Storm Water Management Program For Stanislaus County

Report of Waste Discharge

Submitted Feb 23, 2004
Revised 5/18/04

Under the California State Water Resources Control Board
General Permit for Small Cities
No. CAS000004
Adopted 4/30/03

State Water Resources Control Board
NOTICE OF INTENT
TO COMPLY WITH THE TERMS OF THE GENERAL PERMIT FOR
STORM WATER DISCHARGES FROM
SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS
(WATER QUALITY ORDER NO. 2003 – 0005 - DWQ)

I. NOI Status

Mark Only One Item 1. [X]New Permittee 2. [ ]Change of Information WDID #:_____

II. Agency Information

A. Agency: Stanislaus County			
B. Contact Person: George Stillman		C. Title: Director of Public Works	
D. Mailing Address: 1010 - 10th Street		E. Address (Line 2): Suite 3500	
F. City: Modesto	State: CA	G. Zip: 95354	H. County: Stanislaus
I. Phone: 209-525-6550	J. FAX: 209-525-6507	K. Email Address: stllmng@mail.co.stanislaus.ca.us	

L. Operator Type (check one)
1. [ ] City 2. [X] County 3. [ ] State 4. [ ] Federal 5. [ ] Special District 6. [ ] Government Combination

III. Permit Area

Unincorporated Stanislaus County

IV. Boundaries of Coverage (include a site map with the submittal)

All that portion of Stanislaus County excepting that area lying within the incorporated cities of said county.

V. Billing Information

A. Agency: Stanislaus County			
B. Contact Person: George Stillman		C. Title: Director of Public Works	
D. Mailing Address: 1010 - 10th Street		E. Address (Line 2): Suite 3500	
F. City: Modesto	State: CA	G. Zip: 95354	H. County: Stanislaus
I. Phone: 209-525-6550	J. FAX: 209-525-6507	K. Email Address: stllmng@mail.co.stanislaus.ca.us	

Fees are based on the daily population served by the Small MS4. To determine your fee, consult the current fee schedule (California Code of Regulations, Title 23, Division 3, Chapter 9 Article 1), which can be viewed at www.swrcb.ca.gov/stormwtr/municipal.html.

L. Population 112,581

Fee $12,500

Check(s) should be made payable to the SWRCB and submitted to the appropriate RWQCB.

SWRCB Tax ID is: 68-0281986

VI. Discharger Information (check applicable box(es) and complete corresponding information)

1. [x] Applying for Individual General Permit Coverage

2. [ ] Applying for a permit with one or more co-permittees

The undersigned agree to work as co-permittees in implementing a complete small MS4 storm water program. The program must comply with the requirements found in Title 40 of the Code of Federal Regulations, parts 122.32. Attach additional sheets if necessary. Each co-permittee must complete an NOI.	
Lead Agency	Signature
Agency	Signature
Agency	Signature
Agency	Signature

3. [ ] Separate Implementing Entity (SIE)

A. Agency			
B. Contact Person	C. Title		
D. Mailing Address	E. Address (Line 2)		
F. City	State: CA	G. Zip	H. County
I. Phone	J. FAX	K. Email Address	

H. Operator Type (check one)
1. [ ] City 2. [ ] County 3. [ ] State 4. [ ] Federal 5. [ ] Special District 6. [ ] Government Combination

Minimum Control Measures being implemented by the SIE (check all that apply)

[ ] Public Education [ ] Public Involvement [ ] Illicit Discharge/Elimination
[ ] Construction [ ] Post Construction [ ] Good Housekeeping

"I agree to coordinate with the agency identified in Section III of this form and comply with its qualifying storm water program. I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. Additionally, I certify that the provisions of the permit, including the development and implementation of a Storm Water Management Program, will be complied with."

N. Signature of Official _____ Date _____

VII. Storm Water Management Plan (check box)

[ ] As per section A.2. of this General Permit, the SWMP is attached.
SWMP to follow by 10/15/03.

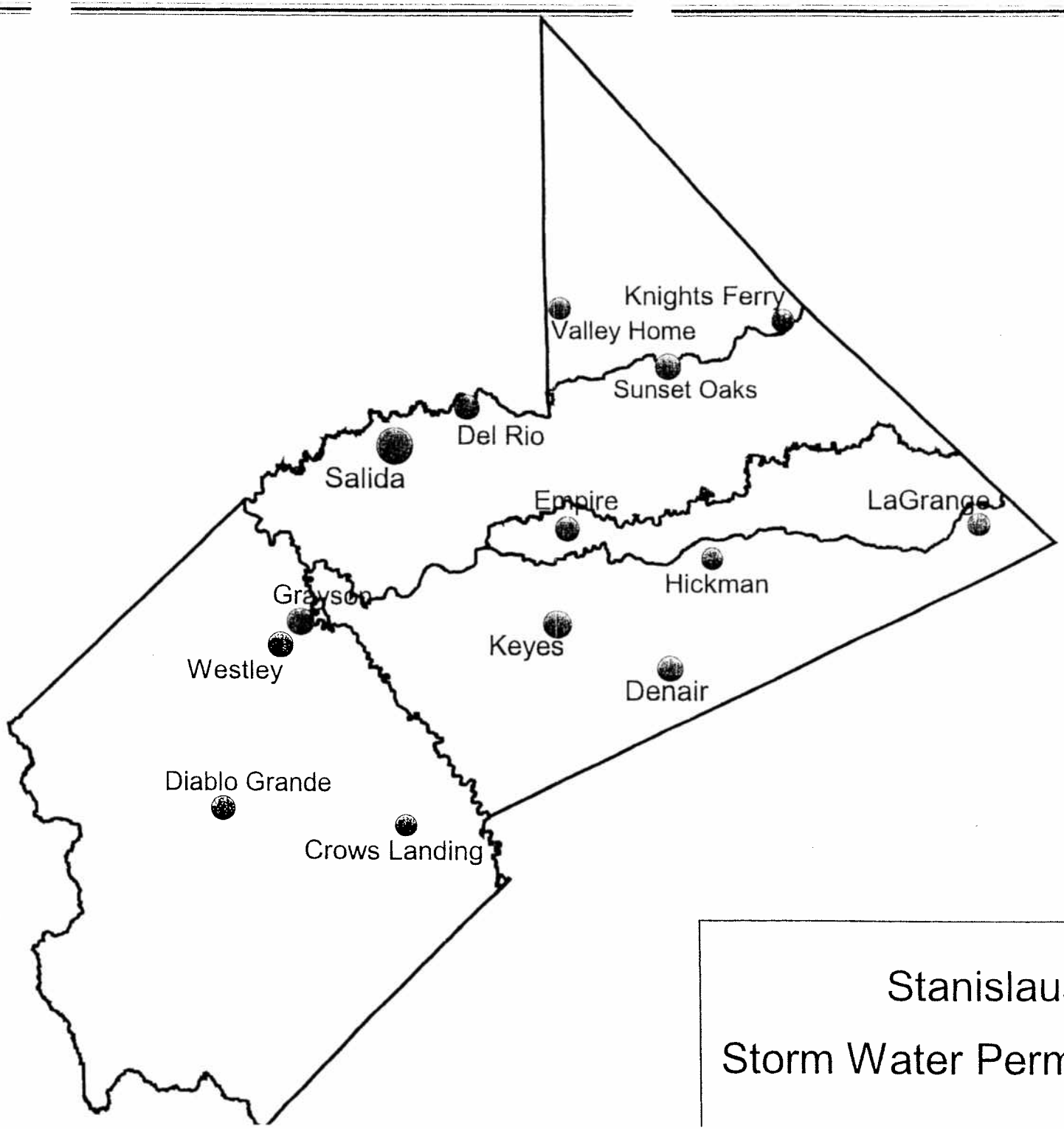
VIII. Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. Additionally, I certify that the provisions of the permit, including the development and implementation of a Storm Water Management Program, will be complied with."

A. Printed Name: George Stillman

B. Title: Director of Public Works

C. Signature: _____ D. Date: 8-1-03



Stanislaus County

Storm Water Permit Coverage Area

Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete.

I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

For **Stanislaus County**

_____ _____

Steve Erickson, PE, Assistant to the Director Date
Public Works Dept.

Storm Water Management Program prepared by:
Tulloch Engineering
Mariposa, CA
Alice Tulloch, RCE # 35593, exp. 9/30/05

Contents

Section 1 – Introduction and Program Summary

This Storm Water Management Program (SWMP) describes the stormwater quality management activities proposed by Stanislaus County, California, in compliance with the federal stormwater quality regulations, 40 CFR Part 122 et seq. (Phase II), Porter-Cologne Water Quality Control Act § 13376, and with the State Water Resources Control Board General Permit for Small Cities No. CAS000004, adopted 4/30/03. The County is filing the Notice of Intent to participate in the State's General Permit.

Stanislaus County is listed in Attachment 1 of the SWRCB General Permit as an operator of a Municipal Separate Storm Sewer System (MS4) that serves areas within urbanized areas. Also listed in Attachment 1 are several unincorporated communities within Stanislaus County, namely, Empire, Keyes, and Salida. This Storm Water Management Plan will also cover the County's unincorporated communities of Crow's Landing, Denair, Diablo Grande, Del Rio, Grayson, Hickman, Knight's Ferry, La Grange, Sunset Oaks Estates, Valley Home and Westley. This SWMP will also cover the industrial area known as the Beard Tract, between Modesto and Empire. Figure 1 shows the County's jurisdiction and communities.

Attachment 4 of the SWRCB General Permit provides supplemental provisions for larger and faster growing regulated Small MS4s. Attachment 5 of the SWRCB General Permit indicates that Salida and Stanislaus County may be subject to the supplemental provisions of Attachment 4. The supplemental provisions set additional requirements regarding receiving water limitations, and the scope of control measures to be included in the County's ordinances and design standards for new development. The implementation of Attachment 4 requirements is incorporated throughout Section 3 of the Stanislaus County Storm Water Management Plan.

The federal and state regulations require designated MS4s to develop a plan to undertake six Minimum Control Measures (MCMs) to control stormwater quality. The permittee is also required to demonstrate a 5-year workplan, with a reasonable budget for the activities. The stormwater pollution prevention plan must also include appropriate performance measures for the workplan. This report describes the control measures, workplan, and budget and performance measures for the County.

The Minimum Control Measures include:

1. Public Outreach and Education
2. Public Participation and Involvement
3. Illicit Discharge Elimination
4. Construction Site BMPs 1 Acre or More
5. Post Construction BMPs
6. Municipal Activities

County stormwater facilities include a number of different stormwater systems, including pipelines, detention basins, and rockwells. However, the most common form of stormwater disposal in the rural majority of the County is field percolation and ditch runoff to streams. Most constructed stormwater facilities serve very small areas in some unincorporated communities. Figure 1 is a map of Stanislaus County and its communities.

The major land use in County jurisdiction is agriculture. Other land uses include residential, rural and regional commercial, agriculture-oriented industrial, government, parks and open space.

The objectives of this Stormwater Pollution Prevention Plan are:

- To meet the requirements of 40 CFR Part 122, Porter-Cologne Water Quality Control Act § 13376, and the SWRCB General Permit No. CAS 000004, adopted 4/30/03.
- To address stormwater quality concerns specific to Stanislaus County.
- To involve the community in development and implementation of the plan in order to meet the permit requirements in the most economical manner possible.

The County is aware that other communities in Stanislaus County are subject to the Phase II storm water permitting requirements. The cities of Modesto, Turlock, Ceres, Oakdale, Patterson, Riverbank and Hughson are addressing the stormwater permitting requirements individually or as a small group. The cities and County often work together on other environmental and community issues. Waterford and Newman are too small to be subject to the Phase II NPDES Stormwater permitting requirements.

Summary of Storm Water Management Plan Activities

Stanislaus County proposes to take a number of actions to protect stormwater quality. This Storm Water Management Program organizes them under the six Minimum Control Measures. Activities include public education for residents and targeted businesses, community involvement in pollution prevention activities, an illicit discharge detection and elimination system with a legislated enforcement protocol, and pollution prevention related to construction. Among the County's municipal activities, increased awareness and pollution prevention actions will include employee training, good housekeeping, surveillance for illicit discharges, and record keeping. County staff from several departments will be involved in the process, with the core leadership coming from the Public Works Department.

The County funds street activities almost exclusively from gas tax. Funding for new stormwater pollution prevention activities will have to come from the same source. Other County projects that use the same funding sources may be impacted to accomplish the goals of the program. The County does not have a mechanism for exacting a user fee for stormwater pollution prevention purposes. The anticipated annual cost for implementing the Storm Water Management Program is $35,000 to $70,000 per year, depending on each year's activities. This represents $0.31 to $0.62 per year per County resident.

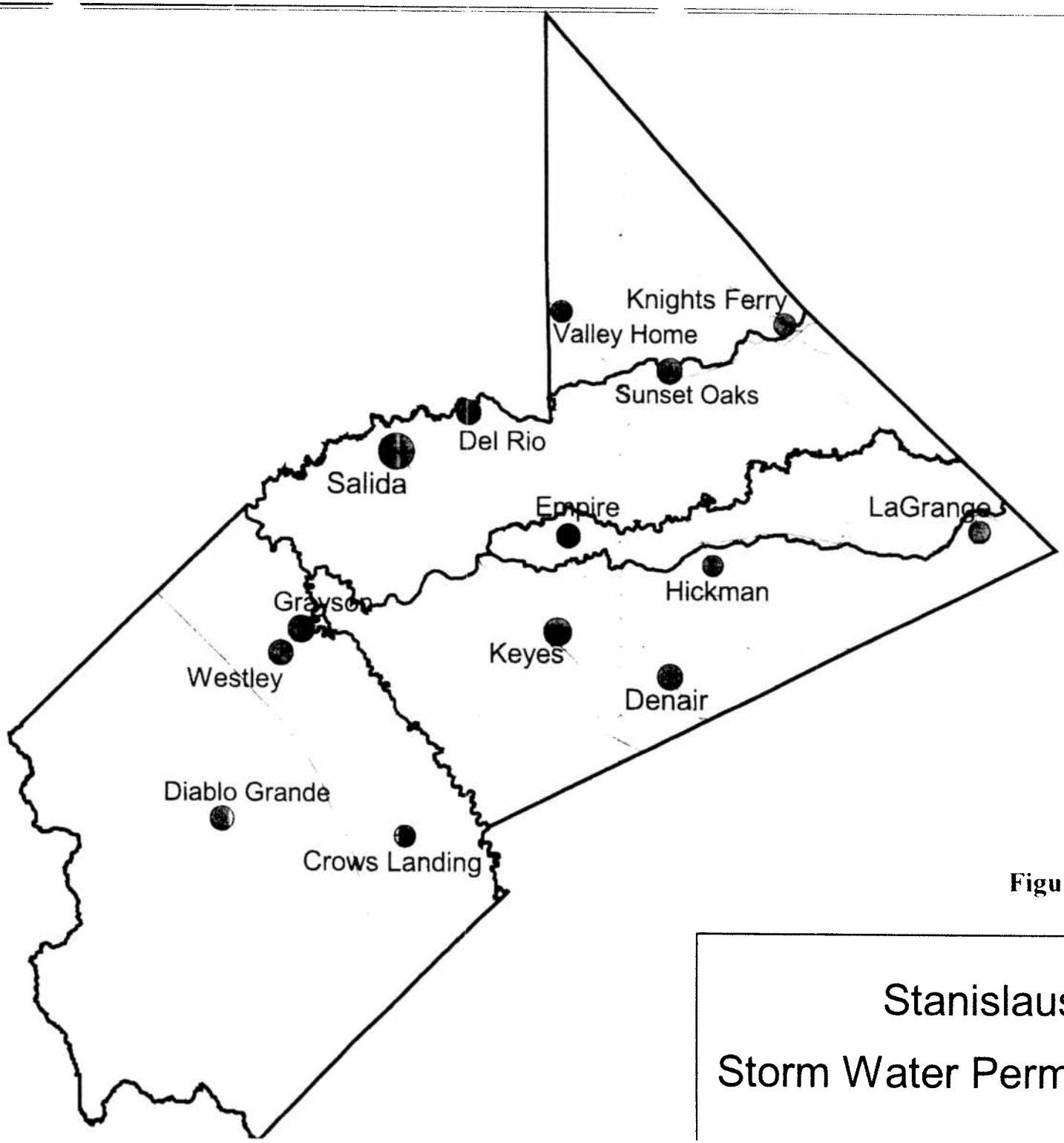


Figure 1

Stanislaus County
Storm Water Permit Coverage Area

Section 2 – Storm Water Systems Descriptions and Needs Assessment

This section describes the County and its unincorporated communities, their storm drainage systems, any stormwater quality concerns, projected growth, and demographics. This section also describes the current status of stormwater quality control measures implemented by the County. This section comprises the needs assessment for the County's Storm Water Management Plan, based on its current activities and the presence of potentially polluting factors in the storm water systems. Generalized information and anecdotal reports from Public Works staff were used to assess the storm runoff pollution potential in the County and to formulate the first 5-year Pollution Prevention Work Plan described in Section 3. There is not enough site-specific information currently available to identify any specific pollutant sources or their loading.

This section also describes the receiving streams associated with County areas, the nature of the particular watersheds, especially regarding the upstream and downstream water quality. This description includes reference to any 303(d) listings of pollutants of concern to the Basin Plan.

The SWRCB retains the authority to regulate the quality of runoff, both storm and non-storm, from agricultural activities. The County will not be responsible for on-farm stormwater matters. In the event that the County becomes aware of a questionable runoff from an agricultural land use area, they will refer the matter to the Central Valley RWQCB.

I. Rural Areas and the Beard Tract

Storm Water Infrastructure

Except as noted for each unincorporated community below, the storm drainage in the rural parts of Stanislaus County is handled by field percolation, and when rainfall exceeds that capacity, runoff flows to roadside ditches which typically drain to Dry Creek, the Tuolumne River, the Stanislaus River or the San Joaquin River. There are very few constructed storm drain facilities or outlets serving the rural areas of the County.

The Beard Tract is a heavy industrial area in the County, between Modesto and Empire. It contains approximately 5,000 acres. The streets have curb and gutter with storm drains that discharge to the Tuolumne River, without detention basins. The industries include food processors, box plants, a solid waste transfer station, railroad yards and a containerized rail-truck shipping terminal. A number of the companies in the Beard Tract have been under the regulation of the 1991 Phase I Storm Water General Permit for Industrial Activities.

Unincorporated communities in the County may have constructed drainage facilities, for the most part operated and maintained by the County. These drainage facilities may discharge to either streams or to irrigation canals and drains that connect to streams. The descriptions in Section II below detail the storm water facilities serving each community. The County has a written agreement with Turlock Irrigation District regarding their stormwater discharges to canals (See Appendix A).

Due to the nature of its jurisdiction and the lack of regional stormwater infrastructure, the County does not have a storm drainage master plan. New infrastructure is designed to serve neighborhoods or commercial/industrial developments on a case-by-case basis.

The County's design standard for stormwater facilities is based on the Rational Method and the Stanislaus County 1976 Storm Drainage Study and Master Plan, a design manual. Pipelines are designed for the 10-year, 24-hour storm. Detention/retention facilities are designed for the 50-year, 24-hour storm. Basins may be detention or retention depending on the percolation properties of the soil, and on the availability of a permissible discharge to a canal or stream. Newer residential areas generally have adequate drainage. Some older areas have flooding problems in storms that exceed ½-inch per hour. During the 170-year storms of 1997, the most significant problems experienced by the County were flooding due to the release of excess water from Don Pedro Dam and Reservoir into the Tuolumne River channel, which caused extensive flooding adjacent to the river. In 1998, during a period of 35 days of higher than normal rain, upland areas of the County experienced sheet flooding, inundating a number of new subdivisions near saturated rural areas. County crews responded to mitigate damage, but the effect of this long period of rain exceeded existing drainage facilities' capacity. The County eliminates any illegal discharges to the stormwater system whenever they are found.

The County does not operate any combined sewer and stormwater pipelines or discharges. The only treatment received by the separate stormwater system occurs in a passive manner at detention and retention basins.

Storm Water Operations and Maintenance

The County conducts a variety of municipal operations that have a relationship to storm water quality, including stormwater, street sweeping, roads maintenance, parks maintenance, fire fighting, and fleet operations. Many of these operations have current service standards that have a beneficial effect on storm water quality. Most of these municipal operations are housed at the Corporation Yard at 1716 Morgan Road, Modesto.

1. Storm Drainage System Description

The rural areas of Stanislaus County are primarily used for agriculture. Storm runoff disposal consists of field percolation, with some roadside ditches that flow to natural drainage channels that terminate in neighboring streams. A small amount of County storm drainage is pumped to natural waterways.

Due in part to a combination of high groundwater, low percolation soils and topography in many parts of the County, there is occasional localized flooding of roads during storm events. Field crews respond to hazardous driving conditions with signs and barricades. They take whatever additional measures are possible to reduce flooding from storms.

The County operates and maintains over 1,400 miles of roadways and a number of parks in the rural areas. The storm drainage features related to these facilities are in fair to good condition. The County's Capital Improvement Program has been able to fund a number of road improvement projects, including storm drainage features over the

last few years. As funding allows, and depending on priorities for all capital projects, stormwater projects will continue to be implemented.

The County operates a small number of storm drainage basins. The maintenance on these basins includes weed control, and twice a year maintenance of any percolations units and pumps. A small amount of water detained in basins is pumped to natural channels.

2. Water and Sewer Field Operations

Water supplies for rural residents are either by private wells or by community service districts in more organized neighborhoods. The County operates small wells at Woodward Reservoir, Modesto Reservoir, Frank Raines ORV Park and Laird Park, to serve the parks themselves. Landscape maintenance is performed by County staff. The County does not conduct a water conservation program.

Sewer service for rural resident is either by private septic systems or by small package plants operated by a community service district. The County does not own or operate wastewater collection and treatment systems.

3. Streets

The County operates and maintains over 1,400 miles of roads. Asphalt maintenance activities include overlays, pothole patching and crack sealing. Currently, the County's capital program includes reconstruction of streets on very limited funding. Streets operations include some street lighting, traffic signals and signage.

4. Street Sweeping and Garden Refuse

Street sweeping is performed by County staff. Every curbed street is swept twice a month. Typical county roads without curbs are not routinely swept. The collected street sweepings loaded into a private waste hauler's bin, and are routed through a solid waste material recovery facility.

The County does not have a separate garden refuse program. As part of their private garbage service, many county residents have a green toter for garden refuse, which is then composted. County residents may make arrangements with the local solid waste companies for bulky item pickup service, but this is not a routine part of solid waste service. As part of its AB 939 program, the County is the operator of the household hazardous waste disposal station at 1516 Morgan Rd, Modesto. The household hazardous waste program is widely advertised, and is open to receive waste two days a week.

5. Parks maintenance

The County operates parks at Woodward Reservoir, Modesto Reservoir, La Grange ORV Park, Laird Park, Frank Raines ORV Park in Del Puerto Canyon, the Tuolumne River Regional Park (in partnership with Modesto and Ceres), and a number of small community specific neighborhood parks. Other than road culverts, there is no park-wide constructed storm drainage pipeline system in the parks. Parks maintenance includes the application of fertilizer and pesticides, mowing, pruning, parking lot sweeping, and litter removal. Chemical usage is applied at agronomic rates and at appropriate times to minimize chemical release in runoff. Landscape maintenance is

provided by County staff. Each park has different restroom facilities, some connected to package sewer treatment plants, some served by septic tanks.

6. Fire fighting

Fire services for the County are provided by the County consolidated fire department and by some independent fire districts. The Consolidated Fire Dept. is responsible for wild land, vehicle and structure fires in their territory. They may also be first responders for hazardous materials spills in the County. Fleet maintenance for fire apparatus is performed by an off-site private contractor.

Fire fighting can result in runoff of excess fire fighting water to storm drains or streams. The potential for fire fighting water to contain pollutants has not been assessed, but is not expected to be a significant source. Hazardous materials spill response also has the potential for the release of pollutants to storm drains or streams. Consolidated Fire and the County Department of Environmental Resources is trained in hazmat containment, and has a tiered response protocol that includes outside specialists as needed.

7. Fleet

The County operates a fleet of sedans, work trucks, and heavy equipment for its Public Works, Fire, Police and Parks functions. Most of the fleet is operated and maintained at the Corporation Yard at 1716 Morgan Road, Modesto. Vehicle maintenance is conducted under cover. Vehicle washing occurs on a paved area, equipped with an oil separator. No gasoline or diesel fuel tanks are located at the Corporation Yard. Gas, diesel and CNG fueling has been provided at a contractor's facility. The County has recently commissioned a new CNG facility at the Morgan Road Corporation Yard.

The County operates a regional bus transit system under a contract with a Storer Transportation, at their private facility on McDonald Ave.

8. Corporation Yard

The County's main Corporation Yard, at 1716 Morgan Road, Modesto, is the home of vehicle maintenance, building maintenance, streets and storm drain operations. The Corp. Yard would benefit from a detailed review of its activities and their potential for exposing deleterious materials to storm runoff. For example, the containment of paving materials, industrial chemicals, batteries, vehicle drips, and painting materials should be evaluated. Part of the Corporation Yard is unpaved. Runoff percolates into the yard's surface or flows to the adjacent street's curb and gutter. The County does not currently have a formal storm water quality training program for its field employees.

Potential Sources of Storm Water Pollution

County staff reports that there are periodic incidents of dumping deleterious materials or chemicals along County roads or on rural property. Since the amount of constructed storm drains is small, illicit connections of sewage to storm drains have not been found. If a complaint of illegal dumping is received, County street crews respond as

appropriate. Depending on the circumstances, response may involve fire or police or outside hazmat cleanup services.

The County's land uses include residential, commercial and industrial areas. These land uses have the potential to generate a wide variety of pollutants. Examples of community activities that have a higher likelihood to contribute to runoff pollution include automobile maintenance and washing, general home/building and landscape maintenance, pest control, restaurants, animal waste disposal, industrial activities, and new development. Industrial activities are a potential source of pollutants such as oxygen demanding substances, heavy metals, petroleum products, and complex hydrocarbons.

The County does not conduct any specific or routine monitoring of storm water quality. No particular chronic or acute concerns have been identified with County storm water quality to date. County staff has not observed that the following non-stormwater discharges or flows (as defined in the draft General Permit section D.2.c[6]) are significant contributors of pollutants to the County's storm drains (MS4):

1. water line flushing
2. landscape irrigation
3. diverted stream flows
4. rising ground waters
5. uncontaminated ground water infiltraton to separate storm sewers
6. uncontaminated pumped ground waters
7. discharges from potable water sources
8. foundation drains
9. air conditioning condensation
10. irrigation water
11. springs
12. water from crawl space pumps
13. footing drains
14. lawn watering
15. individual residential car washing
16. flows from riparian habitats and wetlands, and
17. dechlorinated swimming pool discharges

Projected Community Growth

Stanislaus County is an area experiencing rapid growth in both the cities and the unincorporated County. The County's current 1994 General Plan noted historic total average growth rate of 3.5%, with the majority of the growth occurring within the cities. It is anticipated that the majority of population growth in the county will continue to occur by annexation of cities. Growth of population in the unincorporated areas of the County will continue at less than an average of 1% per year.

Stanislaus County is an agricultural county in transition. More than three quarters of county population lives in the cities. The economy is diversifying beyond agriculture, which has put pressure on the demand for conversion of agricultural lands to other uses. However, agriculture remains the area's leading economic sector.

Table 2.1
Historic and Projected Stanislaus County Populations

	1994	2005	2015
Cities	310,720	449,400	604,100
Unincorporated County	101,956	100,000	105,000
Total	412,676	549,400	709,100

The County community is diverse, both in an economic and ethnic sense. The two most commonly used languages are English and Spanish.

Funding of Storm Water Activities

County-wide stormwater operations and maintenance costs are funded entirely by gas tax revenues and some community service area fees in certain areas such as Salida. There is not a separate accounting for stormwater activities. For stormwater activities associated with county service areas (Mello Roos Districts), assessments are included on property tax bills, under the guidelines of Prop. 218. Tire pickup is funded from landfill revenues. Due to the limitations on gas tax and Prop. 218 exactions, new funding for stormwater quality control will be very difficult to find.

New storm drainage infrastructure is constructed by developers in accordance with County design standards, and then dedicated to the County. Capital funding for rehabilitation of existing storm drainage facilities must compete with other projects for gas tax funding.

