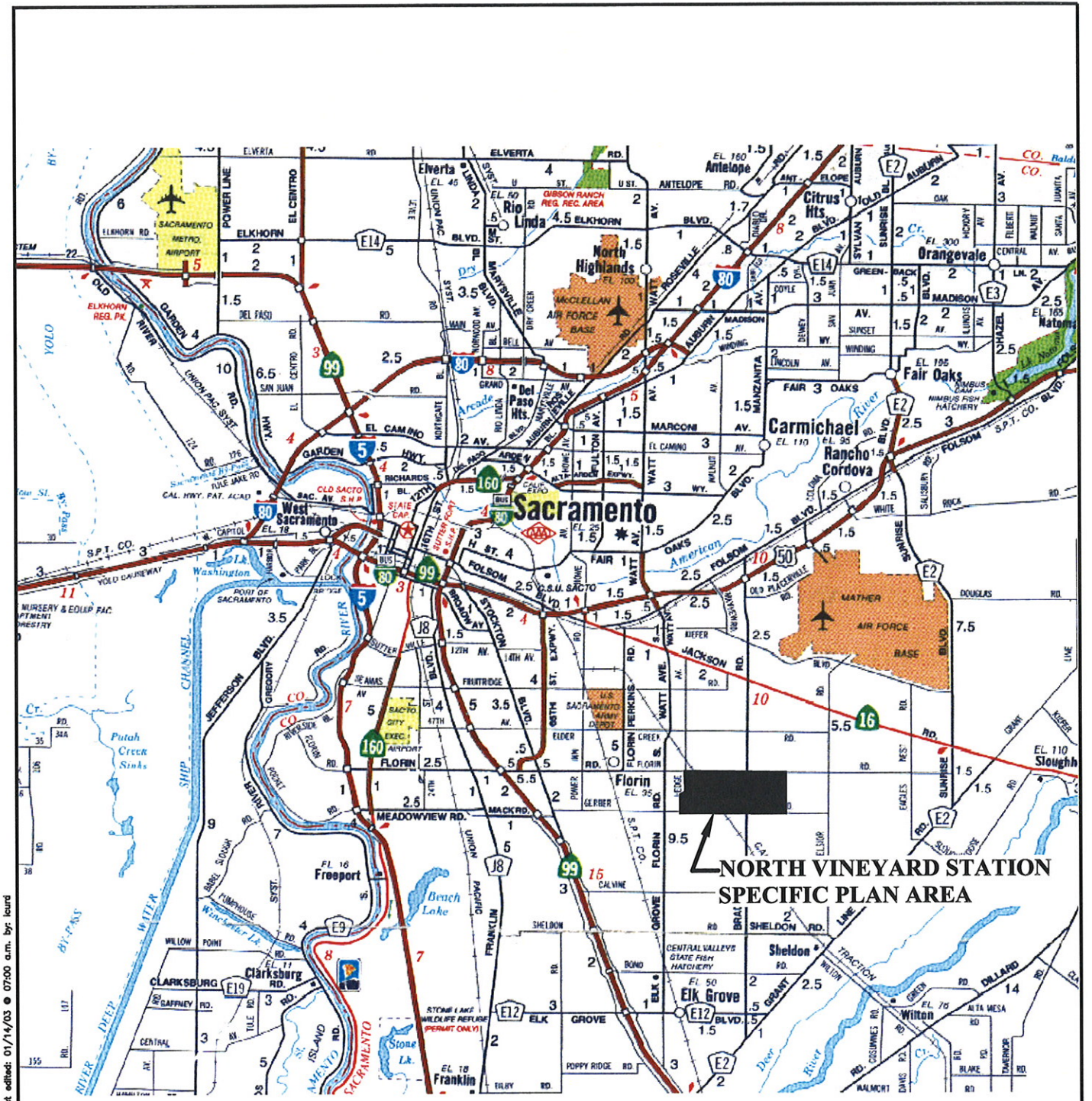


FIGURES



NOT TO SCALE

REVISED DRAFT

NORTH VINEYARD STATION SPECIFIC PLAN
DRAINAGE MASTER PLAN
UPDATE AND PHASING

LOCATION MAP

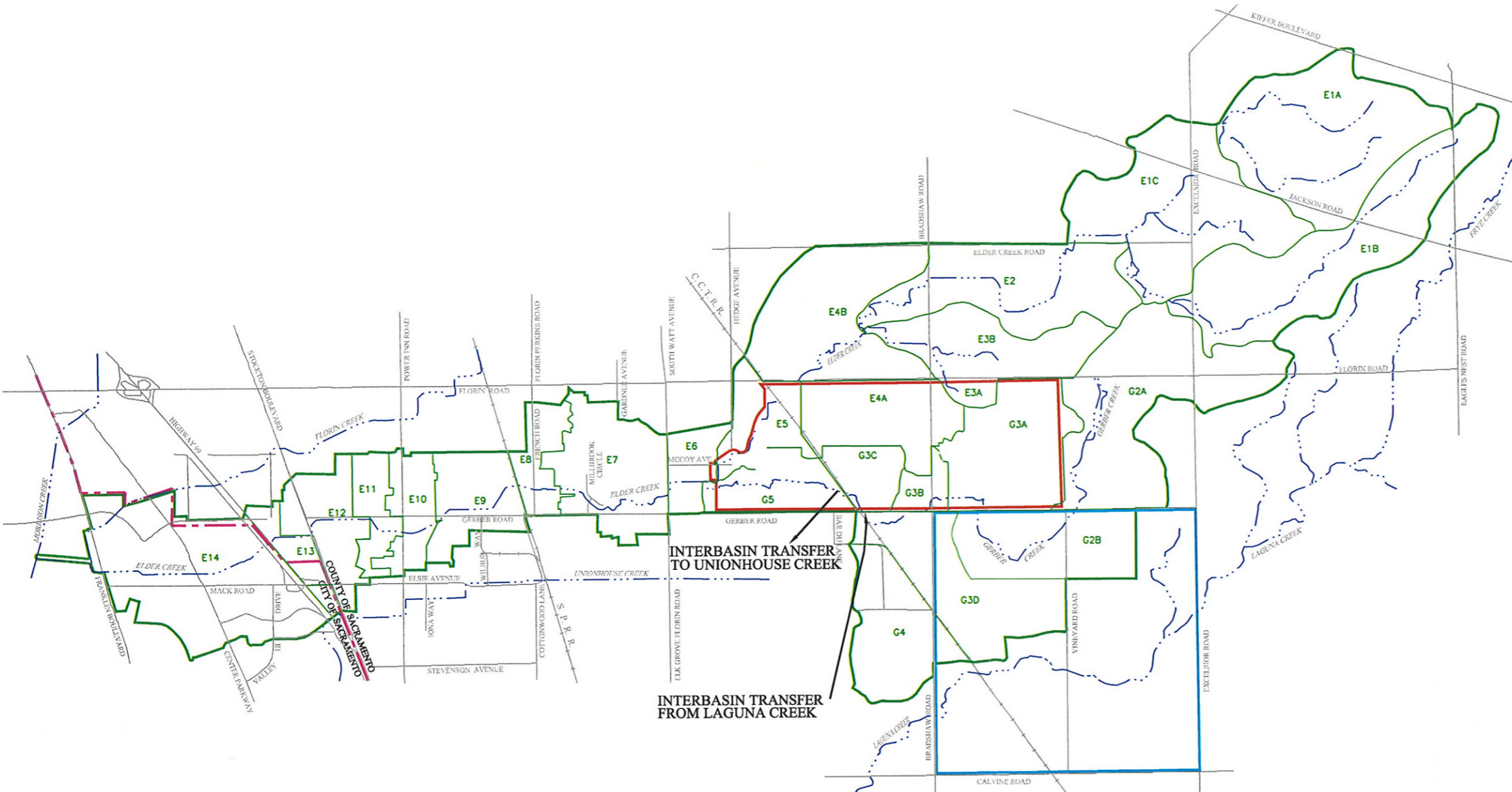
WOOD RODGERS, INC.
SACRAMENTO, CALIFORNIA

File: I:\PROJECTS\208-02_NCSSP\CADD\DRIFT_11-E-02_NCSSPLOCMAP.DWG Lant. edit: 01/14/03 @ 07:00 a.m. by: laurd

SOURCE:
California State Automobile Association, Sacramento Valley Region,
February 1992.

FIGURE 1

File: I:\PROJECTS\208-02 NVSSP\CAD\DRAW\11-6-02 NVSSP-SHEDS.DWG Last edited: 01/14/03 @ 09:49 a.m. by: lcurd

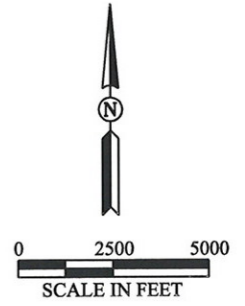


LEGEND

- NVSSP Boundary
- Vineyard Springs CPA Boundary
- Basin Boundary
- Subbasin Boundary
- E4B Subbasin Name
- - - - - Creek
- - - - - City/County Limits
- Major Road
- +++++ Railroad

SOURCE

Based upon the Sacramento County Department of Public Works, Water Resources Division, "Elder and Gerber Creeks Technical Appendix: UNET Analysis," dated January 1997.



