

**Todd Smith, Planning Director**  
Planning and Environmental  
Review



**Troy Givans, Director**  
Department of Community  
Development

## County of Sacramento

**Subject: Revised Notice of Preparation Comments for Grandpark Specific Plan**

Attached are comments received from the Notice of Preparation (NOP) that was circulated on December 20, 2017, through January 19, 2018, 30-days after the NOP was circulated in compliance with the time limits mandated by State law. In addition, a Scoping Meeting was held on January 9, 2018.

If you have any questions regarding the attached documents, please direct your comments to Emma Patten, *Project Manager*, at [Pattene@saacounty.gov](mailto:Pattene@saacounty.gov), (916) 875-4197.

**Attachments:**

1. City of Sacramento – Department of Utilities
2. The Environmental Council of Sacramento – Land Use and Conservation Policy Director
3. Friends of the Swainson’s Hawk
4. City of Sacramento – Community Development Department
5. Rio Linda/Elverta Community Water District – Board of Directors
6. Sacramento Area Council Governments (SACOG)
7. Sacramento County Water Agency - Department of Water Resources
8. Sacramento Metropolitan Air Quality Management District
9. Sacramento Metropolitan Fire District
10. Sacramento Municipal Utility District (SMUD)
11. Sacramento Regional County Sanitation District (Regional San) and Sacramento Area Sewer District (SASD)
12. Walk Sacramento

**From:** [PER-CEQA](#)  
**To:** [Hawkins, Tim](#)  
**Cc:** [Smith, Todd](#)  
**Subject:** FW: Sacramento County - North Precinct Revised NOP  
**Date:** Tuesday, January 23, 2018 9:12:06 AM  
**Attachments:** [2017-12-20 NNPSR Revised NOP.PDF](#)

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***Andrea Guerra, Senior Office Assistant***

Office of Planning and Environmental Review

827 7th Street, Room 225A, Sacramento, CA 95814 | (916) 874-2862

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**From:** Bryan Holm [mailto:BHolm@cityofsacramento.org]  
**Sent:** Friday, January 19, 2018 1:40 PM  
**To:** PER-CEQA <CEQA@saccounty.net>  
**Cc:** Scott Johnson <SRJohnson@cityofsacramento.org>  
**Subject:** Sacramento County - North Precinct Revised NOP

To: Tim Hawkins, Environmental Coordinator

Comment: Page 4 of the NOP lists the City of Sacramento as a backup water supply for this project. The City of Sacramento will not be able to provide water to this area. Please remove this statement from the NOP.

Thank you,

Bryan Holm, PE  
Associate Civil Engineer  
Department of Utilities, City of Sacramento  
916-808-4059

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**From:** Scott Johnson  
**Sent:** Thursday, January 4, 2018 7:22 AM  
**To:** Aelita Milatzo <[AMilatzo@cityofsacramento.org](mailto:AMilatzo@cityofsacramento.org)>; Bill Sinclair <[bSinclair@cityofsacramento.org](mailto:bSinclair@cityofsacramento.org)>; Carson Anderson <[canderson@cityofsacramento.org](mailto:canderson@cityofsacramento.org)>; Evan Compton <[ECompton@cityofsacramento.org](mailto:ECompton@cityofsacramento.org)>; Fedolia Harris <[FHarris@cityofsacramento.org](mailto:FHarris@cityofsacramento.org)>; Inthira Mendoza <[imendoza@cityofsacramento.org](mailto:imendoza@cityofsacramento.org)>; Jennifer Donlon Wyant <[jdonlonwyant@cityofsacramento.org](mailto:jdonlonwyant@cityofsacramento.org)>; Jim McDonald <[JMcDonald@cityofsacramento.org](mailto:JMcDonald@cityofsacramento.org)>; Judith

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**Cc:** Bill Busath <[WBusath@cityofsacramento.org](mailto:WBusath@cityofsacramento.org)>; Bruce Monighan <[BMonighan@cityofsacramento.org](mailto:BMonighan@cityofsacramento.org)>; Christopher Conlin <[CConlin@cityofsacramento.org](mailto:CConlin@cityofsacramento.org)>; Fran Halbakken <[FHalbakken@cityofsacramento.org](mailto:FHalbakken@cityofsacramento.org)>; Hector Barron <[HBarron@cityofsacramento.org](mailto:HBarron@cityofsacramento.org)>; Jeffrey Heeren <[JHeeren@cityofsacramento.org](mailto:JHeeren@cityofsacramento.org)>; Jim Peifer <[JPeifer@cityofsacramento.org](mailto:JPeifer@cityofsacramento.org)>; Jody Ulich <[JUlich@cityofsacramento.org](mailto:JUlich@cityofsacramento.org)>; Kourtney Burdick <[KBurdick@cityofsacramento.org](mailto:KBurdick@cityofsacramento.org)>; Leslie Fritzsche <[LFritzsche@cityofsacramento.org](mailto:LFritzsche@cityofsacramento.org)>; Linda Tucker <[LTucker@cityofsacramento.org](mailto:LTucker@cityofsacramento.org)>; Matt Eierman <[MEierman@cityofsacramento.org](mailto:MEierman@cityofsacramento.org)>; Melissa Anguiano <[MAnguiano@cityofsacramento.org](mailto:MAnguiano@cityofsacramento.org)>; Nicholas Theocharides <[NTheocharides@cityofsacramento.org](mailto:NTheocharides@cityofsacramento.org)>; Ryan DeVore <[RDeVore@cityofsacramento.org](mailto:RDeVore@cityofsacramento.org)>; Sheri Smith <[SSmith@cityofsacramento.org](mailto:SSmith@cityofsacramento.org)>; Sheryl Patterson <[SPatterson@cityofsacramento.org](mailto:SPatterson@cityofsacramento.org)>; Stacia Cosgrove <[SCosgrove@cityofsacramento.org](mailto:SCosgrove@cityofsacramento.org)>; Winfred DeLeon <[WDeleon@cityofsacramento.org](mailto:WDeleon@cityofsacramento.org)>

**Subject:** Sacramento County - North Precinct Revised NOP

Sacramento County Office of Planning and Environmental Review has issued a revised Notice of Preparation of a Draft Environmental Impact Report for the Natomas North Precinct Specific Plan (see attached). There is a scoping meeting on January 9, 2018, 2-3 PM at 827 7<sup>th</sup> Street, First Floor Community Room. Responses to the NOP should be sent by Friday, January 19<sup>th</sup> to:

Tim Hawkins, Environmental Coordinator  
Office of Planning and Environmental Review  
827 7th Street, Room 225, Sacramento, CA 95814  
or via e-mail at: [CEQA@saccounty.net](mailto:CEQA@saccounty.net)



300 Richards Blvd., 3<sup>rd</sup> Floor

Sacramento, CA 95811

(916) 808-5842

[srjohnson@cityofsacramento.org](mailto:srjohnson@cityofsacramento.org)

**From:** [PER-CEQA](#)  
**To:** [Hawkins, Tim](#)  
**Cc:** [Smith, Todd](#)  
**Subject:** FW: ECOS comment re: Natomas North Precinct Specific Plan NOP  
**Date:** Tuesday, January 23, 2018 9:09:46 AM  
**Attachments:** [2016 05 May 31 ECOS Comments on Natomas North Precinct Master Plan NOP.pdf](#)

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***Andrea Guerra, Senior Office Assistant***

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**From:** [ecos.habitat@gmail.com](mailto:ecos.habitat@gmail.com) [<mailto:ecos.habitat@gmail.com>] **On Behalf Of** Matthew Baker

**Sent:** Saturday, January 20, 2018 4:07 PM

**To:** PER-CEQA <[CEQA@saccounty.net](mailto:CEQA@saccounty.net)>

**Subject:** ECOS comment re: Natomas North Precinct Specific Plan NOP

Tim Hawkins, Environmental Coordinator

Office of Planning and Environmental Review

827 7th St. Room 225, Sacramento, CA 95814

Mr, Hawkins,

Please find attached the ECOS letter dated May 31 2016 offering comment on the previous NOP for the Natomas North Precinct. ECOS wishes to resubmit this letter in response to the current NOP, as we find that our concerns and observations for the proposal have not changed.

Please let us know if you have any questions.

Thank you,

Matt

**Matthew Baker**

Land Use and Conservation Policy Director | ECOS

The Environmental Council of Sacramento

P.O. Box 1526, Sacramento, CA, 95812

Mobile: (916) 202-9093

Email: [habitat@ecosacramento.net](mailto:habitat@ecosacramento.net)

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**ECOS**  
ENVIRONMENTAL  
♦ COUNCIL ♦  
OF SACRAMENTO



ECOS & Habitat 2020  
P.O. Box 1526, Sacramento, CA 95812-1526  
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May 31, 2016

Catherine Hack, Environmental Coordinator  
Department of Community Development  
Planning and Environmental Review Division  
827 7th Street, Room 225, Sacramento, CA 95814

*SENT VIA EMAIL TO hackc@saccounty.net*

**SUBJECT: NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE NATOMAS NORTH PRECINCT MASTER PLAN (CONTROL NUMBER: PLNP2014-00172)**

Dear Ms. Hack:

These are comments from the Environmental Council of Sacramento (ECOS), with dozens of individual members and organizational members in the tens of thousands. ECOS has a history of over 4 decades of advocacy to limit sprawl, preserve agriculture, habitat and open space, and improve the quality of life while supporting growth with a vibrant and equitable economy. These comments relate to all the requested entitlements, and the Project Objectives found on NOP, pages 3-4, Objectives 1-6, except where noted.

**Land Use, Transportation, Air Quality, Climate Change**

The proposed Master Plan is obviously inconsistent with the Metropolitan Transportation Plan / Sustainable Communities Strategy (MTP/SCS) and with the Regional Air Quality Attainment Plan. The DEIR must include a full analysis and discussion of the project's inconsistency with the MTP/SCS and the Regional Air Quality Attainment Plan. How this inconsistency will be mitigated (e.g., with strict project phasing) must also be addressed.

Since the proposed project is inconsistent with the MTP/SCS and the State's mandates under SB 375 to reduce greenhouse gas emissions, the project must also, by definition, be inconsistent with the County's Climate Action Plan. If this plan is to have any value, this inconsistency must also be addressed and mitigated.

The above inconsistencies are critically important since the project, as proposed, is a totally auto-oriented community. Regional Transit will not have the ability for many years, if ever, to provide service to this area at the proposed densities. Therefore it is critically important to establish a Transportation Services District, similar to what exists in North Natomas and portions of the Southeast County, to provide funding for transit service, connectivity and other transportation-related services.

It is important that the EIR, as a tool in assessing impacts, provide information which allows all interested parties and decision-makers to ascertain the level/degree of consistency/inconsistency with critical land use policies. The EIR must fully evaluate consistency with Sacramento County General Plan Policy LU-127. Any finding of inconsistency must be explained and where appropriate quantified, particularly with respect to the crucial finding pertaining to available holding capacity.

In addition to analysis of the “No Project” alternative, there should also be an examination of the alternative that 55,000 people will, indeed, move to Sacramento County, but will choose to reside elsewhere, say, in the northern and central portions of the City of Sacramento, choosing infill locations that are already zoned for residential development of the same or higher density as that proposed in this project. It is widely reported that modern homebuyers are preferentially seeking more compact, urban locations than large-lot, suburban locations. The continuing demand for compact, urban housing is further bolstered by the history of the recent foreclosure crisis: while homes in Elk Grove and Natomas literally could not be given away, homes in the central city lost very little value, and recovered these losses (and then some) before any other locations did. While such an alternative may not be the preference of these developers, neither is the “No Project” alternative. But the “No Project” alternative ignores the reality that more people are, indeed, choosing to live in this region. In practical terms, if these developers end up with “No Project,” that alone will not halt the population increase. Rather, the new arrivals will live somewhere already zoned for the type of residential development they prefer. That is the comparison that should be made with the project as proposed.

The proposed project includes substantial employment and higher density residential development in order to meet General Plan policy criteria for new development at the urban fringe. The EIR must evaluate the increase in impact, particularly with respect to VMT and CO<sup>2</sup> air quality emissions, if the development were to build out at lower, traditional levels of suburban development. The EIR must consider mitigation measures, including but not limited to phasing requirements and development moratoriums, to prevent occurrence of those adverse impacts.

There are already enough flawed assumptions in the feasibility analysis for the regional hospital to conclude that such a facility is extremely unlikely to materialize. The nation has spent the past six decades trying to reduce the ratio of hospital beds per thousand population, not increase it. Therefore, in order to properly assess the range of possible impacts of the proposed project, the EIR must include at least one alternative that does not include a regional hospital.

## **Water**

The EIR must consider the adequacy of water to supply the development. A conclusion that the “project will be supplied by surface water supplemented with groundwater withdrawals” is inadequate. State Water Board approval of Natomas Central Mutual Water Company surface water rights from agricultural to municipal/industrial (M/I) use should not be counted upon as a given outcome. All potential sources of surface water, constraints and obstacles to obtaining them, the timing of water delivery, the potential for delivery curtailment in dry years, and overall feasibility of supplemental surface water supplies must all be thoroughly vetted.

The project is outside of the USB. **M/I development was not assumed as part of the studies and assumptions underlying the Water Forum Agreement.** The EIR must include a comprehensive analysis of the North American River Sub-basin, taking into account the buildout of approved and planned projects in Sutter and Placer Counties. The EIR analysis must complement and support sustainable groundwater planning undertaken to implement the California Sustainable Groundwater Management Act.

The EIR must include legally enforceable mitigation measures, including but not limited to phasing requirements and moratoriums, if assumed supplemental surface water supplies are not available sufficiently in advance to forestall groundwater overdraft.

As part of this analysis, the EIR must assess groundwater quality, including the presence of chromium, manganese, iron and arsenic, and its feasibility for domestic consumption. Assessment of infrastructure costs must consider the additional cost of water treatment to remove potentially harmful levels of these and other elements in groundwater supplies.

We are aware of the drainage studies performed under the auspices of the County and others over the past two decades. We believe the drainage problems are even more complex because of additional development that has occurred or been approved since the completion of these drainage studies, including those in Sutter County. The EIR must be extremely detailed as to how adequate drainage will be achieved for this project, as well as how these drainage solutions affect the project's ability to mitigate for any proposed take of endangered species.

### **Growth-inducing Effects**

The EIR must evaluate growth inducing impact of extending the USB to the County Line. The analysis should include speculative land price increases in the region and the resulting impact on implementing the Natomas Basin HCP, Sacramento County's relationship to that HCP notwithstanding. The analysis should also include the regional growth-inducing impact of this, the most populous jurisdiction in the region, acting in violation of its own general plan to expand the region's footprint in a manner inconsistent with regional plans.

### **Biological Resources**

As proposed, this project conflicts with the Natomas Basin Habitat Conservation Plan (NBHCP). While the County declined to become a signatory to the Plan in 2003, nonetheless the proposed development would remove vital agriculture that provides habitat and foraging for at least two endangered species. Without this acreage, mitigation for this project could be rendered inconceivable, especially since other development in the area has already been approved. Those previous approvals have not yet resulted in construction, nor have their approved mitigations been implemented. When they are, the availability of mitigation acreage for this project is nil. The EIR must be explicit about the precise acreage, timing and location of mitigation land, and must demonstrate beyond doubt how compatibility with the NBHCP and already-approved mitigation for already-entitled projects will be achieved.

Specifically, the EIR needs to analyze the impact of this proposed project on the implemented Natomas Basin Habitat Conservation Plan, including, but not limited to the following:

- Analysis of impact on conservation strategy implementation in the NBHCP.
- Analysis of impact on effectiveness of mitigations in the NBHCP. As an example, the NBHCP stipulates a 1:1/2 acre mitigation for terrestrial non wetland habitat loss, but this was predicated on no additional development beyond that covered in the NBHCP within the basin.
- Analysis of the impact on “feasibility for acquisition” for the lands needed within the available inventory for the NBHCP within the basin given that over 5600 additional acres are proposed to be removed from the inventory, and at least that amount, if not substantially more, will be needed to mitigate for the proposed development.
- Analysis of the impact of potentially increased acquisition costs for acquiring mitigation lands for the NBHCP because of the increased demand resulting from trying to mitigate for this project in the same geography as the NBHCP.
- EIR needs to provide substantive evidence that the loss of so much more habitat than was contemplated and covered in the NBHCP in the basin will not result in jeopardy for the Swainson’s hawk and the giant garter snake.
- Analysis of the impact of removing more than 5600 acres of important habitat for the giant garter snake needs to be included. Cumulative effects need to be analyzed for the giant garter snake in this context as well.
- Analysis of the impact of removing more than 5600 acres of important habitat for the Swainson’s hawk needs to be included. Cumulative effects to the Swainson’s hawk need to be analyzed in this context as well.
- The EIR needs to provide all appropriate and feasible mitigations for impacts to species so that their efficacy can be analyzed, and not kick the can down the road with the deferred mitigation of indicating that such details will be worked out later with the regulatory agencies after entitlements are granted.

## **Financing**

The environmental challenges of this project represent astounding obstacles, of a scale rarely seen in this region. The EIR must be very sound in its demonstration of how the provision of public infrastructure and services to this project can be achieved while maintaining a “neutral-to-positive fiscal impact” to the County (see NOP, page 4, Objective #8).

Infrastructure costs for internal drainage, SAFCA flood control assessments, roads and other essential services will be extensive. Parallel evaluation of these costs is essential to the EIR process. The EIR must show that mitigation measures attached to the project, particularly those that rely on developer funded implementation—and in particular those that are related to habitat mitigation requirements—will, when combined with the burden of infrastructure costs, be financially feasible.

Bonding of mitigation measures must be evaluated as part of the mitigation and monitoring program. This evaluation must be part of the draft EIR process and available for public review well before final project approvals.

## Conclusion

ECOS agrees with the assumption that the population of the region and the county will grow. The purpose of the General Plan is to control future development such that it meets the stated needs of the county. Applicant must demonstrate how the proposal will help the county meet these needs, consistent with the existing General Plan, MTP/SCS, Regional Air Quality Attainment Plan, Climate Action Plan, Sustainable Groundwater Management Act, the NBHCP, and, of course, CEQA. Any requested departure from these requirements must demonstrate unequivocal and unique circumstances that outweigh the considerable constraints of those existing requirements. To the extent that one considers the provision of public infrastructure and services, themselves, as mitigation for the environmental impacts of the project, their feasibility, adequacy and their own inherent impacts must be explicated fully and compared to alternatives that do not require amendments to the General Plan, various specific plans ( listed in the NOP as “Requested Entitlements”), or new annexations to the Sanitation District and Sewer District.

The region, and the county, specifically, already have countless alternatives to meet future growth within the above requirements (well beyond the 55,000 people subsumed by this proposal). In fact, the existing General Plan subsumes much more growth than is projected by SACOG. It is incumbent on the applicant, therefore, to demonstrate how the proposal comports with the alternatives already available under the General Plan, MTP/SCS, etc. A simple “No Project” alternative that also assumes no growth anywhere else in the region, or one that fails to relate the project to at least one of these alternatives, is simply not good enough to support rational decision-making.

Sincerely,



A handwritten signature in black ink that reads "Brandon Rose".

Brandon Rose, President  
Environmental Council of Sacramento (ECOS)



A handwritten signature in black ink that reads "Robert C. Burness".

Robert C. Burness, Co-Chair  
Habitat 2020



A handwritten signature in black ink that reads "Barbara Leary".

Barbara Leary, Executive Committee Chair  
Sierra Club Sacramento Group



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swainsonshawk@sbcglobal.net

January 18, 2018

TO: Tim Hawkins, Environmental Coordinator,  
Sacramento County, 827 -7<sup>th</sup> Street #225, Sacramento, CA 85835  
Via email: CEQA@saccounty.net

SUBJECT: Response to Revised Notice of Preparation (NOP) for the Natomas Vision North Precinct Plan, PLNP2014-00172

Dear Mr. Hawkins,

The Friends of the Swainson's Hawk has reviewed the Revised NOP for the North Precinct Plan. The NOP does not appear to differ substantially from the previous NOP, so we are re-submitting, as comment on the Revised NOP, the following ATTACHED letters which we previously submitted in response to the prior NOP and to the Supervisors:

1. Our previous letter dated May 30, 2016, responding to the prior NOP;
2. Our previous letter to the Board of Supervisors dated December 16, 2015;
3. Our previous letter to the Supervisors dated November 2015; and
4. The report of Ensign and Buckley, 2000, "*Drainage Analysis for the North Natomas Long Term Planning Project*," previously submitted as an attachment to our November 2015 letter to the Supervisors. The Ensign and Buckley report was prepared for the 2000 DEIR for a similar proposal for that area which was dropped due to infeasibility.

Please send to us, at the above address and email, all notices of hearings and availability of documents pertaining to this project. You may contact James Pachl or Judith Lamare at the above contact information.

Very Truly Yours,

James P. Pachl  
for Friends of the Swainsons Hawk



8867 Bluff Lane  
Fair Oaks, CA 95628'  
(916) 844-7515  
swainsonshawk@sbcglobal.net

May 30, 2016

TO: Catherine Hack, Environmental Coordinator,  
Sacramento County, 827 -7<sup>th</sup> Street #225, Sacramento, CA 85835  
Via email: CEQA@saccounty.net

SUBJECT: Response to Notice of Preparation (NOP) for the Natomas Vision North Precinct Plan, PLNP2014-0017

Dear Ms. Hack,

The County has long recognized that there are daunting environmental problems with attempting urban development in this area. See, for example, the 2000 DEIR for an earlier proposal to include that area within the USB, particularly the Ensign and Buckley analysis. The Staff Report for an earlier Supervisors' hearing, April 13, 2009, "Natomas Joint Vision Progress Report", p. 5, correctly states: "The Area also has considerable challenges to development such as wildlife habitat preservation, flood protection, infrastructure financing, airport safety zone considerations. . ." . . . "based on the more in-depth understanding of both opportunities and constraints, these constraints will need to be addressed, and high quality answers advanced, as part of the Phase 3 process."

Following are the comments of Friends of the Swainson's Hawk ("FOSH") on some of the issues of concern regarding the proposed North Precinct Plan. Specific and cumulative impacts of these elements of the project, and feasible mitigation measures intended to reduce impacts, must be addressed in the DEIR.

**ATTACHED** is our previous letter to the Supervisors dated December 16, 2015, which elaborates on some of the concerns raised in this letter.

**1. Conflict with the Conservation Program of the 2003 Natomas Basin HCP**

CEQA requires that any conflict with a Habitat Conservation Plan be disclosed and the environmental effects of the conflict analyzed. As explained in more detail in our previous letter to the Supervisors, December 16, 2015, **ATTACHED** (pp. 3, 4), the North Precinct Project directly conflicts with the Conservation Program of the 2003 Natomas Basin HCP, ("NBHCP"), and will cause unmitigated harm to the NBHCP Conservation Program and to the species protected thereunder, notably the Giant Garter Snake, listed as threatened under the Federal and State Endangered Species Acts. and the Swainson's Hawk, listed as threatened under the State Endangered Species Act.

**2. Flood hazard from American and Sacramento Rivers, and Steelhead Creek due to potential levee failure.**

The DEIR should address the very real threat of flooding from the American and Sacramento Rivers, Steelhead Creek, and the Cross-Canal which form the perimeter of the Basin. There is not yet 100-year or 200-year flood protection for Natomas Basin. FEMA's A-99 flood insurance rating is not flood protection. Only one-half of the length of the Basin's perimeter levees have been upgraded to the 100-year standard.

If the North Precinct project goes forward, will County issue certificates of occupancy for residential and commercial buildings completed prior to Corps and FEMA certification that the levees provide 100-year flood protection? Will certificates of occupancy be issued for new construction completed prior to completion and certification of 200-year flood protection (required by California Government Code §§ 65865.5(a)(b), 65962(a), (b), and 66474.5(a).)? The DEIR must disclose this information.

If the County intends to issue certificates of occupancy prior to completion of 200-year flood protection, then the DEIR must disclose the potential impacts, including potential for and consequences of flooding of project structures due to failure of levees which provide less than 200-year flood protection.

If the County will issue certificates of occupancy prior to completion of levees providing 200-year protection, then a condition of approval of this project should be a requirement that the sellers of real property must disclose to prospective buyers that there is less than 200-year protection. Water Code §9601(g) states that "making those flood risks more apparent will help ensure that Californians make careful choices when deciding whether to build homes or live in Central Valley flood plains, and if so, whether to prepare for flooding or maintain flood insurance."

Congress has authorized expenditure of a sum purportedly deemed to be adequate (at this time) to complete the Natomas levee improvement project, but the authorization has not been appropriated, and consequently is presently not available. It is not known when the money will be fully appropriated, whether it will actually be sufficient to complete the Natomas perimeter levee improvement project, or when the Natomas perimeter levee project will be completed. SAFCA has reportedly run out of money, and the Army Corps of Engineers has assumed responsibility for completing the project with Federal funds. Previous phases of Natomas levee construction proved to be vastly more expensive than projected. It is not known when the Army Corps will actually start construction. Estimated dates of completion have been repeatedly extended and are now regarded as virtually meaningless.

**3. Flood hazard due to storm water and internal flooding.**

**Attachment One of FOSH Response to Revised NOP, 1/18/18**

Much of the Plan area is within the FEMA 100-floodplain for storm water and internal flooding within the Basin, even if the perimeter levees do not fail. See Exhibit 3 of the Technical Memorandum attached to the North Precinct Plan Addendum document.

However the applicable criteria under California law is the 200-year floodplain. The DEIR should show the full extent of the 200 year floodplain for internal flooding and the drainage plan should be modified to provide protection at the 200-year level. Government Code §§ 65007(m) and (n), 65865.5(a)(b), 65962(a), (b), and 66474.5(a), Water Code §§9601(d), 9602(h)(i).

This threat is discussed in more detail in FOSH’s letter of December 16, 2015, **ATTACHED** (pp. 5, 6). The project drainage plan presented in the Technical Memorandum appears undersized, and is much more optimistic than what Ensign and Buckley proposed for the 2000 DEIR for an earlier almost identical project. The DEIR should explain why the drainage plan has been downsized from that recommended by Ensign and Buckley.

The Technical Memorandum proposes pumping surplus drainage water into Steelhead Creek (North East Main Drainage Canal, “NEMDC”), despite the fact that Steelhead Creek (NEMDC) has previously backed up and flooded residential areas east of the Basin during major storm events. The Technical Memorandum also suggests that existing drainage canals be widened outside of the Plan area, which means those drainage canals running through the project area and southbound through the City’s North Natomas Community Plan area to the Sacramento River. In fact widening those canals through the developed North Natomas Community Plan area may be deemed hazardous or physically impossible due to urban development alongside those canals. The City has authority to deny permission to widen canals within the City limits. Likewise, the County has no authority to require RD1000 or SAFCA to undertake measures for the benefit of new urban development in the North Precinct area.

The drainage plan must also allow for storm water drainage running from the approved but unbuilt Sutter Pointe project flow through canals running southward through the North Precinct Area.

The DEIR should present a detailed drainage plan approved by RD1000, SAFCA, the City of Sacramento, Sutter County, and the Corps of Engineers, with a detailed funding plan. We seriously question whether the project can fund even the proposed drainage plan without a very substantial subsidy from the County General Fund that is unlikely to be reimbursed.

**4. Water supply**

The Application proposes possible conjunctive use of groundwater and surface water for potable water supply. However the proposal is not supported with water rights. The County and landowners have no surface water rights for urban use in the project area. Natomas Mutual Water Company has riparian water rights for agricultural use only.

**Attachment One of FOSH Response to Revised NOP, 1/18/18**

Even if it wanted to sell water for urban use to North Precinct users, Natomas Mutual cannot provide water for urban use without the authorization of the Bureau of Reclamation and State Water Quality Control Board, which have the discretion to deny such use. There is no evidence that the City of Sacramento intends, or has the legal authority, to sell any of its surface water supply to the County for urban use in the Basin.

Natomas groundwater contains concentrations of arsenic and other minerals greater than allowable under EPA and State standards, and also tastes bad. That is why County Airport built facilities to transport clean City water to International Airport and discontinued using Natomas well water for human consumption. There are processes which may eliminate arsenic from well water, but it is costly. The presence of arsenic and other mineral contaminants in raw wellwater must be disclosed to potential future homebuyers.

The DEIR should explain in detail how potable water would be provided for the project area, and show how this would be feasible from the regulatory and financial standpoints.

Cumulative impacts of obtaining surface or well water for the plan area should be analyzed and impacts mitigated, taking into consideration the competing water needs of the approved but unbuilt Sutter Pointe and MetroAirPark projects, the Sacramento International Airport, and the current and foreseeable demand for groundwater in Rio Linda, Robla, and other points east, and individual wells in the area.

**5. Project impacts outside of the North Precinct area**

Most elements of the North Precinct Plan will have impacts on neighboring Sutter County, particularly the adjacent Sutter Pointe Community Plan, the Natomas area of the City of Sacramento, the Metro Air Park project, Sacramento International Airport, and areas to the east. The DEIR must address all of these impacts and require mitigation measures.

**6. Conflict with the County General Plan**

Where a project conflicts with the applicable General Plan, CEQA requires that the DEIR disclosed the conflict and analyze the environmental impacts. The proposed expansion of the Urban Service Boundary is prohibited by County General Plan Land Use Element Policy LU-127 unless some very narrow criteria are met that would justify expanding the USB. We agree with ECOS that the North Precinct Plan does not qualify for these exceptions to LU-127.

The DEIR should explain why County believes that the North Precinct Plan does not violate Policy LU-127 of the County General Plan.

**7. The DEIR must show how mitigation measures and infrastructure are financially feasible**

**Attachment One of FOSH Response to Revised NOP, 1/18/18**

CEQA requires that all mitigation measures, including infrastructure intended to reduce impacts, must be enforceable. The Courts have repeatedly held that “enforceable” includes “financially feasible”. More than a few EIRs and project approvals have been overturned by courts due to lack of a well-defined funding mechanism to pay for the cost of mitigation measures. FOSH’s **ATTACHED** letter of December 16, 2016, (pp. 1, 2). discusses these issues in more detail.