Legislative Authority for Storm Water Activities

The County is part of State government, empowered to provide public works services, and to set regulations related to storm water quality. The County establishes an annual budget for operations and capital expenditures.

The County has a number of County Code sections that regulate buildings, streets, subdivisions and health and safety that may have a relationship with stormwater quality. However, there is not a coordinated stormwater quality control ordinance with a framework for enforcement. The County Code will need to be updated and coordinated to incorporate measures relevant to the SWRCB General Permit for the purpose of controlling and improving the County's storm water quality. Examples of topics to be evaluated are the prohibition on pollutant discharges to the storm drainage system, sediment control under grading permits, construction activity procedures and fees, and an enforcement protocol for violations.

II. Unincorporated Communities and their SD Systems

A. Crow's Landing (Fig. 2)

Crow's Landing is a very small residential neighborhood, with two stores and one agriculture-related business. Drainage is provided mostly by roadside percolation. There are no pipelines or detention ponds. The neighborhood growth rate is low.

The condition of the storm drainage facilities is fair.

B. Denair

Denair is a small town, with two single street shopping areas, schools, churches and several small industrial and service businesses. Drainage is provided by roadside ditches, detention basins and rockwells. Some basins discharge by pump to a Turlock Irrigation District canal under agreement. Some basins operate entirely on percolation.

The condition of the storm drainage facilities is good.

C. Diablo Grande

Diablo Grande is a new resort destination community under development in western Stanislaus County in the east slope of the Coast Range. Drainage will be newly constructed under both the County design standards for flow, and under the NPDES stormwater quality control program. The planned land uses are residential, recreation, and small shopping hubs. Industrial land use is not planned.

Storm drainage facilities are under construction, so condition will be good to excellent when completed.

D. Del Rio (Fig. 3)

Del Rio is a very small residential neighborhood with a golf course. There are no commercial or industrial areas. The neighborhood is improved with curb, gutter and sidewalk. Drainage facilities include a retention pond, with no discharge to the nearby Stanislaus River.

The condition of the storm drainage facilities is good.

E. Empire (Fig. 4)

Empire is a small town, with a small shopping area, churches, schools, a post office and several industrial and service businesses. Drainage is provided mostly by roadside percolation, by rockwells, and limited piped area with detention basins. One basin discharges into an Modesto Irrigation District canal.

Empire is listed in Attachment 1 of the State's General Permit.

The condition of the storm drainage facilities is fair in the older parts of town and good in newly constructed areas.

F. Grayson (Fig. 5)

Grayson is a very small residential neighborhood with one store. Drainage is provided by roadside perceolation. One newly developing section will have

curb and gutter, and storm drain pipes and a detention basin that pumps to the San Joaquin River bottom, and then overland flow to the river.

The condition of the storm drainage facilities is good.

G. Hickman (Fig. 6)

Hickman is a small residential neighborhood, with a couple of stores. Drainage is provided by rockwells and by a few storm drains that pump into a TID canal.

The condition of the storm drainage facilities is fair.

H. Keyes (Fig. 7)

Keyes is a small town, with several stores and commercial and industrial businesses. Drainage is provided by roadside ditches, and a few detention basins. Some of the basins pump to a TID canal, while others are percolation only. Part of the community will be receiving new curb, gutter and storm drains under a County redevelopment project. Groundwater in Keyes is only 2.5 feet below the surface making drainage difficult.

Keyes is listed in Attachment 1 of the State's General Permit.

The condition of the storm drainage facilities is fair to good.

I. Knight's Ferry (Fig. 8)

Knight's Ferry is a very small historic town, with a restaurant and three stores. Drainage is provided by roadside ditches. There are no pipelines or detention basins. The town is located on the banks of the Stanislaus River.

The condition of storm drainage is fair to good; no ponding occurs.

J. La Grange (Fig. 9)

La Grange is a very small historic town, with a half dozen tourist-oriented businesses. Drainage is provided by roadside ditches. There are no pipelines or detention ponds. The town is located on a bluff above the Stanislaus River.

The condition of storm drainage is fair to good; no ponding occurs.

K. Salida (Fig. 10)

Salida is a rapidly growing bedroom community on Highway 99, with downtown and freeway commercial areas, schools, churches and recreation areas. The 1994 General Plan projects a population for Salida of 22,000 by 2014. The community's growth rate has been in the range of 3.5 % over the last few years. Most of the community is recently constructed and has modern storm drains, detention basins that discharge to the Stanislaus River. Some stormwater is discharged to a MID canal. The old downtown area has new curb, gutter and storm drains to connect to new detention basins. One residential storm drainage system includes a constructed energy dissipater and rock lined channel at the discharge point at the edge of the Stanislaus River flood way.

Salida is listed in Attachment 1 and Attachment 4 of the State's General Permit.

The condition of the storm drainage facilities is good to excellent. Some new construction sequencing problems caused some flooding in 2000, but the situation has been remedied.

L. Sunset Oaks Estates

Sunset Oaks Estates is a very small residential neighborhood. Drainage is provided by storm drains and retention basins. There is no discharge to the Stanislaus River. One new subdivision is at the Vesting Tentative Map stage and when constructed will include direct discharge to the river, pending permits from the Corps of Engineers and Fish and Game.

The condition of the storm drainage facilities is fair to good.

M. Valley Home (Fig. 11)

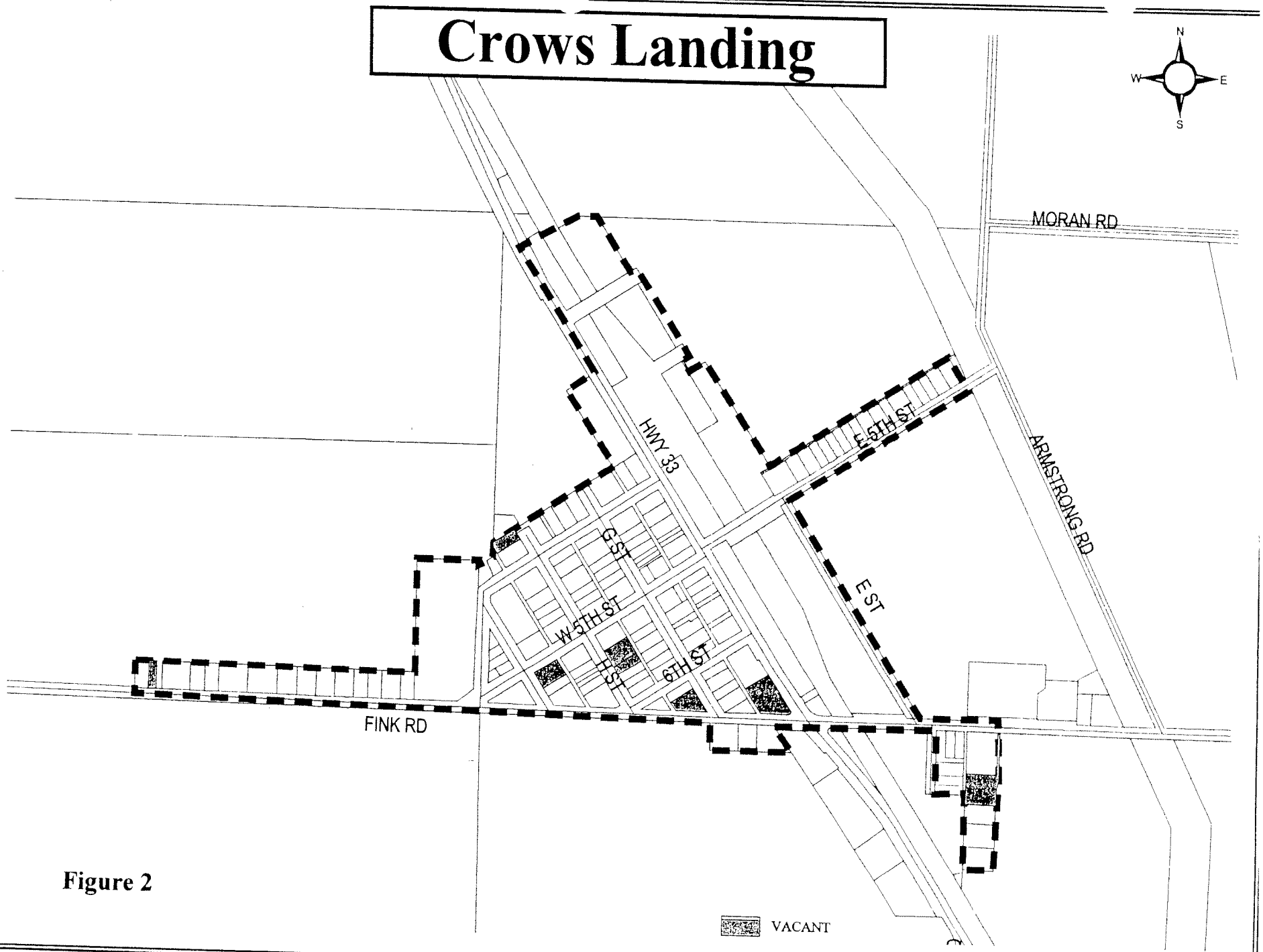
Valley Home is a very small residential neighborhood, with one restaurant and one store. Drainage is provided by rockwells and surface percolation. There are no pipelines or detention ponds. The neighborhood is not located near a river or stream.

The condition of the storm drainage rockwells is fair.

N. Westley (Fig. 12)

Westley is a small town. Drainage is provided by rockwells. There are no pipelines or detention ponds. The San Joaquin River is the nearest watercourse to Westley, approx. two miles away.

The condition of the storm drainage rockwells is fair.


Crows Landing
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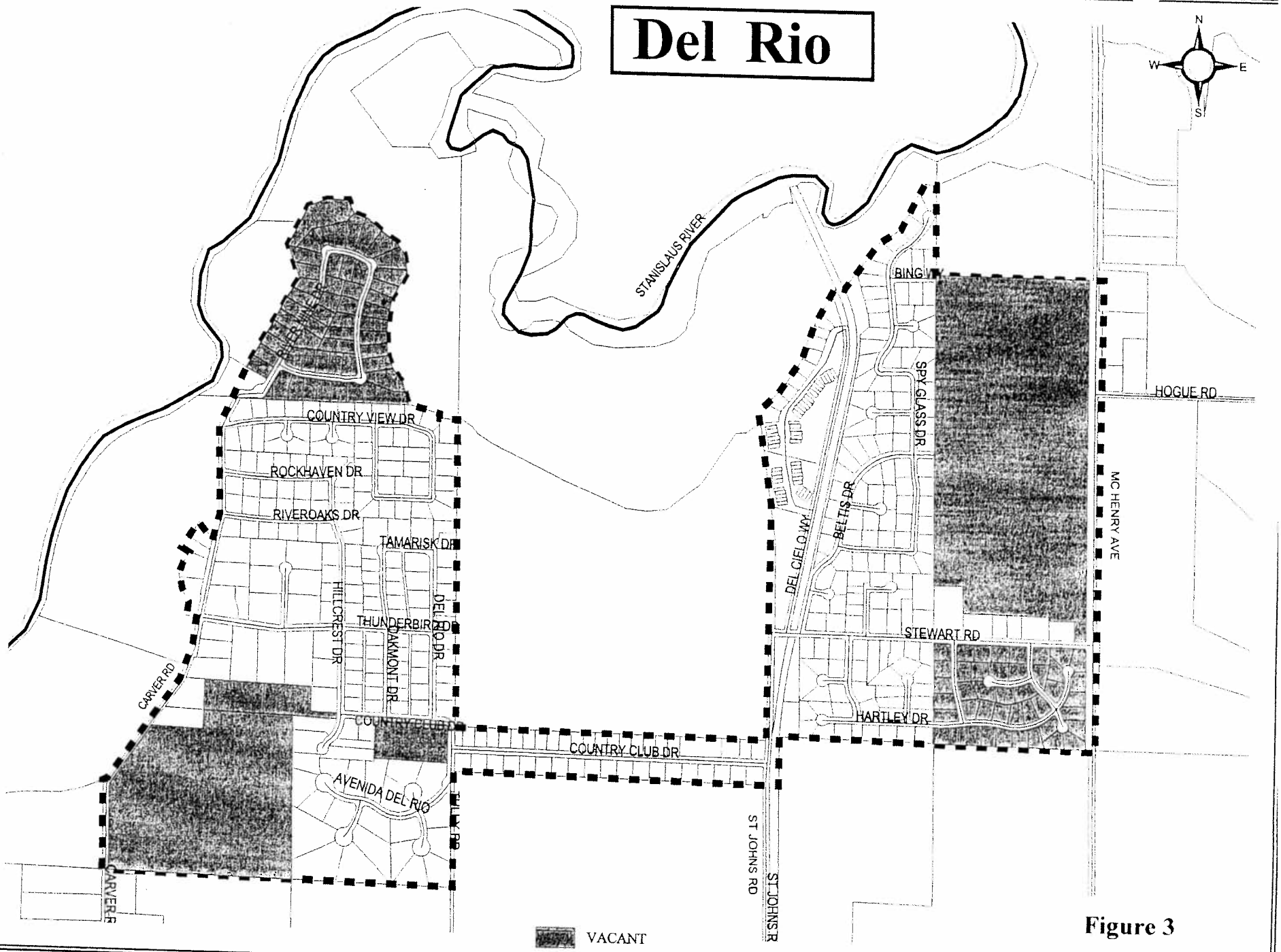
E
S
MORAN RD
HWY 33
E 5TH ST
ARMSTRONG RD
G ST
E ST
W 5TH ST
6TH ST
FINK RD
VACANT

Figure 2


Del Rio
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RIVEROAKS DR
TAMARISK DR
THUNDERBIRD DR
HILLCREST DR
DEL RIO DR
OAKMONT DR
CARVER RD
COUNTRY CLUB DR
AVENIDA DEL RIO
ELM DR
CARVER R
ST JOHNS RD
ST JOHNS R
BING
SPY GLASS DR
BELTIS DR
DEL CIELO WY
HOGUE RD
MC HENRY AVE
STEWART RD
HARTLEY DR
VACANT

Figure 3

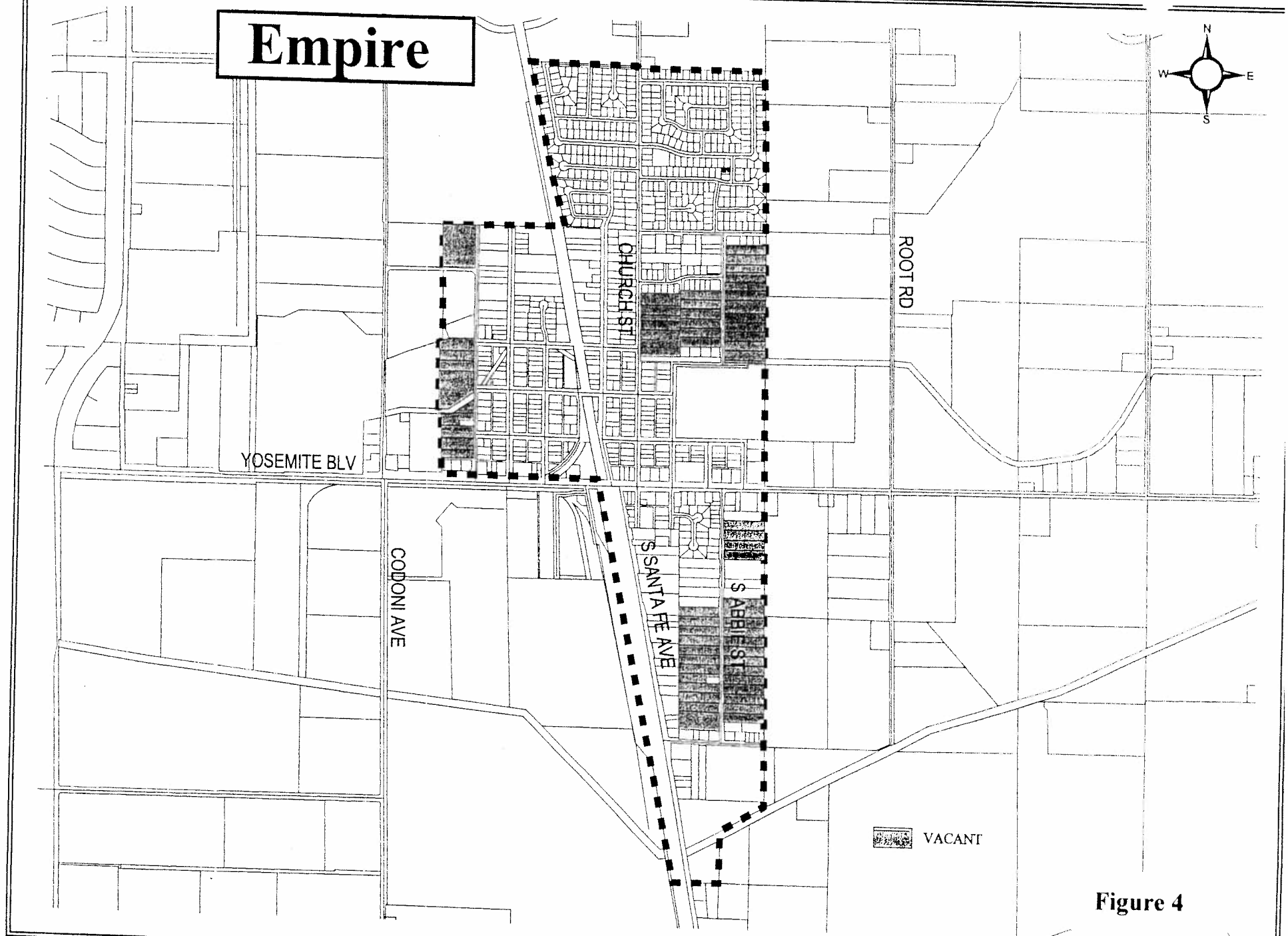

Empire
N
W
E
S
CHURCH ST
ROOT RD
YOSEMITE BLV
CODONI AVE
S SANTA FE AVE
S ABBIE ST
VACANT

Figure 4

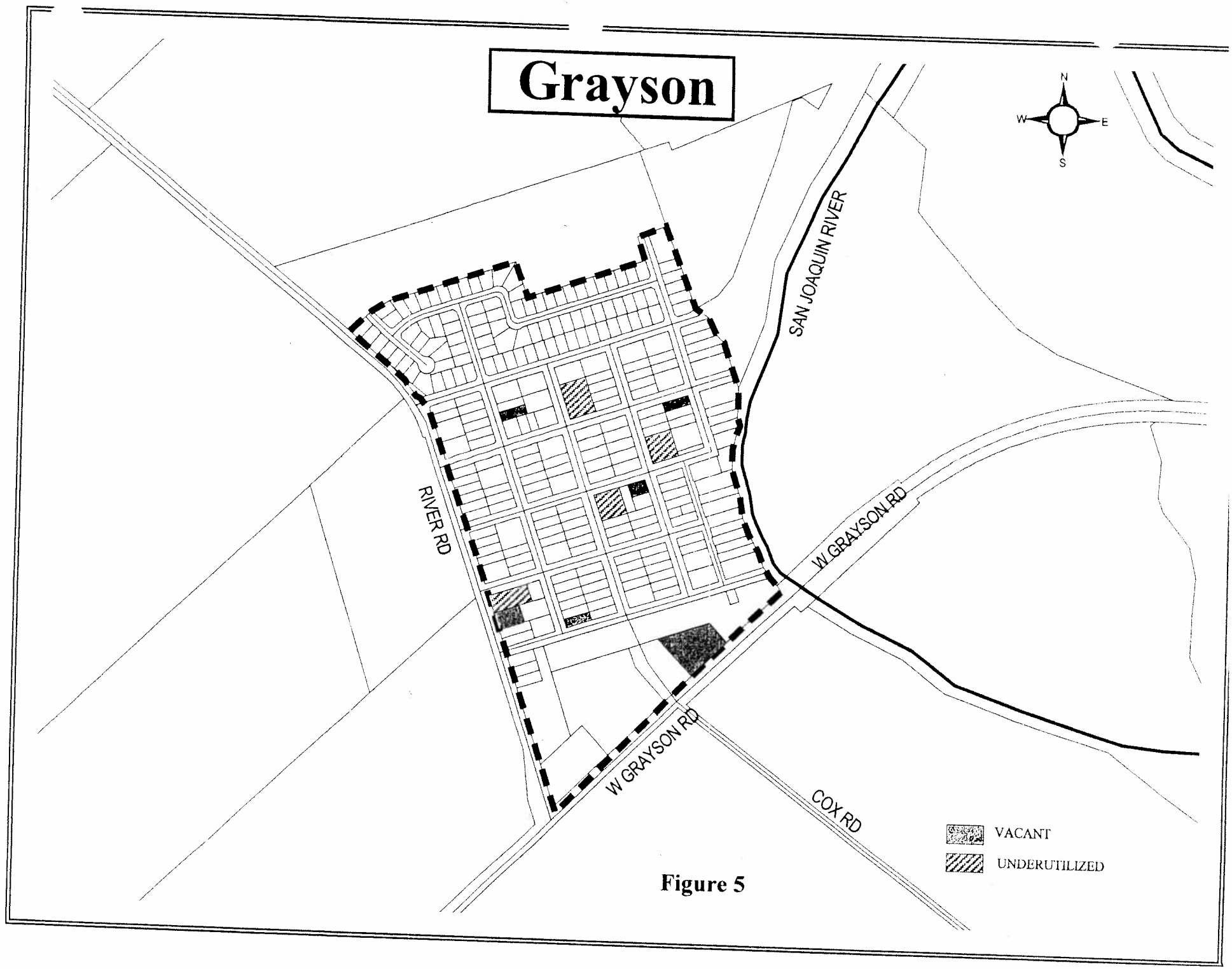
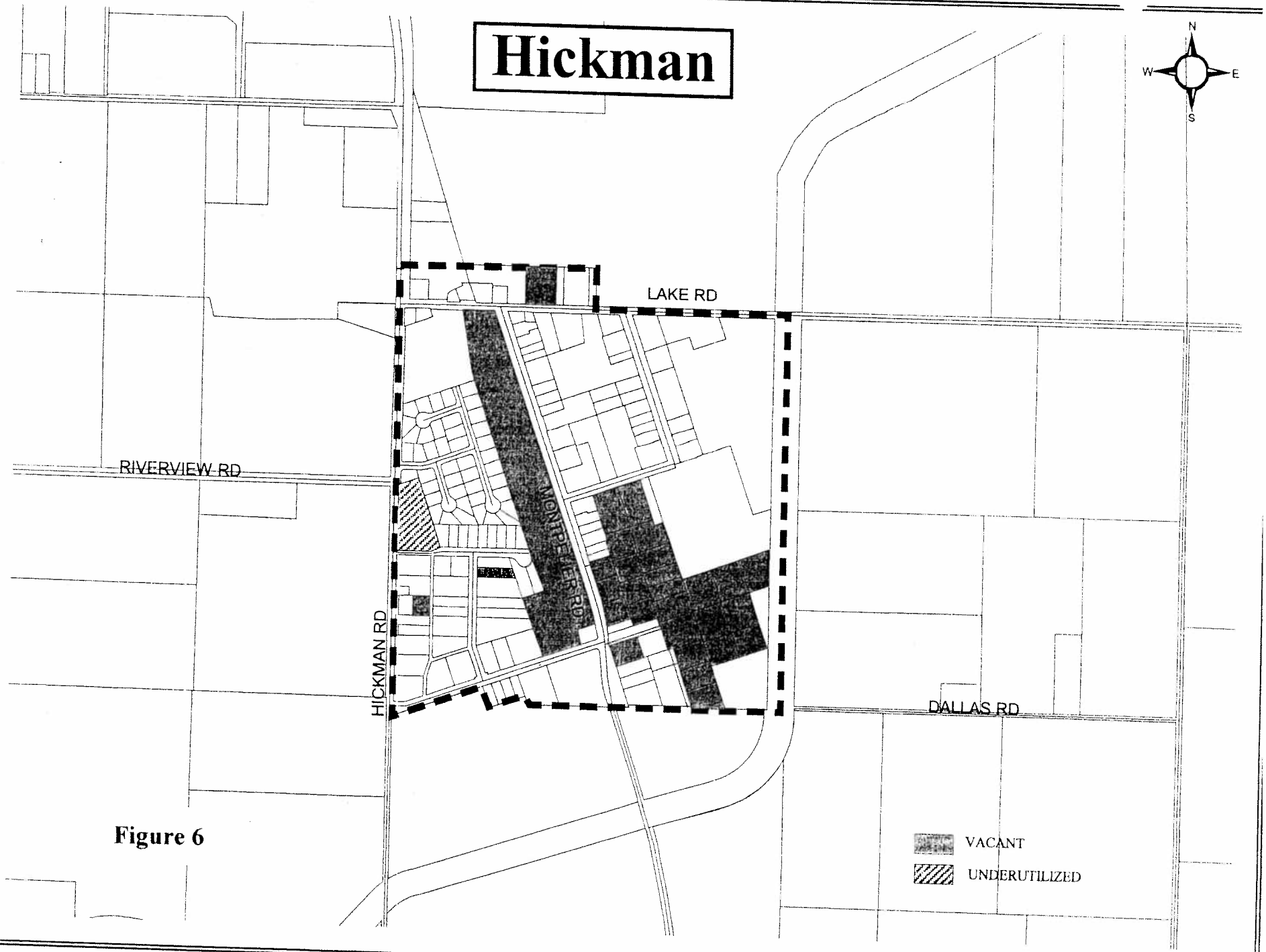

Grayson
N
W
E
S
SAN JOAQUIN RIVER
RIVER RD
W GRAYSON RD
W GRAYSON RD
COX RD
VACANT
UNDERUTILIZED

Figure 5


Hickman
N
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E
S
LAKE RD
RIVERVIEW RD
HICKMAN RD
MONTPELIER RD
DALLAS RD
VACANT
UNDERUTILIZED

Figure 6

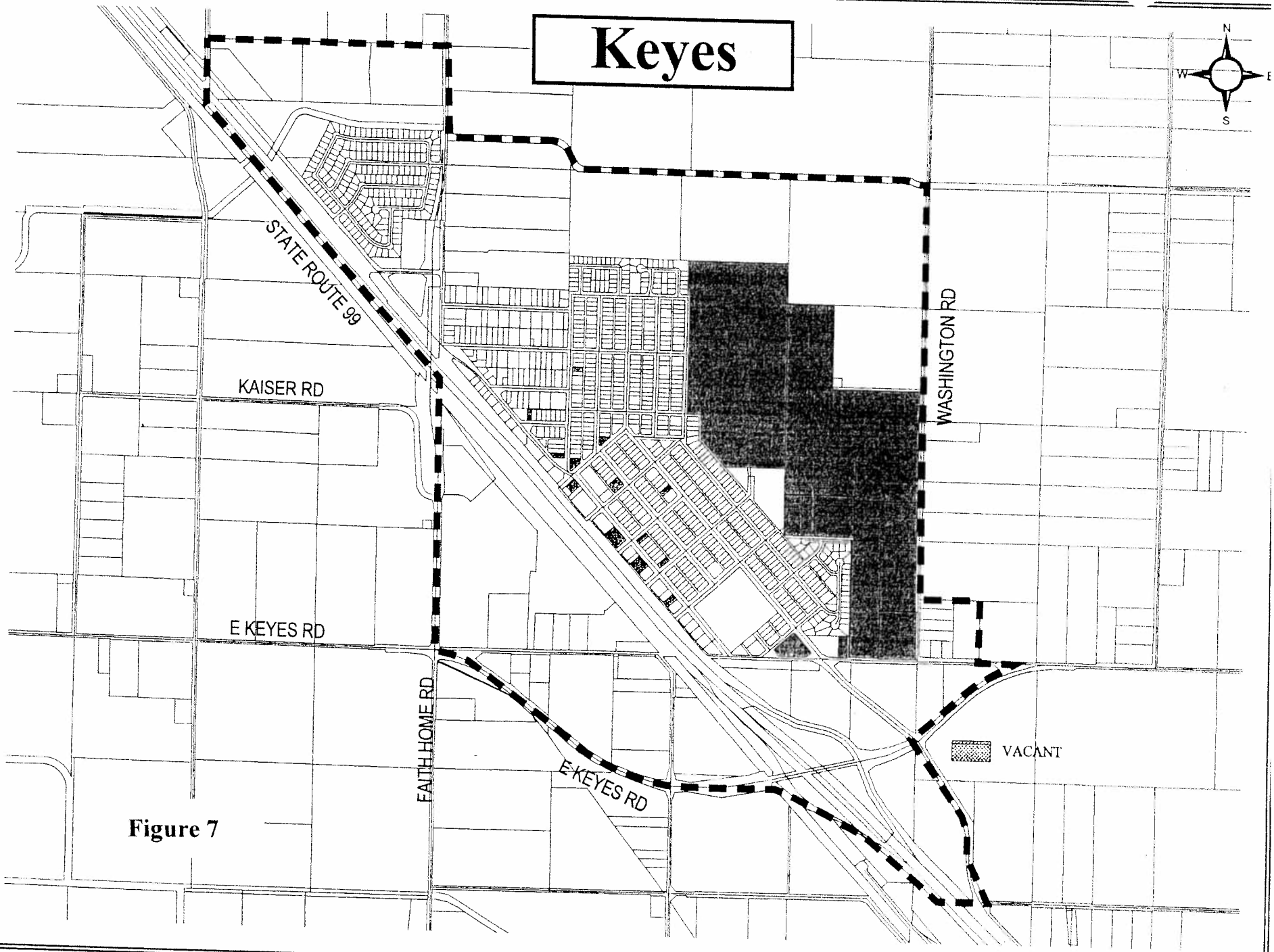
Keyes
N
W
E
S
STATE ROUTE 99
KAISER RD
WASHINGTON RD
E KEYES RD
FAITH HOME RD
E KEYES RD
VACANT

