Not to Scale

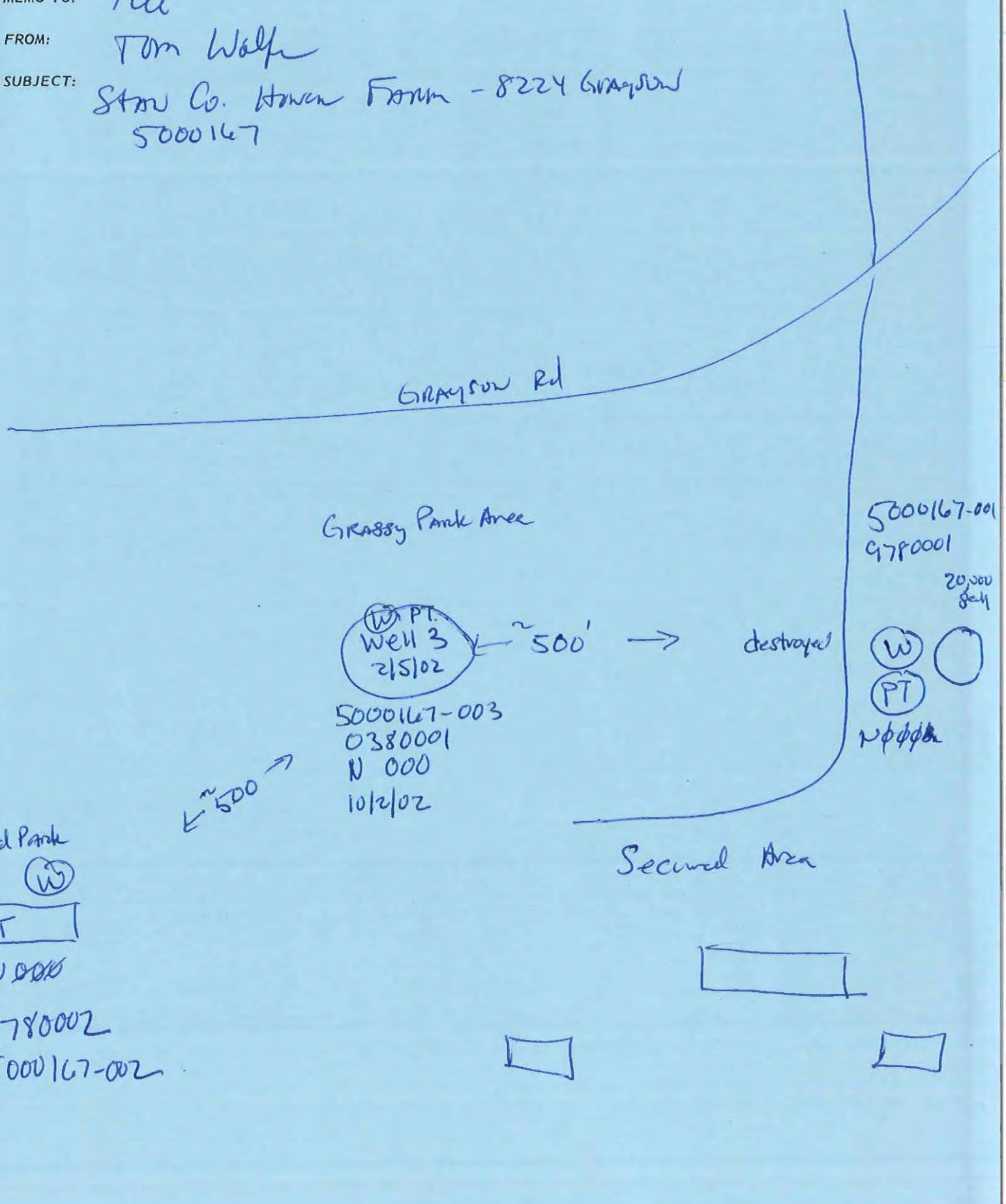
STANISLAUS COUNTY

MEMO TO: file

DATE: 2/5/02

FROM: Tom Wolfe

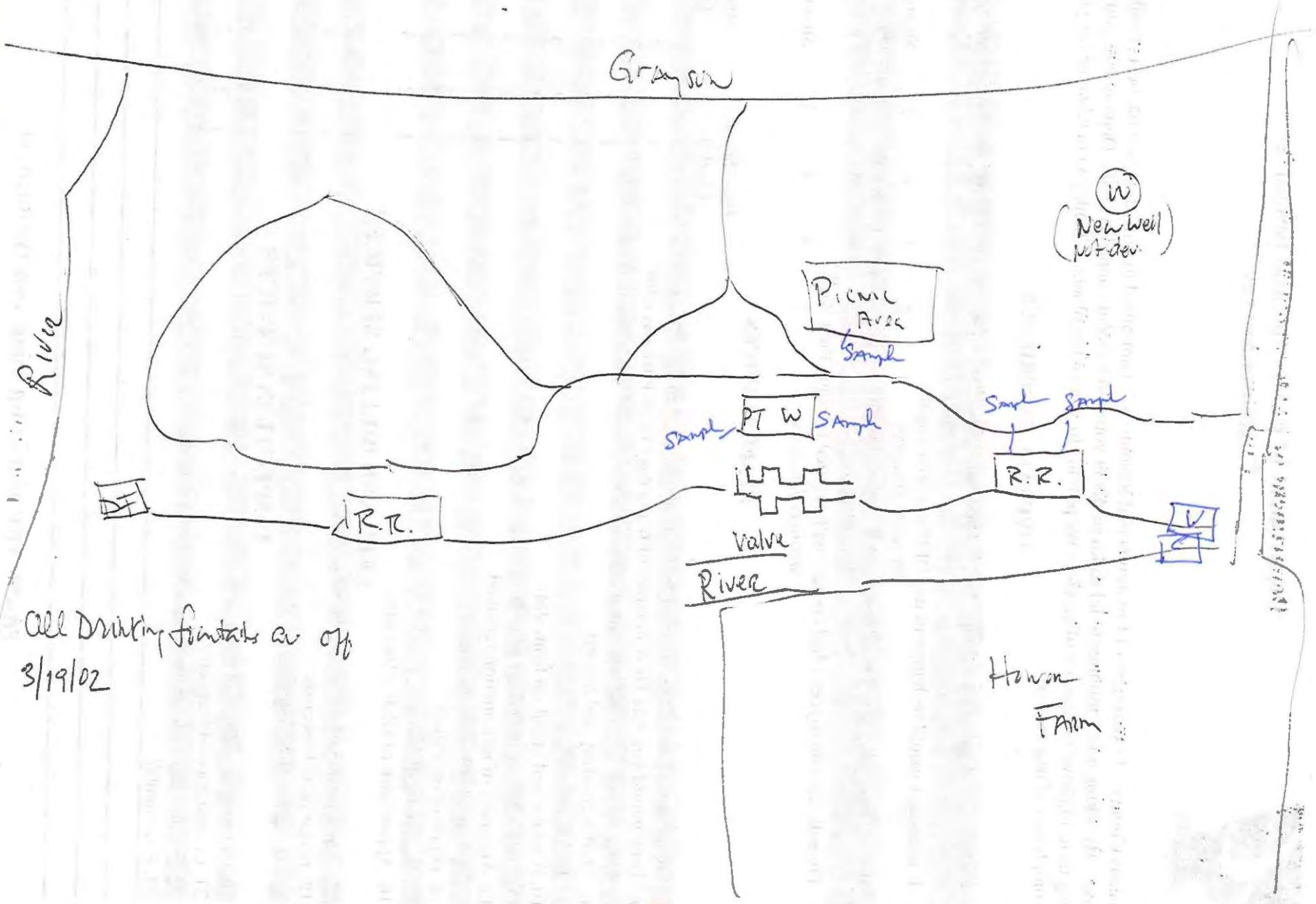
SUBJECT: Stan Co. Haven Farms - 8224 Grayson
5000167



Land Pk. 8224 Grayson Rd.

Park Restroom

8/19/02



All Drinking fountains are off
3/19/02

Stanislaus County

Department of Environmental Resources

1716 Morgan Road
Modesto, California 95351
(209)

APPLICATION FOR PERMIT

THIS IS NOT AN AUTHORIZATION TO OPERATE

NAME OF WATER SYSTEM STANISLAUS COUNTY HONOR FARM WATER SYSTEM

ADDRESSES & AREAS SERVED 8224 W. GRAYSON RD., MODESTO, CA. / HONOR FARM

OWNER'S NAME STANISLAUS COUNTY SHERIFF'S DEPT **PHONE** 571-6456

ADDRESS 1100 H. ST. MODESTO, CA. **ZIP** 95353

REPRESENTATIVE/OPERATOR OF WATER SYSTEM HERB WILKERSON, LT. SHERIFF'S DEPT **PHONE** 538-2202

ADDRESS 8224 W. GRAYSON RD., MODESTO, CA. **ZIP** 95351

Hereby makes application for a permit to operate a WATER SYSTEM (WELL) **Public Water System (definition attached) in accordance with the laws, ordinances and regulations that are now or may be in force by the State of California, or under the jurisdiction of the STANISLAUS COUNTY DEPARTMENT OF ENVIRONMENTAL RESOURCES pertaining to Public Water Systems. (NOTE: Additional permit application information is required; please complete the attached).**

NUMBER OF SERVICE CONNECTIONS ONE

NUMBER OF PEOPLE USING WATER 60 OR MORE DAYS OF YEAR APP. 300

DATE 12-14-87 **SIGNED** Herb Wilkerson **APPLICANT**
(Water System Owner or Operator)

W-57

SYSTEM TECHNICAL REPOR

INFORMATION TO ACCOMPANY WATER SUPPLY PERMIT APPLICATION
(California Health & Safety Code, Section 4012)

Instructions

The following data must accompany your application for a Water Supply Permit. You should answer the questions to the best of your ability. If you do not know the answer to a question after having made a reasonable attempt to find the answer, fill in the blank as "Unknown." Portions which do not apply should be marked "N/A." Complete all sections that apply to your water system.

General Information	Date: 1999
Name of Water System:	STANISLAUS CO. HONOR FARM
Location:	8224 GRAYSON MODESTO
Mailing Address:	
Name of Responsible Person:	
Office Telephone: ( )	
After Hours Telephone: ( )	

Principle Features of System (Summary)

a) Source of Supply:
ONE WATER WELL

b) Water Treatment:
NONE

c) Distribution System Materials:
GALVANIZED

d) Addresses/Facilities/Area-served:

e) Emergency Provisions:

f) Operating Records and Laboratory Tests:

Water System Name: _____

Date: _____

SOURCE INFORMATION

.LL DATA (Use one sheet for each well)

Well Name or Number: WELL #1

Well Name or Number:

Well Location:

a) Distance to sewer? 300 **Septic Tank(s)?** — **Leachlines?** —

b) Distance to other wells? **Abandoned wells?** —

c) Distances to property lines? Front **Rear** **Side 1** **2**

ATTACH A COPY OF YOUR WELL LOG OR WATER WELL DRILLER'S REPORT OR COMPLETE THE FOLLOWING:

Depth of Well (From ground surface to lowest point of excavation)

Casing: Depth 140' Diameter 10"

a) casing material STEEL Gauge or Thickness ¼"

b) Annular seal depth 98' Material BENTONITE

c) Is the well gravel packed? — Depth

d) Is the well gravel packed? — Depth

e) Is the well wall perforated? YES Depth 120-140

f) Impervious Strata: Thickness Depth

g) Water level: First water level Static water level

when pumping

h) Maximum sustained yield:

PUMP: Make Model Number

a) Type (submersible, jet, turbine, centrifugal)

capacity gallons per minute

b) Lubrication (oil, water, sealed, etc.)

c) Power (electric, gas, diesel, etc.)

d) Controls (automatic or manual)

e) Discharges to

f) Frequency of use

g) Flood hazard: Cement slab around well? Dimensions & Height:

DESCRIBE ANY TREATMENT PERFORMED:

ach copies of Chemical Analysis for this source.)

REMARKS AND/OR DEFECTS:

'ater System Name:_____

Date:_____

STORAGE

	Storage #1	Storage #2	Storage #3
Location:			
Date Installed:			
Water From (Source)			
Capacity (Gallons):			
Type (Pressure, gravity):			
Material:			
Dimensions:			
Vents (Gravity flow only):			
Level controls (Types):			
Remarks and/or Defects:			

DISTRIBUTION SYSTEM

Describe your distribution system (types, sizes and lengths of pipe)

_____

_____

_____

Are there any dead-end lines?_____ Can they be flushed?_____

How frequently are they flushed? _____

How many service connections do you have? Metered _____Non-metered_____

What are the size(s) of your service connections?_____

Do you have a cross-connection control program?_____

(Attach a map or sketch of your service area showing water sources, pressure tank, storage reservoirs, water lines, etc.)

Remarks and/or Defects:_____

_____

_____

Water Quantity Supplied:_____

Engineer's Report on Adequacy of Water Quantity Supplied; Required? Yes_____ No_____ Attached? Yes_____ No___

Submitted by:_____

Title:_____

Date:_____

3/21/02 LAND PATCH Well and Hydro-tank

3/21/02 Laurel Park Well ; Hydro-tank

Lat:_____
Long:_____
T.____ R.____ Sec.____
¼ Sec._____
Quad._____
A.P.N._____

STANISLAUS COUNTY
DEPARTMENT OF ENVIRONMENTAL RESOURCES
3800 CORNUCOPIA WAY, SUITE C, MODESTO, CA 95358-9492
(209) 525-6700

Permit No. 02-181
Date Issued 9/5/02

Pd. 149.00 NW

APPLICATION FOR WELL CONSTRUCTION OR DESTRUCTION

THIS PERMIT EXPIRES 1 YEAR FROM DATE ISSUED

Application is hereby made to the Stanislaus County Department of Environmental Resources (D.E.R.) for a permit to construct and/or destroy the work herein described. PLEASE NOTIFY THIS DEPARTMENT (USING PERMIT # AND D.W.R. WELL DRILLERS REPORT) WHEN WELL WORK IS COMPLETED.

JOB ADDRESS/LOCATION 8224 W. Grayson Rd City Modesto, Ca

Distance & Direction from Nearest Cross Streets _____

Owner's Name Stan. County Honor Farm Phone 567-1927

Address 8224 W. Grayson Rd. City/State Modesto, Ca

Contractor's Name Maselli Drilling License #668622 Phone 522-1928

TYPE OF WORK: (Check one) NEW WELL ☐ DEEPEN ☐ RECONDITION ☐ DESTRUCTION ☒
OTHER ☐ _____

DISTANCE TO NEAREST: SEPTIC TANK _____ SEWER LINES _____ PIT PRIVY _____
OTHER WELL _____ SEWAGE DISPOSAL FIELD _____ SEEPAGE PIT _____
DRY WELL _____ OTHER _____
ANIMAL ENCLOSURE _____

INTENDED USE	TYPE OF WELL	CONSTRUCTION / DESTRUCTION SPECIFICATIONS
☐ Industrial	☐ Cable Tool	Dia. of Well Excavation _____
☐ Domestic / Private	☐ Drilled	Dia. of Well Casing _____
☐ Domestic / Public	☐ Gravel Pack	Gauge of Casing _____
☐ Irrigation	☐ Rotary	Depth Conductor Casing _____
☐ Cathodic protection	☐ Other _____	Depth of Grout Seal _____
☐ Other _____		Type of Grout _____ # Bags _____
		Grout Manufacturer _____
		Grout Name _____

Well Destruction: Describe method if different than minimum state standards: According to County/State Standards

Existing well present? (YES) NO Status: Active ☒ To Be Destroyed ☐ Inactive ☐

D.E.R. USE ONLY

Permit Issued by: Tom Walker Date: 9-5-02
Permit Denied by: _____ Date: _____ (See Attached)
Grout Seal Inspected by: Mary-Kate Cook Date: 9/13/02
Final Inspection by: _____ Date: _____

ENTERED 9-9-02 SO

ORIGINAL-Office COPY-Contractor COPY-Applicant

L
Lo
T.____ R.____ Sec.____
¼ Sec.____
Quad.____
A.P.N.____

STANISLAUS COUNTY
DEPARTMENT OF ENVIRONMENTAL RESOURCES
3800 CORNUCOPIA WAY, SUITE C, MODESTO, CA 95358-9492
(209) 525-6700

Permit No. 02-013
Date Issued 1-24-02

PR CK 11561

APPLICATION FOR WELL CONSTRUCTION OR DESTRUCTION

THIS PERMIT EXPIRES 1 YEAR FROM DATE ISSUED

Application is hereby made to the Stanislaus County Department of Environmental Resources (D.E.R.) for a permit to construct and/or destroy the work herein described. PLEASE NOTIFY THIS DEPARTMENT (USING PERMIT # AND D.W.R. WELL DRILLERS REPORT) WHEN WELL WORK IS COMPLETED.

JOB ADDRESS/LOCATION 8224 W. Grayson City Modesto, Ca

Distance & Direction from Nearest Cross Streets Grayson Rd & Shiloh Rd.

Owner's Name Stanislaus Honor Farm Sheriff Phone ____

Address P.O. Box 3409 City/State Mod. Ca.

Contractor's Name Maselli's Drilling License # 668622 Phone 522-1928

TYPE OF WORK: (Check one) NEW WELL ☒ DEEPEN ☐ RECONDITION ☐ DESTRUCTION ☐
OTHER ☐ ____

DISTANCE TO NEAREST:
SEPTIC TANK None SEWER LINES None PIT PRIVY ____
OTHER WELL 500' SEWAGE DISPOSAL FIELD ____ SEEPAGE PIT ____
DRY WELL ____ OTHER ____
ANIMAL ENCLOSURE ____

INTENDED USE		TYPE OF WELL		CONSTRUCTION / DESTRUCTION SPECIFICATIONS	
☐	Industrial	☐	Cable Tool	Dia. of Well Excavation	20"
☐	Domestic / Private	☒	Drilled	Dia. of Well Casing	12" PVC
☒	Domestic / Public	☐	Gravel Pack	Gauge of Casing	160
☐	Irrigation	☒	Rotary	Depth Conductor Casing	None
☐	Cathodic protection	☐	Other ____	Depth of Grout Seal	50'
☐	Other ____			Type of Grout	Bentonite # Bags 12
				Grout Manufacturer	Wyo-Ben
				Grout Name	Grout well

Well Destruction: Describe method if different than minimum state standards: ____

Existing well present? ~~YES~~ NO Status: Active ☐ To Be Destroyed ☒ Inactive ☐

D.E.R. USE ONLY

Permit Issued by: [signature] Date: 01/24/02
Permit Denied by: ____ Date: ____ (See Attached)
Grout Seal Inspected by: ST / 22-BASS Tom Wilson Date: 02/05/02
Final Inspection by: ____ Date: ____

ENTERED 1-28-02 SH
ENTERED

ORIGINAL-Office COPY-Contractor COPY-Applicant

QUADRUPLICATE
For Local Requirements

Page 1 of 1

STATE OF CALIFORNIA
WELL COMPLETION REPORT

Refer to Instruction Pamphlet

No. 808988

DWR USE ONLY --- DO NOT FILL IN

STATE WELL NO./ STATION NO.

LATITUDE LONGITUDE

APN/TRS/OTHER

Owner's Well No. 95353

Date Work Began 2/4/02, Ended 2/7/02

Local Permit Agency Environmental Resources

Permit No. 02-013 Permit Date 1/24/02

GEOLOGIC LOG

ORIENTATION (✓) ✓ VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)

DRILLING METHOD ROTARY FLUID Mud

DEPTH FROM SURFACE Ft. to Ft.	DESCRIPTION *Describe material, grain, size, color, etc.*
0 – 4	Soil
4 – 10	clay
10 – 31	Sand
31 – 40	Clay
40 – 50	Sand & Gravel
50 – 60	Clay
60 – 70	Silt
70 – 120	Sand coarse
120 – 126	Brown Clay
126 – 165	Sand
165 – 172	Brown Clay
172 – 185	Sand & Gravel
185 – 190	Brown Clay

TOTAL DEPTH OF BORING 190 (Feet)

TOTAL DEPTH OF COMPLETED WELL 162 (Feet)

WELL OWNER

Name Stan. Cnty. Chief Exectuive Office

Mailing Address P.O. Box 3404

Modesto CA 95353

CITY STATE ZIP

WELL LOCATION

Address 8224 W. Grayson Rd.

City Modesto CA

County Stanislaus

APN Book ___ Page ___ Parcel ___

Township ___ Range ___ Section ___

Latitude ___ DEG. MIN. SEC. ___ DEG. MIN. SEC.

LOCATION SKETCH

NORTH

WEST EAST

SOUTH

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.

MAR 2002 Received Stanislaus Co. Dept. Of Environmental Resources

ACTIVITY (✓)

✓ NEW WELL

MODIFICATION/REPAIR
___ Deepen
___ Other (Specify)

___ DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG"

PLANNED USES (✓)

WATER SUPPLY
___ Domestic ✓ Public
___ Irrigation ___ Industrial

___ MONITORING
___ TEST WELL
___ CATHODIC PROTECTION
___ HEAT EXCHANGE
___ DIRECT PUSH
___ INJECTION
___ VAPOR EXTRACTION
___ SPARGING
___ REMEDIATION
___ OTHER (SPECIFY)

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER ___ (FL) BELOW SURFACE

DEPTH OF STATIC WATER LEVEL 20 (FL) & DATE MEASURED 2/7/02

ESTIMATED YIELD * ___ (GPM) & TEST TYPE ___

TEST LENGTH ___ (Hrs.) TOTAL DRAWDOWN ___ (FL)

May not be representative of a well's long-term yield.

CASING (S)

DEPTH FROM SURFACE Ft. to Ft.	BORE-HOLE DIA. (Inches)	TYPE (✓) BLANK	SCREEN	CONDUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0 – 142	20	✓				PLASTIC	12	160	
142 – 162			✓						.045

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft. to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0 – 57		✓		
57 – 162			✓	GRAVEL

ATTACHMENTS (✓)

___ Geologic Log
___ Well Construction Diagram
___ Geophysical Log(s)
___ Soil/Water Chemical Analysis
___ Other ___

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME MASELLIS DRILLING, INC.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

119 Albers Rd. Modesto CA 95357
ADDRESS CITY STATE ZIP

Signed Steve Maselli 02/20/02 668622
WELL DRILLER/AUTHORIZED REPRESENTATIVE DATE SIGNED C-57 LICENSE NUMBER

DWR 188 REV. 11-97

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

B.K.

Blake Herring
Doug Stidham's
permit. I don't
Do you? It's a
inspection.

Thanks-
Mary

HONOR FARM

QUADRUPLICATE
Use to comply with local requirements

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do not fill in

No. 304001

Notice of Intent No. _____
Local Permit No. or Date _____

State Well No. _____
Other Well No. _____

(1) OWNER: Name Stanislaus County
Address Dept. of Public Works 1100 "H" St.
City Modesto, Calif. ZIP 95354

(2) LOCATION OF WELL (See instructions): Honor Farm
County Stanislaus Owner's Well Number _____
Well address if different from above 8224 West Grayson
Township Modesto Range _____ Section _____
Distance from cities, roads, railroads, fences, etc. _____

WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well ☒ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☐
Test Well ☐
Municipal ☐
Other Public ☒
(Describe) Honor Farm Monitoring

(5) EQUIPMENT:
Rotary ☑ Reverse ☐
Cable ☐ Air ☐
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☒ No ☐ Size sand gravel
Diameter of bore 18"
Packed from 80 to 140 ft.

(7) CASING INSTALLED:
Steel ☐ Plastic ☑ Concrete ☐

From ft.	To ft.	Dia. in.	Gage or Wall
0	140	10	160 PVC

(8) PERFORATIONS:
Type of perforation or size of screen

From ft.	To ft.	Slot size
120	140	

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☒ No ☐ If yes, to depth 80' ft.
Were strata sealed against pollution? Yes ☐ No ☐ Interval _____ ft.
Method of sealing Bentonite & concrete

(10) WATER LEVELS: 26' 3-17-89
Depth of first water, if known _____ ft.
Standing level after well completion _____ ft.

(11) WELL TESTS:
Was well test made? Yes ☐ No ☐ If yes, by whom? _____
Type of test Pump ☐ Bailer ☐ Air lift ☐
Depth to water at start of test _____ ft. At end of test _____ ft.
Discharge _____ gal/min after _____ hours Water temperature _____
Chemical analysis made? Yes ☐ No ☐ If yes, by whom? _____
Was electric log made Yes ☐ No ☐ If yes, attach copy to this report

(12) WELL LOG: Total depth 182 ft. Completed depth 140 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	6	Top soil
6	12	Clay
12	48	Sand
48	53	gravel
53	69	Clay
69	72	Sand (gray)
72	78	Blue clay
78	83	Gravel & sand (red)
83	88	Clay
88	98	Sand (gray)
98	100	Gravel
100	114	Sand
114	126	Clay
126	136	Sand & gravel, gray
136	141	Clay
141	149	Sand
149	153	Clay
~~153~~	~~167~~	~~Sand~~
153	167	Sand
167	182	Clay

Work started 3-13 19 89 Completed 3-17 19 89

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

Signed _____ Bkkpr.
NAME Calwater Drilling Co., Inc. (Well Driller) (Person, firm, or corporation) (Typed or printed)
Address 300 S. Kilroy
City Turlock, CA. ZIP 95380
License No. 321252 Date of this report 3-31-89

DWR 188 (REV. 12-86) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM 86 96355

FOR DEPT USE	
Date	Wup

P.D. 12-12-91

Permit No. 91-398

Date Issued 12-12-91

STANISLAUS COUNTY
DEPARTMENT OF ENVIRONMENTAL RESOURCES
1716 Morgan Road, Modesto, CA 95351
525-4154

APPLICATION FOR WELL CONSTRUCTION OR PUMP PERMIT

THIS PERMIT EXPIRES 1 YEAR FROM DATE ISSUED
(Complete in Triplicate)

Application is hereby made to the Stanislaus County Department of Environmental Resources for a permit to construct and/or install the work herein described. PLEASE NOTIFY THIS DEPARTMENT (USING PERMIT #) WHEN WELL AND/OR PUMP WORK IS COMPLETED.

JOB ADDRESS/LOCATION 8224 W. Grayson Rd. City Modesto

Owner's Name Stanislaus County Phone 525-4108

Address P.O. Box 3229 City/State Modesto

Contractor's Name Calwater Drilling License # 321252 Phone 667-7932

TYPE OF WORK (CHECK): NEW WELL [X] DEEPEN [ ] RECONDITION [ ] DESTRUCTION [X]
PUMP INSTALLATION (NEW WELL) [ ] PUMP REPAIR [ ] PUMP REPLACEMENT [ ]
OTHER

DISTANCE TO NEAREST: SEPTIC TANK None SEWER LINES ____ PIT PRIVY ____
OTHER WELL ____ SEWAGE DISPOSAL FIELD ____ CESSPOOL/SEEPAGE PIT ____ OTHER Sewage Plant 300'+

INTENDED USE	TYPE OF WELL	CONSTRUCTION SPECIFICATIONS
[ ] Industrial	[ ] Cable Tool	Dia. of Well Excavation 20"
[ ] Domestic/private	[ ] Drilled	Dia. of Well Casing ~~...~~ 10"
[X] Domestic/public	[ ] Driven	Gauge of Casing ~~160 PSI~~ .5 Steel
[ ] Irrigation	[X] Gravel Pack	Depth of Grout Seal 80'
[ ] Other	[X] Rotary	Type of Grout Bentonite
	[ ] Other	Other Information Slab by Owner

PUMP INSTALLATION: Contractor ____
Type of Pump ____ H.P. ____

PUMP REPLACEMENT: [ ] State Work to be Done ____

PUMP REPAIR: [ ] State Work to be Done ____

DESTRUCTION OF WELL: Well Diameter 10" Approx. Depth 140'
Describe Material and Procedure Remove Casing Fill with Bentonite

PLOT PLAN: Show on reverse side.

FOR DEPARTMENT USE ONLY: Permit Issued by [signature] Date 12/12/91
Permit Denied by ____ (See separate report)
Inspected by [signature] Date ____

12-15-91

QUADRUPLICATE
For Local Requirements

Page 1 of 1
Owner's Well No. _____
Date Work Began _____ Ended 12-13-91
Local Permit Agency Stanislaus Co. Dept. of Environmental Res.
Permit No. _____ Permit Date _____

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet
No. 433919

— DWR USE ONLY — DO NOT FILL IN —
STATE WELL NO./STATION NO.
LATITUDE LONGITUDE
APN/TRS/OTHER

GEOLOGIC LOG

ORIENTATION (✓) ___ VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)
DEPTH TO FIRST WATER _____ (Ft.) BELOW SURFACE

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION *Describe material, grain size, color, etc.*
0	2	Sandy top soil
2	8	Clay
8	36	Sand
36	41	Brown and blue clay
41	54	Sandy gravel
54	70	Brown & blue clay w/sand streaks
70	110	Sand & gravel w/clay streaks
110	125	Clay
125	139	Sand
139	147	Clay
147	151	Sand w/clay streaks
151	153	Clay
153	165	Sand w/clay streaks
165	171	Clay
171	178	Gravel
178	182	Clay

TOTAL DEPTH OF BORING 182 (Feet)
TOTAL DEPTH OF COMPLETED WELL 140 (Feet)

WELL OWNER

Name Stanislaus County
Mailing Address P.O. Box 3229 RECEIVED
Modesto, Ca. STANISLAUS CO.
CITY STATE ZIP

WELL LOCATION

Address 3224 E. Grayson Rd. (Honor Farm)
City Modesto, CA.
County Stanislaus
APN Book _____ Page _____ Parcel _____
or
Township _____ Range _____ Section _____
or
Latitude _____ DEG. MIN. SEC. NORTH Longitude _____ DEG. MIN. SEC. W

LOCATION SKETCH

NORTH
WEST EAST
SOUTH
Illustrate or Describe Distance of Well from Landmarks such as Roads, Buildings, Fences, Rivers, etc. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)

___ NEW WELL
MODIFICATION/REPAIR
___ Deepen
___ Other (Specify)
___ DESTROY *(Describe Procedures and Materials Under "GEOLOGIC LOG")*

PLANNED USE(S) (✓)

___ MONITORING
WATER SUPPLY
X Domestic
___ Public
___ Irrigation
___ Industrial
___ "TEST WELL"
___ CATHODIC PROTECTION
___ OTHER (Specify)

DRILLING METHOD Mud rotary FLUID Water

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH OF STATIC WATER LEVEL _____ (Ft.) & DATE MEASURED _____
ESTIMATED YIELD* _____ (GPM) & TEST TYPE _____
TEST LENGTH _____ (Hrs.) TOTAL DRAWDOWN _____ (Ft.)
** May not be representative of a well's long-term yield.*

CASING(S)

DEPTH FROM SURFACE Ft.	to Ft.	BORE-HOLE DIA. (Inches)	TYPE (✓) BLANK	SCREEN	CONDUCTOR	FILL PIPE	MATERIAL/GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0	120	20"	X				Steel	19"	1/4"	
120	140	"		X			"	"	"	.070

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft.	to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	98		X		
98	140				6-12 sand

ATTACHMENTS (✓)

___ Geologic Log
___ Well Construction Diagram
___ Geophysical Log(s)
___ Soil/Water Chemical Analyses
___ Other _____
ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.
NAME Calwater Drilling Co., Inc.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
ADDRESS 300 S. Kilroy CITY Turlock, Ca. STATE 95380 ZIP
Signed _____ Mgr. DATE SIGNED 12-17-91 C-57 LICENSE NUMBER 321252
WELL DRILLER/AUTHORIZED REPRESENTATIVE

DWR 188 REV. 7-90 IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

STANISLAUS COUNTY HEALTH DEPT.