The costs of this project will be very high when compared with other development projects in this region. Infrastructure must be constructed from scratch, including an internal drainage and water detention system that would be expensive to construct and would remove a considerable part of the project area from development. Despite the glowing intentions set forth in the project application and its addendum, the nature and economic value of what is eventually built and its ability to contribute to CFD assessments and to County tax revenues is completely speculative at this time.

The DEIR must include a financing plan that demonstrates that promised mitigation measures and infrastructure are financially feasible. The County’s stated desire that the project be revenue-neutral or better for the County add to the challenge.

Will all costs be paid by the developer? Or is the County expected to contribute? If the latter, does the County expect that tax revenues generated by the project will repay the County’s contribution? If the latter, please disclose in the DEIR the financial analysis to be relied upon.

If the developers form a Community Facility District and issue Mello Roos bonds, would the County guarantee repayment from its General Fund in the event of bond default?

Will the County infrastructure, notably the internal drainage facilities, be completed before construction begins on the rest of the project? How will this infrastructure investment be financed? This question is particularly important as to the drainage infrastructure, which must be substantially completed in its entirety at the onset of development to be effective, regardless of the pace of project development.

Thank you for considering these comments.

Respectfully submitted



James P. Pacht,  
for Friends of the Swainson’s Hawk

**ATTACHMENT:** FOSH letter, 12/16/15



8867 Bluff Lane  
Fair Oaks, CA 95628  
(916) 844-7515  
swainsonshawk@sbcglobal.net

December 16, 2015

TO: Sacramento County Board of Supervisors

RE: Proposed Natomas North Precinct Plan, Board Agenda, 12/16/15: 2:30 pm,  
20030171 and PLNP2014-00172

Honorable Supervisors,

On November 17, 2015, we submitted comments on the “Natomas North Precinct” proposal. Many of those comments, which we consider critical to the decision whether to proceed at this time, are included in the letter we are now submitting below for the hearing on December 16, 2015. Following are the comments of Friends of the Swainson’s Hawk.

The Staff Report for an earlier Supervisors’ hearing, April 13, 2009, “Natomas Joint Vision Progress Report”, p. 5, correctly states: “The Area also has considerable challenges to development such as wildlife habitat preservation, flood protection, infrastructure financing, airport safety zone considerations. . .”. . . “based on the more in-depth understanding of both opportunities and constraints, these constraints will need to be addressed, and high quality answers advanced, as part of the Phase 3 process.”

It now appears that Staff want the Supervisors to initiate the CEQA process with the pre-determined intent to approve USB expansion and an urban land use plan and zoning without first addressing the threshold questions of how (or whether) the project can meet the challenges identified as far back as 2009, or whether development of the North Precinct area is feasible or in the public’s interest .

Some of the threshold issues which should be addressed and resolved before the County proceeds with further planning and an EIR include the following:.

**1. Can public infrastructure and services be provided, and expenses of development be paid, without County subsidies and without exposing County General Fund to risk or potential liability?**

This is a critical threshold question which should resolved at the outset before more money is expended on planning and before expectations of development are created which may prove unrealistic due to cost and financing issues.

**Attachment Two of FOSH Response to Revised NOP 1/18/18**

Development of the proposed project will generate substantial up-front expense well beyond the normal infrastructure and services needed for suburban greenfield development. Expenses of development for the North Precinct Plan would include the very substantial cost of constructing and maintaining internal flood control and drainage facilities, the potential cost of raising the levees of the East Drainage Canal running from the project area through the North Natomas Community Plan area to the RD1000 pumps on the Sacramento River and additional pumps for RD1000; SAFCA and RD1000 assessments necessary for completion of the Natomas perimeter levees, and the cost of developing and implementing a Habitat Conservation Plan that is consistent with the existing Natomas Basin Habitat conservation Plan (which may not be possible) and acceptable to USFWS and CDFW. A built-out North Precinct Plan would generate large new traffic volumes onto Hwy 99, the Elverta and Elkhorn Road interchanges and major City streets in North Natomas. Development would likely be required to make substantial financial contribution to enlarge these neighboring facilities to serve the additional traffic generated by future residents of the North Precinct Plan.

Due to the unique costs of urbanizing the North Precinct area, it is difficult to believe that the all of the costs of developing the North Precinct area, including public facilities, could be met without substantial contributions of taxpayer funds which the County cannot afford, or issuance of bonds guaranteed by the County. The Sacramento Bee reported several months ago that Sacramento County has more debt than any other California County. Yet despite its borrowing, the County continues to have unmet vital needs and seriously underfunded public employee pension obligations. The County cannot afford to subsidize this development of this project with taxpayer funds, and it would be irresponsible for County to impede its borrowing capacity by authorizing issuance of CFD bonds which are dependent on the volatile fortunes of the housing market for repayment. If bonds issued by a County CFD are not repaid, County's credit standing could be jeopardized unless County repaid those bonds from its general fund.

This Application should not go forward until the Applicants and County Staff develop a public infrastructure finance Plan that convincingly shows how the developers will pay all of the costs of development, including those extraordinary expenses discussed above. Realistically, this may not be possible in region's real estate market.

Sutter County's approval of the neighboring 7000-acre Sutter Pointe Specific Plan wisely included the condition that all expenses of development be paid by development.

If the Board goes forward with environmental review and further planning, we strongly urge that the Board include, at the onset, the project condition, that any development proposed for the North Precinct area shall pay for itself, that the County will not contribute, advance or loan funds towards expenses of development or new public infrastructure in that area, and that that County will not approve any action in support of North Precinct development that may potentially incur liability for the County or may potentially burden County's credit rating or ability to borrow.

**2. Conflict with the Conservation Program of the 2003 Natomas Basin HCP**

The Staff Report, p. 5, states that “the Habitat Conservation Plan is tracking separately....” In fact, we recently learned that neither the Applicant nor County staff have contacted or consulted with the U.S. Fish and Wildlife Service regarding an HCP or Amendment of the 2003 NBHCP for this project.

As explained below, the North Precinct Plan proposal conflicts with the Conservation Program of the Natomas Basin Habitat Conservation Plan. Moving ahead now without resolving this conflict could potentially put the County in a public confrontation with US Fish and Wildlife Service (“USFWS”) and California Department of Fish and Wildlife (“CDFW”) and raises the possibility of Federal and State litigation. Such a conflict could also jeopardize other areas of cooperation between the wildlife agencies and the County. This proposal may also attract the concern of local and national environmental organizations wanting to maintain the integrity of the Federal and State HCP programs, and specifically the integrity of the adopted 2003 Natomas Basin Habitat Conservation Plan (“NBHCP”).

The 2003 NBHCP and its Implementing Agreement (“IA”) were executed by the City of Sacramento, County of Sutter, US Fish and Wildlife Service (“USFWS”), California Department of Fish and Wildlife and the Natomas Basin Conservancy (which administers the NBHCP Conservation Program.) The County declined to participate after a lengthy Supervisors’ public hearing.

The purpose of the NBHCP is to conserve the biological values of the Natomas Basin while allowing limited urban development. The NBHCP conservation measures focus upon maintaining the remaining populations of the Giant Garter Snake (“GGS”) and the Swainson’s Hawk, in the Natomas Basin. For that reason, the NBHCP requires that all land acquired for mitigation must be located within the Natomas Basin. However the Staff Report, p. 6, states that mitigation under a future HCP for North Precinct development will need to occur out of County and presumably outside of the Natomas Basin., which is a clear and deliberate conflict with the 2003 NBHCP.

The 2003 NBHCP Implementing Agreement (“IA”) says:

*“Because the **effectiveness of the NBHCP’S Operating Conservation Program is based on City limiting total development to 8,050 acres within the City’s Permit Area and Sutter limiting total development to 7,467 acres . . . approval by either City or Sutter of future urban development . . . outside of their respective Permit Areas would constitute a significant departure** from the Plan’s Operating Conservation Program. “ .. (IA §3.1.1(a),) [emphasis added].)*

Similar statements are in the NBHCP, pp. 1-2, 1-3, 1-5, 1-6; NBHCP FEIR/EIS pp. 3-20, 3-21; USFWS Findings, pp 6-7; and the USFWS Biological Opinion for the NBHCP, pp. 7, 11, 12.

Development by proposed Natomas Vision would be outside of the 17,500 acres covered by

**Attachment Two of FOSH Response to Revised NOP 1/18/18**

the Permit Areas of the City of Sacramento, Sutter County, and MetroAirPark (which is covered by the NBHCP).

In upholding the 2003 NBHCP, the Federal District Court, Judge David Levi presiding, emphasized that the NBHCP permitted acreage was intended to limit the area of allowable development in the Natomas Basin to 17,500 acres:

[T]he Service and those seeking an ITP in the future will face an uphill battle if they attempt to argue that additional development in the Basin beyond 17,500 acres would not result in jeopardy. The NBHCP, BioOp, EIR/EIS, and Findings and Recommendations are ***all predicated on the assumption that development in the Basin will be limited to 17,500 acres and the remaining lands will remain in agricultural use.*** (*National Wildlife Federation v. Norton* (2005) 2005 U.S. Lexis 33768, p.12 fn 13. (*Emp. added.*))

In 2008, the City and LAFCo approved the City's annexation and zoning for development of 573-acre Greenbriar project outside of the NBHCP permit area, on the condition that the Greenbriar developers provide a satisfactory "Effects Analysis" and mitigation land in the Basin at the ratio of 1 acre of mitigation for each acre developed, and obtain approval by USFWS and CDFW of a "Greenbriar HCP". To date, the Greenbriar developers have not produced a satisfactory environmental "Effects Analysis" and Greenbriar HCP that USFWS and CDFG can approve.

Put simply, urban development of the Natomas Vision North Precinct area would eliminate agricultural land which the NBHCP now relies upon in part to retain viable populations of Giant Garter Snake and Swainson Hawks in the Basin. Such development would make it virtually impossible for the Natomas Basin Conservancy to acquire mitigation land in the Basin for remaining development authorized in the NBHCP Permit Areas but not yet built or mitigated.

Proceeding with the Natomas North Precinct Plan will inevitably put the County into a public confrontation with USFWS and CDFW, and possibly the City of Sacramento and Sutter County, which strongly want to retain the viability of the NBHCP Conservation Program that facilitates their development within their NBHCP Permit areas.

We respectfully suggest that the Board first determine if it is in County's best interest to proceed down that pathway of inevitable contention before it considers further steps towards approval of North Precinct Plan proposal.

This Application should go no further until the Applicant first presents a habitat conservation program under the Federal and State Endangered Species Acts that is satisfactory to USFWS, CDFW, the Natomas Basin Conservancy and the NBHCP Permittees (City, Sutter County, MetroAirPark.) This may or may not be feasible.

**3. Applicants Should First Present A Realistic Plan For Drainage And Protection From Stormwater and Internal Flooding.**

In 2000, the County prepared a DEIR for proposed USB expansion covering the identical area. Ensign and Buckley, engineers, who engineered the North Natomas Drainage Plan and are very familiar with Basin hydrology, prepared the drainage analysis for the 2000 County DEIR

The Ensign and Buckley report, “*Drainage Analysis for North Natomas Long-Term Planning Project*” disclosed that approximately 3,400 acres east of Hwy 99 between Elkhorn Blvd and Sutter County line is an internal 100-year flood plain, fed by stormwater and run-off from the east, west, and north, flowing generally southward from within Sutter County, paralleling Hwy 99, via the Natomas East Drainage Canal, through the City's existing developed North and South Natomas areas, and is pumped into the Sacramento River. See Ensign and Buckley report, *supra*, Figure 4, "100-year Floodplain – 1999," (diagram) attached to FOSH’s previous letter of November 17, 2016, emailed to all Supervisors.

Due to low soil permeability (desirable for rice farming) stormwater remains at, or close to, the surface. During major storm events, or local flooding, water also flows into the Basin through the Sanky Gap, which is a flood control measure to protect the long-established Robla, Elverta, and Rio Linda communities east of the Basin. Because the water table is very close to the surface during the winter and early spring during normal years, deep detention basins are not practical in that area of the Basin.

Ensign and Buckley recommended a drainage system consisting of a shallow floodway, 2000 - 2500 feet in width, surrounded by levees, running from the Sutter County line southward to Elkhorn Blvd, connecting with the East Drainage Canal, plus detention basins totaling 141 acres. See Figures 5 and 6 of the Ensign and Buckley report, *supra*. This would remove substantial land area from potential development, be very expensive, and complicate planning and costs of other infrastructure (roads, sewers, water, etc.).

The Ensign and Buckley plan did not account for the additional drainage and flood control facilities that would be needed to serve development west of Hwy 99 or south of Metro Air Park (in former Upper American Lake), nor for the drainage and stormwater run-off that would be generated by the subsequently-approved but as-yet unbuilt Sutter Pointe development, much of which drains southward through the proposed North Precinct Plan area and City’s North Natomas Community Plan area.

In response to Ensign and Buckley, landowners proposed a much more optimistic drainage plan, similar to that depicted on the current Application, which appears inadequate for extended major storm events and is unlikely to pass muster with Reclamation District 1000, SAFCA, the Corps of Engineers, or the City of Sacramento (the downstream recipient of Natomas North Precinct Plan stormwater drainage). The maps in the most recent Application depicts flood control and drainage facilities that appear to be much less than proposed by the Ensign and Buckley report. There is no

**Attachment Two of FOSH Response to Revised NOP 1/18/18**

indication in the Staff report that SAFCA, RD1000, the Corps, or the City of Sacramento have been consulted on the drainage and flood control plan shown in the current Application materials..

In 2000, the USFWS and RD 1000 firmly rejected the suggestion that the floodway and detention basins be used as mitigation habitat for Giant Garter Snakes, due to incompatibility between wildlife habitat needs and the flood control need to remove vegetation and silt to avoid impeding drainage.

This Application should go no further until the Applicant presents a detailed drainage plan, including adequate financing, that has been peer reviewed and satisfies the County, City of Sacramento, SAFCA, RD1000, the Corps of Engineers, and FEMA. Potential urban run-off from much of Sutter County's Sutter Pointe Specific Plan, immediately north of the proposed North Precinct Plan, would run southward through "North Precinct" and thus would need to be accommodated. Such a plan is possible but may be infeasible due to cost, in which event this Application should proceed no further.

**4. This Application should proceed no further until there is 200-year flood protection for the Basin and for the project area.**

There is not yet 100-year or 200-year flood protection for Natomas Basin. FEMA's A-99 flood insurance rating is not flood protection.

Congress has authorized expenditure of a sum deemed adequate to complete the Natomas levee improvement project, but it has not been appropriated, and consequently is presently not available. It is not known when the money will be fully appropriated, whether it will actually be sufficient to complete the Natomas perimeter levee improvement project, or when the Natomas perimeter levee project will be completed. Previous phases of Natomas levee construction proved to be vastly more expensive than projected, and the estimated date of completion has been repeatedly extended.

This Application should proceed no further until the Natomas perimeter levee project is actually completed and certified by FEMA and the Corps of Engineers as providing a minimum of 200-year flood protection. It would be grossly irresponsible for the Supervisors to permit new urban development in the Natomas Basin without the 200-year level of flood protection required by California law.

The Application promises to provide 100-year protection against flooding in the internal flood basin. In fact California law will require 200-year protection before development can proceed. (Government Code §§ 65865.5(a)(b), 65962(a), (b), and 66474.5(a).)

**5. Water supply**

The Application proposes possible conjunctive use of groundwater and surface water for potable water supply. The drawback is that Natomas groundwater contains arsenic concentrations greater than allowable under recent EPA standards, and also tastes bad.

**Attachment Two of FOSH Response to Revised NOP 1/18/18**

That is why County Airport built facilities to transport clean City water to International Airport and discontinued using Natomas well water for human consumption.

There are processes which may eliminate arsenic from well water, but it is costly. The presence of arsenic and other mineral contaminants in raw wellwater would need to be disclosed to potential future homebuyers.

This application should not proceed forward until there is determination that there is an adequate supply of surface water available to serve proposed urban development.

Thank you for reviewing these comments.

Respectfully submitted

A handwritten signature in black ink, appearing to read "James P. Pachl". The signature is written in a cursive style with a large initial "J" and "P".

James P. Pachl,  
for Friends of the Swainson's Hawk



8867 Bluff Lane  
Fair Oaks, CA 95628  
(916) 844-7515  
swainsonshawk@sbcglobal.net

November 16, 2015

TO: Sacramento County Board of Supervisors, and others:      VIA: email

RE: Natomas Vision, Board Agenda, 11/17/15, 2 pm,

Honorable Supervisors,

Following are the comments of Friends of the Swainson's Hawk. We are unable to attend the Board meeting, but ask that you consider these comments at your meeting.

Board consideration of a proposed funding agreement and contract for an EIR for the Natomas Vision North Precinct proposal to expand the USB in Natomas Basin is premature and should be postponed until after the December 15 Board meeting at which the Board will discuss the overriding question of whether County should proceed forward with planning and environmental review for expanding the USB.

There are certain serious issues, unique to Natomas Basin, which should be addressed and resolved at the onset before the County proceeds with further planning.

**1. Conflict with the Conservation Program of the Natomas Basin HCP**

The Natomas Vision - North Precinct proposal conflicts with the Conservation Program of the Natomas Basin Habitat Conservation Plan, which could potentially put the County in a public confrontation with US Fish and Wildlife Service ("USFWS") and California Department of Fish and Wildlife ("CDFW") with a strong likelihood of Federal and State litigation.

The 2003 NBHCP and its Implementing Agreement ("IA") was executed by the City of Sacramento, County of Sutter, US Fish and Wildlife Service ("USFWS"), California Department of Fish and Wildlife and the Natomas Basin Conservancy (which administers the NBHCP Conservation Program.) The purpose of the NBHCP is to conserve the biological values of the Natomas Basin while allowing limited urban development. The NBHCP conservation measures focus upon maintaining the remaining populations of the Giant Garter Snake ("GGS") and the Swainson's Hawk, in the Natomas Basin. For that reason, the NBHCP requires that all land acquired for mitigation must be located within the Natomas Basin.

The 2003 NBHCP Implementing Agreement ("IA") says:

Attachment Three of FOSH Response to Revised NOP 1/18/18

“Because the *effectiveness of the NBHCP’S Operating Conservation Program is based on City limiting total development to 8,050 acres within the City’s Permit Area and Sutter limiting total development to 7,467 acres . . . approval by either City or Sutter of future urban development . . . outside of their respective Permit Areas would constitute a significant departure* from the Plan’s Operating Conservation Program. “ .. (IA §3.1.1(a),.) [emphasis added].)

Similar statements are in the NBHCP, pp. 1-2, 1-3, 1-5, 1-6; NBHCP FEIR/EIS pp. 3-20, 3-21; USFWS Findings, pp 6-7; and the USFWS Biological Opinion for the NBHCP, pp. 7, 11, 12.

Development by proposed Natomas Vision would be outside of the 17,500 acres covered by the Permit Areas of the City of Sacramento, Sutter County, and MetroAirPark (which is covered by the NBHCP).

In upholding the 2003 NBHCP, the Federal District Court, Judge David Levi presiding, emphasized that the NBHCP permitted acreage was intended to limit the area of allowable development in the Natomas Basin to 17,500 acres:

[T]he Service and those seeking an ITP in the future will face an uphill battle if they attempt to argue that additional development in the Basin beyond 17,500 acres would not result in jeopardy. The NBHCP, BioOp, EIR/EIS, and Findings and Recommendations are *all predicated on the assumption that development in the Basin will be limited to 17,500 acres and the remaining lands will remain in agricultural use.* (*National Wildlife Federation v. Norton* (2005) 2005 U.S. Lexis 33768, p.12 fn 13. (*Emp. added.*))

In 2008, the City and LAFCo approved the annexation and zoning for development of 573-acre Greenbriar project outside of the NBHCP permit area, on the condition that the Greenbriar developers provide mitigation land in the Basin at the ratio of 1 acre of mitigation for each acre developed, and obtain approval by USFWS and CDFW of a “Greenbriar HCP”. To date, the Greenbriar developers have been unable to formulate an environmental “Effects Analysis” and Greenbriar HCP that USFWS and CDFG can approve.

Put simply, urban development of the Natomas Vision North Precinct area would eliminate agricultural land which the NBHCP now relies upon in part to retain viable populations of Giant Garter Snake and Swainson Hawks in the Basin, and would make it virtually impossible for the Natomas Basin Conservancy to acquire mitigation land in the Basin for remaining development authorized in the NBHCP Permit Areas but not yet built or mitigated.

Proceeding with Natomas Vision will inevitably put the County into a public confrontation with USFWS and CDFW, and possibly the City of Sacramento and Sutter

County, which strongly want to retain the viability of the NBHCP Conservation Program that facilitates their development within the NBHCP Permit areas.

We respectfully suggest that the Board first determine if it is in County's best interest to proceed down that pathway of inevitable contention before it considers further steps towards approval of the Natomas Vision proposal.

This Application should go no further until the Applicant first presents a habitat conservation program under the Federal and State Endangered Species Acts that is satisfactory to USFWS, CDFW, the Natomas Basin Conservancy and the NBHCP Permittees (City, Sutter County, MetroAirPark.) This may or may not be feasible.

## **2. Applicants Should First Present A Realistic Plan For Drainage And Protection From Stormwater and Internal Flooding.**

In 2000, the County prepared a DEIR for proposed USB expansion covering the identical area. Ensign and Buckley, engineers, who engineered the North Natomas Drainage Plan and are very familiar with Basin hydrology, prepared the drainage analysis for the 2000 County DEIR.

The Ensign and Buckley report, "*Drainage Analysis for North Natomas Long-Term Planning Project*" disclosed that approximately 3,400 acres east of Hwy 99 between Elkhorn Blvd and Sutter County line is an internal 100-year flood plain, fed by stormwater and run-off from the east, west, and north, which flows southward from within Sutter County, paralleling Hwy 99, via the Natomas East Drainage Canal, through the City's existing developed North and South Natomas areas, and is pumped into the Sacramento River. See Ensign and Buckley report, *supra*, Figure 4, "100-year Floodplain - 1999." ATTACHED.

Due to low soil permeability (desirable for rice farming) stormwater remains at, or close to, the surface. During major storm events, or local flooding, water flows into the Basin through the Sanky Gap, which is a flood control measure necessary to protect the long-established Robla, Elverta, and Rio Linda communities on higher ground east of the Basin. Because the water table is very close to the surface during the winter and early spring, deep detention basins are not practical in that area of the Basin.

Ensign and Buckley recommended a drainage system consisting of a shallow floodway, 2000 - 2500 feet in width, surrounded by levees, running from the Sutter County line southward to Elkhorn Blvd, connecting with the East Drainage Canal, plus detention basins totaling 141 acres. See Figures 5 and 6 of the ATTACHED Ensign and Buckley report, *supra*. This would remove substantial land area from potential development, be very expensive, and complicate planning and costs of other infrastructure (roads, sewers, water, etc.).

The Ensign and Buckley plan did not account for the additional drainage and flood control facilities that would be needed to serve Joint Vision development west of Hwy 99

**Attachment Three of FOSH Response to Revised NOP 1/18/18**

or south of Metro Air Park (in former Upper American Lake), nor for the drainage and stormwater run-off that would be generated by the approved but as-yet unbuilt Sutter Pointe development, much of which drains southward through the Natomas Vision and North Natomas Community Plan areas.

In response, landowners proposed a much more optimistic drainage plan, similar that depicted on the current Application, which appears inadequate for major storm events and is unlikely to pass muster with Reclamation District 1000, SAFCA, the Corps of Engineers, or the City of Sacramento (the downstream recipient of Natomas Vision's stormwater drainage). The maps in the most recent Application depicts flood control and drainage facilities that appear to be much less than proposed by the Ensign and Buckley report.

In 2000, the USFWS and RD 1000 firmly rejected the suggestion that the floodway and detention basins be used as mitigation habitat for Giant Garter Snakes, due to incompatibility between wildlife habitat needs and the need to remove vegetation and silt to avoid impeding drainage.

This Application should go no further until the Applicant presents a detailed drainage plan, including adequate financing, that has been peer reviewed and satisfies the County, City of Sacramento, SAFCA, RD1000, the Corps of Engineers, and FEMA. Such a plan is possible but may be infeasible due to cost, in which event the Application should proceed no further.

**3. This Application should proceed no further until there is 200-year flood protection for the Basin.**

There is not yet 100-year or 200-year flood protection for Natomas Basin. FEMA's A-99 flood insurance rating is not flood protection.

Congress has authorized expenditure of a certain amount of money deemed adequate to finish the Natomas levee improvement project, but it has not been appropriated, and consequently is presently not available. It is not known when the money will be fully appropriated, whether it will actually be sufficient to complete the levee improvement project, or when the project be completed. Previous phases of levee construction were vastly more expensive than projected, and the estimated date of completion has been repeatedly extended.

This Application should proceed no further until the levee project is actually completed and certified by FEMA and the Corps of Engineers as providing a minimum of 200-year flood protection.

Thank you for reviewing these comments.

**Attachment Three of FOSH Response to Revised NOP 1/18/18**

Respectfully submitted

James P. Pachl, for Friends of the Swainson's Hawk

ATTACHMENT: Ensign and Buckley, 2000, "*Drainage Analysis for North Natomas Long-Term Planning Project*"

TEL: (916) 971-3961  
FAX: (916) 971-0578

ENSIGN & BUCKLEY  
CONSULTING ENGINEERS



February 1, 2000

Mr. Dan Meier  
Department of Environmental Review and Assessment  
Sacramento County  
827 7<sup>th</sup> Street, Room 220  
Sacramento, California 95814

Subject: Drainage Analysis for North Natomas Long Term Planning Project

Dear Dan:

Ensign & Buckley Consulting Engineers is pleased to submit four (4) copies of the final report for the Drainage Analysis for North Natomas Long Term Planning Project. One of the four copies is unbound and a CD of the text, tables, and figures are enclosed for your use.

We appreciated working with you and George Booth on this study.

Sincerely,

Jack Buckley

JJB:mjm  
Enclosure

cc: J.N. Clifton, Reclamation District No. 1000 w/encl

3327 LONGVIEW DRIVE • NORTH HIGHLANDS, CA 95660



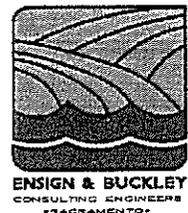
**County of Sacramento,  
California, U.S.A.**

## **Drainage Analysis for North Natomas Long Term Planning Project**

*Prepared for  
Sacramento County  
827 7th Street, Room 301  
Sacramento, California 95814*

*Prepared by  
Ensign & Buckley Consulting Engineers  
3327 Longview Drive, Suite 100  
North Highlands, California 95660*

**January 31, 2000**



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**Drainage Analysis for  
North Natomas Long Term Planning Project**

*Prepared for  
Sacramento County  
827 7th Street, Room 301  
Sacramento, California 95814*

*Prepared by  
Ensign & Buckley Consulting Engineers  
3327 Longview Drive, Suite 100  
North Highlands, California 95660*

**January 31, 2000**

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**Drainage Analysis  
for  
North Natomas Long Term Planning Project**

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# Drainage Analysis for North Natomas Long Term Planning Project

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## INTRODUCTION

This report provides drainage information for the North Natomas Long Term Planning Project which consists of a threshold decision by Sacramento County (County) on whether to urbanize 6,519± acres in the North Natomas area. The project study area is bounded by the Sacramento County line on the north, Highway 99 on the west, Elkhorn Boulevard on the south, and the Natomas East Main Drainage Canal (NEMDC) on the east (Figure 1).

The purpose of this report is to provide information on: the potential for floodplain reclamation under a conceptual drainage plan provided by the project study area property owners; flood risks to people and property associated with ultimate urbanization of the project study area; other options for providing drainage to the project study area; and, requirements of a Drainage Master Plan to be provided prior to approval of any specific development plan for the project study area.

It is not possible to determine the specific hydrologic and flooding impacts of on-site development without a specific development proposal and drainage plan for the site. The current project, which involves a threshold decision on whether to ultimately urbanize the project study area, does not include a specific development plan or drainage plan that would allow a definitive assessment of drainage/flooding impacts. However, a drainage analysis is provided in this report based on a conceptual drainage plan provided by the project study area property owners. This conceptual drainage plan includes the following general elements:

- ▶ Channel Excavation
- ▶ Levees
- ▶ Pump Stations
- ▶ Detention Basins
- ▶ Hydraulic Structures
- ▶ Erosion Control Protection

This qualitative analysis has been conducted to demonstrate the potential for reclaiming the existing on-site floodplain while minimizing offsite drainage/flooding impacts. In addition, there is a discussion of other known options for providing drainage to the project study area. Additional options may be available at the time that development is contemplated at the project study area.

Pursuant to County policies, a Drainage Master Plan will be required at the time that specific development entitlements are requested. This Master Drainage Plan will be reviewed and approved by the County and Reclamation District No. 1000 (RD1000). RD1000 is the local reclamation district that provides drainage and flood control in the project study area. Existing County policies and RD1000 requirements will require demonstration that there will be no increase in offsite flood surface elevations.

This report is presented under the following major headings:

- ▶ Historical Flooding Conditions
- ▶ Natomas Basin Level of Protection

- ▶ Existing Flooding Conditions
- ▶ Conceptual Drainage Plan
- ▶ RD1000 Comments
- ▶ Sacramento County and RD1000 Agreement
- ▶ Alternative Project Sites
- ▶ Summary

## HISTORICAL FLOODING CONDITIONS

A good summary of flooding issues is presented in the “Drainage and Flood Control” chapter of the Supplement to the 1986 North Natomas Community Plan EIR (March 1993) prepared by the City of Sacramento. That summary includes sections on background, 1986 flood, federal regulatory and legislative response, local response, American River Watershed Investigation, AR zone, and revised local strategy. This summary is included in Appendix A.