Figure 7

Knights Ferry

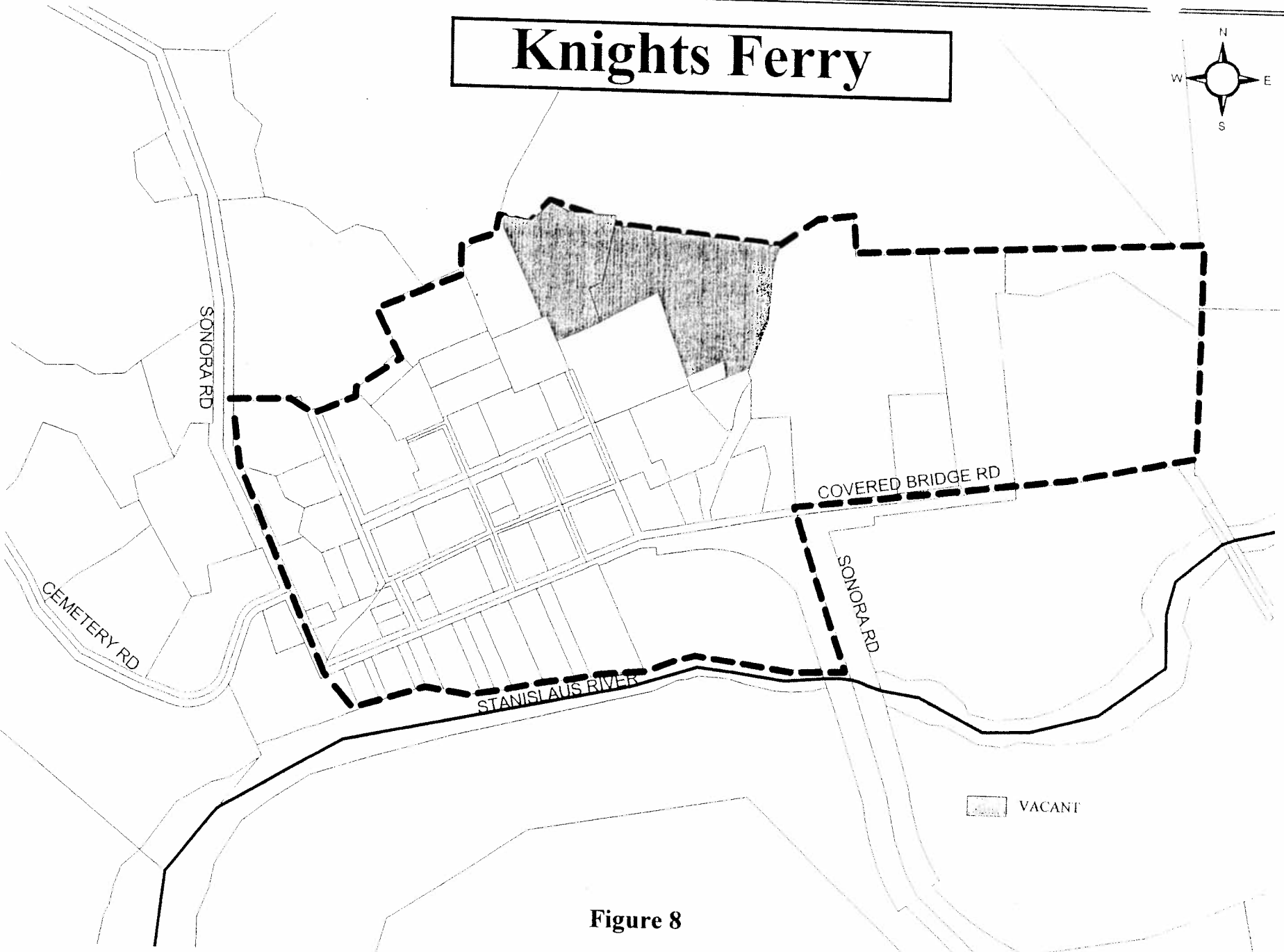

Figure 8

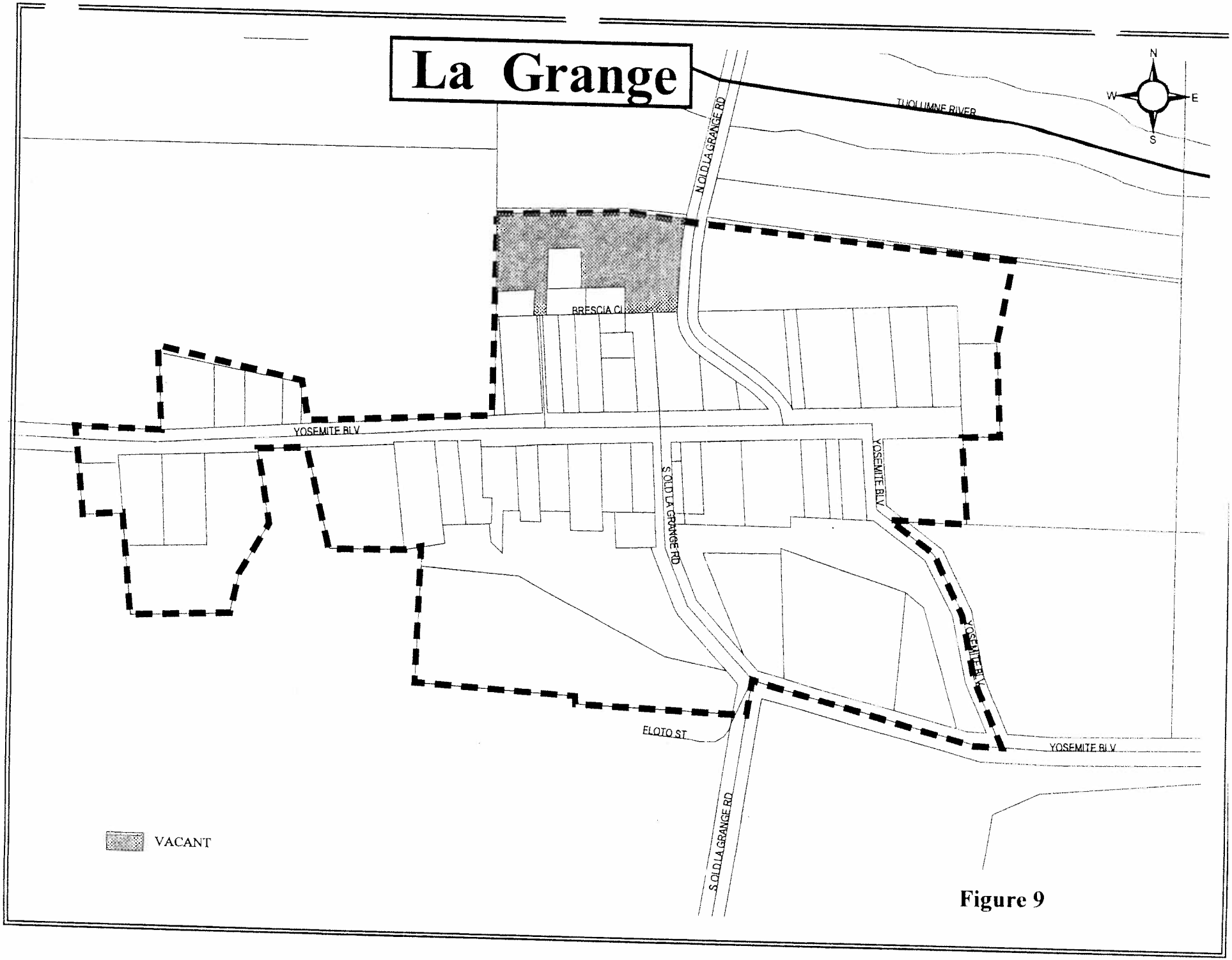
La Grange
TUOLUMNE RIVER
N
W
E
S
N OLD LA GRANGE RD
BRESCIA CT
YOSEMITE BLV
S OLD LA GRANGE RD
YOSEMITE BLV
YOSEMITE BLV
ELOTO ST
YOSEMITE BLV
S OLD LA GRANGE RD
VACANT

Figure 9

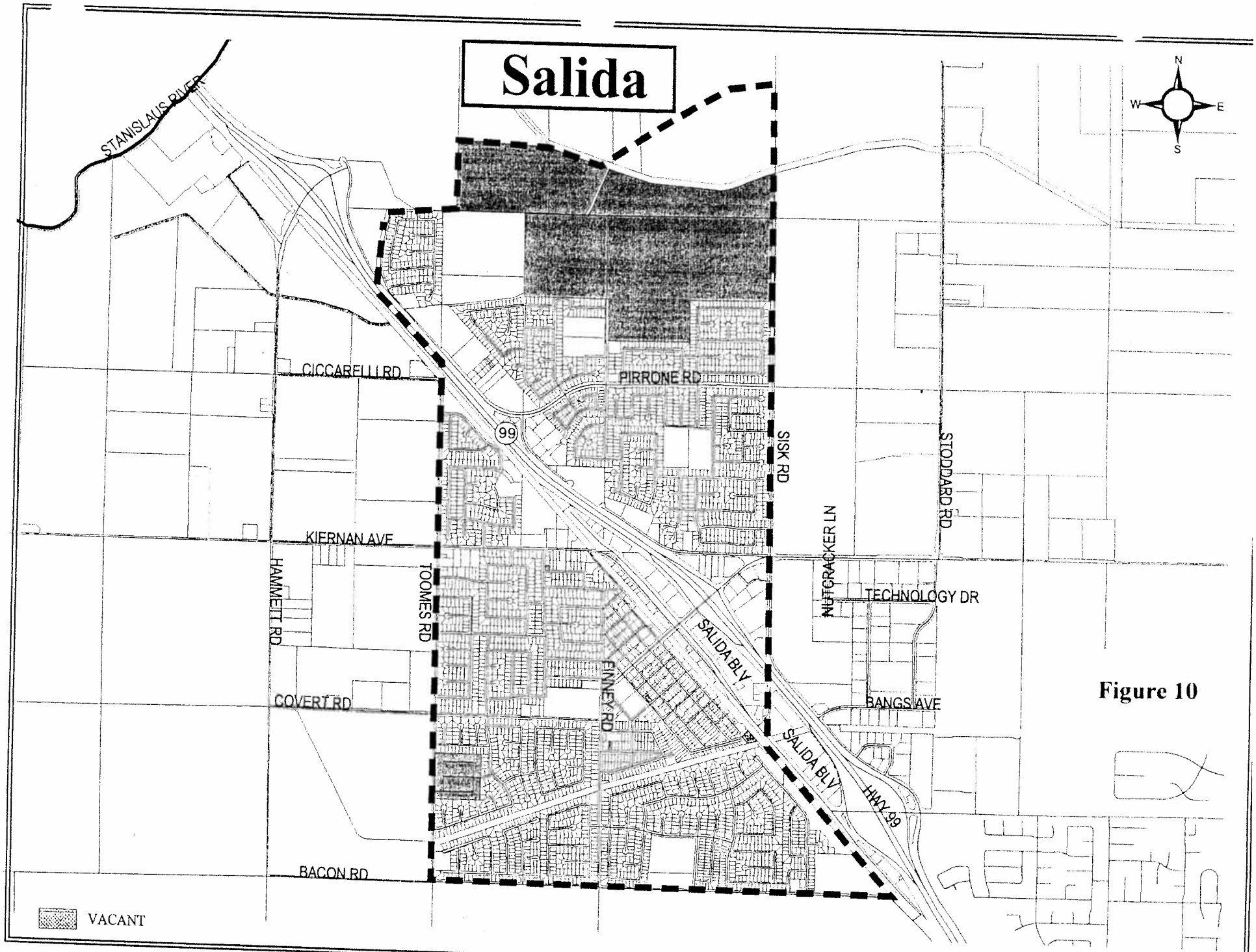
Salida
STANISLAUS RIVER
CICCARELLI RD
PIRRONE RD
99
SISK RD
STODDARD RD
NUTCRACKER LN
TECHNOLOGY DR
KIERNAN AVE
HAMMETT RD
TOOMES RD
SALIDA BLVD
FINNEY RD
COVERT RD
BANGS AVE
SALIDA BLVD
HWY 99
BACON RD
N
W
E
S
VACANT

Figure 10

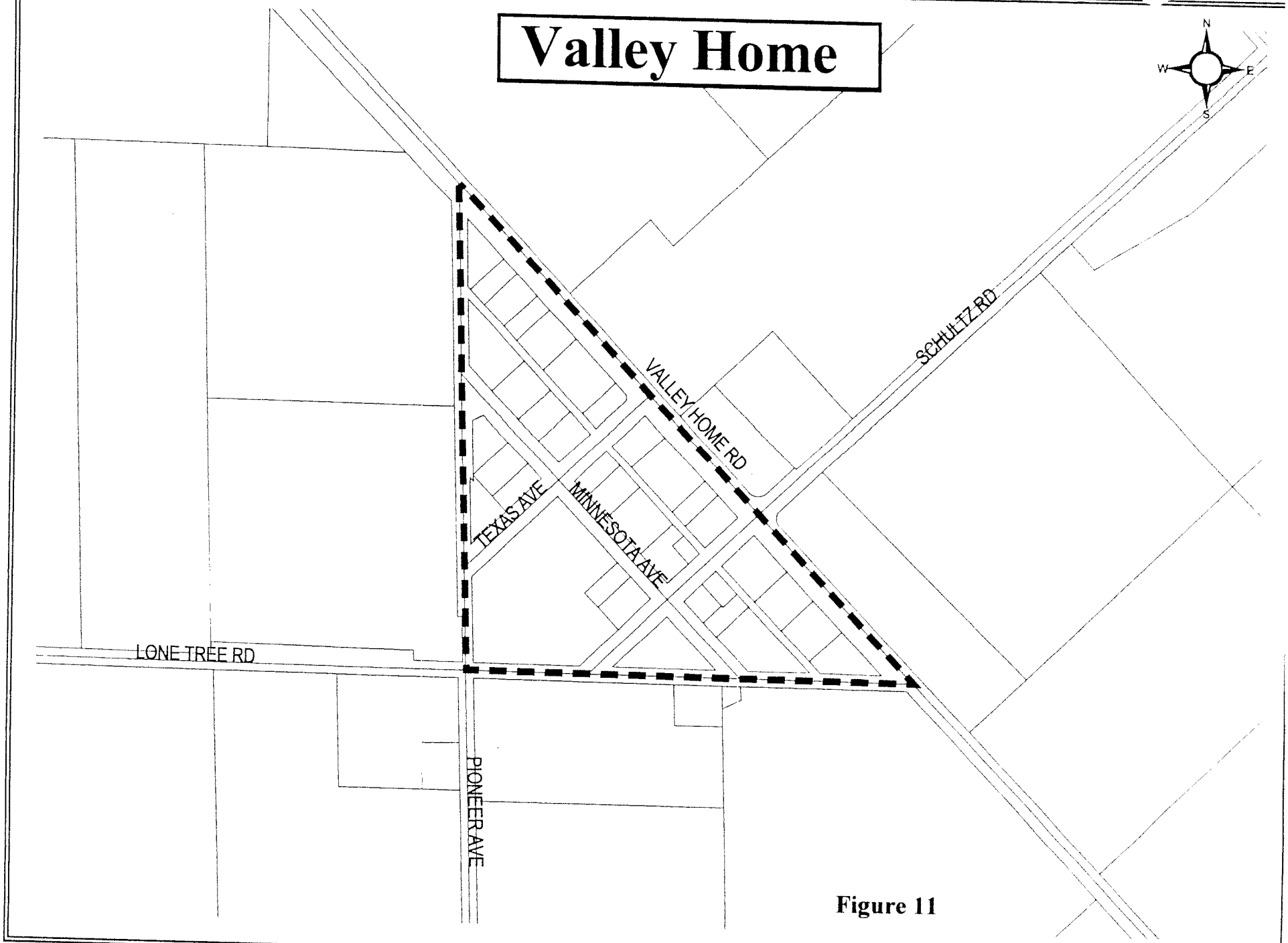
Valley Home
N
W
E
S
VALLEY HOME RD
SCHULTZ RD
TEXAS AVE
MINNESOTA AVE
LONE TREE RD
PIONEER AVE

Figure 11

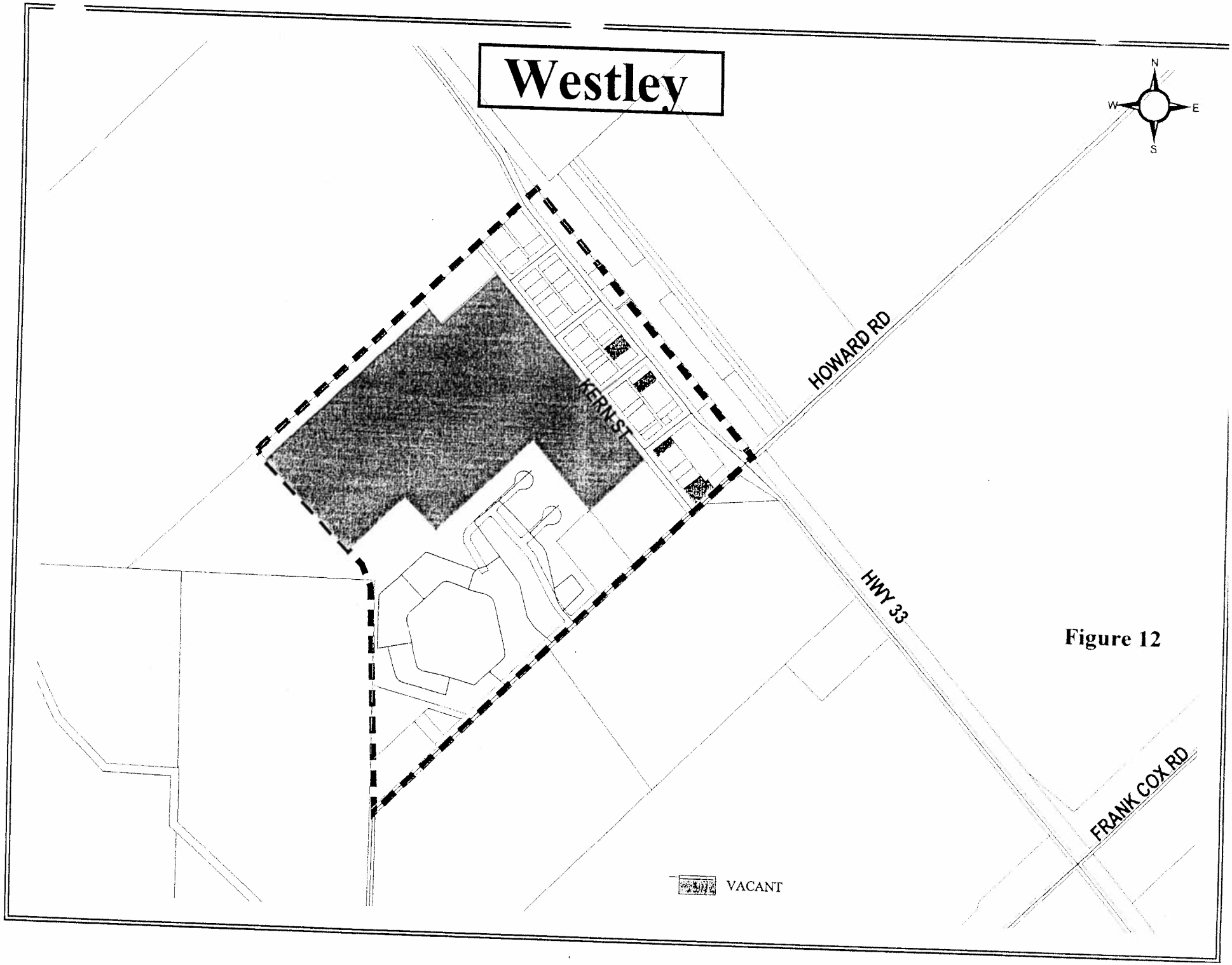

Figure 12

III. Receiving Streams

Storm Runoff

The lands in the County are tributary to the Tuolumne, Stanislaus and San Joaquin Rivers. Several creeks, such as Dry Creek, Salado Creek and Orestimba Creek, are included within these watersheds. The County's storm drainage facilities have three discharge points from pipelines to these rivers. The number of natural channel discharges to the rivers is not known. Discharges to the MID or TID irrigation canals ultimately discharge to the same rivers. The Tuolumne, Stanislaus and San Joaquin Rivers are major watersheds of the State. However the amount of discharge from County storm facilities to these rivers is a minor percentage of the river's storm event flow. No flow rate data is available on discharges from County facilities during storm events..

The overall terrain of the County is mostly flat, with rolling hills to the western Coast Range and eastern Sierra Nevada foothills. The land is highly developed for agricultural purposes. Many acres are leveled and bermed for irrigation purposes.

Average rainfall in the County is 12 inches. In 2001, the County updated its Storm Drainage Design Manual, which uses the Rational Formula for the design of engineered structures such as pipelines and detention basins.

Receiving Streams

County storm drain facilities discharge to the Tuolumne, Stanislaus and San Joaquin River. These rivers are listed as impaired water bodies on the 1998 California 303(d) list by the Central Valley Regional Water Quality Control Board. Table 2.1 is an extract of the relevant 303(d) listing information, showing which pollutants are of concern. If the RWQCB or a permittee determines that stormwater discharges from its MS4 are contributing to a water quality exceedance in a receiving stream, Attachment 4, Part A, of the SWRCB General Permit requires the permittee to take action to prevent or reduce any pollutants that are causing or contributing to the exceedance.

The 303(d)-listed pollutants of concern in the rivers in Stanislaus County are chlorpyrifos, DDT, diazinon, electrical conductivity, Group A pesticides, mercury, organic enrichment, unknown toxicity, boron, selenium, dioxin, furans, and PCBs. Of these, only chlorpyrifos, diazinon, organic enrichment and unknown toxicity are shown as potentially related to urban runoff and storm sewers. If it is determined that the County's runoff is a source of these pollutants or stressors, the County may be called on in the future to participate in TMDL proceedings or other actions to reduce the load of these pollutants to the rivers. At present, there are not scientific studies quantifying the contribution of the County's storm waters to water quality exceedances in receiving streams.

Chlorpyrifos is the most widely used pesticide in the US. It is used in agriculture, commercial and residential landscaping, and as a termiticide.

Diazinon is a dormant spray pesticide used in orchards and on backyard fruit trees, and has been documented as being present in urban runoff in other cities in the San Joaquin Valley.

Organic enrichment occurs when dissolved nutrients, such as nitrate, potassium or phosporus are contained in discharges to a river, causing reduced dissolved oxygen in the

stream. These nutrients are also referred to as oxygen-demanding substances. Organic enrichment usually is present in urban runoff due to garden fertilizers, animal waste, and trash washed off streets.

The sources of unknown toxicity have yet to be determined for the Tuolumne, Stanislaus and San Joaquin Rivers. It is possible that toxicity to aquatic wildlife occurs due to a combination of pollutants and stressors in runoff to the streams. The mitigation of unknown toxicity by the CVRWQCB will take a coordinated effort by scientists, dischargers and wildlife agencies. The elimination of other known pollutants and stressors will likely be the CVRWQCB's first approach to addressing toxicity on a regional basis.

Erosion and the potential for sediment transport are also a concern in the Tuolumne, Stanislaus and San Joaquin Rivers. The turbidity in the rivers has a direct bearing on the reproductive success and fry survival of threatened anadromous fish in these rivers. Turbidity and dissolved oxygen content in the rivers impacts the entire aquatic community. High turbidity and low dissolved oxygen are the general rule in the river from the foothills to the Deep Water Ship Channel below Stockton.

Table 2.2 summarizes some of the relationship between man-made sources and primary pollutants of concern in the County.

Some Related Regulatory Activities on the Tuolumne, Stanislaus and Tuolumne Rivers

The Tuolumne, Stanislaus and San Joaquin Rivers are major waterways of the State, and are the subject of a number of varied water quality activities and initiatives. MID and TID have been closely involved in the Tuolumne River's water quality by means of their FERC[1] license renewal process. The City of Modesto holds a Phase I Storm Water NPDES permit, relevant to their discharges of storm water to the Tuolumne River. The Tuolumne and Stanislaus are tributary to the San Joaquin River, the Delta and San Francisco Bay. This means that the Tuolumne River's water quality of the rivers is also a concern of the Bay-Delta proceedings of the SWRCB, for both quality and quantity. The efforts of regulatory agencies and responsible parties to address other water quality impairments in the San Joaquin River watershed will have a relationship to the quality of the County's storm water runoff over time. Therefore, the County will need to remain involved in regional water quality issues to make sure the County's Storm Water Management Program is coordinated with regulatory actions for multiple pollutants.

[1] Federal Energy Regulatory Commission

Table 2.1
Extract of 1998 California CWA Section 303(d) List and TMDL Priority Schedule (CVRWQCB)

Pollutant/Stressor	Source	Priority
Delta Waterways		
Chlorpyrifos	Agriculture, Urban Runoff, Storm Sewers	High
DDT	Agriculture	Low
Diazinon	Agriculture, Urban Runoff, Storm Sewers	High
Electrical Conductivity	Agriculture	Medium
Group A Pesticides	Agriculture	Low
Mercury	Abandoned Mines	High
Organic enrichment, Low Dissolved Oxygen		
	Municipal Point Sources	High
	Urban Runoff, Storm Sewers	
Unknown Toxicity	Source Unknown	Medium
San Joaquin River		
Boron	Agriculture	High
Chlorpyrifos	Agriculture	High
DDT	Agriculture	Low
Diazinon	Agriculture	High
Electrical Conductivity	Agriculture	High
Group A Pesticides	Agriculture	Low
Selenium	Agriculture	High
Unknown Toxicity	Source Unknown	Medium
Lower Stanislaus River		
Diazinon	Agriculture	High
Group A Pesticides	Agriculture	Low
Unknown Toxicity	Source Unknown	Medium
Stockton Deep Water Ship Channel		
Dioxin	Point Source	Medium
Furans	Point Source	Medium
PCBs	Point Source	Medium
Lower Tuolumne River		
Diazinon	Agriculture	High
Group A Pesticides	Agriculture	Low
Unknown Toxicity	Source Unknown	Medium

Table 2.2 Relationship of Sources to Primary Pollutants of Concern

Source	Physical Parameters	Synthetic Organics	Petro. Hydrocarbons	Heavy Metals	Nutrients	Pathogens	Sediment	Oxygen Demanding Substances	Floatables
Vehicle Services		X	X	X					
Gas Stations		X	X	X					
Metal Fabrication		X	X	X					
Restaurants								X	X
Auto Wrecking Yards	X	X	X	X					
Mobile Cleaners		X							
Parking Lots	X		X	X					
Residential Dwellings	X	X		X	X	X	X	X	
Parks/ Open Spaces					X	X	X	X	X
Construction Sites	X						X	X	
Corporation Yards	X	X	X	X					
Streets	X		X	X				X	X
Golf Courses		X			X		X	X	
Sewer Releases	X					X		X	

Ref: Model Urban Runoff Program, July 1998, City of Monterey et al

Section 3 – Storm Water Management Program

Approach

In this Storm Water Management Program, the County is taking an approach that assumes that the general level of urban runoff pollution can be reduced by a variety of county-wide pollution prevention activities. Insufficient evidence is available about specific non-point sources of pollutants in the County and their loading rates to develop a more targeted approach at this time. The pollution prevention activities to be undertaken are organized into the six Minimum Control Measures:

1. Public Outreach and Education
2. Public Participation and Involvement
3. Illicit Discharge Elimination
4. Construction Site Best Management Practices
5. Post Construction Best Management Practices
6. Municipal Activities

The approach to storm water pollution prevention will also be an adaptive management plan. The results of each year's activities will be evaluated in preparation for the next year's work. Priorities and scheduling of activities may change from this initial plan based on the needs of the county to meet the overall objective of reducing the potential for pollution in runoff.