902 SCE[illegible]IVE
MODESTO, CALIFORNIA

PATIENT _____ DATE 3-14-74

ADDRESS _____

℞ Connection between the Howe Farm and the Laird Park. Water systems. Where, what, etc

TBC

U. S. REG. NO. _____ _____ M.D.

4020–39

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC HEALTH

WELL DATA

(1) Place and Owner: Stanislaus County, Sheriff's Dept.

(2) ~~Source of~~ Information: Honor Farm - Lt. Treuna   P.O. Box 3271

Collected by: Jim Bear and Orland Merchant ← Maintenance   Date: March 14 1974

(3) Number or Name	HONOR FARM		
Date drilled			
(4) Location: Neighborhood	Park, Agriculture		
Size of lot			
Distance to: Sewer			
Sewage disposal			
Abandoned well			
Nearest property line			
(5) Housing: Type	None - cement slab		
Condition	good		
Pit depth (*if any*)	None		
Floor (*material*)	Concrete - Slab		
Drainage	good		
(6) Well Depth			
(7) Casing: Depth			
Diameter			
Kind			
Height above floor			
Distance to highest perforations			
Surface sealed (*yes or no*)			
Gravel pack (*yes or no*)			
Second casing depth			
Second casing diameter			
Annular seal (*depth*)			
(8) Impervious Strata: Penetrated — Thickness			
Depth to			
(9) Water Levels: Depth to — Surface			
Static			
When pumping			
(10) Pump: Make	Fairbanks - Morse	Motor General Electric	
Type	Turbin	10hp	
Capacity, g.p.m.			
Lubrication	Water		
Power	Electrical		
Auxiliary power	None —	they can get water from the Laird Park well	
Control	Pressure Switch		
Discharge location	Above ground		
Discharge to	Pressure Tank		
(11) Frequency of Use	Continuous		
(12) Flood Hazard	None		
(13) Remarks and Defects (Use other side if necessary)			

Destroyed well, 1991 ?

Hawk well

(14) Show well log on other side.

RACHEL RIESS

From: RACHEL RIESS
Sent: Monday, March 11, 2013 12:56 PM
To: JANIS MEIN; Chris Brooks; KARL QUINN
Cc: BELLA BADAL; KIT MCCLURG; TOM WOLFE
Subject: RE: RE: Short Day Flex Day

Hello,

I spoke with Deputy Whipkey this morning. We discussed the fact that Far West Laboratory and Jared Steeley are reporting that they are not currently working on this water system. We also discussed that the report provided to this department previously, by Chris, is not related to the Honor Farm Community Water System. It was made clear that this system is required by regulations to have a Distribution Operator (D.O.), either on staff or by contract, and that failure to provide nitrate and bacteriological sampling for the first quarter of 2013 will require public notification.

Deputy Whipkey promised to research this matter today and follow-up with me to why GSA has not provided the required information to this department. Deputy Whipkey has been advised that if the testing information is not available by tomorrow a Notice of Violation will be issued and public notification will be implemented immediately. I will be writing the Notice of Violation and public notification today to facilitate a timely response tomorrow.

Sincerely,

Rachel Riess, REHS
Senior Environmental Health Specialist
Stanislaus County Department of Environmental Resources
3800 Cornucopia Way, Suite C
Modesto CA 95358-9494
209.525.6720 FAX 209.525.6774
Email: rariess@envres.org

-----Original Message-----
From: JANIS MEIN
Sent: Friday, March 08, 2013 12:47 PM
To: Chris Brooks; KARL QUINN; RACHEL RIESS
Cc: BELLA BADAL; KIT MCCLURG; TOM WOLFE
Subject: RE: RE: Short Day Flex Day

Hello Chris,

Could you please forward this to Deputy Whipkey or provide his email address to us? Is he the person responsible for the Honor Farm Water System?

-----Original Message-----
From: Chris Brooks [mailto:Brooksc@stancounty.com]
Sent: Friday, March 08, 2013 12:48 PM
To: JANIS MEIN; KARL QUINN; RACHEL RIESS
Cc: BELLA BADAL; KIT MCCLURG; TOM WOLFE
Subject: Re: RE: Short Day Flex Day

Yes we may to meet to talk about this can call me with time Monday to meet

Brooks,Chris
Cell: 209.652.0483
Home:
chrisbrooks2007@sbcglobal.net
Al Pacino 1992 from *Scent of a woman*

I*m not a judge or jury. But I can tell you this: he won*t sell anybody out to buy his future!! And that, my friends, is called integrity! That*s called courage! Now that*s the stuff leaders should be made of.
>>> "JANIS MEIN" <JMEIN@envres.org> 03/08/13 11:19 AM >>>
Hi Karl,

I glanced at the attached documents and these do not appear to be related to the delinquent groundwater water monitoring. The documents reference "MW" for monitoring well versus the groundwater wells that are used to serve water to consumers. In addition, I see nothing for January, February, or March 2013 water quality monitoring. As a Community Water System, the Honor Farm Water System must be overseen by a Certified Distribution Operator. If the contract with Mr. Jared Steeley was cancelled, who is the new representative? If the Honor Farm is unable to provide evidence of drinking water quality monitoring, it will need to provide Public Notification of Failure to Monitor immediately. Please forward this email to Deputy Whipkey (sp?). Do we need to schedule a meeting or conference call to remediate these issues?

From: KARL QUINN
Sent: Friday, March 08, 2013 10:18 AM
To: RACHEL RIESS
Cc: JANIS MEIN; KIT MCCLURG; BELLA BADAL
Subject: RE: Short Day Flex Day

Chris Brooks called this morning and stated the water testing report for Honor Farm was accidentally sent to the SO. He asked me to email him, so he can reply with the report. The attached document is what I just received.

Karl Quinn, R.E.H.S.

Senior Environmental Health Specialist

Stanislaus County Department of Environmental Resources

Office: (209) 525-6700

Direct: (209) 525-6757

Fax: (209) 525-6774

From: RACHEL RIESS
Sent: Thursday, March 07, 2013 4:06 PM
To: KARL QUINN
Cc: JANIS MEIN; KIT MCCLURG; BELLA BADAL
Subject: Short Day Flex Day

There is only item that is hanging for water ..... Honor Farm testing.
I left a message for Chris Brook to request bacteriological and nitrate testing for the Honor Farm WS.

Have a great weekend!

Thanks,

Rachel Riess

Rachel Riess, REHS

Senior Environmental Health Specialist

Stanislaus County Department of Environmental Resources

3800 Cornucopia Way, Suite C

Modesto CA 95358-9494

209.525.6720 FAX 209.525.6774

Email: rariess@envres.org

TOM WOLFE

From: TOM WOLFE
Sent: Tuesday, June 27, 2006 3:45 PM
To: DENISE WOOD
Subject: County Honor Farm WS

I received a call from a , who is the girlfriend of an inmate at the above facility. She is making wide accusation about the water quality at this system causing unusual medical conditions in her boyfriend, other inmates and the local residents. For example, she says there are snails and algae in the water causing skin rashes leading to flesh eating staph. infections. She also said that there are sick and dieing inmates at this facility. I told her that the well water meets state drinking water standards and this did not satisfy her. Steve S. received a call from her too with similar accusations. She does not have a specific complaint but rambles on. I called the Honor Farm and asked Deputy Hutchinson about these accusations. He said that they are unfounded and that there is nursing services available 16 hours a day for the inmates. I don't think I can help her. Should I enter this as a complaint in the data base? Thanks, Tom

Appendix B

GENERAL SERVICES AGENCY

Keith D. Boggs
Assistant Executive Officer

1010 10th Street, Suite 5400, Modesto, CA 95354

Phone: (209) 525-7650
Fax: (209) 525-7787

May 26, 2014

Guy Childs
Central Valley Regional Water Quality
Control Board
11020 Sun Center Drive #200
Rancho Cordova, California 95870-6114

Reference:
WDR Order No. 5-01-018
SMR No. BVV7-3C

Subject: April 2014 Monthly Report - Stanislaus County Laird Park County Honor Farm Wastewater Treatment Facility

Dear Mr. Childs

As required by Waste Discharge Requirements Order No. 5-01-018 this is the April 2014 Monthly Report for the Stanislaus County Laird Park County Honor Farm Wastewater Treatment Facility.

The County was presented the opportunity because of low flow and loadings to perform Biosolids (treated sludge) removal and other necessary maintenance. The major work will be performed in the next several months. The influent flow will be diverted to pond 4 where the aerators can be installed if necessary. Ponds 1 and 2 are dry and biosolids will be assessed and stockpiled for removal. After dewatering the aeration pond sludge will be dredged to a bermed drying area for drying which will take a minimum of three months to meet EPA 503 regulations. All required testing will be performed after drying and prior to disposal. Over the next few months there will only be the influent flow to sample because of the low flows. Therefore after the project begins there will only be influent test results in the monthly reports. Testing in the temporary aeration pond (pond 4) and the effluent will begin as the water level is high enough for sampling.

The total influent flow for April was 0.001312 million gallons and the daily average was 0.000044 MGD or 0.087% of design capacity. The influent data spreadsheet is attached for your review and reference.

Samples of the influent and effluent were collected on April 2nd for testing. The influent results for the BOD were 2.0 mg/L and the effluent was 23 mg/L. The removal efficiency rate of the aeration pond for the month was at the negative for the BOD as the Influent was lower than the Effluent. The low BOD numbers in the effluent is also a clear indication that the system is in the final stages of treatment and biosolids removal preparation can begin. Copies of the Influent and Effluent data log spreadsheets are attached for your review and reference.

The average dissolved oxygen content for the month in the aeration pond was 8.4 mg/L and the freeboard was 2.0 feet. The average pH in the aeration pond was 8.1 mg/l. The effluent from the aeration pond flows to pond no. 1 for percolation and evaporation. Pond no.1 is in drying mode because of the low flow and the freeboard is

7 feet. All other ponds were out of service and dry. A copy of the pond data log spreadsheet is attached for your review and reference.

The laboratory equipment calibration log has been attached to verify the calibration of the test equipment.

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

If you have any questions please contact me at (209) 652-0480 or Terry Hegel at (209) 530-9910.

Sincerely,

Scott Shook
FACILITIES MANAGER

CC: Terry Hegel
Chris Brooks

Monitoring Report Submittal Transmittal Form

Attn: Guy Childs (916) 464-4648
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive #200
Rancho Cordova, CA 95670-6114

Discharger:	Stanislaus Cnty General Services Agency
Name of Facility:	Stanislaus County Sheriff Laird Park Honor Farm
WDRs Order Number:	R5-2001-0018
WDID:	5C500112002
County:	Stanislaus

I am hereby submitting to the Central Valley Water Board the following information:

Check all that apply:

✓ Monthly Monitoring Report for the month of April 2014

1st / 2nd / 3rd / 4th (**circle one**) Quarterly Monitoring Report for the year of_____

1st / 2nd (**circle one**) Semi-annual Monitoring Report for the year _____

Annual Monitoring Report for the year _____

Violation Notification

During the monitoring period, there were / were not (circle one) any violations of the WDRs.

1. The violations were:

2. Have the violations been corrected? Yes / No. If no, what will be done to correct the violations:

Certification Statement

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

Signature: _____ Phone: (209) 652-0480

Printed Name: Scott Shook Date: May 26, 2014

SHERIFF'S DEPARTMENT LAIRD PARK COUNTY HONOR FARM STANISLAUS COUNTY

INFLUENT MONITORING - APRIL

Date	Flow	Temp	pH	BOD		TDS		SS	
	mgd	C°	pH Units	mg/L	lbs	mg/L	lbs	mg/L	lbs
04/01/14	0.000034								
04/02/14	0.000040	15.2	8.1	2.0	0.0	831.0	0.3		
04/03/14	0.000037								
04/04/14	0.000030								
04/05/14	0.000035								
04/06/14	0.000048								
04/07/14	0.000041								
04/08/14	0.000030								
04/09/14	0.000036								
04/10/14	0.000035								
04/11/14	0.000041								
04/12/14	0.000048								
04/13/14	0.000046								
04/14/14	0.000045								
04/15/14	0.000051								
04/16/14	0.000047								
04/17/14	0.000044								
04/18/14	0.000048								
04/19/14	0.000050								
04/20/14	0.000042								
04/21/14	0.000044								
04/22/14	0.000049								
04/23/14	0.000050								
04/24/14	0.000051								
04/25/14	0.000049								
04/26/14	0.000047								
04/27/14	0.000048								
04/28/14	0.000050								
04/29/14	0.000045								
04/30/14	0.000051								
Total	0.001312				0.0		9.1		
Average	0.000044	15.2	8.1	2.0	0.0	831.0	0.3		
Minimum	0.000030	15.2	8.1	2.0		831.0			
Maximum	0.000051	15.2	8.1	2.0	0.0	831.0	0.3		

SHERIFF'S DEPARTMENT LAIRD PARK COUNTY HONOR FARM STANISLAUS COUNTY

EFFLUENT MONITORING - APRIL

Date	Flow	Temp	pH	TDS		BOD		Ammonia	Nitrate	SS	
	MGD	C°	pH Units	mg/L	lbs	mg/L	lbs	as N, mg/L	as N,mg/L	mg/L	lbs
04/01/14	0.000034										
04/02/14	0.000040	114.1	8.3	971		23		0.0	0.5		
04/03/14	0.000037										
04/04/14	0.000030										
04/05/14	0.000035										
04/06/14	0.000048										
04/07/14	0.000041										
04/08/14	0.000030										
04/09/14	0.000036										
04/10/14	0.000035										
04/11/14	0.000041										
04/12/14	0.000048										
04/13/14	0.000046										
04/14/14	0.000045										
04/15/14	0.000051										
04/16/14	0.000047										
04/17/14	0.000044										
04/18/14	0.000048										
04/19/14	0.000050										
04/20/14	0.000042										
04/21/14	0.000044										
04/22/14	0.000049										
04/23/14	0.000050										
04/24/14	0.000051										
04/25/14	0.000049										
04/26/14	0.000047										
04/27/14	0.000048										
04/28/14	0.000050										
04/29/14	0.000045										
04/30/14	0.000051										
Total	0.001312				11		0				
Average	0.000044	114.1	8.3	971	0	23	0	0.0	0.5		
Minimum	0.000030	114.1	8.3	971		23		0.0	0.5		
Maximum	0.000051	114.1	8.3	971		23		0.0	0.5		

SHERIFF'S DEPARTMENT LAIRD PARK COUNTY HONOR FARM STANISLAUS COUNTY

POND MONITORING - APRIL

	Aeration Pond				.Pond #1				Pond #2				Pond #3				Pond #4			
Date	Temp °C	Freeboard Feet	DO mg/L	pH	Temp °C	Freeboard Feet	DO mg/L	pH	Temp °C	Freeboard Feet	DO mg/L	pH	Temp °C	Freeboard Feet	DO mg/L	pH	Temp °C	Freeboard Feet	DO mg/L	pH
04/02/14	11.3	2.0	11.5	8.1	NA	7.0	NA	NA	OOS				OOS				OOS			
04/10/14	17.0	2.0	7.76	8.2	NA	7.0	NA	NA												
04/16/14	18.7	2.0	7.97	8.3	NA	7.0	NA	NA												
04/24/14	24.1	2.0	7.6	8.2	NA	7.0	NA	NA												
04/30/14	17.0	2.0	6.9	8.0	NA	7.0	NA	NA												
Average	17.6	2.0	8.4	8.1	0.0	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	24.1	2.0	11.5	8.3	0.0	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Minimum	11.3	2.0	6.9	8.0	0.0	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Laboratory Equipment Calibration Log

Date	Equipment Circle DO Unit Used	Calibration method	Operator Name Print	Signature
4/2/14	9142 DO	Manufacturer's Instructions	Terry L. Hegel	[signature]
4/2/14	HI 991000 pH	Manufacturer's Instructions	Terry L. Hegel	[signature]
4/10/14	9142 DO	Manufacturer's Instructions	Terry L. Hegel	[signature]
4/10/14	HI 991000 pH	Manufacturer's Instructions	Terry L. Hegel	[signature]
4/16/14	9142 DO	Manufacturer's Instructions	Terry L. Hegel	[signature]
4/16/14	HI 991000 pH	Manufacturer's Instructions	Terry L. Hegel	[signature]
4/24/14	9142 DO	Manufacturer's Instructions	Terry L. Hegel	[signature]
4/24/14	HI 991000 pH	Manufacturer's Instructions	Terry L. Hegel	[signature]
4/30/14	9142 DO	Manufacturer's Instructions	Terry L. Hegel	[signature]
4/30/14	HI 991000 pH	Manufacturer's Instructions	Terry L. Hegel	[signature]
	9142 DO	Manufacturer's Instructions	Terry L. Hegel	
	HI 991000 pH	Manufacturer's Instructions	Terry L. Hegel	
	9142 DO	Manufacturer's Instructions	Terry L. Hegel	
	HI 991000 pH	Manufacturer's Instructions	Terry L. Hegel	
	9142 DO	Manufacturer's Instructions	Terry L. Hegel	
	HI 991000 pH	Manufacturer's Instructions	Terry L. Hegel	
	9142 DO	Manufacturer's Instructions	Terry L. Hegel	
	HI 991000 pH	Manufacturer's Instructions	Terry L. Hegel	
	9142 DO	Manufacturer's Instructions	Terry L. Hegel	
	HI 991000 pH	Manufacturer's Instructions	Terry L. Hegel	
	9142 DO	Manufacturer's Instructions	Terry L. Hegel	
	HI 991000 pH	Manufacturer's Instructions	Terry L. Hegel	
	9142 DO	Manufacturer's Instructions	Terry L. Hegel	
	HI 991000 pH	Manufacturer's Instructions	Terry L. Hegel	
	Comments:			

Appendix C

BARNES®

www.cranepumps.com

Series 3SE-L

2½" Spherical Solids Handling Single Seal

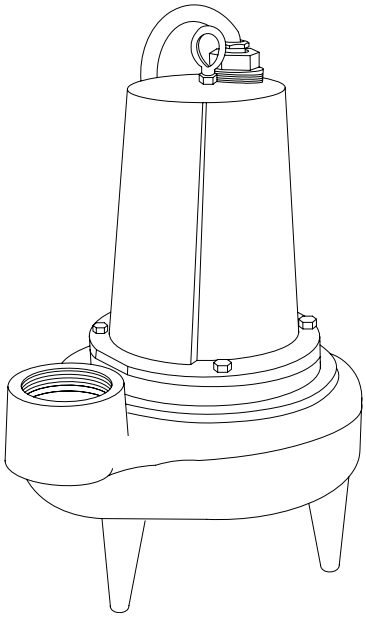
I&O Manual

1½", 2" & 3" Discharge

DISCHARGE		3" NPT, Vertical
LIQUID TEMPERATURE		104°F (40°C) Continuous
VOLUTE		Cast Iron ASTM A-48, Class 30
MOTOR HOUSING		Cast Iron ASTM A-48, Class 30
SEAL PLATE		Cast Iron ASTM A-48, Class 30
IMPELLER:	*Design*	2 Vane, open with pump out vanes on back side. Dynamically balanced, ISO G6.3
	Material	Cast Iron ASTM A-48, Class 30
SHAFT		416 Stainless Steel
SQUARE RINGS		Buna-N
HARDWARE		300 Series Stainless Steel
PAINT		Air Dry Enamel
SEAL:	*Design*	Single Mechanical
	Material	Carbon/Ceramic/Buna-N Hardware -300 Series Stainless
CORD ENTRY		30 ft. (9.1m) Cord. Quick connect custom molded for sealing and strain relief
SPEED		1750 RPM (Nominal), 60Hz
UPPER BEARING		Single Row, Ball, Oil lubricated
	Load	Radial
LOWER BEARING		Single Row, Ball, Oil lubricated
	Load	Radial & Thrust
MOTOR:	*Design*	NEMA L -Single Phase, NEMA B -Three phase Torque Curve, Oil Filled, Squirrel Cage Induction
	Insulation	Class B
SINGLE PHASE		Permanent Split Capacitor (PSC) Includes Overload Protection in Motor
THREE PHASE		200-240/480 is Tri-Voltage. 600V. Requires Overload Protection to be included in control panel
OPTIONAL EQUIPMENT		Seal Material, Impeller Trims, Additional cord

RECOMMENDED:

	Accessories	Break Away Fitting (BAF) Check Valve Control Panel
	Seal Kit PN	130181
	Service Kit PN	130208



Series: 3SE-L
1.5 & 2HP, 1750RPM, 60Hz

Submersible Wastewater Pump Association SWPA MEMBER

CSA 108 - File No. L16567
UL 778

Sample Specifications: Section 1 Page 3.

DESCRIPTION:

SUBMERSIBLE NON-CLOG SEWAGE PUMP DESIGNED FOR TYPICAL RAW SEWAGE APPLICATIONS

Series 3SE-L

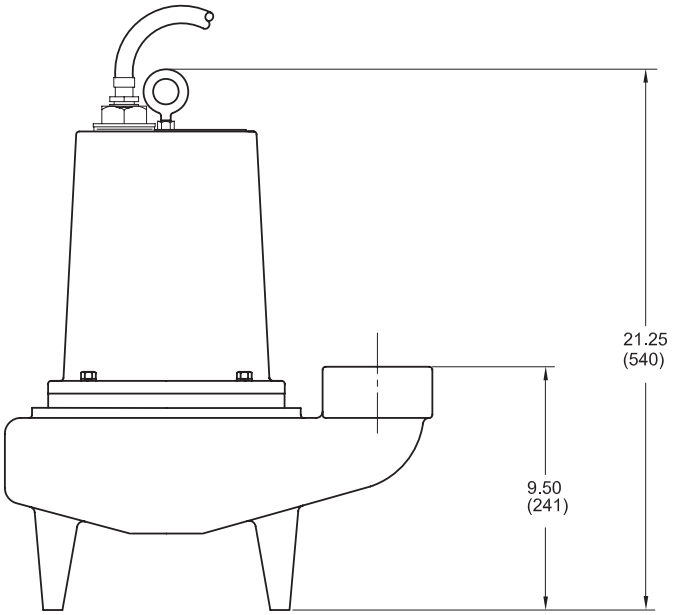
2½" Spherical Solids Handling
Single Seal

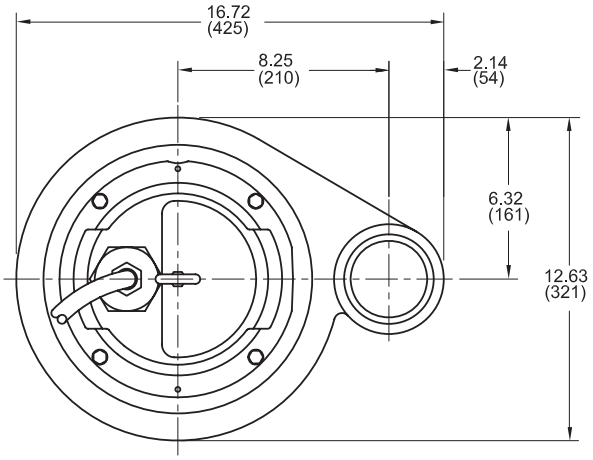
BARNES®
www.cranepumps.com

1½", 2" & 3" Discharge

I&O Manual

inches
(mm)





MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D inch (mm)
3SE1524L	085527	1.5	230/1	60	1750	C	16.0	44.6	10/3	SOW	0.690 (17.5)
3SE1594L	085529	1.5	200-230/3	60	1750	D/G	13.3/11.6	35.8/41.2	10/4	SOW	0.750 (19.1)
3SE1544L	085530	1.5	460/3	60	1750	G	5.8	20.6	10/4	SOW	0.750 (19.1)
3SE1554L	089289	1.5	575/3	60	1750	G	4.6	16.4	10/4	SOW	0.750 (19.1)
3SE2024L	085531	2.0	230/1	60	1750	A	19.0	44.6	10/3	SOW	0.690 (17.5)
3SE2094L	085533	2.0	200-230/3	60	1750	B/D	15.2/13.2	35.8/41.2	10/4	SOW	0.750 (19.1)
3SE2044L	085534	2.0	460/3	60	1750	D	6.6	20.6	10/4	SOW	0.750 (19.1)
3SE2054L	089290	2.0	575/3	60	1750	D	5.2	16.4	10/4	SOW	0.750 (19.1)

IMPORTANT !

1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

BARNES®

www.cranepumps.com

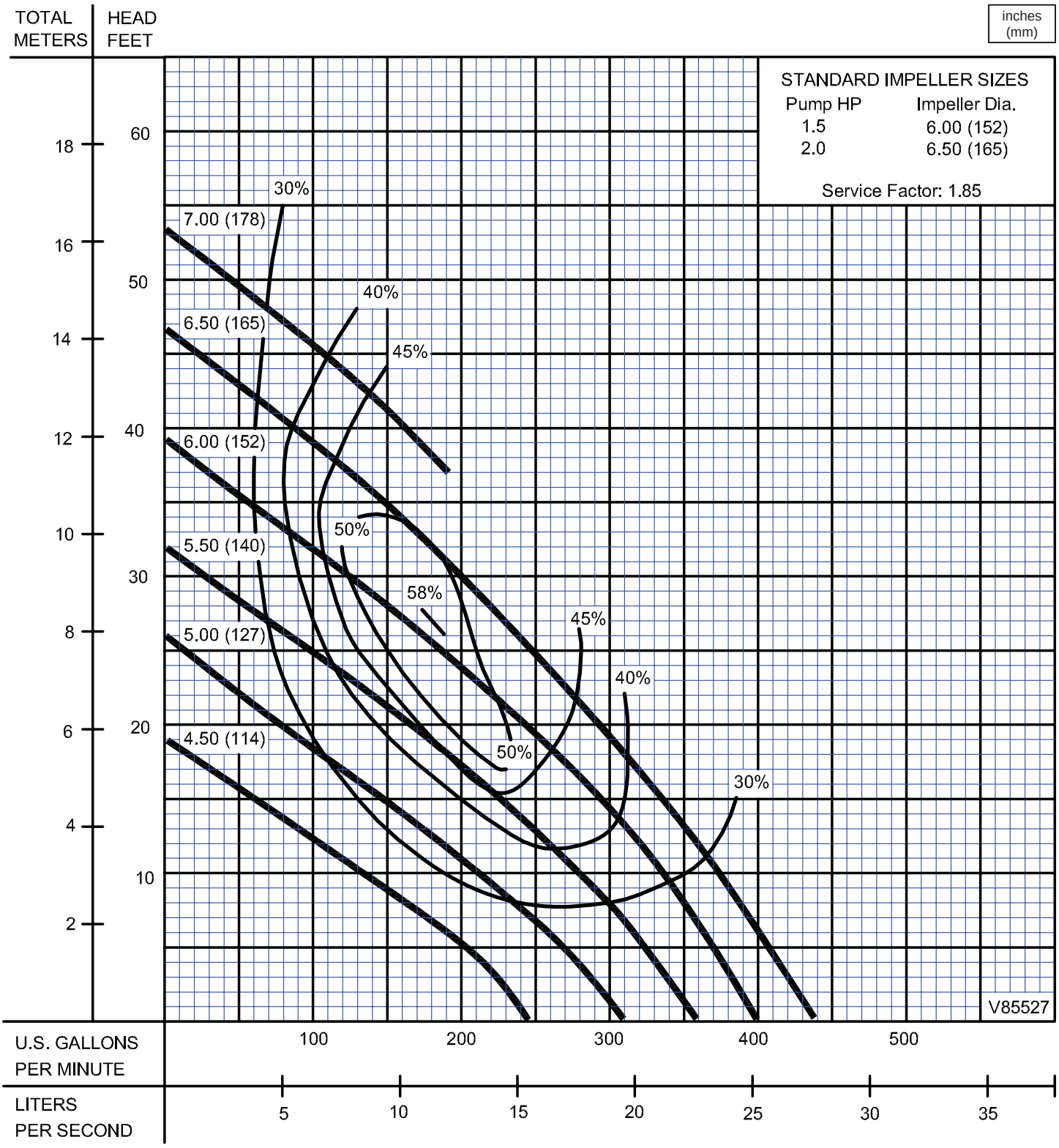
Series 3SE-L

Performance Curve

1.5 & 2.0HP, 1750RPM, 60Hz

I&O Manual

1½", 2" & 3" Discharge



Testing is performed with water, specific gravity 1.0 @ 68° F @ (20°C), other fluids may vary performance

Appendix D

STANISLAUS COUNTY
HONOR FARM
WASTEWATER TREATMENT FACILITY

MASTER PLAN
PHASING PLAN FOR IMPROVEMENTS

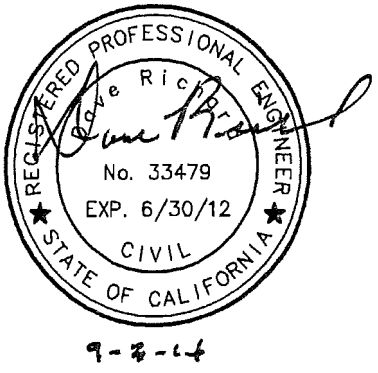
June 2010

NOLTE

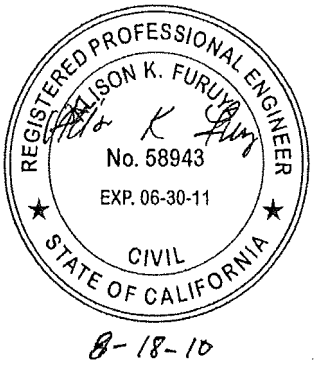
BEYOND ENGINEERING

STANISLAUS COUNTY
HONOR FARM
WASTEWATER TREATMENT FACILITY

MASTER PLAN
PHASING PLAN FOR IMPROVEMENTS



9-2-10



8-18-10

June 2010

Prepared for:

Stanislaus County Capital Projects
825 12th Street
Modesto, CA 95354

Prepared by:

Nolte Associates, Inc.
1215 West Center Street, Suite 201
Manteca, CA 95337
(209) 239-9080 ▪ (209) 239-4166 (Fax)

TABLE OF CONTENTS

		Page
1.0	Objectives	1
2.0	Background	1
	2.1 Facility Description	1
	2.2 Wastewater Characteristics and Plant Performance	3
3.0	Regulatory Setting	5
4.0	Summary of Previous Evaluations	6
5.0	Recommended Improvements	7
	5.1 Lift Station	7
	5.2 Headworks	8
	5.3 Aeration Pond	8
	5.4 Storage and Disposal System	11
	5.5 Electrical System	12
	5.6 Groundwater Monitoring	12
6.0	Summary and Prioritization of Recommended Improvements	12
7.0	Probable Construction Cost	13
8.0	Schedule Considerations	14
9.0	References	15

LIST OF APPENDICES

Appendix A Order No. 5-01-018 Waste Discharge Requirements

Appendix B Summary of Monthly Monitoring Data

Appendix C Correspondence with Regional Board

Appendix D Rationale for Rating of Priorities

Appendix E Probable Construction Cost Breakdown

Appendix F Projected Design and Construction Schedules

LIST OF TABLES

Table 1 Wastewater Treatment Pond Characteristics 3
Table 2 Influent Wastewater Flows To The Honor Farm WWTF 2005-2009 4
Table 3 Historical Influent and Effluent BOD_5 Concentrations at the Honor Farm WWTF 2005-2009 4
Table 4 Historical Influent Parameter Concentrations at the Honor Farm WWTF 2005-2009 5
Table 5 Historical Effluent Parameter Concentrations at the Honor Farm WWTF 2005-2009 5
Table 6 Summary of Effluent Limitations for the Honor Farm WWTF 5
Table 7 Summary of Discharge Specifications/Prohibitions for the Honor Farm WWTF 6
Table 8 Honor Farm Wastewater Treatment Facility Final Assessment Report Recommended Improvements 7
Table 9 BOD_5 Reduction Model Based on Current BOD_5 Reduction for the Honor Farm WWTF 9
Table 10 Projected Aeration Power Requirements Honor Farm WWTF 11
Table 11 Rating System for Prioritizing Improvements 13
Table 12 Ratings Assigned to Recommended Improvements 13
Table 13 Summary of Probable Construction Costs for Recommended Improvements 14
Table 14 Master Schedule for Recommended Improvements 15

LIST OF FIGURES

Figure 1 Honor Farm Wastewater Treatment Facility Site Plan for Existing Conditions 2
Figure 2 Proposed Layout 10

STANISLAUS COUNTY
HONOR FARM
WASTEWATER TREATMENT FACILITY

MASTER PLAN
PHASING PLAN FOR IMPROVEMENTS

June 2010

The Stanislaus County (County) Honor Farm Wastewater Treatment Facility (WWTF) serves the County Honor Farm facility, located at 8224 West Grayson Road in Modesto, California. This Master Plan report (Master Plan) will review background information regarding the WWTF, summarize regulatory issues, and present recommendations for improvements to the facility. The recommended improvements were prioritized for use in determining appropriate phasing. Probable construction costs and implementation timelines are provided for each of the recommended improvements.