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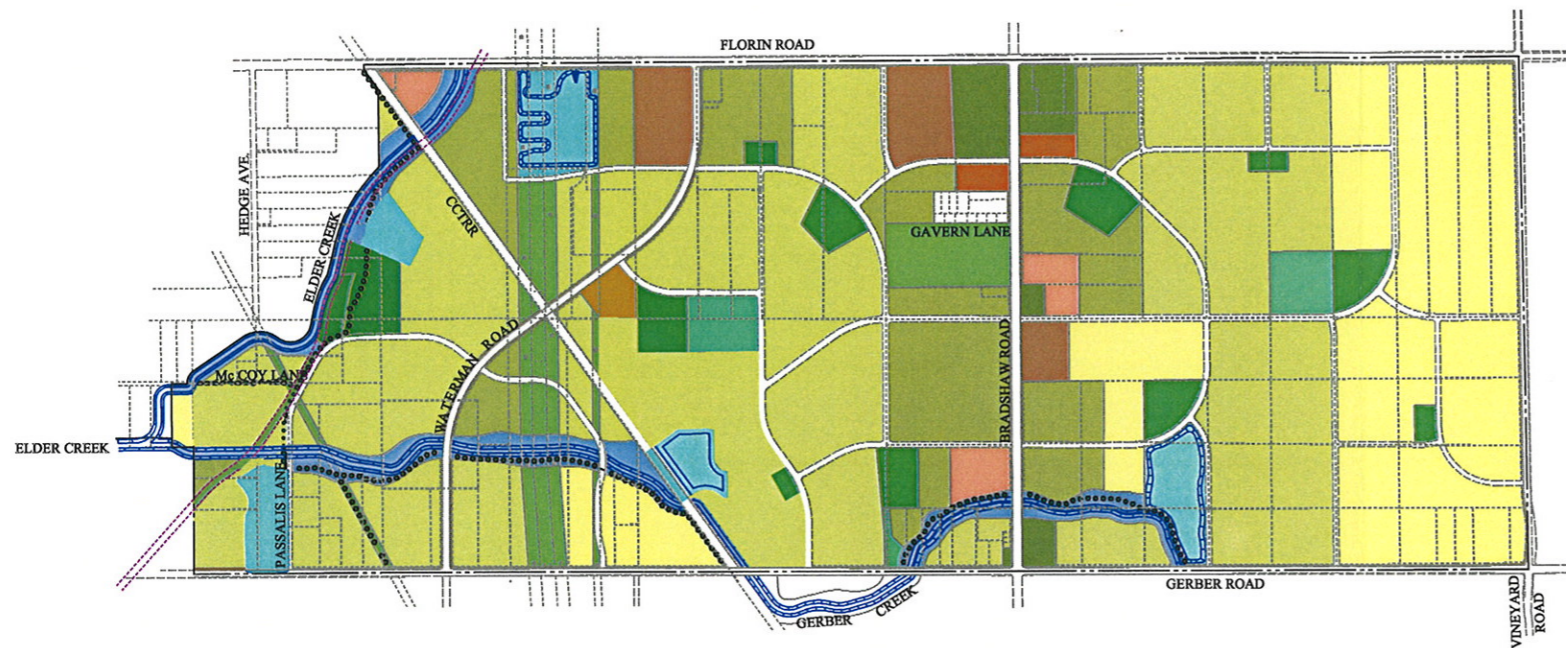
NORTH VINEYARD STATION SPECIFIC PLAN
DRAINAGE MASTER PLAN
UPDATE AND PHASING

**ELDER AND GERBER CREEKS
SUBBASIN MAP
EXISTING CONDITIONS**

WOOD RODGERS, INC.
SACRAMENTO, CALIFORNIA

FIGURE 2

File: I:\PROJECTS\208-02 NVSSP\CAD\DRAW\11-6-02\11_25LANDUSE.DWG Last edited: 01/14/03 © 09:39 by: lcurd



LEGEND

- Business/Professional
- Commercial
- Single Family Residential (1-3)
- Single Family Residential (3-5)
- Single Family Residential (4-7)
- Medium Density Residential (7-12)
- Multi-Family Residential (12-22)
- Landscape Corridor
- Drainage Parkway
- Parkway
- Storm Water Detention Basin
- Open Space
- Public Services
- Schools
- Parks
- Creek
- NVSSP Boundary
- Roads, Railroad
- Property Line, Easement
- Sewer Interceptor
- Trail

NOTE

An 8-acre park or two smaller parks shall be constructed within the area generally bounded by Passalis Lane (Loop) and Gerber Road. The actual size, configuration, and location of a park site(s) will be determined at a later date following the submission and review of tentative maps and development proposal within the general area. Consideration should be given to locating the park site(s) adjacent to Gerber Creek in conjunction with the open space area associated with Gerber Creek. Developing property owners should contact the Southgate Park and Recreation District to determine the size, configuration, and location of the park site(s).

SOURCE

Based on the "North Vineyard Station Specific Plan," dated Fall 1998.

LAND USE SUMMARY

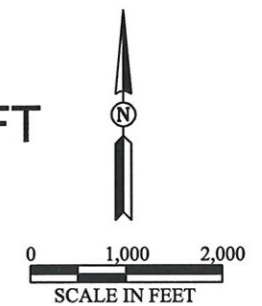
RESIDENTIAL SUMMARY

LAND USE	DENSITY RANGE	DENSITY FIXED COUNT	AREA NET/GROSS		UNITS
Multi-Family Res.	12 to 22	18 (net)	37.8	39.7	680
Medium Density Res.	7 to 12	10 (net)	18.7	19.4	187
Single Family Res.	4 to 7	6 (gross)		204.6	1,227
Single Family Res.	3 to 5	5 (gross)		611.7	3,058
Single Family Res.	1 to 3	2 (gross)		283.4	567
Existing Residential				5.8	13
SUBTOTAL			1,164.6	5,732	

NON-RESIDENTIAL SUMMARY

LAND USE	AREA NET/GROSS	
Golf Course	19.8	20.1
Commercial	29.9	30.5
Business/Professional	7.1	7.9
Schools	20.0	21.6
Parks	63.5	68.2
Parkways	---	2.5
Drainage Parkway	---	75.5
Open Space/Storm Water Detention	---	104.7
Landscape Corridors	---	23.2
Public Services	5.3	5.5
Major Streets	---	57.6
Railroad	---	14.6
SUBTOTAL	431.9	
TOTAL	1,596.5	

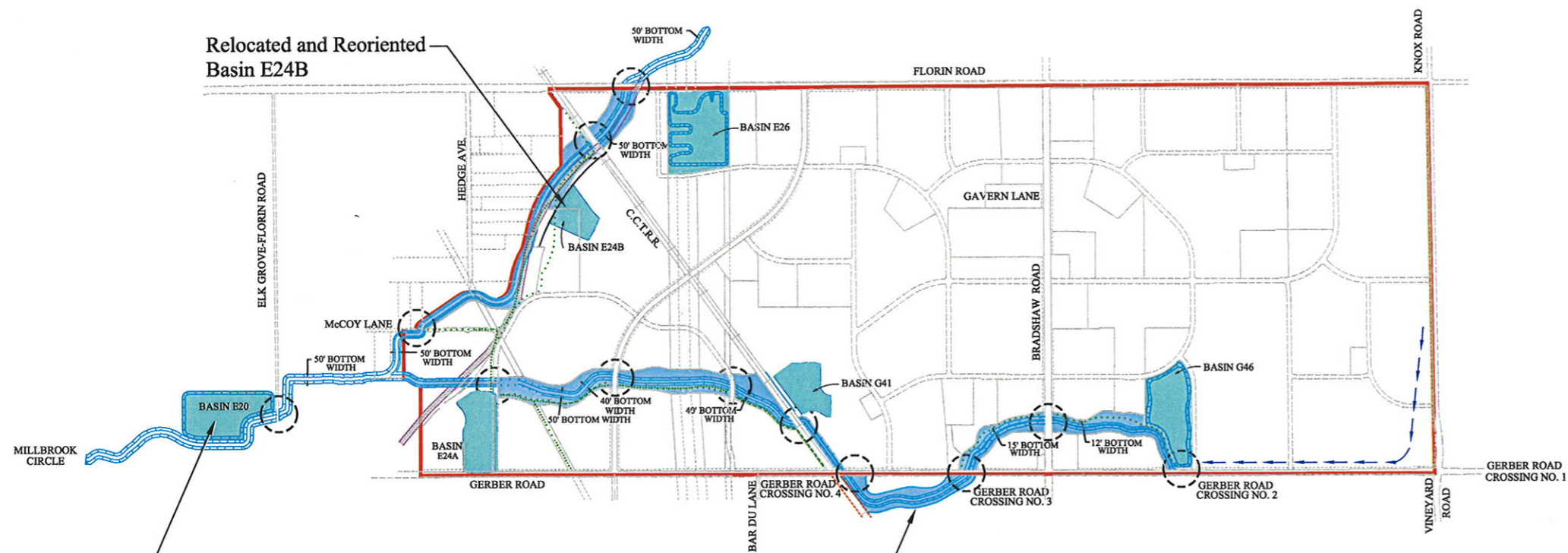
REVISED DRAFT








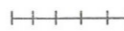







NORTH VINEYARD STATION SPECIFIC PLAN
DRAINAGE MASTER PLAN
UPDATE AND PHASING

ULTIMATE LAND USE

WOOD RODGERS, INC.
SACRAMENTO, CALIFORNIA



LEGEND

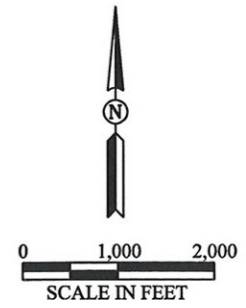
	Drainage Corridor
	Storm Water Detention Basin
	Channel and Detention Basin Improvements
	NVSSP Boundary
	Road
	Railroad
	Power Line Corridor
	Property Line, Easement
	Proposed Land Use Boundary
	Sewer Interceptor
	Drainage Crossing
	Interim Overflow Path
	Trail

NOTE
 The interim overflow path will be required until Gerber Creek is improved upstream of Gerber Road Crossing #1, or another plan is implemented to eliminate the existing spill through the NVSSP area during large storm events.

SOURCE
 "Drainage Master Plan for the North Vineyard Station Specific Plan," dated January 30, 1998.

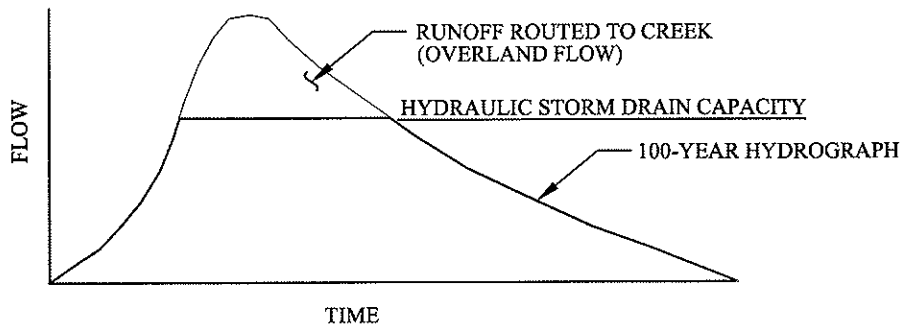
NOTE:
 Basin E20 was reevaluated under the current phasing study and determined not necessary to mitigate peak stages and flows in the Stand-Alone and Ultimate Conditions. Final determination to be made by Sacramento County.

NOTE:
 Spill from Laguna Creek will be eliminated in the Ultimate Conditions, by drainage improvements within the Laguna Creek drainage system and not from facilities implemented as part of the Preferred Drainage Plan.