The County will be seeking opportunities to work with other Permittees in the area to combine their efforts on certain activities to save money. This section outlines the control measures in each of the 6 categories to be undertaken during the 5-year permit period.

TASK CODING: The tasks numbers are coded to indicate where they fit into the 5-year workplan. The first number indicates the year of the activity. The second number identifies it within the year, usually as part of a continuing program element that corresponds with one of the six Minimum Control Measures.

I. PUBLIC OUTREACH AND EDUCATION

The objectives of the Public Outreach and Education Element of this Storm Water Management Plan are:

- To raise public awareness that citizen's actions have an impact on stormwater quality in the County's streams,
- To involve the public in the development of the Storm Water Management Plan, and
- To develop support for the necessary funding.

A. General Public Education on Storm Water Quality impacts and prevention measures.

The purpose of these tasks is to provide the widest communication with the general public about what they can do to prevent stormwater pollution. Because the County has a significant multi-lingual population, public information needs to be provided in at least English and Spanish. Where possible, Cambodian, Hmong and Punjabi should also be used. Public outreach should also be implemented at cultural events where different groups may be reached most effectively. Many of these public outreach tasks may be accomplished in cooperation with other Permittees in the area as opportunities arise.

Task 1.1 Obtain multi-lingual public outreach and education materials, such as brochures, magnets, posters, and coloring books for general public information about storm water quality control activities.

Since the NPDES Stormwater Program was established in 1991, a number of the Phase I permittees have developed a wide range of public education materials that are in the public domain, and available for use by the Phase II permittees. Examples can be found in the Model Urban Runoff Program, or by contacting the Phase I permittees. The County may choose to develop their own materials focused on County specific issues and coordinated programs.

Task 2.1 Distribute educational materials to the public, schools, multi-cultural events and libraries.

Task 3.1 Distribute educational materials at point of sale of household, automotive and agricultural chemicals, at multi-cultural events, and other relevant venues.

Task 4.1, 5.1 Review needs and results, and conduct additional public education, based on the community's response to the first three years of outreach.

At the completion of each year's public education program, the County needs to review the results and set priorities for the next year's target audience for storm water quality control education. For example, if a neighborhood has been the focus of education related to crankcase oil dumping in storm drains, results can be measured by the number of occurrences of such dumping before and after the education effort.

B. Education of Specific Community Groups

The purpose of this task is to focus on certain business types that have a higher potential to generate pollutants in municipal runoff. The first of these are light industrial businesses and automotive repair shops located in the rural areas of the County. But other businesses that may benefit from focused education include restaurants, food processing industries, car wrecking yards, metal recycling, farm equipment repair, farm fertilizer and chemical distributors, and commercial/residential landscape service providers, vehicle steam cleaning services, pool service companies, and pest control companies. This program element can include incentives and public recognition for good environmental citizenship by businesses.

Task 2.2 Obtain and distribute education materials for light industrial businesses and auto repair shops about Best Management Practices for their business.

Since the NPDES Stormwater Program was established in 1991, a number of the Phase I permittees have developed public education materials to focus on the high risk behaviors of certain businesses. Many of these public education materials are in the public domain, and available for use by the Phase II permittees. Examples can be found in the Model Urban Runoff Program, or by contacting the Phase I permittees. Santa Clara Valley Water District and the Fresno Metropolitan Flood Management District are leaders in this area.

The County should also consider developing incentive programs or public recognition programs for good environmental citizenship by businesses. Such programs may incorporate aspects of solid waste management, hazardous waste management or water conservation that relate to other County programs and objectives.

Task 3.2 Follow-up education with light industrial businesses and auto repair shops.

Followup mailings and contacts will be made with these businesses.

Tasks 4.2, 5.2 Educate additional targeted business groups, with the highest potential for stormwater polluting actions.

Depending on the results in the first two years of public education for targeted businesses, and new information gathered during the early years of the SWMP, the County should adapt their management plan for educating certain businesses. For example, if good results are achieved with light industrial businesses and vehicle repair shops, then public education for business could be shifted to the next highest priority business sector.

II. PUBLIC PARTICIPATION AND INVOLVEMENT

The objectives of the Public Participation and Involvement Element are:

- To educate the public about the relationship between community activities and runoff pollution,
- To educate about specific pollutants and what citizens can do about them, and
- To foster participation in community-based projects and volunteer activities regarding pollution prevention.

The purpose of these activities is to support community participation in preventing and eliminating sources of pollution in urban runoff. The second purpose is to provide opportunities for the community to prioritize the types of activities that should be included in the Storm Water Management Program and any implementing ordinances, as adopted by the Board of Supervisors. These two processes provide a key connection between the behaviors of the community and the most cost effective means of preventing pollution.

A. Storm Drain Marking and Community Cleanup Days

Task 2.3 Purchase storm drain stencils or placards, depending on durability and ability of workers to mark storm drains.

Since 1991, vendors have developed and Phase I permittees have tested the effectiveness of storm drain marking devices. The County will need to evaluate marking devices best suited for their storm drain system, and the work force available to install them, whether county staff, inmates or volunteers.

Task 3.3 Begin organizing volunteers or other labor to stencil storm drains and do community cleanups.

The County has some experience in working with volunteers for environmental efforts. Various youth groups are interested in participating in environmental activities. Other options include environmental organizations, after school sports fund raising organizations, and inmate alternative work programs.

Task 4.3 Where curb and gutter includes storm drain inlets, mark the County's storm drain inlets or install marking tiles using volunteers whenever possible. Use County crews or alternative work programs when volunteers not available or appropriate.

Provide a message at storm drain inlets that tells the public that materials released into the drain can adversely impact stormwater quality and the environment.

Task 5.3 Provide annual maintenance of the County's storm drain markings as needed.

Based on past experience, painted storm drain stencils have a useful life of about 4-5 years. Replacement of storm drain marking devices, whether painted or glued placards or tiles, will require a consistent replacement program.

Task 2.4, 3.4, 4.4, and 5.4

Conduct community cleanup activities.

The County household hazardous waste facility accepts chemicals for disposal every weekend. The franchise garbage haulers include twice-a-year bulky item pickup service as part of regular garbage service. The tire amnesty day is held once a year. Landfill fees pay for abandoned tire and white goods pickup around the county. These cleanup activities can be augmented by additional cleanup activities, coordinated with the Earth Day activities or with other community events.

B. Legislative Action

Task 1.2 Conduct a public workshop on the proposed Storm Water Management Program, to educate the community on upcoming activities, and seek their input on the most appropriate approach.

Task 1.3 Prepare a draft Storm Water Quality ordinance or update an existing ordinance.

The Storm Water Quality ordinance needs to address allowable non-stormwater discharges to the storm drain system, a prohibition on the discharge of pollutants to the storm drainage system, and a tiered enforcement protocol and due process for violations. The ordinance may include provisions to recover the cost of enforcement actions. The ordinance may include the authority for incentive programs or public recognition of businesses that display good environmental citizenship. The ordinance will incorporate provisions to implement Attachment 4 of the General Permit.

Task 2.5 Board of Supervisors adoption of Storm Water Quality ordinance.

A Storm Water Quality ordinance will be presented to the Stanislaus County Supervisors for legislative action, in order to provide the authority for County staff to undertake certain actions required in the Storm Water Management Plan, and by the SWRCB Small MS4 General Permit. The ordinance will include a prohibition on non-storm water discharges with the exceptions allowed in the State's General Permit.

The effective date of an ordinance is typically 30 days after Board action to adopt.

See also Section 6 for a listing of the requirements of Attachment 4 of the General Permit that will be coordinated with the County's ordinances and design standards for new development and redevelopment.

Task 3.5 Educate businesses and new development about the new Storm Water Ordinance.

County staff should develop press releases, attend business organization meetings, and create handouts, newsletters or other materials to provide business and the development community with the information they need on their role in preventing storm water pollution. Again, examples are available from Phase I permittees on how to undertake this kind of business education. The public information should inform businesses about any incentives or public recognition programs for good environmental citizenship.

III. ILLICIT DISCHARGE DETECTION AND ELIMINATION

The objectives of the Illicit Discharge Detection and Elimination Element are:

- To control illicit discharges or illegal connections to storm drains by methodical field surveys and investigations of storm drain systems,
- To prevent improper disposal of wastes in a program that combines public education, alternative disposal options, incentives, and enforcement as needed, and
- To contain and clean up accidental spills with proper methods.

The purpose of this section is to provide a program under which uncontrolled sources of pollution directly discharged to storm drains are eliminated. The workplan for the Illicit Discharge Detection and Elimination Element will establish permissible discharges to storm drains, establish enforcement procedures for violations of the discharge standards, conduct field investigations and provide a complaint/spill response program. Some of these tasks overlap with the Public Involvement and Participation Element described above.

The most probable illicit discharges in the County are unauthorized dumping of potential pollutants on rural roadsides and streambanks. It is much less likely that illegal connections to constructed storm drain pipelines is a source of pollutants due to the very low number of such drains in the County's jurisdiction. This part of the program is the most detection and enforcement oriented part of the SWMP.

The County will need to conduct an assessment of the extent and nature of illicit discharges that are occurring. Road crews probably have a good idea where the most common roadside or creekbank dumping occurs. Then the detection and elimination program can be prioritized towards the most probable source of illicit discharges and illegal dumping.

The County may have a few industries subject to the SWRCB Industrial General Stormwater Permit. The potential for pollutants from these businesses is considered low, and so this Work Plan does not include a requirement to monitor these industries' compliance with the SWRCB industrial permit.

Since there are few constructed storm drain systems in the County, mapping of the system was not deemed necessary. For illicit dumping purposes, a pin map on a commercially available County map will be enough for a visual representation of problem areas.

Task 2.6 Develop the outline of Illicit Discharge Detection and Elimination Program.

This task should include the workplan for:

1. Identification of and surveillance of likely dumping locations throughout the County.
2. One-time survey of constructed storm drains and detention basins for illicit sewage connections or illegal dumping.
3. Training of County staff on detecting and identifying illicit connections and illegal dumping.
4. A hotline for citizen reporting of illicit connections and illegal dumping, and of complaints about improper construction activities.

5. The plan of action for responding to any illicit discharges identified or complaints received.

The workplan will set priorities among the activities, and include an annual assessment step to adapt the management of the Illicit Discharge Detection and Elimination Program to the highest priorities. For example, the one-time survey of constructed storm drains will indicate whether more frequent inspections are warranted over the remainder of the 5-year permit.

The Illicit Detection and Elimination Program will also include a checklist or other record keeping form for use during storm drain inspections and maintenance. Records will be kept of hotline complaints responded to. These records will be maintained in accordance with the records retention requirements of the General Permit.

Task 3.6 Conduct pilot surveillance in accordance with the illegal dumping and illicit discharge detection and elimination program. Revise the scope and the approach to detecting illicit discharges.

This year's work on illicit discharge detection and elimination will be focused on understanding the scope of the problem, if any, and the effort that will be required to address the entire county. This task includes the one-time survey of constructed storm drains for illicit connections and illegal dumping. The main part of this task is to determine the plan for periodic inspection of roadsides, creekbanks, and other probable dumping areas. The results of the pilot test will be used to refine a multi-year program to address illicit discharges on a periodic basis.

Task 2.7 Eliminate illegal dumping and illicit connections by cooperation of property owners or perpetrators whenever possible, or by County action or enforcement action if necessary.

The County will develop a tiered procedure for eliminating illicit discharges and illegal dumping. This tiered enforcement procedure will be incorporated into the County's ordinances, as described in Task 2.5. The ordinance will prohibit non-stormwater discharges to storm drains and water courses with the exceptions allowed by the State General Permit.

The tiers will include voluntary compliance, mandatory compliance with a violation citation, and legal action, as each case warrants. The tiers may include education and incentives. Staff responsibilities, including law enforcement, will be established for each tier of enforcement. Protocols to involve the RWQCB will be included. See Task 2.12 for training of County staff on recognizing and responding to illegal dumping and illicit connections.

Whenever an illicit discharge or illegal dumping situation is identified, the County will take action with the responsible parties to eliminate the pollution source. Records will be made of each incident. The records will be maintained in accordance with the records retention requirements of the General Permit.

Tasks 4.5, and 5.5 Conduct annual survey of targeted areas of the County for illegal dumping.

Task 3.6, 4.6, and 5.6 Eliminate illicit discharges as they are found, as in Task 2.7.

IV. CONSTRUCTION SITE RUNOFF CONTROL, 1 ACRE OR MORE

The objective of the Construction Site Runoff Control Element is:

- To develop and implement a control program to reduce the potential for the discharge of pollutants into runoff from construction sites 1 acre or more.

On March 10, 2003, the Federal regulations required construction sites 1 acre or more to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP). Construction over 5 acres has been subject to the regulations since 1991. A SWPPP describes the Best Management Practices that will be used during construction to reduce the sources of potential pollution, control sediments and educate construction workers. Under the General Storm Water Permit for Small MS4s, cities participating in the General Permit will be delegated the regulatory authority and responsibility to require SWPPPs and inspect their implementation at construction sites.

The County may consider using existing resources such as the latest edition of the State Storm Water Handbook for Construction as guidance for Best Management Practices.

Task 1.4 Require Storm Water Pollution Prevention Plans, (SWPPPs) in accordance with the SWRCB General Permit for Construction Activities, beginning March 10, 2003, for all construction 1 acre or more, for both public and private projects.

Each project 1 acre or more is now required to include stormwater pollution prevention measures in the design and construction of the project. Then the owner or developer is required to prepare a Storm Water Pollution Prevention Plan (SWPPP) and to submit a Notice of Intent (NOI) and fee to the RWQCB. The RWQCB sends the developer back a notice with the project's WDID number.

In order to obtain a building permit, the developer will also have to provide the County with a copy of the project's NOI and SWPPP. The County will review the SWPPP and the project plans to determine that the construction and post-construction BMPs are appropriate for controlling the potential pollutant sources from the site. This review will be part of the regular plan review and building permit issuance.

Once the project is permitted, the building inspectors observe the implementation of the BMPs to assure that they are effective. This can include observing where concrete and stucco washout is occurring, the containment of construction chemicals, the control of dirt being tracked off site, the installation of on-site pollution prevention structures such as oil-water separators, etc.

Developers have the option of submitting an application for an individualized stormwater permit for their project, but most have been using the State's General Permit.

The number of construction projects going on in the County can vary every year. The County will inspect 90% of the year's construction projects 1 acre or more for the presence and maintenance of the project's BMPs, and for other elements of compliance with their SWPPP, at least once during the project. This inspection will be part of the regular building or construction inspection procedure. More sensitive construction projects may involve more frequent inspections, even weekly, at the discretion of the inspector. The inspections will occur mostly during October and November, but may occur throughout the year.

During the first storm event in the fall of each year, a drive-by inspection of every active construction project 1 acre or more will be made. Inspectors will make a written record of their stormwater BMP inspections. The inspector will use either each project's SWPPP Monitoring Checklist or a County checklist to document their inspections. Records will be maintained in accordance with the records retention requirements of the General Permit.

Priority for inspection of a construction site will be given to projects with previous deficiencies and to sloped sites with more erodible soils. Otherwise, projects selected for inspection will be on a random basis.

Task 2.8 Educate local developers, construction firms and building department staff about the new requirements for Best Management Practices during construction.

Developers and construction firms in the San Joaquin Valley have already been working with the stormwater pollution program in Phase I cities and for any project over 5 acres. Building departments in Phase I cities should be able to assist the County in developing their own program, design standards and plan review procedures to incorporate stormwater pollution prevention measures. This may include preparing handouts, checklists, design standards and guidance documents specific to the County. The County will distribute flyers informing the development community of the new County requirements and procedures.

Appendix B includes a suggested outline for initial training for County building department staff on their objectives and responsibilities under this SWMP. The training will include material on post-construction BMPs, the types available, benefits and pitfalls of their use, and design criteria. The training will include review of the County's ordinances and development standards that relate to stormwater quality requirements and enforcement protocols.

In the second year of the Permit, training for developers and builders will consist of one presentation to a meeting of the local Building Industry Association, and informational flyers available at the Building Department counter. The content of the presentation will review the General Permit requirements and discuss what the County will expect when a builder makes a building permit application.

Training for County employees will consist of 2 hours of classroom training for building inspectors and encroachment inspectors. The goal is 90% attendance. If plan checking is typically provided by outside engineers, they will be invited to attend the training session. The outline for this training is shown in Appendix B. The County has approximately a half dozen employees that will be provided with the training.

In subsequent years, the need for additional training for developers, builders and employees will be assessed based on the results obtained in the building permit and construction process. Since the SWRCB General Permit is not new, most developers and builders have already been working with the regulations for several years.

Task 2.9 Develop or revise the County Code to incorporate sediment and non-visible pollutant control measures and waste management measures for storm water quality protection.

The County's grading ordinance and development standards may need to be revised to coordinate with the storm water pollution prevention measures called for in this Storm Water Management Program. Any necessary changes in the Code will incorporated in the County's development standards at their next revision. See also Task 5.7.

Task 2.17 Provide a hotline for citizen reporting of improper construction activities.

The County will use the hotline established in Task 2.6 to receive public complaints and information regarding stormwater impacts at construction sites. The County will respond to such complaints and information in accordance with the enforcement procedures established in Tasks 1.3 and 2.5. Records will be kept of complaints received and the responses thereto. The hotline will be advertised at least once in the newspaper or publicized during related public outreach events.

Task 3.8 Implement Storm Water ordinance enforcement provisions to deal with problem sites.

The adoption or upgrading of a stormwater ordinance, in Task 1.6, will provide a tiered enforcement protocol to deal with any problems in stormwater control at construction sites. The Building Department, the stormwater team and perhaps the County Counsel's office will make a team to address such problems.

Task 4.7 Continue training for building inspectors and plan review engineers on SWPPP requirements and best management practices.

After the initial phases of the Work Plan, the Building Department may need continuing education in new materials and methods of stormwater pollution prevention, that are relevant to new construction. The products and methods used in stormwater pollution prevention are rapidly evolving.

During the fourth and fifth years of the Permit, the County will identify opportunities for formal outside training for building inspectors, encroachment inspectors and plan review engineers. The County will seek one training session per year for up to 2 employees on construction and post-construction BMPs offered by professional organizations such as the California Storm Water Quality Association or APWA.

V. POST CONSTRUCTION BMPs

The objective of the Post Construction Best Management Practices (BMP) Element is:

- To reduce the potential for discharge of pollutants from new development and redevelopment areas, using a strategy that combines reducing and eliminating sources of pollutants, managing site runoff volumes and flow rates such that they are similar to pre-construction levels, and treating runoff as appropriate.

Existing development which may be a source of pollution will be addressed by Public Outreach and Education, and if warranted by a serious condition, by the Illicit Discharge Elimination element of the SWMP. The County may consider using the existing resources such as the latest edition of the State Storm Water Handbook for Post-Construction as guidance for Best Management Practices, or guidance documents developed for post-construction BMPs by Phase I cities such as Modesto.

Attachment 4 of the General Permit requires that certain provisions be incorporated into the County's Post-Construction BMP program. These will be implemented primarily by the revision of the County's ordinance and design standards. These tasks are identified as Tasks 1.3, 2.5 and 5.7.[2]

Task 2.10 Educate local developers, engineering firms and building department staff about post-construction BMP requirements. Prepare handouts and guidance documents.

This task can be combined with Task 1.9.

Task 2.11 Require appropriate post-construction BMPs on new development.

As discussed in Task 1.4 above, include post-construction BMPs as part of the plan review and building permit process.

This task also includes an assessment of the County's current design standards for new development and redevelopment to implement the requirements of Attachment 4 of the General Permit. Section 6 is a listing of the Attachment 4 design standards to be incorporated into the County's design standards.

Task 3.9 Continue training for building inspectors and plan review engineers on SWPPP requirements and best management practices.

This task can be combined with Task 3.7.

Task 3.10 Develop and implement a model Long-term Maintenance and Monitoring Agreement for Post Construction BMPs, that will assure that BMPs are being operated and maintained on private property, and to cover costs of annual inspection.

Phase I cities have found the need to assure long-term maintenance and measurable effectiveness of post-construction BMPs by entering into an

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[2] Design Standards to be included: 1) Peak storm water runoff discharge rates, 2) conserve natural areas, 3) minimize storm water pollutants of concern, 4) protect slopes and channels, 5) provide storm drain system stenciling, 6) outdoor material storage area design, 7) trash storage area design, 8) ongoing BMP maintenance, and 9) treatment control BMP design. Additional individual design standards apply to loading docks, vehicle maintenance facilities, restaurants, retail gas stations, auto repair shops, and parking lots.

agreement with the developer. Not every project will require an agreement, just those with a high potential for pollution and complex post-construction BMPs, such as oil-water separators at gas stations. Examples of such Agreements are available from Phase I cities. The County will enter into and implement an Agreement on appropriate projects.

Task 4.8 Implement Storm Water ordinance enforcement provisions to deal with problem sites, where post-construction BMPS are not being utilized or maintained.

Task 5.7 Include SWPPP BMP needs in regular update of County standard specifications.

Whenever the County updates its design standards, post-construction BMPs should be included. This includes implementation of the provisions of Attachment 4 of the General Permit.

VI. MUNICIPAL ACTIVITIES

The objective for the Municipal Activities Element is:

- To identify, develop and implement Best Management Practices and good housekeeping procedures to address stormwater runoff pollution associated with municipal operations.

The County provides roads, storm drain, parks and recreation services. They also are the owner of a number of public works construction projects that have the potential to generate pollutants and sediment in runoff. The Municipal Activities element is a progression of activities that educate County staff and then take positive action to eliminate the potential sources of stormwater pollution from municipal activities.

Task 1.5 Conduct an inspection and assessment of municipal activities, such as the Corporation Yard, pipeline repair procedures, street pavement maintenance activities, parks fertilizer and pesticide applications, etc. to prioritize the BMPs to be implemented within County operations.

The State BMP Handbooks and the Model Urban Runoff Program provide guidance on how a county should conduct an assessment of their physical plant for the potential to release pollutants to storm drainage. Potential pollutant sources such as material storage, vehicle maintenance, and field activities are included. The outcome from this assessment will be a list of activities, facilities and/or training to be undertaken to reduce the source of pollutants exposed to rain within the County's activities.

Task 2.12 Develop a training program regarding BMPs for municipal activities, such as good housekeeping, landscape maintenance chemical use, containment of industrial chemicals and fuels, sediment and erosion control.

Appendix B includes a suggested outline for training for public works and municipal utilities field crews on their objectives and responsibilities under this SWMP. Training will include how to recognize illegal dumping and illicit connections and what are the proper response steps. See Tasks 2.5 and 2.7 for the enforcement framework for illegal dumping and illicit connections.

Task 2.13 Begin implementation of BMPs for municipal operations and capital improvement projects.

50 % of BMPs for municipal operations will be implemented in year 2, 90 % in the year 3, and 100 % thereafter. Implementation will include developing a Standard Operating Procedure (SOP) for responding to chemical, waste or sediment releases associated with the breach, failure, malfunction or spill from a municipal activity BMP.

County capital projects that disturb one acre or more will comply with the requirements for a SWPPP, as described in Task 1.4. The requirements of the SWPPP for capital projects will be included in the plans and specifications and will be reviewed in the pre-construction meeting for each project subject to a SWPPP.

Task 2.14 Develop or update the Standard Operating Procedure (SOP) for responding to chemical or sewer spills onto county roads and into storm drains by the general public.

The SOP should include first responder risk assessment methods, notification procedures, public access control, colloboration with public safety officials, cleanup protocols, incident closure, and outside resources such as hazardous materials cleanup contractors or mutual aid agreements. The type of spills to be covered should include raw sewage, household garbage, hazardous materials, unknown materials and explosive materials.

Task 2.15 Obtain or update General Permit participation for any industrial activities conducted by the County.

Certain municipal activities such as corporation yards and fleet maintenance are required to participate in the SWRCB General Stormwater Permit for Industrial Activities, unless certain very limited exemptions exist. The County should review its compliance in the industrial permit requirements.

Task 3.11 50% of BMPs for municipal activities are being implemented.

Task 4.9 Conduct follow-up training for County staff, on an as-needed basis for specific topics related to municipal activities.

Task 4.10 90% of BMPs for municipal activities are being implemented.

Task 4.11 Assess street sweeping effectiveness.

Collect data and conduct performance tests to optimize County street sweeping effectiveness with existing equipment, comparing the frequency of sweeping or speed of sweepers for residential, commercial and industrial areas. Evaluate available research in other locations regarding street sweeping methods and equipment. Develop a plan to improve sweeping effectiveness.

Task 5.8 100% of BMPs for municipal activities are being implemented.

Task 5.9 Review and revise BMPs for municipal activities with operational and construction staff input.

Tasks 1.6, 2.16, 3.12, 4.12, 5.10
Keep informed of related regional regulatory activities that involve the water quality of the Tuolumne and San Joaquin Rivers, to coordinate the County's SWMP with regional, multi-pollutant remediation measures.

The County will keep informed and participate whenever possible in regional water quality issues. Groups addressing these issues include the California Stormwater Quality Association, several TMDL committees, and the river groups that have a relationship to either the sources of pollution or the health of the receiving streams.

Table 3.1
5-Year Storm Water Pollution Prevention Work Plan

Control Measure	Year 1	Year 2	Year 3	Year 4	Year 5
Public Education and Outreach	1.1 Obtain bi-lingual brochures, magnets, posters, coloring books for general public information	2.1 Distribute educational materials to the public, schools, events.	3.1 Distribute educational materials at point of sale, and additional venues	4.1 Assess additional public education needs	5.1 Assess additional public education needs
		2.2 Begin education of industries and auto repair shops about BMPs	3.2 Followup education with industries and auto repair shops	4.2 Educate additional business groups	5.2 Educate additional business groups
Public Participation and Involvement	1.2 Conduct public workshop on the proposed SW Pollution Prevention Plan	2.3 Buy storm drain stencils or placards.	3.3 Organize volunteers to mark storm drains.	4.3 Mark storm drains as needed	5.3 Annual maintenance on storm drain markings as needed.
		2.4 Conduct community cleanup	3.4 Conduct community cleanup	4.4 Conduct community cleanup	5.4 Conduct community cleanup
	1.3 Write draft SW quality ordinance.	2.5 Governing body adoption of SW ordinance	3.5 Educate businesses about the new ordinance.		
Illicit Discharge Detection and Elimination		2.6 Develop outline of illicit discharge detection and elimination program	3.6 Conduct pilot surveillance for illicit discharge elimination program.	4.5 Conduct annual survey of target areas for illegal dumping.	5.5 Conduct annual survey of target areas for illegal dumping.
		2.7 Eliminate illicit discharges as found.	3.7 Eliminate illicit discharges as found	4.6 Eliminate illicit discharges as found	5.6 Eliminate illicit discharges as found
Construction Site Runoff Control	1.4 Require SWPPPs for all construction 1 acre or more	2.8 Educate local developers, construction firms and Building Dept. on BMP requirements .	3.8 Implement SW Ordinance enforcement provisions to deal with problem sites.	4.7 Continue training for building inspectors and plan review engineers on SWPPP reqmts.	
		2.9 Develop or revise grading ordinance.			
		2.17 Provide hotline for construction complaints .			
Post Contruction BMPs		2.10 Educate local developers and engineering firms about BMP requirements	3.9 Train building inspectors and plan review engineers on SWPPP reqmts.	4.8 Implement SW Ordinance enforcement provisions to deal with problem sites.	5.7 Include SWPPP BMPs needs in regular update of County standard specifications.
		2.11 Require appropriate post construction BMPs on new development.	3.10 Develop and implement Long-term Maintenance and Monitoring Agreements for private BMPs.		