The 55,000 acre Natomas Basin shown on Figure 1 was a floodplain area known as the American Basin prior to the reclamation of the basin. High stages in the lower American River and the Sacramento River would spill into the American Basin. There were two significant overbank events in 1907 and 1909 that inundated the entire basin from the Sacramento River east to the location where the NEMDC is now located. In the 1910-1915 period a large reclamation project was initiated. A large canal with levees on both sides called the Cross Canal, was constructed from the Sacramento River in a northeasterly direction to accommodate drainage coming from the east and serves as the northern boundary of RD1000. Levees were constructed around, essentially, all of the perimeter of the District to provide protection against flooding from external sources (see Figure 1). Two pump stations, Numbers 1 and 2, were constructed along the perimeter of the Natomas Basin during this period to handle interior drainage. Those two pump stations are still in use. Canals were excavated to convey storm runoff to these two pump stations. A review of a 1921 map indicates that the original alignment of the drains has not changed significantly.

In February 1986 there was a major flood event in the Sacramento area with many areas receiving more than 10 inches of rainfall over an eight-day period. This is equivalent to approximately a 100-year precipitation event based on the National Weather Service gage located in downtown Sacramento. The Natomas Basin received six to nine inches of rainfall during that same period with overbank flooding of approximately 13,000 acres (see Figure 2). All available RD1000 pump units within all seven (7) RD1000 pump stations were on continuously, for a period of approximately eight (8) days. The volume of runoff for that event was estimated to be 34,000 acre-feet.

In 1986 the first recorded spill into the basin was at Sankey Road located in the northeast corner of the basin. The levee road at Sankey Road is depressed and acts like a weir when flood stages east of the Pleasant Grove Canal are high. The estimated maximum discharge rate at the spill location was 1,360 cfs with an approximate spill volume of 3,500 acre-feet. In 1996 the Sankey Road spill location was designed and reconstructed to the same elevation profile to safely pass the spills into the Natomas Basin without adversely impacting upstream structures and without failure of the levee section. In early January 1997 a second spill occurred with a maximum depth of 6" – 9". The spill was relatively minor and no discharge rate or volume was estimated.

## **NATOMAS BASIN LEVEL OF PROTECTION**

During the 1986 event portions of the levees on the east bank of the Sacramento River along Garden Highway were sloughing due to seepage on the landside slopes and emergency action was required to keep the levees from failing. The Corps of Engineers followed up with remedial emergency construction including an earth berm, on the landside, with internal drainage to stabilize the existing landside slopes. In the period 1986 – 1992, the Corps of Engineers completed additional studies and construction along the Sacramento River as part of the Sacramento Urban Area levee Reconstruction Project. Additional landside berms were constructed along the Garden Highway levees. A deep slurry wall seepage barrier was also constructed along the centerline of Garden Highway where space on the landside of the levees was limited. In addition, a reach along the South levee of the Cross Canal was rehabilitated for stability reasons.

During the last five or six years the Sacramento Area Flood Control Agency (SAFCA), as part of their Natomas Area Flood Control Improvements Project, has made levee improvements along the northern and eastern perimeter of the Natomas Basin. These locations include the south levee of the Cross Canal, the west levee of the Pleasant Grove Creek Canal, and the west levee of the Natomas East Main Drainage Canal (NEMDC south of the mouth of Dry Creek). Levees were raised on the NEMDC from the American River to the new pump station located at the mouth of Dry Creek. The pump station reduces the flood stages on NEMDC north of the station to provide improved freeboard to existing levees in that reach. In addition, the Sankey Road overflow location in Pleasant Grove was designed and constructed to safely pass the spills into the basin. All of these perimeter levees were certified by the Corps of Engineers to provide protection against the 100-year event. This information was submitted to FEMA in 1996 and FEMA modified the residual interior 100-year Natomas Basin floodplain recognizing that the perimeter levees provide at least one-hundred year level of protection.

In May 1997, a request for a Conditional Letter of Map Revision (CLOMR) was submitted to FEMA for the 7,000 acre NNCDP to allow construction of interior levees along the East Drainage Canal, West Drainage Canal, and Main Drainage Canal. Approval from FEMA was received in December of 1997, and construction of Phase I of the project facilities was completed in 1998. Final revised FEMA maps were issued in April 1999 to reflect the new interior levee protection. The NNCDP levees were designed to provide a minimum of a 200-year level of protection to the protected area.

Currently the Corps of Engineers is constructing additional slurry walls for a reach along the Garden Highway on the southern boundary of the Natomas Basin. The Corps is also working on the design and preparation of construction drawings to raise approximately 11 miles of Garden Highway levees and five (5) miles of cross canal levees to improve the level of protection to the Natomas Basin above the 100-year level.

## **EXISTING FLOODING CONDITIONS**

As a result of the major flooding event in 1986, and increasing pressure for additional development close to downstream Sacramento, RD1000 wanted to better understand the flooding conditions within the Natomas Basin. In 1990, RD1000 started the development of a basin wide model that would allow the District to evaluate hydraulic impacts of new developments. The hydraulic model was calibrated using the available information for the February 1986 event. The estimated February 1986 floodplain is shown in Figure 2. That model was modified to reflect current 1997 existing pumping capacities for RD1000 and City of Sacramento (City) pumping plants, and runoff resulting

from a 10-day 100-year precipitation pattern in accordance with the City/County Hydrology Manual. (See Figure 3). The model has been very useful during the planning and implementation stages of the 7,000 acre NNCDP and the 2,000 acre Metro Air Park development within Sacramento County. The 1999 100-year floodplain shown in Figure 4 is the post NNCDP floodplain which is exactly the same floodplain as the 1997 existing floodplain north of Elkhorn Boulevard. The 1999 100-year floodplain and water surface profile will serve as the basis for comparison with the conceptual drainage plan water surface profile.

## CONCEPTUAL DRAINAGE PLAN

The conceptual drainage plan is based on information provided by study area landowners. The general concept behind this plan is to excavate sufficient material from the new floodplain channel within the proposed new levees to provide equivalent storage to the existing conditions overbank storage. The following information was received from study area property owners to describe the proposed plan:

1. A plan view at 1" = 1,000' (approx.) labeled "Revised 100-Year Floodway and Detention Analysis," dated January 8, 1998. This map shows the approximate existing floodplain, proposed floodplain, and the revised East Drainage Canal alignment. The East Drainage Canal bisects the conceptual plan area and a portion of the alignment between Elverta Road and Highway 99 was revised to accommodate the plan.
2. An 8 ½" x 11" sheet labeled "Basic Floodway Concept" with a typical cross-section showed the proposed configuration of excavated earthwork and new levee locations. This sheet also contains a table showing 100-year flood elevations, drainage channel invert elevations, floodway bottom elevations, existing "floodway" widths and proposed "floodway" widths for each section.

This conceptual plan was analyzed to illustrate the potential for reclaiming the on-site 100-year floodplain while meeting County and RD1000 requirements. Figure 5 shows the new levees and floodway superimposed over the existing East Drainage Canal and 100-year floodplain. The project area on the landside of the proposed levee was separated into six (6) reasonable drainage subbasins with approximate locations for the on-site detention basins and pump stations shown for each subbasin.

The changes required to the initial conceptual proposed plan are some additional levees and an offsite detention basin and pump station. The additions of levees along the Sacramento County line are required to keep upstream overbank flows from outflanking the new floodway levees. The offsite detention basin and pump station are required to control the runoff from 2,300 acres, located west of Highway 99, that was cutoff or impeded by the conceptual plan facilities.

The basin wide 1999 existing storm model was modified to reflect the conceptual plan layout and facilities as shown on figure 6. Drainage area changes, realigned East Drainage Canal, and proposed facilities within the project area were incorporated into a "post-plan" model. The "post-plan" hydraulic results of project alternative schemes will be compared to the 1999 "existing conditions" hydraulic results to estimate the hydraulic impacts due to the post-plan facilities.

RD1000 requirements, existing ground water conditions, study assumptions, alternatives and results, and project constraints are described in the following sections.

### **RD1000 Requirements**

RD1000 was established in 1911 to be operated under the provisions of the California Reclamation District Act. RD1000 is a single purpose special district formed for the purpose of flood control, drainage, and reclamation of all lands within its boundaries, including the construction, maintenance and operation of the flood control and drainage facilities.

RD1000 reviews and approves only project development plans related to drainage and flood control facilities. Storm drains and conveyance facilities shall be provided to safely pass the development runoff into the existing RD1000 drainage system. RD1000 will maintain and operate the existing and enhanced drainage system and pumping stations to handle the runoff from the proposed development. If new drainage channels and pump stations are included within new development areas, the District will operate the system following construction, unless special arrangements have been made with the appropriate municipality.

The District requires that an application for a project be completed along with submitting an initial deposit to cover District costs to review project plans and documents. If the initial deposit is not sufficient to complete the required review, an additional deposit will be required.

RD1000 has adopted the following policies pertinent to proposed developments within the Natomas Basin regarding development drainage, levees, easements, encroachment, and fill in the floodplain.

Development Drainage – Each development shall not increase flood risk to anyone upstream or downstream of their location. Each development shall provide appropriately sized detention facilities, storm drainage systems, or grading plans, to reduce the 2-year through the 100-year peak discharges after development to no more than the corresponding peak discharges for existing conditions. All impacts due to increased runoff volumes shall be mitigated.

Levees – Generally, levees will not be allowed to be constructed, in order to reclaim floodplain for new development. However, if levee construction is approved to reclaim floodplain for new development, 200-year flood protection is required to the satisfaction of the District.

Easements – Upon development of a site, a floodway easement will be required to be dedicated to RD1000 or to the appropriate agency over the area of a watercourse necessary to pass the peak 100-year flow at a designated elevation.

Encroachment – Development shall not cause an offsite increase in the 100-year water surface elevation due to encroachment within the floodplain unless a floodplain easement is obtained for the impacted offsite floodplain area.

Fill in the Floodplain – There will be no net loss of storage within the 100-year floodplain. In-kind, replacement of lost storage will be required.

## Existing Ground Water Conditions

The ground water levels within the Natomas Basin vary significantly from year to year and month to month. Records are available for two wells that are located along Elverta Road (see Figure 6) within the project area and within the current existing 100-year floodplain. The following table summarizes the available information for these two wells. Note that the minimum to maximum ground water elevations ranges from 1.5 feet to 13.4 feet with a medium range of approximately 7 feet to 10 feet. The date of the California Department of Water Resources measurements, and the water surface elevations are contained in Appendix B. An understanding of the anticipated ground water elevation is important because a deeper and wider channel excavation may be below the anticipated ground water elevation, which could cause significant increases in the volume of the water pumped by RD1000 and the County during the year.

**Table No. 1  
Well Information**

Well Number	Period of	Ground Surface	Water Surface Elevations		
			Min.	Max.	Median
			Feet, NGVD		
10N04E21B02M	5/90 - 10/97	16'	7.5'	12.5'	9.6'
10N04E23A01M	2/53 - 10/97	15'	1.5'	13.4'	7.4'

## Study Assumptions

Several assumptions were required to estimate the hydraulic impacts associated with the conceptual drainage. These assumptions are listed below:

- ▶ All of the conceptual plan areas on the landside of the proposed levees were urbanized.
- ▶ A 10-day storm event was used for pre- and post-project comparisons.
- ▶ Detention basins were sized and on-off pump settings were based on experience with the NNCDP.
- ▶ Peak pumped outflow from urbanized subbasins are based on 0.10 cfs/acre.
- ▶ Peak pumped outflow from offsite agricultural lands (2,300 acres) was 0.05 cfs/acre.

## Analysis Results

Several model runs were made to determine whether the proposed equivalent storage concept could be implemented with no negative hydraulic impact outside the project area. The submitted conceptual plan was evaluated to reflect the new excavated floodway and levees with no changes to the Elverta Road profile or bridge opening. There were negative impacts downstream from Elkhorn Boulevard. Additional 100-year runs were made until the hydraulic impacts were

negligible. The 100-year water surface profiles for the selected conceptual plan and the base condition (1998) are shown on Figure 7. The profiles start at RD1000 Plant No. 1 located at the downstream end of the Natomas Basin and are extended to 1,600 feet above the Sacramento-Sutter County line along the East Drainage Canal. These two profiles were plotted to be able to graphically show the impacts upstream and downstream due to the conceptual plan.

Table 2 summarizes the hydraulic impacts for the selected conceptual plan. Results for the 100-, 200-, and 500-year events are presented. Key locations along the profiles were selected to show the pre- and post-project elevations and the resulting impacts. Note that the shaded values indicate those locations where there were hydraulic impacts downstream from Elkhorn Boulevard and upstream from the county line. With the levees at Elkhorn (upstream and downstream) at elevation 17.0, there would still be 2.5 feet of freeboard remaining at that location for the 500-year event.

The selected conceptual reclamation plan meets the Sacramento County and RD1000 technical requirements. This illustrative plan reclaims approximately 2,200 acres of a total floodplain area within the plan area of 3,400 acres<sup>1</sup>. The existing overbank storage within the plan area is 7,700 acre-feet. This compares with the post plan storage contained within the new levees of 6,550 acre-feet and combined with on-site detention basin storage of 1,000 acre-feet, the net loss is only 150 acre-feet.

The plan facilities include an excavated channel, levees, pump stations, detention basins, and hydraulic structures. The new excavated channel between Elkhorn Boulevard and the county line is approximately 4.2 miles long. The channel width used between Elkhorn Boulevard and Elverta Road was about 2,000 feet and between Elverta Road and the county line was 2,500 feet. The estimated floodplain excavation (with a depth of 3' – 4') was approximately 6.6 million cubic yards (CY). Approximately 11 miles of levees, with heights ranging from 4 feet to 6 feet are included in this plan. The seven pump stations have capacities ranging from 60 cfs to 102 cfs.

Approximately 140 acres of land is required for the six (6) on-site detention basins with 100-year peak storage values totaling 1,000 acre-feet. Two hydraulic structures are included in the plan: a drop structure at the county line and a box culvert through the new levee and Elverta Road. The drop structure is 2,500 feet long, with an approximate height of 4 feet. This structure was included to safely drop the water to the new floodplain bench level. A double 6-foot x 5.6-foot reinforced concrete box culvert with a length of approximately 140 feet serves to restrict the flood flows to downstream areas and creates additional storage upstream of Elverta Road. Both hydraulic structures will require erosion control protection.

### **Conceptual Development Plan Constraints**

During the analysis of the conceptual drainage plan, several items turned up that would need to be addressed in a Master Drainage Plan required at the time of development entitlements. These items are noted below:

- ▶ Additional Ground Water Pumping
- ▶ Maintenance of Flood Control Facilities
- ▶ Maintenance of Interim Water Deliveries and Drainage
- ▶ Maintenance of Drainage West of Project Area
- ▶ Stability of Everta Road Bridge

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<sup>1</sup> All values reflect pre-and post-plan 100-year, 10-day flooding conditions.

**Table 2**  
**North Natomas Long Term Planning Project**  
**Hydraulic Impacts**

Location	Approximate Profile Station Feet Upstream From Plant No. 1	Selected Conceptual Plan									
		100-Year			200-Year			500-Year			
		100-Year Base Condition Elevation, Feet/NGVD	2 - 6 x 5.6' Box Culvert Elevation, Feet/NGVD	Impacts Feet	200-Year Base Condition Elevation, Feet/NGVD	2 - 6 x 5.6' Box Culvert Elevation, Feet/NGVD	Impacts Feet	500-Year Base Condition Elevation, Feet/NGVD	2 - 6 x 5.6' Box Culvert Elevation, Feet/NGVD	Impacts Feet	
1. 1,000' Downstream from Del Paso Boulevard	20,200	11.35	10.30	-1.05	11.63	10.62	-1.01	11.98	11.05	-0.93	
2. 5,500' Downstream from Elkhorn Boulevard	26,000	12.84	12.57	-0.27	12.96	12.81	-0.15	13.19	13.37	0.18	
3. Just Downstream from Elkhorn Boulevard	31,500	13.47	13.52	0.05	13.52	13.77	0.25	13.68	14.44	0.76	
4. Just Upstream from Elkhorn Boulevard	31,700	13.47	13.52	0.05	13.53	13.77	0.24	13.68	14.43	0.75	
5. Plant 6 Intake Channel	37,000	13.76	13.52	-0.24	13.82	13.78	-0.04	14.0	14.43	0.43	
6. Just Downstream from Elverta Road	44,200	15.55	13.53	-2.02	15.62	13.78	-1.84	15.79	14.43	-1.36	
7. Just Upstream from Elverta	44,400	15.55	15.79	0.24	15.62	16.18	0.56	15.79	16.95	1.16	
8. County Line	57,000	16.46	15.80	-0.66	16.54	16.18	-0.36	16.75	16.95	0.20	
9. Highway 99	63,000	16.51	15.89	-0.62	16.60	16.25	-0.35	16.82	16.99	0.17	
10. East Drainage Canal Intersection with North Drainage Canal	69,500	17.15	16.83	-0.32	17.32	17.07	-0.25	17.62	17.55	-0.07	



Locations outside the project area with hydraulic impacts

Additional Ground Water Pumping – The new floodway bench invert elevations vary from 7 feet to 11 feet NGVD at Elkhorn Boulevard and the county line respectively. Based on the two (2) wells located within the floodplain at Elverta Road the maximum ground water elevations are in the range of 12 feet to 13 feet NGVD. Typically, ground water levels are highest in the spring and lowest in the fall. With excavated bench widths varying from 2,000 feet to 2,500 feet, there could be significant volumes of additional water that would normally be stored within the ground that will seep into the floodway section and, ultimately, be pumped out of the basin. Since power costs represent approximately 85 to 90 percent of the operation and maintenance costs for the seven (7) RD1000 pump stations, then this could be a significant cost increase to the District. There would also be increased pumping costs to the County for pumping this additional volume of water into the RD1000 East Drain.

Maintenance of Flood Control Facilities – This proposed plan is dependant upon the planned flood control facilities having the storage and conveyance capacity to handle the major storms when they hit the Natomas Basin. The new floodplain should be reviewed after every large event to determine whether significant debris and sediment has been deposited that would reduce the design floodplain storage and conveyance. The box culvert under Elverta Road is designed to restrict flow to allow the proposed plan to work. Mechanical trashracks or other facilities must be operable to maintain the box culvert openings to keep the water from rising above design levels upstream from Elverta Road. Possibly a redundant box culvert with closure gates could be constructed as insurance. An operation and maintenance fund should be set aside to facilitate critical maintenance work when it is required.

Maintenance of Interim Water Deliveries and Drainage - Following the construction of the levees defining the new floodway, there will likely be a transition period where large portions of the land will still be used for agricultural purposes. Water deliveries during the growing season and storm drainage during the rainy season will need to be maintained.

Maintenance of Drainage West of Project Area – The proposed facilities will impede the drainage for the 2,300 acres west of the project area. A pump station with a capacity of .05 cfs/acre or 115 cfs has been included in the plan to maintain flood stages to no more than those stages that would have been there without the project. A more detailed analysis may modify the pump station capacity to meet the specific needs of that area. This area is similar to the area just west and outside of the Natomas Comprehensive Drainage Plan and two (2) plants were carefully sized for that area to not be considered growth inducing structures.

Stability of Elverta Road Bridge – The existing Elverta Road Bridge has an opening of approximately 500 ft<sup>2</sup>. The bridge is supported by concrete piles. The double box culvert will have an opening of approximately 67 feet<sup>2</sup>. It appears like the box culvert could be constructed under the bridge without affecting the stability of the bridge structure. However, this is an item that should be considered. If the conceptual plan is implemented, it is likely that there will be a need to expand the width of Elverta Road. In that case, it may be more economical to remove the bridge, construct the box culvert, and widen the road at the same time the cross levee is constructed utilizing nearby fill material excavated from the floodplain inside the new levees.

## **OTHER OPTIONS**

Other possible options considered to provide flood protection to the project study area are listed and briefly described below.

- ▶ Canal system with double pumping
- ▶ Go east and pump into NEMDC
- ▶ Go south and add capacity to RD1000 Plant No.'s 1 and 8.

### **Canal System with Double Pumping**

This possible option would collect the drainage near Elverta Road and Highway 99 and convey the water to the Sacramento River. A large pump station with detention basins at Elverta Road and Highway 99 could lift the water into an east-west canal to divert the water to the Sacramento River. An improved Pump Station 2 or a new pump station would pump the water up into the Sacramento River. The canal could be as long as 5.5 - 6 miles. Improvements to Plant No. 4 on the Natomas Cross Canal could also be improved to be a component of an optimized system. A control structure may need to be constructed at Elkhorn Boulevard or Elverta Boulevard to restrict flows to ensure no hydraulic impacts occur downstream from Elkhorn Boulevard.

### **Go East and Pump Into NEMDC**

This option would deliver drainage via excavated channels from the East Drain east to one or more pump stations that would pump into the NEMDC. There are, at least, two significant hurdles to overcome with this option – mitigation for pumping additional volumes of storm drainage into NEMDC and resistance from property owners, located east of NEMDC, to any additional pumping into NEMDC. The new NEMDC pump station located just north of the mouth of Dry Creek, constructed by SAFCA, has a capacity of 1,000 cfs. No capacity was included for future upstream development. Therefore, additional capacity would have to be added to the new station by developers and all hydraulic impacts downstream of the station on NEMDC, Dry/Robla Creeks, Arcade Creek, and possibly even the American River would have to be mitigated. The mitigation becomes even more difficult because the levees on NEMDC (south of the pump station), Dry/Robla Creek, and Arcade Creek have recently been raised.

Property owners east of NEMDC were very vocal at SAFCA public meetings about the existing RD1000 pump stations (6 and 8), that pump into NEMDC, being a significant cause of the flooding along NEMDC (upstream of the pump station) and Dry/Robla Creeks.

### **Go South and Add Capacity to RD1000 Plant No.'s 1 and 8**

RD1000 Plant No.'s 1 and 8 are in the process of being expanded to mitigate for the lost floodplain storage due to the NNCDP. Plant No.'s 1 and 4 are 4 to 6 miles away from Elkhorn Boulevard. Levees have been constructed along the banks of the East Drain and Main Drain as part of the NNCDP and the lands required to widen the East Drain are not available. Even if the lands were available, this alternative would not be economical due to the extremely wide channels that would be required to even attempt to effectively pump down the stages at Elkhorn Boulevard from 4 to 6 miles away.

## RD1000 COMMENTS

RD1000 has reviewed the draft report and their comments are included in Appendix D. They listed their concerns about the following issues:

- ▶ Groundwater protocol
- ▶ Maintenance of Floodplain Bench
- ▶ Maintenance of new levees
- ▶ Operation and maintenance of the new pumping plants
- ▶ Method of collecting increased costs

These concerns are briefly summarized below:

### Groundwater Protocol

The District anticipates higher pumping costs due to the floodplain channel excavation to below normal groundwater levels. The District will require that the issue be addressed and provisions be made to reimburse them for pumping groundwater that would not have been pumped under existing conditions.

### Maintenance of the Floodplain Bench

The District is concerned that the new wide floodplain bench may be difficult to maintain due to soggy conditions. The District believes that without appropriate removal of silt deposits and new vegetation that the new floodplain will not perform as designed. This could cause the flood water to back up north of the County line to inundate properties not currently flooded which could cause inverse condemnation claims. Therefore, the District will require project proponents and the County to indemnify and hold the District harmless for these potential claims.

The District is also concerned that the floodplain bench would become wetland and/or critical habitat, thus, stifling maintenance.

The District does not maintain any existing floodplain areas beyond the existing canals and would not want to maintain the new floodplain bench for future development plans similar to the conceptual drainage plan.

### Maintenance of the New Levees

The District is concerned that the new levees located in high groundwater areas will be subject to toe stability problems requiring additional maintenance. If they are asked to maintain these levees, they expect to be compensated for these additional costs.

### Operation and Maintenance of New Pumping Plants

The District is only interested in the pump station located west of Highway 99. If they are asked to maintain that station, they would need to be reimbursed for that operation and expect that an indemnification/hold harmless agreement would be required.

## Method of Collecting Increased Costs

The District currently levies an O & M assessment on all properties within the District, but, has no authority to levy an assessment on a specific group of parcels. Therefore, a method to collect the increased costs associated with a plan similar to the conceptual drainage plan would have to be devised.

## **SACRAMENTO COUNTY – RD1000 AGREEMENT**

It is anticipated that if a project similar to the conceptual plan is going to be implemented, then an agreement between Sacramento County and RD1000 will likely be required. RD1000 is responsible for drainage and flood control within the 55,000 acre Natomas Basin. The County will be responsible for the operation and maintenance of on-site drainage facilities including detention basins and pumping stations that will carry storm water into RD1000's drainage system.

Therefore, coordination and cooperation during the planning, design, and construction of development on-site and RD1000's offsite drainage facilities are important to both entities. For example, an agreement between the City and RD1000 (Agreement No. 97-145) was developed to implement the 7,000 acre North Natomas Comprehensive Drainage Plan. The agreement was drafted and refined during the planning and preliminary design stages. The agreement contained two parts: Joint Community Facilities Agreement and a Facilities Protocol Agreement. These two parts are briefly described in the following sections and copies are included in Appendix C.

### **Joint Community Facilities Agreement**

The Joint Community Facilities Agreement between the City and RD1000 describes their “intent and their agreements with respect to the conduct of the proceedings for formation of the CFD (Community Facilities District), the implementation of the levy, collection of the special tax, the issuance of bonds and distribution of bond proceeds, and construction and ownership of the facilities<sup>2</sup>.”

### **Facilities Protocol Agreement**

The Facilities Protocol Agreement between the City and RD1000 was developed to cooperate in the design and construction of drainage facilities including on-site detention basins and “for a protocol for operation of such detention basins, which will be owned and operated by the City, for disposal of water into District’s area-wide drainage system<sup>3</sup>.”

## **ALTERNATIVE PROJECT SITES**

A smaller project area could be analyzed using the same approach as for the conceptual drainage plan. For example, the project area could be reduced to the area between Elkhorn Boulevard and Elverta Road (Alternative A). Then, a levee with a box culvert could be constructed similar to the levee and box culvert at Elverta Road that was included in the conceptual drainage plan. The east-

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<sup>2</sup> Joint Community Facilities Agreement between the City and RD1000, City Agreement No. 97-145, dated September 2, 1997, Page 2, Paragraph I.

<sup>3</sup> Facilities Protocol Agreement between the City and RD1000 – North Natomas Community Plan Area Facilities, City Agreement No. 97-145, dated September 2, 1997, Paragraph C.

west levee along the upstream side of Elverta would have to be extended along the full width of the existing floodplain. The East Drainage Canal would have to be realigned to be just north of the new levee parallel to Elverta Road to tie into the new culvert. The overbank drop structure would not be required since the new box culvert, with some downstream erosion control protection, would handle the changes in water surface required at Elverta Road. The excavated channel width and depth and the box culvert would be sized to not allow hydraulic impacts downstream from Elkhorn Boulevard and upstream from Elverta Road. If the Alternative A site was expanded to the north (Alternative B), the facilities required would be very similar to the conceptual plan except that the realigned East Drainage Canal would be slightly shortened. If the Alternative A site was expanded to the west (Alternative C), the only change in drainage facilities to add the 1,280 acres to Alternative A site would be the incremental costs for: a larger culvert under Highway 99; a larger drain parallel to and south of Elverta Road; a larger detention basin; and, a larger pump station capacity. These increased facilities and costs would be required to handle urban drainage rather than agricultural drainage from the west side of Highway 99. It is noted that drainage costs/acre developed for Alternative C (5,190 acres) would be less than those for Alternative B (5,690 acres). The overbank drop structure and the channel excavation upstream of Elverta for Alternative B would be significantly more costly than the incremental drainage costs to handle the urban runoff from the west of Highway 99 and carry it to the RD1000 system. Another advantage of Alternative C is that the 1,280 acres west of Highway 99 would remove a relatively minor amount of 100-year floodplain. Based on the information gained during the analysis of the conceptual drainage plan, and review of Alternatives A, B, and C, a drainage plan could be developed for smaller alternative areas that would meet County and RD1000 technical requirements.

## **SUMMARY**

The intent of this report was to provide information on the potential for reclaiming floodplain lands, flood risks to people and property within the urbanized reclaimed lands, other options to provide flood protection to the study area, and requirements of a Drainage Master Plan.

### **Potential for Reclaiming Floodplain Lands**

The concept of providing equivalent storage, in concert with levees, a hydraulic drop structure, and a box culvert was analyzed for a conceptual drainage plan to reclaim floodplain lands. The results indicate that there would be no significant hydraulic impacts for the 100-year event outside the project area due to this plan. The conceptual plan was also tested for the 200- and 500-year events. The hydraulic impacts of 0.25 foot and 0.8 foot, at a location just downstream from Elkhorn Boulevard for the 200- and 500-year events would still have residual levee freeboard of 3.2 feet and 2.6 feet respectively. These impacts would probably be acceptable to the County and RD1000 because they are very rare events and are still well contained within the levees. The maximum impact for the 500-year event at the Sacramento-Sutter County line was approximately 0.2 foot. This impact would have a residual levee freeboard of 2 feet, however, the reach upstream of the county line is not contained within levees and, therefore, this impact would not be acceptable to the County and RD1000. Minor refinement of components of the conceptual drainage plan would be required to eliminate any impacts.

## **Flood Risks**

There are two sources of potential flood risks to the conceptual plan study area – failure of Natomas Basin perimeter levees and failure of interior levees. The perimeter levees have been certified by the Corps of Engineers (COE) and approved by FEMA to provide protection against a 100-year event from external sources. The COE is currently constructing a slurry wall seepage barrier on Garden Highway and is working on the design and preparation of construction drawings to raise levees to improve the level of protection provided by the perimeter levees.

The interior levees included in the conceptual drainage plan provide protection against flooding from runoff inside the Natomas Basin. These interior levees are sized to meet FEMA freeboard requirements of a minimum of three (3) feet for a 100-year event. These same levees will contain the 500-year event with two feet of freeboard.

## **Other Options**

There are other options to provide flood protection to the study area. The most likely option would be to divert the flood water toward the Sacramento River to Plant No. 2 and to the Natomas Cross Canal to Plant No. 4. A component of this option would be to restrict the increased flood flows from going south and causing hydraulic impacts downstream from Elkhorn Boulevard.