1.0 OBJECTIVES

The objectives of the Master Plan are as follows:

1. Review existing conditions at the WWTF.

2. Provide recommendations for improvements to maintain the operation of the facility, improve personnel safety, and meet regulatory requirements.

3. Provide estimates of probable construction costs for the recommended improvements.

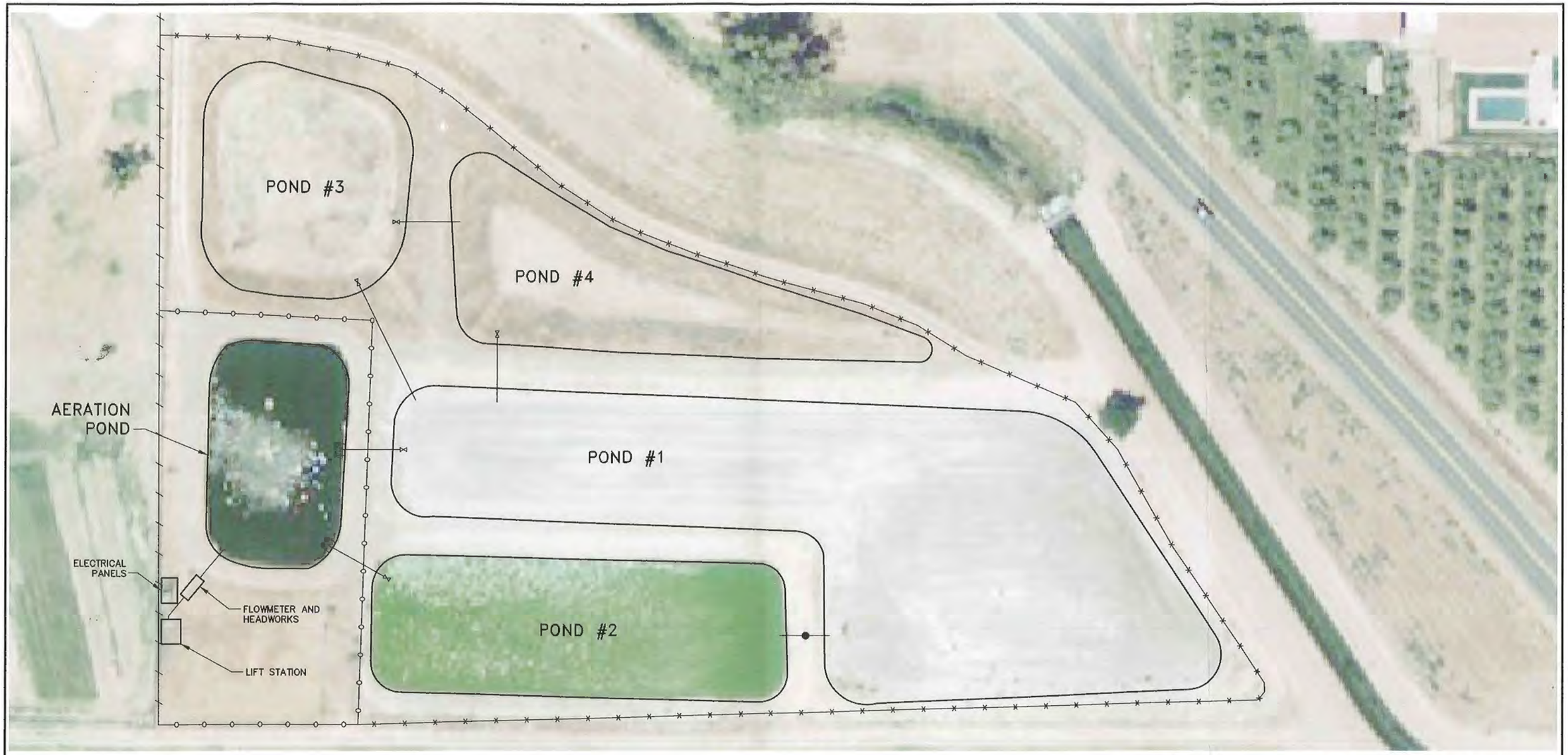
4. Provide a master schedule for use in phasing of the improvements.

2.0 BACKGROUND

Background information includes a description of the WWTF, a summary of wastewater characteristics, and a review of facility performance. Each is presented below.

2.1 Facility Description

The WWTF is a 50,000 gpd capacity aerated pond/percolation pond wastewater treatment system operating under Regional Water Quality Control Board (Regional Board) Waste Discharge Requirements (WDRs) Order No. 5-01-018 since January 2001 (Appendix A) [1]. The WWTF consists of a lift station, headworks, one aerated pond, and four percolation ponds as shown in Figure 1. Interconnecting piping and valving for the WWTF is included in Figure 1. The lift station is located in the southeast corner of the WWTF property and receives flow from



POND	SURFACE AREA (AC)
1	1.68
2	0.60
3	0.37
4	0.43

LEGEND

- EXISTING PIPE
- EXISTING BUTTERFLY VALVE
- EXISTING BARBED WIRE FENCING
- EXISTING CHAIN-LINK W/ BARBED WIRE FENCING
- EXISTING SECURITY FENCING

NOTES

PONDS #1, #2, #3, AND #4 ARE PERCOLATION PONDS.

N

0' 30' 60'
SCALE: 1"=60'

FIGURE 1

STANISLAUS COUNTY HONOR FARM
WASTEWATER TREATMENT FACILITY
MASTER PLAN

SITE PLAN FOR EXISTING CONDITIONS

NOLTE
BEYOND ENGINEERING

N:\MTB019500\CADD\EXHIBITS\MASTER PLAN\FIGURE 1 - SITE PLAN.DWG SEM 6/22/10

the Honor Farm collection system. The lift station pumps influent wastewater to the headworks. The headworks is a concrete structure with a magnetic flow meter located immediately upstream and a stationary bar screen located within the structure. Following the headworks, flow is directed to the Aeration Pond then to the percolation ponds, Ponds #1 through #4. The Aeration Pond is equipped with two 5-hp aerators and one 7-hp aerator. Three groundwater monitoring wells are located at the facility.

Historical records indicate that this facility was planned for operation in the 1950s and is currently sized to serve 425 inmates, equating to an estimated flow of 120 gallons per day per capita (gpcd). The facility originally consisted of one aeration pond and two percolation ponds. Ponds #3 and #4 were added in 2001.

On July 1, 2010, the rated capacity of the Honor Farm will be reduced to 85 inmates, equating to an estimated total flow of 10,200 gallons per day (gpd).

Table 1 summarizes characteristics of the ponds at the WWTF.

TABLE 1
WASTEWATER TREATMENT POND CHARACTERISTICS

Pond Number	Pond Surface Area (ac)	Side Slope (-)	Water Depth (ft)	Freeboard (ft)	Volume[a] (MG)
Aeration Pond[b]	0.25[c]	4:1	6	2	0.2
Pond #1[b]	1.68[d]	4:1	6	2	1.6
Pond #2[b]	0.60[d]	4:1	6	2	0.45
Pond #3[e]	0.37[d]	2:1	7	2	0.90
Pond #4[e]	0.43[d]	2:1	7	2	0.75

[a] Volumes were calculated from the information presented in the table

[b] Side slope and water depth information for Aeration Pond, Pond #1, and Pond #2 were approximated based on typical design criteria and information provided in *Wastewater Facility Evaluation Final Assessment Report* by Jared Steeley [2]

[c] Water surface area from WDRs [1]

[d] Water surface area from Reference [2]

[e] Characteristics based on design drawings prepared by Harding Lawson Associates, March 19, 1999

2.2 Wastewater Characteristics and Plant Performance

Monthly monitoring reports submitted to the Regional Board from January 2005 to December 2009 were reviewed as part of this Master Plan to establish historical flow, operation, influent water quality, and effluent water quality data. This information was evaluated to determine compliance with WDR requirements and potential improvements, if necessary, to maintain or attain compliance. Table 2 summarizes historical flow information for the WWTF.

TABLE 2
INFLUENT WASTEWATER FLOWS TO THE HONOR FARM WWTF
2005-2009

Year	Average Daily Flow, gpd
2005	26,300
2006	26,400
2007[a]	26,800
2008[a]	26,200
2009	25,900
Average	26,300

[a] Values for October 2007 and January-May 2008 are not available.

Influent and effluent biological oxygen demand (BOD_5) concentrations are measured on a monthly basis and are summarized in Table 3. The average influent BOD_5 concentration was 200 mg/L with minimum and maximum concentration of 54 mg/L and 676 mg/L, respectively. Based on this characterization, raw wastewater strength would be classified as "medium" [3]. The average effluent BOD_5 concentration was 78 mg/L. Detailed flow and BOD_5 data are presented in Appendix B.

TABLE 3
HISTORICAL INFLUENT AND EFFLUENT BOD_5 CONCENTRATIONS
AT THE HONOR FARM WWTF
2005-2009

Item	Influent BOD_5, mg/L	Effluent BOD_5, mg/L
Average	203	78
Minimum	54	12
Maximum	676	211

In addition to BOD_5, influent is sampled on a monthly basis for pH and total dissolved solids (TDS) and effluent is sampled monthly for pH, TDS, ammonia (as nitrogen), and nitrate (as nitrogen). Average, minimum, and maximum concentrations for these parameters are summarized in Tables 4 and 5.

TABLE 4
HISTORICAL INFLUENT PARAMETER CONCENTRATIONS
AT THE HONOR FARM WWTF
2005-2009

Item	pH, units	TDS, mg/L
Average	8.0	957
Minimum	6.7	550
Maximum	9.1	1,270

TABLE 5
HISTORICAL EFFLUENT PARAMETER CONCENTRATIONS
AT THE HONOR FARM WWTF
2005-2009

Item	pH, units	TDS, mg/L	Ammonia (as nitrogen), mg/L	Nitrate (as nitrogen), mg/L
Average	7.9	933	19	5
Minimum	7.2	688	< 1	< 1
Maximum	9.3	1,050	53	35

3.0 REGULATORY SETTING

The WDRs for the WWTF include specific effluent water quality limitations and performance requirements, as well as specific reporting provisions. A review of the WDRs is provided below.

The WDRs describe the WWTF as having a design capacity of 55,000 gpd and consisting of an unlined aeration pond and two unlined facultative ponds, with the construction of two additional facultative ponds. Specific parameter requirements contained in the WDRs are summarized in Tables 6 and 7.

TABLE 6
SUMMARY OF EFFLUENT LIMITATIONS
FOR THE HONOR FARM WWTF [1]

Parameter	30-day Average Limit	Daily Maximum Limit
BOD_5	40 mg/L	90 mg/L

TABLE 7
SUMMARY OF DISCHARGE SPECIFICATIONS/PROHIBITIONS
FOR THE HONOR FARM WWTF [1]

Specification	Requirement
Average daily dry weather flow	Shall not exceed 55,000 gpd
Dissolved oxygen level in ponds	Minimum of 1.0 mg/L in upper 1 foot of wastewater in ponds
Freeboard	Minimum of two feet vertically from water surface to lowest point of overflow
pH	Shall not be less than 6.5 or greater than 8.5

The flows to the WWTF are below the permitted flows, and dissolved oxygen and freeboard are typically in compliance with the WDRs. On occasion, the effluent pH has exceeded the WDRs. As such, the most significant compliance issue at the WWTF is effluent BOD_5. Average effluent BOD_5 concentrations are 78 mg/L.

As part of this Master Plan, regulatory input on requirements associated with potential improvements was received. Based on feedback from the Regional Board that no new requirements were anticipated, this Master Plan did not consider potential changes to the WDRs. Copies of correspondence with the Regional Board are included in Appendix C.

4.0 SUMMARY OF PREVIOUS EVALUATIONS

A Final Assessment Report (FAR), which evaluated the WWTF, was completed in August 2008 by Jared Steeley Wastewater Consulting [2]. The FAR reviewed the existing conditions at the WWTF and provided recommendations. The evaluation included near term and long term recommendations for operating and maintaining the WWTF. These recommendations are summarized in Table 8.

TABLE 8
HONOR FARM WASTEWATER TREATMENT FACILITY
FINAL ASSESSMENT REPORT
RECOMMENDED IMPROVEMENTS

Category	Recommended Improvements	
	Maintenance	**Facility Improvements**
Near Term	1. Increase cleaning and maintenance of lift station. 2. Hire a licensed State of California wastewater operator to manage and oversee operations of the plant, submission of monitoring reports, and implementation of improvements to ensure plant is complying with WDR requirements. 3. Calibrate flow meter. 4. Regularly check the collection system for debris. 5. Check the condition of the aerators and performing regular maintenance.	1. Replace existing electrical panels, wiring, conduits, and controls. 2. Remove sludge in the Aeration Pond.
Long Term	1. Clean ponds of weeds and debris. 2. Utilize bait stations to mitigate rodents. 3. Addition of life preservers at sides of each pond.	1. Separate plumbing of storm lines to mitigate Inflow/Infiltration (I/I). 2. Fence all ponds and add proper signage. 3. Add crushed rock to access roads to prevent erosion and rutting. 4. Add a groundwater monitoring well down gradient of the percolation ponds.

Since the completion of the evaluation, the County has executed an operations contract with a licensed wastewater treatment operator. Because the operations contract is expected to address the majority of the maintenance issues discussed in the FAR, this Master Plan focused on facility improvements.

5.0 RECOMMENDED IMPROVEMENTS

Following the review of historical monitoring reports, previous evaluations, and a site visit, recommended improvements to the WWTF were developed. The recommended improvements are based on maintaining operation of the WWTF while meeting the following objectives:

1. Improving safety for operational personnel.

2. Achieving regulatory compliance.

Recommended improvements by process area are presented below.

5.1 Lift Station

Minimization of raw sewage overflows is of utmost importance with regard to both regulatory compliance and safety. Overflows at the WWTF have mainly occurred at the lift station. The cause of the raw sewage overflows has been attributed to an abundance of grease, solids floating

in the sump, and an isolated security breach. The FAR recommended a regular maintenance schedule for the sump. Additional physical improvements to the lift station do not appear to be necessary at this time.

If operational issues continue at the lift station after implementation of improved regular maintenance activities, addition of a back-up level float switch and/or alarm should be considered to increase system redundancy and reliability.

5.2 Headworks

The FAR suggested the flow meter at the headworks may be better positioned to allow for the recommended straight pipe length before and after the meter. Following further investigation, because of the small size of the flow meter, sufficient length appears to be provided.

Screening at the headworks could be improved to reduce the presence of floatables and debris in the treatment and disposal ponds. However, this issue does not affect regulatory compliance or safety at the facility and therefore is not critical. Depending on future improvements at the facility and availability of funds, upgrades to the screening process may be considered.

5.3 Aeration Pond

The majority of the BOD_5 removal occurs in the Aeration Pond at the WWTF. To identify recommended improvements to the treatment system, a BOD_5 reduction model was developed and calibrated using data from the Monthly Monitoring Reports submitted to the Regional Board. The analysis used a complete-mix model and first-order reaction-rate kinetics to approximate performance. Based on existing performance data, a reaction rate of 0.20 d^{-1} was estimated. Table 9 summarizes the results of the model and typical values for design parameters of treatment pond systems.

Because of the reduction in inmate population, the flow to the WWTF is expected to decrease to 10,200 gpd. Using the calculated reaction rate and an effluent BOD_5 concentration goal of 40 mg/L, the model estimated that a total treatment volume of 0.20 million gallons (MG) was required for future anticipated flows. For comparison, the approximate volume in Aeration Pond is 0.2 MG.

TABLE 9
BOD_5 REDUCTION MODEL[a]
BASED ON CURRENT BOD_5 REDUCTION
FOR THE HONOR FARM WWTF

Parameter	Aeration Pond	Typical Values
Flow, average daily, gpd	26,000[a]	
Aeration Pond volume, MG	0.2	
Residence time, day	8	5-20[b]
Water surface area, acre	0.20	
Influent BOD, mg/L	203[a]	
Effluent BOD, mg/L	78[a]	
BOD loading, lb/acre·d	220	40-360[b]
BOD reaction rate coefficient k, d^{-1}	0.20	

[a] BOD_5 reduction model based on annual average flow and water quality conditions from 2005-2009.
[b] Reference [3]

The results of the model indicate that the existing Aeration Pond may be sized adequately to treat anticipated future flows. The County is planning to monitor the resulting changes to influent and effluent quality to the WWTF following the inmate reduction to determine if additional improvements to the Aeration Pond are warranted. The County will re-evaluate the timing of improvements after a two month monitoring period.

Despite the potential ability of the Aeration Pond to treat project flows, conversion of Pond #3 to an aeration pond is recommended to: 1) improve operational flexibility for operation of the WWTF by allowing the ponds to function in parallel or in series; 2) provide the opportunity to bypass flow from the Aeration Pond while maintaining operation of the WWTF; and 3) improve performance of the WWTF by increasing the residence time for treatment. Pond #3 is most similar in size to the existing Aeration Pond and also adjacent to the Aeration Pond, minimizing additional piping requirements. The proposed layout of the WWTF is provided in Figure 2. The existing Aeration Pond is presented in the figure as Aeration Pond #1, with the additional aeration pond labeled as Aeration Pond #2. Aeration Pond #2 would have an approximate volume of 0.9 MG.

POND	SURFACE AREA (AC)
1	1.68
2	0.60
3	0.37
4	0.43

LEGEND

- EXISTING PIPE
- PROPOSED PIPE
- EXISTING BUTTERFLY VALVE
- PROPOSED VALVE
- EXISTING BARBED WIRE FENCING
- EXISTING CHAIN-LINK W/ BARBED WIRE FENCING
- PROPOSED CHAIN-LINK W/ BARBED WIRE FENCING
- EXISTING SECURITY FENCING

NOTES

PONDS #1, #2, #3, AND #4 ARE PERCOLATION PONDS.

N

0' 30' 60'
SCALE: 1"=60'

FIGURE 2

STANISLAUS COUNTY HONOR FARM
WASTEWATER TREATMENT FACILITY
MASTER PLAN

PROPOSED LAYOUT

NOLTE
BEYOND ENGINEERING

N:\MTB019500\CADD\EXHIBITS\MASTER PLAN\FIGURE 2 -- PROPOSED LAYOUT.DWG SC 6/22/10

Aeration is required to provide sufficient oxygen to facilitate the reduction in BOD_5 loading and to maintain dissolved oxygen (DO) levels in the ponds. Preliminary calculations indicate that one 3 hp aerator would sufficiently aerate Aeration Pond #1 and two 5 hp aerators would sufficiently aerate Aeration Pond #2 for the projected wastewater flows. Assuming that the WWTF has a 200 Amp service, there should be adequate power available for these aerators. Aeration requirements are summarized in Table 10. Aerators should be sized to provide adequate oxygen transfer for BOD_5 reduction and mixing in the ponds, assuming all of the flow was going to each pond. The power requirement for adequate mixing for both Aeration Pond #1 and Aeration Pond #2 is greater than the requirements for oxygen transfer. Mixing requirements therefore govern.

TABLE 10
PROJECTED AERATION POWER REQUIREMENTS[a]
HONOR FARM WWTF

Parameter	Aeration Pond #1	Aeration Pond #2
Average projected flow rate, gpd	10,200	10,200
Pond volume, MG	0.2	0.9
Estimated BOD removal efficiency [b]	80%	80%
Influent BOD, mg/L	200	200
Effluent BOD, mg/L	40	40
O_2 to BOD ratio, lb O_2/lb BOD removed [b]	1.5	1.5
O_2 required (AOTR), lb/d [b]	26	26
O_2 transfer rate, lb O_2/hp·hr	2.5	2.5
Power required for adequate oxygen transfer, HP	1	1
Power required for mixing, HP [c]	2	9
Recommended total aerator power, HP[d]	3	10

[a] Aeration requirements based on average flow, water quality conditions, and current permit requirements.
[b] AOTR = [BOD_5 Loading to Pond 1] x [O_2 to BOD_5 Ratio].
[c] Typical power requirement for mixing is 10 HP/MG.
[d] Recommended total aerator power may differ from power requirements to account for standard motor horsepower sizes.

Following the conversion of Pond #3 to Aeration Pond #2, additional operational flexibility will be available to plan future improvements to Aeration Pond #1 while maintaining treatment capacity. The calculations summarized in Table 10 indicate the lower power aerators may be sufficient for Aeration Pond #1. Currently, Aeration Pond #1 has three aerators with a total horsepower of 17.

5.4 Storage and Disposal System

The influent flow to the WWTF is less than the permitted flow of 55,000 gpd. Reports of issues with storage or disposal of the treated wastewater have not been recorded. No recommended

improvements beyond the regular maintenance of the storage ponds (weeding and discing) are deemed necessary for this component of the facility.

5.5 Electrical System

One of the major safety concerns documented in the FAR and confirmed by a site visit include the electrical panels and wiring at the WWTF. Replacement of existing service panels, motor starters, controls, transformers, conduits, and wires is recommended.

5.6 Groundwater Monitoring

Groundwater monitoring reports for the WWTF are submitted to the Regional Board on a quarterly basis. The reports indicate that an additional groundwater monitoring well located west of Pond #4 may be useful in better assessing the effect of the WWTF on groundwater, as well as the groundwater gradient in the area. However, based on correspondence with the Regional Board, this additional monitoring well is not required and can be installed at the future discretion of the County.

5.7 Site

The area around the Aeration Pond, lift station, electrical panels, and headworks is fenced. Barbed wire fencing exists around Ponds #1, #2, and #3. Improved fencing around Pond #3 is recommended, in particular with regard to the recommended future conversion of Pond #3 to an aeration pond. The area with the recommended additional fencing is shown in Figure 2.

6.0 SUMMARY AND PRIORITIZATION OF RECOMMENDED IMPROVEMENTS

The improvements recommended in Section 5 were prioritized based on safety and regulatory requirements. Prioritizing the improvements will ensure early completion of the most critical improvements. To prioritize the improvements, a rating system for assigning a score based on safety and regulatory requirements was developed. The rating system is summarized in Table 11.

TABLE 11
RATING SYSTEM FOR PRIORITIZING IMPROVEMENTS

Category	Description	Rating
Safety	Imminent safety concern	10
	Safety concern, but some existing measures currently in place	5
	Improvement does not address a safety issue	0
Regulatory Requirements	Allows facility to comply with regulatory requirements	10
	Improvement is not required at this time, but does improve the facility's ability to meet a regulatory requirement	5
	Improvement is not related to a regulatory requirement	0

The ratings assigned to each improvement are presented in Table 12. The improvement with the greatest total score was assigned the highest priority. Table 12 lists improvements in order of score, from highest to lowest. Additional details regarding the rationale for assigning the ratings to each improvement is provided in Appendix D.

Construction sequencing issues were also considered when establishing the final prioritized list of improvements. For example, although Items 2 and 3 have the same total rating, conversion of Pond #3 to an aeration pond is listed first because the fencing around Pond #3 is not an issue until after aeration equipment is added to the pond.

TABLE 12
RATINGS ASSIGNED TO RECOMMENDED IMPROVEMENTS

		Rating		
Item	Improvement	Safety	Regulatory Requirements	Total
1	Upgrade of electrical panels, including anticipated future additional loads	10	5	15
2	Conversion of Pond #3 to an aeration pond (includes piping and aeration)	0	10	10
3	Improved fencing and signage around Pond #3 (future Aeration Pond #2)	5	5	10

7.0 PROBABLE CONSTRUCTION COST

Probable construction costs for the recommended improvements are presented in Table 13. The total probable construction cost for all of the improvements, including a 20 percent contingency, is approximately $250,000. A detailed breakdown of the probable construction costs are provided in Appendix E.

TABLE 13
SUMMARY OF PROBABLE CONSTRUCTION COSTS
FOR RECOMMENDED IMPROVEMENTS

Item	Description of Improvement	Probable Construction Cost, $
1	Upgrade of electrical panels	65,000
2	Conversion of Pond #3 to an aeration pond[a]	135,000
3	Improved fencing and signage around Pond #3 (future Aeration Pond #2)	10,000
	Subtotal	210,000
	Contingency, 20% (rounded)	40,000
	Total Probable Construction Cost	250,000
	Engineering, Administration, Construction Management, 25%	62,500
	Total Project Costs	312,500

[a] Includes earthwork, piping and appurtenances, and aerators

8.0 SCHEDULE CONSIDERATIONS

The recommended improvements can be phased depending on priority and available funding. For planning purposes, Table 14 summarizes approximate timelines for design and construction of each improvement. Table 14 reflects the priorities described earlier for phasing of the improvements. The design timeline includes a 50%, 90%, and final submittal, and provides 2-week review periods for the County for the 50% and 90% submittals for each improvement project. For improving the fencing and signage around Pond #3, a more streamlined schedule may occur based on the scope of the project. Final design documents will be submitted to the Regional Board, but approval from the Regional Board is not required. The construction timelines factors typical requirements for contractor mobilization and procurement, fabrication, and delivery of equipment. A more detailed schedule which serves as the basis for Table 14 is provided in Appendix F.

TABLE 14
MASTER SCHEDULE FOR RECOMMENDED IMPROVEMENTS

Item	Description of Improvement	Estimated Design Timeline, working days[a]	Estimated Bidding Period, working days[b]	Estimated Construction Timeline, working days
1	Upgrade of electrical panels	55	40	60
2	Conversion of Pond #3 to an aeration pond	80	40	110
3	Improved fencing and signage around Pond #3 (future Aeration Pond #2)	35	40	20

[a] Assumes designer has been selected. Includes 50%, 90%, and final submittals, with two-week review period for 50% and 90% submittals.

[b] Assumes two week approval period for bidding, a four week bidding period, and two week approval period to award bid.

9.0 REFERENCES

[1] California Regional Water Quality Control Board, Central Valley Region, Order No. 5-01-018, *Waste Discharge Requirements for Stanislaus County Department of Public Works, Parks and Recreation Department, and Sheriff's Department Laird Park County Honor Farm*, 26 January 2001.

[2] *Stanislaus County Honor Farm Wastewater Facility Evaluation Final Assessment Report*, prepared by Jared Steeley Wastewater Consulting, August 31, 2008.

[3] Reed, Sherwood C., Donald W. Crites, and E. Joe Middlebrooks, Natural Systems for Waste Management and Treatment, McGraw-Hill, Inc., New York, NY, 1995.

APPENDIX A

ORDER NO. 5-01-018
WASTE DISCHARGE REQUIREMENTS

California Regional Water Quality Control Board
Central Valley Region
Robert Schneider, Chair

Winston H. Hickox
Secretary for Environmental Protection

Gray Davis
Governor

Sacramento Main Office
Internet Address: http://www.swrcb.ca.gov/~rwqcb5
3443 Routier Road, Suite A, Sacramento, California 95827-3003
Phone (916) 255-3000 • FAX (916) 255-3015

6 February 2001

CERTIFIED MAIL
7099 3220 0005 3846 5759

Mr. Robert Macha
Stanislaus County
Department of Public Works
1010 10th Street, Suite 3500
Modesto, CA 95358

CERTIFIED MAIL
7099 3220 0005 3846 5766

Mr. Steven Brodie
Stanislaus County Parks and
Recreation Department
3800 Cornucopia Way
Modesto, CA 95354

CERTIFIED MAIL
7099 3220 0005 3846 5773

Sergeant Temple
Stanislaus County Sheriff's
Department
8224 West Grayson Road
Modesto, CA 95358

NOTICE OF ADOPTION
OF
REVISED WASTE DISCHARGE REQUIREMENTS
FOR
STANISLAUS COUNTY PARKS AND RECREATION DEPARTMENT
LAIRD PARK COUNTY HONOR FARM
STANISLAUS COUNTY

Waste Discharge Requirements (WDRs) Order No. 5-01-018 for Laird Park County Honor Farm was adopted by the California Regional Water Quality Control Board, Central Valley Region, at its 26 January 2001 meeting.

Please note that Provision F.1 specifies the contents and due dates for technical reports and other documents that the you must submit. The first submittal, which is due by **30 June 2001**, is the Groundwater Monitoring Workplan. Guidance for preparing the workplan is provided in Attachment C.

If you have any questions, please call Anne Olson at (916) 255-3140.

Wendy Wyels

WENDY S. WYELS, Chief
Waste Discharge to Land Unit
Lower San Joaquin River Watershed

Enclosures - Adopted Order
Standard Provisions (discharger only)

cc list: see next page

cc: Frances McChesney, Office of Chief Counsel, State Water Resources Control Board, Sacramento
John Youngerman, Division of Water Quality, State Water Resources Control Board, Sacramento
Joseph Spano, Department of Health Services, Office of Drinking Water, Stockton
Department of Health Services, Environmental Management Branch, Sacramento
Department of Fish and Game, Region II, Rancho Cordova
Jerry Boles, Department of Water Resources, Red Bluff
Stanislaus County Environmental Resources Department, Modesto
Al Young, Stanislaus County Public Works Department, Modesto
Kirk Ford, Stanislaus County Department of Planning and Community Development

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. 5-01-018

WASTE DISCHARGE REQUIREMENTS
FOR
STANISLAUS COUNTY DEPARTMENT OF PUBLIC WORKS, PARKS AND RECREATION DEPARTMENT, AND SHERIFF'S DEPARTMENT
LAIRD PARK COUNTY HONOR FARM
STANISLAUS COUNTY

The California Regional Water Quality Control Board, Central Valley Region (hereafter Board), finds that:

1. The Stanislaus County Department of Public Works submitted a Report of Waste Discharge (RWD), dated 7 September 2000, for expansion of its existing domestic wastewater treatment facility at the Laird Park County Honor Farm. Supplemental information was received on 30 October 2000.

2. The facility is on Assessor's Parcel Number 17-60-02. The facility is owned by the Stanislaus County Department of Public Works and operated the Stanislaus County Parks and Recreation Department. The Stanislaus County Sheriff's Department operates the honor farm. All three entities are hereafter referred to as "Discharger".

3. The wastewater treatment facility is in the northern portion of the Laird Park County Honor Farm at 8224 West Grayson Road in Section 30, T4S, R8E, MDM&M, as shown on Attachment A, which is attached hereto and made part of the Order by reference.

4. Order No. 94-012, adopted by the Board on 28 January 1994, prescribes requirements for treatment and disposal of domestic wastewater generated at the Laird Park County Honor Farm. This Order is neither adequate nor consistent with the current plans and policies of the Board.

5. The Laird Park County Honor Farm is a detention facility operated by the Stanislaus County Sheriff's Department. The facility was designed to house maximum of 425 inmates.