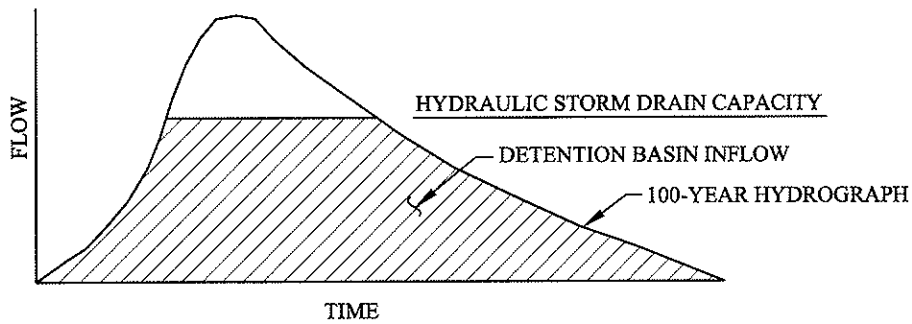


REVISED DRAFT
 NORTH VINEYARD STATION SPECIFIC PLAN
 DRAINAGE MASTER PLAN
 UPDATE AND PHASING
PREFERRED DRAINAGE PLAN
 WOOD RODGERS, INC.
 SACRAMENTO, CALIFORNIA

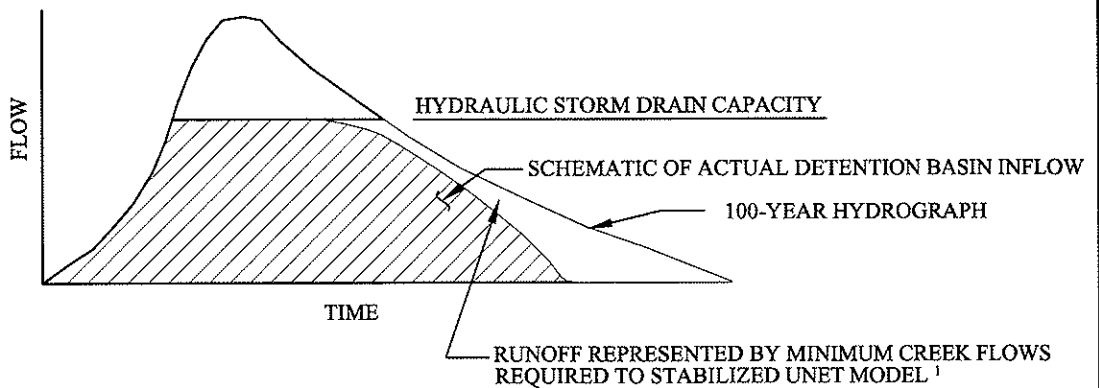
FIGURE 4



SCENARIO 1: CREEK EVALUATION



SCENARIO 2: DETENTION BASIN EVALUATION



DOUBLE-COUNTED FLOW

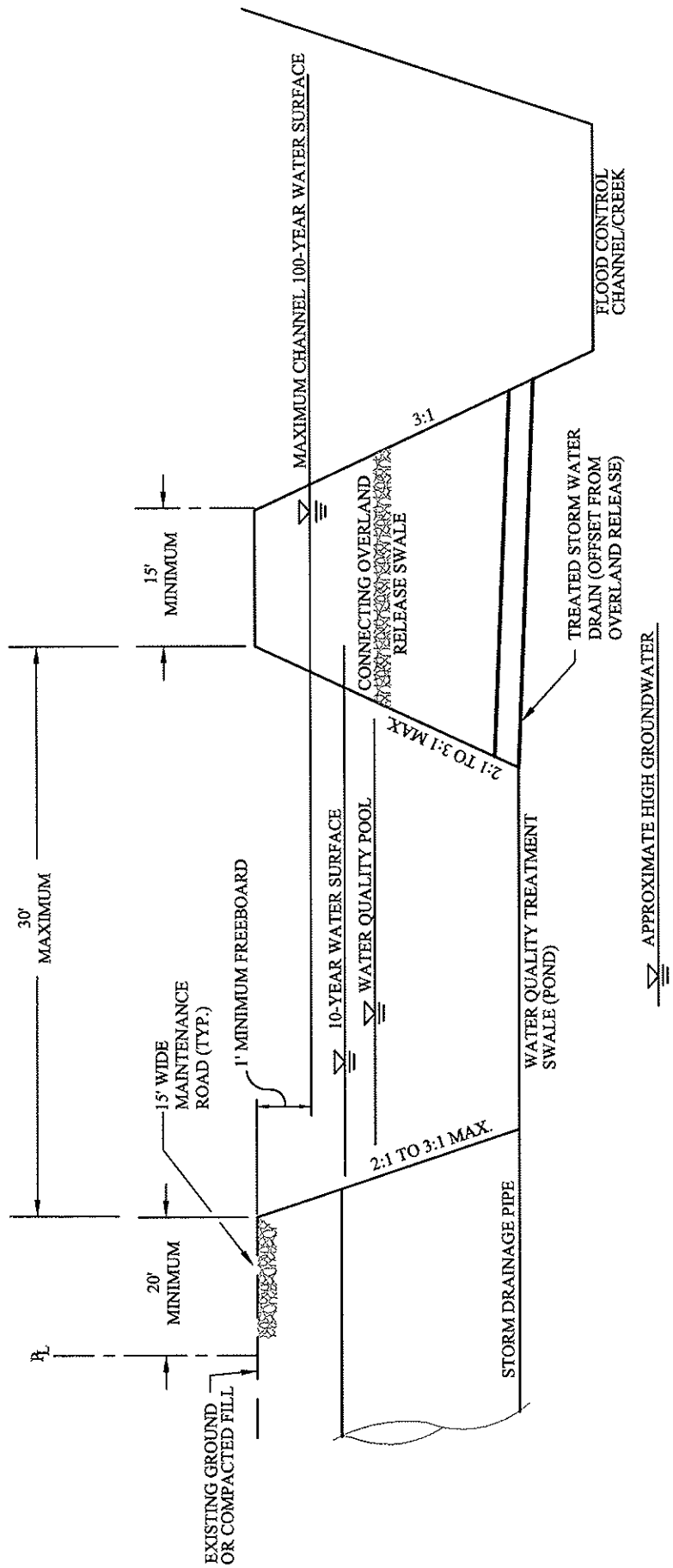
¹ THE RUNOFF ILLUSTRATED WAS ALSO USED IN THE EVALUATION OF THE DETENTION BASINS THUS, COUNTED TWICE.

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NORTH VINEYARD STATION SPECIFIC PLAN
DRAINAGE MASTER PLAN
UPDATE AND PHASING

**BASINS E24A, G41, AND G46
ILLUSTRATION OF RUNOFF
ROUTING METHODOLOGY**

WOOD RODGERS, INC.
SACRAMENTO, CALIFORNIA



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NORTH VINEYARD STATION SPECIFIC PLAN
 DRAINAGE MASTER PLAN
 UPDATE AND PHASING

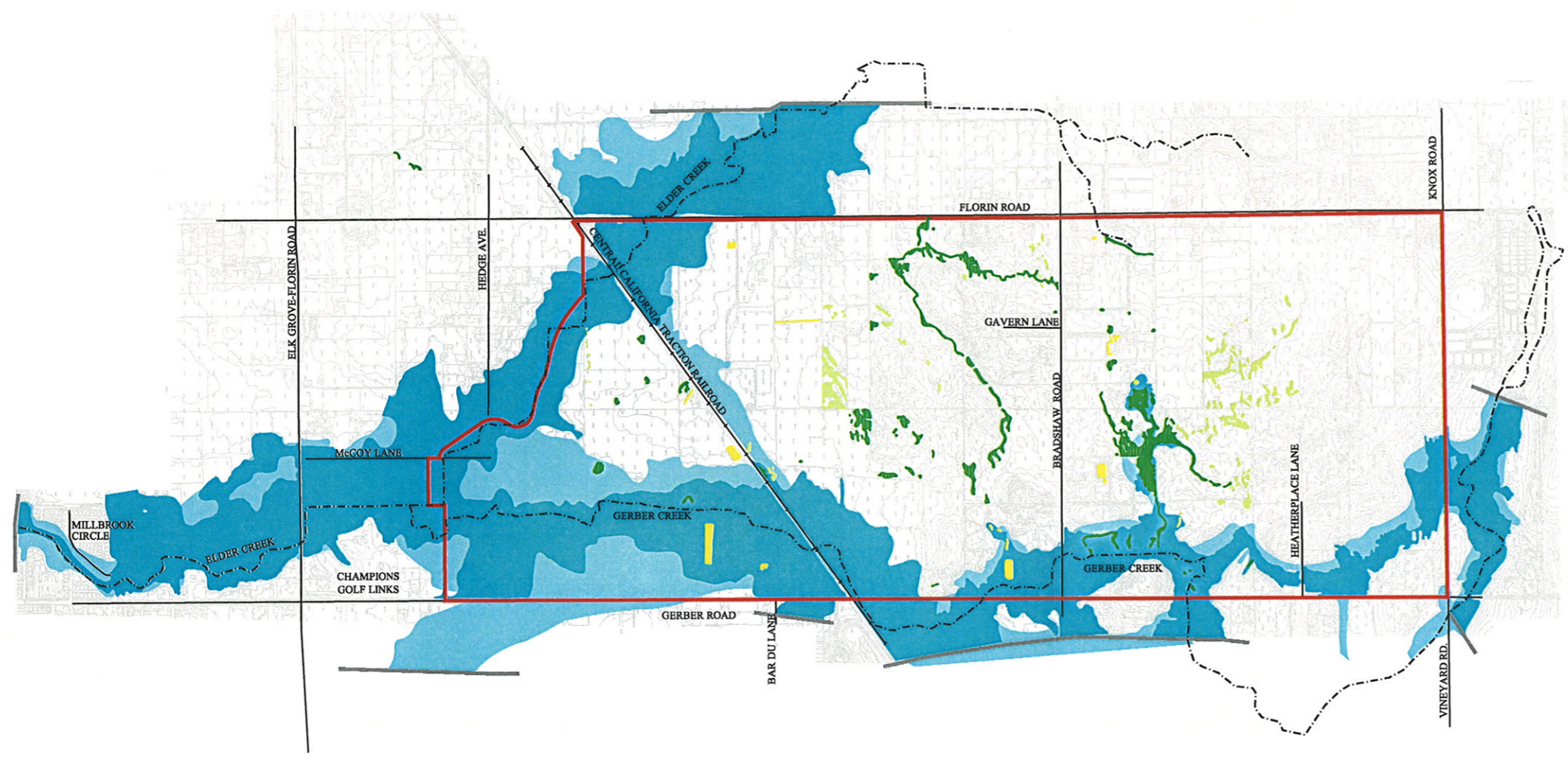
TYPICAL WATER QUALITY SWALE/CHANNEL CROSS SECTION

WOOD RODGERS, INC.
 SACRAMENTO, CALIFORNIA

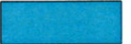









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FIGURE 6

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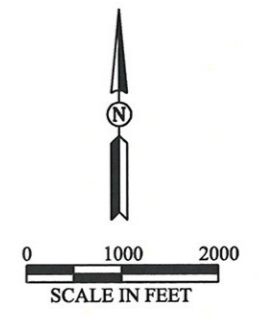


LEGEND

-  100-Year Floodplain (UNET Model)
-  100-Year Floodplain (FEMA)
-  Vernal Pool
-  Seasonal Wetland
-  Stock Pond
-  NVSSP Boundary
-  Creek
-  Major Road
-  Railroad
-  Limit of Floodplain Mapping

SOURCES

1. The 100-year floodplain (UNET Model) is based upon the Sacramento County Department of Public Works, Water Resources Division, "Elder and Gerber Creeks Technical Appendix: UNET Analysis," dated January 1997.
2. The 100-year floodplain (FEMA) is based upon the FIRM Panel No. 060262 0330 C.
3. The wetland delineation is based upon the "North Vineyard Station Specific Plan Technical Appendix: Biotic Resources," prepared by Sugnet and Associates Environmental Consultants, dated May 3, 1996.