## **Drainage Master Plan Requirements**

In addition to meeting County and RD1000 requirements for Drainage Master Plans there are several constraints that must be resolved prior to the time of development entitlements. These include issues related to additional ground water pumping for the County and RD1000, maintenance of the flood control facilities, maintenance of interim water deliveries and drainage to the study area, maintenance of drainage west of the project area and stability of Elverta Road bridge.

H:\468\WORKFILE\FIG-1.DWG

### CONCEPTUAL DRAINAGE PLAN AREA

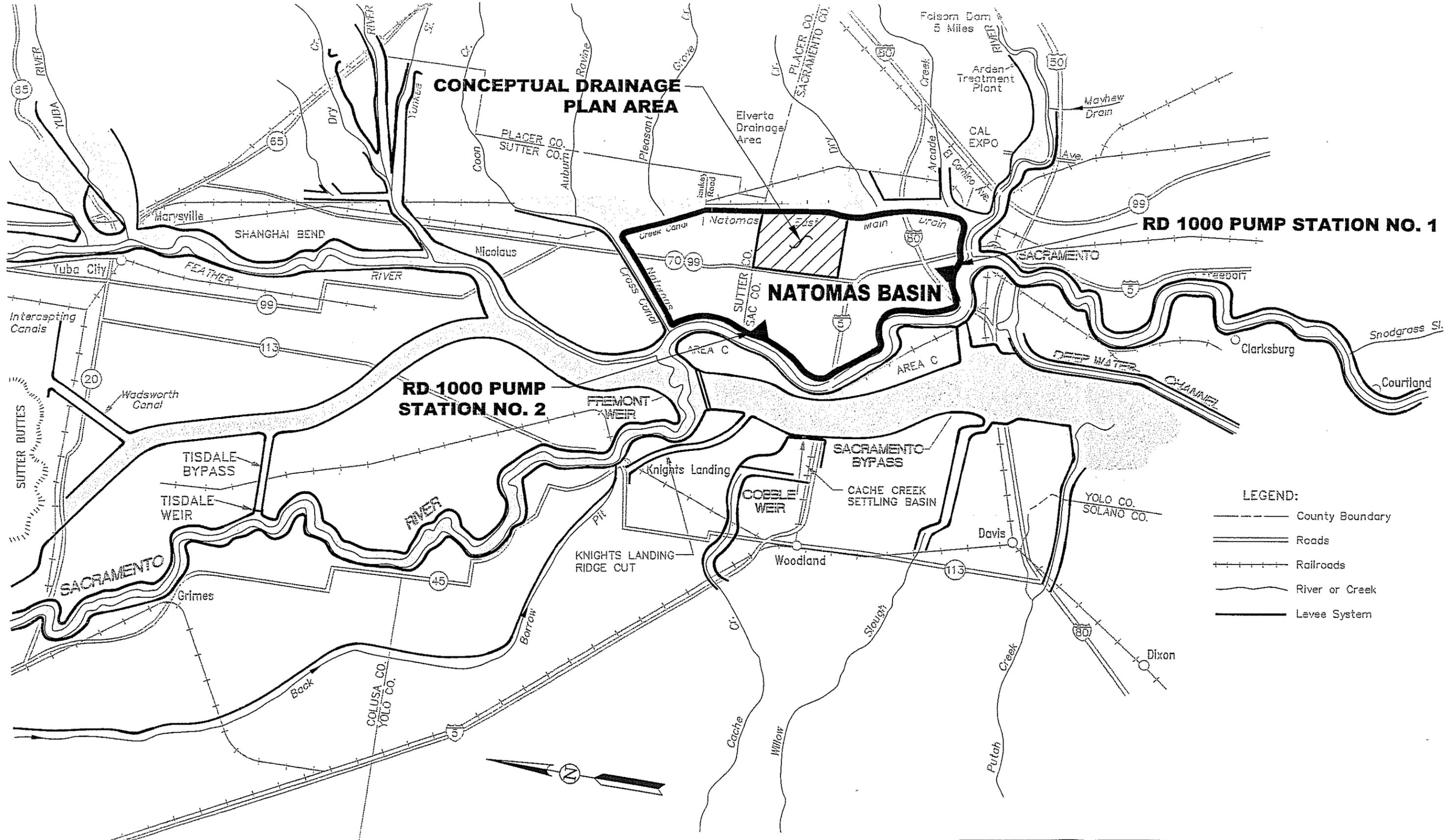
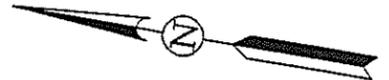
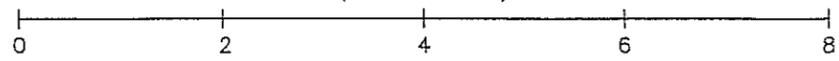
### NATOMAS BASIN

### RD 1000 PUMP STATION NO. 1

### RD 1000 PUMP STATION NO. 2

- LEGEND:**
- County Boundary
  - == Roads
  - Railroads
  - ~ River or Creek
  - Lavee System

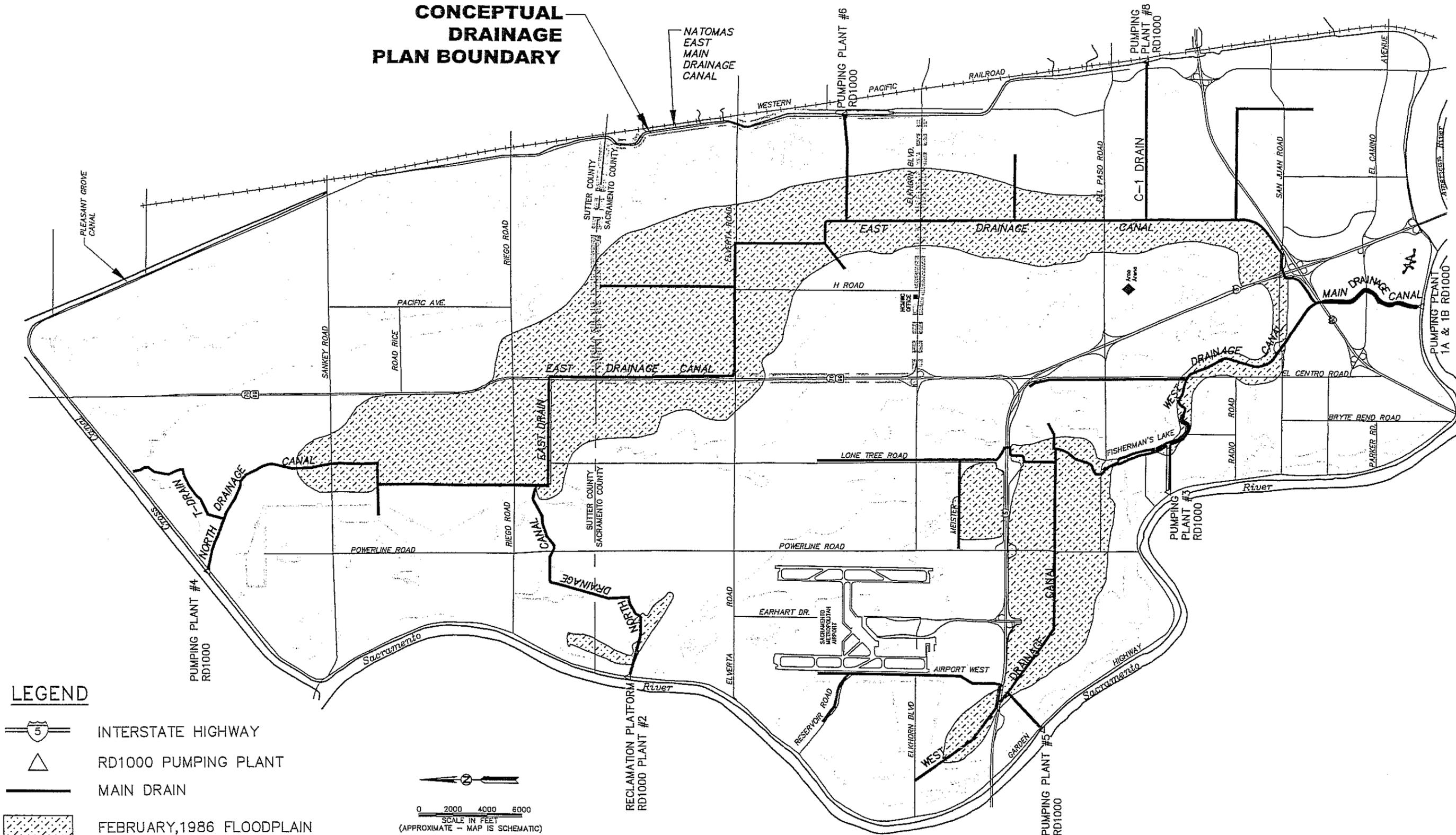
SCALE/MILES (APPROXIMATE)



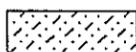
<b>ENSIGN &amp; BUCKLEY</b> CONSULTING ENGINEERS SACRAMENTO		COUNTY OF SACRAMENTO	<b>FIGURE 1</b>	
		NORTH NATOMAS LONG TERM PLANNING PROJECT		
		VICINITY MAP		

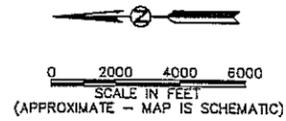
DECEMBER 1999

# CONCEPTUAL DRAINAGE PLAN BOUNDARY

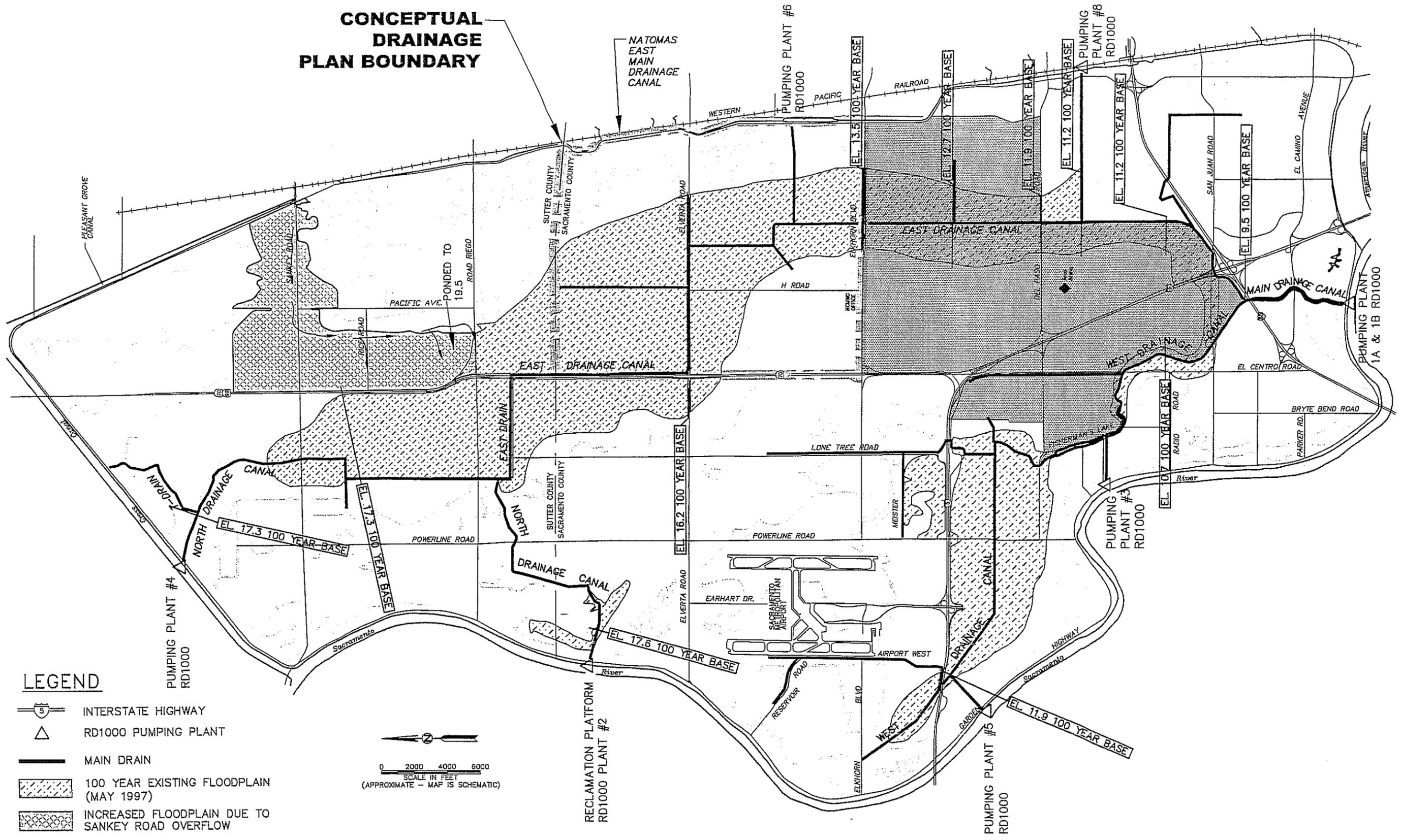


## LEGEND

-  INTERSTATE HIGHWAY
-  RD1000 PUMPING PLANT
-  MAIN DRAIN
-  FEBRUARY, 1986 FLOODPLAIN

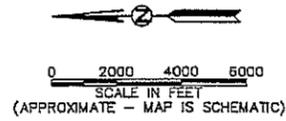


# CONCEPTUAL DRAINAGE PLAN BOUNDARY



## LEGEND

- INTERSTATE HIGHWAY
- RD1000 PUMPING PLANT
- MAIN DRAIN
- 100 YEAR EXISTING FLOODPLAIN (MAY 1997)
- INCREASED FLOODPLAIN DUE TO SANKEY ROAD OVERFLOW
- COMPREHENSIVE DRAINAGE PLAN SERVICE AREA
- OVERLAND FLOW
- EL. 16.3 WATER SURFACE ELEVATION



H:\468\WORKFILE\FIG-3.DWG

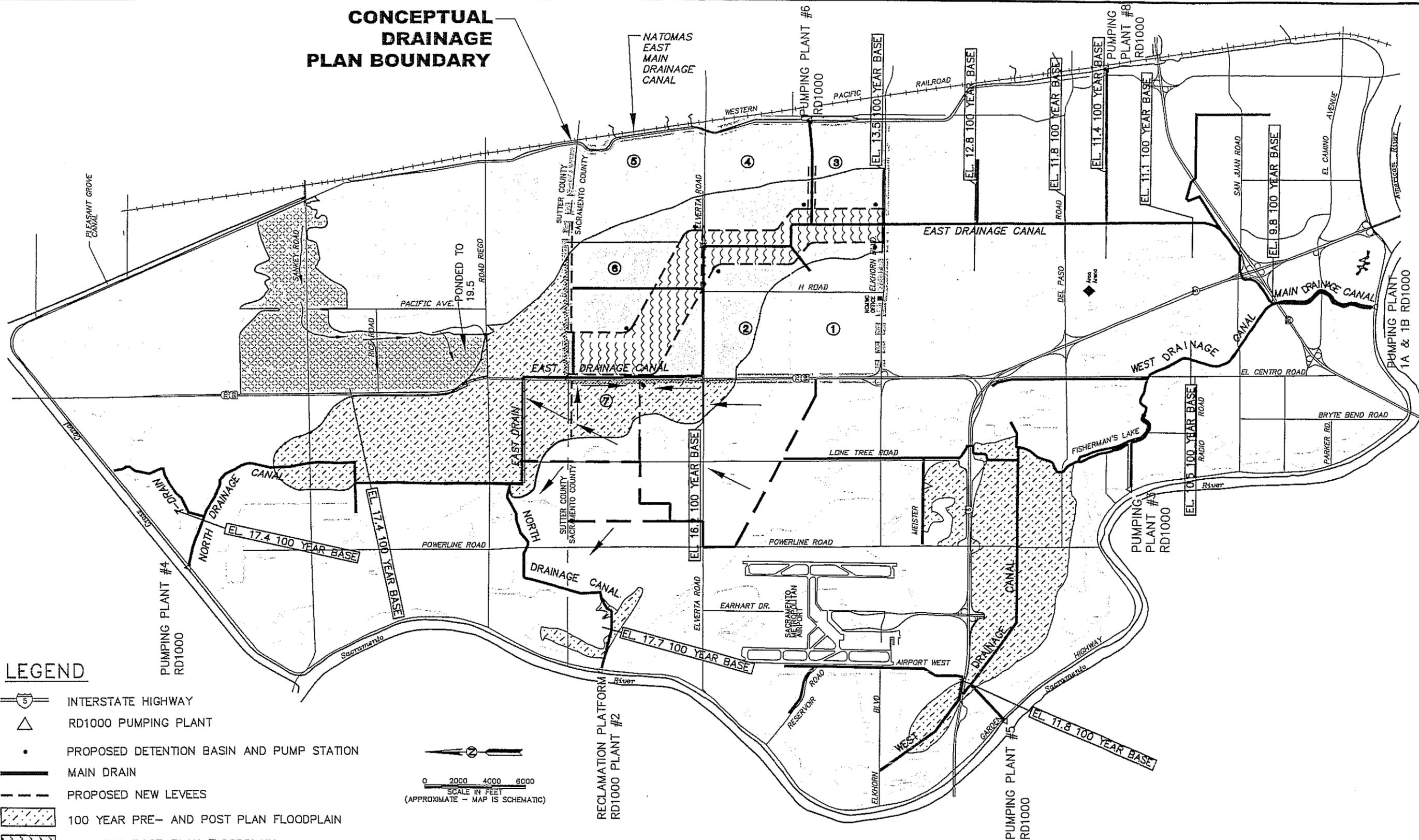
**ENSIGN & BUCKLEY**  
CONSULTING ENGINEERS  
SACRAMENTO  
DECEMBER 1999

COUNTY OF SACRAMENTO  
NORTH NATOMAS LONG TERM PLANNING PROJECT  
**100-YEAR PLAN FLOODPLAIN - 1997**



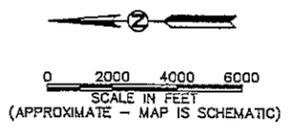
H:\468\WORKFILE\FIG-5.DWG

# CONCEPTUAL DRAINAGE PLAN BOUNDARY



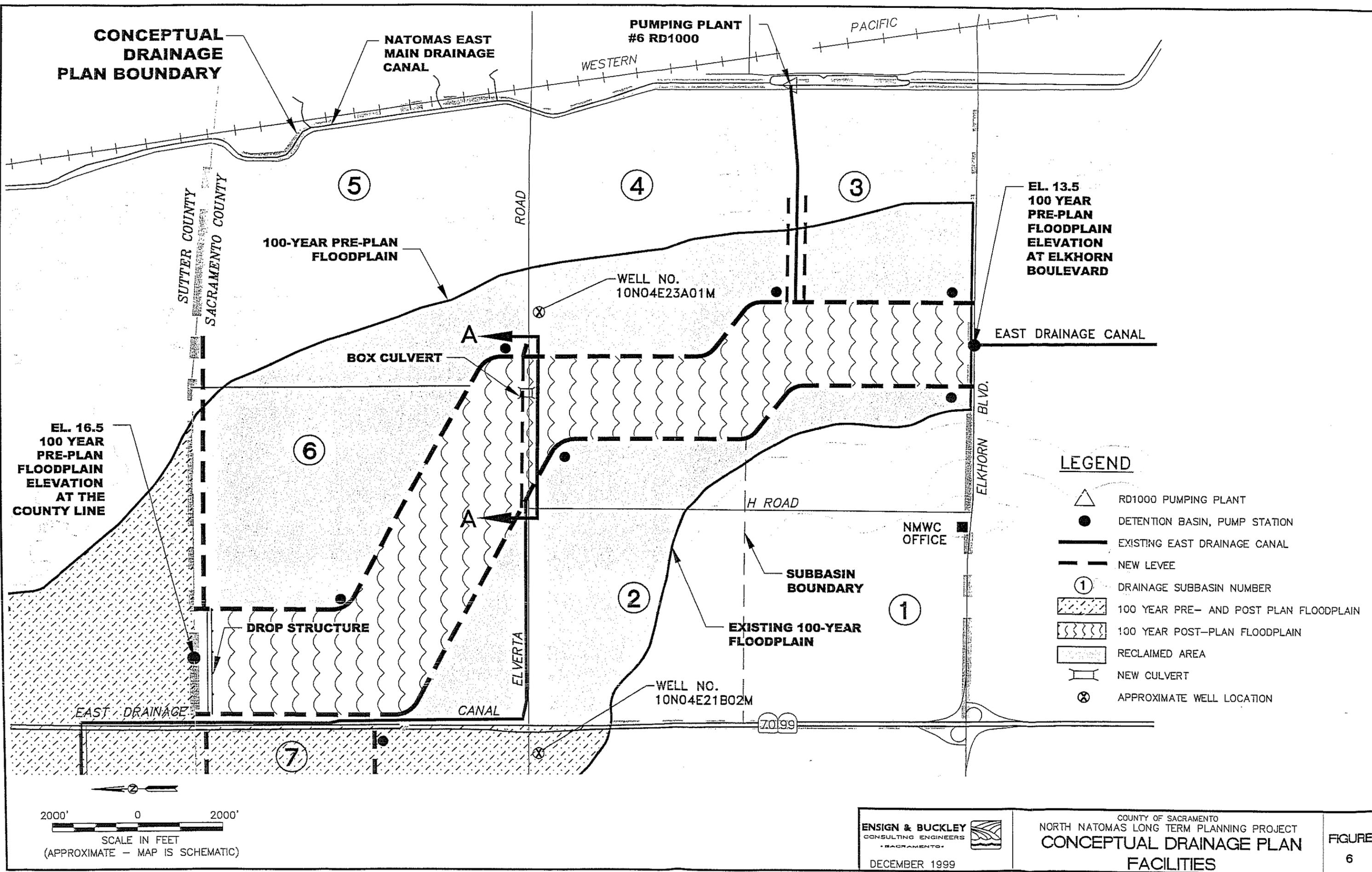
## LEGEND

- INTERSTATE HIGHWAY
- RD1000 PUMPING PLANT
- PROPOSED DETENTION BASIN AND PUMP STATION
- MAIN DRAIN
- PROPOSED NEW LEVEES
- 100 YEAR PRE- AND POST PLAN FLOODPLAIN
- 100 YEAR POST-PLAN FLOODPLAIN
- INCREASED FLOODPLAIN DUE TO SANKEY ROAD OVERFLOW
- RECLAIMED AREA
- OVERLAND FLOW
- EL. 16.3** WATER SURFACE ELEVATION

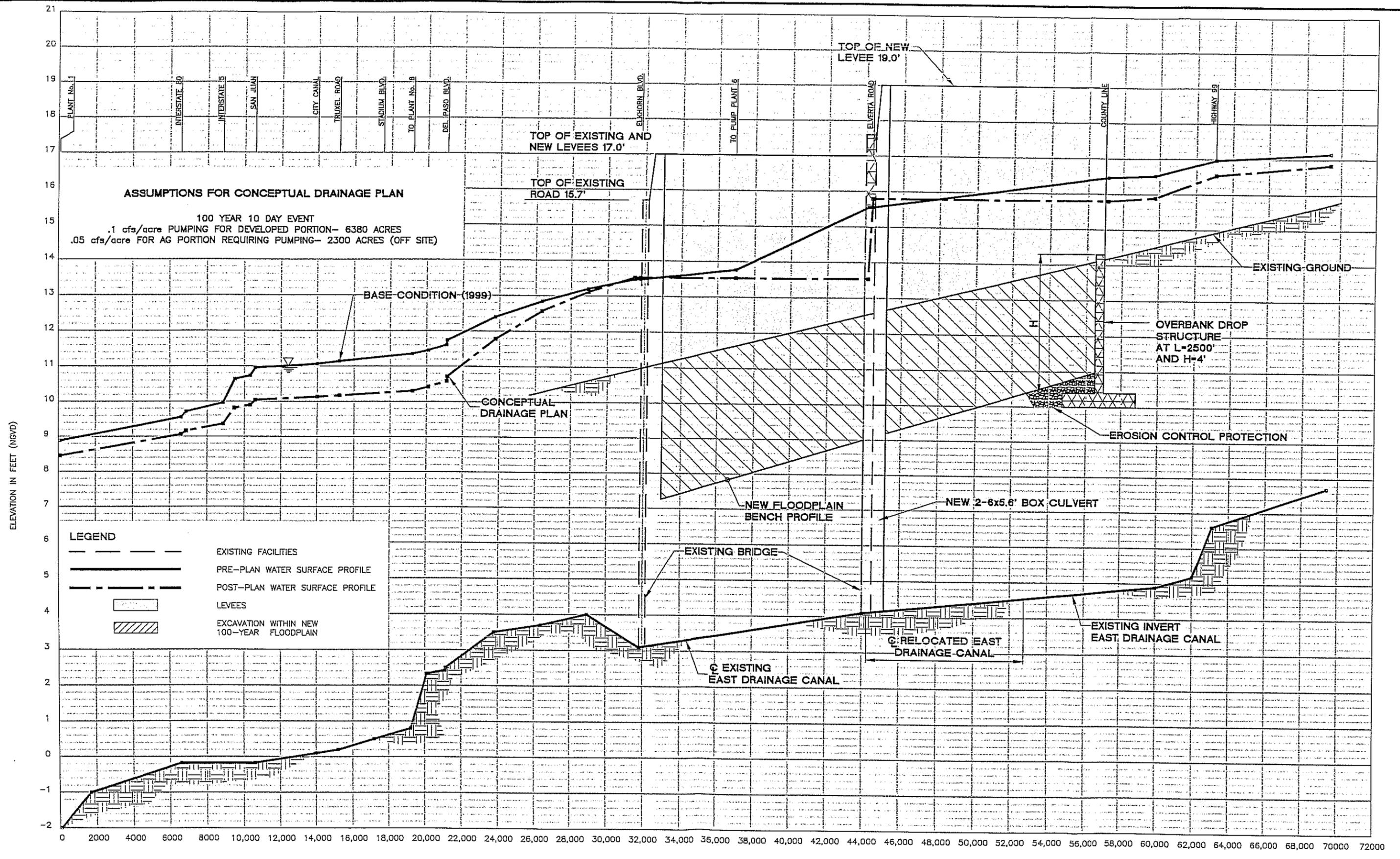


<p><b>ENSIGN &amp; BUCKLEY</b> CONSULTING ENGINEERS SACRAMENTO</p> <p>DECEMBER 1999</p>	<p>COUNTY OF SACRAMENTO NORTH NATOMAS LONG TERM PLANNING PROJECT</p>	<p><b>FIGURE 5</b></p> <p><b>CONCEPTUAL DRAINAGE PLAN</b></p>
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H:\468\WORKFILE\FIG-6.DWG



H:\468\WORKFILE\FIG-7.DWG



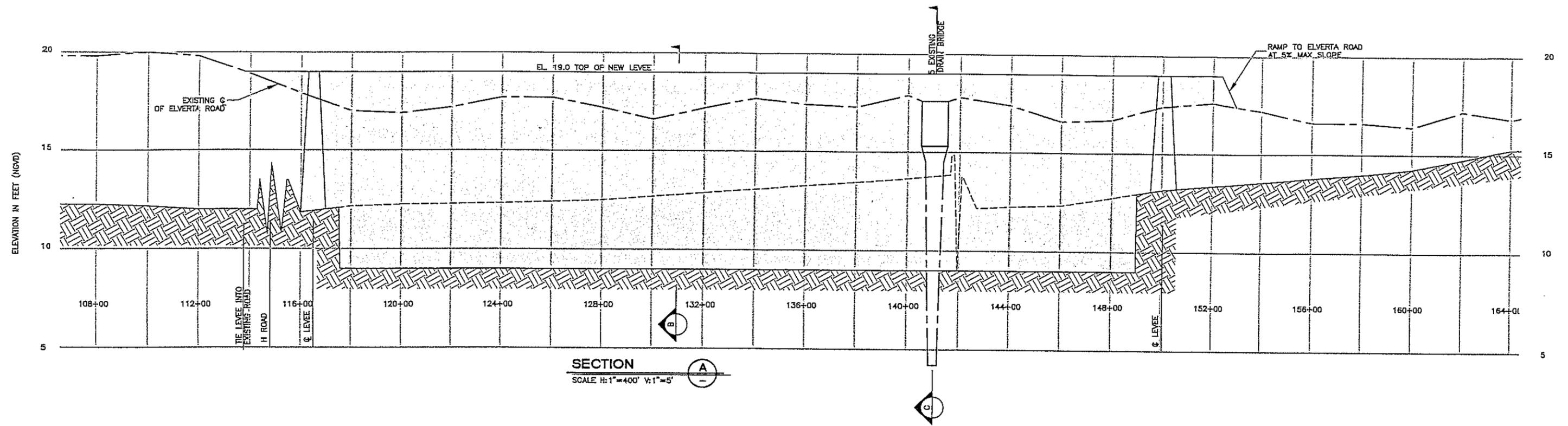
HORIZONTAL SCALE - 1" = 5000 feet  
 2500 0 2500 5000 feet

NOTE: LEVEES AND STRUCTURES ARE NOT TO SCALE FOR DESCRIPTIVE PURPOSES.

