North Vineyard Station Specific Plan Public Facilities Financing Plan Supplemental and Zone 11A Drainage Fees

DRAFT 7/6/2005

DRAINAGE FEE STUDY

Nexus

The North Vineyard Station Specific Plan (NVSSP) Public Facilities Finance Plan (PFFP) was adopted by the Board of Supervisors on November 10, 2004. The drainage facilities identified in the PFFP were determined by the NVSSP Drainage Master Plan, dated January 2003, by Wood-Rodgers, Inc. The Drainage Master Plan, being consistent with regional watershed planning by the Department of Water Resources, identifies drainage facilities, both on- and off-site, that were required to adequately drain the NVSSP area, to mitigate for development impacts. The impacts considered include flood control, endangered species habitat, and storm water quality. The Drainage Master Plan combined with the US Army Corps of Engineers requirements for aquatic habitat conservation serve to define the nexus between development within the NVSSP area and the need for the drainage facilities.

The NVSSP lies in the drainage sheds of Elder and Gerber Creeks. Elder Creek enters the NVSSP from the north, crossing under Florin Road, approximately 1000 feet east of the California Central Traction Railroad right-of-way. Gerber Creek enters the NVSSP from the south approximately 1700 feet west of Bradshaw Road. The two creeks converge and flow westward at the western edge of the NVSSP. The entire Elder and Gerber Creek watershed lies within the County urban services boundary and Zone 11A of the Water Agency.

The NVSSP will ultimately be served by a drainage system that includes flood control basins, preserved floodplain, aquatic habitat, environmental enhancements, and stormwater quality improvement measures.

See the following attached Figures from the North Vineyard Station Drainage Master Plan, prepared by Wood Rodgers Engineering, dated January 2003:

- Figure 4 Preferred Drainage Plan
- Figure 7 Existing Condition Floodplain
- Figure 10 Development Phasing
- Figure 21 Drainage Facilities Project Numbers

Facility Cost and Fees

The adopted PFFP estimated Zone 11A credits at \$14,623,200. In this Study, the Zone 11A credits are estimated to be \$18,823,034. This amounts to a 29% increase due to real estate values estimated in the PFFP at \$50,000 per acre.

The adopted PFFP also estimated cost of drainage facilities above and beyond that amount credited by the Zone 11A drainage development impact fee to be \$17,476,700. In this Study, the supplemental drainage fee is increased considerably to \$40,907,309. This large increase is compelled by the requirements for a natural and beneficial preserve and recent rise in real estate values, as addressed in the real estate valuation study by Pattison Associates dated April 28, 2005 (amended by memorandum dated May 17, 2005).

Development of typical trunk drainage (serving thirty or more acres of watershed) facilities in this region of the County is typically reimbursed by Zone 11A of the Sacramento County Water Agency. However, in this case, a Supplemental Drainage Fee is required to fund the enormity of the drainage, flood control, storm water quality and nature preserve that are not paid by Zone 11A

Pursuant to Title 2 and the Zone 11 Fee Plan (updated effective August 16, 2004), the Zone 11A fee program will reimburse for trunk drainage pipes, manholes, channel and basin excavation, and land acquisition for detention basins based on a date of valuation in accordance with a reservation agreement.

The North Vineyard Station Supplemental Drainage Fee is established to reimburse developers and property owners for:

- Riparian Enhancement and Riparian Landscaping
- Erosion Control
- Lineal Water Quality Features
- Creek Crossings of Private Property Access
- Creek Crossings of County Roadways not included in road fee
- Temporary pump stations at the flood control detention basins E24B, G41 and G46 (install and remove)
- Construct temporary weirs at basins G41, E24B, E24A
- Consultants
- Channel Land Acquisition
- Additional Amount for Basin Land Acquisition
- Engineering, Administration, and Contingency

Attached tables describe the North Vineyard Station Supplemental Drainage Fee Plan:

- Table 1 describes the North Vineyard Station Supplemental Drainage Fee
- Table 2 is the Fee Schedule for the Supplemental Drainage Fee
- Table 3 describes the approximate cash flow, based on phased development as provided in the Drainage Master Plan
- Table 4 estimates the Zone 11A trunk drainage facilities and scheduled costs, according the 2005 Credit Schedule (Schedule D)
- Table 5 is the fee calculator based on type of development and impact on watershed related to percent impervious area
- Table 6 is the list of basin land used for the fee
- Table 7 is Right-of-way acquisition assistance schedule

 Table 8 summarizes the riparian/wetland enhancements (the payment schedule will be enhanced when ECORP completes the design work)

This Nexus Study shall supersede and take precedence over all representations in the Public Facilities Finance Plan and shall stand alone in the implementation of the Sacramento County Water Agency Supplemental Drainage Fee for North Vineyard Station Specific Plan.

Phasing of Drainage Improvements

The construction of the drainage improvements will be phased over some period of time due to the high cost of the drainage improvements and numerous property owners with varying development interest within the NVSSP. The construction of each portion of the drainage improvements will be dependent upon which developers are ready to proceed and where their property lies within the watershed. The Drainage Master Plan suggests a logical way for development to proceed in a phased fashion. A detailed hydrology and hydraulic study will be required should a developer desire to put forward an alternate phasing scheme. The phases proposed in the Drainage Master Plan are called A1, A2, B, C, D, and E

Phasing

The phasing of drainage improvements is highly dependent upon the geographic location and timing of development. If development does not proceed in the sequence anticipated to make the following phasing estimates, a detailed hydraulic analysis will need to be prepared to demonstrate to the satisfaction of the County Department of Water Resources that the County Improvement Standards are being met. The following phases (see Figure 10) are as described in the NVSSP Public Facilities Financing Plan, and are considered to be one realistic approach to phased development of the channels and detention basins. The proposed schedule is based on reasonable expectation of development absorption.

Phase A-1 Proposed Schedule 2005-2007.

Because of the geographical location of this phase, the necessary improvements consist of construction of Detention Basin G41 with a temporary pump station, channel improvements of Gerber Creek between the railroad crossing and Gerber Road, channel parkway corridor construction in the Gerber Creek Reach, drainage pipes, and land acquisition.

Phases A-2 and B Proposed Schedule 2006-2008.

It is assumed that these phases, subsequent to A1, will open up a large area for development and include the construction of three detention basins E26, E24A, and E24B. Associated channel improvements on Elder and Gerber Creeks. Each section of channel will be constructed to its ultimate width and depth so that it will not be disturbed in the future. However, in some cases only a portion of a detention basin may be constructed. Additionally, downstream channel improvements will be constructed during these early phases if easements are in place.

Phase C Proposed Schedule 2007-2010.

Construct Detention Basin G46 and appurtenant channel conveyance improvements.

Phases D and E Proposed Schedule 2009-2012.

Construct the balance of the channel conveyance improvements on Gerber and Elder Creeks.

Description of Creditable Work

- 1. Riparian Enhancement and Riparian Landscaping shall be done in accordance with the plan developed by ECORP, approved by the Federal Regulators and the Department of Water Resources.
- 2. Erosion Control This is for additional erosion control work within the constructed channel including jute mats or other methods to allow for the passage of flowing water while providing opportunity for root establishment by the hydroseed mix.
- 3. Lineal Water Quality Features There are limited locations where pipes will discharge directly into the stream. This item will provide for water quality adjacent to those channel reaches listed in Table 1.
- 4. Low Flow Driveway Crossings These are needed at the channel reaches listed on Table 1 to provide access to parcels number 121-0050-020, 065-0080-068, and 066-0090-018 after the channel is reconstructed.
- 5. Box culverts These are creek crossings of county roadways that are not included in road fee at channel reaches shown on Table 1.
- 6. Temporary Pump Stations at the Flood Control Detention Basins In accordance with the phased drainage plan, during the early phases of development, awaiting completion of downstream channel and basin improvements, there will be need for temporary pump stations. These pumps will be the property of the Department of Water Resources, operated by Water Resources staff under funding agreement with the developer.
- 7. Remove the temporary pump stations Upon completion of downstream detention basin(s) and channel construction, the temporary pump stations will be removed and stored at a location designated by the Department of Water Resources.
- 8. Temporary weirs Construct temporary weirs at basins in accordance with the phased drainage plan. The weir will be constructed then reconstructed at three detention basins: G41 (150' long), E24B (100'), and E24A (2 @ 100'). This funding is only for the temporary weirs. The permanent weirs will be credited against Zone 11A fees. Future removal or adjustment of weir configuration to ultimate position shall be creditable by Zone 11A, per Schedule D.