Table 3.1 Continued

Control Measure	Year 1	Year 2	Year 3	Year 4	Year 5
Municipal Activities – Good Housekeeping	1.5 Inspect and assess cleanliness of municipal activities	2.12 Develop BMP training program for County staff		4.9 Followup training with County staff	
		2.13 Begin BMP implementation	3.11 30% of BMPs implemented	4.10 60% of BMPs implemented	5.8 100 % of BMPs implemented.
		2.14 Develop or revise SOP for street or storm drain spills.		4.11 Assess street sweeping effectiveness	5.9 Review and revise BMPs with staff input
		2.15 Verify or update Industrial SW permits for Corp Yards			
	1.6 Participate in regional water quality initiatives.	2.16 Participate in regional water quality initiatives.	3.12 Participate in regional water quality initiatives.	4.12 Participate in regional water quality initiatives.	5.10 Participate in regional water quality initiatives.

Section 4 5-Year Workplan Budget

Table 4.1 estimates costs and staff time for the County for the additional activities proposed to be included in the SWMP. These activities are in addition to current county services that have a beneficial impact on stormwater quality, such as system maintenance, street sweeping, and solid waste disposal. The actual costs of each task will depend on the extent of possible cost sharing with other agencies and the amount of volunteer contributions.

This estimate provides costs per activity. Not all activities will occur in one year. Some activities will occur every year.

Table 4.2 provided a year-by-year estimate of direct costs to implement the program. Table 4.2 does not include an estimate of County staff cost, since assignment of staff for these tasks has not yet been made. In some cities and counties responsible for stormwater permit implementation, full time staff are assigned to these tasks. However, initially, Stanislaus County will delegate these activities to a number of existing staff members, depending on their expertise. A team approach will be more effective. Planning and building department staff will have a key role in construction related control measures, and public works staff will have responsibility in the area of illegal discharges and municipal activities. Environmental resources staff and the County Counsel's office may be involved in enforcement actions. Additional full time staff is not recommended to start the program.

Table 4.1
Estimate of Costs and County Staff Time
For Additional Storm Water Activities

Control Measure	Probable Material Cost in Year That the Activity Occurs	Staff Time Per Year
Public Education and Outreach		
Obtain and distribute public education Brochures, flyers or novelties.	$20,000	80 hrs/yr
Public Participation and Involvement		
Purchase storm drain stencils or placards	$2,000	50 hrs/year
Organize volunteers		
Stormwater Ordinance		
Update ordinance, public input for Board adoption	$0	100 hrs
Illicit Discharge Detection and Elimination		
Develop program	$5,000	40-80 hrs
Conduct investigations, allowance for lab work	$1,000 each occurrence	100 hrs each
Correct discharges	$0	Will vary by case
Construction Site Runoff Control		
Educate local developers and construction companies	$1,000	20 hrs
Post-Construction Runoff Control		
Educate developers and local engineering firms	$1,000	20 hrs
Pollution Prevention/Good Housekeeping		
Provide BMP training for staff	$500	40 hrs
Conduct housekeeping assessment	$0	60 hrs
Implement BMPs	varies [3]	varies
Permitting and Reporting Requirements		
Annual report and fee to SWRCB	$18,500[4]	40 hrs/yr
Permit Renewal in Year 5	$30,000	
Total Program Direct Costs/yr	**$35,000 to $70,000/yr**	
Estimated Program Staff Costs/yr[5]		**$30,000 to $60,000/yr**
County Population (Jan 2003)	**112,581**	
Estimated Program Cost per capita	**$0.31 to 0.62 per person per year**	

[3] Cost to implement BMPs will vary depending on the specific work plan for each year.
[4] Per SWRCB Res. No. 2003-0064. Fee is based on population.
[5] Staff cost estimated at $50/hr with benefits.

Table 4.2
Projected Five-Year Direct Cost Distribution, Based on Planned Activities

Control Measure	Year 1	Year 2	Year 3	Year 4	Year 5
Public Education and Outreach	$20,000	$3,000	$3,000	$3,000	$3,000
Public Participation & Involvement	$0	$2,000	$2,000	$2,000	$2,000
Stormwater Ordinance	$0				
Illicit Discharge Detection and Elimination	$5,000	$5,000[6]	$5,000	$5,000	$5,000
Construction Site Runoff Control		$1,000			
Post-Construction Runoff Control		$1,000			
Pollution Prevention/ Housekeeping	$500	10,000[7]	$10,000	$10,000	$10,000
Permitting and Reporting					
Annual SWRCB Fee	$18,500[8]	$18,500	$18,500	$18,500	$18,500
Permit Renewal					$30,000
Total	**$44,000**	**$40,500**	**$38,500**	**$38,500**	**$70,500**

Direct costs shown are for materials or contracts, and does not include County staff costs. Table 4.1 shows an estimate of County staff time, which is not included in this estimate of additional costs. Costs presented here are for planning purposes only. More specific costs will be adopted in the County's annual budget, targeted for each year's work plan.

[6] Some enforcement costs may be recoverable.

[7] Cost varies depending on the need for containment of municipal activities.

[8] Per SWRCB Res. No. 2002-0150, 50% of full fee for 2002-03.

Section 5 Performance Measurement and Reporting

The purpose of this Section is to establish the methods by which the County will measure and report on its efforts to implement the Storm Water Management Program. The County's performance under the General Permit will be measures in two ways:

1. Storm Water Management Program activities completed as scheduled.

2. Tabulation of potential pollutants removed from the county's environment each year. These include measures such as the number of pounds of street sweepings collected each year, or the number of illicit discharges discovered and eliminated.

The performance measures are organized on the suggested worksheet shown in Figure 5.1, for routine use by field supervisors during the year.

In the event the county is not able to comply with the General Permit, or with the planned activities of their Storm Water Management Program, the county will notify the Central Valley Regional Water Quality Control Board (CVRWQCB) within 30 days. If an emergency condition exists that endangers human health or the environment, the county shall notify the CVRWQCB within 24 hours of becoming aware of the circumstances, and follow-up with a written report within 5 days.

By September 15th of each year, beginning in 2004, the County must submit an annual report to the Central Valley Regional Water Quality Control Board. The report shall include:

1. The status of compliance with permit conditions.
2. An assessment of the appropriateness and effectiveness of the identified BMPs.
3. Status of identified measurable goals,
4. Results of information collected and analyzed, including monitoring data, if any, during the reporting period;
5. A summary of the storm water activities the county plans to undertake during the next reporting cycle;
6. Any proposed changes to the SWMP along with a justification of why the changes are necessary, and
7. A change in the person or persons implementing and coordinating the SWMP.

Figure 5.2 is an annotated outline of the annual report to be submitted by the County.

The County will retain the records corresponding to the SWMP implementation for at least 5 years, or during the duration of the General Permit. Such records are public documents, accessible to the public in accordance with the Public Information Act.

Table 5-1

Stanislaus County
Implementation of Stormwater Pollution Prevention Work Plan
Permit Year 1 [9]
3/03 to 3/04

Control Measures	Work Task for Measurable Goal	Begin Measurable Goal	Completion Date of Measurable Goal	Quantity of Measurable Goal
Public Education and Outreach	1.1 Obtain bi-lingual brochures, magnets, posters and coloring books for general public education.	8/03 Obtain 3-fold handouts.	1/04	10,000 3-fold, black and white bi-lingual storm water information flyers
Public Participation and Involvement	1.2 Conduct public workshop on the proposed SW Management Plan	10/03 Begin organizing for public workshop	3/04	Hold 1 public workshop on the SW Management Plan
	1.3 Write draft storm water quality ordinance.	1/04 Start work on SW ordinance revision	3/04	Draft ordinance ready for County Board consideration
Illicit Discharge Detection and Elimination	*No program tasks this year.*			
Construction Site Runoff Control	1.4 Require SWPPPs for all construction 1 acre or more	March 10, 2003	March 10, 2003	SWPPPs required for 100% of new construction 1 acre or more. 30% of construction sites inspected.
Post Construction BMPs	*See task 1.4.*			
Municipal Activities – Good Housekeeping	1.5 Inspect and assess cleanliness of municipal activities.	10/03 Conduct initial inspection of Corp Yard and other county facilities	1/04	Develop list of changes needed for good BMPS, both behavioral and structural
	1.6 Participate in regional water quality initiatives	1/04 Identify regional water quality organizations or forums	3/04	Attend 50% of meetings of at least one relevant water quality organization/forum.

[9] Permit year refers to each 12 month period after March 10, 2003.

Stanislaus County
Implementation of Stormwater Pollution Prevention Work Plan
Permit Year 2
4/04 to 3/05

Control Measures	Work Task for Measurable Goal	Begin Measurable Goal	Completion Date of Measurable Goal	Quantity of Measurable Goal
Public Education and Outreach	2.1 Distribute bi-lingual educational materials to the public, schools, events, library, utility bills	4/04 Develop distribution list	10/04	Distribute SW materials to distribution list
	2.2 Begin education of industies and auto repair shops about BMPs	4/04 Develop distribution list	10/04	Distribute SW materials to distribution list. (Coordinate w/ Task 2.5)
Public Participation and Involvement	2.3 Buy storm drain placards.	9/03 Contact vendors	1/04	Buy $6,500 of placards
	2.4 Conduct community cleanup	4/04	3/05	Community cleanup on-going year round w/ County bulky item pickup program
	2.5 Board adoption of SW ordinance	10/04 Agendize SW ordinance	10/04 Effective date 30 days after adoption	Board adoption of SW ordinance
Illicit Discharge Detection and Elimination	2.6 Develop outline of illicit discharge detection and elimination program	10/04 Begin field crew observations for problem areas	3/05	Work plan developed for pilot study of targeted inspection of storm drains
	2.7 Eliminate illicit discharges	Begin when enabling ordinance is adopted. Respond as problems are identified	As problems identified	100 % eliminated.
Construction Site Runoff Control	2.8 Educate local developers, construction firms and Bldg. Dept on BMP requirements	4/04 Arrange training for building inspectors and encroachment inspectors. 10/04 Begin construction site inspections.	10/04	Building inspectors trained. Provide information flyer to 100% of local developers and construction firms. 90% of construction sites inspected annually for SWPPP compliance.
	2.9 Revise grading ordinance.	4/04 Assess grading ordinance needs	3/05	Board adoption of revised ordinance, effective 30 days after adoption.
	2.17 Provide hotline for construction complaints.	10/04 With Task 2.6.	3/05	Hotline established. Phone staff trained on response.
Post Construction BMPs	2.10 Educate local developers and engineering firms about BMPs	4/04 Develop information flyer.	10/04	Provide information flyer to 100% of local developers, construction firms and Bldg. Dept staff.

	2.11 Require appropriate post construction BMPs on new development	As projects with significant potential SW impacts are submitted to County Planning/Bldg. Dept.	With permit approval schedule	100% of new developments 1 acre or more are checked for post construction BMPs needed.
Municipal Activities – Good Housekeeping	2.12 Develop BMP training program for County operations staff	4/04 Arrange for training	3/05	Hold 2 workshops for County operations crews on BMPs within their responsibility.
	2.13 Begin implementation for municipal BMPs	4/04 Begin implementing BMP for municipal activities	3/05	20% of planned BMPS are established
	2.14 Revise Standard Operating Procedure for street or storm drain spills	4/04 Begin SOP development	3/05	Standard Operating Procedure is adopted for spills of raw sewage/chemicals in streets or into storm drains
	2.15 Verify or update Industrial SW permits for WWTP. and Corp. Yards	4/04 Check status of County facilities re General Industrial SW permit	3/05	Obtain or update Industrial permit as needed
	2.16 Participate in regional water quality initiatives.	4/04	3/05	Attend 50% of meetings of at least one relevant water quality organization/forum.

Stanislaus County
Implementation of Stormwater Pollution Prevention Work Plan
Permit Year 3
4/05 to 3/06

Control Measures	Work Task for Measurable Goal	Begin Measurable Goal	Completion Date of Measurable Goal	Quantity of Measurable Goal
Public Education and Outreach	3.1 Distribute education materials at point of sale, and additional venues	4/05 Develop distribution list. Obtain point of sale materials.	10/05	Arrange distribution at point of sale with vendors of household and landscape chemicals
	3.2 Followup education with industries and auto repair shops	4/05	11/05	Send second letter to distribution list. Make calls on 25% of light industries and auto repair shops.
Public Participation and Involvement	3.3 Organize volunteers to mark storm drains and do community cleanups.	4/05 Begin outreach to volunteers	3/06	Recruit individuals or groups of volunteers willing to install 100% of placards over 3 years
	3.4 Conduct community cleanup	4/05	3/06	Community cleanup on-going year round w/ County bulky item pickup program
	3.5 Educate businesses about the new SW ordinance.	4/05 Develop distribution list	8/05	Distribute flyer to business about the SW ordinance
Illicit Discharge Detection and Elimination	3.6 Conduct pilot surveillance for illicit discharge elimination program.	9/05 Mobilize for pilot surveillance	3/06	Pilot surveillance of target areas completed. Full scale work plan complete.
	3.7 Eliminate illicit discharges as found.	As problems identified	As problems identified	100% eliminated.
Construction Site Runoff Control	3.8 Implement SW ordinance enforcement provisions to deal with problem sites.	As problems identified	As problems identified	100% addressed in accordance with SW ordinance enforcement protocol
Post Construction BMPs	3.9 Continue to train building inspectors and plan review engineers on post construction BMPs.	4/05	3/06	Conduct or send inspection and plan review staff to BMP training for construction
	3.10 Implement Long-term Maintenance and Monitoring Agreements for private BMPs in new developments	7/05 Draft model Long-term Maintenance and Monitoring Agreement.	12/05	Execute LMMA with new developments with significant on-site storm water pollution prevention controls.
Municipal Activities – Good Housekeeping	3.11 50% of municipal BMPs implemented	4/05	10/05	50% of BMPs for municipal activities implemented

	3.12 Participate in regional water quality initiatives.	4/05	3/06	Attend 50% of meetings of at least one relevant water quality organization/forum.

Stanislaus County
Implementation of Stormwater Pollution Prevention Work Plan
Permit Year 4
4/06 to 3/07

Control Measures	Work Task for Measurable Goal	Begin Measurable Goal	Completion Date of Measurable Goal	Quantity of Measurable Goal
Public Education and Outreach	4.1 Assess additional public education needs	4/06	3/07	Prepare report on effectiveness of public education efforts. Identify needs.
	4.2 Educate additional business groups	4/06 Identify next groups for education. Develop distribution list.	10/06	Distribute information flyer to distribution list
Public Participation and Involvement	4.3 Mark more storm drains as needed	4/06 Make arrangements	9/06	100% of storm drains marked.
	4.4 Conduct community cleanup.	4/06	3/07	Community cleanup on-going year round w/ County bulky item pickup program
Illicit Discharge Detection and Elimination	4.5 Conduct annual survey of target areas for illegal dumping.	9/06 Mobilize	3/07	Inspections completed per surveillance plan developed in pilot phase (Task 3.6).
	4.6 Eliminate illicit discharges as found	As problems identified.	As problems identified.	100% eliminated.
Construction Site Runoff Control	4.7 Continue training for building inspectors and plan review engineers on SWPPP requirements.	4/06 Arrange for training	3/07	Conduct or send inspection and plan review staff to BMP training for construction
Post Construction BMPs	4.8 Implement SW ordinance enforcement provisions to deal with problem sites	As problems identified.	As problems identified.	100% of problem sites addressed per SW ordinance enforcement protocol.
Municipal Activities – Good Housekeeping	4.9 Follup training with County operations staff	4/06 Arrange for training	3/07	Conduct or send operations staff for training on BMPs for municipal operations
	4.10 75% of BMPs implemented	4/06	10/06	75% of BMPs for municipal activities implemented
	4.11 Assess street sweeping effectiveness	4/06 Collect data from field operations	1/07	Prepare report on street sweeping effectiveness
	4.12 Participate in regional water quality initiatives	4/06	3/07	Attend 50% of meetings of at least one relevant water quality organization/forum.

Stanislaus County
Implementation of Stormwater Pollution Prevention Work Plan
Permit Year 5
4/07 to 3/08

Control Measures	Work Task for Measurable Goal	Begin Measurable Goal	Completion Date of Measurable Goal	Quantity of Measurable Goal
Public Education and Outreach	5.1 Assess additional public education needs	4/07	3/08	Prepare report on effectiveness of public education efforts. Identify needs.
	5.2 Education additional business groups	4/07 Identify next groups for education. Develop distribution list.	10/07	Distribute information flyer to distribution list
Public Participation and Involvement	5.3 Annual maintenance on storm drain markings as needed.	4/07 Make arrangements	3/08	Storm drain markings maintained annually.
	5.4 Conduct community cleanup.	4/07	3/08	Community cleanup on-going year round w/ County bulky item pickup program
Illicit Discharge Detection and Elimination	5.5 Conduct annual survey of target areas for illegal dumping	9/07 Mobilize	3/08	Inspections completed per surveillance plan developed in pilot phase (Task 3.6).
	5.6 Eliminate illicit discharges as found	As problems identified.	As problems identified	100% eliminated.
Construction Site Runoff Control	*No new tasks this year.*	*Program continues*		
Post Construction BMPs	5.7 Include SWPPP BMPs needs in regular update of County standard specifications.	4/07 Collect input for county standards	3/08	Include SW quality measures in the County's standard specifications for new development.
Municipal Activities – Good Housekeeping	5.8 95% of municipal BMPs implemented	4/07	3/08	95% of BMPs for municipal activities implemented
	5.9 Review and revise municipal BMPs with staff input	10/07 Conduct brainstorming session with field crews on improvements to BMPs for municipal operations	3/08	Develop list of changes needed for good municipal BMPS, both behavioral and structural
	5.10 Participate in regional water quality initiatives	4/07	3/08	Attend 50% of meetings of at least one relevant water quality organization/forum.

Figure 5.1
Storm Water Management Program
Monthly Tabulation of Storm Water Quality Activities

Month/Year _____

Activity	Tally	Notes
Street Sweeping, tons or # of bins		
Storm inlets marked		
Illicit discharges or illegal connections found and eliminated		
Corp. Yard cleanup activities		
Bulky Item Pickup Days & Estimated Tons Removed		
Catch Basins and Storm Drains Cleaned		
Detention Basins Cleaned		
Public Education Contacts by Field Crews		

Figure 5.2

Storm Water Management Program
Stanislaus County

Outline of Annual Report to CVRWQCB

I. Executive Summary

(This section should summarize the main challenges encountered and accomplishments achieved by the County during the year.)

II. Control Measures Implemented
- a. Public Involvement and Outreach
- b. Public Participation
- c. Illicit Discharge/Illegal Connection Elimination
- d. Construction BMPs
- e. Post-Construction BMPs.
- f. Municipal Operations.

(This section should record the Tasks completed for each control measure. This discussion may include an assessment of the effectiveness of the various Tasks. Measurements of actual potential pollutants removed from the County's environment, such as tons of street sweepings or bulky items, should be tabulated. The section should also include a report of any enforcement actions taken. If the year's tasks included any monitoring, the monitoring data should be attached to the annual report.)

III. Funding Status

(This section should present the current and next year's budget for storm water quality activities. This section may also include a discussion of the cost effectiveness of any of the control measure tasks.)

IV. Next Year's Work Plan

(This section should present the SWMP tasks to be accomplished during the coming year. This discussion can include the justification for any adaptive management changes in the planned work, based on the effectiveness or lack thereof of a previous year's task.)

Section 6
Concordance with Attachment 4 To WQO 2003-005-DWQ

Stanislaus County is designated as an area subject to high growth or serving a population of at least 50,000 that must comply with the requirements of Attachment 4 of the General Permit. The following table details the sections of the County's Storm Water Management Program (SWMP) that satisfies or will satisfy these requirements.

Attachment A	SWMP
A. Receiving Water Limitations	
1. Discharges shall not cause or contribute to water quality standards exceedances.	The objective of the County's SWMP is to minimize and control to the maximum extent practicable the potential for stormwater discharges from County infrastructure and facilities to cause or contribute to a water quality standards exceedance.
2. Timely implementation of control measures.	The implementation steps in Section 5 detail the timely implementation of control measures.
B. Design Standards	
Adopt ordinance to implement Attachment A new development design standards.	Tasks 2.5, 2.11 and their associated tasks will result in the County's adoption of an ordinance and revision of County standards to implement Attachment 4 development design standards.
1. Conflict with local practices	Tasks 2.5 and 2.11 will include an assessment to coordinate local practices with the requirements of Attachment 4 .
2. Design Standards Applicable to All Categories a. Maintain pre-development runoff rates b. Conserve natural areas. c. Minimize pollutants of concern. d. Protect slopes and channels e. Provide storm inlet marking. f. Design of outdoor materials storage areas. g. Design of trash storage areas. h. Proof of on-going BMP maintenance i. Design standards for structural or treatment control BMPs.	Task 2.11 will coordinate local practices with these design standards. Implementation may occur in either planning standards or engineering standards. Conflicts or differences with the County's adopted General Plan will be addressed in the next cycle of updating the General Plan.
3. Provisions Applicable to Individual Priority Project Categories a. Large commercial developments b. Restaurants c. Retail Gasoline Outlets d. Automobile Repair Shops e. Parking Lots	Task 2.11 will address these individual priority project categories in the design standards.
4. Waiver	A waiver provision will be included in the Task 2.5 ordinance.
5. Limitation on Use of Infiltration BMPs	Task 2.11 will evaluate provisions for the limitation on the use of infiltration BMPs in sensitive situations.
6. Alternative Certification for Storm Water Treatment Mitigation	Tasks 2.5 or 2.11 may incorporate a provision allowing certification of stormwater treatment mitigation methods or devices by a licensed Civil Engineer or Architect.

Documents Referenced

1994 Stanislaus County General Plan

Stanislaus County Standard Specifications, 7/1/98

Stanislaus County Storm Drain Study and Master Plan, 1976

Stanislaus County Safety Manual, Rev. 2000

Stanislaus County Code

Stanislaus County Parks Master Plan, 8/24/90

Model Urban Runoff Program, July 1998, City of Monterey et al, sponsored by USEPA Agency Assistance Agreement with the SWRCB

California Stormwater Quality Association, Stormwater Best Management Practices Handbook, Municipal, January 2003

Acknowledgements

The following county staff members and supporting engineers gave thoughtful and unstinting assistance in preparing this Storm Water Management Program.

George Stillman, Director, Public Works Department
Steve Erickson, PE, Assistant to the Director, Public Works Department
Dave Nordell, Assistant to the Director, Public Works Department
Dennis Wister, Deputy Building Official

Appendix A

Turlock Irrigation District – Stanislaus County Master Storm Drainage Agreement

February 13, 1990

COUNTY OF STANISLAUS
MASTER STORM DRAINAGE AGREEMENT

This Agreement is entered into between TURLOCK IRRIGATION DISTRICT ("District"), a public entity, and the COUNTY OF STANISLAUS ("Licensee"),

WHEREAS, Licensee is located within the boundaries of the District and Licensee desires to enter into an agreement with the District to allow Licensee to use a portion of the District's irrigation system to carry away storm drainage waters which accumulate within the boundaries of Licensee; and

WHEREAS, it is the District's policy to allow cities, counties, and special districts within the District to use District's ditches, canals, and pipelines (hereinafter referred to as "District's irrigation system" or "system") to dispose of storm drainage water accumulating within such other public entities' boundaries so long as such use does not interfere with the maintenance, operation and use of the District's irrigation system and so long as such use does not result in any additional cost or liability to the District;

NOW, THEREFORE, IT IS AGREED AS FOLLOWS:

1. Grant of Revocable License. Licensee is hereby granted a revocable license to discharge storm drainage water accumulating within its legal boundaries, by means of works constructed or to be constructed by Licensee at Licensee's own expense, into District's irrigation system at the discharge points specified in the attached numbered exhibits, and subject to all the terms and conditions of this Agreement.

a. The location of all discharge points authorized by this Agreement are shown on Exhibit "A." Exhibit "A" shall be amended from time to time to reflect any changes in the number and location of authorized discharge points.

b. Supersedes All Prior Agreements. This Agreement supersedes the agreements listed in Exhibit "B", excepting therefrom those agreements which are within the scope of any unresolved claim or lawsuit and only until such claims or lawsuits are resolved.

2. Termination of License. This Agreement shall continue until terminated by either party with at least one year's prior written notice to the other party. However, the District may terminate this Agreement or any portion thereof, on thirty (30) days' prior written notice if Licensee violates any term or condition of this Agreement.

3. Temporary Suspension of Discharge Privileges. In the event it becomes necessary, as determined solely by the District, to eliminate water from any portion of the District's irrigation system affected by this Agreement for the purpose of repair, maintenance, replacement, irrigation usage, or for any other purpose, the District may temporarily suspend the Licensee's privileges hereunder, in whole or in part, and may temporarily turn off any pump or valve by which licensee's storm drainage water is discharged into the District's irrigation system. Unless it is an emergency situation, the District shall endeavor to give Licensee at least seven (7) days prior notice before suspending any discharge privileges pursuant to this section.

4. Storm Drainage Water Only. Licensee agrees to discharge only storm drainage water into the District's irrigation system and further agrees that it shall not permit oil, solvents, fat, grease, trash, leaves, garbage or refuse to be discharged into the District's irrigation system from Licensee's discharge facilities.

5. Water Quality. Should any court or any federal, state, county, or local agency (including the District) because of alleged violations of water quality standards or for any reason order that the discharge of Licensee's storm drainage water into the District's irrigation system be restricted, limited or curtailed, or be treated or processed before being discharged into the system, the District shall have the right to unilaterally amend this Agreement to require the Licensee to conform with such order at Licensee's sole expense. Licensee shall have the right to terminate this Agreement before the effective date of any such amendment, but such termination shall not relieve the Licensee from the responsibility and expense of remedying any condition caused by Licensee's use of the District's irrigation system, including but not limited to any cleanup costs and any damage to persons or property. Licensee agrees to reimburse the District for the cost of any chemical analysis of the storm drainage water.

6. Licensee's Responsibilities; Operating Criteria and Limitations. Licensee agrees that it has full responsibility for the design, construction, operation, maintenance, repair, and replacement of Licensee's storm drainage system and of the discharge points, including but not limited to all interconnection facilities between Licensee's storm drainage system and District's irrigation system. Licensee shall pay for all modifications to District's irrigation system needed to accommodate each discharge point and the cumulative impact of all discharge points under this Agreement on District's irrigation system.

a. Licensee agrees to comply with all operating criteria and limitations specified for each discharge point in the exhibits hereto.

b. Licensee agrees that the district may place more restrictive operating criteria and limitations on each discharge point because of seasonal or annual capacity limitations of the affected portion of the District's irrigation system with one (1) month prior written notice to Licensee.

c. The design and method of operating all facilities by which Licensee discharges storm drainage water into the District's irrigation system shall be subject to the approval of the District. However, the District shall have no obligation, liability or responsibility in connection with the design, construction, operation, maintenance, repair or replacement of any such facilities.

d. Licensee shall not make any alterations to any discharge point facilities without the District's prior written consent.

e. Licensee shall be responsible for initiating, constructing, operating, maintaining, repairing, replacing, and supervising all safety programs, precautions, measures, and facilities in connection with every discharge point under this Agreement.

f. Licensee shall be responsible for monitoring its discharges into the District's irrigation system and the amount of storm drainage water in the system to insure that the water does not overtop any of the District's ditches, pipelines, or canals carrying such water.

g. Where applicable at each discharge point, Licensee shall be responsible for insuring that the necessary side gates are closed and the necessary stop gates are opened or closed as may be necessary to insure that the storm drainage water properly enters the District's irrigation system.

h. When a discharge point utilizes a pump to discharge storm drainage water into the District's irrigation system, licensee shall install and maintain at its expense a sensor system approved by the District which shall automatically turn off the pump during high water levels in the Districts system. The automatic turn off setting for each pump is specified in the applicable discharge point exhibit.