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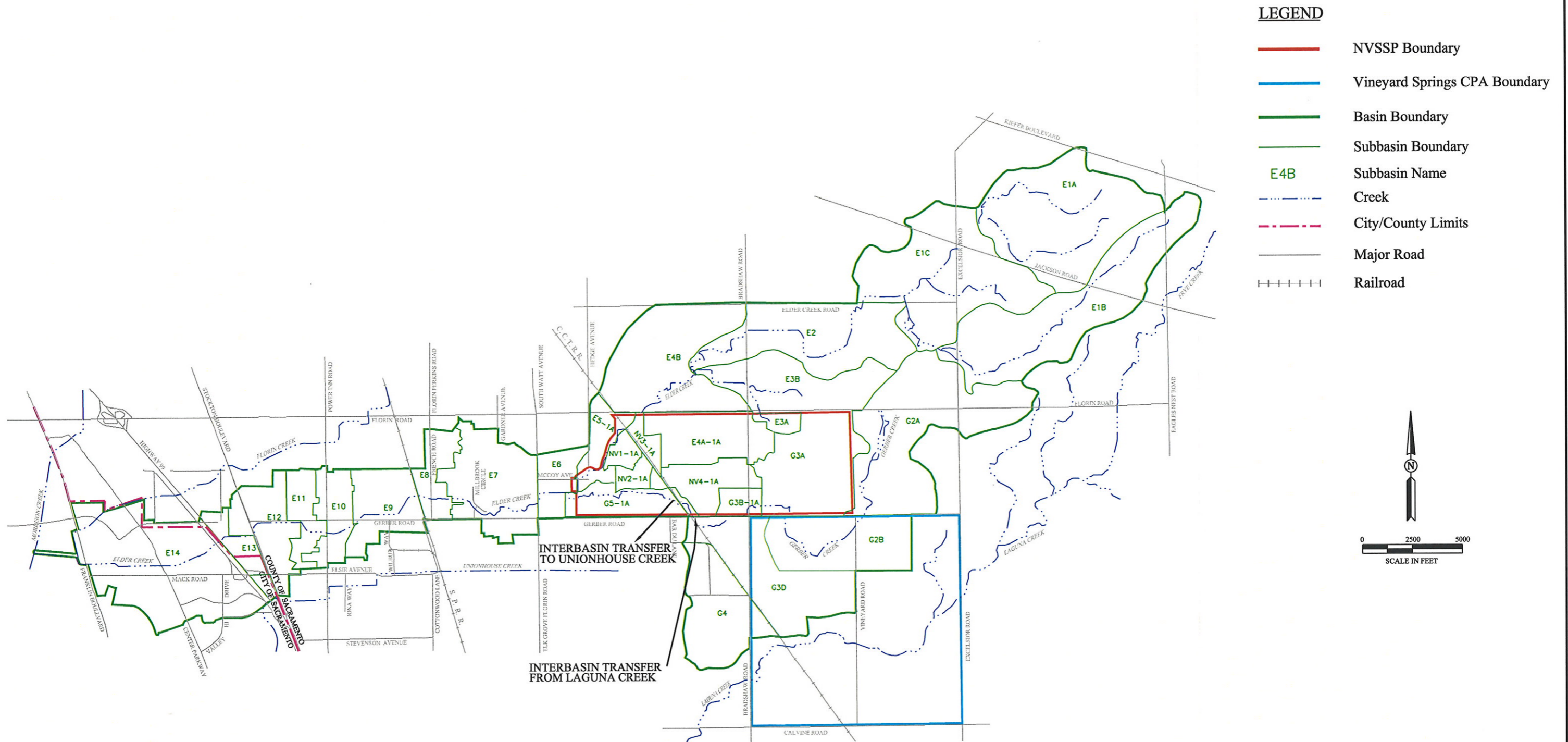
NORTH VINEYARD STATION SPECIFIC PLAN
DRAINAGE MASTER PLAN
UPDATE AND PHASING

EXISTING CONDITIONS FLOODPLAIN

WOOD RODGERS, INC.
SACRAMENTO, CALIFORNIA

FIGURE 7

File: I:\PROJECTS\208-02 NVSSP\CAD\DRAW\11-6-02 NVSSP-SHEDS.DWG Last edited: 01/14/03 @ 09:49 a.m. by: lcurd



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NORTH VINEYARD STATION SPECIFIC PLAN
DRAINAGE MASTER PLAN
UPDATE AND PHASING

**ELDER AND GERBER CREEKS
SUBBASIN MAP
DEVELOPED CONDITIONS**

WOOD RODGERS, INC.
SACRAMENTO, CALIFORNIA

FIGURE 8

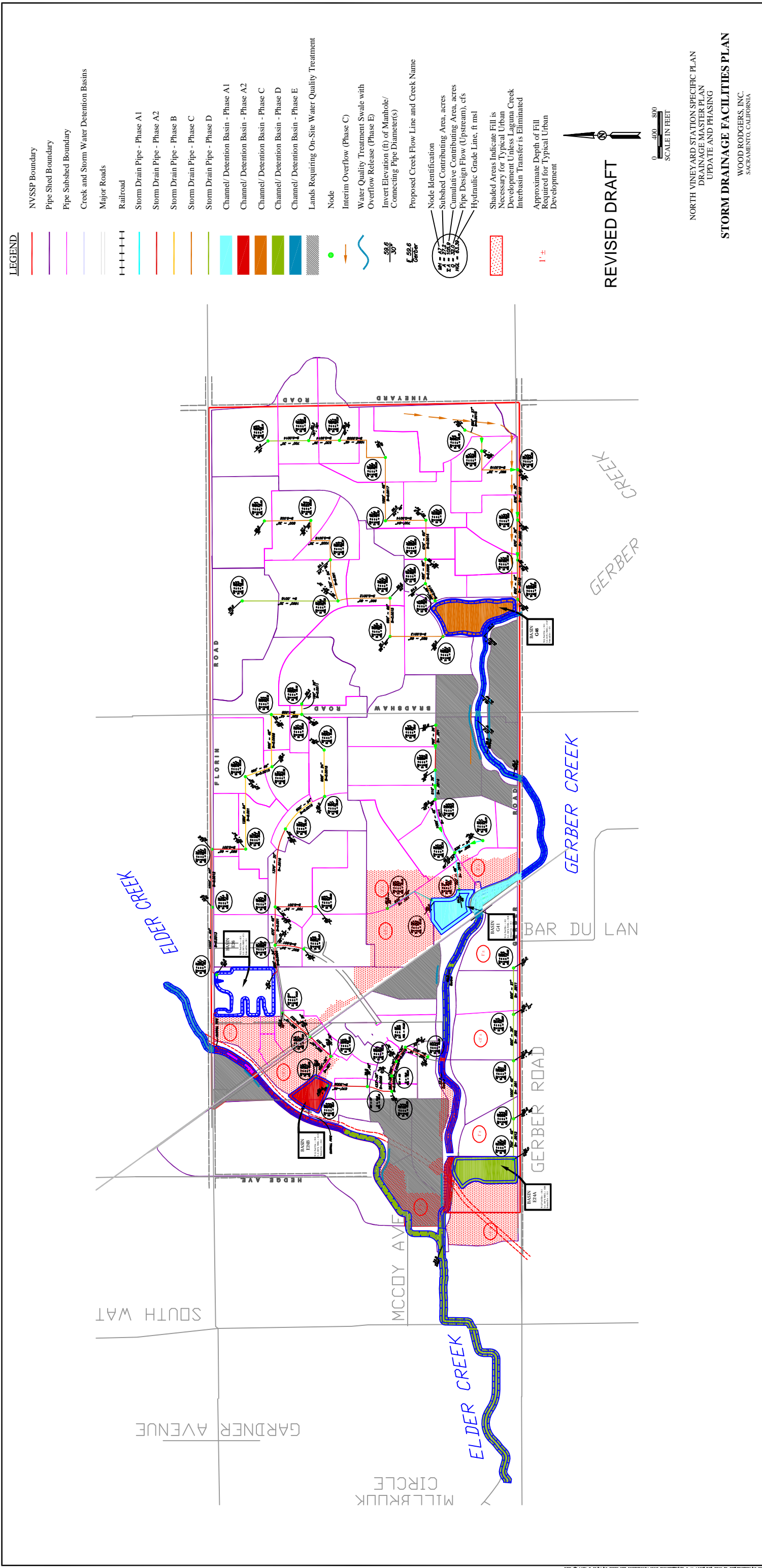
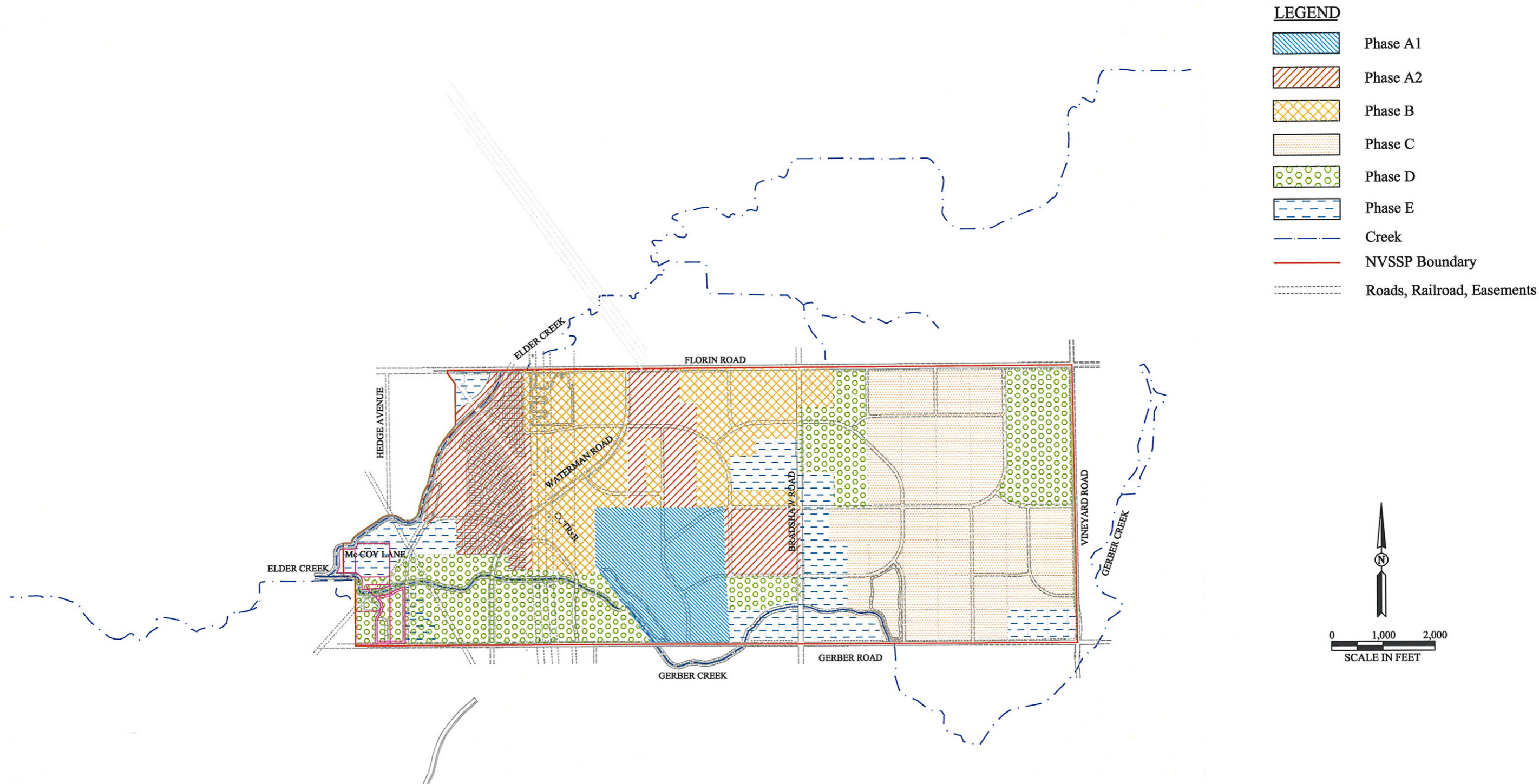
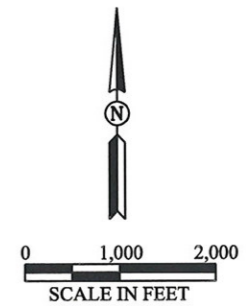