6. The existing wastewater treatment facility consists of an unlined aeration pond (0.25 acres) and two unlined facultative ponds (1.44 and 0.55 acres, respectively) as shown on Attachment B, which is attached hereto and made part of the Order by reference. The facultative ponds provide secondary treatment and effluent disposal through evaporation and percolation. Each facultative pond is periodically allowed to dry and is then disced to maintain percolation capacity.

7. The existing facility was designed to treat up to 45,000 gallons per day (gpd) of domestic wastewater, but daily flows in recent years are estimated by the Discharger to be up to 55,000 gpd.

8. The Discharger proposes to construct two additional facultative ponds (0.37 and 0.43 acres, respectively) to increase the total treatment and disposal capacity to 55,000 gpd. The additional ponds will be constructed by July 2001.

9. The Discharger has not performed chemical characterization of the plant's influent and effluent. However, based on the sources of the waste, water supply characterization data provided by the Discharger and standard engineering references, staff estimates the quality of the influent and effluent as follows:

Parameter	Estimated Influent Concentration	Estimated Effluent Concentration
BOD_5	220 mg/L	40 mg/L
Total Suspended Solids	220 mg/L	40 mg/L
Electrical Conductivity	1,200 µmhos/cm	1,200 µmhos/cm
Organic Nitrogen	15 mg/L	5 mg/L
Nitrate Nitrogen	0 mg/L	5 mg/L
Ammonia Nitrogen	25 mg/L	10 mg/L

10. Beginning in 1995, the Discharger had an intermittent history of violating the minimum requirements for pond freeboard due to flows in excess of the permitted capacity. Most of the problems were associated with unusually wet winter conditions. These proposed improvements are designed to fully mitigate the freeboard problems.

11. The water supply for the facility is a well located approximately 150 feet southwest (downgradient) of the existing aeration pond. Based on current policies of the Board and the Department of Health Services Drinking Water Branch, the Discharger proposes to abandon the old well and construct a new water supply well approximately 500 feet northwest (upgradient) of Facultative Pond No. 1.

12. The Discharger has not monitored groundwater quality. Based on data obtained from the existing water supply well, which is screened in the second hydrostratigraphic unit from 120 feet below ground surface to 140 feet below ground surface, the water supply is characterized as follows:

Parameter	Concentration
Electrical Conductivity	1,100 µmhos/cm
Total Dissolved Solids	700 mg/L
Total Hardness	300 mg/L as $CaCO_3$
Nitrate Nitrogen	1.7 mg/L
Nitrite Nitrogen	0.1 mg/L

13. The typical base elevation of the ponds is 40 feet above mean sea level (MSL).

14. Groundwater is assumed to be present approximately 20 feet below the ground surface at the facility, and the gradient is presumably to the southwest (towards the San Joaquin River).

15. Surface water drainage is to the San Joaquin River.

16. Surrounding land uses are primarily agricultural.

17. The mean annual rainfall for the vicinity of the site is approximately 13.6 inches (Department of Water Resources).

18. The Pan A evaporation rate published by CIMIS for the closest weather station in Stockton is 67.8 inches.

19. Federal regulations for stormwater discharges promulgated by the U.S. Environmental Protection Agency (40 CFR Parts 122, 123, and 124) require specific categories of facilities which discharge stormwater associated with industrial activities to obtain NPDES permits. Because the flow at this wastewater treatment plant is less than 1.0 mgd, the Discharger is not required to apply for a stormwater NPDES permit.

20. The Board adopted a Water Quality Control Plan, Fourth Edition, for the Sacramento River and San Joaquin River Basins (hereafter Basin Plan), which contains water quality objectives for waters of the Basins. These requirements implement the Basin Plan.

21. The beneficial uses of the San Joaquin River are municipal and domestic supply; agricultural supply; recreation; aesthetic enjoyment; groundwater recharge; fresh water replenishment; and preservation and enhancement of fish, wildlife, and other aquatic resources.

22. The beneficial uses of underlying groundwaters are municipal, industrial, and agricultural supply.

23. The Board has considered anti-degradation pursuant to State Board Resolution No. 68-16 and finds that not enough data exists to determine whether this discharge is consistent with those provisions. Therefore, this Order provides a timeline for data collection to determine whether the discharge will cause an increase in groundwater constituents above that of background levels. If the discharge is causing such an increase, then the Discharger may be required to cease the discharge, line the ponds, implement source control, change the method of disposal, or take other action to prevent groundwater degradation.

24. On 9 January 2001, the Stanislaus County Board of Supervisors certified an Initial Study/Mitigated Negative Declaration in accordance with the California Environmental Quality Act (CEQA)(Public Resources Code 21000, et. seq.) and the State CEQA guidelines. The Mitigated Negative Declaration prepared for the expansion of the facility specifies that required mitigation shall consist of obtaining Waste Discharge Requirements and any other required permits; obtaining clearance prior to any disturbance of suspected archeological resources; and facility maintenance to prevent odor or other air quality impacts. The Board has reviewed the Initial Study/Mitigated Negative Declaration and concurs that the project as approved will not have significant effects on water quality.

25. This discharge is exempt from the requirements of *Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste,* as set forth in Title 27, CCR, Division 2, Subdivision 1, Section 2005, et seq., (hereafter Title 27). The exemption pursuant to Section 20090(b), is based on the following:

    a. The Board is issuing waste discharge requirements,
    b. The discharge complies with the Basin Plan, and
    c. The wastewater does not need to be managed according to Title 22 CCR, Division 4.5, and Chapter 11, as a hazardous waste.

26. Section 13267(b) of California Water Code provides that: "In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of discharging, or who proposes to discharge within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of discharging, or who proposes to discharge waste outside of its region that could affect the quality of the waters of the state within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the board requires. The burden, including costs of these reports, shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports."

27. The discharge of waste is a privilege, not a right, and authorization to discharge is conditional upon the discharge complying with provisions of Division 7 of the California Water Code and any more stringent effluent limitations necessary to implement water quality control plans, to protect beneficial uses, and to prevent nuisance.

28. The Board has notified the Discharger, and interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

29. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that Order No. 94-012 is rescinded and Stanislaus County, its agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following.

Note: Other prohibitions, conditions, definitions, and the method of determining compliance are contained in the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements" dated 1 March 1991.

A. Discharge Prohibitions:

1. Discharge of wastes to surface waters or surface water drainage courses is prohibited.

2. Bypass or overflow of untreated or partially treated waste is prohibited.

3. Neither the treatment nor the discharge shall cause a nuisance or condition of pollution as defined by the California Water Code, Section 13050.

4. The discharge shall not cause the degradation of any water supply.

5. Discharge of waste classified as hazardous, as defined in Sections 2521(a) of Title 23, CCR, Section 2510, et seq., (hereafter Chapter 15, or 'designated', as defined in Section 13173 of the California Water Code, is prohibited.

6. Surfacing of wastewater outside of the ponds is prohibited.

7. Overflow of wastewater from the ponds is prohibited.

8. The discharge of any wastewater other than that from domestic sources is prohibited. Domestic sources shall include bathrooms, laundry rooms, and kitchens used by staff and inmates.

B. Discharge Specifications:

1. The 30-day average daily discharge shall not exceed 55,000 gallons per day (gpd).

2. Objectionable odors originating at this facility shall not be perceivable beyond the limits of the wastewater treatment and disposal areas.

3. As a means of discerning compliance with Discharge Specification No.2, the dissolved oxygen content in the upper zone (1 foot) of wastewater in ponds shall not be less that 1.0 mg/l.

4. The wastewater treatment ponds shall not have a pH of less than 6.5 or greater than 8.5.

5. The Discharger shall operate all systems and equipment to maximize treatment of wastewater and optimize the quality of the discharge.

6. The ponds shall be managed to prevent the breeding of mosquitoes. In particular,

   a. An erosion control program should assure that small coves and irregularities are not created around the perimeter of the waste surface.
   b. Weeds shall be minimized through control of water depth, harvesting, and/or herbicides.
   c. Dead algae, vegetation, and debris shall not accumulate on the water surface.

7. The facility shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.

8. The freeboard in all ponds shall never be less than two feet as measured vertically from the water surface to the lowest point of overflow.

9. The wastewater ponds shall have sufficient capacity to accommodate allowable wastewater flow, design seasonal precipitation, and ancillary inflow and infiltration. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with the historical rainfall patterns.

10. On or about 1 October each year, available pond storage capacity shall at least equal the volume necessary to comply with Discharge Specifications No. 8 and No. 9.

11. The treatment and disposal facilities shall be enclosed with durable fencing designed to prevent public access to the facility. Any gates shall be kept locked when the facility is unattended.

12. The Discharger shall post signs that clearly inform the public of the nature of the facility and warning of health risks associated with contacting the wastewater.

C. Effluent Limitations

1. The discharge of effluent in excess of the following limits is prohibited:

	Concentration Limit	
Parameter	30-day average	Daily maximum
BOD_5	40 mg/L	90 mg/L

D. Solids Disposal Requirements:

1. Collected screenings, grit, sludge, and other solids removed from liquid wastes shall be disposed of in a manner approved by the Executive Officer, and consistent with *Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste*, as set forth in Title 27, CCR, Division 2, Subdivision 1, Section 20005, et seq.

2. Storage, use and disposal of sewage sludge shall comply with existing Federal, State, and local laws and regulations, including permitting requirements and technical standards included in 40 CFR Part 503 and the Statewide General Order for the Discharge of Biosolids (Water Quality Order No. 2000-10-DWQ) (or any subsequent document which replaces Order No. 2000-10-DWQ).

3. Sludge and other solids shall be removed from the ponds as needed to ensure optimal plant operation and adequate hydraulic capacity. The sludge drying systems shall be designed and operated to prevent impacts to groundwater and surface water.

4. Biosolids removed from the ponds, if stored onsite between 15 October and 15 May of any year, shall be stored in a facility constructed in accordance with Class II surface impoundment or waste pile standards contained in Title 27 of the CCR, or similar facility approved by the Executive Officer. Such a facility shall be designed and maintained to prevent inundation or washout from a storm or flood with a 100-year return frequency. The Discharger shall collect any leachate or storm water that comes in contact with the biosolids pile and return it to the wastewater treatment plant.

5. Biosolids may not be disposed of onsite except as a soil amendment used at agronomic rates. *Before onsite disposal is permitted, the Discharger must submit a technical report* containing all the information required for a Notice of Intent for Water Quality Order No. 2000-10-DWQ (or any subsequent document which replaces Order No. 2000-10-DWQ). The technical report must be submitted at least 60 days before the anticipated date of disposal.

6. Disposal of biosolids at a permitted municipal solid waste landfill or at a permitted publicly owned treatment works is acceptable. The Discharger may also elect to dispose of its biosolids at a facility permitted under Order No. 2000-10-DWQ or at a similar facility permitted under individual WDRs. No matter where the biosolids are taken, the Discharger must comply with all sampling and analytical requirements of the entity that accepts the waste.

7. If the State Water Resources Control Board and the Regional Water Resources Control Board are given the authority to implement regulations contained in 40 CFR Part 503, this Order may be reopened to incorporate appropriate time schedules and technical

standards. The Discharger shall comply with the standards and time schedules contained in 40 CFR Part 503 whether or not they have been incorporated into this Order.

E. **Groundwater Limitations:**

The discharge, in combination with other sources, shall not cause underlying groundwater to contain waste constituents in concentration statistically greater than background water quality, except for coliform bacteria. The most probable number of total coliform organisms shall not exceed 2.2 MPN/100 ml over any 7-day period.

F. **Provisions:**

1. All of the following reports shall be submitted pursuant to Section 13267 of the California Water Code.

   a. **By 30 June 2001**, the Discharger shall submit a Groundwater Monitoring Workplan prepared in accordance with Attachment C: *"Monitoring Well Workplan and Monitoring Well Installation Report Guidance."* If well sampling is to be performed by the Discharger's staff, then the workplan shall also include a detailed description of routine purging and sampling procedures to be employed by staff performing the sampling.

   b. **By 30 August 2001**, the Discharger shall submit certification that the new evaporation/percolation ponds have been constructed in accordance with the design documents submitted with the Report of Waste Discharge.

   c. **By 30 August 2001**, the Discharger shall submit certification that a flow metering system has been installed and is fully operational. The flow meter shall be designed to accurately measure influent flow to the aeration pond, and shall provide cumulative flow monitoring.

   d. **By 30 October 2001**, the Discharger shall submit a Monitoring Well Installation Report containing the information specified in the second section of Attachment C.

   e. **By 30 October 2001**, the Discharger shall submit a Solids Management Plan. The Solids Management Plan shall provide a detailed program and schedule for periodic pond cleanout and permanent disposal of biosolids removed during pond cleanout. Information provided shall include at least the items listed in Attachment D of this Order.

   f. **By 30 October 2002**, the Discharger shall submit certification that the new facility water supply well has been constructed and is at least 500 feet away from the wastewater ponds.

2. The Discharger shall comply with the Monitoring and Reporting Program No. 5-01-018, which is a part of this Order, and any revisions thereto as ordered by the Executive Officer.

3. The Discharger shall comply with the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements", dated 1 March 1991, which are attached hereto and by reference a part of this Order. This attachment and its individual paragraphs are commonly referenced as "Standard Provision(s)."

4. At least 90 days prior to termination or expiration of any lease, contract, or agreement involving the disposal or reclamation areas, used to justify the capacity authorized herein and assure compliance with this Order, the Discharger shall notify the Board in writing of the situation and of what measures have been taken or are being taken to assure full compliance with this Order.

5. The Discharger shall submit to the Board on or before each compliance report due date the specified document, or if appropriate, a written report detailing compliance or noncompliance with the specific schedule date and task. If noncompliance is reported, then the Discharger shall state the reasons for noncompliance and shall provide a schedule to come into compliance.

6. The Discharger shall provide certified wastewater treatment plant operators in accordance with Title 23 of the California Code of Regulations, Division 3, Chapter 26.

7. To determine compliance with Provision F.8, the Discharger shall submit written verification of compliance including a copy of each operator's certification no later than **15 March 2001, and by 15 March each year thereafter.**

8. The Discharger shall use the best practicable cost-effective control technique(s) currently available to comply with discharge limits specified in this order.

9. The Discharger shall report promptly to the Board any material change or proposed change in the character, location, or volume of the discharge.

10. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, then the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to this office.

11. The Discharger shall comply with all conditions of this Order, including timely submittal of technical and monitoring reports as directed by the Executive Officer. Violations may result in enforcement action, including Regional Board or court orders requiring corrective action or imposing civil monetary liability, or in revision or rescission of this Order.

12. A copy of this Order shall be kept at the discharge facility for reference by operating personnel. Key operating personnel shall be familiar with its contents.

13. The Board will review this Order periodically and may revise requirements when necessary.

I, GARY M. CARLTON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 26 January 2001.

GARY M. CARLTON, Executive Officer

Attachments
26 January 2001

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. 5-01-018
FOR
STANISLAUS COUNTY DEPARTMENT OF PUBLIC WORKS, PARKS AND RECREATION DEPARTMENT, AND SHERIFF'S DEPARTMENT
LAIRD PARK COUNTY HONOR FARM
STANISLAUS COUNTY

This monitoring and reporting program (MRP) incorporates requirements for monitoring of the treatment process, effluent disposal ponds and groundwater. This MRP is issued pursuant to Water Code Section 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer. Specific sample station locations shall be approved by Regional Board staff prior to implementation of sampling activities.

INFLUENT MONITORING

Samples of influent wastewater shall be collected at approximately the same time as effluent samples and should be representative of the influent at the plant headworks prior to any treatment. The time, date, and location of each grab sample shall be recorded on the sample chain of custody form. At a minimum, influent monitoring shall consist of the following:

Constituent/Parameter	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Flow	mgd	Observation	Daily	Monthly
pH	pH units	Grab	Monthly	Monthly
BOD_5 at 20° C	mg/l	Grab	Monthly	Monthly
Total Dissolved Solids	mg/l	Grab	Monthly	Monthly

EFFLUENT MONITORING

Samples of effluent shall be taken at the point of discharge from the aeration pond. The time, date, and location of each grab sample shall be recorded on the sample chain of custody form. At a minimum, effluent monitoring shall consist of the following:

Constituent/Parameter	Units	Type of Sample	Sampling Frequency	Reporting Frequency
pH	pH units	Grab	Monthly	Monthly
Total Dissolved Solids	mg/l	Grab	Monthly	Monthly
BOD_5 at 20° C	mg/L	Grab	Monthly	Monthly
Ammonia (as nitrogen)	mg/L	Grab	Monthly	Monthly
Nitrate (as nitrogen)	mg/L	Grab	Monthly	Monthly

POND MONITORING

All wastewater treatment and disposal ponds shall be monitored as follows. If any pond is empty on the scheduled monitoring date, the Discharger may report the freeboard monitoring result as "dry".

Constituent/Parameter	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Freeboard	Feet (+/- 0.1')	Observation	Weekly	Monthly
Dissolved Oxygen	mg/L	Grab	Weekly	Monthly

GROUNDWATER MONITORING

Prior to construction of any new groundwater monitoring wells, the Discharger shall submit a Groundwater Monitoring Well Installation Workplan to the Board for review and approval.

All wells shall be sampled and analyzed quarterly following standard EPA protocols. Prior to sampling, the groundwater elevation shall be measured at each well, and each well shall be purged of at least three well volumes until measurements of pH and electrical conductivity have stabilized. Depth to groundwater shall be measured to the nearest 0.01 feet. Water table elevations shall be calculated and used to determine the groundwater gradient and direction of flow. Groundwater samples shall be analyzed as follows:

Constituent/Parameter	Units	Sampling and Reporting Frequency
Groundwater elevation	*feet (MSL datum)*	*Quarterly*
pH	pH units	Quarterly
Total Dissolved Solids	mg/l	Quarterly
Nitrate (as nitrogen)	mg/l	Quarterly
Ammonia (as nitrogen)	mg/l	Quarterly
Total Coliform Organisms	MPN/100 ml	Quarterly
Fecal Coliform Organisms	MPN/100 ml	Quarterly

BIOSOLIDS MONITORING

The Discharger shall keep records regarding the quantity of biosolids generated by the treatment processes; any sampling and analytical data; the quantity of biosolids stored on site; and the quantity removed for disposal. The records shall also indicate that steps taken to reduce odor and other nuisance conditions. Records shall be stored onsite and available for review during inspections.

If biosolids are transported off-site for disposal, then the Discharger shall submit records identifying the hauling company, the amount of biosolids transported, the date removed from the facility, the location of disposal, and copies of all analytical data required by the entity accepting the waste. If biosolids are disposed of onsite, then the Discharger shall submit the annual report information as contained in the Statewide General Order for the Discharge of Biosolids (Water Quality Order No. 2000-10-DWQ) (or any subsequent document which replaces Order No. 2000-10-DWQ).

All records shall be submitted as part of the Annual Monitoring Report.

REPORTING

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., influent, effluent, etc.), and reported analytical result for each sample are readily discernible. The data shall be summarized in such a manner to clearly illustrate compliance with waste discharge requirements and spatial or temporal trends, as applicable. The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Program shall also be reported to the Regional Board.

As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, All groundwater monitoring reports shall be prepared under the direct supervision of a registered professional engineer or geologist and signed by the registered professional.

A. Monthly Monitoring Reports

Monthly reports shall be submitted to the Regional Board on the **1st day of the second month following sampling** (i.e. the January Report is due by 1 March). At a minimum, the reports shall include:

1. Results of influent, effluent, storage pond, and surface water monitoring. Data shall be presented in tabular format.

2. A comparison of monitoring data to the discharge specifications and an explanation of any violation of those requirements.

3. If requested by staff, copies of laboratory analytical report(s).

4. A calibration log verifying weekly calibration of field monitoring instruments (DO, pH, EC, etc. meters) used to collect reported data.

5. A discussion of compliance and the corrective action taken, as well as any planned or proposed actions needed to bring the discharge into full compliance with the waste discharge requirements.

B. Quarterly Monitoring Reports

The Discharger shall establish a quarterly sampling schedule for groundwater monitoring such that samples are obtained approximately every three months. Quarterly monitoring reports shall be submitted to the Board by the 1st **day of the second month after the quarter** (i.e. the January-March quarter is due by May 1st) each year. The Quarterly Report shall include the following:

1. Results of groundwater monitoring. The results of regular monthly monitoring reports for March, June, September and December may be incorporated into their corresponding quarterly monitoring report.

2. Field logs shall be submitted for each well, documenting depth to groundwater; parameters measured before, during, and after purging; method of purging; calculation of casing volume; and total volume of water purged.

3. Calculation of groundwater elevations, an assessment of groundwater flow direction and gradient on the date of measurement, comparison of previous flow direction and gradient data, and discussion of seasonal trends if any.

4. A narrative discussion of the analytical results for all media and locations monitored including spatial and temporal tends, with reference to summary data tables, graphs, and appended analytical reports (as applicable).

5. A comparison of monitoring data to the discharge specifications, groundwater limitations and surface water limitations, and explanation of any violation of those requirements.

6. Summary data tables of historical and current water table elevations and analytical results.

7. A scaled map showing relevant structures and features of the facility, the locations of monitoring wells and any other sampling stations

8. Copies of laboratory analytical report(s) for groundwater, if requested by staff .

C. Annual Report

An Annual Report shall be prepared as the fourth quarter monitoring report. The Annual Report will include all monitoring data required in the monthly/quarterly schedule. The Annual Report shall be submitted to the Regional Board by 1 **February of each year**:

1. If requested by staff, tabular and graphical summaries of all data collected during the year.

2. Data for monitoring and analysis performed on an annual basis (i.e., biosolids monitoring).

3. An evaluation of the performance of the wastewater treatment system and effluent storage pond, as well as a forecast of the flows anticipated in the next year.

4. An evaluation of the groundwater quality beneath the effluent storage pond.

5. Summary of information on the disposal of all biosolids including volume removed and location of disposal, and analytical results.

6. Whether the Discharger anticipates removing biosolids in the coming year, and if so, an anticipated schedule for cleaning, drying, and disposal;

7. A discussion of compliance and the corrective action taken, as well as any planned or proposed actions needed to bring the discharge into full compliance with the waste discharge requirements.

8. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.

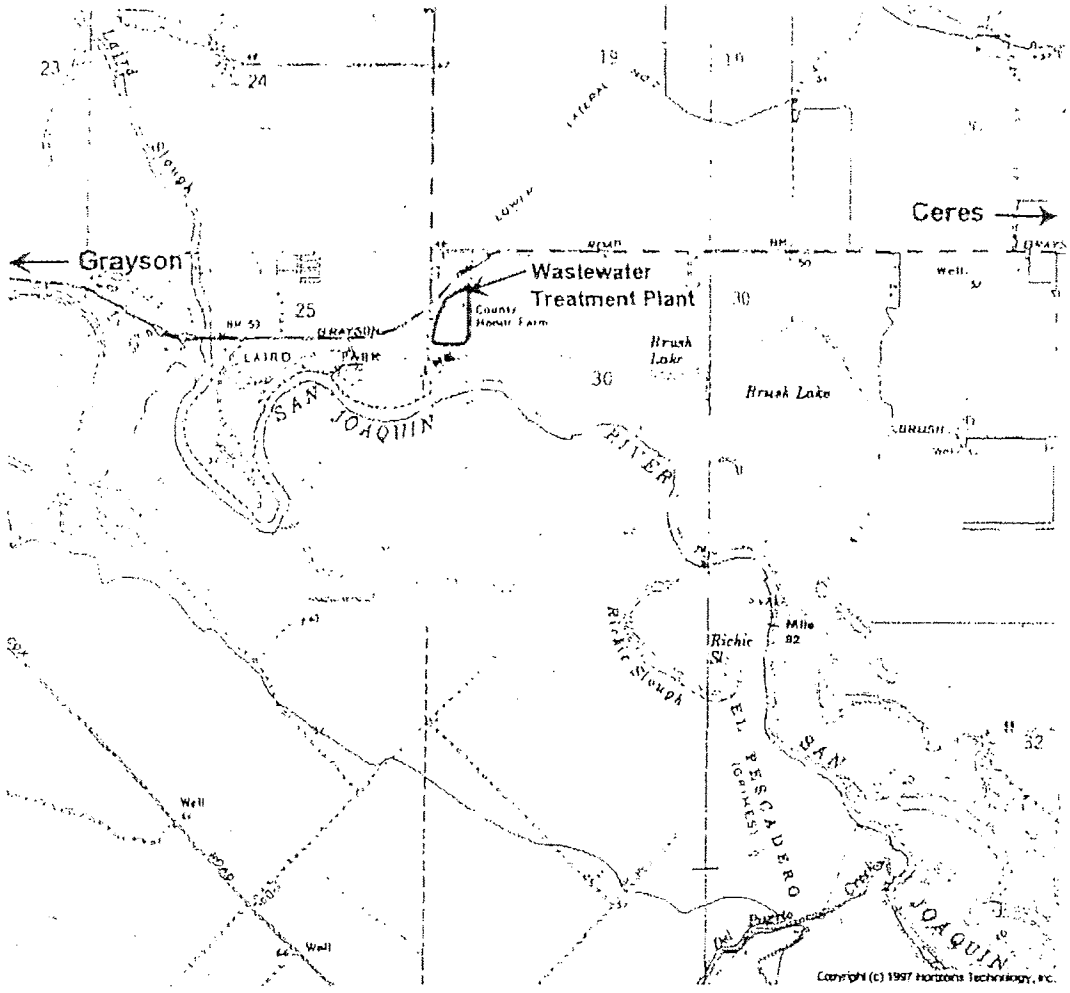
The Discharger shall implement the monitoring program for treatment plant operations, influent, effluent, storage pond, spray field, and biosolids monitoring as of the date of this Order. The Discharger shall implement groundwater monitoring when approved groundwater monitoring facilities are in place and operational.

ORDERED BY: _____
GARY M. CARLTON, Executive Officer

26 January 2001
(Date)

ALO: 26 January 2001

ATTACHMENT A



VICINITY MAP

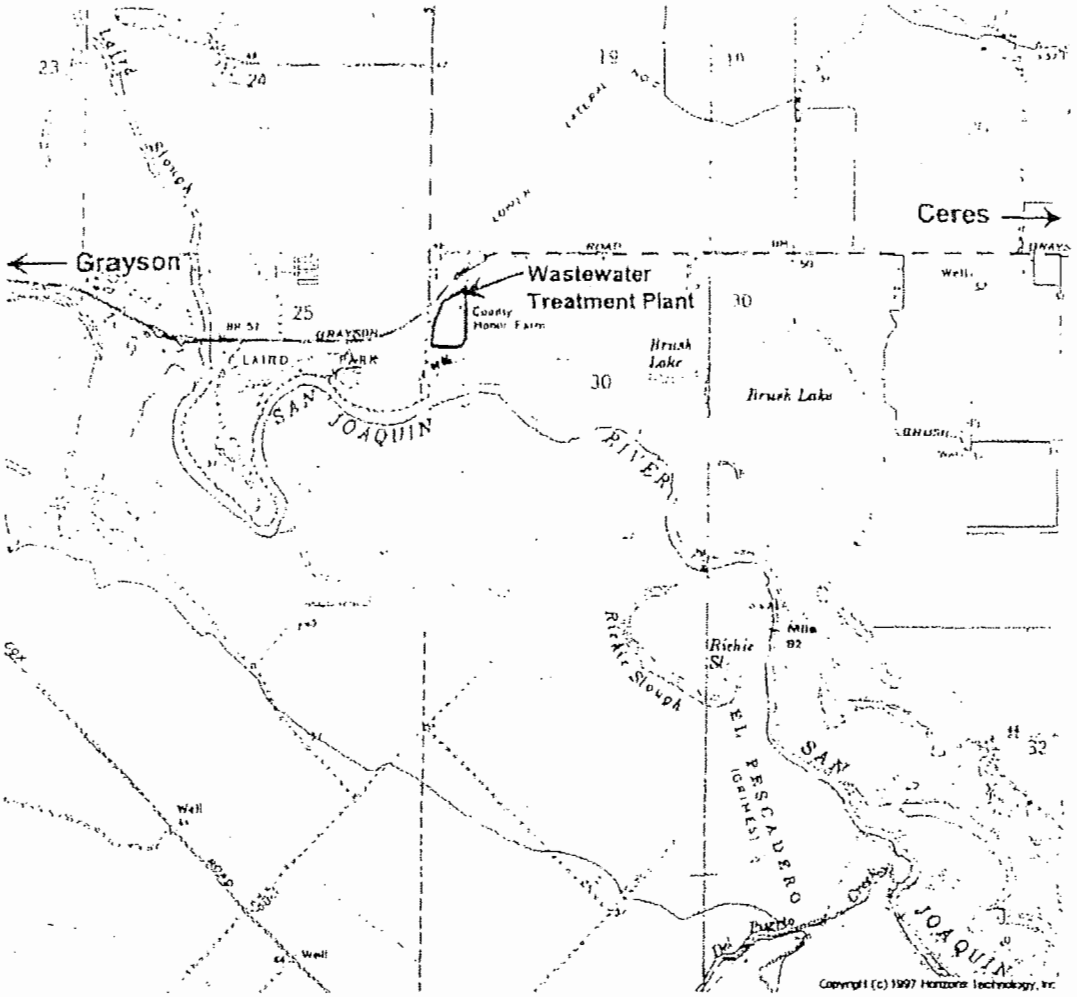
STANISLAUS COUNTY PARKS AND RECREATION DEPARTMENT
LAIRD PARK COUNTY HONOR FARM

WASTE DISCHARGE REQUIREMENTS Order No. 5-01-018

STANISLAUS COUNTY

USGS 7.5 MIN. QUAD: WESTLEY

ATTACHMENT A



VICINITY MAP

STANISLAUS COUNTY PARKS AND RECREATION DEPARTMENT
LAIRD PARK COUNTY HONOR FARM

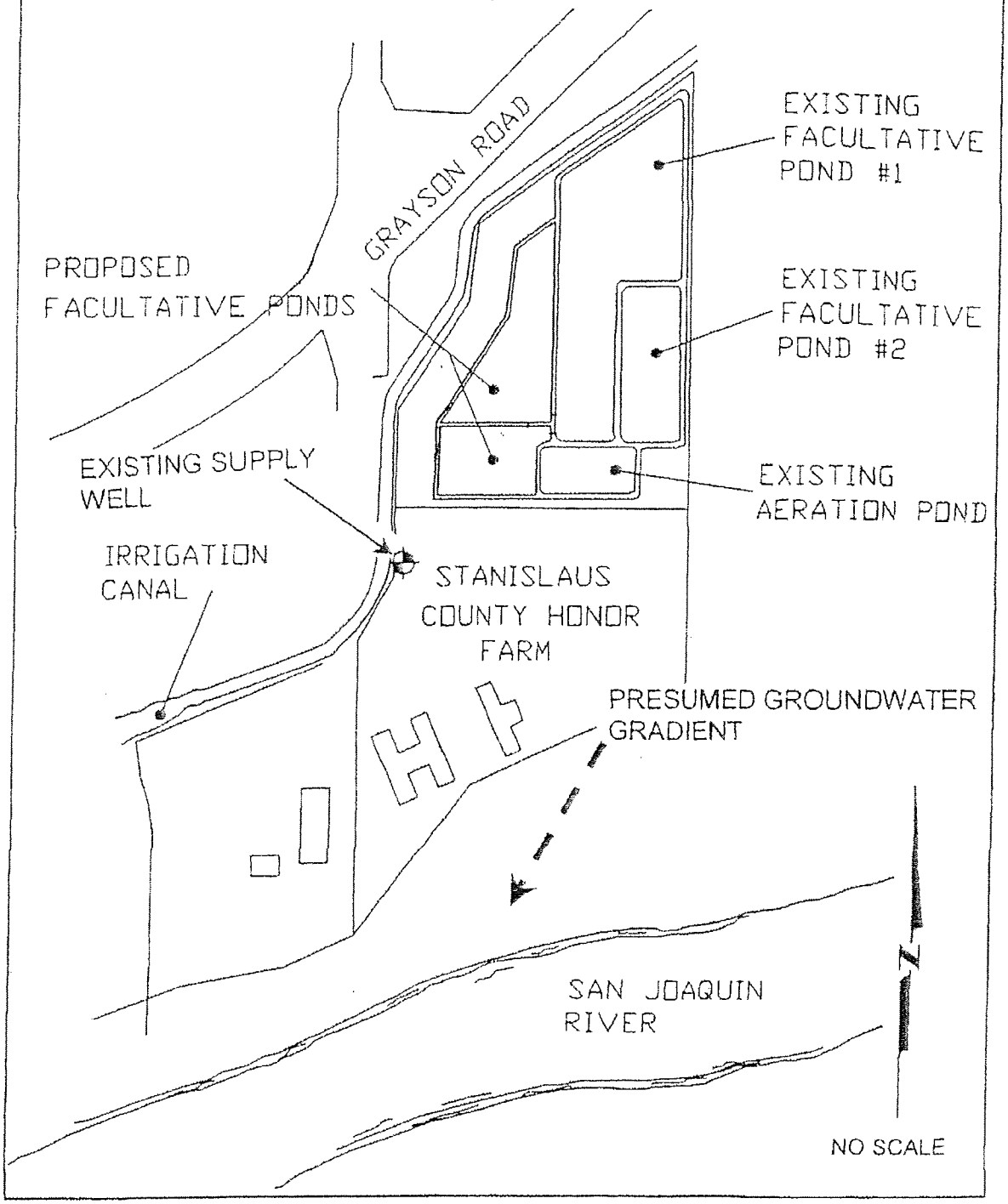
WASTE DISCHARGE REQUIREMENTS Order No. 5-01-018

STANISLAUS COUNTY

USGS 7.5 MIN. QUAD: WESTLEY

ATTACHMENT B

WASTE DISCHARGE REQUIREMENTS Order No. 5-01-018



HARDING LAWSON ASSOCIATES
Engineering and Environmental Services
10265 Rockingham Drive, Suite 100
Sacramento, California 95827
(916) 364-0793

SITE PLAN
LAIRD PARK HONOR FARM
WASTEWATER TREATMENT FACILITY
STANISLAUS COUNTY

FIGURE 1

DRAWN	FILE NAME	PROJECT NUMBER	APPROVED	DATE	REVISED DATE
DDG	SITEPLAN.DWG	42328		9/99	

California Regional Water Quality Control Board
Central Valley Region

Winston H. Hickox
Secretary for
Environmental
Protection

Gray Davis
Governor

Sacramento Main Office
Internet Address: http://www.swrcb.ca.gov/~rwqcb5
3443 Routier Road, Suite A, Sacramento, California 95827-3003
Phone (916) 255-3000 • FAX (916) 255-3015

WASTE DISCHARGE REQUIREMENTS ORDER NO. 05-01-018

ATTACHMENT C
MONITORING WELL WORKPLAN AND
MONITORING WELL INSTALLATION REPORT GUIDANCE

Prior to installation of groundwater monitoring wells, the Discharger shall submit a workplan containing the minimum listed information. Wells may be installed after Board staff approves the workplan. Following installation of the monitoring wells, the Discharger shall submit a report of results, as described below. All workplans and reports must be prepared under the direct supervision of, and signed by, a geologist, engineering geologist, or civil engineer registered or certified by the State of California.