7. The Fees and Assessments.

a. Improvement District Assessments.

(1) Should Licensee need to use any improvement district facilities to convey storm drainage water to any discharge point, Licensee agrees to pay to the Board of Directors of the District as trustees for such improvement district Licensee's cost share of the annual maintenance and operation assessments of such improvement districts. The Licensee's cost share, which can change over time, is defined as the ratio of acres to be drained divided by the sum of the acres in the improvement district and the acres to be drained.

(2) Licensee further agrees to pay its cost share of any construction assessment to pay for replacement or major repair costs to replace or repair any improvement district ditch, canal or pipeline or to pipe any improvement district ditch or canal used by Licensee to convey storm drainage water to any discharge point.

(3) Licensee shall be given prior notice of the imposition of any such assessments.

(4) The initial cost share responsibility of the Licensee as to each affected improvement district is specified in the attached exhibits for each discharge points.

b. District Fees or Assessments. The District reserves the right to charge a fee or assessment for the privilege of using the District's irrigation system for storm drainage purposes, in addition to any operation, maintenance and consruction costs required to be paid herein by Licensee. Licensee shall be given at least six (6) months' notice of the imposition of such fee or assessment and shall have the right to terminate this Agreement before the effective date of such fee or assessment.

8. Indemnification; Liability to District.

a. Licensee agrees that in consideration of its use of the District's irrigation system for storm drainage purposes, Licensee shall defend, indemnify, and hold harmless the District, its Board of Directors, officers, agents, employees, improvement districts and their respective committees, from and against any and all liability, loss, damage, claims, legal actions or suits, costs and expenses (including reasonable attorneys's fees) for personal injury to or death of any person and loss of or damage to any property and loss of use thereof arising out of or in any way connected with Licensee's storm drainage system or the Licensee's use of the District's irrigation system.

b. Licensee further agrees to pay the District for all damages or losses to District's irrigation system arising out of Licensee's use of District's irrigation system.

9. Exhibits. All exhibits referred to in this Agreement are attached hereto and incorporated herein by reference.

10. Binding on Successors. This Agreement shall be binding on and inure to the benefit of the parties and their successors.

11. Modifications to Agreement.

a. Additional discharge points may be added to this Agreement subject to the written approval of the Irrigation System Administrator. Such additional discharge points shall be subject to all the terms and conditions of this Agreement.

b. Except as otherwise provided in this Agreement, this Agreement cannot be amended or modified except by written agreement of the parties.

DATED: February 13, 1990

TURLOCK IRRIGATION DISTRICT

By _____
President

By _____
Deputy Secretary

COUNTY OF STANISLAUS (LICENSEE)

By _____
Chairman of the Board
of Supervisors

ATTEST:
Claudia Leong, Clerk of the Board
of Supervisors

By _____
Patricia Minton, Assistant Clerk

Approved as to form:
Michael H. Krausnick
Stanislaus County Counsel

By _____
Terry Rein, Deputy County Counsel

ID1015J

Rev. 12/27/89

EXHIBIT 1 TO

COUNTY OF STANISLAUS

MASTER STORM DRAINAGE AGREEMENT

No.: 1

Name: Crows Landing

Discharge into: T.I.D. Lateral No. 3

Location: Crows Landing Road at Taylor Road

Acreage to be drained: 1.5 acres

Description of Discharge Point Facilities:

3" diameter pipe from a HP pump station

Maximum rate of discharge authorized at this discharge point:

200 g.p.m.

The turn off setting of the automatic sensor system shall be:

N/A feet/USGS elevation.

Licensee's initial cost share of improvement district assessments from the following improvement districts are as follows:

Improvement Dsitrict	Initial Prorate Share

Special conditions applicable to this discharge point:

Approved by: Brent Harrigan for Ron DeLuca
Irrigation System Administration

2-1-90
Date

IM1438

Rev. 12/20/89
K:exh1

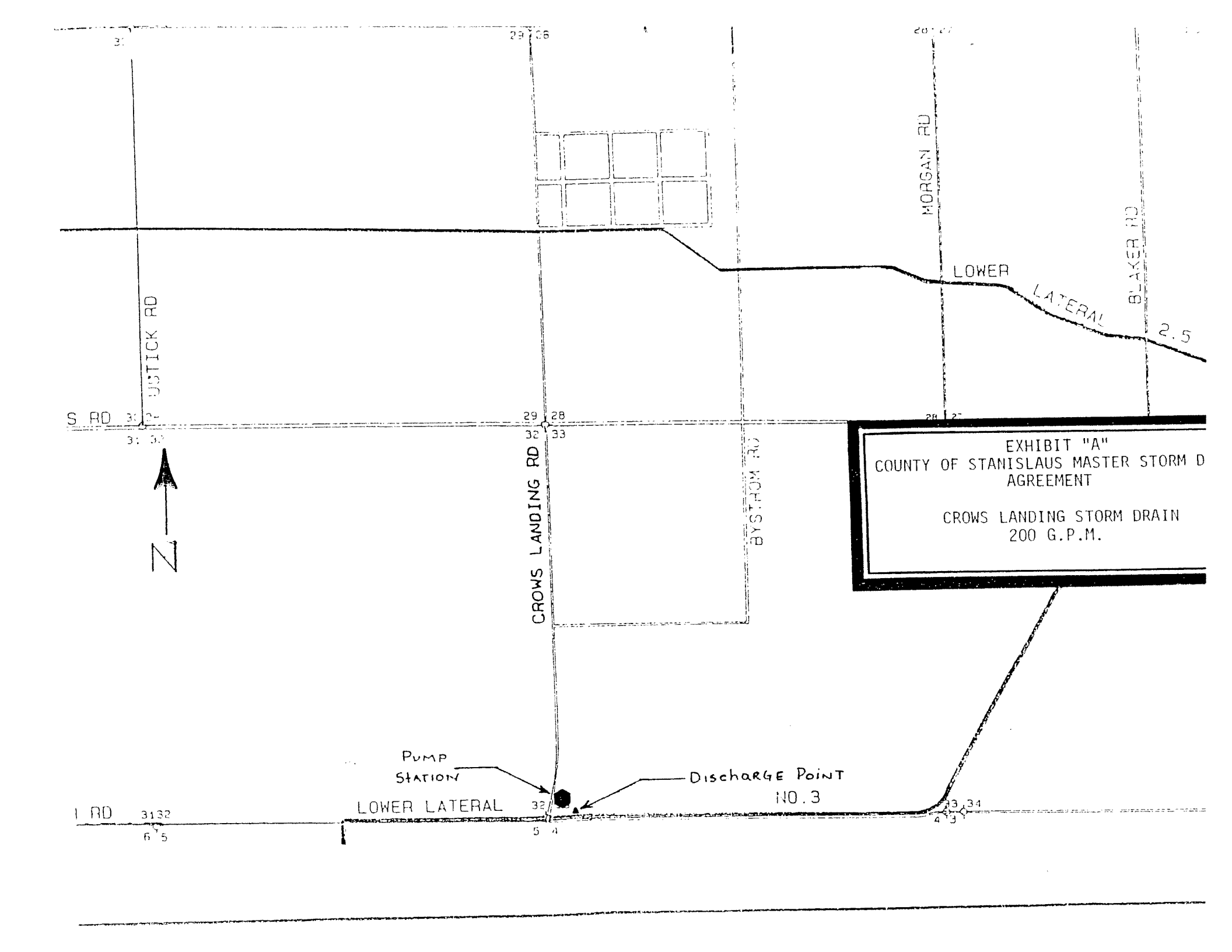
MORGAN RD
BLAKER RD
LOWER
LATERAL
2.5
USTICK RD
S RD
CROWS LANDING RD
BYSTROM RD
EXHIBIT "A"
COUNTY OF STANISLAUS MASTER STORM D
AGREEMENT
CROWS LANDING STORM DRAIN
200 G.P.M.
PUMP
STATION
DISCHARGE POINT
NO. 3
LOWER LATERAL
I RD

EXHIBIT 2 TO

COUNTY OF STANISLAUS

MASTER STORM DRAINAGE AGREEMENT

No.: 2

Name: Souza-Souza Pipeline (ID553) and Crows Landing Road

Discharge into: I.D. 1553, The Souza-Souza Pipeline

Location: Crows Landing Road 1300' South of West Main

Acreage to be drained: 7.16 acres

Description of Discharge Point Facilities:

Two 6" diameter pipes from 2 pumps totaling 5 HP

Maximum rate of discharge authorized at this discharge point:

2000 g.p.m.

The turn off setting of the automatic sensor system shall be:

N/A feet/USGS elevation

Licensee's initial cost share of improvement district assessments from the following improvement districts are as follows:

Improvement District	Initial Prorate Share
I.D. 1553, Souza-Souza Pipeline	$\frac{7.16}{453.05}$ = 1.58%

Special conditions applicable to this discharge point: N/A

Approved by: [signature] 8-27-96

Assistant General Manager Engineering — Date

ID1015C

Rev. 9/21/95

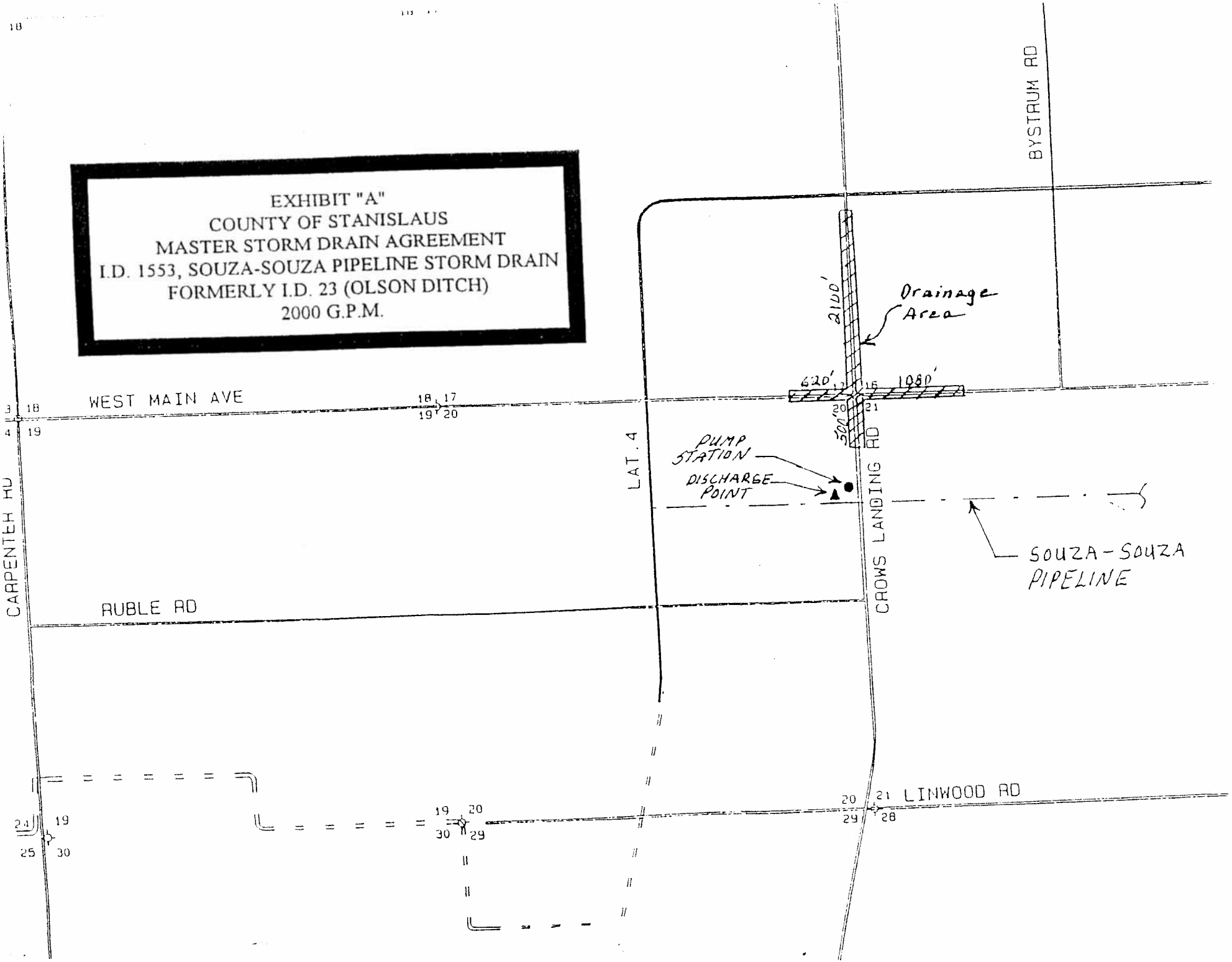
EXHIBIT "A"
COUNTY OF STANISLAUS
MASTER STORM DRAIN AGREEMENT
I.D. 1553, SOUZA-SOUZA PIPELINE STORM DRAIN
FORMERLY I.D. 23 (OLSON DITCH)
2000 G.P.M.
BYSTRUM RD
WEST MAIN AVE
CARPENTER RD
RUBLE RD
LAT. 4
CROWS LANDING RD
LINWOOD RD
2100'
620'
1080'
500'
Drainage Area
PUMP STATION
DISCHARGE POINT
SOUZA-SOUZA PIPELINE

COUNTY OF STANISLAUS
MASTER STORM DRAINAGE AGREEMENT
EXHIBIT "A"

Existing and pending storm drainage agreements

LOCATION	NO. OF PUMPS	CAPACITY	T.I.D. FACILITY USED	ULTIMATE ACRES	DEED NUMBER	REMARKS
Crows Landing & Taylor Rd	1	200	Lateral 3	1.5	5427	Existing
Souza-Souza Pipeline (ID1553) Crows Landing (Also known as Olson Ditch, ID 23)	2	2000	ID 1553 (Lateral 4)	7.16	4917	Existing
Monte Vista @ Waring Road	2	700	ID's 347-A & 245 (Lateral 4)	1.15	7110	Existing
atch Road	Gravity	1350	Lateral 1	16.2		Existing
Hatch Road @ Church Lane	1	200	Lateral 1	1.5		Existing
Faith Home Rd @ Lat. 2.5	2	500	Lateral 2.5	36.8		Pending
		4950 gpm		64.31 Ac		
		11 cfs		76.97 gpm/Ac		

EXHIBIT 2 TO

COUNTY OF STANISLAUS

MASTER STORM DRAINAGE AGREEMENT

No.: 2

Name: Olson Ditch (ID 23) and Crows Landing Road

Discharge into: I.D. 23, Olson Ditch

Location: Crows Landing Road 1300' South of West Main

Acreage to be drained: 11.5 acres

Description of Discharge Point Facilities:

Two, 6" diameter pipes from 2 pumps totaling 5 HP

Maximum rate of discharge authorized at this discharge point:

2000 g.p.m.

The turn off setting of the automatic sensor system shall be:

N/A feet/USGS elevation.

Licensee's initial cost share of improvement district assessments from the following improvement districts are as follows:

Improvement Dsitrict	Initial Prorate Share
I.D. 23, Olson Ditch	$\frac{11.5}{468.72} = 2.45\%$

Special conditions applicable to this discharge point:

Approved by: Brent Harrison for Russ Dolan
Irrigation System Administration

2-1-90
Date

IM1438

Rev. 12/20/89
K:exh2

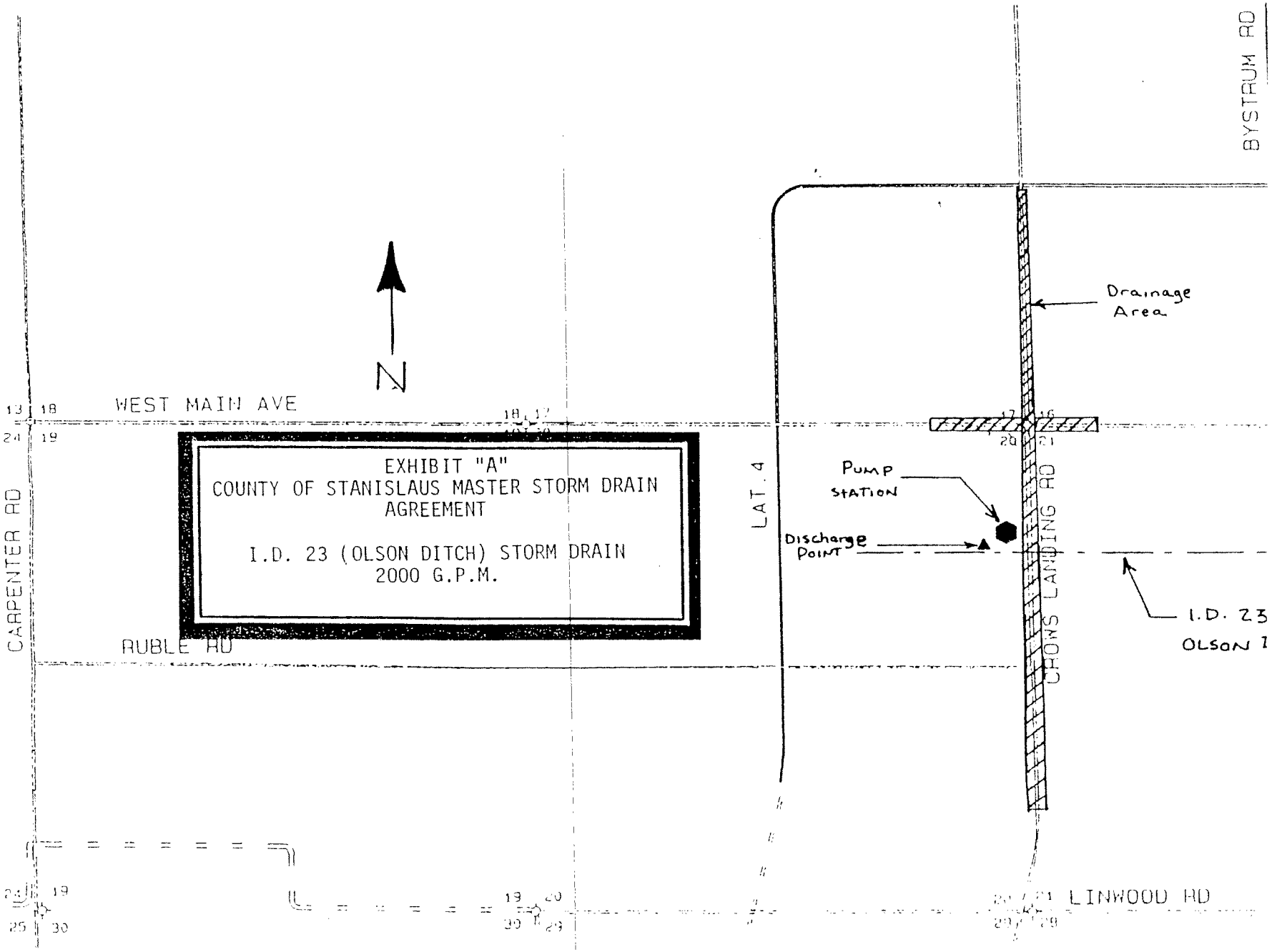
EXHIBIT "A"
COUNTY OF STANISLAUS MASTER STORM DRAIN AGREEMENT
I.D. 23 (OLSON DITCH) STORM DRAIN
2000 G.P.M.
N
WEST MAIN AVE
RUBLE RD
CARPENTER RD
LAT. 4
CROWS LANDING RD
BYSTRUM RD
LINWOOD RD
Drainage Area
Pump Station
Discharge Point
I.D. 23
OLSON 1

EXHIBIT 3 TO

COUNTY OF STANISLAUS

MASTER STORM DRAINAGE AGREEMENT

No.: 3

Name: Monte Vista

Discharge into: I.D. 347-A, the Siphon, and I.D. 245, the Leland-Siphon Spill

Location: Monte Vista and Waring Road

Acreage to be drained: 1.15 acres

Description of Discharge Point Facilities:

6" diameter pipe from two pumps totaling 6 HP

Maximum rate of discharge authorized at this discharge point:

700 g.p.m.

The turn off setting of the automatic sensor system shall be:

N/A feet/USGS elevation.

Licensee's initial cost share of improvement district assessments from the following improvement districts are as follows:

Improvement Dsitrict	Initial Prorate Share
I.D. 347-A, Siphon Ditch	$\frac{1.15}{478.46} = 0.24\%$
I.D. 245, Leland-Siphon Spill	$\frac{1.15}{1107.89} = 0.1\%$

Special conditions applicable to this discharge point:

Approved by: Brent Harmon for Russ Dalen
Irrigation System Administration

2-1-90
Date

IM1438

Rev. 12/20/89
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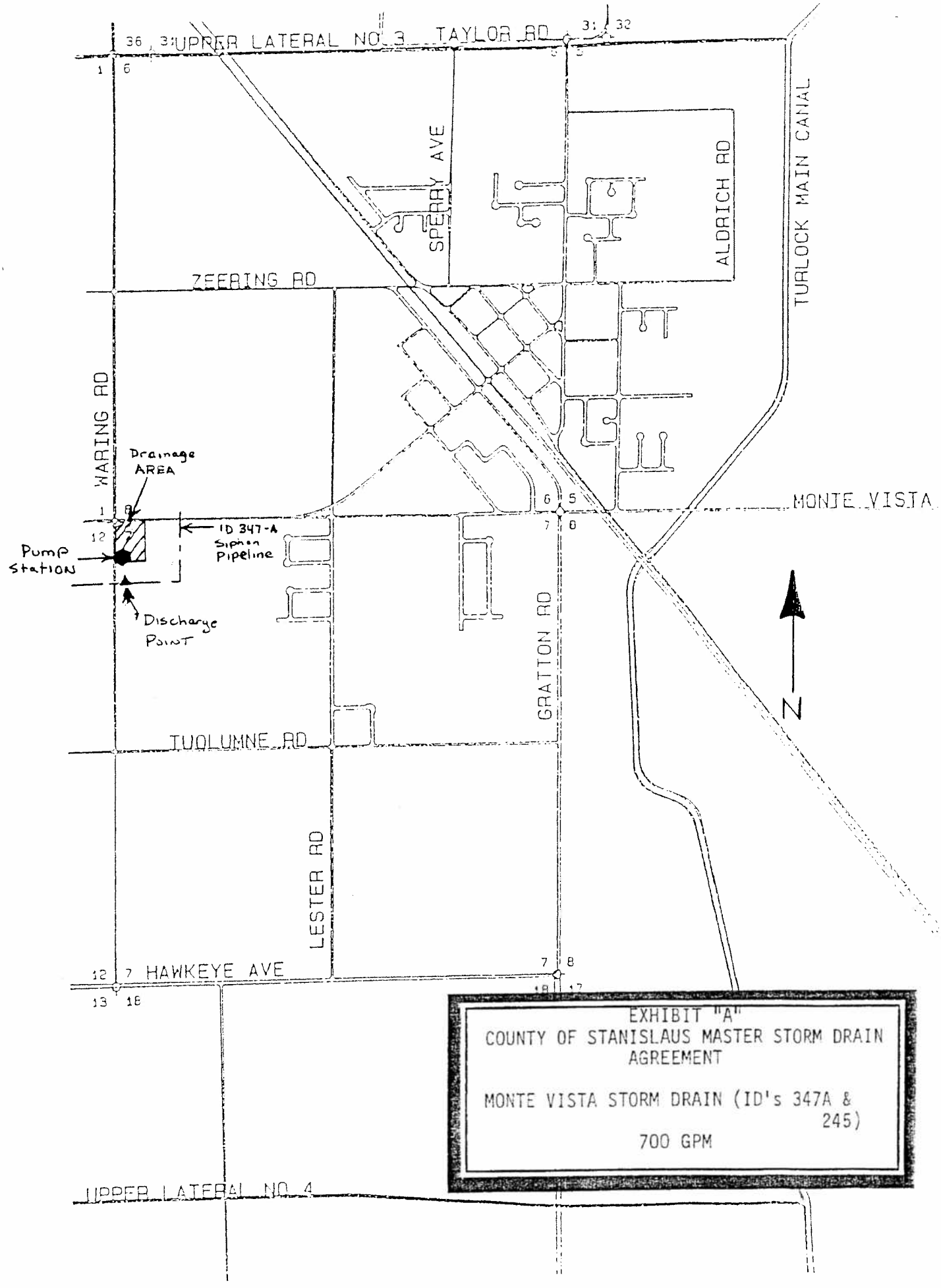
UPPER LATERAL NO. 3
TAYLOR RD
SPERRY AVE
ALDRICH RD
TURLOCK MAIN CANAL
ZEERING RD
WARING RD
Drainage AREA
ID 347-A Siphon Pipeline
Pump Station
Discharge Point
MONTE VISTA
GRATTON RD
TUOLUMNE RD
LESTER RD
HAWKEYE AVE
UPPER LATERAL NO. 4
N
EXHIBIT "A"
COUNTY OF STANISLAUS MASTER STORM DRAIN AGREEMENT
MONTE VISTA STORM DRAIN (ID's 347A & 245)
700 GPM

EXHIBIT 4 TO

COUNTY OF STANISLAUS

MASTER STORM DRAINAGE AGREEMENT

No.: 4

Name: Hatch Road

Discharge into: T.I.D. Lateral 1

Location: Various locations along Hatch Road

Acreage to be drained: 16.2 acres

Description of Discharge Point Facilities:

Six gravity discharges along Hatch Road

Maximum rate of discharge authorized at this discharge point:

1350 g.p.m. (Total)

The turn off setting of the automatic sensor system shall be:

N/A feet/USGS elevation.

Licensee's initial cost share of improvement district assessments from the following improvement districts are as follows:

Improvement Dsitrict	Initial Prorate Share

Special conditions applicable to this discharge point:

The discharges will be open only during storm periods with permission of the Turlock Irrigation District. During non-storm periods, the gates will be closed.

Approved by: Brent Harmon for Russ Dolan
Irrigation System Administration

2-1-90
Date

IM1438

Rev. 12/20/89
K:exh4

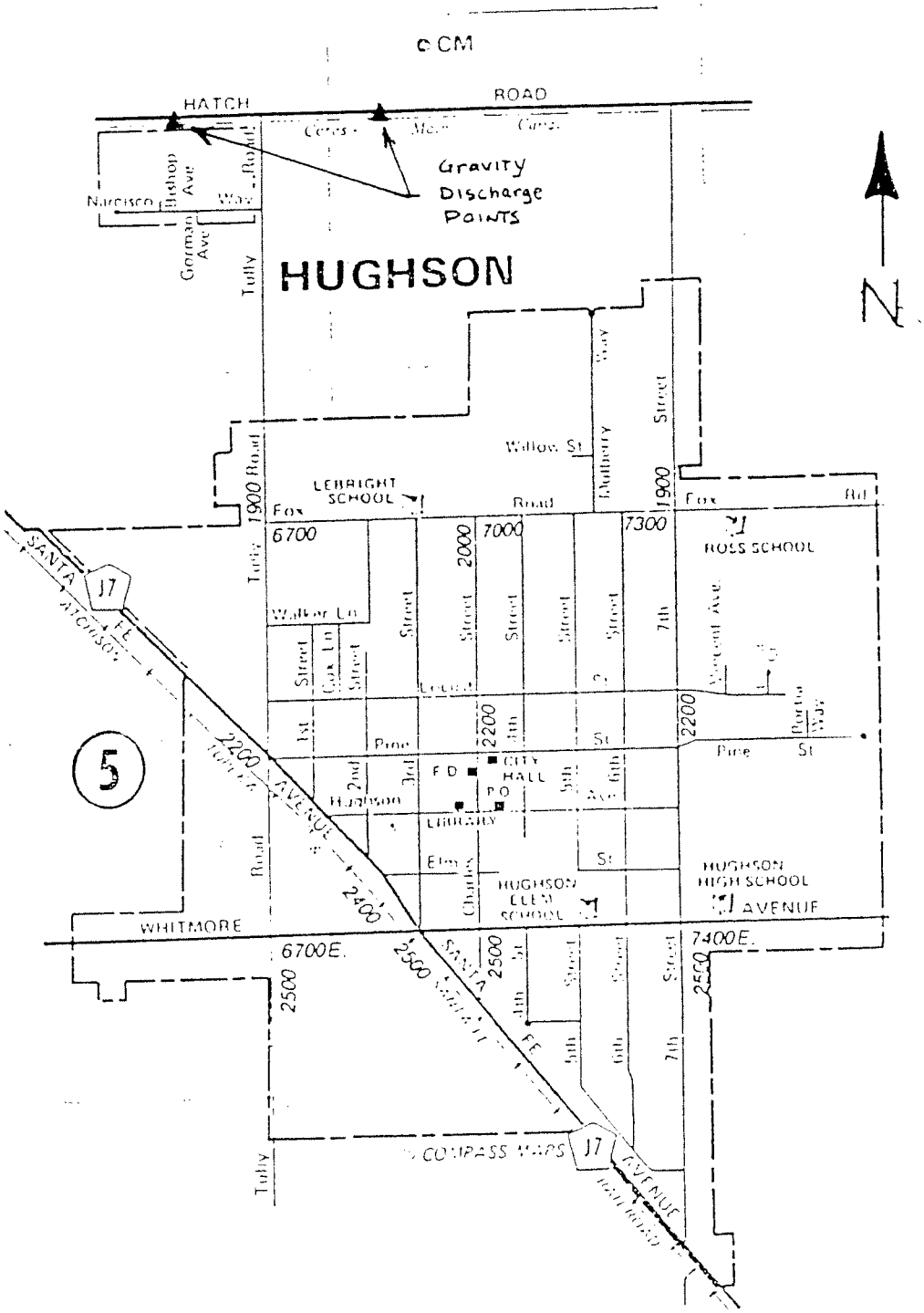

EXHIBIT "A" (1)
COUNTY OF STANISLAUS MASTER STORM DRAIN AGREEMENT

HATCH ROAD GRAVITY STORM DRAINS (6)
1350 G.P.M.