- 9. Channel and Buffer Land Acquisition Right-of-way for channel and adjoining floodplain and buffer lands, as listed on Table 1. This is land that would otherwise be dedicated in accordance with Section 2.40.010. In the case of North Vineyard Station, only, the development proponents have determined that it is fair and appropriate to include the value of this land in this fee plan.
- 10. Additional Amount for Basin Land Acquisition Pursuant to Section 2.40.030, Zone 11A credits are available for detention basin land valued at the date of application for subdivision map(s) conditioned to construct the basins. The developers desire (for NVSSP only) to also value the land on May 1, 2005 and to provide, within this fee, a mechanism to be credited for any difference in land value. Furthermore, Zone 11A was updated effective August 16, 2004 with estimated basin land value of \$100,000 per acre. It is hereby agreed that the maximum price for land acquired by Zone 11A is that amount (\$100,000 per acre inflated annually per Section 2.50.080).

The dates of valuation used in the Pattison Associates study are as follows:

NORTH VINEYARD STATION DETENTION BASINS		
	Date of Valuation Supplemental	
BASIN	Zone 11A Valuation	Fee Valuation
E24A	2/13/2003	5/1/2005
E24B	2/13/2003	5/1/2005
E26	5/23/2002	5/1/2005
G41	4/29/2002	5/1/2005
G46	10/5/2004	5/1/2005

- 11. Right-of-way Acquisition Assistance Costs Associated with this Real Estate Program (Table 7 sum to \$1,709,151) include staff and consultants who prepared and are preparing environmental reports, community outreach, legal descriptions, open space maps, drainage studies, legal counsel, title reports, and other.
- 12. Engineering This allows credit for a portion of what it costs to design those creditable facilities, shown on Table 1.
- 13. Program Administration This is an allowance for County staff and County consultants who will be involved in the implementation of this program.
- 14. Contingency This amount is for unforeseen costs occurring during the implementation of this plan.

- 15. Riparian Enhancement and Riparian Landscaping Cost This is for specific work described in the (forthcoming) plan from ECORP.
- 16. Land Acquisition Miscellaneous Cost The value study determines the amount of credits for basin and channel right-of-way land acquisition. The addition of this contingency amount is for other costs such as condemnation of off-site property that is not under the control of development interests, that is, property that can not be acquired as a condition of development.

Real Estate Value Study

Market value, for the purposes of this Fee Plan, was developed in the Real Estate Value Study prepared by Pattison & Associates dated April 28, 2005 (amended by memorandum dated May 17, 2005). This provides amounts for land (on- and off- site) that is to be credited/reimbursed by the NVSSP Supplemental Drainage Fee. These credits will be issued by separate agreement to the developers, builders, and landowners who seek entitlements.

The intention of the land acquisition component of this Fee is to allow for orderly completion of the drainage facilities required for build-out of the North Vineyard Station Specific Plan Area. The channel right-of-way would, on any other project, be dedicated while these development proponents desire to provide for reimbursement and this program is the mechanism for such reimbursement.

The land value amounts listed in the Value Study are hereby deemed to be reasonable and no additional amount will be allowed for property that is acquired by credit agreement.

The value of land will be adjusted annually pursuant to Section 2.81.130 (Engineering News Record Construction Cost Index).