Monitoring Well Installation Workplan

A. General Information:
   - Proposed monitoring well locations and rationale for location selection
   - Equipment decontamination procedures
   - Topographic map showing any existing monitoring wells, proposed wells, waste handling facilities, utilities, and other major physical and man-made features.

B. Drilling Details: describe proposed drilling and logging methods

C. Monitoring Well Design:
   - Casing diameter
   - Borehole diameter
   - Depth of surface seal
   - Well construction materials
   - Diagram of well construction
   - Type of well cap
   - Size of perforations and rationale
   - Grain size of sand pack and rationale
   - Thickness and position of bentonite seal and sand pack
   - Depth of well, length and position of perforated interval

D. Well Development:
   - Method of development to be used
   - Method of determining when development is complete
   - Method of development water disposal

E. Surveying Plan: discuss how each well will be surveyed to a common reference point.

F. Well Sampling:
   Minimum time after development before sampling (48 hours)
   Well purging method and amount of purge water
   Sample collection and preservation method
   QA/QC procedures

G. Water Level Measurement:
   The elevation reference point at each monitoring well shall be within 0.01 foot.
   Ground surface elevation at each monitoring well shall be within 0.1 foot.
   The method and time of water level measurement shall be specified.

H. Proposed time schedule for well installation and development.

Monitoring Well Installation Report

A. Well Construction:
   Number and depth of wells drilled
   Date(s) wells drilled
   Description of drilling and construction
   Approximate locations relative to facility site(s)
   A well construction diagram for each well must be included in the report, and should contain the following details:
      Total depth drilled
      Depth of open hole (same as total depth drilled if no caving occurs)
      Footage of hole collapsed
      Length of slotted casing installed
      Depth of bottom of casing
      Depth to top of sand pack
      Thickness of sand pack
      Depth to top of bentonite seal
      Thickness of bentonite seal
      Thickness of concrete grout
      Boring diameter
      Casing diameter
      Casing material
      Size of perforations
      Number of bags of sand
      Well elevation at top of casing
      Depth to ground water
      Date of water level measurement
      Monitoring well number
      Date drilled

Location

B. Well Development:
   - Date(s) of development of each well
   - Method of development
   - Volume of water purged from well
   - How well development completion was determined
   - Method of effluent disposal
   - Field notes from well development should be included in report.

C. Well Survey Data: provide reference elevations for each well and surveyor's notes

D. Water Sampling:
   - Date(s) of sampling
   - How well was purged
   - How many well volumes purged
   - Levels of temperature, EC, and pH at stabilization
   - Sample collection, handling, and preservation methods
   - Sample identification
   - Analytical methods used
   - Laboratory analytical data sheets
   - Water level elevation(s)
   - Groundwater contour map

E. Explanation of any deviation from the approved workplan

Winston H. Hickox
Secretary for Environmental Protection

California Regional Water Quality Control Board
Central Valley Region

Gray Davis
Governor

Sacramento Main Office
Internet Address: http://www.swrcb.ca.gov/~rwqcb5
3443 Routier Road, Suite A, Sacramento, California 95827-3003
Phone (916) 255-3000 • FAX (916) 255-3015

WASTE DISCHARGE REQUIREMENTS ORDER NO. 5-01-018

ATTACHMENT D

INFORMATION NEEDS FOR SOLIDS MANAGEMENT PLAN

A. Wastewater Treatment Facility (WWTF)

1. Provide a site map showing existing biosolids handling facilities (e.g., biosolids drying beds, site for temporary dewatering facilities, biosolids storage areas).

B. Biosolids Production

1. Provide a schematic diagram showing biosolids dewatering and handling operations. Include, where applicable, supernatant flow and handling operations.
2. Specify annual biosolids production in dry tons and how quantities will be measured.

C. Biosolids Storage

1. If on-site biosolids storage is used, describe:

   Size of biosolids storage area

   Frequently of use (temporary or continuous)

   Typical storage duration

   Leachate controls

   Erosion controls

   Run-on/runoff controls

2. Describe measures that will be taken to ensure that area groundwater is not adversely affected by the biosolids storage facility
3. For biosolids storage facilities that contain biosolids between 15 October and 15 May, describe how facilities are designed and maintained to prevent washout or inundation from a storm or flood with a return frequency of 100 years.
4. Provide a map of showing setback distances from:

   Property lines

   Water supply wells

   Public roads

   Residences

Surface waters, including wetlands, creeks, ponds, lakes, reservoirs, underground aqueducts, and marshes

Agricultural drainage channels

D. Method of Disposal

1. List the disposal options that will be used (i.e., landfill disposal, incineration, composting, off-site land application, on-site land application, or other).
2. For each disposal option to be used, state the percentage of annual biosolids production disposed of by each method.
3. Provide the facility name, location (address), contact name, and contact phone number for each off-site disposal facility to be used.

E. Grit and Screenings Management:
Quantity (tons or cubic yards) generated per year.

1. Method of collection and storage prior to disposal.
2. Physical features of the plant or handling practices (if any) prevent that spillage and potential contact with storm water runoff or with surface water.
3. Describe the disposal method and frequency of disposal.
   Name any contractors are involved (including transporters and disposal sites).

INFORMATION SHEET

ORDER NO. 5-01-018
STANISLAUS COUNTY DEPARTMENT OF PUBLIC WORKS,
PARKS AND RECREATION DEPARTMENT, AND
SHERIFF'S DEPARTMENT
LAIRD PARK COUNTY HONOR FARM
STANISLAUS COUNTY

The Laird Park Honor County Farm is a detention facility operated by the Stanislaus County Sheriff's Department. It is located east of Laird Park on Grayson Road (southeast of the town of Grayson) along the north bank of the San Joaquin River.

The Laird Park County Honor Farm houses up to 425 inmates, and domestic wastewater is treated and disposed of on-site using a plant operated by the Stanislaus County Parks and Recreation Department. The treatment process consists of pond aeration followed discharge to facultative ponds that also serve as evaporation/percolation ponds.

The Discharger will construct two additional facultative ponds with a total surface area of 0.8 acres to provide a design capacity of 55,000 gallons per day average dry weather flow.

All ponds are underlain by sandy soils that are expected to exhibit moderate percolation rates, and the water table is assumed to be approximately 20 feet below the base of the ponds. The facility is currently served by a supply well approximately 150 feet from the ponds. The existing well does not comply with current Department of Health Services standards for setbacks from the wastewater treatment plant. The Discharger will therefore construct a new supply well approximately 500 feet upgradient of the wastewater treatment plant.

The facility has been in operation for over 25 years, and no groundwater monitoring has been performed to date. Therefore, these Waste Discharge Requirements contain a time schedule for development and implementation of a groundwater monitoring program to assess potential groundwater impacts. The Discharger will also perform enhanced influent and effluent monitoring and is required to develop a long-term plan for biosolids management.

APPENDIX B

SUMMARY OF MONTHLY MONITORING DATA

Table B-1
Stanislaus County Laird Park County Honor Farm Wastewater Treatment Facility
Monthly Influent Totals

Month	Temp °C	pH	BOD mg/L	TDS mg/L	SS mg/L	EC	D.O.
Jan-05	17.6	7.7	358	1000	119		
Feb-05	19.3	7.6	424	1080	296		
Mar-05	20	7.8	470	1060	366		
Apr-05	20.2	7.6	310	981	384		
May-05	21.4	7.5	320	972	272		
Jun-05	21.7	7.7	400	869	676		
Jul-05	23.1	7	540	1000	204		
Aug-05	23.6	7.6	180	921	120		
Sep-05	22.8	7.6	220	1000	146		
Oct-05	22.5	7.2	300	1020	200		
Nov-05	21.2	7.4	400	1200	174		
Dec-05	19.6	8.1	180	1060	336		
Jan-06	19.3	8.5	100	960	500		
Feb-06	20	7.8	150	990	240		
Mar-06	19.3	7.7	270	1000	590		
Apr-06	18.5	7.1	590	1100	830		
May-06	22.5	7.6	670	1200	1300		
Jun-06	22.2	6.7	150	810	120		
Jul-06	23.6	8	200	1270	820		
Aug-06	22.9	8	195	978	670		
Sep-06	22.8	8.2	54	921	170		
Oct-06	21.6	8.3	146	1040	220		
Nov-06	20.7	8.4	102	1020	440		
Dec-06	19.6	8.5	338	890	170		
Jan-07	17.6	7.9	203	926	810		
Feb-07	18.8	8.1	140	989	140		
Mar-07	20.4	8.5	160	1000	1230		
Apr-07	21.0	7.8	120	938	218		
May-07	22.1	8.3	197	1010	360		
Jun-07	22.7	8.4	123	1000	260		
Jul-07	23.1	8.3	144	924	136		
Aug-07	23.3	8.4	135	920	193		
Sep-07	22.6	7.8	150	855	262		
Oct-07	22.6	8.5	120	961	144		
Nov-07	22.9	8.4	96	880	148		
Dec-07	19.5	8.0	93	872	170		
Jan-08	17.8	7.8	92	881	124		
Feb-08	19.7	8.5	108	988	57		
Mar-08	20.0	8.2	195	964	236		
Apr-08	20.4	8.8	212	997	258		
May-08	23.1	8.2	94	943	148		
Jun-08	22.8	8.3	104	1040	588		
Jul-08	22.0	7.0	Note 2	1240	2690		
Aug-08	21.8	8.2	206	874	137		
Sep-08	24.2	8.4	89	886	124		

Table B-1
Stanislaus County Laird Park County Honor Farm Wastewater Treatment Facility
Monthly Influent Totals

Month	Temp °C	pH	BOD mg/L	TDS mg/L	SS mg/L	EC	D.O.
Oct-08	22.2	8.5	89	990	320		
Nov-08	21.9	8.4	96	924	290		
Dec-08	19.5	8.6	153	1070	944		
Jan-09	18.4	8.5	188	922	268		
Feb-09	20.7	8.3	159	999	216		
Mar-09	19.6	8.3	105	1010	124		
Apr-09	21.7	8.2	170	916	189		
May-09	23.4	7.9	137	881	192		
Jun-09	21.1	7.3	181	885	79		
Jul-09	24.5	8.3	219	755.8	96	1,327	3.7
Aug-09	24.5	8.4	70	788	54	1,549	3.6
Sep-09	22.7	8.4	82	763	106	1,545	3.0
Oct-09	20.4	8.1	100	782	38	1,588	2.0
Nov-09	11.7	9.1	NT	550	NT	1,340	1.8
Dec-09	12.0	8.9	155	766	55	1,355	9.6
Average		8.0	202.6	957.2	352.0	1,451	
Minimum		6.7	54	550	38	1,327	
Maximum		9.06	670	1270	2690	1,588	

Notes:
1. NT = Not taken
2. Concentration reported as 1,880. Appears to be an anamoly and was not included in calculations.

Table B-2
Stanislaus County Laird Park County Honor Farm Wastewater Treatment Facility
Monthly Effluent Data

Month	Avg. Temp °C	Avg. pH	Avg. TDS mg/L	BOD mg/L	Ammonia as N (mg/L)	Nitrate as N (mg/L)	SS mg/L
Jan-05	15.9	8.1	883	61	35	0.6	36
Feb-05	11.5	7.8	953	41	46	0	24
Mar-05	17	7.9	950	170	49	0.3	54
Apr-05	20.9	7.7	926	70	10	5.4	84
May-05	21	7.4	980	80	0	1.8	120
Jun-05	20.1	7.3	973	80	0	19	135
Jul-05	27.1	7.7	980	70	0	30	148
Aug-05	24.2	7.2	964	70	0	11	88
Sep-05	23.2	7.6	942	50	0	33	184
Oct-05	18.8	7.4	953	70	0	10	128
Nov-05	14.3	7.7	1050	110	0	35	142
Dec-05	9.4	7.8	984	50	19	5	74
Jan-06	9.3	8.4	870	30	29	1.5	30
Feb-06	16.3	8	940	30	49	0.5	58
Mar-06	13.7	7.7	990	40	45	0	42
Apr-06	15.4	7.7	930	60	53	0.5	54
May-06	21	7.4	1000	160	29	0.4	92
Jun-06	23.7	7.6	860	70	0	0	36
Jul-06	24.8	7.7	1040	60	30	ND	82
Aug-06	22	7.6	1010	134	22	0	140
Sep-06	23.8	8.1	970	15	44	0.3	36
Oct-06	21.6	8	990	31	47	ND	28
Nov-06	15.2	7.4	940	24	5.3	0	49
Dec-06	9.2	8.4	928	119	32	0.9	64
Jan-07	8.9	8.0	914	38	38.8	1.9	56
Feb-07	11.3	8.0	954	49	38.2	0.6	73
Mar-07	19.5	8.1	958	57	39.7	0	90
Apr-07	15.8	7.8	911	89	0	1	121
May-07	17.8	7.8	994	124	0	16	176
Jun-07	22.0	8.4	1030	76	15.9	0	68
Jul-07	21.3	7.5	972	144	0	0.5	323
Aug-07	23.1	8.1	978	97	24.5	0	52
Sep-07	22.4	7.8	911	138	10.1	1.2	82
Oct-07	18.3	7.6	950	140	3.1	7	64
Nov-07	23.7	7.6	924	95	10.4	1.3	28
Dec-07	7.2	8.0	888	211	30.9	1.9	238
Jan-08	8.1	7.7	826	33	24.3	0.9	28
Feb-08	5.6	8.0	857	29	50	0	25
Mar-08	14.1	8.1	908	48	43.7	0	42
Apr-08	12.4	7.7	996	206	15	1.3	96
May-08	22.3	7.7	1000	154	9.2	1.4	90
Jun-08	20.4	7.8	1010	69	0	4.7	73
Jul-08	25.6	7.6	1030	61	0	7	98
Aug-08	21.8	7.5	921	65	1.6	2.3	61
Sep-08	23.4	7.8	965	64	0	5	42
Oct-08	19.3	7.7	1000	52	0	13.3	33
Nov-08	22.5	7.7	972	33	0	14	32
Dec-08	12.7	7.8	951	52	6.9	10.5	28

Table B-2
Stanislaus County Laird Park County Honor Farm Wastewater Treatment Facility
Monthly Effluent Data

Month	Avg. Temp °C	Avg. pH	Avg. TDS mg/L	BOD mg/L	Ammonia as N (mg/L)	Nitrate as N (mg/L)	SS mg/L
Jan-09	6.2	8.1	915	12	25.3	3.2	19
Feb-09	10.2	8.0	940	50	25.3	1.2	30
Mar-09	12.8	8.1	918	91	28.9	1.5	74
Apr-09	15.6	8.0	956	60	26.3	1.7	57
May-09	18.8	7.6	983	60	2.5	20.6	70
Jun-09	21.1	7.3	885	181	<1.0	16.4	79
Jul-09	24.6	8.5	688.4	63	< 1.0	6.3	87
Aug-09	23.5	8.3	747.5	51	<1.0	<0.2	188
Sep-09	21.6	8.9	802	75	<1.0	1.3	214
Oct-09	20.9	8.2	770	87	1.8	1.5	78
Nov-09	12.5	9.1	742	Samples not taken			
Dec-09	13.0	9.3	785	60	30.1	2.2	40
Average		7.9	932.6	78.1	19.0	5.4	
Minimum		7.2	688.4	12.0	0.0	0.0	
Maximum		9.3	1,050.0	211.0	53.0	35.0	

Notes:
ND = Non-detect

APPENDIX C

CORRESPONDENCE WITH REGIONAL BOARD

NOLTE
BEYOND ENGINEERING

PHONE CONVERSATION LOG

Contact:	Guy Childs	**Log By:**	Alison Furuya
Company:	Regional Water Quality Control Board	**Date:**	December 17, 2009, 9:00 am
Subject:	Honor Farm WWTF – Master Planning		MTB019500
Phone #:	916-464-4648		Honor Farm WWTF

Spoke with Guy to schedule meeting with the Regional Water Quality Control Board (Regional Board) to discuss immediate repairs and the Master Plan for the Honor Farm Wastewater Treatment Facility (WWTF).

Guy asked about the project and said that the Regional Board is currently split into two major sections; permitting and compliance. Depending on the type of improvements planned for the WWTF, a permit update may need to be filed.

He reviewed information that the Regional Board had on the facility and noted that notice of violations had been issued for spills in August 2008 and November 6, 2008. The letters had been sent to Scott Schook with Stanislaus County General Services. The spills were at the lift station. He noted that it looked like the Regional Board had not done a review of Discharger Monthly Monitoring Reports (DMRs) recently, but that any violations which occur at the facility for the month should be noted in the monthly reports.

He suggested that a letter be sent to his attention, to make a determination of which Regional Board staff should be included in for this project. The letter should detail reasons for the improvements (such as recent violations at the treatment plant) and the initial planned improvements.

He was unsure of the timing for review of the letter and scheduling a follow-up meeting. Once he received the letter, he would need to determine which staff should be involved, which can have an effect on the scheduling of a meeting. He also mentioned that the meeting could be done over the phone.

NOLTE

BEYOND ENGINEERING

January 27, 2010
MTB019500

Guy Childs
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670-6114

SUBJECT: Stanislaus County Laird Park Honor Farm Wastewater Treatment Facility

Dear Guy:

Nolte Associates, Inc. is assisting Stanislaus County (County) with master planning and engineering services for the Stanislaus County Laird Park Honor Farm Wastewater Treatment Facility (WWTF).

As part of our master planning and engineering services, a Master Plan and design documents for immediate repairs to the WWTF will be prepared. The purpose of the Master Plan is to appropriately plan for necessary improvements to the WWTF and implement the improvements within a two to three year span for efficient operation of the facility for the next fifteen years. The improvements are to be phased and regulatory requirements are to be complied with during each phase of work.

The County had established a budget for this fiscal year for implementation of immediate repairs to the WWTF to address existing issues regarding safety and regulatory compliance at the facility. The facility has experienced sanitary sewer overflows at the lift station, exceeded the effluent BOD_5 limit, and the electrical equipment does not comply with applicable codes. Based on an initial assessment, the immediate improvements shown in Table 1 and Figure 3 were identified. Probable construction costs are included in the table.

The probable construction costs for the improvements shown in Table 1 exceed the County's available budget. The County is currently assessing their ability to implement all of the recommended improvements within a reasonable time frame. Improvements will be prioritized to address the most critical issues first.

NOLTE ASSOCIATES, INC.
1215 WEST CENTER STREET, SUITE 201
MANTECA, CA 95337-4311
209.239.9080 TEL 209.239.4166 FAX
WWW.NOLTE.COM

Table 1
Initial Recommendations for Immediate Improvements
to the
Honor Farm Wastewater Treatment Facility

Item	Description of Improvement	Probable Construction Cost[a], $
1	Conversion of Pond #3 to an aeration pond[b,c]	160,000
2	Upgrade of electrical panels	75,000
3	Addition of fencing and signage around outer perimeter of WWTF	40,000
4	Addition of groundwater monitoring well	10,000
5	Removal of sludge from Aeration Pond	60,000
6	Rehabilitation of Aeration Pond side slopes and armoring of side slopes[b]	75,000
7	Procurement and installation of new aerators for Aeration Pond	30,000
	Total	450,000

[a] Includes contingency of 20 percent

[b] Excludes lining of pond

[c] Includes earthwork, piping and appurtenances, and aerators

Three of the seven recommended improvements affect the treatment, storage, and disposal ponds. Conversion of an existing storage/percolation pond to an aeration pond is being proposed. The addition of an aeration pond will improve the performance and operational flexibility of the treatment plant. Addition of a second aeration pond, will also allow for temporarily taking the existing aeration pond off-line for removal of sludge and rehabilitation of the side slopes.

We would like to schedule a meeting with the Regional Board to receive input on planned immediate improvements/repairs to the facility and the phasing of these improvements. Additionally, we are interested in receiving input on anticipated long-term regulatory requirements which can be incorporated into the Master Plan.

Please contact us to discuss your availability for a meeting.

Sincerely,

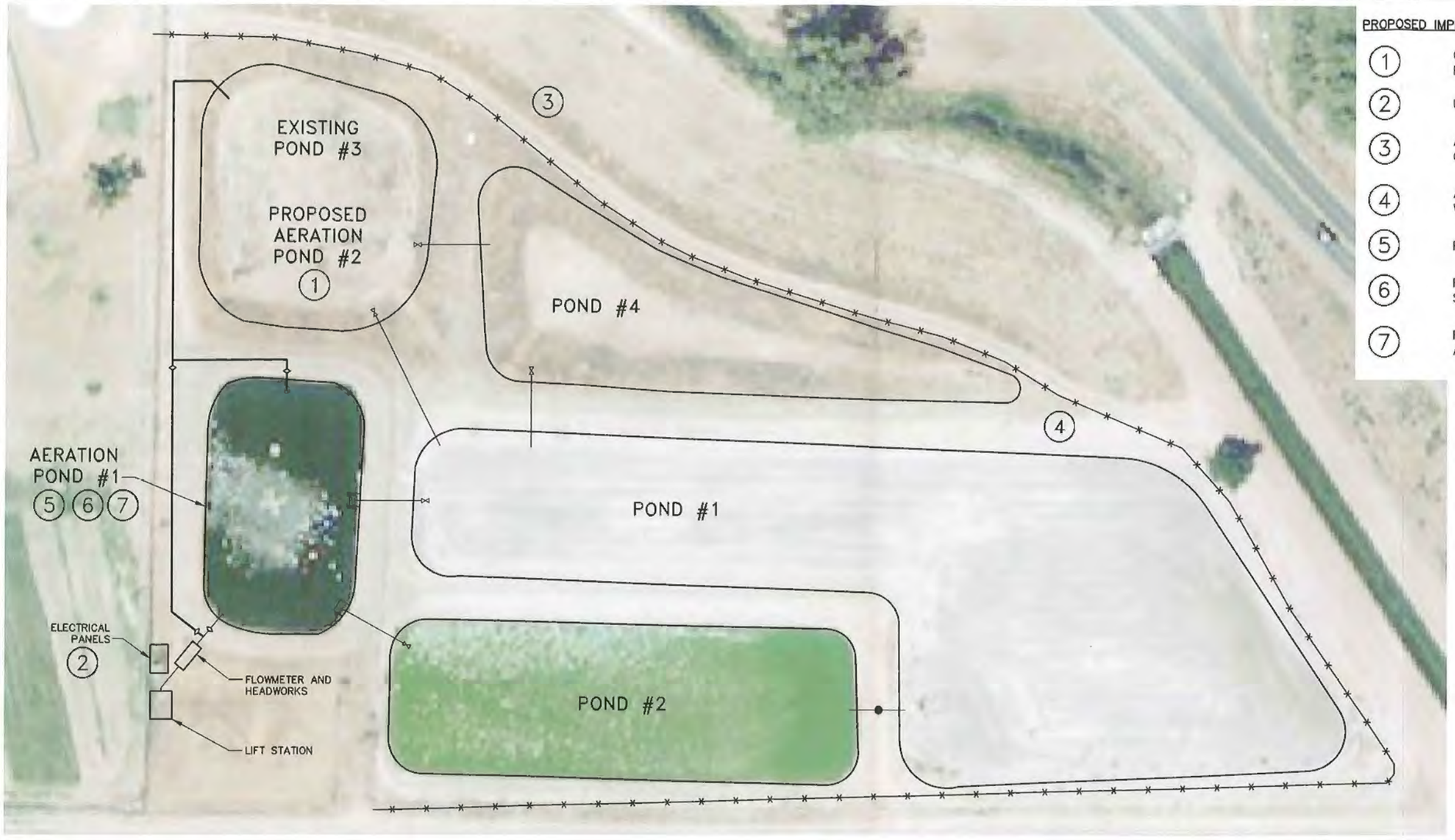
Nolte Associates, Inc.

Dave Richard, PE
Principal

Alison Furuya, PE
Engineering Manager

Enclosure: Figure 3, Proposed Improvements

cc: Don Phemister, Stanislaus County
Charles Vasquez, P.M., Stanislaus County
David Leamon, P.E., Stanislaus County



PROPOSED IMPROVEMENTS

1. CONVERSION OF POND #3 TO AERATION POND.
2. UPGRADE OF ELECTRICAL PANELS.
3. ADDITION OF FENCING AND SIGNAGE AROUND OUTER PERIMETER OF WWTF.
4. ADDITION OF GROUND WATER MONITORING WELL.
5. REMOVAL OF SLUDGE FROM AERATION POND.
6. REHABILITATION OF AERATION POND SIDE SLOPES AND ARMORING OF SIDE SLOPES.
7. PROCUREMENT AND INSTALLATION OF NEW AERATORS FOR AERATION POND.

LEGEND

- EXISTING PIPE
- PROPOSED PIPE
- EXISTING BUTTERFLY VALVE
- PROPOSED VALVE
- PROPOSED FENCING
- EXISTING MANHOLE

NOTES

PONDS #1, #2, #3, AND #4 ARE PERCOLATION PONDS.

N

0' 30' 60'
SCALE: 1"=60'

FIGURE 3

STANISLAUS COUNTY HONOR FARM
WASTEWATER TREATMENT FACILITY
MASTER PLAN

PROPOSED IMPROVEMENTS

NOLTE
BEYOND ENGINEERING

N:\MTB019500\CADD\EXHIBITS\MASTER PLAN\FIGURE 3 - PROPOSED IMPROVEMENTS.DWG SC/DM 6/16/10

NOLTE
BEYOND ENGINEERING

March 17, 2010
MTB019500

Guy Childs
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670-6114

SUBJECT: Stanislaus County Laird Park Honor Farm Wastewater Treatment Facility – Status Letter

Dear Guy:

Thank you for reviewing our correspondence dated January 27, 2010, to the Regional Water Quality Control Board (Regional Board) and discussing with staff for the Stanislaus County Laird Park Honor Farm Wastewater Treatment Facility (WWTF). We appreciated your follow-up phone call on February 26, 2010. As recommended, we are submitting a summary of your feedback as follows:

1. Regional Board staff is supportive of the proposed improvements to the WWTF, particularly the construction of a second aeration pond and removal of sludge. The Regional Board does not have an issue with phasing of the improvements.

2. Based on the improvements proposed in the January 27, 2010 letter, no permit revisions or modifications are required.

3. Construction of an additional monitoring well is at the County's discretion.

4. A meeting with Regional Board staff is not recommended at this time.

5. The County should keep the Regional Board abreast of any changes to the WWTF by submitting technical documentation and improvement plans to the attention of Guy Child.

Please let us know if there are any discrepancies with our summary of the phone conversation.

Sincerely,

Nolte Associates, Inc.