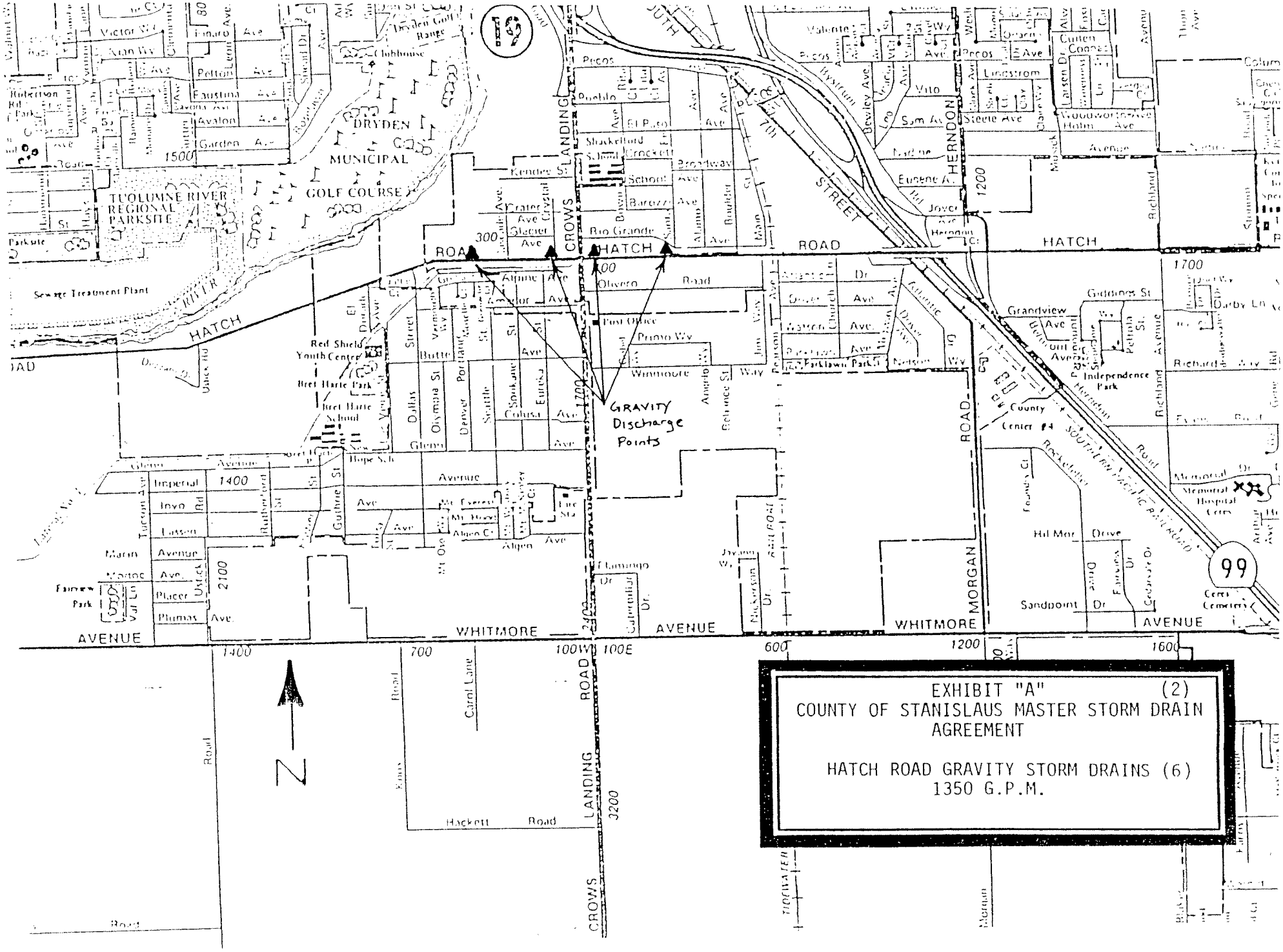

EXHIBIT "A" (2)
COUNTY OF STANISLAUS MASTER STORM DRAIN AGREEMENT

HATCH ROAD GRAVITY STORM DRAINS (6)
1350 G.P.M.

EXHIBIT 5 TO

COUNTY OF STANISLAUS

MASTER STORM DRAINAGE AGREEMENT

No.: 5

Name: Church Lane

Discharge into: T.I.D. Lateral 1

Location: Hatch Road - Church Lane and T.I.D. Lateral 1 intersection

Acreage to be drained: 1.5 acres

Description of Discharge Point Facilities:

6" diameter pipe from a pump station located on Church Lane 154' South of Atlanta Drive

Maximum rate of discharge authorized at this discharge point:

200 g.p.m.

The turn off setting of the automatic sensor system shall be:

N/A feet/USGS elevation.

Licensee's initial cost share of improvement district assessments from the following improvement districts are as follows:

Improvement Dsitrict	Initial Prorate Share

Special conditions applicable to this discharge point:

Approved by: Brent D Hansen for Ron DeLuca
Irrigation System Administration

2-1-90
Date

IM1438

Rev. 12/20/89
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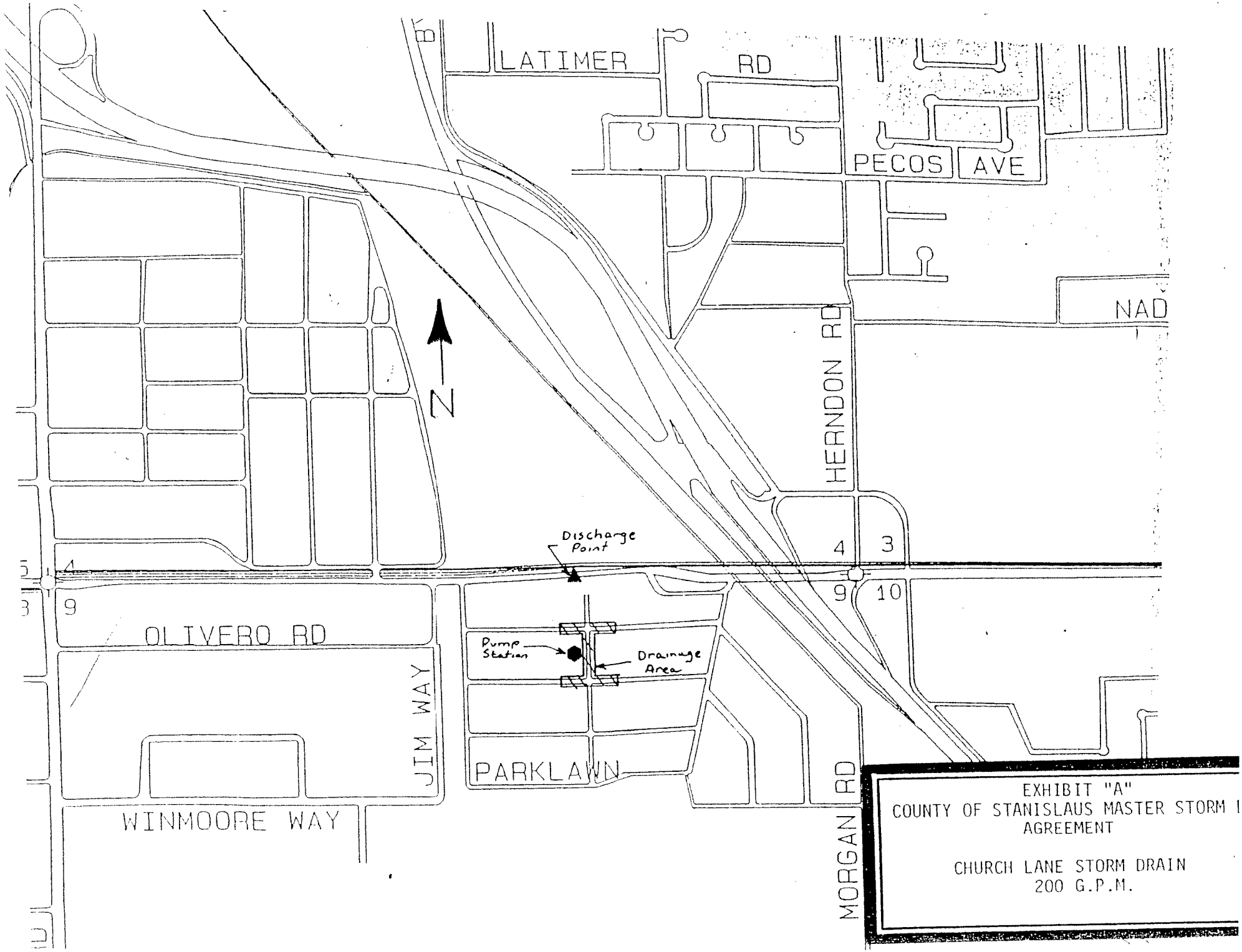
LATIMER
RD
PECOS
AVE
NAD
HERNDON RD
N
Discharge Point
4
3
9
10
9
OLIVERO RD
Pump Station
Drainage Area
JIM WAY
PARKLAWN
WINMOORE WAY
MORGAN RD
EXHIBIT "A"
COUNTY OF STANISLAUS MASTER STORM I
AGREEMENT
CHURCH LANE STORM DRAIN
200 G.P.M.

EXHIBIT 6 TO

COUNTY OF STANISLAUS

MASTER STORM DRAINAGE AGREEMENT

No.: 6 (proposed)

Name: Starlite Place

Discharge into: T.I.D. Lateral 2½

Location: Faith Home Road at Lateral 2½

Acreage to be drained: 36.8 acres

Description of Discharge Point Facilities:

Two, 4" diameter pipes from two pumps

Maximum rate of discharge authorized at this discharge point:

500 g.p.m.

The turn off setting of the automatic sensor system shall be:

N/A feet/USGS elevation.

Licensee's initial cost share of improvement district assessments from the following improvement districts are as follows:

Improvement Dsitrict	Initial Prorate Share

Special conditions applicable to this discharge point:

Approved by: Brent Harrison for Ron DeLuca 2-1-90
Irrigation System Administration Date

IM1438

Rev. 12/20/89
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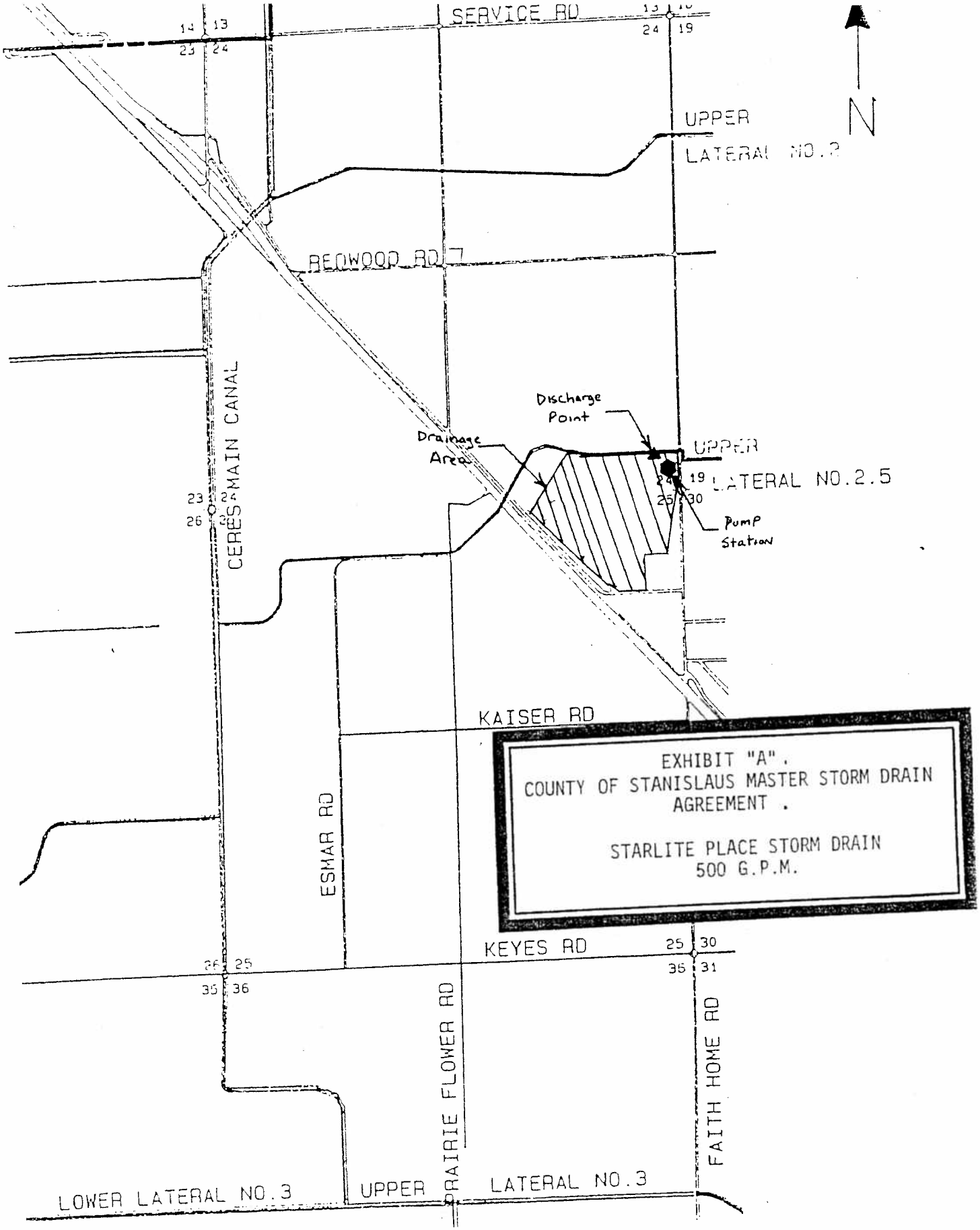

SERVICE RD
UPPER
LATERAL NO.2
REDWOOD RD
CERES MAIN CANAL
Discharge Point
Drainage Area
UPPER
LATERAL NO.2.5
Pump Station
KAISER RD
ESMAR RD
KEYES RD
PRAIRIE FLOWER RD
FAITH HOME RD
LOWER LATERAL NO.3
UPPER
LATERAL NO.3
N
EXHIBIT "A".
COUNTY OF STANISLAUS MASTER STORM DRAIN AGREEMENT .
STARLITE PLACE STORM DRAIN
500 G.P.M.

COUNTY OF STANISLAUS

MASTER STORM DRAINAGE AGREEMENT

EXHIBIT "A"

Existing and pending storm drainage agreements.

LOCATION	NO. OF PUMPS	CAPACITY	T.I.D. FACILITY USED	ULTIMATE ACRES	DEED NUMBER	REMARKS
Crows Landing @ Taylor Rd	1	200	Lateral 3	1.5	5427	Existing
Olson Ditch (ID-23) @ Crows Landing	2	2000	I.D. 23 (Lateral 4)	11.5	4917	Existing
Monte Vista @ Waring Rd	2	700	I.D.'s 347A and 245 (Lateral 4)	1.15	7110	Existing
Hatch Rd	Gravity	1350	Lateral 1	16.2		Existing
Hatch Rd @ Church Lane	1	200	Lateral 1	1.5		Existing
Faith Home Rd @ Lateral 2.5	2	500	Lateral 2.5	36.8		Pending
		4950 GPM		68.65 Ac		
		11 CFS		72.10 GPM/Ac		

COUNTY OF STANISLAUS

MASTER STORM DRAINAGE AGREEMENT

EXHIBIT "B"

Existing storm drainage agreements.

LOCATION	NO. OF PUMPS	CAPACITY	T.I.D. FACILITY USED	ULTIMATE ACRES	DEED NUMBER	REMARKS
Crows Landing @ Taylor Rd	1	200	Lateral 3	1.5	5427	Existing
Olson Ditch (ID-23) @ Crows Landing	2	2000	I.D. 23 (Lateral 4)	11.5	4917	Existing
Monte Vista @ Waring Rd	2	700	I.D.'s 347A and 245 (Lateral 4)	1.15	7110	Existing
Hatch Rd	Gravity	1350	Lateral 1	16.2		Existing
Hatch Rd @ Church Lane	1	200	Lateral 1	1.5		Existing
		4450 GPM		31.85 Ac		
		9.89 CFS		139.72 GPM/Ac		

THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS
STATE OF CALIFORNIA

Date: January 16, 1990 No. 90-82

On motion of Supervisor Blom, Seconded by Supervisor Paul,
and approved by the following vote,
Ayes: Supervisors: Paul, Blom, Simon and Chairman Cannella
Noes: Supervisors: None
Excused or Absent: Supervisors: Starn
Abstaining: Supervisor: None *C-1

THE FOLLOWING RESOLUTION WAS ADOPTED:

IN RE: APPROVING AGREEMENT WITH TURLOCK IRRIGATION DISTRICT

WHEREAS, an agreement has been presented to the Stanislaus County Board of Supervisors providing for tracking of all storm water discharge points; and

WHEREAS, the Board is familiar with the contents thereof,

NOW, THEREFORE, BE IT RESOLVED that the agreement with Turlock Irrigation District be, and hereby is, approved, and the Chairman is authorized to sign same.

I hereby certify that the foregoing is a full, true and correct copy of the Original entered in the Minutes of the Board of Supervisors.
CLAUDIA LEONG
Clerk of the Board of Supervisors of the County of Stanislaus, State of California
By Patricia A. Minton

BOARD OF SUPERVISORS * STANISLAUS COUNTY CAL. JAN 29 1990

ATTEST: CLAUDIA LEONG, Clerk
Stanislaus County Board of Supervisors,
State of California.

By: PATRICIA A. MINTON, Assistant Clerk

File No. S-21-AF-26

RESOLUTION NO. 90-12

RESOLUTION APPROVING MASTER STORM DRAINAGE AGREEMENT

WITH THE COUNTY OF STANISLAUS

BE IT HEREBY RESOLVED by the Board of Directors of the Turlock Irrigation District that that certain Master Storm Drainage Agreement, dated February 13, 1990, between Turlock Irrigation District and the County of Stanislaus, is hereby approved and that the President and Secretary are hereby authorized and directed to sign the same on behalf of the District.

Moved by Director Berryhill, seconded by Director Starn, that the foregoing resolution be adopted.

Upon roll call the following vote was had:

Ayes: Directors Berryhill, Short, Starn, Clauss, Long

Noes: Directors None

Absent: Directors None

The President declared the resolution adopted.

I, Juli A. Turnbow, Deputy Secretary of the Board of Directors of the TURLOCK IRRIGATION DISTRICT, do hereby CERTIFY that the foregoing is a full, true and correct copy of a resolution duly adopted at a regular meeting of said Board of Directors held the 13th day of February, 1990.

Juli A. Turnbow

Deputy Secretary of the Board of Directors
of the Turlock Irrigation District


E ZEERING RD
E MONTE VISTA AVE
well 396
N SANTA FE AVE
E TUOLUMNE RD
N WARING RD
LESTER RD
N GRATTON RD
E HAWKEYE AVE
Well 40E

COUNTY OF STANISLAUS
MASTER STORM DRAINAGE AGREEMENT
EXHIBIT AMENDMENT
DATED February 2003

Contents:

These exhibits are an amendment to the existing Master Storm Drainage Agreement between the Turlock Irrigation District and Stanislaus County pursuant to Section 11a of the original agreement. The information in this amendment shall supersede and/or supplement the previous exhibits of the Master Storm Drainage Agreement.

Attached:

Exhibit A	revised, Dated February 2003
Exhibit B	revised, Dated February 2003
Exhibit 7	added, Dated February 2003
Exhibit 8	added, Dated February 2003
Exhibit 9	added, Dated February 2003
Exhibit 10	added, Dated February 2003
Exhibit 11	added, Dated February 2003

Approval:

Turlock Irrigation District

3-5-03

Assistant General Manager Water Resources & Regulatory Affairs — Date

County of Stanislaus (Licensee)

2/28/03

County Representative — Date

2/28/03 ✓

EXHIBIT A
COUNTY OF STANISLAUS
MASTER STORM DRAINAGE AGREEMENT

Existing and Pending Storm Drainage Agreements

Exhibit #	Discharge Point Location by Canal	No. of Pumps	Allowable Discharge Flow gpm	Ultimate Acres Drained	Hours of Detention	Status	Remarks
	Lateral 3						
1	Crows Landing & Taylor Rd.	1	200	1.5	0	Existing	
	Lateral 4						
2	Souza-Souza (ID1553) Pipeline	2	2000	7.16	0	Existing	Discharge point revised, 1996
3	Monte Vista (ID 347-A and ID 245)	2	700	42.0	0	Existing	
8	Santa Fe Ditch (ID 308)	4	2700	58.0	0	Existing	Added to Agreement, 2003
	Ceres Main (Lat. 1)						
4	Hatch Road	gravity	1350	16.2	0	Existing	
	Lateral 1						
5	Church Lane	1	200	1.5	0	Existing	
	Lateral 2 ½						
6	Faith Home Rd. @ Lat. 2½	2	500	36.8	0	Existing	
11	Bonita Ranch	2	3590	394.0	24	Pending	Added to Agreement, 2003
	Turlock Main						
9	Denair Village No. 4		900	10.0	0	Existing	Added to Agreement, 2003
10	Monte Vista Meadows		900	20.0	0	Existing	Added to Agreement, 2003
7	Foote Ditch (ID 320)	1	200	2.25	0	Existing	Added to Agreement, 2003
	Drainage Totals		13,240 gpm (29.50 cfs)	589.41 acres 22.46 gpm/acre			

EXHIBIT B
COUNTY OF STANISLAUS
MASTER STORM DRAINAGE AGREEMENT

Superseded Storm Drainage Agreements

Discharge Point Location by Canal (Turlock ID #)	**Deed #**
Lateral 1	
Hatch Rd.	none
Hatch Rd. @ Church Ln.	none
Lateral 3	
Crows Landing @ Taylor Rd.	5427
Lateral 4	
Olson Ditch @ Crows Landing (ID 23)	4917
Monte Vista @ Waring Rd. (ID 347A, 245)	7110
Turlock Main	
(previously agreements with Denair Community Services Dist.)	
Improvement District 308	
• Villa De Palma Subdivision & Sarah Tract	6071
• Eastgate Estates	5125
• Brookside Park Homes	5471
Denair Village No. 4	5472
Monte Vista Meadows	6362

EXHIBIT 7
COUNTY OF STANISLAUS
MASTER STORM DRAINAGE AGREEMENT

No. 7

Name: Foote Ditch

Discharge into: Turlock Main via the Foote Ditch (ID #320)

Location: Shopping center at Main and Fresno Streets, Denair

Acreage to be drained: 2.25 acres (see attached map)

Description of Discharge Point Facilities:

One 4" diameter discharge from one 7.5-hp pump

Maximum rate of discharge authorized at this discharge point:

200 g.p.m.

The turn off setting of the automatic sensor system shall be:

n/a ft. (USGS elevation)

Licensee's initial cost share of improvement district assessments from the following improvement districts are as following:

Improvement District	Initial Prorated Share
ID 320 (Foote Ditch)	$\frac{2.25}{3.63 + 2.24}$ = 38.33%

Special conditions applicable to this discharge point:

Stanislaus County shall arrange with the Turlock Irrigation District Water Distribution Department before discharging into the Foote Ditch for the appropriate side gates/stop gates to be operated as necessary for storm water discharge.

Approved by: _____ 3-5-03

Assistant General Manager Water Resources & Regulatory Affairs — Date

County of Stanislaus Master Storm Drain Agreement
Foote Ditch (ID 320)
2.25 Acres 200 GPM
Pump = (1) 7.5 HP

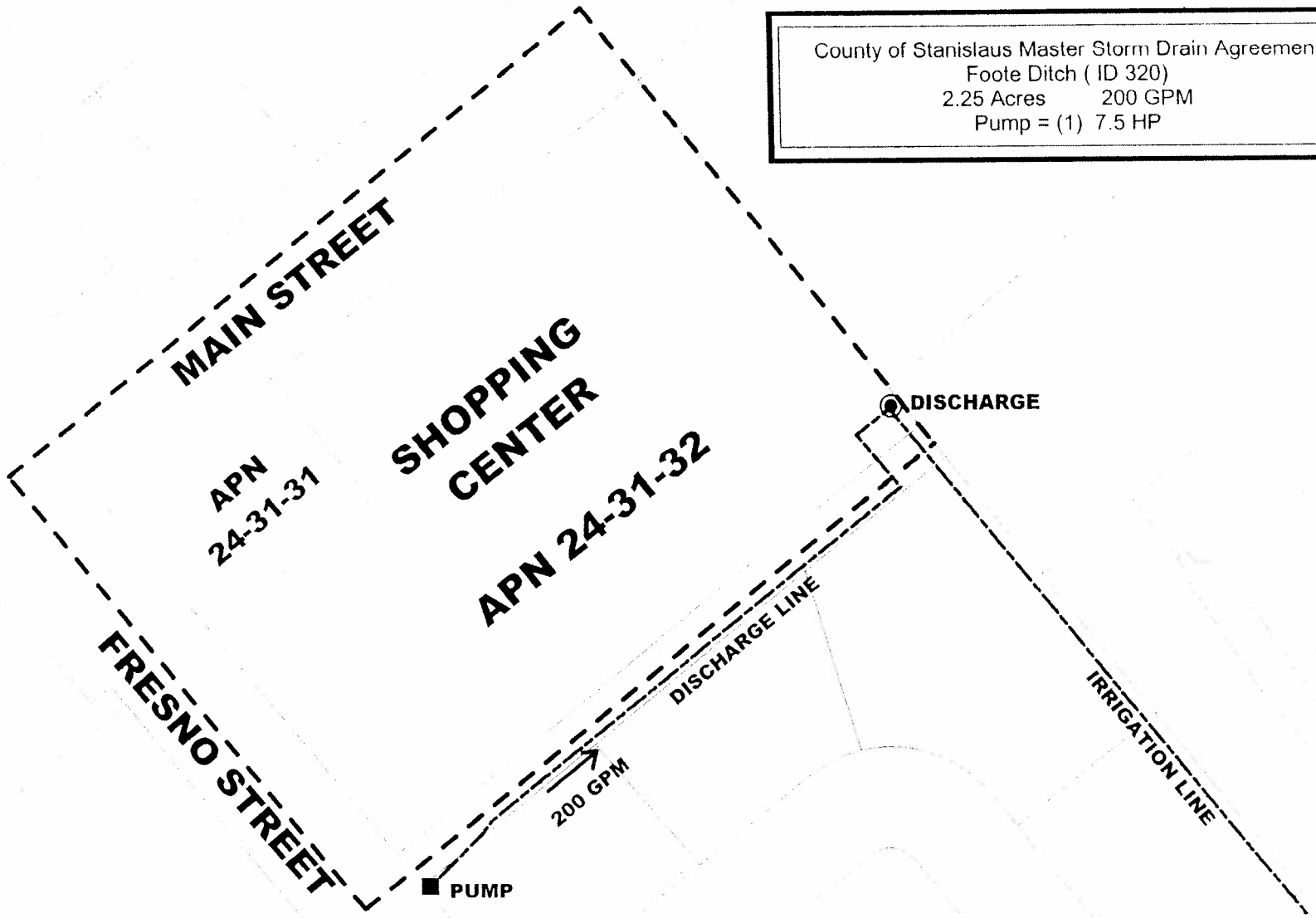


Exhibit #7

Foote Ditch (ID 320)

40 0 40 80 Feet

This map is for display purposes only

N W E S

Map printed 2/27/2003

EXHIBIT 8
COUNTY OF STANISLAUS
MASTER STORM DRAINAGE AGREEMENT

No. 8

Name: Santa Fe Ditch

Discharge into: Upper Lateral 4 via the Santa Fe Ditch (ID #308)

Locations: Villa De Palma Subdivision, Sarah Tract, Eastgate Estates, and Brookside Park Homes

Acreage to be drained:

58.0 acres	(see attached map)
9.0 acres	Villa De Palma Subdivision
9.0 acres	Sarah Tract
20.0 acres	Eastgate Estates
20.0 acres	Brookside Park Homes

Description of Discharge Point Facilities:

Villa De Palma & Sarah Tract	one 4" dia. discharge from two 3-hp pumps
Eastgate Estates	two 6" dia. discharges from two 3-hp pumps
Brookside Park Homes	two 5" dia. discharges from two 3-hp pumps

Maximum rate of discharge authorized at this discharge point:

Villa De Palma & Sarah Tract	900 g.p.m.
Eastgate Estates	900 g.p.m.
Brookside Park Homes #1 & 2	900 g.p.m.
	2,700 g.p.m. Total

The turn off setting of the automatic sensor system shall be:

n/a ft. (USGS elevation)

Licensee's initial cost share of improvement district assessments from the following improvement districts are as following:

Improvement District	Initial Prorated Share
ID 308 (Santa Fe Ditch)	58.0 / (580.84+58.0) = 9.08 %

Special conditions applicable to this discharge point:

Stanislaus County shall arrange with the Turlock Irrigation District Water Distribution Department before discharging into the Santa Fe Ditch for the appropriate side gates/stop gates to be operated as necessary for storm water discharge.