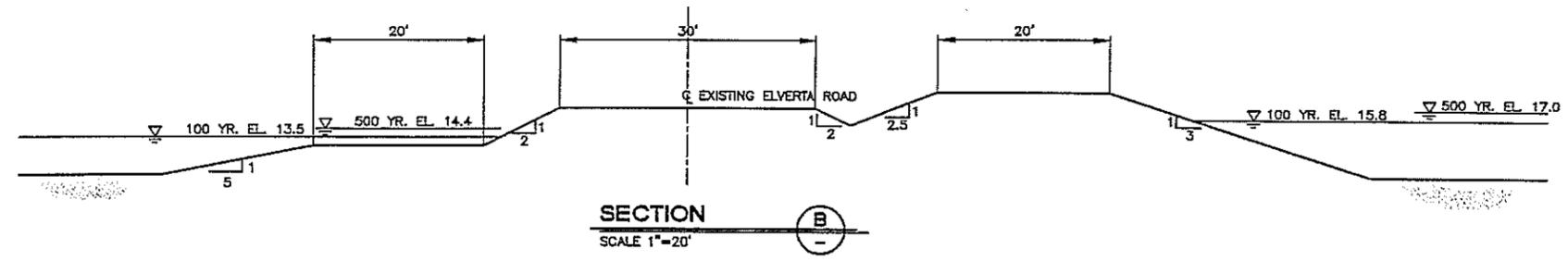
**ENSIGN & BUCKLEY**  
 CONSULTING ENGINEERS  
 SACRAMENTO  
 DECEMBER 1999

COUNTY OF SACRAMENTO  
 NORTH NATOMAS LONG TERM PLANNING PROJECT  
**CONCEPTUAL DRAINAGE PLAN**  
 100 YEAR EVENT PROFILES

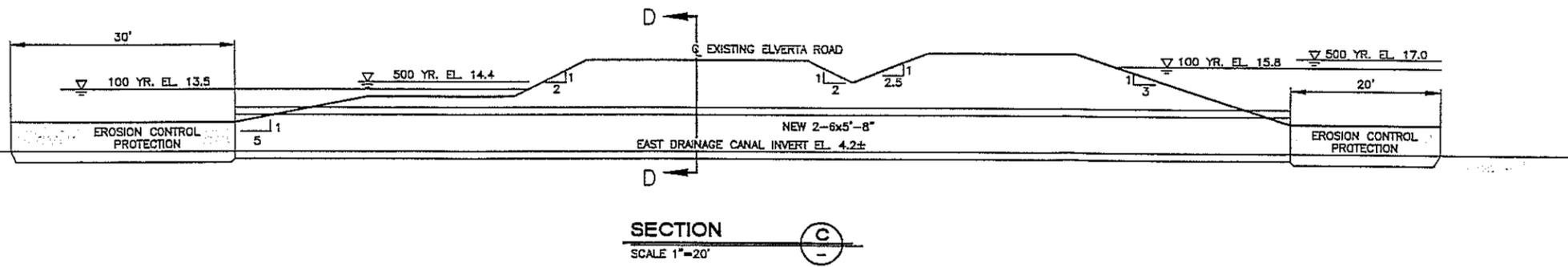
H:\468\WORKFILE\FIC-8.DWG



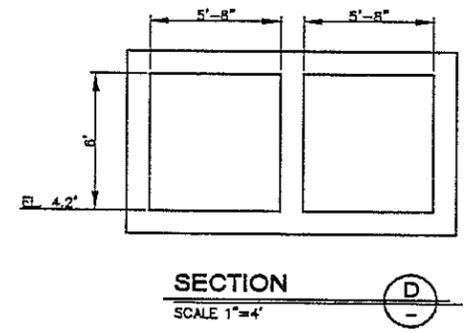
**SECTION A**  
SCALE H:1"=400' V:1"=5'



**SECTION B**  
SCALE 1"=20'

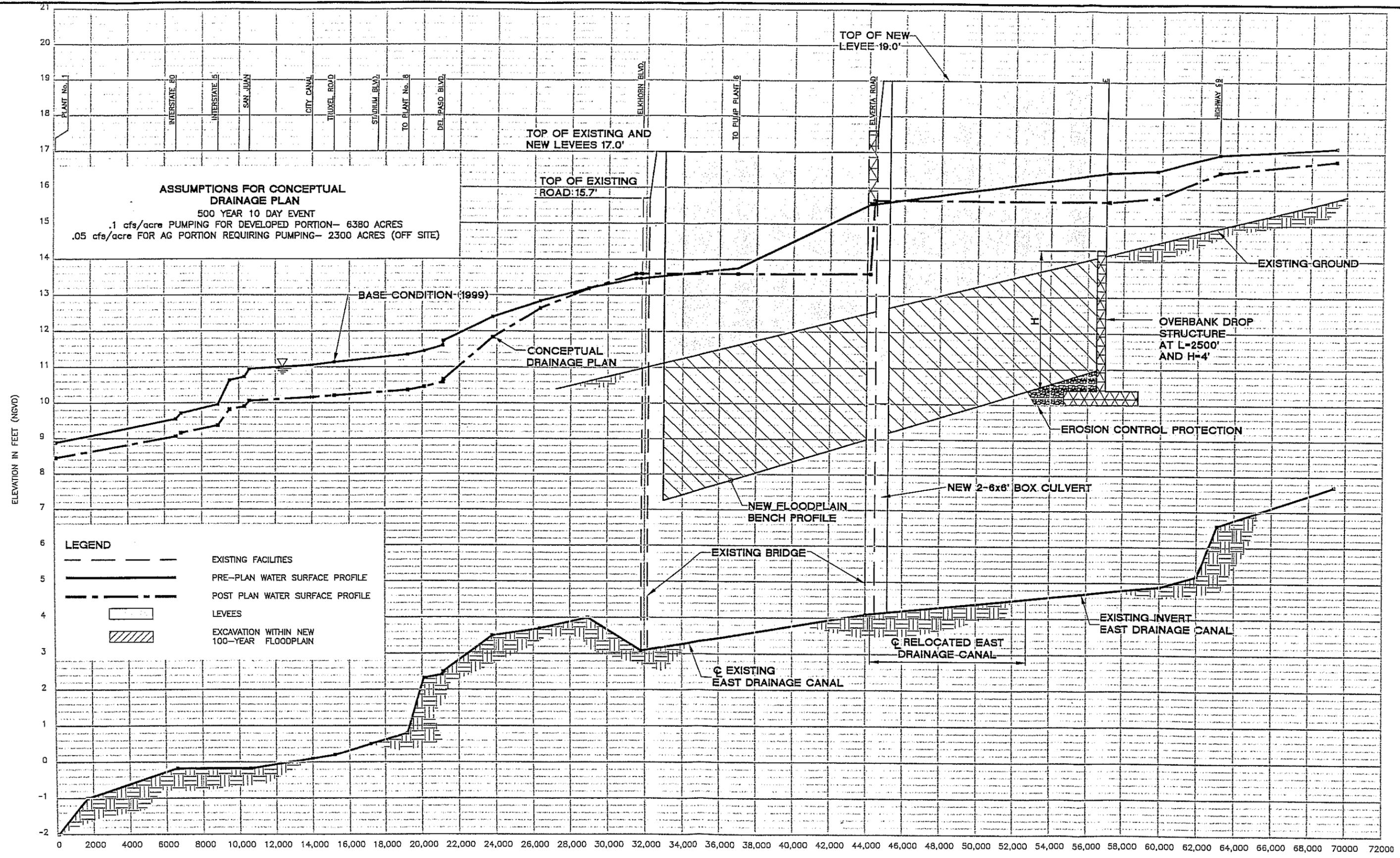


**SECTION C**  
SCALE 1"=20'



**SECTION D**  
SCALE 1"=4'

H:\468\WORKFILE\FIG-9.DWG



NOTE: LEVEES AND STRUCTURES ARE NOT TO SCALE FOR DESCRIPTIVE PURPOSES.

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 SACRAMENTO  
 DECEMBER 1999

COUNTY OF SACRAMENTO  
 NORTH NATOMAS LONG TERM PLANNING PROJECT  
**CONCEPTUAL DRAINAGE PLAN**  
**500 YEAR EVENT PROFILES**

**Appendix A**  
**Excepts from 1993 Supplemental Environmental**  
**Impact Report**

**Reference: Supplement to the 1986 North Natomas Community**  
**Plan EIR Prepared by**  
**City of Sacramento (March 1993)**

**Excerpted Section on Flooding – Pages 4.7-4 through 4.7-10**

would be located along the eastern canal, while approximately two detention ponds would be located along the western canal.

The CDP has the following key features which are considered improvements to the previous drainage plan:

- open/recreational space
- elimination of one pumping station
- use of detention facilities
- significant reduction in the rate of discharge to the Sacramento River
- reduced canal width
- reduction in overall canal length
- aesthetic/environmental enhancement to canal design
- leaving RD 1000 canals intact to protect habitat

The final design program for the CDP is not yet available, and consequently, only a general program level assessment of the impacts of the system can be undertaken at this time. A more thorough environmental assessment will need to be conducted once detailed design studies are available.

Based on the North Natomas Drainage System SEIR and preliminary findings of the Borcalli Report, the new detention system plan results in an environmentally superior solution to drainage than that which was previously analyzed in the 1986 NNCP EIR. The detention system can separate urban and agricultural run-off; provide controls for urban run-off; provide more wetland and canal areas for habitat restoration; and limit disruption of existing riparian areas along existing canals by limiting the amount of canal widening required.

## **FLOODING**

### **Background**

The Natomas basin occupies the southern end of the Sacramento Valley at the confluence of the Sacramento and American Rivers. Prior to the twentieth century, the Valley was frequently inundated by flows which exceeded channel capacities and spread across vast tracts of land. In the latter half of the nineteenth century, as the Valley's economy shifted from gold mining to agriculture, efforts were made to regulate Sacramento River flows and protect agricultural lands and urban settlements through a system of earthen levees. These early levees, including those protecting the City of Sacramento, were crudely designed, discontinuous, and generally ineffective in controlling large floods. In the Flood Control Act of 1917, Congress authorized Federal participation in providing flood control to the Sacramento Valley and directed the Corps of Engineers to undertake a comprehensive plan to expand and upgrade the existing levee system. The Flood Control Acts of 1928, 1937, 1941, 1944, and 1950 increased this Federal commitment and made the Sacramento River, along with the Mississippi, a principal focus of the Corps' flood control mission.

Today the Sacramento River Flood Control System consists of three integral parts: (1) large headwater dams, including Shasta on the Sacramento River, Oroville on the Feather, and New Bullards Bar on the Yuba, which detain peak flood flows produced during major storm events; (2) hundreds of miles of earthen levees that contain reservoir releases and tributary discharges within channel banks; and (3) a series of large by-pass channels and accompanying weirs which receive overflow from the Sacramento and Feather Rivers and convey this water to the delta.

Along the American River, local levees were upgraded to Federal standards in the late 1940s and 1950s. These upgraded levees were designed to safely contain controlled releases from Folsom Reservoir, a multipurpose facility completed by the Corps in 1956. During the flood season, Folsom is operated in accordance with criteria promulgated by the Secretary of the Army. Under these criteria, the design release from the reservoir during a flood event is 115,000 cubic feet per second (cfs) and 400,000 acre-feet of storage space (about 40% of the total) is dedicated to flood control. When these criteria were developed in the early 1950s, it was believed that Folsom would provide Sacramento with a 250-year level of flood protection as envisioned in federal legislation authorizing the flood control improvements. Over the years, however, this estimate has been steadily downgraded as more and better data has been gathered on flows in the American River.

The 55,000 acre Natomas basin is protected from flooding by the east levee of the Sacramento River, the north levee of the American River, the west levee of the Natomas East Main Drainage Canal (NEMDC) and Pleasant Grove Creek Canal (PGCC), and the south levee of the Natomas Cross Canal (NCC). Around the perimeter of Natomas, Sankey Road, a major east west corridor in South Sutter County, acts as a watershed divide. Runoff from the tributary streams north of Sankey Road are collected in the PGCC, conveyed north to the NCC and discharged into the Sacramento River. Runoff from the tributary streams south of Sankey road are collected in the NEMDC and conveyed southward into the American River.

### The Flood of 1986

In February 1986, Sacramento experienced record flooding. Around Natomas, high flood stages in the Sacramento River and American Rivers combined with well-above-average runoff from tributary streams into the NEMDC, the PGCC and the NCC to produce extensive local flooding in the Arcade Creek, Dry Creek and Pleasant Grove areas east of the basin. Levee freeboard at a number of locations along the perimeter drainage canals was reduced to 0.5 foot to 2 feet, some 1.0 to 2.5 feet above design water surface levels. Floodwaters reached the understructure of the Highway 99 bridge that crosses the NCC, floated a timber bridge at Fifield Road off its abutments and overtopped the bridge at Main Avenue. In the Pleasant Grove area, floodwaters overtopped Sankey Road. Some of this water flowed southward into the NEMDC. The remainder of these floodwaters flowed west along Sankey Road, flooding a small area of Natomas and threatening to close Highway 99. Emergency sandbagging and diversion dam construction closed off the flow into the Natomas area at Sankey Road and prevented overtopping of Highway 99. Flooding caused by backwater from the American River, runoff from the Dry Creek basin, and floodwaters entering the NEMDC from other tributaries

inundated several thousand acres east of the NEMDC between Sankey Road and Dry Creek including portions of the town of Rio Linda. Floodwaters outflanked the Arcade Creek north levee and inundated the Strawberry Manor area of North Sacramento. Along the Sacramento River, extensive sloughing occurred on the land side of the east levee, nearly triggering a breach and inundating developed portions of South Natomas.

#### Federal Regulatory and Legislative Response

After the 1986 flood, the Corps undertook an extensive evaluation of the existing flood control system. First, the frequency of flooding for the American River basin was reevaluated. Prior to the flood, Folsom Reservoir and the lower American River levee system were thought to provide approximately a 120-year level of flood protection to the residents and businesses occupying the American River flood plain, including Natomas. After the flood, using data gathered from the storm itself and hydrologic information compiled since the construction of Folsom Dam, the Corps downgraded the system's flood control capacity to a 63-year level.

Second, the Corps initiated a comprehensive evaluation of the condition of the entire Sacramento River Flood Control System. The first phase of this evaluation focused on the 110 miles of levees protecting the heavily urbanized Sacramento metropolitan area. These levees were constructed in the early 1900's using material dredged from the river channel. Due to the sandy quality of this material, much of which was deposited in the river bed during the hydraulic mining era in Northern California, and poor compaction methods, the Corps determined that the levees along the 33 mile stretch of the Sacramento River between Freeport and Verona were structurally deficient. Without remedial work, the Corps concluded, high flows in the Sacramento River could produce enough seepage through the levees to trigger a breach. The east levee protecting Natomas between the mouth of the American River and Verona, where severe seepage and a near breach occurred in 1986, was found to be particularly vulnerable, with the east levee south of the American River to Freeport being in slightly better condition.

As a result of these findings, the Federal Emergency Management Agency (FEMA) contracted with the Corps to reassess the 100-year (FEMA) flood plain in the Sacramento area. This reassessment affected a sizeable portion of the urbanized Sacramento, placing approximately 110,000 acres containing \$23 billion of property and 300,000 people in the revised 100-year (FEMA) flood plain. Within this area, the Corps estimated that flood depths likely to result from an uncontrolled 100-year flood ("Base Flood Elevations" or "BFEs") would range from two feet in some places to in excess of 20 feet in the Natomas basin.

Because adoption and enforcement of new Flood Insurance Rate Maps (FIRMs) based on the revised 100-year flood plain would have produced severe economic consequences in Sacramento, special legislation was passed by the U.S. Congress in 1988 prohibiting FEMA from using the new BFEs to regulate development in the flood plain during the ensuing four year period, ending November 7, 1992. In response to this special legislation, FEMA promulgated new FIRMs delineating the boundaries of the new 100-year (FEMA) flood plain but without indicating BFEs. The bounded area was designated as a special A-99 zone. This designation provides relief from

building restrictions on new construction in the flood plain, but requires all existing and new structures to obtain flood insurance at a subsidized rate. The A-99 zone is typically used in areas within the 100-year (FEMA) flood plain which are making adequate progress toward protecting the area through construction of a flood control project (Section 61.12 of the National Flood Insurance Program and Related Regulations). To demonstrate adequate progress, FEMA requires:

1. Evidence that construction has started on the critical features of the flood control improvement project needed to protect the affected area.
2. Appropriation of funds irrevocably dedicated for construction of the flood control improvement project.
3. Documentation showing that 60 percent of the funds needed to construct the project have been expended and 50 percent of the project has been completed.

#### Local Response

In February 1990, the City of Sacramento responded to these Federal actions by adopting a land use planning policy applicable to development in the newly designated A-99 zone. In Natomas, because of the highly unstable condition of the Sacramento River east levee above the Sacramento-American River confluence, the policy requires all new residential structures to be elevated at least one foot above the applicable base flood elevation calculated by the Corps. New commercial structures must be designed so as to prevent structural collapse in the event of inundation. Because of the severity of the BFE's in the incorporated areas of Natomas, this policy has imposed restrictions on residential development pending completion of the work needed to reconstruct the Sacramento River east levee.

To satisfy FEMA adequate progress criteria, remove affected areas of Sacramento from the flood plain, and provide the community with increased flood protection, the City and County of Sacramento, Sutter County, Reclamation District 1000, and the American River Flood Control District formed the Sacramento Area Flood Control Agency (SAFCA), a joint exercise of powers agency, to address the regional flood problem. SAFCA in turn adopted an incremental three-step strategy:

1. Reconstruct and improve the existing levee system where necessary to insure the adequacy and structural integrity of the system.
2. Participate in a flood control project designed to provide a long term, high level (minimum 200-year) of flood protection to the Sacramento area through construction of a flood control dam at Auburn.

3. Pending completion of the dam, increase the space allocated to flood control in Folsom Reservoir on an interim basis so as to provide a minimum FEMA (100-year) level of protection.

In carrying out this strategy, SAFCA has cooperated with the State Reclamation Board and the Corps in repairing the Sacramento River east levee as part of the Sacramento Urban Area Levee Reconstruction Project. This effort, which has proceeded under existing Federal authorization for work related to the Sacramento River Flood Control Project, will be completed during the summer of 1993. The structural integrity of the existing levee will be restored without increasing the carrying capacity of the Sacramento River channel. SAFCA has also moved forward with preliminary planning and engineering for the levee improvements needed in the Natomas and lower Dry and Arcade Creek areas. However, because of the influence of flows in the lower American River on the design of these improvements, this project was included within the scope of the American River Watershed Investigation (ARWI).

#### American River Watershed Investigation (ARWI)

The ARWI commenced after the storm of 1986 when the Corps was directed by Congress to study alternative means of controlling flows in the American River basin assuming the previously authorized Auburn Dam would not be built. A reconnaissance level study completed in 1988 indicated there was a Federal interest in pursuing a flood control project and recommended a formal feasibility level study be initiated. Both the State Reclamation Board and SAFCA shared in the cost of this feasibility study. The Corps released the Draft ARWI Report in April 1991, followed by a series of informational meetings and public hearings. The Tentatively Selected Plan, which would have provided a 400-year level of protection to the Sacramento area, included two primary features:

1. Levee and other flood control improvements around the northern and eastern perimeter of the Natomas basin.
2. A flood control detention dam on the American River near the site of the previously authorized Auburn Dam.

Both SAFCA and the State Reclamation Board, upon reviewing the report and subsequent public testimony, requested that the Corps revise its Tentatively Selected Plan to accommodate a locally preferred plan that would provide a 200-year level of protection. The 200-year plan reduced the size of the proposed flood control detention dam, thus reducing the project cost and addressing some environmental concerns while meeting SAFCA's objective of a minimum 200-year level of protection. This plan was presented in the Final ARWI Report (December 1991). As indicated in that report, the Natomas features of the project were not significantly changed by the reduction in the revised level of protection.

Since construction of the flood control dam would take approximately ten years, SAFCA also pressed the Corps to pursue flood control measures which would provide an interim 100-year

FEMA level of flood protection during the construction period. It was found that the only reasonable way to achieve such interim protection was by temporarily increasing the space allocated to flood control in Folsom Reservoir. Currently, 400,000 of the 975,000 acre-feet of capacity in Folsom Reservoir is kept empty for flood control storage from approximately December through March. The Corps determined that by increasing this flood control allocation to 590,000 acre-feet, the objective safe release of 115,000 cfs from Folsom Reservoir could be maintained for all flood events up to the FEMA 100-year event. Based on this assessment, a Draft Operation Plan and EIS evaluating the impacts of temporarily "reoperating" Folsom Reservoir was prepared by the Corps and circulated for public comment in March 1992.

In June 1992, the elements of the American River Plan including the flood control dam, the levee work in and around Natomas, and Folsom Reoperation were presented to Congress for authorization as part of the 1992 Water Resources Development Act (Act). However, because of the complexity of the issues being addressed, the Bush Administration did not have adequate time to develop a formal recommendation on the project. In addition, Congressional representatives determined that several issues addressed by the plan needed further study. These included the appropriateness of providing Sacramento with a level of protection significantly in excess of the 100-year (FEMA) flood standard establish in connection with the National Flood Insurance Program, the potential to achieve significant increases in flood protection by increasing the capacity of the existing levee system, and the ease with which the flood control dam could later be expanded for multipurpose use. As a result, the American River plan failed to achieve adequate congressional support and it was removed from the Act.

Recognizing the importance of flood control on the American River, however, Congress did attach provisions to the 1992 Defense Appropriation Bill ("DOD legislation") which direct the Corps, in concert with the State, SAFCA, and other interested parties, to continue studying the long term flood control options available to Sacramento. In the short term, the DOD legislation directs the Corps to commence the Natomas levee component of the American River plan, giving credit or reimbursement to SAFCA for any related planning and construction work consistent with the plan which the agency undertakes on a local basis.

#### AR ZONE

Congress also passed, as part of an omnibus housing bill, legislation directing the FEMA to create a new "AR" flood zone designation applicable to communities such as Sacramento where a certified 100-year or greater flood protection system has been decertified due to updated hydrologic or other data. The AR zone will delineate the new 100-year flood plain and establish the flood insurance and development regulations that apply within the zone. Qualifying communities may use the AR zone designation provided they apply to FEMA and demonstrate that their flood protection system will be restored within a specified time period based on a plan acceptable to FEMA. Flood insurance in the AR zone is mandatory. The legislation freezes existing flood insurance rates in communities deemed eligible for AR zone status as of January 1, 1992 until such time as FEMA promulgates new rules specifically applicable to the AR zone. At that time, residents who have effective policies will be allowed to maintain them at current

rates, while residents who do not have effective policies, or who subsequently allow their policies to lapse, may be required to obtain new policies at roughly double the existing rate.

With respect to development in the AR zone, the legislation prohibits FEMA from requiring elevation of improvements to existing structures. However, FEMA may require that new structures be elevated up to three feet above existing grade in areas where the base flood elevation does not exceed five feet, or where the new construction occurs on an infill site, qualifies as rehabilitation of an existing structure, or constitutes redevelopment of a previously developed area. The legislation imposes no limits on FEMA in promulgating flood plain management criteria for areas where the base flood elevation exceeds five feet and the new construction does not meet any of the above criteria. However, report language attached to the legislation states that the AR Zone designation is not intended to facilitate development in the Natomas area of Sacramento.

### Revised Local Strategy

In the face of these legislative developments, SAFCA has revised its strategy for securing flood protection for Sacramento so as to distinguish between the short term steps which can be immediately undertaken to protect the people and property currently at risk in the floodplain, and the steps which will be needed to provide adequate protection on a long term basis. Given the uncertainty of future Federal action to control flows in the American River, SAFCA has proposed to proceed with a stand alone levee improvement project (Revised Local Project) designed to provide a minimum 100-year level of flood protection to the Natomas area without benefit of the upstream improvements evaluated in connection with the ARWI. This project is described in the Revised Draft Environmental Impact Report for the Natomas Area Flood Control Improvement Projects which was circulated for public comment and review on March 17, 1993 and is available through the SAFCA office, 926 J Street, Suite 424, Sacramento, CA 95814.

As shown in Exhibit 4.7-1, under the Revised Local Project, the west and east levees of the NEMDC and the levees along the north and south banks of Arcade Creek would be raised. Raises would also be undertaken along the south levee of the NCC, the west levee of the PGCC, and the north levee of the American River. In addition, a new levee would be constructed along the northern edge of Dry Creek, a pump station installed at the mouth of Dry Creek and the existing south Dry Creek levee raised and extended. These improvements may reduce the risk of flooding in Natomas, although a large interior drainage problem would remain. In addition, the pump station may reduce flooding in the Elverta Drainage basin above Dry Creek, although there too localized flooding would remain a problem. Exhibit 4.7-2 shows the extent of the 100-year flood plain before and after the project.

### PROPOSED PLAN UPDATE VISION STATEMENTS AND GUIDING POLICIES

This section presents the proposed Plan Update Vision Statements and Guiding Policies for Drainage and Flood Control. Implementing Policies are also included as part of the proposed

**Appendix B**  
**Ground Water Well Readings**

①

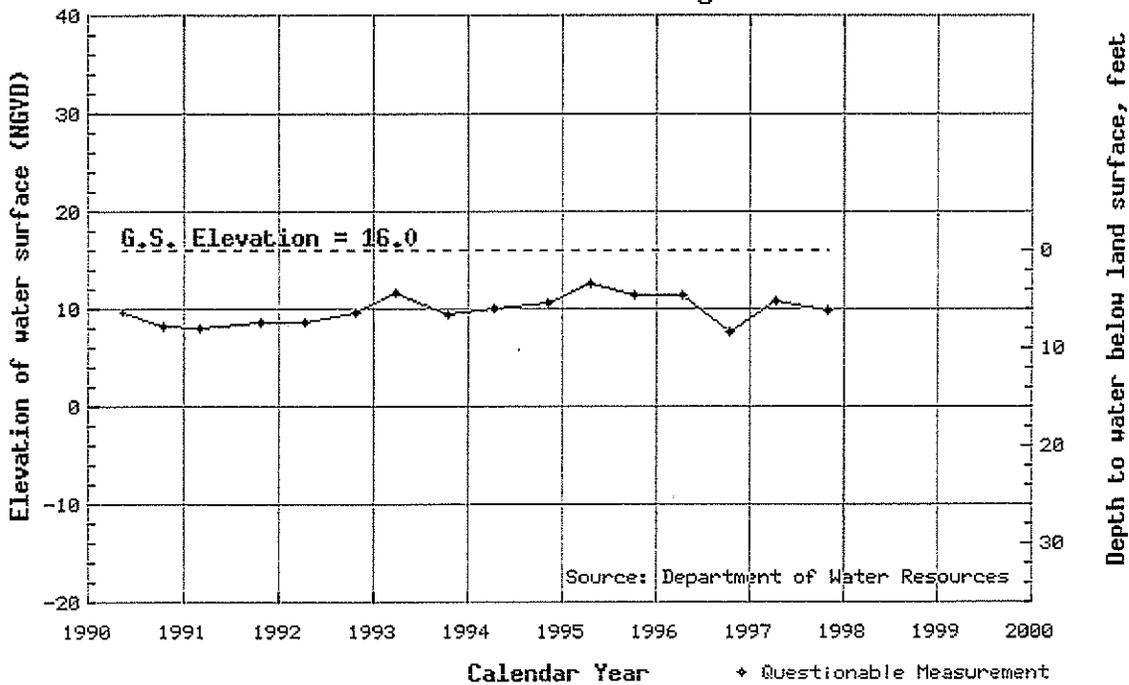
California Department of Water Resources  
Division of Planning and Local Assistance



**Groundwater Level Query Results for '10N04E21B02M'**

The query for the well you selected returned 16 records. The data are listed in the table below. The table headings and records contain several codes and abbreviations.

Groundwater Levels, 10N04E21B02M  
Sacramento County



Graphics created using fly.

Meas. Date	R.P.Elev	G.S.Elev	DBRP	EWS	DTW	QMC	NMC
05/09/1990	16.5	16.0	7.0	9.5	6.5		
10/11/1990	16.5	16.0	8.4	8.1	7.9	8	
02/27/1991	16.5	16.0	8.5	8.0	8.0	8	
10/21/1991	16.5	16.0	7.9	8.6	7.4	8	
04/07/1992	16.5	16.0	7.9	8.6	7.4	8	
10/16/1992	16.5	16.0	7.0	9.5	6.5	8	
03/22/1993	16.5	16.0	5.0	11.5	4.5	8	
10/07/1993	16.5	16.0	7.1	9.4	6.6	8	
04/04/1994	16.5	16.0	6.5	10.0	6.0	8	
11/01/1994	16.5	16.0	6.0	10.5	5.5	8	
04/12/1995	16.5	16.0	4.0	12.5	3.5	8	
10/05/1995	16.5	16.0	5.2	11.3	4.7	8	
04/04/1996	16.5	16.0	5.2	11.3	4.7	8	
10/10/1996	16.5	16.0	9.0	7.5	8.5	8	
04/02/1997	16.5	16.0	5.8	10.7	5.3	8	
10/23/1997	16.5	16.0	6.8	9.7	6.3	8	

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[\[Return to Well Location Map\]](#)

[\[ Groundwater Home | Division of Planning and Local Assistance Home | Department of Water Resources Home \]](#)

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**For more information, please contact our office:**

*Department of Water Resources, Central District  
Geology and Groundwater Section  
3251 'S' Street  
Sacramento, CA 95816*

*Phone: 916-227-7590*

*Fax: 916-227-7600*

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Please send any comments to [Eric Senter](#)

Document: AllWellData.cfm

Revised: March 11, 1998

3

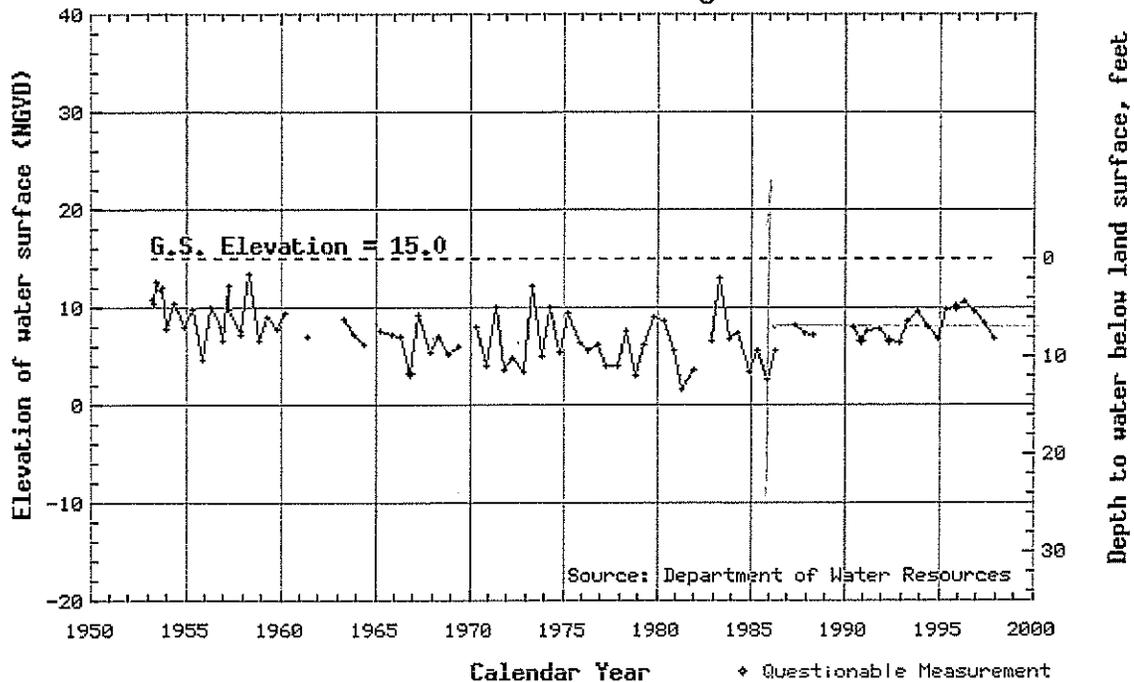
California Department of Water Resources  
 Division of Planning and Local Assistance



**Groundwater Level Query Results for '10N04E23A01M'**

The query for the well you selected returned **90** records. The data are listed in the table below. The table headings and records contain several codes and abbreviations.