Dave Richard, PE
Principal

Alison Furuya, PE
Engineering Manager

cc: Don Phemister, Stanislaus County
Charles Vasquez, P.M., Stanislaus County
David Leamon, P.E., Stanislaus County

NOLTE ASSOCIATES, INC.
1215 WEST CENTER STREET, SUITE 201
MANTECA, CA 95337-4227
209.239.9080 TEL 209.239.4166 FAX
WWW.NOLTE.COM

n:\mtb019500\correspondence\20100317 rwqcb resp letter.doc

APPENDIX D

RATIONALE FOR RATING OF PRIORITIES

Table D-1
Rationale for Assigned Rating

Item	Improvement	Rationale for Assigned Rating	Rating		
			Safety	Regulatory Requirements	Total
1	Upgrade of electrical panels	Addresses existing safety concerns. Existing equipment near end of useful life. Maintenance of electrical facilities critical for operation of WWTF.	10	5	15
2	Conversion of Pond #3 to an aeration pond (includes piping and aeration)	Improves effluent quality for the WWTF. Improves ability to conduct future improvements at the existing aeration pond.	0	10	10
3	Improved fencing and signage around Pond #3 (future Aeration Pond #2)	Improved fencing and signage around Pond #3 following conversion to an aeration pond would improve safety.	5	5	10

APPENDIX E

PROBABLE CONSTRUCTION COST BREAKDOWN

Table E-1
Honor Farm Wastewater Treatment Facility
Probable Construction Cost for Recommended Improvements

Improvement	Quantity	Unit	Unit Price	Total Price
Electrical Improvements	1	LS	$65,000.00	$65,000
(see Table E-2 for electrical cost breakdown)				
Upgrade of Pond #3 for potential use as an aeration pond (addition of aerators, earthwork, side slope protection, addition of piping)				
Clearing and Grubbing	18,955	SF	$1.00	$18,955
Excavation and re-compaction	340	CY	$5.00	$1,700
Rock Slope Protection	10	TN	$80.00	$800
Extension of influent piping (assume 6" DIP)	400	LF	$100.00	$40,000
Effluent Weir Box	1	EA	$15,000.00	$15,000
6" Plug Valves	4	EA	$5,000.00	$20,000
5 hp aerator	2	EA	$15,000.00	$30,000
Installation of new aerators	1	LS	$2,000.00	$2,000
Aerator anchor moorings	6	EA	$1,000.00	$6,000
Subtotal				*$134,455*
Fencing around perimeter of ponds				
Chain link fence	1,000	LF	$10.00	$10,000
Subtotal				*$10,000*
			Subtotal (rounded)	$210,000
			20% contingency	$40,000
			Total	$250,000

Table E-2
Honor Farm Wastewater Treatment Facility
Probable Construction Cost for Electrical Improvements

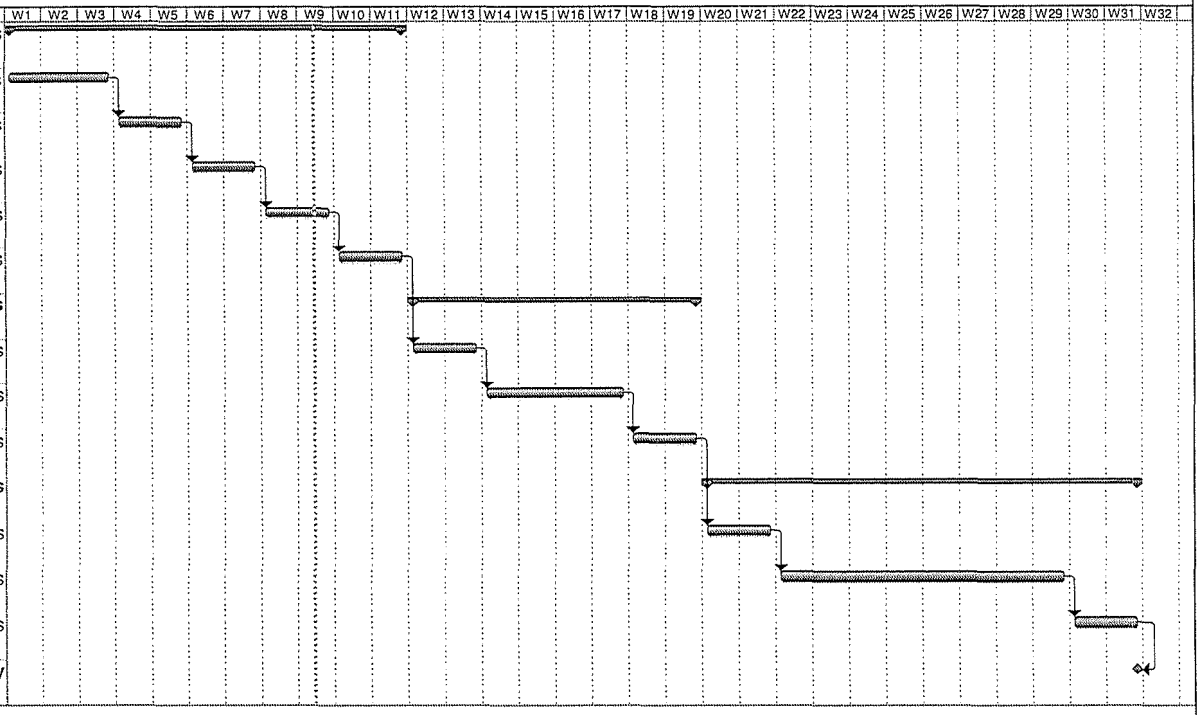
Item No.	Description	Quantity	Unit	Unit Price	Total Price
1	Equipment demo of (E) service panels, starters, controls, transformers, and weather cover. Removal of all aerator service conductors	1	Lot	$10,000.00	$10,000
2	Construction of (N) weather cover	1	Lot	$5,000.00	$5,000
3	Motor starters (two 5 hp and one 7 hp for Aeration Pond #1 [existing]; two 5 hp for Aeration Pond #2)	1	Lot	$15,000.00	$15,000
4	Transformer and controls equipment	1	Lot	$5,000.00	$5,000
5	Conduit and wire for (N) and (E) aerators, instrumentation, and site lighting	1	Lot	$15,000.00	$15,000
6	Install (N) site lighting	1	Lot	$5,000.00	$5,000
7	Electrical equipment and instrumentation testing and commissioning	1	Lot	$10,000.00	$10,000
				Total	$65,000

APPENDIX F

PROJECTED
DESIGN AND CONSTRUCTION
SCHEDULES

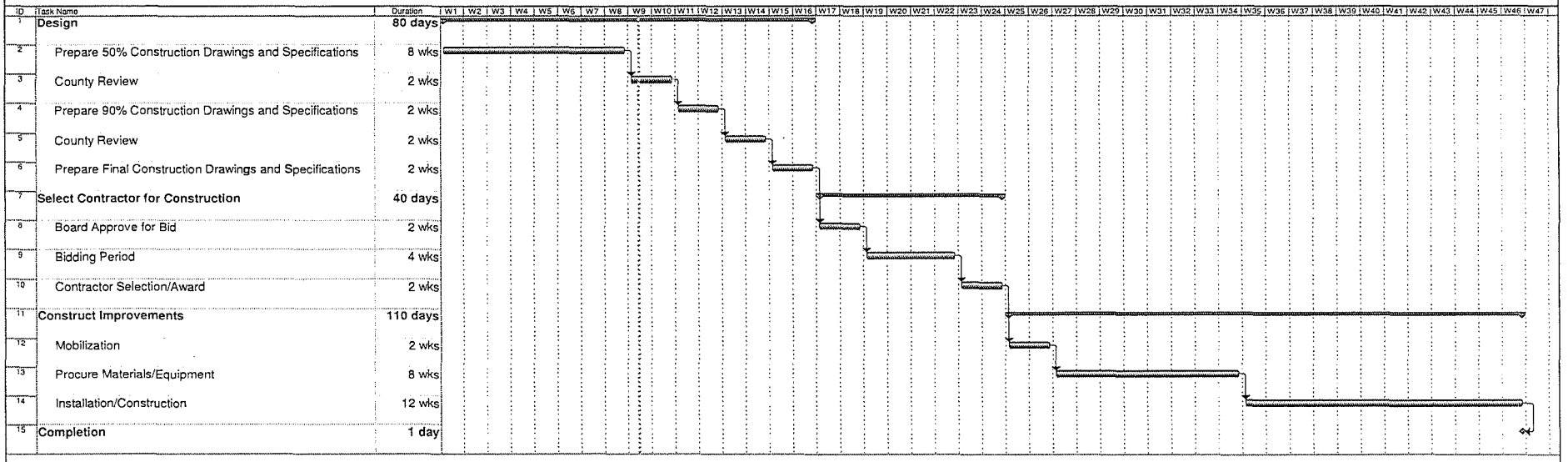
Figure F-1
STANISLAUS COUNTY HONOR FARM WASTEWATER TREATMENT FACILITY
UPGRADE OF ELECTRICAL PANELS
ESTIMATED DESIGN AND CONSTRUCTION SCHEDULE

ID	Task Name	Duration
1	**Design**	**55 days**
2	Prepare 50% Construction Drawings and Specifications	3 wks
3	County Review	2 wks
4	Prepare 90% Construction Drawings and Specifications	2 wks
5	County Review	2 wks
6	Prepare Final Construction Drawings and Specifications	2 wks
7	**Select Contractor for Construction**	**40 days**
8	Board Approve for Bid	2 wks
9	Bidding Period	4 wks
10	Contractor Selection/Award	2 wks
11	**Construct Improvements**	**60 days**
12	Mobilization	2 wks
13	Procure Materials/Equipment	8 wks
14	Installation/Construction	2 wks
15	**Completion**	**1 day**



\\MTS2\PROJECT\MTB019500\Documents\Master Plan - Final\master plan 0610 fig f-1.mpp

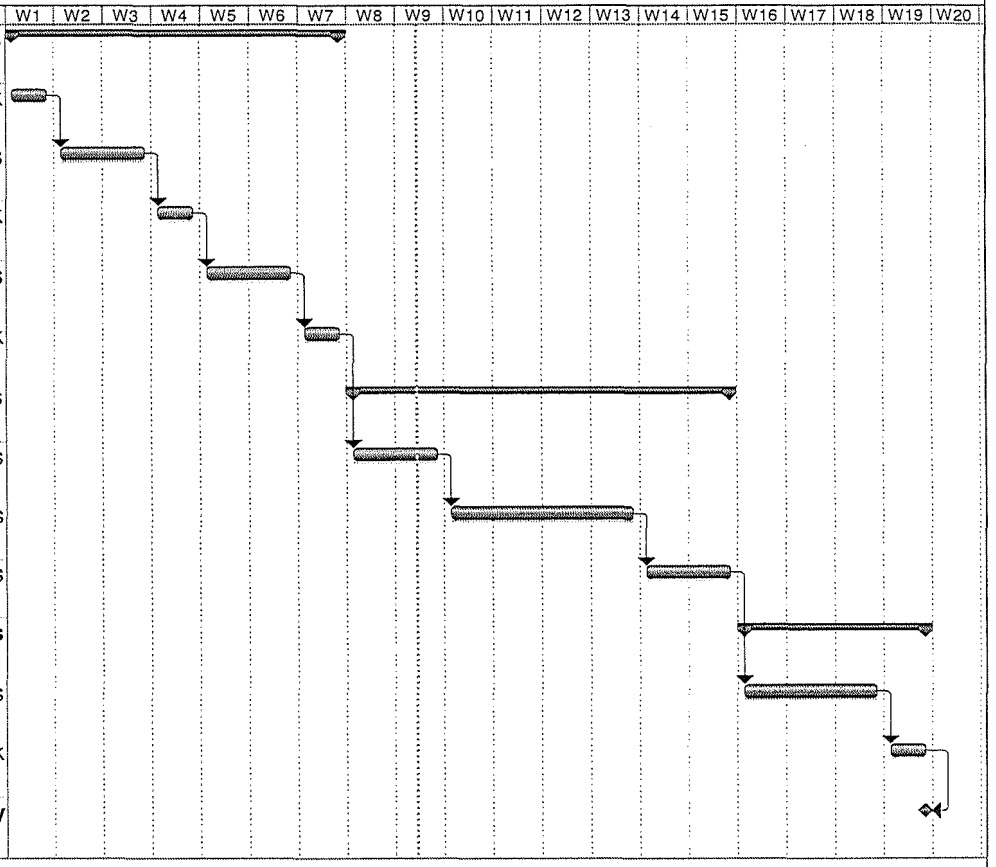
Figure F-2
STANISLAUS COUNTY HONOR FARM WASTEWATER TREATMENT FACILITY
CONVERSION OF POND #3 TO AN AERATION POND
ESTIMATED DESIGN AND CONSTRUCTION SCHEDULE



\\MTS2\PROJECT\MTB019500\Documents\Master Plan - Final\master plan 0610 fig f-2.mpp

Figure F-3
STANISLAUS COUNTY HONOR FARM WASTEWATER TREATMENT FACILITY
IMPROVED FENCING AND SIGNAGE AROUND POND #3 (FUTURE AERATION POND #2)
ESTIMATED DESIGN AND CONSTRUCTION SCHEDULE

ID	Task Name	Duration
1	**Design**	**35 days**
2	Prepare 50% Construction Drawings and Specifications	1 wk
3	County Review	2 wks
4	Prepare 90% Construction Drawings and Specifications	1 wk
5	County Review	2 wks
6	Prepare Final Construction Drawings and Specifications	1 wk
7	**Select Contractor for Construction**	**40 days**
8	Board Approve for Bid	2 wks
9	Bidding Period	4 wks
10	Contractor Selection/Award	2 wks
11	**Construct Improvements**	**20 days**
12	Mobilization and Procure Materials/Equipment	3 wks
13	Installation/Construction	1 wk
14	**Completion**	**1 day**



\\MTS2\PROJECT\MTB019500\Documents\Master Plan - Final\master plan 0610 fig f-3.mpp

Appendix E

Sludge Removal Project Outline

Proposed Progression

1. Move temporary influent line to pond 4 to maintain the facility in operation and treatment.

2. Remove aerators and store in a place that will not interfere with the dredging project.

3. Start pumping/dewatering aeration pond. This may consist of different pumping configurations as conditions require.

4. Mow area below the east side of the aeration pond.

5. Remove existing sludge in Pond 1, optional. Construct a holding berm around the area to contain any water from the sludge to be dried in Pond 1.

6. Identify how the excavator is going to position itself on the aeration pond levee to do the exaction.

7. Identify how double trailer trucks can get in to and out of the site to remove the material. This may include removing sections of fencing and building ramps.

Progression after dewatering

1. Bring in any necessary portable toilets and water supply for personnel during the project.

2. Turn off power, water, and drop power lines.

3. Equipment will be required to move dredging's as it is dumped on the drying area. Type and who has it?

4. The pond may need some extra clean-up work after dredging.

Sludge drying progression

1. During this period the land application permit company will have to be brought in to provide a cost for removing the dried treated sludge (Biosolids) to Merced County.

2. The drying period should be at least 3 months to meet the EPA 503 Vector Attraction Reduction requirements.

3. Once it has met the drying requirements perform the sampling for laboratory testing.

4. Once the test results are received the Biosolids can be removed.

5. The Biosolids removal will have to be reported to the State in the Monthly Report and to the EPA in a separate report by February 23rd of the following year of removal.

Stanislaus County Honor Farm Maintenance Project Cost Estimate

Table 1: Biosolids Removal Tests

Item No.	Item	Quantity	Unit	Unit Cost	Cost
1	Miscellaneous Removal Tests[1,2,3]	14	EA	$1,470.00	$20,580
2	Bacti (Coliform) Removal Test[2]	10	EA	$655.00	$6,550
				Sub-Total	$27,130
				40% Contingency (for removal to landfill)	$10,852
				TOTAL	**$37,982**

[1]Includes Metals, EPA 8081A, EPA 8082 and EPA 8270

[2]Aeration Pond and Ponds 1-4

[3]Sample Points 1-4

Table 2: Excavating and Pumping

Item No.	Item	Quantity	Unit	Unit Cost	Cost
1	Pumping Dewatering[1]	1	LS	$15,000.00	$15,000
2	Long Reach Excavator[1]	40	HRS	$300.00	$12,000
3	Leveling for Drying[1]	16	HRS	$200.00	$3,200
4	Stockpiling[1]	16	HRS	$200.00	$3,200
5	Excavating and Stockpiling[2]	40	HRS	$200.00	$8,000
				Sub-Total	$41,400
				25% Contingency	$10,350
				TOTAL	**$51,750**

[1]Aeration Pond

[2]Ponds 1-2

Table 3: Biosolids Removal

Item No.	Item	Quantity	Unit	Unit Cost	Cost
1	Biosolids Removal[1]	5,126	TON	$44.00	$225,544
				Sub-Total	$225,544
				40% Contingency (for removal to landfill)	$90,218
				TOTAL	**$315,762**

[1]Aeration Pond and Ponds 1-2

Note: Costs for Pond 3 and 4 biosolids removal will be evaluated after the testing results are received as it is assumed biosolids removal will be required.

Table 4: Total Cost Estimate Biosolids Removal

Item No.	Item	Cost
1	Biosolids Removal Test	$37,982
2	Excavating and Pumping	$51,750
3	Biosolids Removal	$315,762
	TOTAL	**$405,494**

Appendix F

ASBESTOS SAMPLING REPORT

Stanislaus County Sheriff's Department
Honor Farm
8224 West Grayson Rd., Modesto, CA 95358

PERFORMED BY:

J. W. MACK CONSULTING
July 8-9 -2013

J. W. MACK CONSULTING

1502 GLENN AVENUE
MODESTO, CA 95358

RESIDENTIAL AND COMMERCIAL
ASBESTOS
LEAD/BASED PAINT
ENVIRONMENTAL CONSULTING

PHONE AND FAX
(209) 581-9646

ASBESTOS SAMPLING REPORT

STANISLAUS COUNTY SHERIFF'S DEPARTMENT HONOR FARM
8224 W GRAYSON RD., MODESTO, CA 95358

On 8-9 July 2013, J. W. Mack, a Certified Asbestos Consultant, C.A.C. # 97-2270, performed a sampling of suspected asbestos containing building materials (ACBM). The sampling was conducted at the request of Mr. Joshua Ewen, Assistant Management Consultant, Chief Executive Office of Stanislaus County.

The purpose of the sampling was to confirm or deny the existence of asbestos in suspected building materials that would be impacted by the demolition of buildings and structures at the Honor Farm. This is a requirement under the National Emissions Standard for Hazardous Air Pollutants (NESHAP) 40 CFR and the San Joaquin Valley Unified Air Pollution Control District prior to a renovation or demolition.

PROPERTY DESCRIPTION

The Honor Farm consists of a combination of permanent buildings, modular buildings, trailers, water tank, propane tank, a free standing freezer box, and a back-up generator. The buildings and trailers, for the purpose of clarification of this report, were assigned an individual number in addition to site reference names and will be described individually.

1 Gee Classroom

A single story modular building with a metal roof, approximately 900 sq. ft. that sits on the ground. The interior is carpeting on the floors over wood with a T-bar ceiling and sheetrock walls.

2 Visitor's Trailer

A double wide, 24'x60' trailer with a metal roof. The exterior is wood siding. It has a shade covered porch with comp roofing. The interior is tack-board walls with a T-bar ceiling, 2'x4' panels, and carpet on the floor. There is some fiberglass insulation above the ceilings and in the walls. There is sheetrock under tack-board, with no joint compound or skimcoat.

3 Deputy Locker Room

A single wide, 10'x45' trailer with a metal roof and metal exterior. The interior is sheetrock trimmed in wood with fiberglass insulation in the walls. There is carpet on the floor.

4 Transition Trailer

A single wide, 8'x20' trailer with a metal roof that is snow coated. The exterior is wood siding trimmed in wood. The interior is sheetrock, T-bar ceiling and with carpet on the floor.

J. W. MACK CONSULTING

1502 GLENN AVENUE
MODESTO, CA 95358

RESIDENTIAL AND COMMERCIAL
ASBESTOS
LEAD/BASED PAINT
ENVIRONMENTAL CONSULTING

PHONE AND FAX
(209) 581-9646

5 Lieutenant's Office Trailer

A single wide, 12'x50' trailer with a metal snow coated roof, metal exterior siding. The interior walls are of sheetrock with wood laminate flooring and clay tiles in the restroom floor and T-bar ceiling.

6 Gazebo

The gazebo has a 24' diameter made of wood with no walls and a comp shingle roof.

7 Deputy Restrooms

A single story, 450' sq. ft. building sitting on a cement slab. The exterior and interior walls are of cementitious block. Ceilings are wood and no floor finishes.

8 Shops

A single story, 40'x168' structure made out of metal with metal siding and metal roof. There is some sheetrock, approximately 200 sq. ft. located in the first bay. The entire structure has bare cement floors.

9 Weight Building

A single story cementitious block (interior and exterior) building on a slab with a built up roof, approximately 1,600 sq. ft. It is utilized as a deputy weight workout room. It has sheetrock interior walls and ceilings.

10 Main Building

Contains the control room, chow hall, and kitchen. It's a single story building on cement slab; approximately 6,200 sq. ft. The exterior walls are of cementitious block. Interior walls are cementitious block covered over with paint and skimcoat over wooden walls in the chow hall. There is some sheetrock in the armory in back of the control room. There are 12"x12" VFT floor tiles throughout the control room and chow hall. There are clay tiles in the kitchen.

11 Barracks 3

It is a single story building on a cement slab with comp roofing on the main bunk room and built-up roofing over the shower room. Interior and exterior is of cementitious block walls with a wood ceiling, unfinished floors in the bunk room, and clay tiles on the floor of the shower room. Building is approximately 6,000 sq. ft.

12 Barracks 4

It is a two story building on a cement slab. It is composed of three units with a central court yard. It has approximately 6,000 sq. ft. footprint. The interior of the barracks rooms are plaster with 12"x12" VFT floor

J. W. MACK CONSULTING

1502 GLENN AVENUE
MODESTO, CA 95358

RESIDENTIAL AND COMMERCIAL
ASBESTOS
LEAD/BASED PAINT
ENVIRONMENTAL CONSULTING

PHONE AND FAX
(209) 581-9646

tile on the floor of the bunk rooms and clay tile in the shower rooms. All rooms, first and second floor, are homogenous. There is sheetrock on the walls of the mechanical room. The TSI in the mechanical room is fiberglass. It has a built-up roof.

13 Deputy Trailer

It is a single wide 10'x20' trailer. It has wooden exterior with a metal roof. The interior is painted wooden walls. It has 12"x12" VFT floor tiles homogenous to Barracks 4 on the floor.

14 Green House

It has cementitious block walls, fiberglass roof and no floor.

15 Free Standing Metal Shade Cover

16 Medical Trailer

It is a single wide, 10'x45' trailer. It has wooden exterior siding and metal roof. Wood paneling inside that has been skim coated and a T-bar ceiling. It is homogenous to other trailers.

17 Clothing Building

It is a single story site built building. It has wood exterior siding on cement slab with a metal roof. No interior finishes, approximately 800 sq. ft.

18 Break Room Trailer

It is a single wide 10'x60' trailer. It has a wooden exterior siding with a metal roof. The interior is T-bar ceiling, wood paneling on the walls, and a wooden parquet floor.

19 Storage Building

It is a metal framed building with a metal roof and approximately 2,000 sq. ft.

20 Free Standing Metal Shade Cover

21 Old Green House

It has cementitious block walls, with fiberglass roof and siding.

22 Wooden Shade Structure

Metal roof with no walls.

J. W. MACK CONSULTING

1502 GLENN AVENUE
MODESTO, CA 95358

RESIDENTIAL AND COMMERCIAL
ASBESTOS
LEAD/BASED PAINT
ENVIRONMENTAL CONSULTING

PHONE AND FAX
(209) 581-9646

Water Tank

Metal tank, 27' high with a 38' diameter.

Propane Tank

Metal pressure tank, 34' length with an 8' diameter.

LABORATORY ANALYSIS OF SAMPLES

The following samples were collected and placed under a chain-of-custody and shipped via FedEx to Forensic Analytical, 3777 Depot Rd., Suite 409, Hayward, CA 94545, an accredited ELAP/NVLAP/AIHI laboratory for analysis by EPA Method 600/R-93-116, visual area estimation (PLM). (See attached laboratory analysis, chain-of-custody, and photos. Paints were analyzed as component parts of other samples.)

SAMPLING

Roofs

R-1-1	Gee Modular-seaming material (Approx. 30 sq. ft.)	2% Chrysotile Asbestos
R-2-2	Visitor's Trailer-rubber seams and joints	No Asbestos Detected
R-3-3	Staff Locker Room Trailer-silver paint (Approx. 450 sq. ft.)	2% Chrysotile Asbestos
R-4-4	Operations Office Trailer/Transition Trailer-silver paint over metal	No Asbestos Detected
R-5-5	Adjutant's Office Trailer/Lt. Office-coating over metal roofing (Approx. 600 sq. ft.)	3% Chrysotile Asbestos
R-6-6	Comp roofing-all layers-Gazebo roof	No Asbestos Detected
R-7-7	Comp roofing-Staff Restrooms roof	No Asbestos Detected
R-8-7	Tarpaper under R-7-7	No Asbestos Detected
R-9-8	Shop metal roof coating-north end	No Asbestos Detected
R-10-8	Shop metal roof coating-south end	No Asbestos Detected
R-11-9	Weight Room-built-up roofing	No Asbestos Detected
R-12-9	Weight Room-built-up roofing	No Asbestos Detected
R-13-9	Weight Room-roof jack mastic (Approx. 25 sq. ft.)	7% Chrysotile Asbestos
R-14-10	Main Building-built-up roofing-kitchen	No Asbestos Detected
R-15-10	Main Building-built-up roofing-north end	No Asbestos Detected
R-16-10	Main Building-built-up roofing-center of roof (top layer)	No Asbestos Detected
R-17-10	Main Building-built-up roofing-center of roof (bottom layer)	No Asbestos Detected
R-18-10	Main Building-roof jack mastic-a/c units	No Asbestos Detected
R-19-10	Main Building-roof jack mastic-east side vents	No Asbestos Detected
R-20-10	Main Building-built-up roofing-west side (top layer)	No Asbestos Detected
R-21-10	Main Building-built-up roofing-east side (bottom layer)	No Asbestos Detected
R-22-10	Main Building-built-up roofing-west side (top layer)	No Asbestos Detected
R-23-10	Main Building-built-up roofing-west side (bottom layer)	No Asbestos Detected

J. W. MACK CONSULTING

1502 GLENN AVENUE
MODESTO, CA 95358

RESIDENTIAL AND COMMERCIAL
ASBESTOS
LEAD/BASED PAINT
ENVIRONMENTAL CONSULTING

PHONE AND FAX
(209) 581-9646

R-24-11	Barracks 3-comp roofing-top layer	No Asbestos Detected
R-25-11	Barracks 3-tarpaper under comp roofing	No Asbestos Detected
R-26-11	Barracks 3-comp roofing-north end	No Asbestos Detected
R-27-11	Barracks 3-comp roofing-south end	No Asbestos Detected
R-28-11	Barracks 3-comp roofing-2nd layer-south end	No Asbestos Detected
R-29-11	Barracks 3-tarpaper under comp roofing-west end	No Asbestos Detected
R-30-11	Barracks 3-built-up roofing-west side over shower room	No Asbestos Detected
R-31-11	Barracks 3-built-up roofing-bottom layer west side over shower room	No Asbestos Detected
R-32-11	Barracks 3-built-up roofing-over shower room	No Asbestos Detected
R-33-11	Barracks 3-roof jack mastic-vent-north	No Asbestos Detected
R-34-11	Barracks 3-roof jack mastic-vent-south	No Asbestos Detected
R-35-12	Barracks 4-built-up roofing-north	No Asbestos Detected
R-36-12	Barracks 4-built-up roofing-south	No Asbestos Detected
R-37-12	Barracks 4-built-up roofing-east	No Asbestos Detected
R-38-12	Barracks 4-built-up roofing tarpaper-west	No Asbestos Detected
R-39-12	Barracks 4-built-up roofing tarpaper-bottom layer-west	No Asbestos Detected
R-40-12	Barracks 4-roof jack mastic-vents	No Asbestos Detected
R-1-16	Medical Trailer-metal roof coating (Approx. 450 sq. ft.)	2% Chrysotile Asbestos
R-2-16	Medical Trailer Porch-comp roofing	No Asbestos Detected
R-3-0	Shade covers between buildings and porches-comp roofing	No Asbestos Detected
R-4-0	Shade covers-comp roofing-tarpaper-bottom layer	No Asbestos Detected
R-5-18	Break Room Trailer-roof seaming/coating material (Approx. 600 sq. ft.)	2% Chrysotile Asbestos
R-6-19/20	Storage Building-rubber seaming material	No Asbestos Detected

Interior / Exterior of Buildings

A-1	Sheetrock/skimcoat-Barracks 4-west mechanical room	No Asbestos Detected
A-2	Sheetrock/skimcoat-Barracks 4-north mechanical room	No Asbestos Detected
A-3	Sheetrock/skimcoat-Barracks 4-center mechanical room	No Asbestos Detected
A-4	12"x12" Lt. Brown VFT/black mastic-Barracks 4-Room L	No Asbestos Detected
A-5	12"x12" Gray VFT/yellow mastic-Barracks 4-Room L	No Asbestos Detected
A-6	12"x12" Off-white VFT-yellow mastic-Barracks 4-Room L	No Asbestos Detected
A-7	Clay tile/grout-Barracks 4-shower room floors-Room L	No Asbestos Detected
A-8	Mortar base under clay tile-Barracks 4-shower room-Room L	No Asbestos Detected
A-9	Ext. plaster-Barracks 4-north	No Asbestos Detected
A-10	Ext. plaster-Barracks 4-south	No Asbestos Detected
A-11	Clay floor tile/grout-Barracks 3-shower room	No Asbestos Detected
A-12	Sheetrock/skimcoat-Medical trailer	No Asbestos Detected
A-13	Ext. plaster-Barracks 3-south	No Asbestos Detected
A-14	Ext. plaster-Barracks 3-north	No Asbestos Detected
A-15	Carpet/carpet mastic-Gee Modular	No Asbestos Detected
A-16	Sheetrock/skimcoat-Gee Modular-north wall	No Asbestos Detected

J. W. MACK CONSULTING

1502 GLENN AVENUE
MODESTO, CA 95358

RESIDENTIAL AND COMMERCIAL
ASBESTOS
LEAD/BASED PAINT
ENVIRONMENTAL CONSULTING

PHONE AND FAX
(209) 581-9646

A-17	Sheetrock/skimcoat-Gee Modular-south wall	No Asbestos Detected
A-18	2'x4' acoustical ceiling panels-T-bar ceiling-Gee Modular	No Asbestos Detected
A-19	2'x4' acoustical ceiling panels-T-bar ceiling-Visitor's Trailer	No Asbestos Detected
A-20	Sheetrock under tack board-Visitor's Trailer	No Asbestos Detected
A-21	Ceiling plaster-Staff Locker Rm. Trailer	No Asbestos Detected
A-22	Sheetrock/skimcoat-Staff Locker Rm. Trailer	No Asbestos Detected
A-23	Sheetrock/skimcoat-Women's side-Locker Room Trailer	No Asbestos Detected
A-24	Sheetrock/skimcoat-interior walls-Transition Trailer	No Asbestos Detected
A-25	Ceiling plaster-Admin. (Lieutenant) Office Trailer	No Asbestos Detected
A-26	Sheetrock/skimcoat-Lieutenant Office Trailer-east end	No Asbestos Detected
A-27	Sheetrock/skimcoat-Lieutenant Office Trailer-restroom wall	No Asbestos Detected
A-28	Clay tile/grout-Lieutenant Office Trailer-restroom floor	No Asbestos Detected
A-29	Mortar base under clay tile-Lieutenant Office Trailer-restroom floor	No Asbestos Detected
A-30	Sheetrock/skimcoat-Lieutenant Office Trailer-hallway	No Asbestos Detected
A-31	Ext. block walls-Staff Restroom Bldg.	No Asbestos Detected
A-32	12"x12" VFT/black mastic-Main Bldg. Control Room Bldg.	No Asbestos Detected
A-33	Clay floor tiles-Main Bldg. Main Control room	No Asbestos Detected
A-34	Sheetrock/skimcoat-Main Bldg. Armory locker	No Asbestos Detected
A-35	12"x12" VFT/yellow mastic-Chow Hall	No Asbestos Detected
A-36	12"x12" Black VFT/yellow mastic-Kitchen floor	No Asbestos Detected
A-37	12"x12" White VFT/tan mastic-Kitchen floor	No Asbestos Detected
A-38	Clay tile/mortar-Kitchen floor	No Asbestos Detected
A-39	Ext. block walls-Main Bldg.-west	No Asbestos Detected
A-40	Ext. block walls-Main Bldg.-south	No Asbestos Detected
A-41	Skimcoat over wooden walls-Chow Hall-north	No Asbestos Detected
A-42	Skimcoat over wooden walls-Chow Hall-south	No Asbestos Detected
A-43	Ext. block walls-Weight Room	No Asbestos Detected
A-44	Sheetrock/skimcoat-Weight Room-north	No Asbestos Detected
A-45	Sheetrock/skimcoat-Weight room-restroom wall	No Asbestos Detected
A-46	Sheetrock/skimcoat-Work shop/welding shop-wall	No Asbestos Detected

EXCUTIVE SUMMARY

Based on laboratory analysis of samples, there is asbestos in the following:

Bldg. 1	Gee Classroom	Approximately 25 sq. ft. over the bolts on the roof.