FIGURE 9

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- LEGEND**
- Phase A1
 - Phase A2
 - Phase B
 - Phase C
 - Phase D
 - Phase E
 - Creek
 - NVSSP Boundary
 - Roads, Railroad, Easements



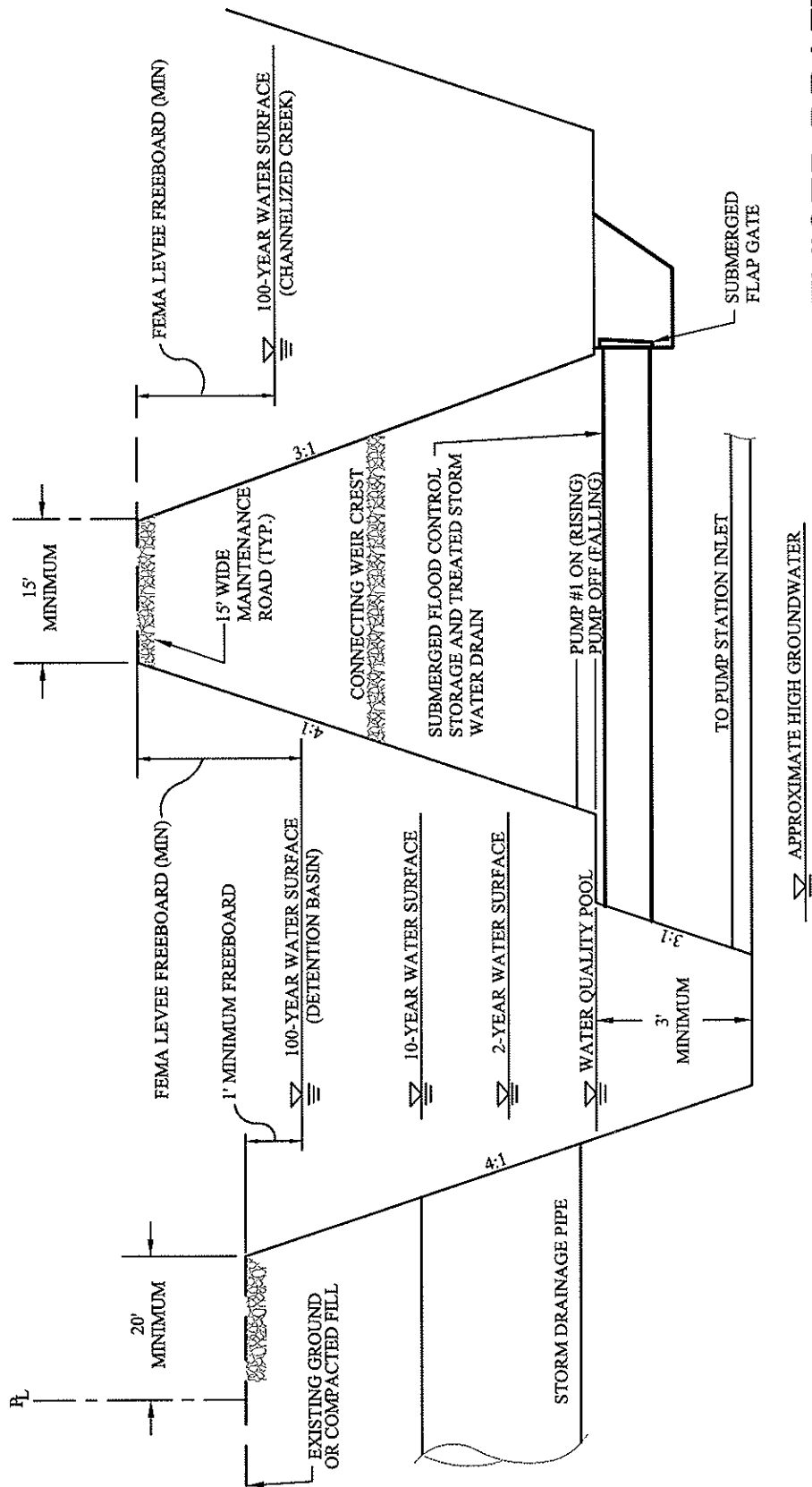
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NORTH VINEYARD STATION SPECIFIC PLAN
DRAINAGE MASTER PLAN
UPDATE AND PHASING

DEVELOPMENT PHASING

WOOD RODGERS, INC.
SACRAMENTO, CALIFORNIA

FIGURE 10



REVISED DRAFT

NORTH VINEYARD STATION SPECIFIC PLAN
 DRAINAGE MASTER PLAN
 UPDATE AND PHASING

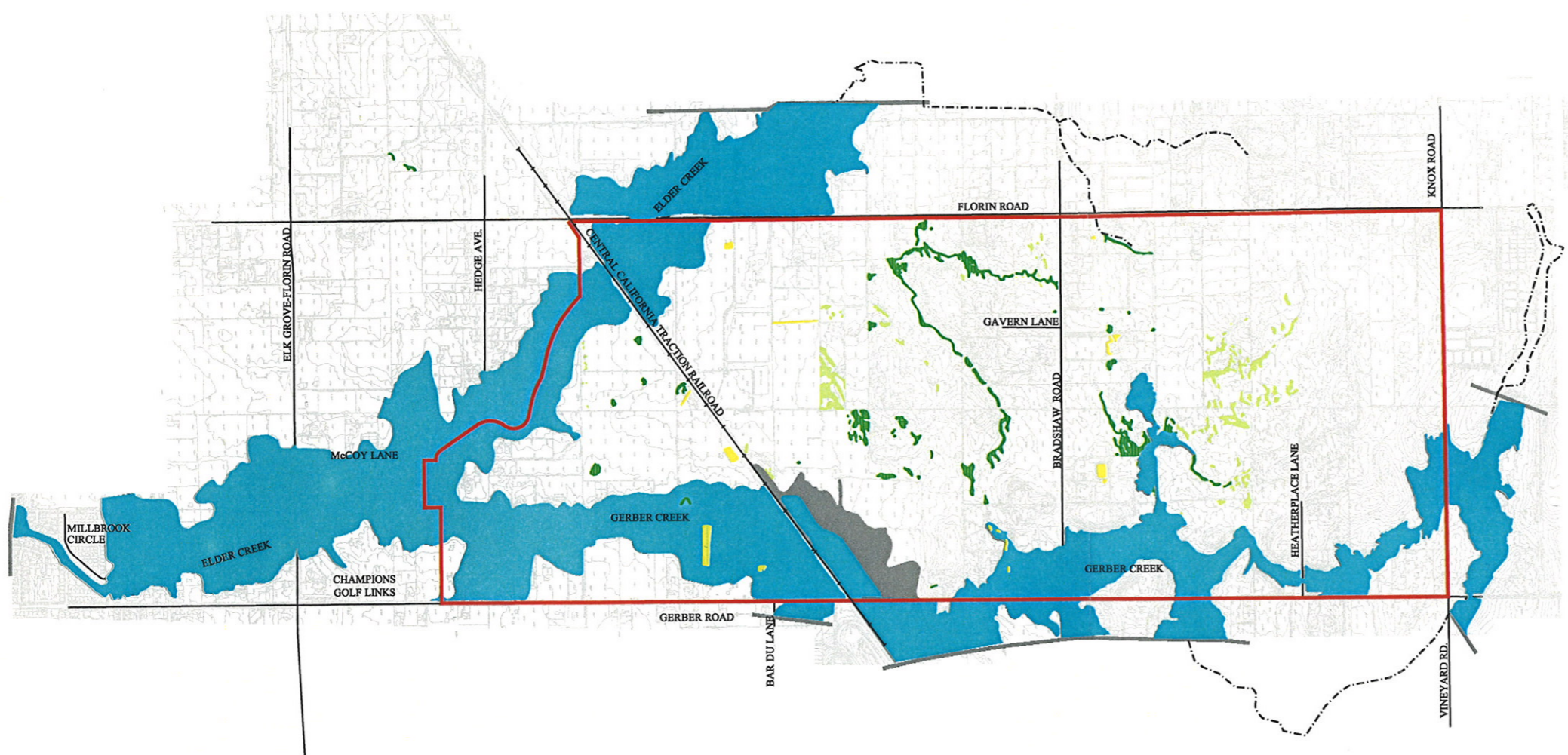
TYPICAL DETENTION BASIN/ CHANNEL CROSS SECTION

BORCALLI & ASSOCIATES, INC.
 SACRAMENTO, CALIFORNIA



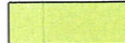







NOT TO SCALE

FIGURE 11

File: I:\PROJECTS\208-02 NVSSP\CA\DRIFT 11-6-02\PHASE1\FPGURE.DWG Last edited: 11/08/02 @ 11:19 by: jpicke



LEGEND

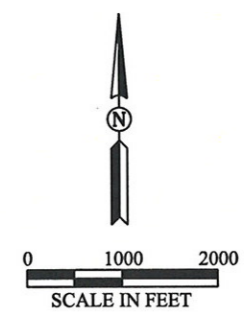
-  100-Year Floodplain (UNET Model)
-  Removed 100-Year Floodplain from Previous Phase
-  Vernal Pool
-  Seasonal Wetland
-  Stock Pond
-  NVSSP Boundary
-  Creek
-  Major Road
-  Railroad
-  Limit of Floodplain Mapping

NOTE

The 100-year floodplain is based upon existing conditions (UNET Model) derived from Sacramento County Department of Public Works, Water Resources Division, "Elder and Gerber Creeks Technical Appendix: UNET Analysis," dated January 1997.