Approved by: _____ 3-5-03

Assistant General Manager Water Resources & Regulatory Affairs — Date

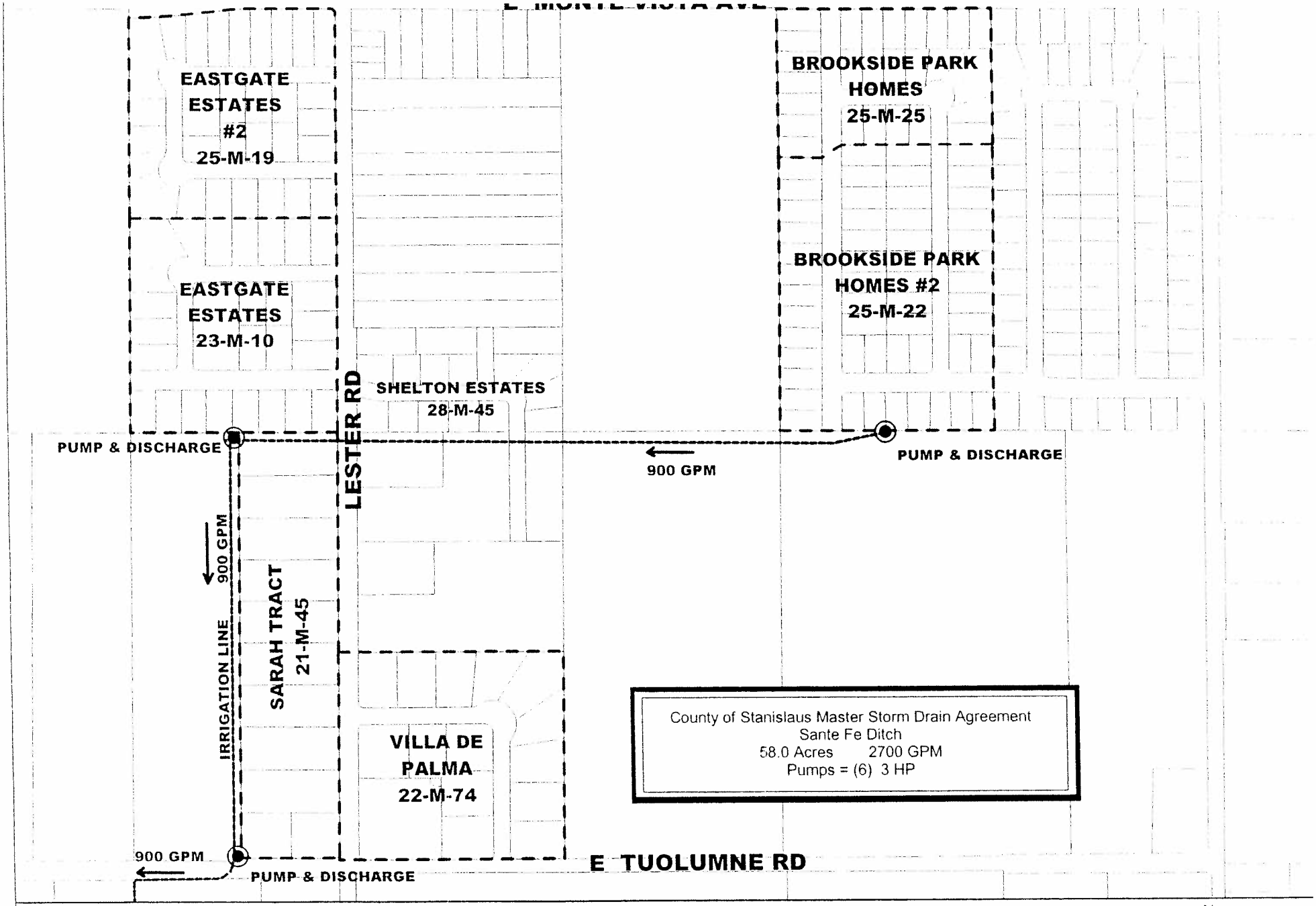


Exhibit #8

Sante Fe Ditch

197 0 197 394 Feet

N W E S

This map is for display purposes only. Map printed 2/27/2003

EXHIBIT 9
COUNTY OF STANISLAUS
MASTER STORM DRAINAGE AGREEMENT

No. 9

Name: Denair Village No. 4

Discharge into: Turlock Main Canal

Location: N. of Monte Vista, West bank of Turlock Main Canal

Acreage to be drained: 10.0 acres (see attached map)

Description of Discharge Point Facilities:

Two 8" diameter discharges from two 5-hp pumps

Maximum rate of discharge authorized at this discharge point:

900 g.p.m.

The turn off setting of the automatic sensor system shall be:

n/a ft. (USGS elevation)

Licensee's initial cost share of improvement district assessments from the following improvement districts are as following:

Improvement District	Initial Prorated Share
n/a	n/a

Special conditions applicable to this discharge point:

none

Approved by: _____ 3-5-03

Assistant General Manager Water Resources & Regulatory Affairs — Date

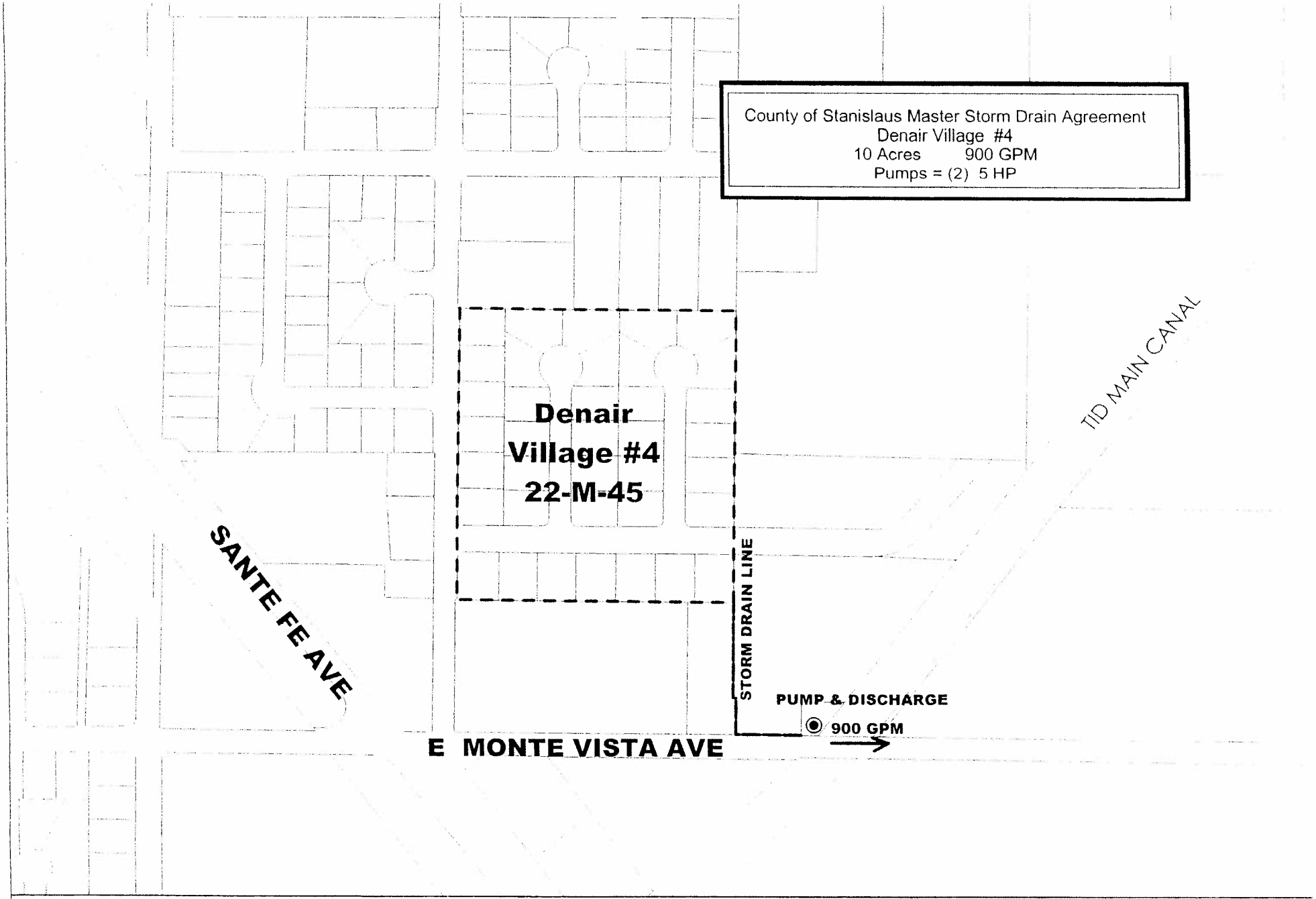


Exhibit #9

Denair Village #4

147 0 147 294 Feet

N W E S

This map is for display purposes only.

Map printed: 2/18/2003

EXHIBIT 10
COUNTY OF STANISLAUS
MASTER STORM DRAINAGE AGREEMENT

No. 10

Name: Monte Vista Meadows

Discharge into: Turlock Main Canal

Location: West of Gratton, 800' west of Turlock Main Canal

Acreage to be drained: 20.0 acres (see attached map)

Description of Discharge Point Facilities:
One 9" diameter discharge from two 3-hp pumps

Maximum rate of discharge authorized at this discharge point:
900 g.p.m.

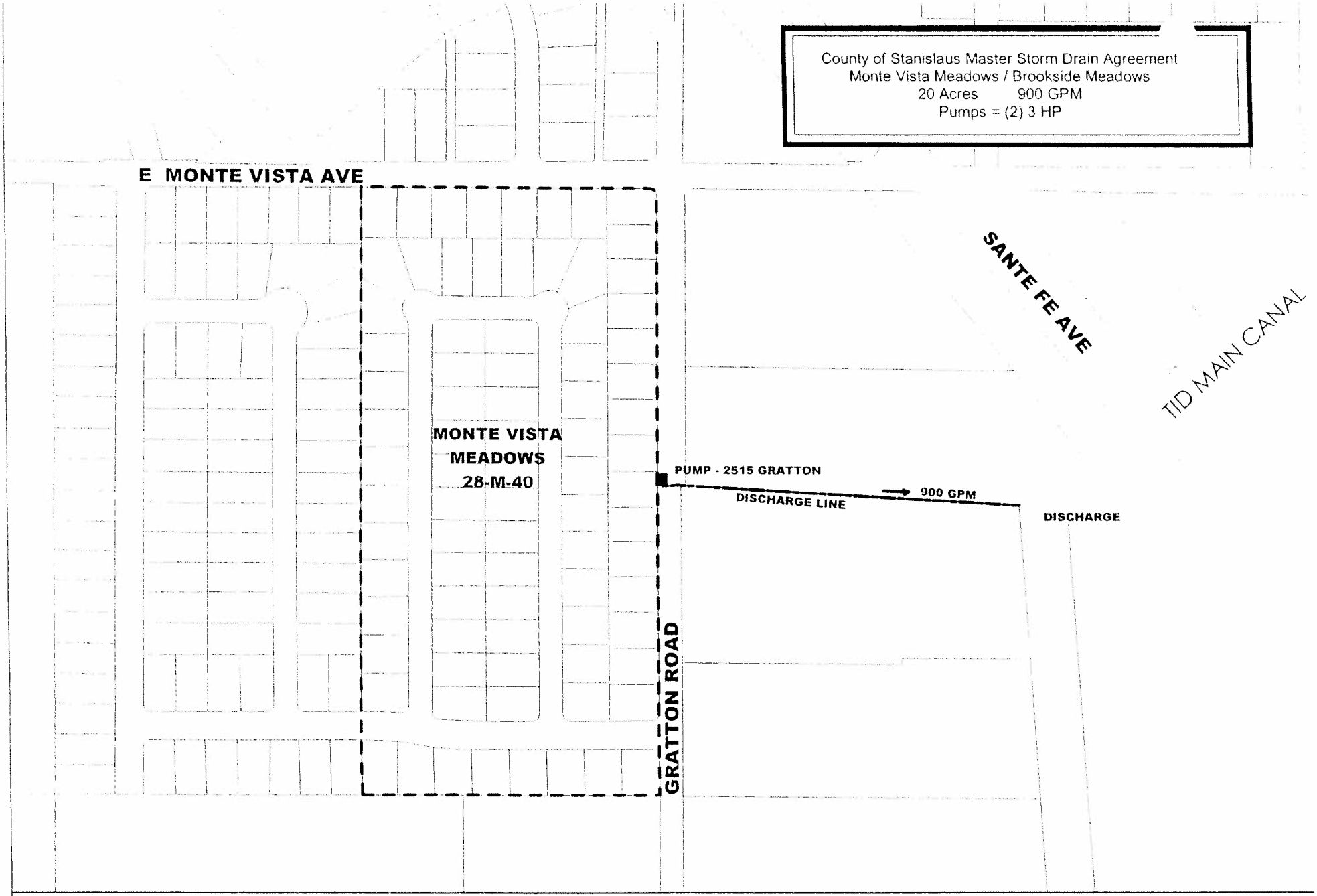
The turn off setting of the automatic sensor system shall be:
n/a ft. (USGS elevation)

Licensee's initial cost share of improvement district assessments from the following improvement districts are as following:

Improvement District	Initial Prorated Share
n/a	n/a

Special conditions applicable to this discharge point:
none

Approved by: _____ 3-5-03
Assistant General Manager Water Resources & Regulatory Affairs — Date



Stanislaus County

Exhibit #10

Monte Vista / Brookside Meadows

137 0 137 274 Feet

N W E S

This map is for display purposes only.

Map printed: 2/27/2003

Public
Stanislaus

EXHIBIT 11
COUNTY OF STANISLAUS
MASTER STORM DRAINAGE AGREEMENT

No. 11

Name: Bonita Ranch

Discharge into: Lateral No. 2 ½

Location: 2700' ± from Washington Road, west

Acreage to be drained: 394 acres

Description of Discharge Point Facilities:

Two 18" diameter pipes from a storm water lift station, located within a park/basin in Bonita Ranch with two 20-hp pumps.

Maximum rate of discharge authorized at this discharge point:

3590 g.p.m.

The turn off setting of the automatic sensor system shall be:

100.00 feet/USGS elevation

Licensee's initial cost share of improvement district assessments from the following improvement districts are as following:

Improvement District	Initial Prorata Share
N/A	N/A

Special conditions applicable to this discharge point:

None.

Approved by: _____ 3-5-03

Assistant General Manager Water Resources & Regulatory Affairs — Date

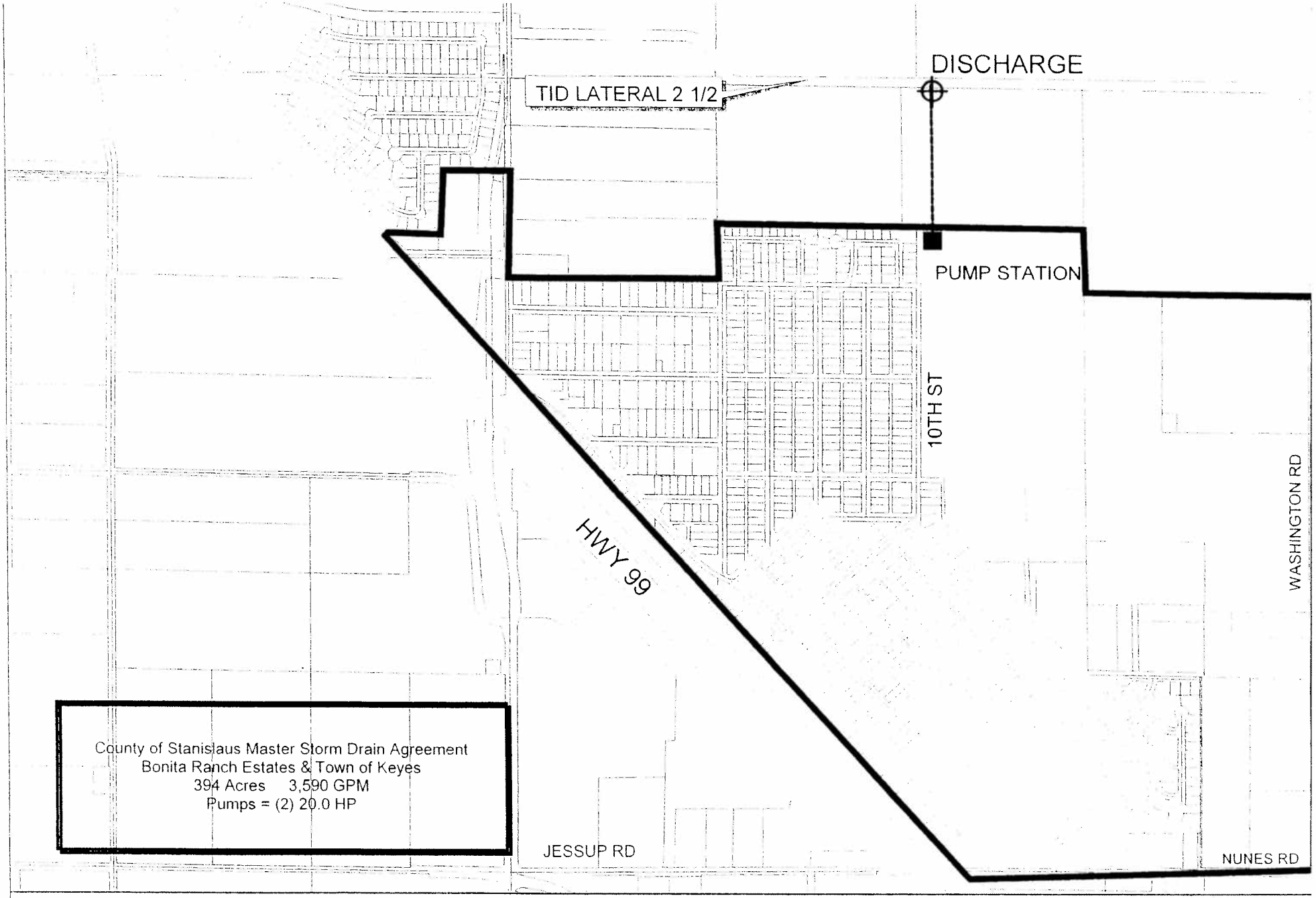


Exhibit #11

Bonita Estates Ranch

(and the Town of Keyes)

431 0 431 862 Feet

N W E S

This map is for display purposes only.

Map printed 2/19/2003

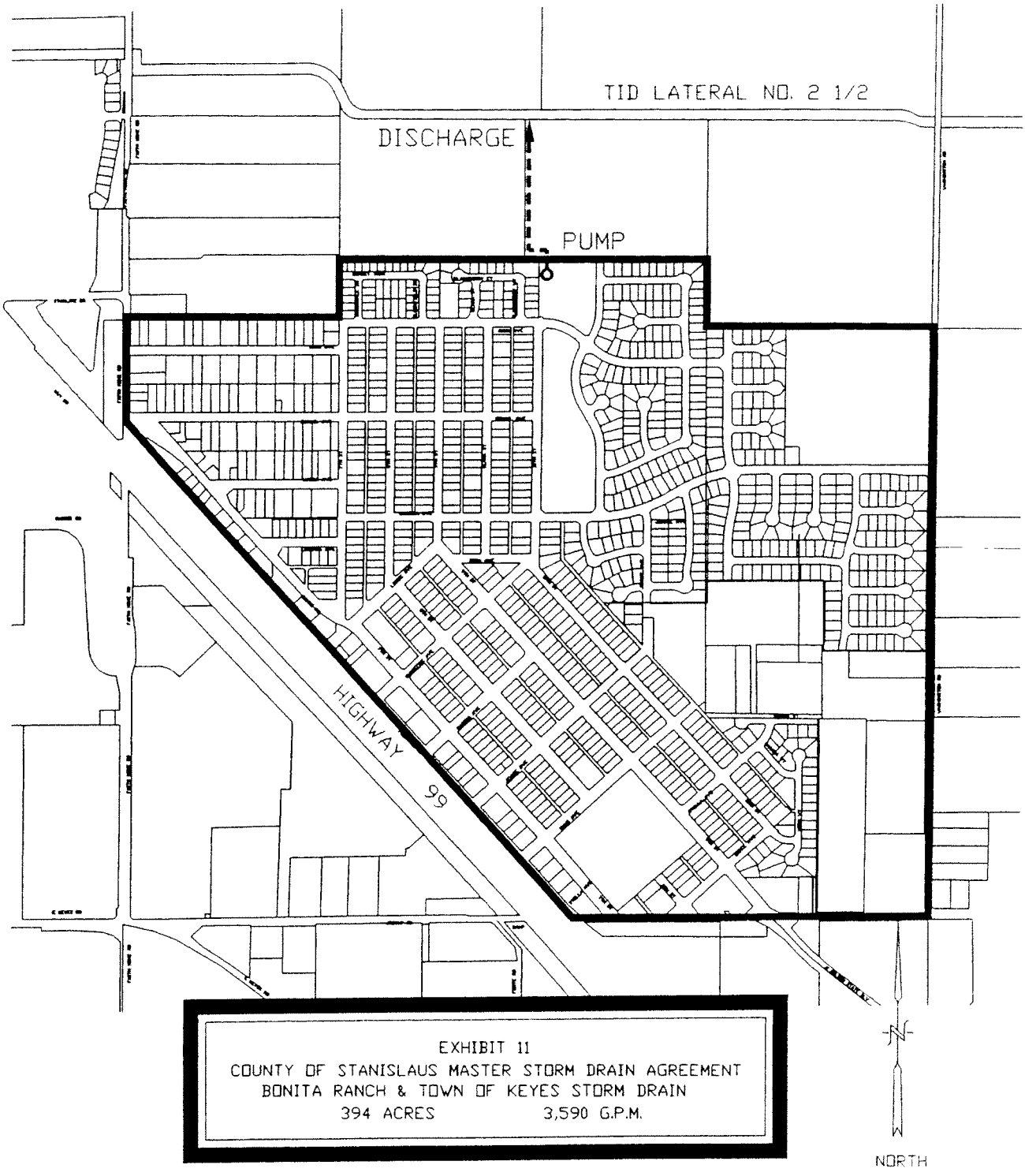


EXHIBIT 11
COUNTY OF STANISLAUS MASTER STORM DRAIN AGREEMENT
BONITA RANCH & TOWN OF KEYES STORM DRAIN
394 ACRES 3,590 G.P.M.

1" = 1000'

Appendix B

General Outline for Stormwater Pollution Prevention Training for Municipal Activities Field Crews and the Building Department

I. What is the Storm Water Pollution Prevention Program?

A. A nationwide program that requires cities over 10,000, industries, and new construction 1 acre or more to prevent the release of pollution and sediment in stormwater runoff to streams and lakes.

B. A program focused on source control rather than end of pipe treatment like a sewer system.

II. Why is the County required to participate?

A. The federal Clean Water Act requires all cities over 10,000 and certain urbanizing counties to begin to implement a Storm Water Management Plan (SWMP) by March 10, 2003. Failure to comply can result in fines of up to $25,000 per day.

B. Urban runoff contains a wide variety of dirt, debris, chemicals, animal waste, and fertilizer. Simple source control behaviors can significantly reduce pollution. Sometimes structural or treatment controls are necessary to prevent pollution.

III. What are the things we have to do? What are my assignments?

A. The 6 Minimum Control Measures

B. #1 Public Education and Outreach

C. #2 Public Involvement

1. Public involvement activities
2. Hotline for reporting violations and complaints
3. New County enforcement ordinance

D. #3 Illicit Discharge Elimination

1. Identifying Illegal Dumping and Illicit Discharges
2. Observation of community behaviors like crankcase oil dumping
3. TV Inspection of storm drains for illegal connections
4. Enforcement protocol

E. #4 Construction BMPs

1. State BMP Handbooks
2. Check the SWPPP and NOI for the State General Permit for Construction Activities required before we issue a Building Permit.
3. Inspection of construction site for BMP effectiveness.

F. #5 Post Construction BMPs

1. State BMP Handbooks
2. Part of the plan review process before we issue a Building Permit.
3. Planning standards and design standards for new development and redevelopment.
4. Constructed with the project
5. Post construction Maintenance Agreement and annual inspection

G. #6 Municipal Activities
    1. Cover or contain potential pollutants at the Corporation Yard, like vehicle maintenance, chemical storage, construction debris.
    2. Pollution prevention activities while out doing maintenance or repair on roads, pipelines, etc.
    3. Routine maintenance of storm drainage basins.
    4. Street sweeping
    5. Solid waste and hazardous waste removal and disposal for the community.
    6. Standard Operating Procedures (SOP) for breaches, spills and malfunctions of municipal BMPs.
H. Record Keeping Requirements

IV. When do we have to do them?

A. 5 Year Permit Period
B. The 5 Year Workplan
C. Adaptive Management
D. Annual report to the RWQCB

V. Who Is in Charge?

A. County staff with inter-related responsibilities
B. The Permit's team leader is _____
C. Reporting to the Regional Water Quality Control Board

VI. What are other cities doing? How can we get more help or good ideas?

A. Model Urban Runoff Program – book or website
B. Storm Water Quality Task Force
C. Cities over 100,000 have been under SW permits since 1991. So they have lots of ideas and resources on what works and what doesn't.

VII. How does this program get funded? What if we need more people to do the work?

A. Funding from the County's gas tax revenues, not the federal or state government
B. Expected cost is about $0.27 to $0.45 per county resident per year
C. The County's SWMP is organized so that each department that has some responsibility can assign tasks to the most qualified personnel. It is unlikely to increase the staffing in any one area by a whole person.

VIII. Best Management Practices

Discuss types of BMPs, benefits and pitfalls of their use, and design criteria of:

A. Municipal BMPs
B. Construction BMPs
C. Post-construction BMPs