This material would need to be removed prior to demolition.

Bldg. 3	Deputy Locker Room Trailer	Approximately 450 sq. ft. in roof coating.
Bldg. 5	Lieutenant's Office Trailer	Approximately 600 sq. ft. in roof coating.

J. W. MACK CONSULTING

RESIDENTIAL AND COMMERCIAL
ASBESTOS
LEAD/BASED PAINT
ENVIRONMENTAL CONSULTING

1502 GLENN AVENUE
MODESTO, CA 95358

PHONE AND FAX
(209) 581-9646

Bldg. 9	Weight Building	Approximately 60 sq. ft. in roof jack mastic.

This material would have to be removed prior to demolition of the building.

Bldg. 16	Medical Trailer	Approximately 450 sq. in roof coating.
Bldg. 18	Break Trailer	Approximately 600 sq. ft. in roof coating.

There is approximately 30 sq. ft. of 9"x9" VFT (vinyl floor tile) on an exposed concrete slab by the visitor's bridge. (This material should be properly removed and disposed of by a California licensed abatement contractor prior to demolition of the slab.

All of these materials are non-friable but have the potential to become friable if impacted by a mechanical means in the course of demolition.

The trailers can be moved in an intact condition with the asbestos roof coatings in place.

If the trailers are going to be demoed at their current location, the roof coatings would have to be removed and disposed of by a California licensed abatement contractor following all applicable laws and regulations.

When impacting asbestos, a California licensed abatement contractor following all applicable laws and regulations to removal and disposal should be utilized.

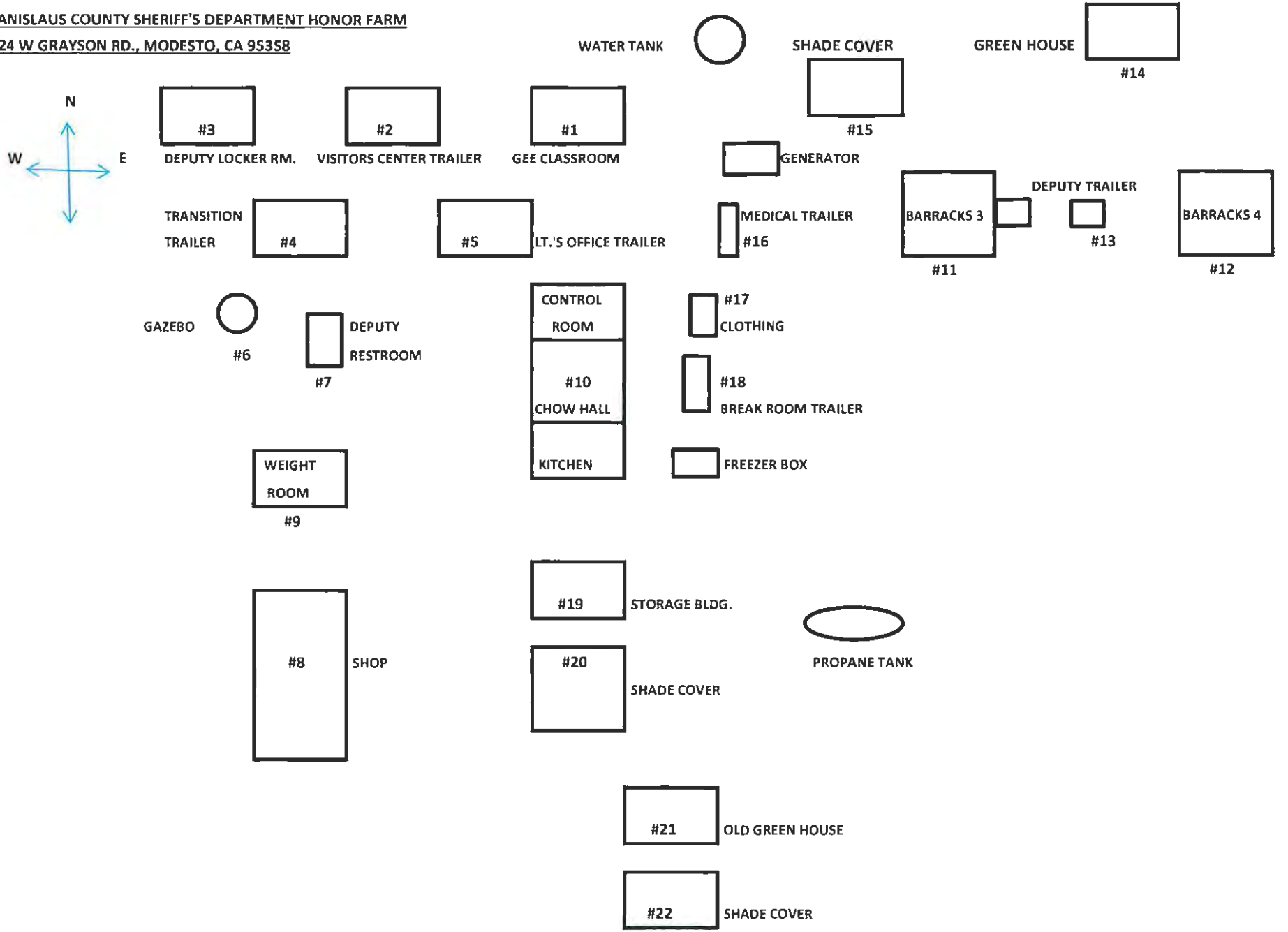
J. W. Mack

C.A.C. # 97-2270

SITE LAYOUT

STANISLAUS COUNTY SHERIFF'S DEPARTMENT HONOR FARM

8224 W GRAYSON RD., MODESTO, CA 95358



HONOR FARM

LABORATORY ANALYSIS AND

CHAIN-OF-CUSTODY

Bulk Asbestos Analysis

(EPA Method 600/R-93-116, Visual Area Estimation)

JW Mack Consulting
J.W. Mack
1502 Glenn Ave.

Modesto, CA 95358

Client ID: 4405
Report Number: B179554
Date Received: 07/11/13
Date Analyzed: 07/12/13
Date Printed: 07/12/13
First Reported: 07/12/13

Job ID/Site: Honor Farm, Roof's

Date(s) Collected: 07/08/2013

FALI Job ID: 4405
Total Samples Submitted: 40
Total Samples Analyzed: 40

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
R-1-1	11400843						
Layer: Grey Semi-Fibrous Material		Chrysotile	**2 %**				
Total Composite Values of Fibrous Components:		**Asbestos (2%)**					
Cellulose (Trace) Synthetic (5 %)							
R-2-2	11400844						
Layer: Off-White Non-Fibrous Material			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace)							
R-3-3	11400845						
Layer: Silver Paint		Chrysotile	**2 %**				
Total Composite Values of Fibrous Components:		**Asbestos (2%)**					
Cellulose (Trace)							
R-4-4	11400846						
Layer: Silver Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace)							
R-5-5	11400847						
Layer: Silver Paint			**ND**				
Layer: Off-White Non-Fibrous Material			**ND**				
Layer: Beige Non-Fibrous Material		Chrysotile	**3 %**				
Total Composite Values of Fibrous Components:		**Asbestos (Trace)**					
Cellulose (Trace)							
R-6-6	11400848						
Layer: Black Roof Shingle			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (5 %) Fibrous Glass (45 %)							
R-7-7	11400849						
Layer: Black Roof Shingle			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (5 %) Fibrous Glass (45 %)							

3777 Depot Road, Suite 409, Hayward, CA 94545 / Telephone: (510) 887-8828 (800) 827-FASI / Fax: (510) 887-4218

Client Name: JW Mack Consulting

Report Number: B179554
Date Printed: 07/12/13

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
R-8-7	11400850						
Layer: Black Fibrous Material			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (85 %)							
R-9-8	11400851						
Layer: Off-White Non-Fibrous Material			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace)							
R-10-8	11400852						
Layer: Off-White Non-Fibrous Material			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace)							
R-11-9	11400853						
Layer: Silver Paint			**ND**				
Layer: Black Tar			**ND**				
Layer: Black Felt			**ND**				
Layer: Black Tar			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace) Fibrous Glass (5 %) Synthetic (35 %)							
R-12-9	11400854						
Layer: Silver Paint			**ND**				
Layer: Black Tar			**ND**				
Layer: Black Felt			**ND**				
Layer: Black Tar			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace) Fibrous Glass (5 %) Synthetic (35 %)							
R-13-9	11400855						
Layer: Black Mastic		Chrysotile	**7 %**				
Total Composite Values of Fibrous Components:		**Asbestos (7%)**					
Cellulose (Trace) Synthetic (3 %)							
R-14-10	11400856						
Layer: White Roof Shingle			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (5 %) Fibrous Glass (45 %)							
R-15-10	11400857						
Layer: Black Felt			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace) Fibrous Glass (60 %)							
R-16-10	11400858						
Layer: White Roof Shingle			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (5 %) Fibrous Glass (45 %)							

3777 Depot Road, Suite 409, Hayward, CA 94545 / Telephone: (510) 887-8828 (800) 827-FASI / Fax: (510) 887-4218

Client Name: JW Mack Consulting

Report Number: B179554
Date Printed: 07/12/13

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
R-17-10	11400859						
Layer: Black Felt			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace) Fibrous Glass (60 %)							
R-18-10	11400860						
Layer: Black Mastic			**ND**				
Layer: White Roof Shingle			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (5 %) Fibrous Glass (40 %)							
R-19-10	11400861						
Layer: Black Mastic			**ND**				
Layer: White Roof Shingle			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (5 %) Fibrous Glass (40 %)							
R-20-10	11400862						
Layer: Black Felt			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace) Fibrous Glass (60 %)							
R-21-10	11400863						
Layer: Black Felt			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace) Fibrous Glass (60 %)							
R-22-10	11400864						
Layer: White Roof Shingle			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (5 %) Fibrous Glass (45 %)							
R-23-10	11400865						
Layer: Black Felt			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace) Fibrous Glass (60 %)							
R-24-11	11400866						
Layer: Orange Roof Shingle			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (5 %) Fibrous Glass (45 %)							
R-25-11	11400867						
Layer: Black Felt			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (85 %)							
R-26-11	11400868						
Layer: Black Roof Shingle			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (5 %) Fibrous Glass (45 %)							

3777 Depot Road, Suite 409, Hayward, CA 94545 / Telephone: (510) 887-8828 (800) 827-FASI / Fax: (510) 887-4218

Client Name: JW Mack Consulting

Report Number: B179554
Date Printed: 07/12/13

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
R-27-11	11400869						
Layer: Orange Roof Shingle			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (5 %) Fibrous Glass (45 %)							
R-28-11	11400870						
Layer: Grey Roof Shingle			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (5 %) Fibrous Glass (45 %)							
R-29-11	11400871						
Layer: Black Felt			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (85 %)							
R-30-11	11400872						
Layer: White Roof Shingle			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (5 %) Fibrous Glass (45 %)							
R-31-11	11400873						
Layer: Black Felt			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (85 %)							
R-32-11	11400874						
Layer: Silver Paint			**ND**				
Layer: Black Semi-Fibrous Tar			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace) Synthetic (10 %)							
R-33-11	11400875						
Layer: Black Mastic			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (10 %)							
R-34-11	11400876						
Layer: Black Mastic			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (10 %)							
R-35-12	11400877						
Layer: White Roof Shingle			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (5 %) Fibrous Glass (45 %)							
R-36-12	11400878						
Layer: White Roof Shingle			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (5 %) Fibrous Glass (45 %)							

3777 Depot Road, Suite 409, Hayward, CA 94545 / Telephone: (510) 887-8828 (800) 827-FASI / Fax: (510) 887-4218

Report Number: B179554

Client Name: JW Mack Consulting **Date Printed:** 07/12/13

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
R-37-12	11400879						
Layer: White Roof Shingle			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (5 %) Fibrous Glass (45 %)							
R-38-12	11400880						
Layer: Black Felt			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Fibrous Glass (70 %)							
R-39-12	11400881						
Layer: Black Felt			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Fibrous Glass (70 %)							
R-40-12	11400882						
Layer: Black Mastic			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (10 %)							

Tad Thrower

Tad Thrower, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

3777 Depot Road, Suite 409, Hayward, CA 94545 / Telephone: (510) 887-8828 (800) 827-FASI / Fax: (510) 887-4218

Forensic Analytical Laboratories, Inc. — **Analysis Request Form (COC)**

Company Name & Address: JW. MACK CONSULTING, 1502 GLENN AVE. MODESTO CA,95358	PO / Job#: — Date: 7-10-13
	Turn Around Time: Same Day / (1Day) / 2Day / 3Day / 4Day / 5Day
	☐ PCM: ☐ NIOSH 7400A / ☐ NIOSH 7400B ☐ Rotometer
	☒ PLM: ☒ Standard / ☐ Point Count 400 - 1000 / ☐ CARB 435
Contact: JW MACK	☐ TEM Air: ☐ AHERA / ☐ Yamate2 / ☐ NIOSH 7402; ☐ TEM Bulk: ☐ Quantitative / ☐ Qualitative / ☐ Chatfield; ☐ TEM Water: ☐ Potable / ☐ Non-Potable / ☐ Weight %; ☐ TEM Microvac: ☐ Qual(+/-) / ☐ D5755(str/area) / ☐ D5756(str/mass)
Phone: 290-581-9646 — Fax: 209-581-9646	
E-mail: jwmackcon@aol.com	☐ IAQ Particle Identification (PLM LAB) ☐ PLM Opaques/Soot; ☐ Particle Identification (TEM LAB) ☐ Special Project
Site: Honor Farm.	☐ Metals Analysis: Method:
Site Location: Roof's	Matrix: ; Analytes:
Comments: Asbestos Bulk Samples.	Report Via: ☐ Fax ☒ E-Mail ☐ Verbal

Sample ID	Date / Time	Sample Location / Description	Type (A/P/C)	Time On/Off	Avg. LPM	Total Time	Sample Area / Air Volume
R-1-1	7/8	GEE Trailer/Robber		Seam / Bolt Door	material		
R-2-2	7/8	Visor trailer/Rober		Seam's / And Joint			
R-3-3	7/8	Staff Locker Room's		Trailer. / Paint	Sch. coat.		
R-4-4	7/8	OPP office Trailor.		Paint / over	Metal		
R-5-5	7/8	Adment offices trailor		Coating / over	metal.		
R-6-6	7/8	Comp Roofing		gazebo			
R-7-7	7/8	Staff R.R. Comp Roofing		Top / layer			
R-8-7	7/8	Tar paper under R-7		Bottom / Layer.			
R-9-8	7/8	Shop Roof Coating		North			
R-10-8	7/8	Shop Roofing Coating		South / end			

Sampled By: JW Mack — Date: 7/8/13 — Time: 0800

Shipped Via: ☒ Fed Ex ☐ DHL ☐ UPS ☐ US Mail ☐ Courier ☐ Drop Off ☐ Other:

Relinquished By: JW Mack; Date / Time: 7/10/13 1500	Relinquished By: ; Date / Time:	Relinquished By: ; Date / Time:
Received By: [signature]; Date / Time: 7-11-13 @ 10am	Received By: ; Date / Time:	Received By: ; Date / Time:
Condition Acceptable? ☒ Yes ☐ No	Condition Acceptable? ☐ Yes ☐ No	Condition Acceptable? ☐ Yes ☐ No

Forensic Analytical Laboratories, Inc.

Analysis Request Form (COC)

Company Name & Address: JW. MACK CONSULTING 1502 GLENN AVE. MODESTO CA,95358	PO / Job#: Date: 7-10-13
	Turn Around Time: Same Day / (1Day) / 2Day / 3Day / 4Day / 5Day
	☐ PCM: ☐ NIOSH 7400A / ☐ NIOSH 7400B ☐ Rotometer
	☒ PLM: ☒ Standard / ☐ Point Count 400 - 1000 / ☐ CARB 435
Contact: JW MACK	☐ TEM Air: ☐ AHERA / ☐ Yamate2 / ☐ NIOSH 7402 ☐ TEM Bulk: ☐ Quantitative / ☐ Qualitative / ☐ Chatfield ☐ TEM Water: ☐ Potable / ☐ Non-Potable / ☐ Weight % ☐ TEM Microvac: ☐ Qual(+/-) / ☐ D5755(str/area) / ☐ D5756(str/mass)
Phone: 290-581-9646 Fax: 209-581-9646	
E-mail: jwmackcon@aol.com	☐ IAQ Particle Identification (PLM LAB) ☐ PLM Opaques/Soot ☐ Particle Identification (TEM LAB) ☐ Special Project
Site: HONOR FARM	☐ Metals Analysis: Method:
Site Location: Roofs.	Matrix: Analytes:
Comments: Asbestos Bulk Samples	Report Via: ☐ Fax ☒ E-Mail ☐ Verbal

Sample ID	Date / Time	Sample Location / Description	FOR AIR SAMPLES ONLY Type	Time On/Off	Avg. LPM	Total Time	Sample Area / Air Volume
R-11-9	7/8	Bilt up Roofing	A P C	Wt. Room	Bldg. #9		
R-12-9	7/8	Bilt up Roofing	A P C	Wt. Room Building	#9		
R-13-9	7/8	Roof Jack mastic	A P C	Wt Room	Building	#9	
R-14-10	7/8	Bilt up Roofing Top Layer	A P C	Kitchen	North west.		
R-15-10	7/8	Bilt up Roofing Bottom Layer	A P C	North	west		
R-16-10	7/8	Bilt up Roofing top Layer	A P C	Center Roof			
R-17-10	7/8	Bilt up Roofing Bottom Layer	A P C	Center Roof.			
R-18-10	7/8	Black Roof mastic	A P C	Cent & Rom	AC units.		
R-19-10	7/8	Black Mastic Roof	A P C	East Side	Vents		
R-20-10	7/8	Bilt up Roofing Top	A P C	[redacted] Layer	West Side.		

Sampled By: JWMack Date: 7/8/13 Time: 0800

Shipped Via: ☒ Fed Ex ☐ DHL ☐ UPS ☐ US Mail ☐ Courier ☐ Drop Off ☐ Other:

Relinquished By:	Relinquished By:	Relinquished By:
JWMack		
Date / Time: 7/10/13 1500	Date / Time:	Date / Time:
Received By: bjp	Received By:	Received By:
Date / Time: 7-11-13 @10am	Date / Time:	Date / Time:
Condition Acceptable? ☒ Yes ☐ No	Condition Acceptable? ☐ Yes ☐ No	Condition Acceptable? ☐ Yes ☐ No

San Francisco Office: 3777 Depot Road, Suite 409, Hayward, California 94545-2761 / Ph: (510)887-8828 * (800)827-3274 / Fax: (510)887-4218
Los Angeles Office: 2959 Pacific Commerce Drive, Rancho Dominguez, California 90221 / Ph: (310)763-2374 * (888)813-9417 / Fax: (310)763-4450
Las Vegas Office: 6765 S. Eastern Avenue, Suite 3, Las Vegas, Nevada 89119 / Ph: (702)784-0040 / Fax: (702)784-0030

Forensic Analytical Laboratories, Inc.

Analysis Request Form (COC)

Company Name & Address: JW. MACK CONSULTING 1502 GLENN AVE. MODESTO CA,95358	PO / Job#: Date: 7-10-13 Turn Around Time: Same Day / (1Day) / 2Day / 3Day / 4Day / 5Day ☐ PCM: ☐ NIOSH 7400A / ☐ NIOSH 7400B ☐ Rotometer ☒ PLM: ☒ Standard / ☐ Point Count 400 - 1000 / ☐ CARB 435
Contact: JW MACK Phone: 290-581-9646 Fax: 209-581-9646 E-mail: jwmackcon@aol.com	☐ TEM Air: ☐ AHERA / ☐ Yamate2 / ☐ NIOSH 7402 ☐ TEM Bulk: ☐ Quantitative / ☐ Qualitative / ☐ Chatfield ☐ TEM Water: ☐ Potable / ☐ Non-Potable / ☐ Weight % ☐ TEM Microvac: ☐ Qual(+/-) / ☐ D5755(str/area) / ☐ D5756(str/mass) ☐ IAQ Particle Identification (PLM LAB) ☐ PLM Opaques/Soot ☐ Particle Identification (TEM LAB) ☐ Special Project
Site: Honor farm Site Location: Roofs	☐ Metals Analysis: Method: Matrix: Analytes:
Comments: Asbestos Bulk Samples	Report Via: ☐ Fax ☒ E-Mail ☐ Verbal

Sample ID	Date / Time	Sample Location / Description	FOR AIR SAMPLES ONLY Type	Time On/Off	Avg. LPM	Total Time	Sample Area / Air Volume
R-21-10	7/8	Bilt up Roofing Bottom	A P C	Layer Bottom			
R-22-10	7/8	Bilt up Roofing	A P C	Top Layer	Sample #4 West Side		
R-23-10	7/8	Bilt up Roofing	A P C	Bottom Layer		#4	
R-24-11	7/8	Comp Roofing Bar # 3	A P C	top layer-			
R-25-11	7/8	Tar paper Under R-24	A P C	Bottom layer.			
R-26-11	7/8	Comp Roofing ~~Metal~~ Bar #3	A P C	2nd North Layer.			
R-27-11	7/8	Comp Roofing top Bar #3	A P C	South			
R-28-11	7/8	Comp Roofing Bar # 3	A P C	2nd Layer			
R-29-11	7/8	Pepper Bottom Layer	A P C				
R-30-11	7/8	Barracks #3 Bilt up Roofing	A P C	West Side	RR area of Bldg		

Sampled By: JW MACK Date: 7/8/13 Time: 0800

Shipped Via: ☒ Fed Ex ☐ DHL ☐ UPS ☐ US Mail ☐ Courier ☐ Drop Off ☐ Other:

Relinquished By:	Relinquished By:	Relinquished By:
Date / Time: JW Mack 7/10/13 1500	Date / Time:	Date / Time:
Received By:	Received By:	Received By:
Date / Time: 7-11-13 @ 10am	Date / Time:	Date / Time:
Condition Acceptable? ☒ Yes ☐ No	Condition Acceptable? ☐ Yes ☐ No	Condition Acceptable? ☐ Yes ☐ No

San Francisco Office: 3777 Depot Road, Suite 409, Hayward, California 94545-2761 / Ph: (510)887-8828 * (800)827-3274 / Fax: (510)887-4218
Los Angeles Office: 2959 Pacific Commerce Drive, Rancho Dominguez, California 90221 / Ph: (310)763-2374 * (888)813-9417 / Fax: (310)763-4450
Las Vegas Office: 6765 S. Eastern Avenue, Suite 3, Las Vegas, Nevada 89119 / Ph: (702)784-0040 / Fax: (702)784-0030

Forensic Analytical Laboratories, Inc.

Analysis Request Form (COC)

Company Name & Address: JW. MACK CONSULTING 1502 GLENN AVE. MODESTO CA,95358	PO / Job#: Date: 7-10-13
	Turn Around Time: Same Day / (1Day) / 2Day / 3Day / 4Day / 5Day
	☐ PCM: ☐ NIOSH 7400A / ☐ NIOSH 7400B ☐ Rotometer
	☒ PLM: ☒ Standard / ☐ Point Count 400 - 1000 / ☐ CARB 435
Contact: JW MACK	☐ TEM Air: ☐ AHERA / ☐ Yamate2 / ☐ NIOSH 7402 ☐ TEM Bulk: ☐ Quantitative / ☐ Qualitative / ☐ Chatfield ☐ TEM Water: ☐ Potable / ☐ Non-Potable / ☐ Weight % ☐ TEM Microvac: ☐ Qual(+/-) / ☐ D5755(str/area) / ☐ D5756(str/mass)
Phone: 290-581-9646 Fax: 209-581-9646	
E-mail: jwmackcon@aol.com	☐ IAQ Particle Identification (PLM LAB) ☐ PLM Opaques/Soot ☐ Particle Identification (TEM LAB) ☐ Special Project
Site: Honor farm	☐ Metals Analysis: Method:
Site Location: Roofs	Matrix: Analytes:
Comments: Asbestos Bulk Samples	Report Via: ☐ Fax ☒ E-Mail ☐ Verbal

Sample ID	Date / Time	Sample Location / Description	FOR AIR SAMPLES ONLY				Sample Area / Air Volume
			Type	Time On/Off	Avg. LPM	Total Time	
R-31-11	7/8	Bilt up Roofing Barracks 3	A P C	Bottom Layer	RR15		
R-32-11	7/8	Bild up Rofing Barracks	A P C	# 3	RR		
R-33-11	7/8	Vent mastic Barracks	A P C	# 3	North		
R-34-11	7/8	Vent mastic Barracks	A P C	# 3	South.		
R-35-12	7/8	Bilt up Roofing Barx.	A P C	# 4	North		
R-36-12	7/8	Bilt up Roofing Barx.	A P C	# 4	South.		
R-37-12	7/8	Bilt up Roofing Barx	A P C	# 4	East		
R-38-12	7/8	Bilup Roofing Barr x	A P C	# 4	West.	Paper.	
R-39-12	7/8	Bilup Roofing Barr x	A P C	# 4	Paper	Bottom layer	
R-40-12	7/8	Roof Jack mastic	A P C	Barrx #4	Vents		

Sampled By: JW Mack Date: 7-8-13 Time: 0800

Shipped Via: ☒ Fed Ex ☐ DHL ☐ UPS ☐ US Mail ☐ Courier ☐ Drop Off ☐ Other:

Relinquished By: JW Mack Date / Time: 7/10/13 1500	Relinquished By: Date / Time:	Relinquished By: Date / Time:
Received By: Date / Time: 7-11-13 @ 10am Condition Acceptable? ☒ Yes ☐ No	Received By: Date / Time: Condition Acceptable? ☐ Yes ☐ No	Received By: Date / Time: Condition Acceptable? ☐ Yes ☐ No

Forensic Analytical Laboratories, Inc.

Analysis Request Form (COC)

Company Name & Address: JW. MACK CONSULTING 1502 GLENN AVE. MODESTO CA,95358	PO / Job#: Date: 7-11-13 Turn Around Time: Same Day / (1Day) / 2Day / 3Day / 4Day / 5Day ☐ PCM: ☐ NIOSH 7400A / ☐ NIOSH 7400B ☐ Rotometer ☒ PLM: ☒ Standard / ☐ Point Count 400 - 1000 / ☐ CARB 435
Contact: JW MACK Phone: 290-581-9646 Fax: 209-581-9646	☐ TEM Air: ☐ AHERA / ☐ Yamamo2 / ☐ NIOSH 7402 ☐ TEM Bulk: ☐ Quantitative / ☐ Qualitative / ☐ Chatfield ☐ TEM Water: ☐ Potable / ☐ Non-Potable / ☐ Weight % ☐ TEM Microvac: ☐ Qual(+/-) / ☐ D5755(str/area) / ☐ D5756(str/mass)
E-mail: jwmackcon@aol.com	☐ IAQ Particle Identification (PLM LAB) ☐ PLM Opaques/Soot ☐ Particle Identification (TEM LAB) ☐ Special Project
Site: Honor Farm Site Location: Roofs.	☐ Metals Analysis: Method: Matrix: Analytes:
Comments: Asbestos Bulk Samples	Report Via: ☐ Fax ☒ E-Mail ☐ Verbal

Sample ID	Date / Time	Sample Location / Description	FOR AIR SAMPLES ONLY				Sample Area / Air Volume
			Type	Time On/Off	Avg. LPM	Total Time	
R-1—16	7/8/13	Mech trailer	A P C	Roof Coating	Metal Roof.		
R-2-16	7/8	Comp Roofing Porch	A P C				
R-3-0	7/8	Comp Roofing Shade Cover	A P C	Top Layer			
R-4-0	7/8	Comp Roofing Tarpaper	A P C	Bottom Layer.			
R-5-18	7/8	Roof Seam material.	A P C				
R-6-19/20	7/8	Metal Roofs Seams	A P C				
			A P C				
			A P C				
			A P C				
			A P C				

Sampled By: Hilmell Date: 7/8/13 Time: 0800

Shipped Via: ☒ Fed Ex ☐ DHL ☐ UPS ☐ US Mail ☐ Courier ☐ Drop Off ☐ Other:

Relinquished By: JW Mack Date / Time: 7/11/13 1500	Relinquished By: Date / Time:	Relinquished By: Date / Time:
Received By: Nellie Lopez FX Date / Time: 7-12-13 10AM Condition Acceptable? ☒ Yes ☐ No	Received By: Date / Time: Condition Acceptable? ☐ Yes ☐ No	Received By: Date / Time: Condition Acceptable? ☐ Yes ☐ No

San Francisco Office: 3777 Depot Road, Suite 409, Hayward, California 94545-2761 / Ph: (510)887-8828 * (800)827-3274 / Fax: (510)887-4218
Los Angeles Office: 2959 Pacific Commerce Drive, Rancho Dominguez, California 90221 / Ph: (310)763-2374 * (888)813-9417 / Fax: (310)763-4450
Las Vegas Office: 6765 S. Eastern Avenue, Suite 3, Las Vegas, Nevada 89119 / Ph: (702)784-0040 / Fax: (702)784-0030

Bulk Asbestos Analysis

(EPA Method 600/R-93-116, Visual Area Estimation)

JW Mack Consulting
J.W. Mack
1502 Glenn Ave.

Modesto, CA 95358

Client ID: 4405
Report Number: B179607
Date Received: 07/12/13
Date Analyzed: 07/12/13
Date Printed: 07/15/13
First Reported: 07/15/13

Job ID/Site: Honor Farm, Roofs

Date(s) Collected: 07/08/2013

FALI Job ID: 4405
Total Samples Submitted: 6
Total Samples Analyzed: 6

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
R-1-16	11401244						
Layer: Silver Paint		Chrysotile	**2 %**				
Total Composite Values of Fibrous Components:		**Asbestos (2%)**					
Cellulose (Trace)							
R-2-16	11401245						
Layer: Black Roof Shingle			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (5 %) Fibrous Glass (50 %)							
R-3-0	11401246						
Layer: Black Roof Shingle			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (5 %) Fibrous Glass (50 %)							
R-4-0	11401247						
Layer: Black Felt			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (85 %)							
R-5-18	11401248						
Layer: Silver Paint		Chrysotile	**2 %**				
Layer: White Non-Fibrous Material			**ND**				
Layer: Beige Non-Fibrous Material		Chrysotile	**5 %**				
Total Composite Values of Fibrous Components:		**Asbestos (3%)**					
R-6-19/20	11401249						
Layer: Light Grey Non-Fibrous Material			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace)							

3777 Depot Road, Suite 409, Hayward, CA 94545 / Telephone: (510) 887-8828 (800) 827-FASI / Fax: (510) 887-4218

Report Number: B179607

Client Name: JW Mack Consulting **Date Printed:** 07/15/13

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer

Tad Thrower, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

3777 Depot Road, Suite 409, Hayward, CA 94545 / Telephone: (510) 887-8828 (800) 827-FASI / Fax: (510) 887-4218

Forensic Analytical Laboratories, Inc.