SOURCE

The wetland delineation is based upon the "North Vineyard Station Specific Plan Technical Appendix: Biotic Resources," prepared by Sugnet and Associates Environmental Consultants, dated May 3, 1996.

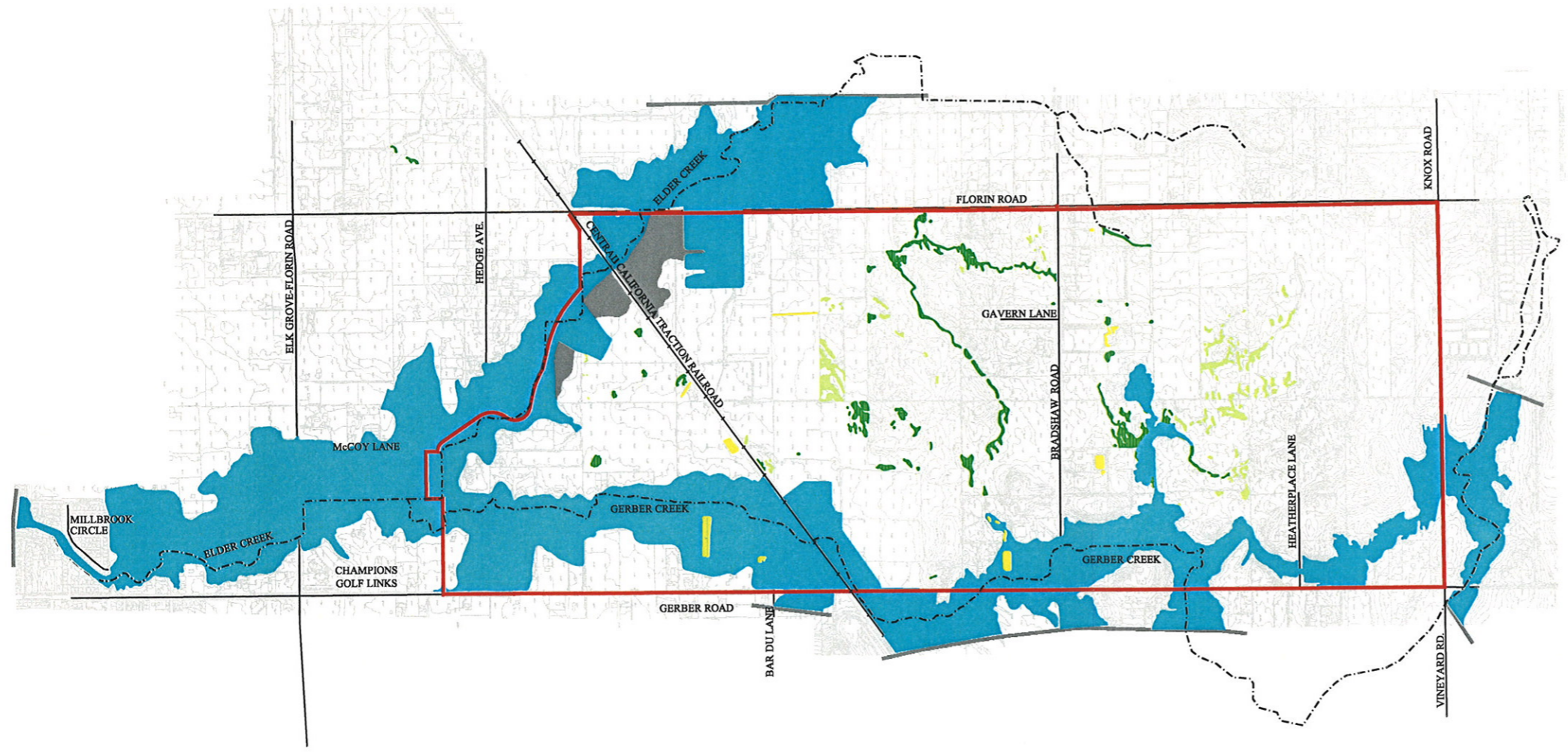


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NORTH VINEYARD STATION SPECIFIC PLAN
 DRAINAGE MASTER PLAN
 UPDATE AND PHASING
PHASE A1
RESIDUAL 100-YEAR FLOODPLAIN
 WOOD RODGERS, INC.
 SACRAMENTO, CALIFORNIA

FIGURE 12

File: I:\PROJECTS\2008-02 NVSSA\CAD\DRMT_11-6-02\11_25PHASE2\Figure.DWG Last edited: 01/14/03 @ 11:05 by: leurd



LEGEND

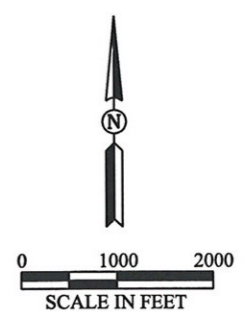
- 100-Year Floodplain (UNET Model)
- Removed 100-Year Floodplain from Previous Phase
- Vernal Pool
- Seasonal Wetland
- Stock Pond
- NVSSP Boundary
- Creek
- Major Road
- Railroad
- Limit of Floodplain Mapping

NOTE

The 100-year floodplain is based upon existing conditions (UNET Model) derived from Sacramento County Department of Public Works, Water Resources Division, "Elder and Gerber Creeks Technical Appendix: UNET Analysis," dated January 1997.

SOURCE

The wetland delineation is based upon the "North Vineyard Station Specific Plan Technical Appendix: Biotic Resources," prepared by Sugnet and Associates Environmental Consultants, dated May 3, 1996.



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NORTH VINEYARD STATION SPECIFIC PLAN
 DRAINAGE MASTER PLAN
 UPDATE AND PHASING
PHASE A2
RESIDUAL 100-YEAR FLOODPLAIN
 WOOD RODGERS, INC.
 SACRAMENTO, CALIFORNIA