Groundwater Levels, 10N04E23A01M  
 Sacramento County



Graphics created using fly.

Meas. Date	R.P.Elev	G.S.Elev	DBRP	EWS	DTW	QMC	NMC
02/27/1953	15.5	15.0	4.7	10.8	4.2		
04/01/1953	15.5	15.0	5.1	10.4	4.6		
05/19/1953	15.5	15.0	3.0	12.5	2.5		
07/08/1953	15.5	15.0	3.8	11.7	3.3		
08/24/1953	15.5	15.0	3.6	11.9	3.1		
10/30/1953	15.5	15.0	7.8	7.7	7.3		
04/12/1954	15.5	15.0	5.1	10.4	4.6		
10/21/1954	15.5	15.0	7.5	8.0	7.0		
03/25/1955	15.5	15.0	5.7	9.8	5.2		
10/21/1955	15.5	15.0	10.9	4.6	10.4		
03/30/1956	15.5	15.0	5.6	9.9	5.1		
10/01/1956	15.5	15.0	7.5	8.0	7.0		
10/24/1956	15.5	15.0	9.0	6.5	8.5		
03/10/1957	15.5	15.0	3.3	12.2	2.8		
03/21/1957	15.5	15.0	5.7	9.8	5.2		
10/07/1957	15.5	15.0	8.3	7.2	7.8		

x

10/08/1957	15.5	15.0	8.0	7.5	7.5	
03/24/1958	15.5	15.0	2.1	13.4	1.6	
10/09/1958	15.5	15.0	8.9	6.6	8.4	
03/09/1959	15.5	15.0	6.5	9.0	6.0	
09/30/1959	15.5	15.0	7.7	7.8	7.2	
03/01/1960	15.5	15.0	6.2	9.3	5.7	
04/12/1961	15.5	15.0	8.6	6.9	8.1	
10/12/1961	15.5	15.0	0.0	0.0	0.0	5
03/12/1962	15.5	15.0	0.0	0.0	0.0	5
10/12/1962	15.5	15.0	0.0	0.0	0.0	5
03/25/1963	15.5	15.0	6.7	8.8	6.2	
10/18/1963	15.5	15.0	8.4	7.1	7.9	
04/09/1964	15.5	15.0	9.4	6.1	8.9	
10/15/1964	15.5	15.0	0.0	0.0	0.0	9
03/12/1965	15.5	15.0	7.9	7.6	7.4	
10/13/1965	15.5	15.0	8.3	7.2	7.8	
03/08/1966	15.5	15.0	8.6	6.9	8.1	
10/11/1966	15.5	15.0	12.4	3.1	11.9	2
03/15/1967	15.5	15.0	6.3	9.2	5.8	
10/23/1967	15.5	15.0	10.2	5.3	9.7	
03/14/1968	15.5	15.0	8.6	6.9	8.1	
10/23/1968	15.5	15.0	10.4	5.1	9.9	
04/07/1969	15.5	15.0	9.5	6.0	9.0	
04/21/1970	15.5	15.0	7.5	8.0	7.0	
10/26/1970	15.5	15.0	11.5	4.0	11.0	
05/06/1971	15.5	15.0	5.5	10.0	5.0	
10/18/1971	15.5	15.0	12.0	3.5	11.5	
03/16/1972	15.5	15.0	10.7	4.8	10.2	
10/19/1972	15.5	15.0	12.1	3.4	11.6	
03/19/1973	15.5	15.0	3.4	12.1	2.9	
10/12/1973	15.5	15.0	10.5	5.0	10.0	
03/15/1974	15.5	15.0	5.6	9.9	5.1	
10/11/1974	15.5	15.0	10.1	5.4	9.6	
03/13/1975	15.5	15.0	6.1	9.4	5.6	
10/16/1975	15.5	15.0	9.1	6.4	8.6	
03/12/1976	15.5	15.0	10.0	5.5	9.5	
10/15/1976	15.5	15.0	9.3	6.2	8.8	
03/17/1977	15.5	15.0	11.5	4.0	11.0	
10/14/1977	15.5	15.0	11.5	4.0	11.0	
03/22/1978	15.5	15.0	8.0	7.5	7.5	
10/26/1978	15.5	15.0	12.6	2.9	12.1	
03/27/1979	15.5	15.0	9.4	6.1	8.9	
10/04/1979	15.5	15.0	6.6	8.9	6.1	
03/17/1980	15.5	15.0	7.0	8.5	6.5	
10/08/1980	15.5	15.0	10.0	5.5	9.5	
03/16/1981	15.5	15.0	14.0	1.5	13.5	
10/22/1981	15.5	15.0	12.0	3.5	11.5	
11/05/1982	15.5	15.0	8.9	6.6	8.4	
03/24/1983	15.5	15.0	2.6	12.9	2.1	
10/19/1983	15.5	15.0	8.8	6.7	8.3	
03/14/1984	15.5	15.0	8.1	7.4	7.6	
10/24/1984	15.5	15.0	12.1	3.4	11.6	
04/02/1985	15.5	15.0	10.0	5.5	9.5	
10/24/1985	15.5	15.0	13.0	2.5	12.5	
03/27/1986	15.5	15.0	10.0	5.5	9.5	
03/25/1987	15.5	15.0	7.3	8.2	6.8	
10/15/1987	15.5	15.0	8.1	7.4	7.6	
03/23/1988	15.5	15.0	8.4	7.1	7.9	
05/09/1990	15.5	15.0	7.6	7.9	7.1	
10/11/1990	15.5	15.0	9.0	6.5	8.5	3
02/27/1991	15.5	15.0	8.0	7.5	7.5	
10/21/1991	15.5	15.0	7.8	7.7	7.3	
04/08/1992	15.5	15.0	8.9	6.6	8.4	4
10/16/1992	15.5	15.0	9.1	6.4	8.6	



03/23/1993	15.5	15.0	7.0	8.5	6.5	
10/07/1993	15.5	15.0	6.0	9.5	5.5	
04/04/1994	15.5	15.0	7.6	7.9	7.1	
11/01/1994	15.5	15.0	8.7	6.8	8.2	
04/12/1995	15.5	15.0	5.8	9.7	5.3	
10/05/1995	15.5	15.0	5.6	9.9	5.1	8
04/04/1996	15.5	15.0	5.0	10.5	4.5	
10/10/1996	15.5	15.0	5.9	9.6	5.4	
04/02/1997	15.5	15.0	7.1	8.4	6.6	
10/23/1997	15.5	15.0	8.7	6.8	8.2	

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[\[Return to Well Location Map\]](#)

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**For more information, please contact our office:**

*Department of Water Resources, Central District  
Geology and Groundwater Section  
3251 'S' Street  
Sacramento, CA 95816*

*Phone: 916-227-7590*

*Fax: 916-227-7600*

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Please send any comments to [Eric Senter](#)

Document: AllWellData.cfm  
Revised: March 11, 1998

**Appendix C**  
**City of Sacramento –**  
**Reclamation District No. 1000 Agreement**

COPY

JOINT COMMUNITY FACILITIES AGREEMENT  
BETWEEN  
THE CITY OF SACRAMENTO  
AND  
RECLAMATION DISTRICT 1000

This Agreement is entered into as of ~~September, 1996~~<sup>2, 1997</sup>, by and between the City of Sacramento, a charter municipal corporation ("City"), and Reclamation District 1000, a public entity of the State of California formed by Cal. Stats. 1911, c. 412 ("District").

Recitals

Whereas:

A. Development within the geographic area included in the North Natomas Community Plan (the "Plan Area"), as shown on the map attached as Exhibit A, requires the construction of public facilities and improvements, including drainage and associated facilities; and

B. District owns and operates an integrated system of drainage canals, pumping plants and other facilities for the drainage of lands within its boundaries; and

C. City and District have agreed to cooperate in the design and construction of drainage facilities to serve the Plan Area, consisting of new facilities and improvements to existing District facilities ("Facilities"), in order to accommodate new development within the Plan Area; and

D. City has, in conjunction with landowners and developers within the Plan Area, determined to finance the Facilities through the formation by City of a community facilities district ("CFD") pursuant to the Mello-Roos Community Facilities Act of 1982, as amended (California Government Code Sections 53311, et seq., hereafter the "Act"), and the authorization of special tax levies and bond issues ("Bonds") that will be used in part to pay for the Facilities, which will be owned by District; and

E. Section 53316.2 of the Act provides that a CFD may be used to finance facilities to be owned by an entity other than the agency that forms the CFD, but only pursuant to a joint community facilities agreement or a joint exercise of powers agreement; and

F. Section 53316.2 of the Act authorizes the legislative bodies of two or more local agencies to enter into a joint community facilities agreement prior to the formation of the CFD if the legislative body of each entity adopts a resolution declaring that such a joint agreement would be beneficial to residents of that entity; and

G. For purposes of the Act and this Agreement, the City Council of the City of Sacramento (the "City Council") is the legislative body of City; and the Board of Trustees of District ("the Board") is the legislative body of District; and

H. The City Council and the Board have, prior to the execution of this Agreement, duly considered the contents of this Agreement and have each determined, by resolution, that the execution of this Agreement would be beneficial to the residents of City and the residents within the service area of District; and

I. By this Agreement, City and District desire to set forth their intent and their agreements with respect to the conduct of the proceedings for formation of the CFD, the implementation of the levy and collection of the special tax, the issuance of Bonds and distribution of Bond proceeds, and construction and ownership of the Facilities.

### **Agreement**

**Now, therefore, the parties agree as follows:**

Section 1. **Formation of CFD.** City covenants to use its best efforts to initiate and conduct all legal proceedings to form the CFD with the boundaries specified in Exhibit B, attached hereto and incorporated herein by this reference, or such other boundaries that City and District shall agree upon in writing. If the CFD is formed, City agrees to use its best efforts in actions to levy, collect and enforce the special tax, and issue and administer the Bonds and the CFD. In administering the Bonds and the CFD, City shall employ and pay all required consultants, annually levy the special tax, pay and administer the Bonds, and comply with all state and federal requirements pertaining to the proceedings and the Bonds, including the requirements of the United States Internal Revenue Code and associated regulations. District will not participate in or be considered a participant in the formation proceedings for the CFD, nor will it for any purpose be considered to be an issuer of the Bonds.

Section 2. **Facilities.** The land and improvements which are to be acquired, installed and constructed within each of three (3) phases of construction and the required time of completion thereof are specified in Exhibits C and C-1, attached hereto and incorporated herein by this reference. Exhibits C and C-1 may be modified with the written approval of both parties, should the need to do so arise during design or construction of the Facilities. At City's request, District will provide to City any information in District's possession required to complete the portion of the public facilities report regarding the Facilities (as specified in section 53321.5 of the Act).

Section 3. **Design, construction and ownership of Facilities; right of way acquisition.** City shall prepare and deliver to District for its approval, the following: (i) upon completion thereof, final design plans and specifications for the Facilities; (ii) an itemized budget for the design, construction and acquisition of the Facilities; and (iii) an estimated schedule of expenditures for the Facilities, which shall provide for phased installation of Facilities substantially as set forth in Exhibit "C". City shall, additionally, acquire any additional right of way necessary to accommodate the Facilities and shall obtain all necessary permits and approvals required for construction of the Facilities, including, if and to the extent required, but not limited to, Section 404 permits and California Fish and Game Code Section 1601 permits. Upon completion and acceptance of the plans and specifications, budget and schedule of expenditures, and acquisition of any additional required right of way, District shall construct the Facilities in accordance therewith

and shall solely own and operate such Facilities. City and District shall cooperate in the process of acquiring needed land and rights of way for the construction of the Facilities. In the event that it is determined by District, by survey or otherwise, that District needs to acquire or memorialize of record land or rights of way in order to conform legal descriptions of its existing facilities, easements, fee title, or other rights of way, to the actual physical location of its existing facilities, costs associated with such acquisitions shall not be costs associated with the Facilities, and shall be borne solely by District from its own funds.

Section 4. **Disbursement of Bond proceeds.** Pursuant to the Bond resolution or indenture providing for the issuance of the Bonds (“Indenture”), City shall establish a separate account with the bond trustee or fiscal agent designated in the Indenture, into which the proceeds of the Bonds to be used for the Facilities shall be deposited (the “Facilities Account”). The proceeds in the Facilities Account shall be for the use of District and City exclusively for the purposes herein described and may be drawn upon by District and City in accordance with the procedures set forth in this section.

City may draw upon the Facilities Account to pay for its costs actually incurred in connection with the design of the Facilities, together with costs relating to the acquisition of land and rights of way. District may draw upon the Facilities Account to pay for its costs actually incurred in connection with construction and installation of the Facilities. District or City shall submit a requisition, in such form as may be specified with the bond trustee or fiscal agent, to the bond trustee or fiscal agent for the costs incurred. District and City may not draw upon any of the proceeds in the Facilities Account without the signature of an appropriate official upon the requisition.

Except to the extent that the Indenture requires earnings that are subject to rebate as arbitrage pursuant to the Internal Revenue Code be deposited elsewhere, all earnings from investment of the proceeds in the Facilities Account shall accrue to and be deposited into the Facilities Account.

Section 5. **Use of special tax proceeds; tax covenant.** District shall use the proceeds from the draws upon the Facilities Account exclusively to pay the costs of construction and installation of the Facilities, and City shall use the proceeds from draws upon the Facilities Account exclusively to pay the costs of design of the Facilities and acquisition of necessary right of way for the Facilities, and each shall account for the expenditure of such funds according to generally accepted governmental accounting practices. District and City each covenant that they will take no action that would result in interest on any Bonds issued with respect to the CFD not being excluded from gross income for federal income tax purposes.

Section 6. **Debt service; rebate compliance.** District’s obligations hereunder shall be limited to the obligations assumed by it with respect to the Facilities. District shall have no obligation or responsibility whatsoever with respect to the issuance and sale of the Bonds, for the payment of principal and interest thereon, or for the levy of the special taxes required to provide debt service. City shall have the sole responsibility in such matters.

City shall be responsible for payment of arbitrage rebates, where required under the United States Internal Revenue Code and the regulations promulgated thereunder. Notwithstanding the foregoing, unless otherwise provided in the Indenture, to the extent that any earnings on the funds in the Facilities Account are subject to rebate, District and City will deliver from the Facilities Account such rebatable amounts to allow City to timely rebate to the United States, as required.

Section 7. **No separate entity.** It is not intended that this Agreement be construed to form a separate joint exercise of powers authority; instead, it is the intention of the parties that the Council act on behalf of City in all matters for which City is responsible under the Act and this Agreement, and that the Board act on behalf of District in all matters for which it is responsible under this Agreement. Whenever approval of City and District is required under the Act or this Agreement, it is contemplated by the parties that such action be submitted to the Council and the Board for approval by resolution, or to the officer to whom approval authority has been delegated, prior to such action being taken.

Section 8. **Indemnification.**

a. **By City.** City shall to the full extent permitted by law indemnify, defend and hold District, and its officers, employees, agents and contractors harmless from and against any and all liability, obligations, losses, claims and damages, and expenses in connection therewith, including counsel fees and expenses, arising out of or as the result of the proceedings for the formation of the CFD, the levy and collection of the special taxes, and the insurance, sale and administration of the bonds and bond proceeds.

b. **By District.** District shall to the full extent permitted by law indemnify, defend and hold City, and its officers, employees, agents and contractors harmless from and against any and all liability, obligations, losses, claims and damages, and expenses in connection therewith, including counsel fees and expenses, arising out of or as the result of the acquisition, construction, or operation and maintenance of the Facilities.

Section 9. **Termination.** This Agreement shall terminate and be of no further force and effect upon the earliest to occur of the following events: (i) the dissolution of the CFD pursuant to Section 53338.5 of the Act; and (ii) the agreement of City and District to terminate this Agreement. Notwithstanding the foregoing, this Agreement shall remain in force and effect for as long as any Bonds are outstanding.

Section 10. **Notice.** Any notice, payment or instrument required or permitted by this Agreement to be given or delivered to any party or other person shall be deemed to have been received when personally delivered or seventy-two (72) hours following deposit of the same in any United States Post Office in California, first class, postage prepaid, addressed as follows:

City: City of Sacramento  
Manager, Real Estate and Special Districts  
915 I Street, Sacramento, CA 95814

District: District Engineer  
Reclamation District No. 1000  
1633 Garden Highway, Sacramento, CA 95833

Section 11. **Captions.** Captions to sections of this Agreement are for convenience purposes only, and are not part of this Agreement.

Section 12. **Severability.** If any portion of this Agreement is declared by a court of competent jurisdiction to be invalid or unenforceable, such portion shall be deemed severed from this Agreement and the remaining parts shall remain in full effect as though such invalid or unenforceable provision had not been a part of this Agreement.

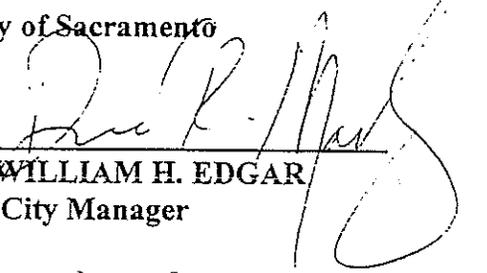
Section 13. **Successors and assigns.** This Agreement shall be binding upon and inure to the benefit of the successors and assigns of the parties hereto.

Section 14. **Entire agreement; amendment.** This Agreement contains the entire agreement between the parties with respect to the matters provided for herein and may be amended only by subsequent written agreement signed on behalf of both parties.

Section 15. **Counterparts.** This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one instrument.

Section 16. **CEQA compliance.** No physical work on the ground shall be conducted until the California Environmental Quality Act has been complied with, at no cost to District, on City's drainage plan for the Plan Area, and this agreement is subject to such compliance.

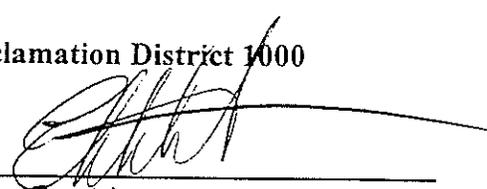
City of Sacramento

By:   
WILLIAM H. EDGAR  
City Manager

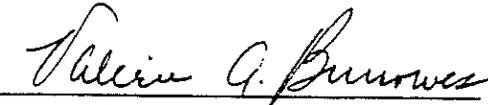
Approved as to form:

  
City Attorney

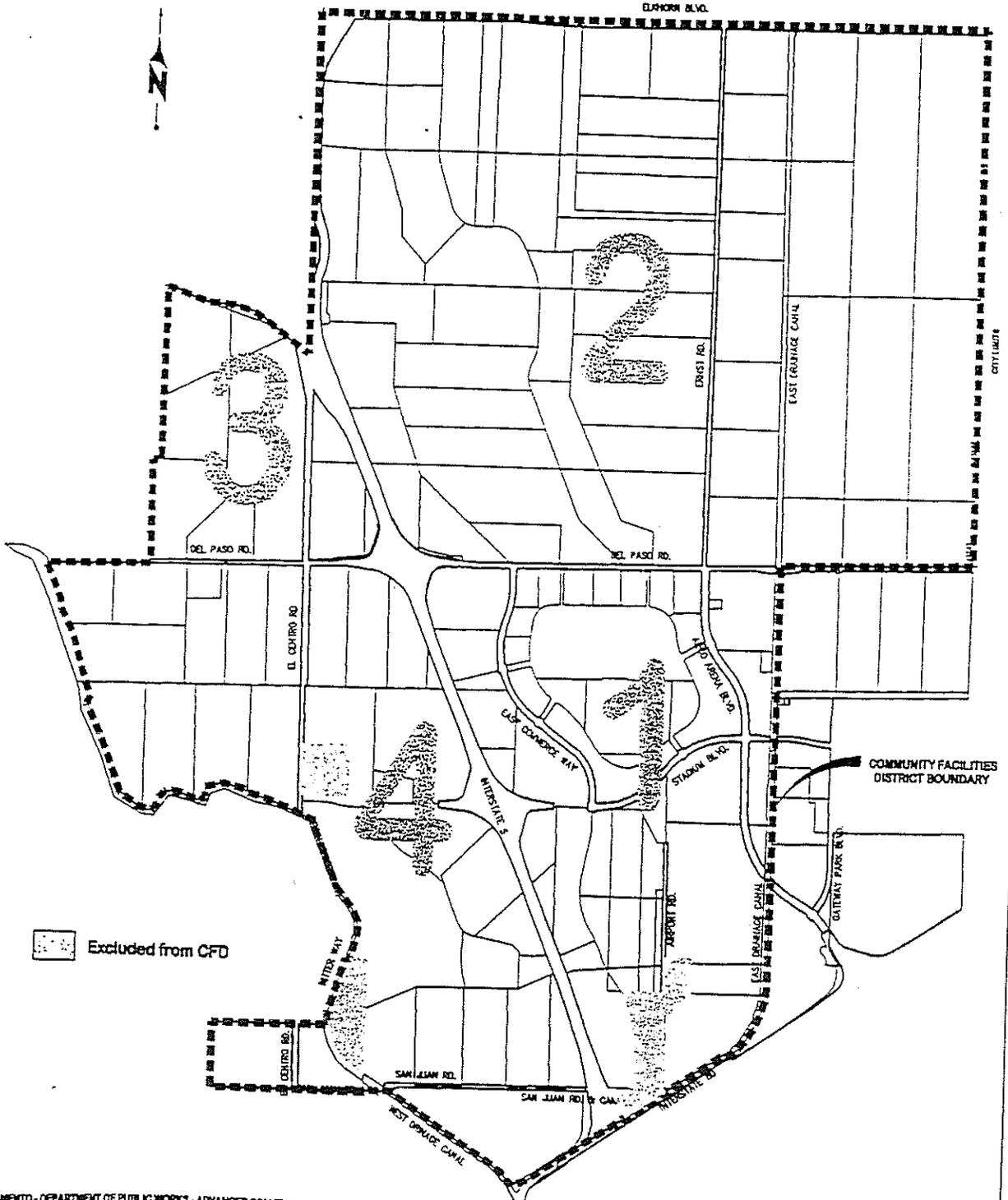
Reclamation District 1000

By:   
Title: President  
Board of Trustees

Attest:

  
City Clerk

Boundaries of  
**NORTH NATOMAS DRAINAGE**  
**COMMUNITY FACILITIES DISTRICT NO. 97-01**  
 City of Sacramento, County of Sacramento  
 State of California



**LEGEND**

- △ EXISTING PUMPING PLANT
- EXISTING LEVEE
- == NEW LEVEE
- ⊠ EXISTING PUMPING, ENLARGE CAPACITY
- NEW PUMPING PLANT
- ..... CANAL IMPROVEMENTS, WIDEN AND SHAPE CANAL, REMOVE SEDIMENTS
- REMOVE SEDIMENTS

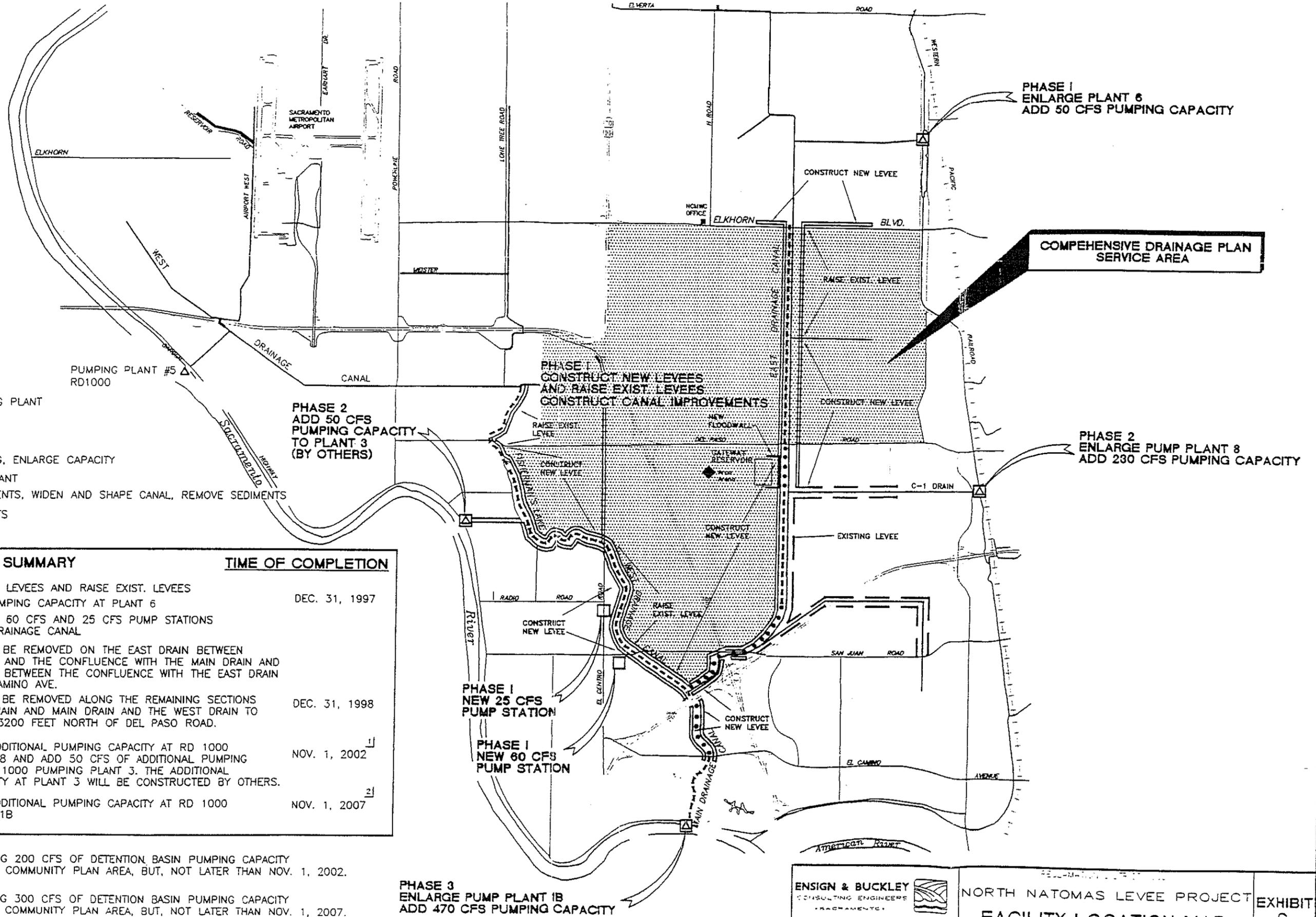
**CONSTRUCTION PHASE SUMMARY**

**TIME OF COMPLETION**

<b>PHASE 1</b>	<ul style="list-style-type: none"> <li>• CONSTRUCT NEW LEVEES AND RAISE EXIST. LEVEES</li> <li>• ADD 50 CFS PUMPING CAPACITY AT PLANT 6</li> <li>• CONSTRUCT NEW 60 CFS AND 25 CFS PUMP STATIONS ON THE WEST DRAINAGE CANAL</li> <li>• SEDIMENTS WILL BE REMOVED ON THE EAST DRAIN BETWEEN DEL PASO ROAD AND THE CONFLUENCE WITH THE MAIN DRAIN AND THE MAIN DRAIN BETWEEN THE CONFLUENCE WITH THE EAST DRAIN AND WEST EL CAMINO AVE.</li> </ul>	DEC. 31, 1997
<b>PHASE 1A</b>	<ul style="list-style-type: none"> <li>• SEDIMENTS WILL BE REMOVED ALONG THE REMAINING SECTIONS OF THE EAST DRAIN AND MAIN DRAIN AND THE WEST DRAIN TO APPROXIMATELY 3200 FEET NORTH OF DEL PASO ROAD.</li> </ul>	DEC. 31, 1998
<b>PHASE 2</b>	<ul style="list-style-type: none"> <li>• ADD 230 CFS ADDITIONAL PUMPING CAPACITY AT RD 1000 PUMPING PLANT 8 AND ADD 50 CFS OF ADDITIONAL PUMPING CAPACITY AT RD 1000 PUMPING PLANT 3. THE ADDITIONAL PUMPING CAPACITY AT PLANT 3 WILL BE CONSTRUCTED BY OTHERS.</li> </ul>	NOV. 1, 2002 <sup>1)</sup>
<b>PHASE 3</b>	<ul style="list-style-type: none"> <li>• ADD 470 CFS ADDITIONAL PUMPING CAPACITY AT RD 1000 PUMPING PLANT 1B</li> </ul>	NOV. 1, 2007 <sup>2)</sup>

<sup>1)</sup> PRIOR TO INSTALLING 200 CFS OF DETENTION BASIN PUMPING CAPACITY IN NORTH NATOMAS COMMUNITY PLAN AREA, BUT, NOT LATER THAN NOV. 1, 2002.