Analysis Request Form (COC)

Company Name & Address: JW. MACK CONSULTING 1502 GLENN AVE. MODESTO CA,95358	**PO / Job#:** **Date:** 7-11-13 **Turn Around Time:** Same Day / (1Day) / 2Day / 3Day / 4Day / 5Day ☐ PCM: ☐ NIOSH 7400A / ☐ NIOSH 7400B ☐ Rotometer ☒ PLM: ☒ Standard / ☐ Point Count 400 - 1000 / ☐ CARB 435
Contact: JW MACK **Phone:** 290-581-9646 **Fax:** 209-581-9646 **E-mail:** jwmackcon@aol.com **Site:** Hoover Farm. **Site Location:**	☐ TEM Air: ☐ AHERA / ☐ Yamate2 / ☐ NIOSH 7402 ☐ TEM Bulk: ☐ Quantitative / ☐ Qualitative / ☐ Chatfield ☐ TEM Water: ☐ Potable / ☐ Non-Potable / ☐ Weight % ☐ TEM Microvac: ☐ Qual(+/-) / ☐ D5755(str/area) / ☐ D5756(str/mass) ☐ IAQ Particle Identification (PLM LAB) ☐ PLM Opaques/Soot ☐ Particle Identification (TEM LAB) ☐ Special Project ☐ Metals Analysis: Method: Matrix: Analytes:
Comments: Asbestos Bulk Samples.	**Report Via:** ☐ Fax ☒ E-Mail ☐ Verbal

Sample ID	Date / Time	Sample Location / Description	FOR AIR SAMPLES ONLY				Sample Area / Air Volume
			Type	Time On/Off	Avg. LPM	Total Time	
A-1	7/8	Barracks #4 Sheetrock/Skim	A P C	West Mach	Room.	Wall.	
A-2	7/8	Barracks #4 Sheetrock/Skim	A P C	North Mach	Room.	Wall	
A-3	7/8	Barracks #4 Sheetrock/Skim	A P C	Mach. Room	Ceiling		
A-4	7/8	12x12 Vft/Black mastic	A P C	Bar. #4 Room L		Lt Brown.	
A-5	7/8	12x12 Vft/Mastic	A P C	Bar. #4	Room L		Gray.
A-6	7/8	12x12 Vft/Mastic	A P C	Bar. #4	Room L		off White.
A-7	7/8	Clay/tile/grout	A P C	Barr #4 Shower	Room's		Room L
A-8	7/8	Mortar Base	A P C	Barr #4 Shower	Room's		
A-9	7/8	Ex Plaster Bar. #4	A P C	North Wall			
A-10	7/8	Ex Plaster Bar #4	A P C	South Wall.			

Sampled By: JWMack **Date:** 7/8/11 **Time:** 0800

Shipped Via: ☒ Fed Ex ☐ DHL ☐ UPS ☐ US Mail ☐ Courier ☐ Drop Off ☐ Other:

Relinquished By:	Relinquished By:	Relinquished By:
JWMack		
Date / Time: 7/11/13 1500	Date / Time:	Date / Time:
Received By:	**Received By:**	**Received By:**
Date / Time: 7-12-13 10AM	Date / Time:	Date / Time:
Condition Acceptable? ☒ Yes ☐ No	Condition Acceptable? ☐ Yes ☐ No	Condition Acceptable? ☐ Yes ☐ No

San Francisco Office: 3777 Depot Road, Suite 409, Hayward, California 94545-2761 / Ph: (510)887-8828 * (800)827-3274 / Fax: (510)887-4218
Los Angeles Office: 2959 Pacific Commerce Drive, Rancho Dominguez, California 90221 / Ph: (310)763-2374 * (888)813-9417 / Fax: (310)763-4450
Las Vegas Office: 6765 S. Eastern Avenue, Suite 3, Las Vegas, Nevada 89119 / Ph: (702)784-0040 / Fax: (702)784-0030

Bulk Asbestos Analysis

(EPA Method 600/R-93-116, Visual Area Estimation)

JW Mack Consulting
J.W. Mack
1502 Glenn Ave.

Modesto, CA 95358

Client ID: 4405
Report Number: B179608
Date Received: 07/12/13
Date Analyzed: 07/15/13
Date Printed: 07/15/13
First Reported: 07/15/13

Job ID/Site: Honor Farm

Date(s) Collected: 07/08/2013

FALI Job ID: 4405
Total Samples Submitted: 46
Total Samples Analyzed: 46

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
A-1	11401250						
Layer: White Drywall			**ND**				
Layer: White Skimcoat/Joint Compound			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (20 %) Fibrous Glass (10 %)							
A-2	11401251						
Layer: White Drywall			**ND**				
Layer: White Skimcoat/Joint Compound			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (20 %) Fibrous Glass (10 %)							
A-3	11401252						
Layer: White Drywall			**ND**				
Layer: White Skimcoat/Joint Compound			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (20 %) Fibrous Glass (10 %)							
A-4	11401253						
Layer: Off-White Tile			**ND**				
Layer: Black Mastic			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace)							
A-5	11401254						
Layer: Light Grey Tile			**ND**				
Layer: Yellow Mastic			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace)							
A-6	11401255						
Layer: Off-White Tile			**ND**				
Layer: Yellow Mastic			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace)							

3777 Depot Road, Suite 409, Hayward, CA 94545 / Telephone: (510) 887-8828 (800) 827-FASI / Fax: (510) 887-4218

Client Name: JW Mack Consulting

Report Number: B179608
Date Printed: 07/15/13

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
A-7	11401256						
Layer: Red-Brown Grout			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A-8	11401257						
Layer: Off-White Grout			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A-9	11401258						
Layer: Grey Plaster			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A-10	11401259						
Layer: Grey Plaster			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A-11	11401260						
Layer: Off-White Grout			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A-12	11401261						
Layer: Pink Texture			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A-13	11401262						
Layer: Off-White Plaster			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A-14	11401263						
Layer: Off-White Plaster			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A-15	11401264						
Layer: Grey Carpet			**ND**				
Layer: Yellow Mastic			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace) Synthetic (85 %)		**Asbestos (ND)**					

3777 Depot Road, Suite 409, Hayward, CA 94545 / Telephone: (510) 887-8828 (800) 827-FASI / Fax: (510) 887-4218

Forensic Analytical Laboratories, Inc.

Analysis Request Form (COC)

Company Name & Address: JW. MACK CONSULTING 1502 GLENN AVE. MODESTO CA,95358	PO / Job#: Date: 7-11-13
	Turn Around Time: Same Day / 1Day / 2Day / 3Day / 4Day / 5Day
	☐ PCM: ☐ NIOSH 7400A / ☐ NIOSH 7400B ☐ Rotometer
	☒ PLM: ☒ Standard / ☐ Point Count 400 - 1000 / ☐ CARB 435
Contact: JW MACK	☐ TEM Air: ☐ AHERA / ☐ Yamate2 / ☐ NIOSH 7402 ☐ TEM Bulk: ☐ Quantitative / ☐ Qualitative / ☐ Chatfield ☐ TEM Water: ☐ Potable / ☐ Non-Potable / ☐ Weight % ☐ TEM Microvac: ☐ Qual(+/-) / ☐ D5755(str/area) / ☐ D5756(str/mass)
Phone: 290-581-9646 Fax: 209-581-9646	
E-mail: jwmackcon@aol.com	☐ IAQ Particle Identification (PLM LAB) ☐ PLM Opaques/Soot ☐ Particle Identification (TEM LAB) ☐ Special Project
Site: HONOR FARM.	☐ Metals Analysis: Method: Matrix:
Site Location:	Analytes:
Comments: (Asbestos Bulk Samples)	Report Via: ☐ Fax ☒ E-Mail ☐ Verbal

Sample ID	Date / Time	Sample Location / Description	Type	Time On/Off	Avg. LPM	Total Time	Sample Area / Air Volume
A-11	7/8	Barracks #3 Clay floor tile	A P C	about	Shower Room.		
A-12	7/8	Med. Trailer /skim cont	A P C				
A-13	7/8	Barracks #3 ext Plaster	A P C	Walls South			
A-14	7/8	Barracks #3 Ext Plaster	A P C	Walls North			
A-15	7/8	Gen mod. Carpet/mastic	A P C				
A-16	7/8	Gen mod. Sheet Rock Skim	A P C	North	wall		
A-17	7/8	Gen mod Sheet Rock/skim	A P C	South	wall		
A-18	7/8	Gen Med 2'x4' ACP	A P C	T-Bar Celing			
A-19	7/8	Vistor mod 2'x4' Acp	A P C	T-Bar Celin		Trailer	
A-20	7/8	Sheet Rock	A P C	Panel walls	No skim	cont under.	

Sampled By: JWMack Date: 7/8/11 Time: 0800

Shipped Via: ☒ Fed Ex ☐ DHL ☐ UPS ☐ US Mail ☐ Courier ☐ Drop Off ☐ Other:

Relinquished By: JW Mack	Relinquished By:	Relinquished By:
Date / Time: 7/11/13 1500	Date / Time:	Date / Time:
Received By: Delivery Fx	Received By:	Received By:
Date / Time: 7-12-13 10AM	Date / Time:	Date / Time:
Condition Acceptable? ☒ Yes ☐ No	Condition Acceptable? ☐ Yes ☐ No	Condition Acceptable? ☐ Yes ☐ No

Report Number: B179608

Client Name: JW Mack Consulting **Date Printed:** 07/15/13

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
A-16	11401265						
Layer: White Drywall			**ND**				
Layer: White Skimcoat/Joint Compound			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (20 %) Fibrous Glass (10 %)							
A-17	11401266						
Layer: White Drywall			**ND**				
Layer: White Skimcoat/Joint Compound			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (20 %) Fibrous Glass (10 %)							
A-18	11401267						
Layer: Beige Fibrous Tile			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (80 %) Fibrous Glass (5 %)							
A-19	11401268						
Layer: Beige Fibrous Tile			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (80 %) Fibrous Glass (5 %)							
A-20	11401269						
Layer: White Drywall			**ND**				
Layer: Tan Fibrous Material			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (30 %)							
A-21	11401270						
Layer: Tan Fibrous Material			**ND**				
Layer: Paint			**ND**				
Layer: Off-White Non-Fibrous Material			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (90 %)							
A-22	11401271						
Layer: White Drywall			**ND**				
Layer: White Skimcoat/Joint Compound			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (20 %) Fibrous Glass (10 %)							

3777 Depot Road, Suite 409, Hayward, CA 94545 / Telephone: (510) 887-8828 (800) 827-FASI / Fax: (510) 887-4218

Forensic Analytical Laboratories, Inc.

Analysis Request Form (COC)

Company Name & Address:
JW. MACK CONSULTING
1502 GLENN AVE. MODESTO CA,95358

PO / Job#:

Date: 7/11/13

Turn Around Time: Same Day / (1Day) / 2Day / 3Day / 4Day / 5Day

☐ PCM: ☐ NIOSH 7400A / ☐ NIOSH 7400B ☐ Rotometer

☒ PLM: ☒ Standard / ☐ Point Count 400 - 1000 / ☐ CARB 435

Contact: JW MACK

Phone: 290-581-9646

Fax: 209-581-9646

E-mail: jwmackcon@aol.com

☐ TEM Air: ☐ AHERA / ☐ Yamate2 / ☐ NIOSH 7402
☐ TEM Bulk: ☐ Quantitative / ☐ Qualitative / ☐ Chatfield
☐ TEM Water: ☐ Potable / ☐ Non-Potable / ☐ Weight %
☐ TEM Microvac: ☐ Qual(+/-) / ☐ D5755(str/area) / ☐ D5756(str/mass)

☐ IAQ Particle Identification (PLM LAB) ☐ PLM Opaques/Soot
☐ Particle Identification (TEM LAB) ☐ Special Project

Site: Honor Farm.

Site Location:

☐ Metals Analysis: Method:

Matrix:

Analytes:

Comments: (Asbestos Bulk samples)

Report Via: ☐ Fax ☒ E-Mail ☐ Verbal

Sample ID	Date / Time	Sample Location / Description	FOR AIR SAMPLES ONLY				Sample Area / Air Volume
			Type	Time On/Off	Avg. LPM	Total Time	
A-21	7/8	Staff Locker Room / Ceiling	A P C	Ceiling		Trailer.	
A-22	7/8	Sheet Rock / Skim	A P C	Staff Locker	Room Trailer		Wall Mtrl.
A-23	7/8	Sheet Rock / Skim	A P C	Women Side			
A-24	7/8	Sheet Rock Skim	A P C	Wall Travis	Trailer.		
A-25	7/8	Admi office / Ceiling	A P C	Trailer		Lt. office	
A-26	7/8	Admi. office Sheet Rock / Skim	A P C		East End		
A-27	7/8	Admin office Sheet Rock / Skim	A P C		West End. RR.		
A-28	7/8	Admin office Clay tile	A P C	Grad	R. R. Floor.		
A-29	7/8	Admi office tile	A P C	Mortar Base			
A-30	7/8	Admin off. Sheet Rock / Skim	A P C	R. R. Above	tile walls.		

Sampled By: JW Mack Date: 7/8/13 Time: 0800

Shipped Via: ☒ Fed Ex ☐ DHL ☐ UPS ☐ US Mail ☐ Courier ☐ Drop Off ☐ Other:

Relinquished By:	Relinquished By:	Relinquished By:
JW Mack		
Date / Time: 7/11/13 1500	Date / Time:	Date / Time:
Received By: Quantum Fx	Received By:	Received By:
Date / Time: 7-12-13 10AM	Date / Time:	Date / Time:
Condition Acceptable? ☒ Yes ☐ No	Condition Acceptable? ☐ Yes ☐ No	Condition Acceptable? ☐ Yes ☐ No

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
A-23	11401272						
Layer: White Drywall			**ND**				
Layer: White Skimcoat/Joint Compound			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (20 %) Fibrous Glass (10 %)							
A-24	11401273						
Layer: Pink Drywall			**ND**				
Layer: White Skimcoat/Joint Compound			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (20 %) Fibrous Glass (10 %)							
A-25	11401274						
Layer: Tan Fibrous Material			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (95 %)							
A-26	11401275						
Layer: White Drywall			**ND**				
Layer: Tan Fibrous Material			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (20 %)							
A-27	11401276						
Layer: White Drywall			**ND**				
Layer: White Skimcoat/Joint Compound			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (10 %) Fibrous Glass (5 %)							
A-28	11401277						
Layer: Red-Brown Grout			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace)							
A-29	11401278						
Layer: Grey Mortar			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (Trace)							
A-30	11401279						
Layer: White Drywall			**ND**				
Layer: Off-White Skimcoat/Joint Compound			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
Cellulose (20 %) Fibrous Glass (10 %)							

3777 Depot Road, Suite 409, Hayward, CA 94545 / Telephone: (510) 887-8828 (800) 827-FASI / Fax: (510) 887-4218

Forensic Analytical Laboratories, Inc.

Analysis Request Form (COC)

Company Name & Address: JW. MACK CONSULTING 1502 GLENN AVE. MODESTO CA,95358	PO / Job#: Date: 7-11-13 Turn Around Time: Same Day / (1Day) / 2Day / 3Day / 4Day / 5Day ☐ PCM: ☐ NIOSH 7400A / ☐ NIOSH 7400B ☐ Rotometer ☒ PLM: ☒ Standard / ☐ Point Count 400 - 1000 / ☐ CARB 435
Contact: JW MACK Phone: 290-581-9646 Fax: 209-581-9646 E-mail: jwmackcon@aol.com Site: HONOR FARM. Site Location:	☐ TEM Air: ☐ AHERA / ☐ Yamate2 / ☐ NIOSH 7402 ☐ TEM Bulk: ☐ Quantitative / ☐ Qualitative / ☐ Chatfield ☐ TEM Water: ☐ Potable / ☐ Non-Potable / ☐ Weight % ☐ TEM Microvac: ☐ Qual(+/-) / ☐ D5755(str/area) / ☐ D5756(str/mass) ☐ IAQ Particle Identification (PLM LAB) ☐ PLM Opaques/Soot ☐ Particle Identification (TEM LAB) ☐ Special Project ☐ Metals Analysis: Method: Matrix: Analytes:
Comments: Asbesto Bulk Sample	Report Via: ☐ Fax ☒ E-Mail ☐ Verbal

Sample ID	Date / Time	Sample Location / Description	FOR AIR SAMPLES ONLY				Sample Area / Air Volume
			Type	Time On/Off	Avg. LPM	Total Time	
A-31	7/8	R.R Bldg ext Block walls.	A P C				
A-32	7/8	Main Control Room 12x12	Uft C	Master			
A-33	7/8	Main Control Room / clay tile	A P C				
A-34	7/8	Sheet Rock / ARM Locker	A P C	Control Room			
A-35	7/8	12x12 VAT Control Room Chow Hall.	A P C				
A-36	7/8	12x12 Vft Kitchen	A P C	Black			
A-37	7/8	12x12 Vft Kitchen	A P C	Off White			
A-38	7/8	Clay tile/mastic Kitchen	A P C	Floor			
A-39	7/8	Ext Block wall	A P C	main Control / Kitchen			West
A-40	7/8	Ext Block walls	A P C	main Bld.	South		

Sampled By: JW Mack Date: 7/8/11 Time: 0800

Shipped Via: ☒ Fed Ex ☐ DHL ☐ UPS ☐ US Mail ☐ Courier ☐ Drop Off ☐ Other:

Relinquished By: JW Mack Date / Time: 7/11/13 1500	Relinquished By: Date / Time:	Relinquished By: Date / Time:
Received By: Ellen Leon FX Date / Time: 7-12-13 10AM Condition Acceptable? ☒ Yes ☐ No	Received By: Date / Time: Condition Acceptable? ☐ Yes ☐ No	Received By: Date / Time: Condition Acceptable? ☐ Yes ☐ No

San Francisco Office: 3777 Depot Road, Suite 409, Hayward, California 94545-2761 / Ph: (510)887-8828 * (800)827-3274 / Fax: (510)887-4218
Los Angeles Office: 2959 Pacific Commerce Drive, Rancho Dominguez, California 90221 / Ph: (310)763-2374 * (888)813-9417 / Fax: (310)763-4450
Las Vegas Office: 6765 S. Eastern Avenue, Suite 3, Las Vegas, Nevada 89119 / Ph: (702)784-0040 / Fax: (702)784-0030

Client Name: JW Mack Consulting

Report Number: B179608
Date Printed: 07/15/13

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
A-31	11401280						
Layer: Red Cementitious Material			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A-32	11401281						
Layer: Off-White Tile			**ND**				
Layer: Black Mastic			**ND**				
Layer: Grey Cementitious Material			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A-33	11401282						
Layer: Grey Ceramic Tile			**ND**				
Layer: Grey Cementitious Material			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A-34	11401283						
Layer: Light Brown Drywall			**ND**				
Layer: White Skimcoat/Joint Compound			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components: Cellulose (20 %) Fibrous Glass (10 %)		**Asbestos (ND)**					
A-35	11401284						
Layer: Grey Tile			**ND**				
Layer: Yellow Mastic			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A-36	11401285						
Layer: Black Tile			**ND**				
Layer: Yellow Mastic			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A-37	11401286						
Layer: Off-White Tile			**ND**				
Layer: Tan Mastic			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A-38	11401287						
Layer: Red-Brown Non-Fibrous Material			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					

3777 Depot Road, Suite 409, Hayward, CA 94545 / Telephone: (510) 887-8828 (800) 827-FASI / Fax: (510) 887-4218

Forensic Analytical Laboratories, Inc.

Analysis Request Form (COC)

Company Name & Address: JW. MACK CONSULTING 1502 GLENN AVE. MODESTO CA,95358	PO / Job#: Date: 7/11/13
	Turn Around Time: Same Day / 1Day / 2Day / 3Day / 4Day / 5Day
	☐ PCM: ☐ NIOSH 7400A / ☐ NIOSH 7400B ☐ Rotometer
	☐ PLM: ☒ Standard / ☐ Point Count 400 - 1000 / ☐ CARB 435
Contact: JW MACK	☐ TEM Air: ☐ AHERA / ☐ Yamate2 / ☐ NIOSH 7402
Phone: 290-581-9646 Fax: 209-581-9646	☐ TEM Bulk: ☐ Quantitative / ☐ Qualitative / ☐ Chatfield ☐ TEM Water: ☐ Potable / ☐ Non-Potable / ☐ Weight % ☐ TEM Microvac: ☐ Qual(+/-) / ☐ D5755(str/area) / ☐ D5756(str/mass)
E-mail: jwmackcon@aol.com	☐ IAQ Particle Identification (PLM LAB) ☐ PLM Opaques/Soot ☐ Particle Identification (TEM LAB) ☐ Special Project
Site: Honor farm.	☐ Metals Analysis: Method:
Site Location:	Matrix:
	Analytes:
Comments: Asbestos Bulk Sample	Report Via: ☐ Fax ☒ E-Mail ☐ Verbal

Sample ID	Date / Time	Sample Location / Description	FOR AIR SAMPLES ONLY				Sample Area / Air Volume
			Type	Time On/Off	Avg. LPM	Total Time	
A-41	7/8	Skim Coat Chow Hall	A P C	North wall			
A-42	7/8	Skim Coat Chow Hall	A P C	South wall			
A-43	7/8	Wt Room Ext walls	A P C				
A-44	7/8	Wt Room Sheetrock/Skim	A P C	North	wall		
A-45	7/8	Wt Room Sheetrock/Skim	A P C	East	wall		
A-46	7/8	Wall & Slop Sheetrock/Skim	A P C				
			A P C				
			A P C				
			A P C				
			A P C				

Sampled By: J.W. Mack Date: 7/8/13 Time: 0800

Shipped Via: ☐ Fed Ex ☐ DHL ☐ UPS ☐ US Mail ☐ Courier ☐ Drop Off ☐ Other:

Relinquished By:	Relinquished By:	Relinquished By:
Date / Time: 7/11/13 1500	Date / Time:	Date / Time:
Received By: Dell Leeper FX	Received By:	Received By:
Date / Time: 7-12-13 10AM	Date / Time:	Date / Time:
Condition Acceptable? ☒ Yes ☐ No	Condition Acceptable? ☐ Yes ☐ No	Condition Acceptable? ☐ Yes ☐ No

San Francisco Office: 3777 Depot Road, Suite 409, Hayward, California 94545-2761 / Ph: (510)887-8828 * (800)827-3274 / Fax: (510)887-4218
Los Angeles Office: 2959 Pacific Commerce Drive, Rancho Dominguez, California 90221 / Ph: (310)763-2374 * (888)813-9417 / Fax: (310)763-4450
Las Vegas Office: 6765 S. Eastern Avenue, Suite 3, Las Vegas, Nevada 89119 / Ph: (702)784-0040 / Fax: (702)784-0030

Report Number: B179608

Client Name: JW Mack Consulting **Date Printed:** 07/15/13

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
A-39	11401288						
Layer: Grey Cementitious Material			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A-40	11401289						
Layer: Grey Cementitious Material			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A-41	11401290						
Layer: Off-White Skimcoat/Joint Compound			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A-42	11401291						
Layer: Off-White Skimcoat/Joint Compound			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A-43	11401292						
Layer: Grey Cementitious Material			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
A-44	11401293						
Layer: Off-White Joint Compound			**ND**				
Layer: Off-White Tape			**ND**				
Layer: Off-White Joint Compound			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components: Cellulose (25 %)		**Asbestos (ND)**					
A-45	11401294						
Layer: Off-White Joint Compound			**ND**				
Layer: Off-White Tape			**ND**				
Layer: Off-White Joint Compound			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components: Cellulose (25 %)		**Asbestos (ND)**					
A-46	11401295						
Layer: Off-White Drywall			**ND**				
Layer: Multi-Layer Paint			**ND**				
Total Composite Values of Fibrous Components: Cellulose (20 %)		**Asbestos (ND)**					

3777 Depot Road, Suite 409, Hayward, CA 94545 / Telephone: (510) 887-8828 (800) 827-FASI / Fax: (510) 887-4218

Report Number: B179608

Client Name: JW Mack Consulting **Date Printed:** 07/15/13

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer

Tad Thrower, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

3777 Depot Road, Suite 409, Hayward, CA 94545 / Telephone: (510) 887-8828 (800) 827-FASI / Fax: (510) 887-4218

HONOR FARM

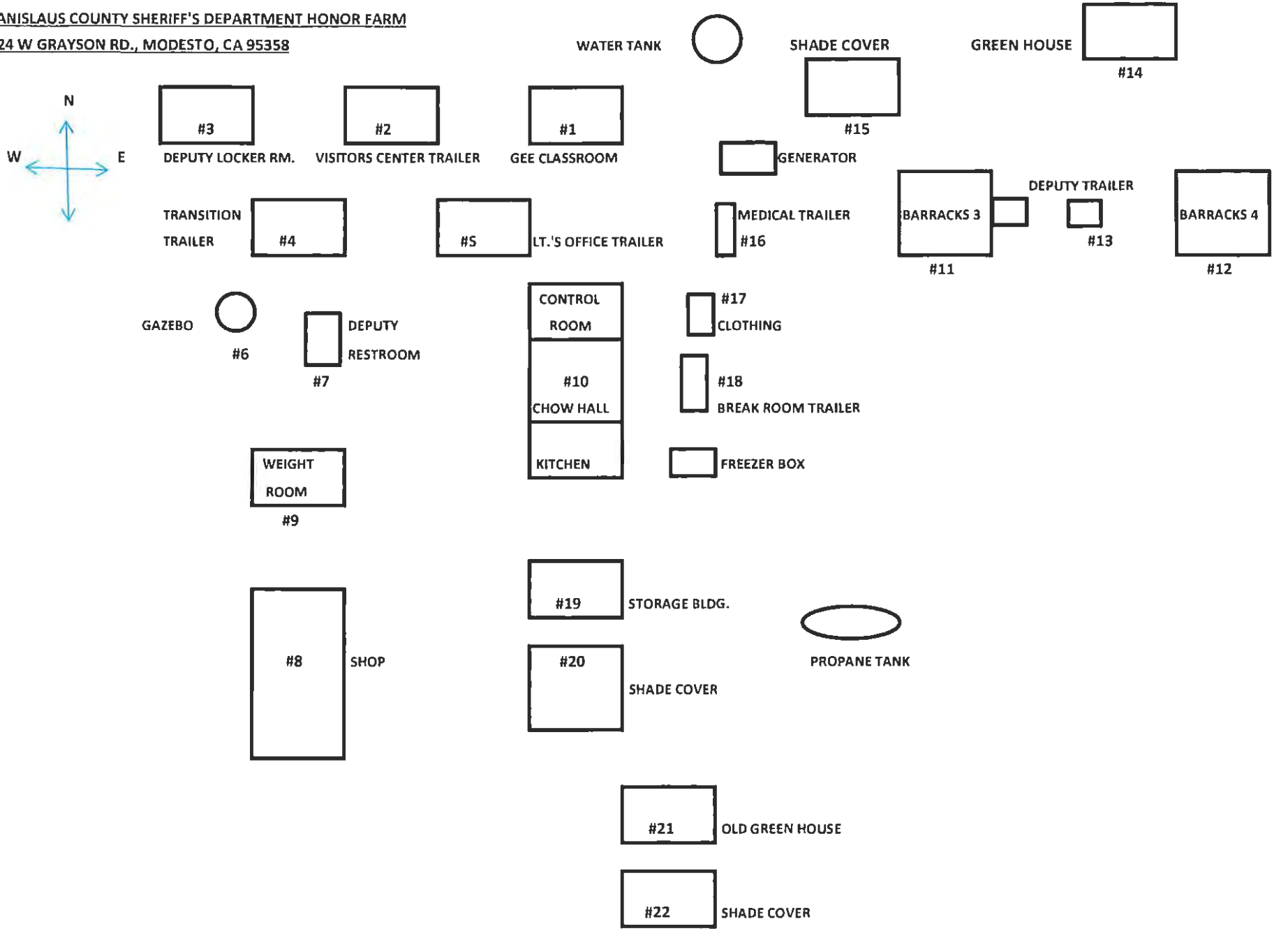
PICTURES

Google earth

feet 600
meters 100

STANISLAUS COUNTY SHERIFF'S DEPARTMENT HONOR FARM

8224 W GRAYSON RD., MODESTO, CA 95358




2


2


4


1


2


4


1


1


3


#7


#10


#8


#6


#10


#9


#5


#10


#9


101
#


8


11
11


19
8


19
20
21
22


11


8


19


11


#12


#12


#12


#12


#12


#12


#13
#11

#6

#5

#4

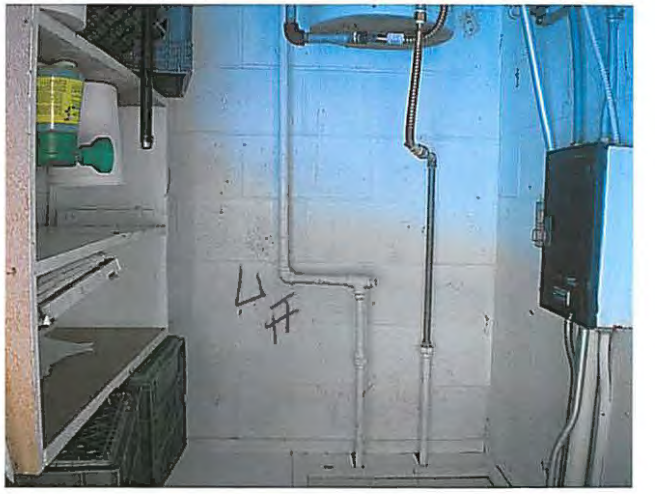

2 #


4 #


4 #


2 #


4 #


4 #


3 #


1 #


4 #

이부

이부

이부

이부

이부

이부

이부

이부


#13


#13

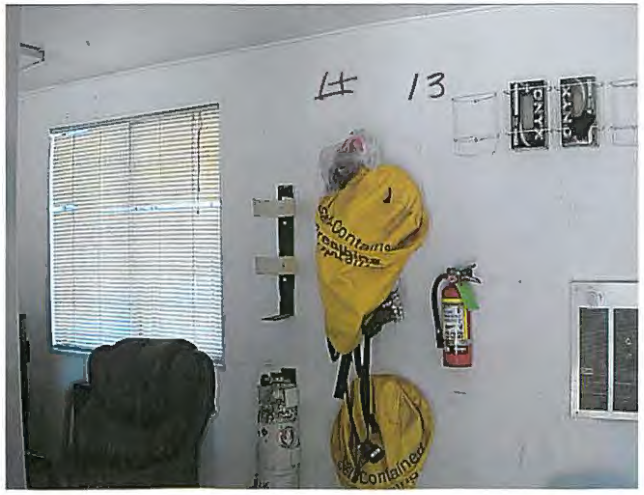

#11


#13


#13


#11


#12


#13

#12

#12

#12

#12

#12

#12

#12

#12

#12


10


#10
OFFICE


17
16


17
16
OFFICE


17


17

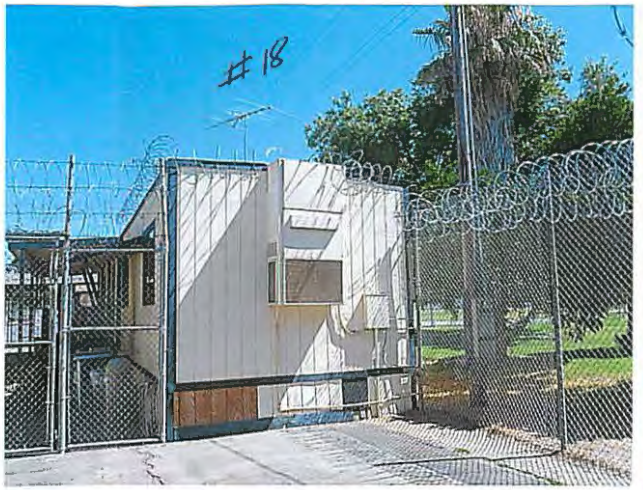

#4


#10


#7


#7


#6


#18


#19


#10


#18


#20
#21
#22


#8


#15


#8


#19
excel
Office depot