FIGURE 13

ELDER CREEK MAXIMUM WATER SURFACE PROFILE
PHASE A1

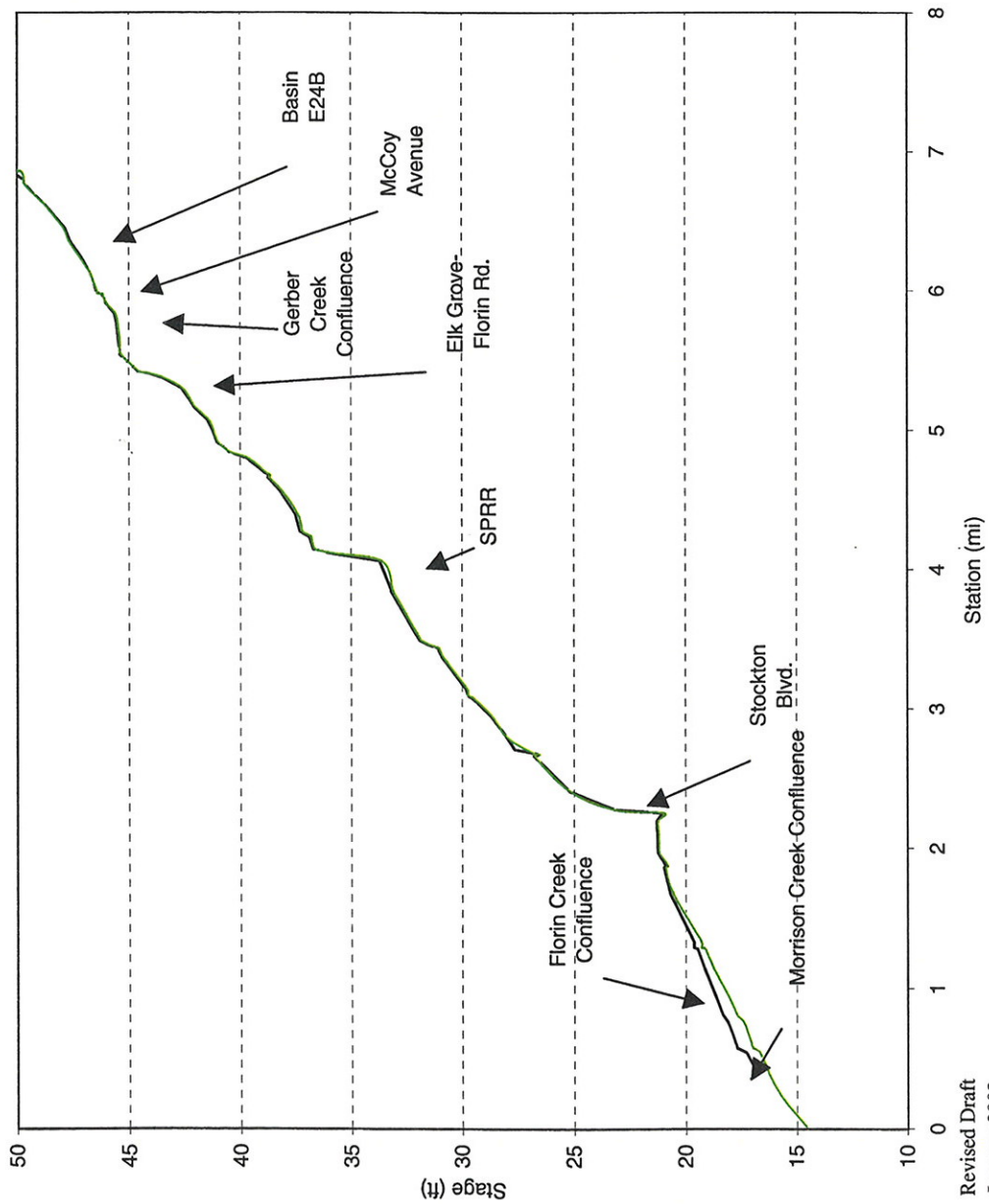
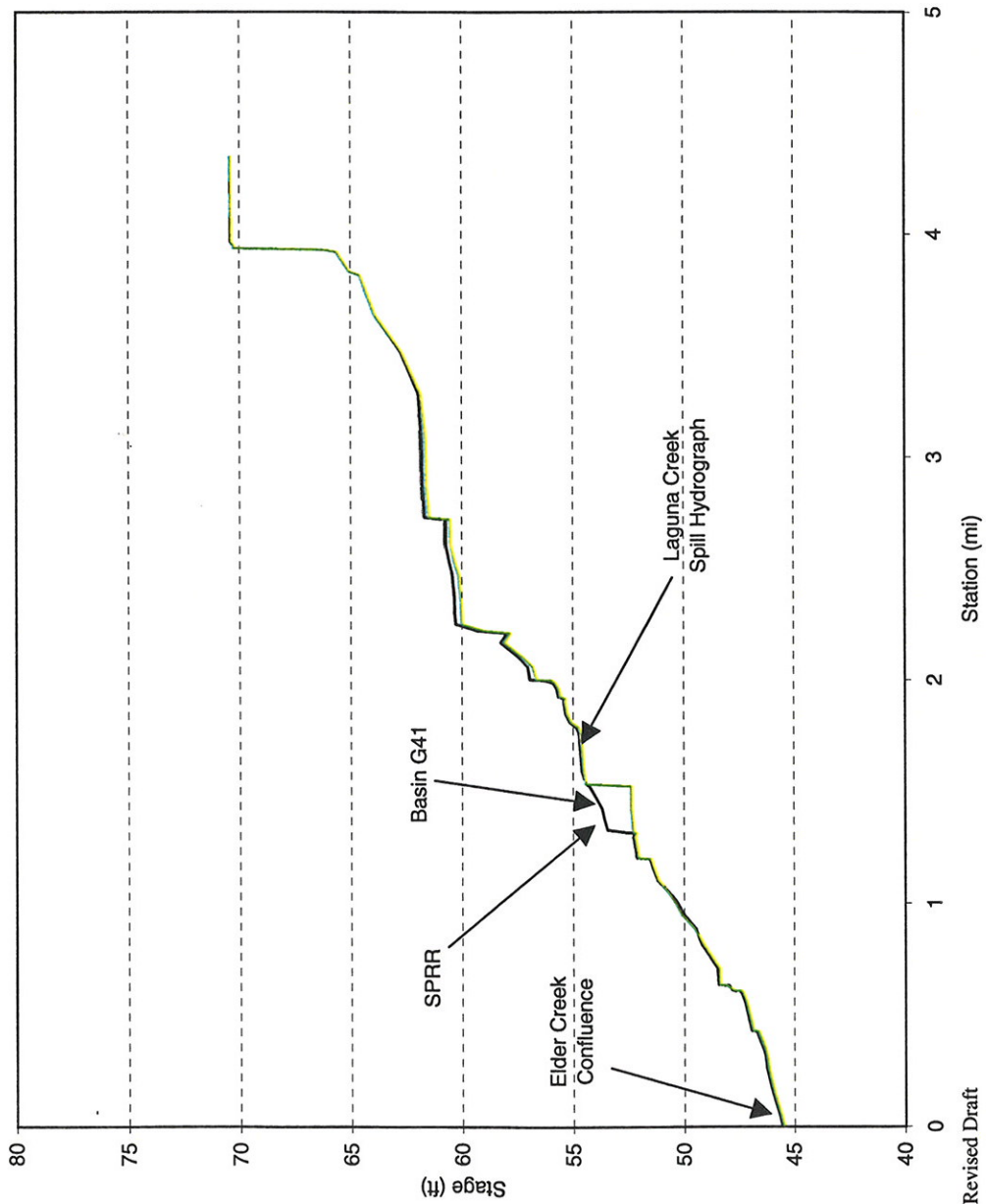