<sup>2)</sup> PRIOR TO INSTALLING 300 CFS OF DETENTION BASIN PUMPING CAPACITY IN NORTH NATOMAS COMMUNITY PLAN AREA, BUT, NOT LATER THAN NOV. 1, 2007.



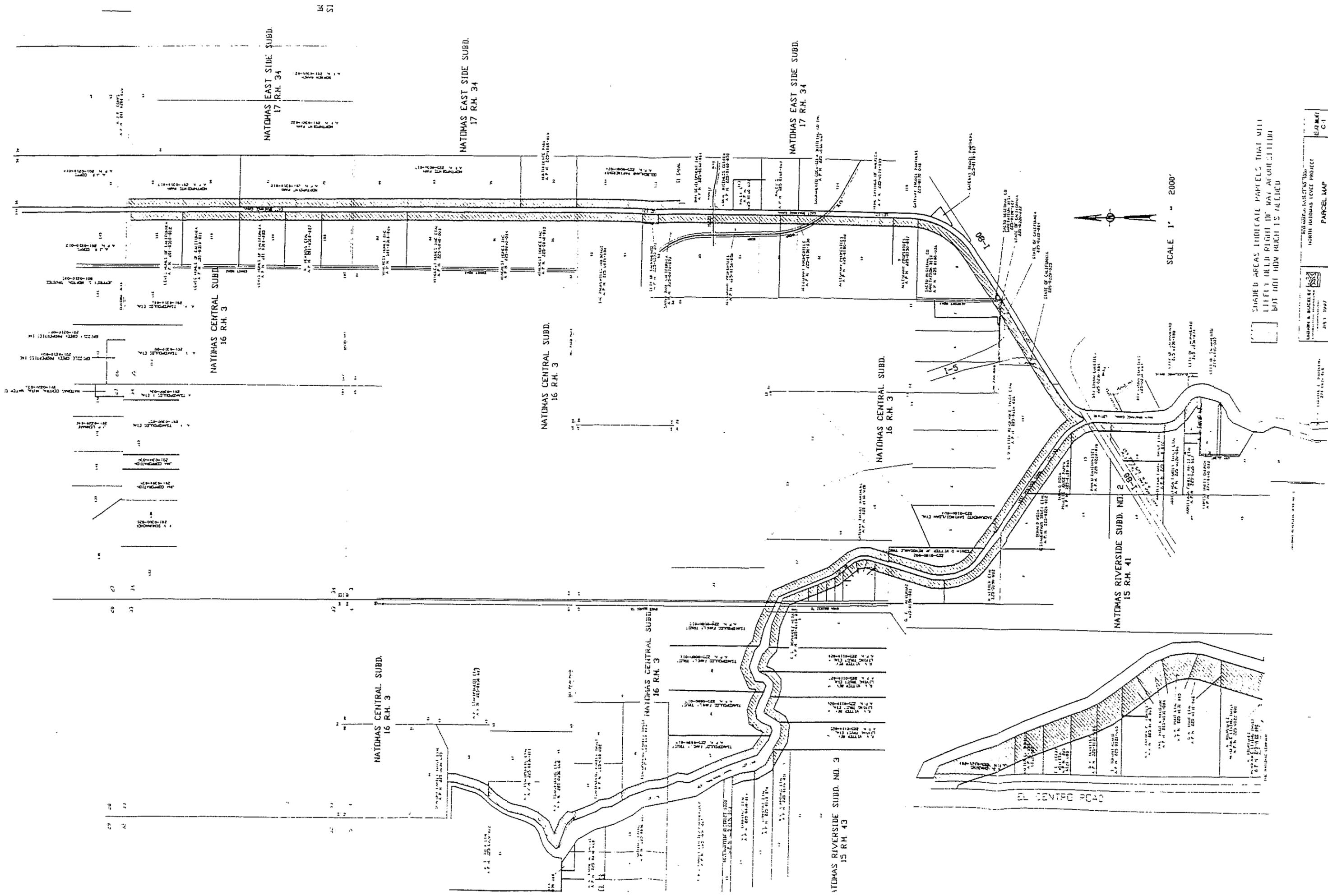
ENSIGN & BUCKLEY  
CONSULTING ENGINEERS  
FACILITATION



NORTH NATOMAS LEVEE PROJECT  
FACILITY LOCATION MAP

EXHIBIT  
C

MAY 1997



SCALE 1" = 2000'

SHADED AREAS INDICATE PARCELS THAT WILL LIKELY HOLD RIGHT OF WAY ACQUISITION BUT NOT HOW MUCH IS NEEDED

LANDIS & BUCKLEY ENGINEERS ARCHITECTS  
 NORTH NATOMAS LEVEL PROJECT  
 PARCEL MAP  
 JAN 1 1987  
 EBM 41

11  
 12

NATOMAS EAST SIDE SUBD.  
 17 R.H. 34

NATOMAS EAST SIDE SUBD.  
 17 R.H. 34

NATOMAS EAST SIDE SUBD.  
 17 R.H. 34

NATOMAS CENTRAL SUBD.  
 16 R.H. 3

NATOMAS CENTRAL SUBD.  
 16 R.H. 3

NATOMAS CENTRAL SUBD.  
 16 R.H. 3

NATOMAS RIVERSIDE SUBD. NO. 2  
 15 R.H. 41

NATOMAS CENTRAL SUBD.  
 16 R.H. 3

NATOMAS CENTRAL SUBD.  
 16 R.H. 3

NATOMAS RIVERSIDE SUBD. NO. 2  
 15 R.H. 41

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COPY

FACILITIES PROTOCOL AGREEMENT  
BETWEEN THE CITY OF SACRAMENTO  
AND RECLAMATION DISTRICT 1000

NORTH NATOMAS COMMUNITY PLAN AREA FACILITIES

RECITALS

A. The City of Sacramento ("City") and Reclamation District No. 1000 ("District") have entered into that certain Joint Community Facilities Agreement of even date herewith under which City and District agree to cooperate in the design and construction of drainage facilities to serve the geographic area included in the North Natomas Community Plan (the "Plan Area"); and

B. A portion of the facilities to dispose of drainage within the Plan Area will be detention basins within which interior storm runoff will be detained and from which such runoff will be pumped or gravity drained into District's existing and improved area-wide drainage disposal system, for eventual disposition by District into the Sacramento River; and

C. District and City desire by this agreement to provide for cooperation in the design and approval of on-site detention basins within the Plan Area and for a protocol for operation of such detention basins, which will be owned and operated by City, for disposal of water into District's area-wide drainage system.

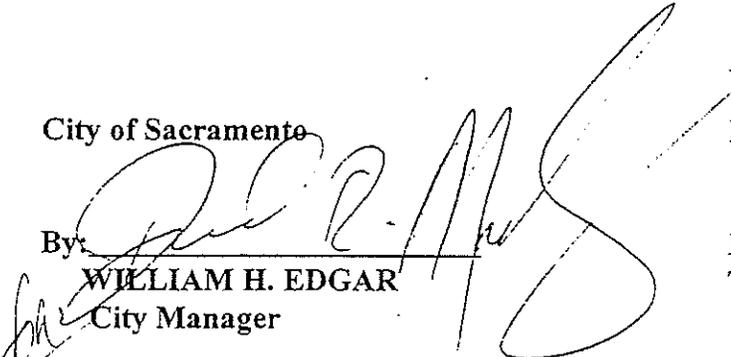
AGREEMENT

1. City shall disclose to District for its review and reasonable approval the proposed final design of all detention basins and detention basin pumping plants.
2. City shall propose to District a schedule for installation of detention basins and detention basin pumping plants or other drainage release structures for District's review and reasonable approval.
3. City shall propose to District a protocol for the operation of each detention basin pumping plants or other drainage release structures for District's review and reasonable approval.
4. All detention basins and detention basin pumping plants or other drainage release structures shall be installed in accordance with the approved plans therefor and operated in accordance with the approved protocol therefor.
5. The District's cost of engineering review and approval of the final design for detention basins and pumping plants or other drainage release structures and protocols for

operation thereof, shall be reimbursed by City to District upon City's collection thereof from developers within the Plan Area.

6. City will reimburse District for the Plan Area's share of reimbursement for District's development of the Natomas Basin Modeling Plan in accordance with Reclamation District No. 1000 Resolution No. 1996-4B, a copy of which is attached hereto as Schedule I.

City of Sacramento

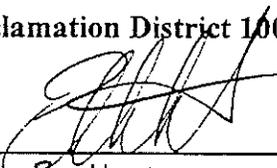
By: 

**WILLIAM H. EDGAR**  
City Manager

Approved as to form:

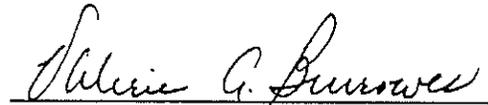
  
City Attorney

Reclamation District 1000

By: 

Title: President  
Board of Trustees

Attest:

  
City Clerk

RESOLUTION NO. 1996-4BPOLICY FOR RECOVERY OF COSTS OF  
NATOMAS BASIN MODELING PROGRAM

WHEREAS, over the past several years Reclamation District No. 1000 ("District") has developed the Natomas Basin Modeling Program (the "Program") under agreement with District's consulting engineers, through which District owns the Program and all improvements or additions thereto which are developed over time;

WHEREAS, the Program consists of a computer software program and an organized data set which exists independently of, but is used in conjunction with, EPA's Storm Water Management Model;

WHEREAS, the Program enables District to define the flood plain within District boundaries and to predict the effect on District's drainage system of various assumed inputs of water thereto and of various encroachments in the interior flood plain within District boundaries;

WHEREAS, the cost to District of developing the Program has been substantial, and the District continues to incur costs in refining and further developing the Program as additional data is developed, and costs in the nature of interest for loss of use of funds (to be based on the percentage increase, if any, on an annual basis in the U.S. Department of Labor Consumer Price Index for the San Francisco-Oakland Area, All Urban Consumers, All Items) (together "Costs");

WHEREAS, District desires by this Resolution to establish a policy for recoupment of a portion of the Costs of the Program, recognizing that a portion of the Costs thereof (10%) are properly allocable to all District landowners by virtue of general application of the Program for District-wide purposes (such as flood plain mapping, canal and crossing sizing, pumping plant analysis and general drainage system information);

WHEREAS, though required for District purposes, it has been projected, and experience has validated the projection, that 90% of the use of the Program is required by development proposals by owners/developers of land within District boundaries; and

WHEREAS, District projects that approximately 15,000 acres of land within District boundaries is susceptible to development in the foreseeable future in a manner requiring that a drainage improvement agreement be entered into by the owners/developers thereof with District, and requiring utilization of the Program by District.

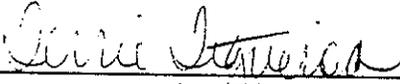
NOW, THEREFORE, BE IT RESOLVED AS FOLLOWS:

1. The above recitals are found to be true and correct.

2. The owners/developers of land within District boundaries should be required, in any form of drainage improvement agreement entered into with District, to pay that portion of 90% of the then current Costs of the Program that the acreage of land they propose to develop bears to 15,000 acres.

CERTIFICATION

I, Terrie Figueroa, Secretary of Reclamation District No. 1000, hereby certify that the foregoing Resolution was duly adopted by the Board of Trustees of Reclamation District No. 1000 at the regular meeting held April 12, 1996, and made a part of the minutes thereof.

  
\_\_\_\_\_  
Terrie Figueroa

**RESOLUTION NO. 97-497**

ADOPTED BY THE SACRAMENTO CITY COUNCIL

ON DATE OF SEP 21 1997

**RESOLUTION APPROVING THE AGREEMENT  
BETWEEN THE CITY OF SACRAMENTO AND RECLAMATION  
DISTRICT 1000 REGARDING CFD No. 97-01**

BE IT RESOLVED BY THE COUNCIL OF THE CITY OF SACRAMENTO:

1. The agreement between the City of Sacramento and Reclamation District 1000, a copy of which is attached to this resolution, is approved and the City Manager is authorized to execute the agreement.
2. The City Manager is authorized to transfer such amounts of the bond proceeds, when and if received by the City to Reclamation District 1000 as is required to pay the district's costs and fund construction of the project.

JOE SERNA, JR.

MAYOR

ATTEST:

VALERIE CURDOWES

CITY CLERK

CERTIFIED AS TRUE COPY  
of Resolution No. 97-497

OCT 17 1997  
DATE CERTIFIED Valerie C. Curdowes  
CITY CLERK CITY OF SACRAMENTO

FOR CITY CLERK USE ONLY

RESOLUTION NO.: 97-497

DATE ADOPTED: SEP 21 1997

**Appendix D**  
**Reclamation District No. 1000's Comments**

Reclamation District 1000 is concerned about the following issues regarding the proposed plan:

- Groundwater protocol
- Maintenance of the floodway
- Maintenance of the new levees
- Operation and maintenance of the new pumping plants
- Method of collecting increased costs

### **Groundwater Protocol**

Due to the higher than normal groundwater levels relative to other areas, the District could experience significantly increased pumping costs to maintain existing canal stages. A method of evaluating the effect of groundwater pumping must be considered and provisions made to reimburse the District for pumping said groundwater.

### **Maintenance of the Floodway**

The new floodway will range from two to three thousand feet in width and it will be excavated into the ground water area. Depending on the time of year and the particular year with regard to wetness, there may be none to 4 feet ( $\pm$ ) of water in the floodway. There has been no suggestion made as to how the floodway could be maintained and cleared of silt and vegetation. At best the floodway will be very soggy and unable to support normal cleaning and maintenance equipment, without which it will become a marsh and sooner or later will not be able to adequately pass the design flows. When design flows are not passed, upstream stages will increase and inundate property not previously inundated which will subject the District to inverse condemnation claims. The District will require that proponents and the county indemnify and hold the District harmless for any such claims.

As the floodway becomes populated with water grasses, tulle's and wild trees of varying types, it may become a wetlands and/or critical habitat to various threatened and/or endangered wildlife species, including but not limited to the Giant Garter Snake and Swainson's Hawk, which would complicate or stifle maintenance of the floodway and may require mitigation every time it is worked on.

At the present time the District does not maintain a floodway and would not want to do so in this case. Currently, when a storm causes water to flow out of District canals, it over-flows onto agricultural land and eventually flows back into the canals. The land is farmed and no effort is required of the District than to maintain the canals.

### **Maintenance of New Levees**

The proposal adds eight miles or so of new levees to be maintained. Groundwater effects on the new levees are unknown. With high groundwater on the outside of the new levees, the inside toe slopes may become unstable, requiring continual maintenance. The District would expect to be compensated for this additional maintenance if it has to maintain these new levees.

At present time the District only maintains the canals and a road adjacent to them.

## **Operation and Maintenance of New Pumping Plants**

The District does not want to operate any of the new pumping plants with the possible exception of the one west of Highway 99 and would need to be reimbursed for that operation to handle drainage from the area. Additionally, an indemnification/hold harmless agreement would probably be required.

## **Method of Collecting Increased Costs**

A method of collecting increased costs associated with this proposal apart from RD1000's O&M assessment would need to be devised. RD1000 currently levies an assessment on all properties in the District but has no method to add specific costs to a segregated list of parcels.

**From:** [PER-CEQA](#)  
**To:** [Hawkins, Tim](#)  
**Cc:** [Smith, Todd](#)  
**Subject:** FW: North Precinct: MORE comment on Revised NOP by FOSH  
**Date:** Tuesday, January 23, 2018 9:09:34 AM  
**Attachments:** [Ltr.NOP.North.Precinct.1.18.18.pdf](#)  
[ATT00001.htm](#)  
[Attach.Two.FOSH.1.18.18.pdf](#)  
[ATT00002.htm](#)  
[Attach.One.FOSH.1.18.18.pdf](#)  
[ATT00003.htm](#)  
[Attach.Three.FOSH.NOP.1.18.18.pdf](#)  
[ATT00004.htm](#)  
[Drainage.Ensign.2000.pdf](#)  
[ATT00005.htm](#)

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***Andrea Guerra, Senior Office Assistant***

Office of Planning and Environmental Review

827 7th Street, Room 225A, Sacramento, CA 95814 | (916) 874-2862

 Please consider the environment before printing this email  
[www.saccounty.net](http://www.saccounty.net)



---

**From:** Friends of Swainson's Hawk [mailto:swainsonshawk@sbcglobal.net]  
**Sent:** Sunday, January 21, 2018 12:54 PM  
**To:** PER-CEQA <CEQA@saccounty.net>  
**Cc:** Judith Lamare <judelam@sbcglobal.net>  
**Subject:** North Precinct: MORE comment on Revised NOP by FOSH

Dear Mr. Hawkins,

One further comment on the Revised NOP for proposed North Precinct project:

The Applicant proposes to reserve an area of land for construction of a future new hospital, even though no hospital operator has proposed locating a facility in Natomas Basin.

The Natomas Basin does not have protection against even a FEMA 100-year flood. The levee project is half-completed, there have been innumerable project delays, and although Federal funds have theoretically been authorized, it cannot be known whether the promised funding will actually prove adequate, or when it will be available. Recent upheavals in the Federal budget, based on highly ideological and unrealistic fiscal projections, have created great uncertainty as to whether funding will ever be available for completion of 200-year flood protection.

As we recall, Hurricane Katrina caused disastrous flooding of several New

Orleans hospitals. An obvious lesson is that new hospitals should not be sited in deep flood basins surrounded by levees. Any new hospital should be sited east of the NEMDC (Steelhead Creek), on higher ground that is not subject to potential flooding in the event of levee failure or overtopping. We believe that most hospital operators would agree.

Nonetheless, as long as the North Precinct project proposes a future hospital in the Basin, the DEIR must address the potential effects of flooding upon the hospital and its patients and staff, and include mitigation measures that would mitigate or reduce, to the extent feasible, the effects of flooding upon the future hospital or medical facility, and its patients and staff.

Below are our previous comments submitted on 1/18/18.

Jim Pacht, Judith Lamare  
Friends of the Swainson's Hawk  
[www.swainsonshawk.org](http://www.swainsonshawk.org)  
[swainsonshawk@sbcglobal.net](mailto:swainsonshawk@sbcglobal.net)  
916 769 2857

Begin forwarded message:

**From:** Friends of Swainson's Hawk <[swainsonshawk@sbcglobal.net](mailto:swainsonshawk@sbcglobal.net)>  
**Subject:** North Precinct: comment on Revised NOP by FOSH  
**Date:** January 18, 2018 9:19:04 PM PST  
**To:** [CEQA@saccounty.net](mailto:CEQA@saccounty.net)  
**Cc:** Judith Lamare <[judelam@sbcglobal.net](mailto:judelam@sbcglobal.net)>, "Rob [rmburness@comcast.net](mailto:rmburness@comcast.net)" <[rmburness@comcast.net](mailto:rmburness@comcast.net)>, Sean Wirth <[wirthsoscranes@yahoo.com](mailto:wirthsoscranes@yahoo.com)>, Matt Baker <[habitat@ecosacramento.net](mailto:habitat@ecosacramento.net)>

Dear Mr. Hawkins

Please open and review the attached letter of Friends of the Swainson's Hawk commenting on the Revised NOP for North Precinct, and Attachments 1 - 3, and Report of Ensign and Buckley.

Thank you very much.

Jim Pachl, Judith Lamare  
Friends of the Swainson's Hawk  
[www.swainsonshawk.org](http://www.swainsonshawk.org)  
[swainsonshawk@sbcglobal.net](mailto:swainsonshawk@sbcglobal.net)  
916 769 2857

February 2, 2018

Tim Hawkins, Environmental Coordinator  
Sacramento County, Office of Planning and Environmental Review  
827 7<sup>th</sup> Street, Room 225  
Sacramento, CA 95814

**Subject: COMMENTS ON THE REVISED NOTICE OF PREPARATION FOR THE PREPARATION OF DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE NATOMAS NORTH PRECINCT SPECIFIC PLAN (PLNP2014-00172).**

Dear Mr. Hawkins,

On December 27, 2017, the City of Sacramento Community Development Department received the Revised Notice of Preparation (NOP) for the Natomas North Precinct Specific Plan (NNPSP). The Revised NOP reflects changes and refinements to the project plan that have occurred since the County previously released an NOP for the project on April 28, 2016.

The proposed NNPSP would include development of approximately 5,675.6 acres north of Elkhorn Blvd. and east of Hwy 99 – adding 23,515 dwelling units (58,671 population) and 14,347 jobs into the unincorporated Natomas area immediately proximate to the City's North Natomas Community Plan Area. The project plan includes development consisting of residential, neighborhood mixed-use, neighborhood commercial, community mixed-use, office mixed-use and health & hospitality mixed-use. The plan includes 2,288.1 acres of parks and open space.

The City of Sacramento previously provided comments regarding the proposed development the Natomas North Precinct area (December 11, 2014 and May 31, 2016). The following comments presented herein are intended to supplement and update those previous comments:

#### **Memorandum of Understanding between City & County**

On December 10, 2002, the City & County entered into a Memorandum of Understanding (MOU) (City Resolution 2002-830 and County Resolution 2002-1566) regarding Principles of Land Use and Revenue Sharing for the Natomas Area. Does the County agree the MOU remains in effect, and, if so, how will the County address the seeming inconsistencies between the parties' agreements in the MOU and the proposal for development embodied in the North precinct proposal?

### **Economic**

Locating commercial, hospital/hospitality near City boundary may cause secondary physical and economic impacts within the City. The City requests that the County address these issues.

### **Growth Inducement**

The proposed North precinct project would bring development to an area that has not been included in the long-range plans approved by the County or the City. In addition to analyzing the effects of the project itself, the EIR should carefully evaluate its potential growth inducing effects. For example, the project would require at least the extension of urban utilities to the site, which lacks sufficient water, wastewater, storm water and energy infrastructure. California Environmental Quality Act (CEQA) recognizes that the extension of urban infrastructure to a site or area may lead to future development in nearby areas that, as a result of the infrastructure extension, may now feasibly extend and connect, thus leading to additional new development. This should be analyzed in the Environmental Impact Report (EIR).

Development of the North Precinct as proposed would involve not just extension of infrastructure, but expansion of existing facilities, and the impacts of such expansion efforts must also be evaluated. As with extension of infrastructure, the expansion may also lead to additional downstream development, and should be analyzed as growth inducing effects.

The Draft EIR should address growth inducement and premature development associated with the NNPSF project and any conflicts with growth consistency of the project with the Sacramento Area Council of Governments (SACOG) 2016 Metropolitan Transportation/Sustainable Communities Strategy (MTP/SCS).

### **Habitat Conservation Plan**

1. While the County is not a party to the Natomas Basin Habitat Conservation Plan (NBHCP), activities that could affect the success of the conservation strategy established in the NBHCP should be considered in the EIR. In the Natomas Basin, any future development not covered by an existing Habitat Conservation Plan (HCP) must obtain take authorization under the Endangered Species Act (ESA). The HCP's purpose is to promote biological conservation in conjunction with economic and urban development within the permit area. How and when does the County intend to meet this requirement? The City of Sacramento requests that the EIR include an analysis of:
  - a. Location and quality of proposed mitigation sites (including those within the Natomas Basin), including an analysis of the effect of market competition and

price increases resulting from the North precinct project and its effect on the HCP conservation strategy;

- b. Effect of the North Precinct project on existing and future water supplies that would affect the reliability of water supply and price of water used for maintenance of Giant Garter Snake (and other aquatic species) habitat;
- c. Hydrological connectivity to existing preserves in the Basin;
- d. Effects of a reduction in the inventory (supply) of land available for mitigation, while also increasing the demand for mitigation land, drive up the price of mitigation for the existing permit holders.; and
- e. Appropriate mitigation ratio assuming development of the plan, which would appear to substantially change the assumptions that supported a 0.5:1 ration for the Metro Air Park HCP and the NBHCP.

### **Agricultural, Prime Farmland and Open Space**

The Sacramento County General Plan land use designation for the project area is Agricultural Cropland. This designation represents agricultural lands most suitable for intensive agricultural activities, including row crops, tree crops, irrigated grains, and dairies. One single-family dwelling unit per 40 acres is also considered suitable in this area. The NNPSF does not appear to include any preservation of the +5,675.6-acres as Agricultural Cropland. As such, the NNPSF appears inconsistent with local, regional and state goals that facilitate and encourage in-fill development as an alternative to the development of agricultural lands.

### **Transportation**

1. As discussed with County staff regarding the study scenarios for the City's Panhandle project, we request that the Natomas North Precinct traffic analysis provide analysis for a super cumulative scenario (Post 2036). The Post 2036 Cumulative scenario shall include all major projects approved/ anticipated such as Metro Air Park, Placer Vineyards, Regional University, Sierra Vista, Sutter Pointe, Greenbriar, etc. The City would like to see analysis for roadway (LOS and ADT) in addition to intersection analysis for the intersections along Elkhorn Boulevard.
2. For the Study Area, the City requests that the traffic study assess impacts to City of Sacramento roadways and intersections. At a minimum, impacts to City streets shall include the following locations:

#### Intersections:

- Elkhorn Blvd/SR 99 Interchange (including on/off-ramp intersections)

- Elkhorn Boulevard/E Commerce Way
- Elkhorn Boulevard/Northborough Drive
- Elkhorn Boulevard/Natomas Boulevard
- Elkhorn Boulevard/Sageview Drive
- Elkhorn Boulevard/ National Drive
- Elkhorn Boulevard/various intersections proposed with Natomas North Precinct Specific Plan, and with the approved Greenbriar project
- E Commerce Way/ Meister Way

Roadways:

- Elkhorn Blvd sections (SR 99 – eastern City limits (E. Levee Road))
  - Natomas Blvd (Elkhorn Blvd – Del Paso Blvd)
  - E. Commerce Way (Elkhorn Blvd – Del Paso Blvd)
  - Del Paso Road (SR 99 – Natomas Blvd)
  - Natomas Boulevard (Elkhorn – Del Paso)
3. If roadways and intersections are impacted, widening of roadways and intersections may not be feasible since the City’s roadways are not designed to carry this volume of traffic and widening of roadways is in most cases not consistent with the City of Sacramento 2035 General Plan. We anticipate seeing mitigation measures other than roadway widening being implemented to reduce traffic affecting the City roadway system.
  4. Since the NNPSF project site is extensive, phasing should be considered. Roadway improvements and infrastructure should be defined according to each phase.
  5. The SR 99/Elkhorn Boulevard interchange reconstruction shall be required as part of the proposed project. Please refer to the 1995 Caltrans Cooperative Agreement with the City and County of Sacramento for more details about this requirement.
  6. It will be very important that development of the project would be implemented in such a way that the jobs-housing balance would remain constant throughout the development of this project. The jobs-housing balance is a very important factor that will be affecting the amount of additional traffic generated from this project on City roadways.
  7. As previously discussed, it is the City’s understanding that the County will include a VMT analysis as part of the traffic analysis.
  8. Any proposed roadway or intersection improvements within the City of Sacramento jurisdiction should be reviewed and agreed upon with the City of Sacramento Department of Public Works.

9. The City requests that the scope of work for the traffic study be shared with the City of Sacramento for review and comment. Additionally, the City requests to be included in the project development team to discuss the impact of the project on City of Sacramento streets and proposed mitigation measures and improvements

### **Sewer System**

The City of Sacramento believes the impacts from additional sewer flows to the Sacramento Regional County Sewer Interceptor needs to be analyzed to ensure there is adequate sewer capacity in the interceptor to accommodate the build-out of the existing Natomas area and the Natomas Vision area (including the NNPSF pending development plans).

### **Drainage - Long term maintenance & funding:**

1. The Project should ensure that long term maintenance mechanisms and associated funding are established for the drainage facilities including flood control basins, water quality treatment, hydro-modification basins, and low impact development measures.

### **Flood Control and Flood Plain Management**

1. How will flood control and flood plain management be addressed on and off-site? Remaining Levee improvements & phased development? This development may put people and infrastructure at risk of flooding. Will the County have any milestones for allowing development as the remaining levee work (by the Corps) is completed?

### **Storm Drainage**

1. What is the plan for storm drainage on and off-site? There is no capacity in the current North Natomas Drainage System for storm drainage from this or other developments.

### **Water Supply**

1. The County's NOP identifies that water service to the NNPSF area may come from one or more service providers. How would the NNPSF development area be provided with water service without SCWA relying upon purchases from Natomas Central Mutual Water Co. and/or City of Sacramento?
2. Backup water supply for the Plan Area is identified per the County's NOP as water from the City and/or Sac Suburban Water District Water source. What is the availability of this

is backup supply presumption based on? The City's Utilities Department has informed the County that the City is not able to provide water to this area. In compliance with State law, new development projects must show the existence of water supply that is sufficient for near-term and long-term water needs.

3. If groundwater is used, would it lower groundwater levels in City wells? How would it work within the existing groundwater management plan and the water accounting framework?

### **Fire Protection**

1. New development will result in an increase in service demand for Fire and Emergency Medical Services (EMS). Currently the City provides 100% of the fire protection and EMS demand to the unincorporated portion of Natomas. How will Metro Fire mitigate the service demand impacts and the City's ability to maintain current levels of service?
2. If LAFCo approves a shift in fire service sphere of influence in the unincorporated portion of Natomas, how does Sacramento Metropolitan Fire District (Metro Fire) intend to serve the area – including station locations, timing of stations coming on line, etc.
3. Has Metro Fire considered, as per LAFCo requirements, the fiscal impacts on the City? How does Metro Fire propose to mitigate the fiscal impacts?

### **Parks & Recreation**

1. How will development comply with the County's Rio Linda/Elverta Recreation and Park District's (RLERPD) neighborhood/community service level goals?
2. When will parks be constructed?
3. What types of parks are anticipated (neighborhood / community / regional / open space areas) and amenities will be included?
4. What funding mechanisms will be in place to finance ongoing maintenance?

### **Schools**

The NOP identifies that the NNPSF area is located within two school districts, the Twin Rivers Unified School District (RUSD) and the Elverta Joint Elementary School District (EJESD). EJESD provides elementary and middle school facilities only. The development plan would include various Public/Quasi-Public (P/QP) uses such as schools, civic uses, and public utility use to serve the needs of residents (projected population of 58,671). The NOP notes that potentially six K through 8 schools are sited in the Plan Area within the designated P/QP areas. What high school would serve the NNPSF area? What schools would serve the residents that

may be located outside of the NNPS development plan area including those that may serve the area while the six K through 8 schools are built?

**Library Services**

1. What is the infrastructure staging for library facilities?
2. Until library facilities are constructed and operational in the Vision Area, what service impacts will be carried by the City and how will these services be funded?

Thank you for the opportunity to comment. If you have follow-up questions or seek clarifications on any of the above issues, please contact Cheryle Hodge at [chodge@cityofsacramento.org](mailto:chodge@cityofsacramento.org) or 808-5971.

Sincerely,



Ryan DeVore  
Director, Community Development Department

Cc: Howard Chan, City Manager  
Fran Halbakken, Assistant City Manager  
Leyne Milstein, Assistant City Manager  
Thomas Pace, Planning Director  
Cheryle Hodge, Principal Planner  
Hector Barron, Director, Public Works  
Judith Matsui-Drury, Senior Engineer  
Ryan Moore, Engineering Manager  
Bill Busath, Director, Dept. of Utilities  
Melissa Anguiano, Economic Development Manager



# RIO LINDA/ELVERTA COMMUNITY WATER DISTRICT

P. O. BOX 400 730 L STREET  
RIO LINDA, CALIFORNIA 95673  
Phone: 916-991-1000

RECEIVED

JAN 26 2018

County of Sacramento  
Planning and Environmental Review

January 23, 2018

Leighann Moffit, Director  
Sacramento County Office of Planning and Review  
827 7<sup>th</sup> Street, Room 225  
Sacramento, CA 95814

Re. Notice of Preparation for Draft EIR for Natomas North Precinct

Ms. Moffit:

This letter is to advise you that Rio Linda Elverta Community Water District (RLECWD) is able and willing to serve domestic water to the subject project. At the public Board meeting held on January 22, 2018, the RLECWD Board of Directors formally acted to confirm its ability to serve the project and further authorize submittal of this letter.

The Rio Linda/Elverta Community Water District received the subject notice, dated December 20, 2017. The subject notice includes a Proposed Services section, which conveys that drinking water service could be provided by Sacramento County Water Agency with backup supply from the City of Sacramento and/or Sacramento Suburban Water District. RLECWD is not listed as a potential water service provider.

The RLECWD Board of Directors hereby advises you and the Local Agency Formation Commission (LAFCo) of our ability to serve the subject project.

Please contact me with any questions or concerns.

Sincerely,

Mary Harris  
President  
RLECWD Board of Directors

Cc: Don Lockhart, LAFCo (by e-mail)

## Board of Directors

Mary Harris    Mary Henrici    Brent Dills    Paul Green    John Ridilla

January 19, 2018

Tim Hawkins, Environmental Coordinator  
Sacramento County  
Office of Planning and Environmental Review  
827 7<sup>th</sup> Street, Room 225  
Sacramento, CA 95814

Re: Notice of Preparation of a Draft Environmental Impact Report for the Natomas North Precinct Specific Plan (Control Number: PLNP2014-00172)

Dear Mr. Hawkins:

Thank you for inviting SACOG's comments on the Notice of Preparation of a Draft Environmental Impact Report for the Natomas North Precinct Specific Plan. The project area is identified in SACOG's 2016 Metropolitan Transportation Plan/Sustainable Communities Strategy (2016 MTP/SCS) as an area not identified for development by the MTP/SCS horizon year of 2036. The 2016 MTP/SCS includes funding for widening a portion of Elkhorn Boulevard in the general vicinity of the proposed project. This year SACOG has just begun its quadrennial update of the plan (scheduled adoption in 2020) and will be working with Sacramento County to determine if there is a need to update the projections for this area for the next MTP/SCS.

In the context of the Blueprint, a regional framework of principles for sustainable growth, the project is in an area identified for future residential mixed use development.

If you have additional questions, please feel free to contact me or Jennifer Hargrove, Blueprint and SCS Coordinator, at [jhargrove@sacog.org](mailto:jhargrove@sacog.org) or 916-340-6216.

Sincerely,

A handwritten signature in black ink, appearing to read "Kacey Lizon".

Kacey Lizon  
Planning Manager

Auburn  
Citrus Heights  
Colfax  
Davis  
El Dorado County  
Elk Grove  
Folsom  
Galt  
Isleton  
Live Oak  
Lincoln  
Loomis  
Marysville  
Placer County  
Placerville  
Rancho Cordova  
Rocklin  
Roseville  
Sacramento  
Sacramento County  
Sutter County  
West Sacramento  
Wheatland  
Winters  
Woodland  
Yolo County  
Yuba City  
Yuba County



SACRAMENTO COUNTY  
**WATER AGENCY**

**Date:** January 16, 2018

**To:** Todd Smith, Principal Planner  
County of Sacramento

**From:** Michael Grinstead – Senior Civil Engineer  
Sacramento County Water Agency

**Subject:** SCWA Comments on Natomas North Precinct Revised Notice of Preparation of Draft Environmental Impact Report dated December 20, 2017

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The Sacramento County Water Agency (SCWA) has reviewed the subject document and has the following comments:

1. Should SCWA be the water purveyor for the area, there will be additional requirements along with the requested entitlements. A list of requirements are listed below and more requirements may be added in the future:
  - a. Adding the area to an existing benefit Zone or creating a new benefit Zone in SCWA.
  - b. Demand calculations that may be included in the Urban Water Management Plan.
  - c. A Water Supply Master Plan for the area. This update will likely include:
    - i. Refined water demands for the area.
    - ii. Selection of water supply for the area.
      1. Groundwater, surface water, and recycled water supplies will be analyzed.
      2. Water Forum Agreement and Sustainable Groundwater Management Act requirements will be taken into account.
    - iii. Regional infrastructure requirements and costs.
  - d. A rate study for the area.
2. Should SCWA serve the area, additional infrastructure will be required. At a minimum this would include a surface water treatment plant, ground water

treatment plant, storage facilities, water wells, and transmission and distribution mains. The water demand and available supplies will determine the facilities needed to serve the area.

3. The developer should follow all county General Plan policies related to groundwater and surface water including the Conservation Element.

Cc: electronic file: P:\Shared Folders\Wsplandev\Natomas North Precinct

January 12, 2018

**SENT VIA EMAIL**

Mr. Tim Hawkins, Environmental Coordinator  
County of Sacramento  
Office of Planning and Environmental Review  
827 7<sup>th</sup> Street, Room 225  
Sacramento, CA 95814

**RE: Revised Notice of Preparation of a Draft Environmental Impact Report for the Natomas North Precinct Specific Plan [Control Number: PLNP2014-00172]**

Dear Mr. Hawkins:

Thank you for providing an opportunity for the Sacramento Metropolitan Air Quality Management District (SMAQMD) to review and comment on the Revised Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) for the Natomas North Precinct Specific Plan (NNPSP) [Control Number: PLNP2014-00172]. We review and provide comments through the lead agency planning, environmental and entitlement processes with the goal of reducing adverse air quality impacts and ensuring compliance with the California Environmental Quality Act (CEQA). We offer the following comments to ensure air quality impacts are adequately analyzed, disclosed and mitigated.

**1. Consistency with Existing Plans**

Evaluate the NNPSP's consistency with existing plans, especially those that reduce criteria air pollutants and greenhouse gases. Such plans include, but are not limited to, the Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS), the California Air Resources Board's Climate Change Scoping Plan, Sacramento County Bicycle Master Plan, and the Sacramento Tree Foundation's Regional Greenprint Initiative.

**2. Climate Change**

Coordinate the NNPSP with the County's Climate Action Plan (CAP) that is currently being developed. SMAQMD is available for technical assistance as the County proceeds with the development of their CAP. A qualified CAP would provide CEQA streamlining benefits for future development projects.

**3. Vehicle Miles Traveled**

Examine the potential impacts of the project directing regional growth to areas with higher vehicle miles traveled (VMT) per household than the regional average and include mitigation measures as appropriate in the DEIR. VMT is directly linked to both greenhouse gas (GHG) emissions and criteria air pollution; therefore, reducing VMT is an important component toward meeting clean air and GHG reduction goals.

**4. Emissions of Criteria Air Pollutants and Greenhouse Gases**

Analyze and disclose both construction and operational emissions; including nitrogen oxides, reactive organic gases, exhaust and fugitive dust particulate matter (PM10 and PM2.5), GHG emissions, toxic air contaminants and odors.

**a. Short-term Construction Emissions of Criteria Air Pollutants and Precursors**

Discuss possible onsite and offsite mitigation measures to reduce construction emissions for development within the NNPSP.

**b. Long-term Operational Emissions of Criteria Air Pollutants and Precursors**

Development within the NNPSP was not considered in the land use assumptions used to develop the MTP/SCS and the SMAQMD's State Implementation Plan. In order to ensure operational air quality impacts are mitigated for the NNPSP, the SMAQMD recommends preparation of an Air Quality Mitigation Plan (AQMP). Typically, a 15 percent emission reduction plan is required, as referenced in the Sacramento County General Plan Policy AQ-4, but, due to the inconsistency with the planning assumptions mentioned here, the NNPSP AQMP should include strategies to reduce operational ozone precursor emissions by 35 percent. This reduction level has been established as feasible mitigation. Projects that have adopted 35 percent mitigation plans include: Cordova Hills, Folsom South of 50 and the Galt Sphere of Influence.

Please reference the previous NNPSP comment letters from the SMAQMD dated December 10, 2014 and May 26, 2016.

**5. General Comments**

SMAQMD's most current CEQA *Guide to Air Quality Assessment in Sacramento County* and its applicable thresholds to assist with significance determinations are available at [www.airquality.org](http://www.airquality.org).

**6. Non-CEQA Comments: Locating Sensitive Receptors Near Sources of Air Toxics**

Analyze and disclose air toxic exposure that may result from the project. The SMAQMD is currently updating the recommended protocol for evaluating exposure reduction measures to reduce sensitive receptors to air pollution near major roadways and railways. Please visit [www.airquality.org](http://www.airquality.org) to view the most current recommended protocol, tools and methodology.

Thank you for your consideration of these comments. If you have any questions, please contact me at 916-874-6267 or JChan@airquality.org.

Regards,



Joanne Chan  
Air Quality Planner/Analyst

- c: Paul Philley, Program Supervisor – CEQA & Land Use Section, SMAQMD  
Karen Huss, Air Quality Planner/Analyst – CEQA & Land Use Section, SMAQMD  
Rachel DuBose, Air Quality Planner/Analyst – CEQA & Land Use Section, SMAQMD



TODD HARMS  
Fire Chief

# Sacramento Metropolitan Fire District

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10545 Armstrong Ave., Suite 200 • Mather, CA 95655 • Phone (916) 859-4300 • Fax (916) 859-3702

January 17, 2018

## SENT VIA EMAIL

Tim Hawkins, Environmental Coordinator  
Office of Planning and Environmental Review  
County of Sacramento  
827 7<sup>th</sup> Street, Room 225, Sacramento, CA 95814

**Subject: Comment Letter for the Natomas North Precinct Specific Plan's Revised Notice of Preparation of a Draft Environmental Impact Report**

Dear Mr. Hawkins:

Thank you for the opportunity to comment on the Natomas North Precinct Specific Plan's (Project) Notice of Preparation (NOP) of a Draft Environmental Impact Report. The Sacramento Metropolitan Fire District (District) has reviewed the document and has the following comments.

### *Sphere of Influence/Municipal Service Review Amendment*

The proposed Project is adjacent to a portion of the District's northwest jurisdictional boundary. Given the District has two existing stations which could respond to emergencies within the Project area, it stands to reason the District could provide all-hazard emergency services to the Project area in an efficient manner. The Project area is currently within the Natomas Fire Protection District which is a dependent special district governed by Sacramento County Board of Supervisors. In order for the District to provide emergency services to the Project, the District must submit an updated Sphere of Influence (SOI) and Municipal Services Review to the Sacramento Local Agency Formation Commission (LAFCO) and, at the appropriate time, annex the Project area. The Project proponents should consider including the District's annexation of the Project area in its entitlement process.

### *Fire Service and Apparatus Needs*

In 2010, the District adopted a neighborhood-based fire company deployment plan, with response times, meeting national best practice recommendations. These response standards are in place to deliver good outcomes to keep serious, but still emerging, fires small and to rescue and treat the emergency's victims. For areas that have over 1,000 people per square mile (Suburban/Urban Areas), the District's standard 1<sup>st</sup> Due travel time is 4 minutes with an overall reflex time of 7 minutes. Given the Project's acreage and proposed land uses, the proposed development fits within the District's Suburban/Urban Area model. Additionally,

multiple units are needed to quickly control building fires. The District's performance standard for an Effective Response Force (1<sup>st</sup> Alarm) to a building fire incident is to deliver three engines, one ladder truck and one battalion chief and have all the units arrive at the incident within 8 minutes travel time.

The District has reviewed the Project's proposed land uses, applied its 1<sup>st</sup> Due and Effective Response Force standards and believes it may need four apparatus to effectively serve the Project area. This is a preliminary estimate and the District will need Project population estimates to make a final determination.

Station Location, Lot Size and Timing

The District has conducted a preliminary travel time analysis to determine the number and location of stations required to serve the Project and has determined the Project would be best served by one centrally located station near the northwest corner of W. Elverta Road and the west side of the proposed Parkway.

In general, the District would like to identify a 3-5 acre site that meets the District's response requirements. District policy requires the proposed station to be operational by the time the Project's population density exceeds 1,000 people per square mile outside of the 4-minute response time from existing stations.

Capital and Operating Costs

The District established the Fire Capital Facilities Fee program to pay for the land, buildings and improvements, apparatus, vehicles and equipment required to accommodate development within the District's boundaries. If the District were to annex the Project area, the District would fund all its capital expenditures related to the Project through this impact fee program.

Additionally, the Project proponents should demonstrate that the Project would generate enough property tax revenue to cover its portion of the 1<sup>st</sup> Due and Effective Response Force.

If you have any questions, please feel free to contact me at (916) 859-4517 or via email at [frye.jeff@metrofire.ca.gov](mailto:frye.jeff@metrofire.ca.gov).

Sincerely,



Jeff Frye  
Economic Development Manager



*Sent Via E-Mail*

January 22, 2018

Tim Hawkins  
Environmental Coordinator  
Office of Planning and Environmental Review  
827 7<sup>th</sup> Street, Room 225  
Sacramento, CA 95814  
[ceqa@saccounty.net](mailto:ceqa@saccounty.net)

Subject: **Revised Notice of Preparation of a Draft Environmental Impact Report for the Natomas North Precinct Specific Plan (Project No.: PLNP2014-00172)**

Dear Mr. Hawkins,

The Sacramento Municipal Utility District (SMUD) appreciates the opportunity to provide comments on the Revised Notice of Preparation (NOP) of the Draft Environmental Impact Report for the Natomas North Precinct Specific Plan (Project). SMUD is the primary energy provider for Sacramento County and the proposed Project area. SMUD's vision is to empower our customers with solutions and options that increase energy efficiency, protect the environment, reduce global warming, and lower the cost to serve our region. As a Responsible Agency, SMUD aims to ensure that the proposed Project limits the potential for significant environmental effects on SMUD facilities, employees, and customers.

It is our desire that the Project NOP will acknowledge any Project impacts related to the following:

- Overhead and or underground transmission and distribution line easements. Please view the following links on [smud.org](http://smud.org) for more information regarding transmission encroachment:
  - <https://www.smud.org/en/Business-Solutions-and-Rebates/Design-and-Construction-Services>
  - <https://www.smud.org/en/Corporate/Do-Business-with-SMUD/Land-Use/Transmission-Right-of-Way>
- Utility line routing
- Electrical load needs/requirements
- Energy Efficiency
- Climate Change
- Cumulative impacts related to the need for increased electrical delivery

Additionally, based on our review of the Notice and our understanding of the proposed Project, SMUD offers the following input for your consideration:

1. **Project Description:** SMUD would like to be informed of any anticipated Project related impacts on existing or future SMUD facilities. It is important that information regarding potential impacts to SMUD facilities in the vicinity of the proposed Project be contained in the Project description chapter of the EIR, as well as the existing conditions discussion of the utilities, hazards and hazardous materials, and cumulative impact sections.
2. **Energy Delivery (Capacity):** Please continue to coordinate with SMUD staff regarding the proposed energy delivery assumptions associated with the proposed Project site. The EIR should provide analysis regarding SMUD's ability to handle the Project's anticipated energy needs. SMUD is looking forward to partnering with the City to ensure that the Project is designed in an energy efficient and sustainable way.
3. **Energy Delivery (Infrastructure):** The EIR should provide an analysis of the proposed on-site and off-site energy infrastructure improvements needed to construct and operate the proposed Project. The EIR should clearly delineate the responsibilities of SMUD and Caltrans, as it pertains to infrastructure improvements.
4. **Planning Consideration:** If proper clearances from any proposed roadway widening, lane extensions, auxiliary lanes, bike path, structure replacements cannot be maintained (please consult with SMUD's new services department for precise clearance requirements), the customer will need to work with SMUD to relocate and/or underground these facilities. This work will be billable to the customer.
5. **Distribution Considerations:** The following comments pertain to the design and construction requirements around SMUD's distribution right-of-ways. SMUD has existing and/or proposed facilities on or adjacent to the proposed Project Site, including:
  - There is existing 69 kV overhead with 12 kV underbuilt (on the same poles ) located on the north side of Elverta Rd, extending east-west across length of NNP. The 69 kV & 12 kV crosses HWY 99 on north side of Elverta.
  - There is existing 69 kV overhead on the north side of W. Elkhorn from the east boundary of NNP to just east of the Transmission Corridor, approximately 450 feet west of E. Levee Road. The existing 69 kV overhead then extends to the SMUD substation near Natomas Blvd. These lines west of the Transmission corridor are on the south side of W. Elkhorn and are not within the NNP. It is anticipated that future 69 kV lines will also extend along the south side of W. Elkhorn, and cross HWY 99 on the south side, unless alternate plans are made available.
  - There are plans for a future 69 kV overhead pole-line between W. Elkhorn Road and Elverta Road through the west side of the NNP. The line will start on W. Elkhorn at a location to be identified, west of the existing SMUD substation (near Natomas Blvd.)

It will continue north to Elverta Road connecting the 69 kV on Elverta and W. Elkhorn.

- There is existing 12 kV overhead along the north side of W. Elkhorn from the east boundary of the NNP to Hwy 99 near the west boundary of NNP. 12 kV is underbuilt on 69 kV poles from east boundary of NNP to just east of Transmission Corridor, approximately 450 feet west of E. Levee Road.
  - There are extensive existing 12 kV overhead lines throughout the NNP. SMUD welcomes the opportunity to discuss the specific locations of these facilities.
  - SMUD's future plans call for three Distribution Substations within the North Natomas Precinct. These will be required to serve the load within the development. The substations will need to be located near existing or future 69 kV lines, as well as near the load centers to provide service to our customers. The substations for this project will need to be located in the northwest quadrant, the southwest quadrant and the northeast quadrant of the development to provide service to all the customers.
6. Transmission Considerations: Refer to SMUD's transmission consent program for additional information regarding improvements within transmission line rights-of-way. Please visit our website and review our Guide for Transmission Encroachment Guideline: <https://www.smud.org/assets/documents/pdf/Guide-for-Transimssion-Encroachment.pdf>.

SMUD would like to be involved with discussing the above areas of interest as well as discussing any other potential issues. We aim to be partners in the efficient and sustainable delivery of the proposed Project. Please ensure that the information included in this response is conveyed to the Project planners and the appropriate Project proponents.

Environmental leadership is a core value of SMUD and we look forward to collaborating with you on this Project. Again, we appreciate the opportunity to provide input on this NOP. If you have any questions regarding this letter, please contact SMUD's Environmental Management Specialist, Rob Ferrera, at [rob.ferrera@smud.org](mailto:rob.ferrera@smud.org) or 916.732.6676.

Sincerely,



Nicole Goi  
Regional & Local Government Affairs  
Sacramento Municipal Utility District  
6301 S Street, Mail Stop A313  
Sacramento, CA 95817  
[nicole.goi@smud.org](mailto:nicole.goi@smud.org)

Cc: Rob Ferrera



January 8, 2018

Todd Smith,  
Principal Planner  
Office of Planning and Environmental Review  
827 7th Street, Room 225, Sacramento, CA 95814

**Subject: Revised Notice of Preparation of a Draft Environmental Impact Report for the North Natomas Precinct Master Plan (Control Number PLNP2014-00172)**

Dear Mr. Smith:

Sacramento Regional County Sanitation District (Regional San) and the Sacramento Area Sewer District (SASD) have the following comments regarding the Notice of Preparation for the DEIR for the North Natomas project:

The subject area is located outside the SASD and Regional San Service Areas. In order to receive sewer service, this area will need to annex into SASD and Regional San's Service Areas. The project applicant should work closely with Sacramento Local Agency Formation Commission ([www.saclafco.com](http://www.saclafco.com)) to begin the annexation process.

Upon annexation, SASD will provide local sewer service for the proposed project area. Regional San provides conveyance from local trunk sewers to the Sacramento Regional Wastewater Treatment Plant (SRWTP) through large pipelines called interceptors.

The Regional San Board of Directors adopted the Interceptor Sequencing Study (ISS) in February 2013. The ISS updated the SRCSD Master Plan 2000 is located on the Regional San website at <http://www.regionalsan.com/ISS>. The SASD Board of Directors approved the most current SASD planning document, the 2010 System Capacity Plan Update (SCP) in January 2012. The SCP is on the SASD website at <http://www.sacsewer.com/devres-standards.html>.

Regional San and SASD are not land-use authorities. Regional San and SASD designs their sewer systems using predicted wastewater flows that are dependent on land use information provided by each land use authority. Regional San and SASD base the projects identified within their planning documents on growth projections provided by these land-use authorities. Onsite and offsite environmental impacts associated with extending sewer services to this development should be contemplated in this Environmental Impact Report.

The proposed project is outside the SASD NN Natomas Trunk shed and would likely result in a new trunk system that would route to the Regional San Upper Northwest Interceptor. Project proponents should work closely with SASD and Regional San Development Services to ensure proper connection to any existing SASD or Regional San facilities.

The developer must complete a Sewer study that includes connection points and phasing information to assess the capacity of the existing sewer system to accommodate additional flows generated by this project.

**Main Office**

10060 Goethe Road  
Sacramento, CA 95827-3553  
Tel: 916.876.6000  
Fax: 916.876.6160

**Treatment Plant**

8521 Laguna Station Road  
Elk Grove, CA 95758-9550  
Tel: 916.875.9000  
Fax: 916.875.9068

**Board of Directors**

Representing:

- County of Sacramento
- County of Yolo
- City of Citrus Heights
- City of Elk Grove
- City of Folsom
- City of Rancho Cordova
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*District Engineer*

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*Director of Internal Services*

Joseph Maestretti  
*Chief Financial Officer*

Claudia Goss  
*Public Affairs Manager*

[www.regionalsan.com](http://www.regionalsan.com)

Customers receiving service from Regional San and SASD are responsible for rates and fees outlined within the latest Regional San and SASD ordinances. Fees for connecting to the sewer system recover the capital investment of sewer and treatment facilities that serves new customers. The SASD ordinance is located on the SASD website at <http://www.sacsewer.com/ordinances.html>, and the Regional San ordinance is located on their website at <http://www.regionalsan.com/ordinance>.

The SRWTP provides secondary treatment using an activated sludge process. Incoming wastewater flows through mechanical bar screens and then through a primary sedimentation process. This allows most of the heavy solids to settle to the bottom of the tanks. These solids are later delivered to the digesters. Next, oxygen is added to the wastewater to grow naturally occurring microscopic organisms, which consume the organic particles in the wastewater. These organisms eventually settle on the bottom of the secondary clarifiers and are also delivered to the digesters. Clean water pours off the top of these clarifiers and is chlorinated, removing and inactivating any pathogens or other harmful organisms that may still exist. Chlorine disinfection occurs while the wastewater travels through a two-mile “outfall” pipeline to the Sacramento River, near the town of Freeport, California. Before entering the Sacramento River, sulfur dioxide is added to neutralize the chlorine.

The design of the SRWTP and collection system was balanced to have SRWTP facilities accommodate some of the wet weather flows while minimizing idle SRWTP facilities during dry weather. Regional San designed the SRWTP to accommodate some wet weather flows with onsite storage basins and interceptors designed to accommodate the remaining wet weather flows. The Central Valley Regional Water Quality Control Board (Water Board) issued an NPDES Discharge Permit in December 2010 (2010 Permit) requiring Regional San to meet significantly more restrictive treatment levels for ammonia and nitrate by May 2021 and for pathogens by May 2023. Regional San began the necessary activities, studies, and projects to meet the new requirements with the adoption of the 2010 Permit. In April 2016, the Water Board issued an NPDES Discharge Permit (2016 Permit) which replaced the 2010 Permit while continuing the more restrictive treatment requirements and deadlines. Regional San currently owns and operates a 5-mgd Water Reclamation (WRF) that has been producing Title 22 tertiary recycled since 2003. The WRF is located within the SRWTP property in Elk Grove. Regional San uses a portion of the recycled water at the SRWTP and the rest is wholesaled to the Sacramento County Water Agency (SCWA). SCWA retails the recycled water, primarily for landscape irrigation use, to select customers in the City of Elk Grove. Regional San currently does not have any planned facilities that could provide recycled water to the proposed project or its vicinity. Additionally, Regional San is not a water purveyor and any potential use of recycled water in the project area must be coordinated between the key stakeholders, e.g. land use jurisdictions, water purveyors, users, and the recycled water producers.

If you have any questions regarding these comments, please contact me at 916-876-9994

Sincerely,

*Sarena Moore*

Sarena Moore  
Regional San/SASD  
Policy and Planning

Cc: Regional San Development Services, SASD Development Services, Michael Meyer, Dave Ocenosak, Christoph Dobson



1/19/2018

VIA EMAIL

Tim Hawkins, Environmental Coordinator  
Office of Planning and Environmental Review  
827 7th Street, Room 225  
Sacramento, CA 95814

**RE: Revised Notice of Preparation of a Draft Environmental Impact Report for the Natomas North Precinct Specific Plan (PLNP2014-00172)**

Dear Mr. Hawkins:

Thank you for the opportunity to review and comment on the Revised Notice of Preparation (NOP) of a Draft Environmental Impact Report for the Natomas North Precinct Specific Plan (PLNP2014-00172).

WALKSacramento is working to support increased physical activity such as walking and bicycling in local neighborhoods as well as helping to create community environments that support walking and bicycling. The benefits include improved physical fitness, less motor vehicle traffic congestion, better air quality, and a stronger sense of cohesion and safety in local neighborhoods. These benefits are contingent upon land use and transportation plans that facilitate and promote walking and biking. With these goals in mind, we make the following recommendations for the Natomas North Precinct Specific Plan Draft Environmental Impact Report (EIR).

The NOP states that a transportation impact study will be prepared and that a vehicle miles traveled (VMT) analysis will be conducted. The NOP indicates the transportation impact study will examine the effects of the project on roadways as well as pedestrian, bicycle and transit modes. Pedestrians, and to a lesser extent bicyclists, are sensitive to distance; both much more so than drivers. One of the stated objectives of the project is to develop pedestrian and bicycle friendly neighborhoods, and we agree with this objective. But as communities and cities are composed of multiple, adjacent neighborhoods, it's critical to build in a manner that makes it easy and safe to walk and bike beyond one's neighborhood. The proposed land use plan should be critically reviewed to ensure it supports community-wide active travel.

There are several features of the land use plan that we would like the EIR to analyze for its impact on pedestrian, bicycle and transit modes of travel. *Figure NOP-10: Conceptual Land Use Plan* shows a diverse distribution of land uses and densities, but it appears the average densities in the northern half of the plan area are greater than those in the southern half. Nearby destinations outside of the project area will primarily be to the south in the City of Sacramento community of North Natomas. Future destinations to the north within the planned Sutter Pointe Specific Plan area will be more distant than those in North Natomas.

The arrangement of land uses within the project area may also affect travel behaviors for residents in North Natomas. Destinations, such as commercial or employment, within the project area could be closer for North Natomas residents than comparable destinations in North Natomas making for shorter and non-vehicular trips.

We recommend the EIR analyze Person Miles Traveled by walking and bicycling in addition to VMT. Further, analyzing Person Miles Traveled by neighborhoods or blocks could help establish the effectiveness of the land use plan to promote and facilitate active transportation.

*Figure NOP-8: Proposed Zoning Designations* identifies properties within the Natomas North Precinct Specific Plan (NNPSP) that are not participating in the project. Several of the areas combine to isolate the majority of the planned development from development to the south. This open space, even if roadways and bike trails were to be constructed through them, will add extra distance between communities and may decrease walking and biking. The EIR should analyze the plan area with the non-participating properties remaining undeveloped during the cumulative time frame as an alternative to the proposed project.

The effective boundaries for development created by the non-participating properties are irregular and the proposed project's consistency with LU-119 is questionable. The EIR should consider the project's consistency with LU-119 using its effective boundaries.

*Figure NOP-11: Proposed Transportation Plan* has two errors that should be corrected for the EIR. First, the roadways in the city of Sacramento Panhandle Annexation project are not shown. Street 'G', which will have a signalized intersection at Elkhorn Boulevard should be shown on the figure. Second, East Commerce and Natomas Boulevard within the city of Sacramento are shown as "Existing Collectors." They should be shown as "Existing Arterials."

Thank you for your consideration of these comments and recommendations. If you have questions or need additional information, please contact me.

Sincerely,

Chris Holm  
Project Manager