FIGURE 14

GERBER CREEK MAXIMUM WATER SURFACE PROFILE
PHASE A1



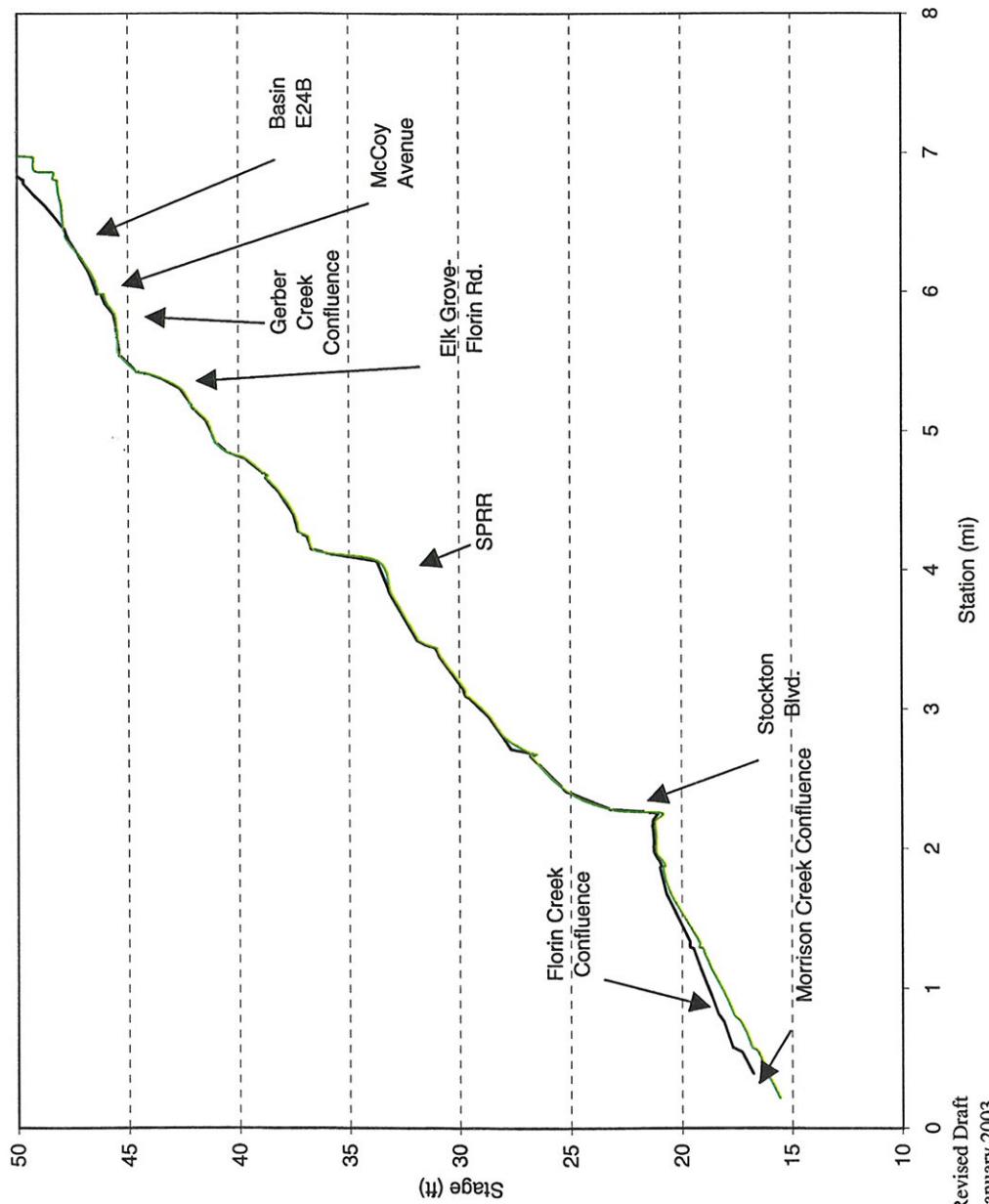
Existing 100-Year
Phase A1 - 100-Year

Wood Rodgers, Inc.
Sacramento, CA

Revised Draft
January 2003

FIGURE 15

ELDER CREEK MAXIMUM WATER SURFACE PROFILE
PHASE A2



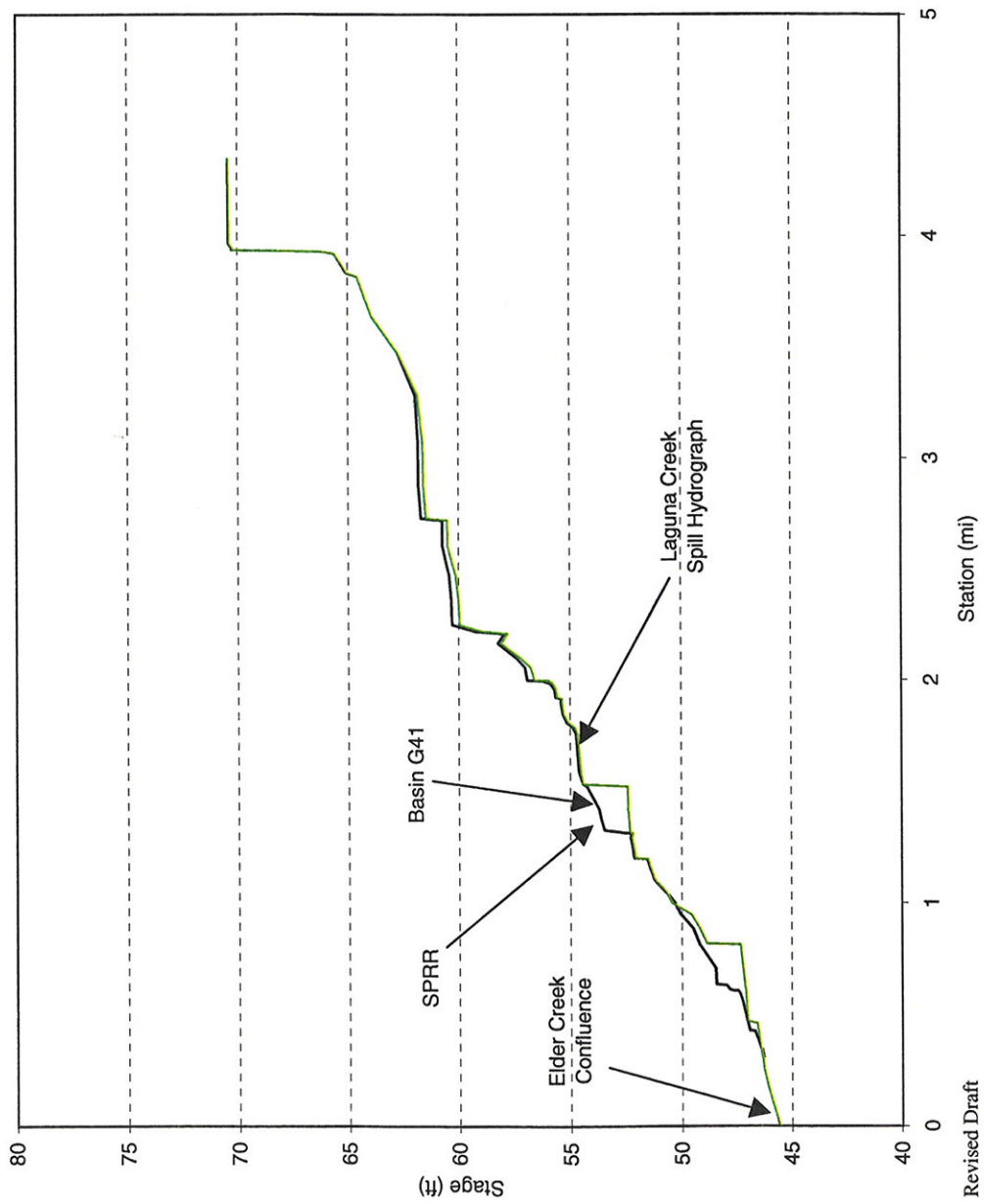
Existing 100-Year
Phase A2 - 100-Year

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January 2003

FIGURE 16

GERBER CREEK MAXIMUM WATER SURFACE PROFILE
PHASE A2



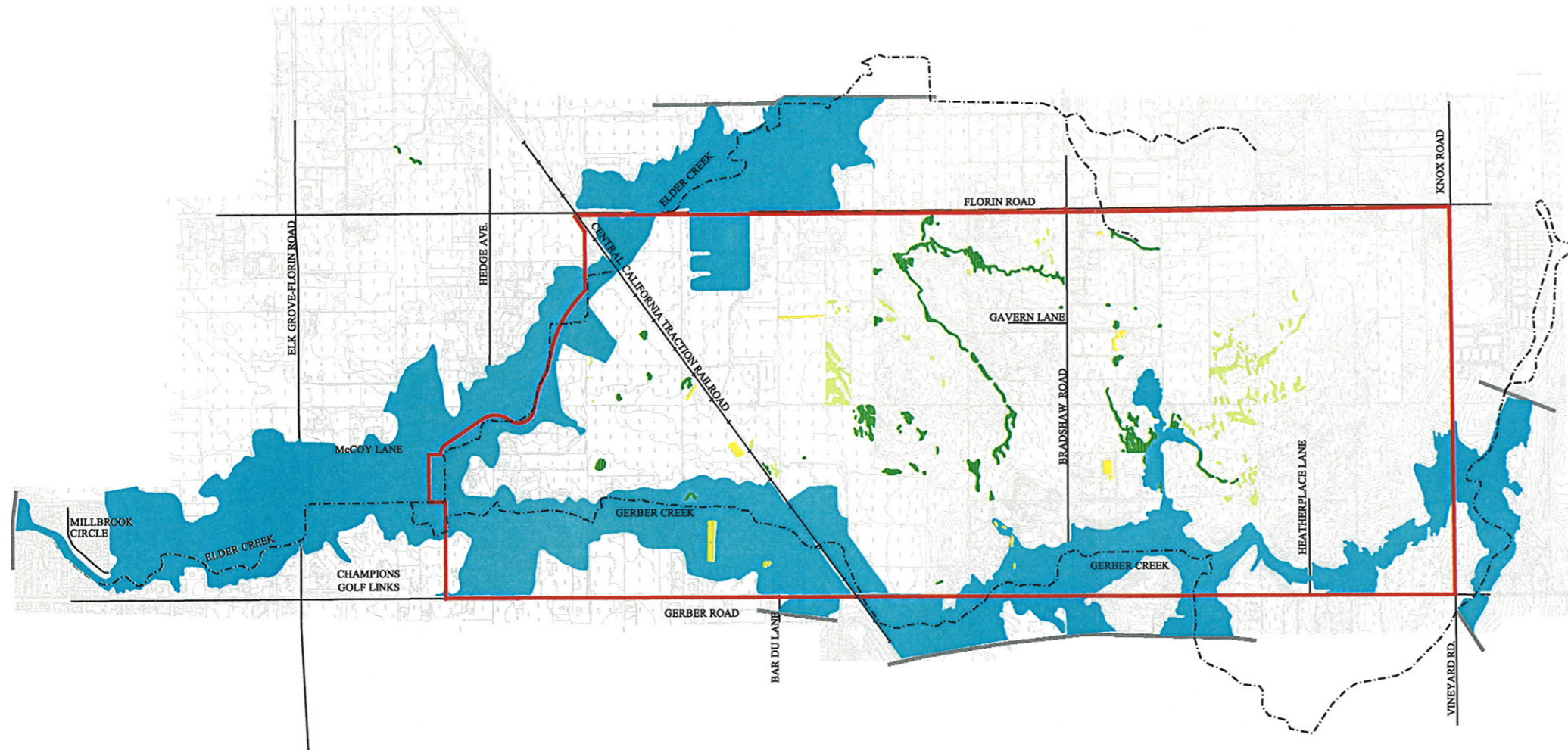
Existing 100-Year
Phase A2 - 100-Year

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Sacramento, CA

Revised Draft
January 2003

FIGURE 17

File: I:\PROJECTS\208-02 NVSSP\CAD\DRAWING\11-6-02\11_25PHASEB_FFIGURE.DWG Last edited: 12/03/02 © 09:24 by: kurd



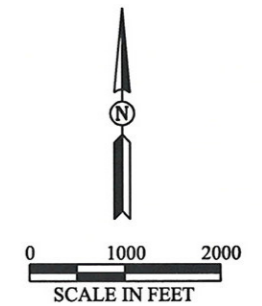
- LEGEND**
- 100-Year Floodplain (UNET Model)
 - Removed 100-Year Floodplain from Previous Phase
 - Vernal Pool
 - Seasonal Wetland
 - Stock Pond
 - NVSSP Boundary
 - Creek
 - Major Road
 - Railroad
 - Limit of Floodplain Mapping

NOTE

The 100-year floodplain is based upon existing conditions (UNET model) derived from Sacramento County Department of Public Works, Water Resources Division, "Elder and Gerber Creeks Technical Appendix: UNET Analysis", dated January 1997.

SOURCE

The wetland delineation is based upon the "North Vineyard Station Specific Plan Technical Appendix: Biotic Resources," prepared by Sugnet and Associates Environmental Consultants, dated May 3, 1996.



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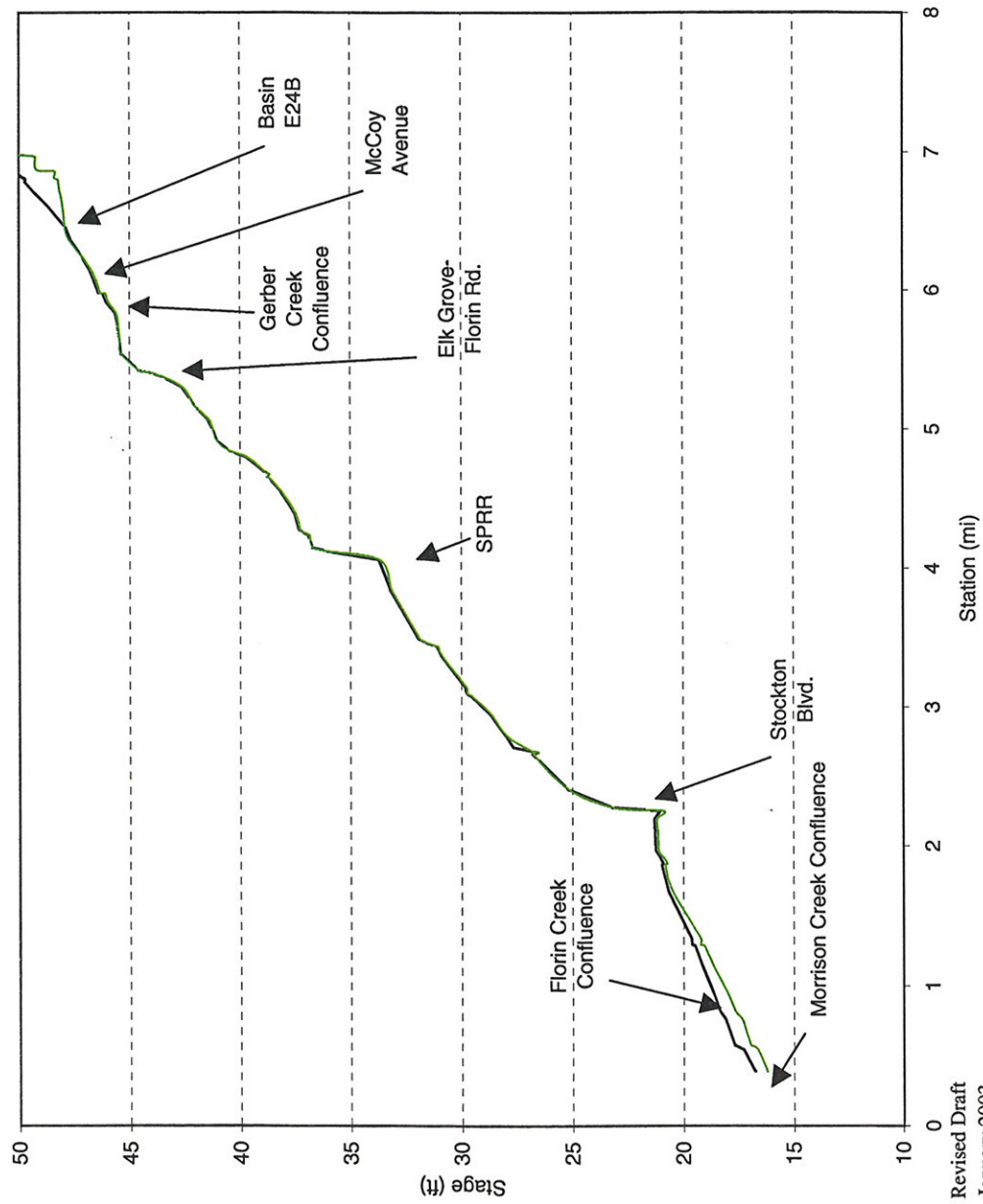
NORTH VINEYARD STATION SPECIFIC PLAN
DRAINAGE MASTER PLAN
UPDATE AND PHASING

PHASE B
RESIDUAL 100-YEAR FLOODPLAIN

WOOD RODGERS, INC.
SACRAMENTO, CALIFORNIA

FIGURE 18

ELDER CREEK MAXIMUM WATER SURFACE PROFILE
PHASE B



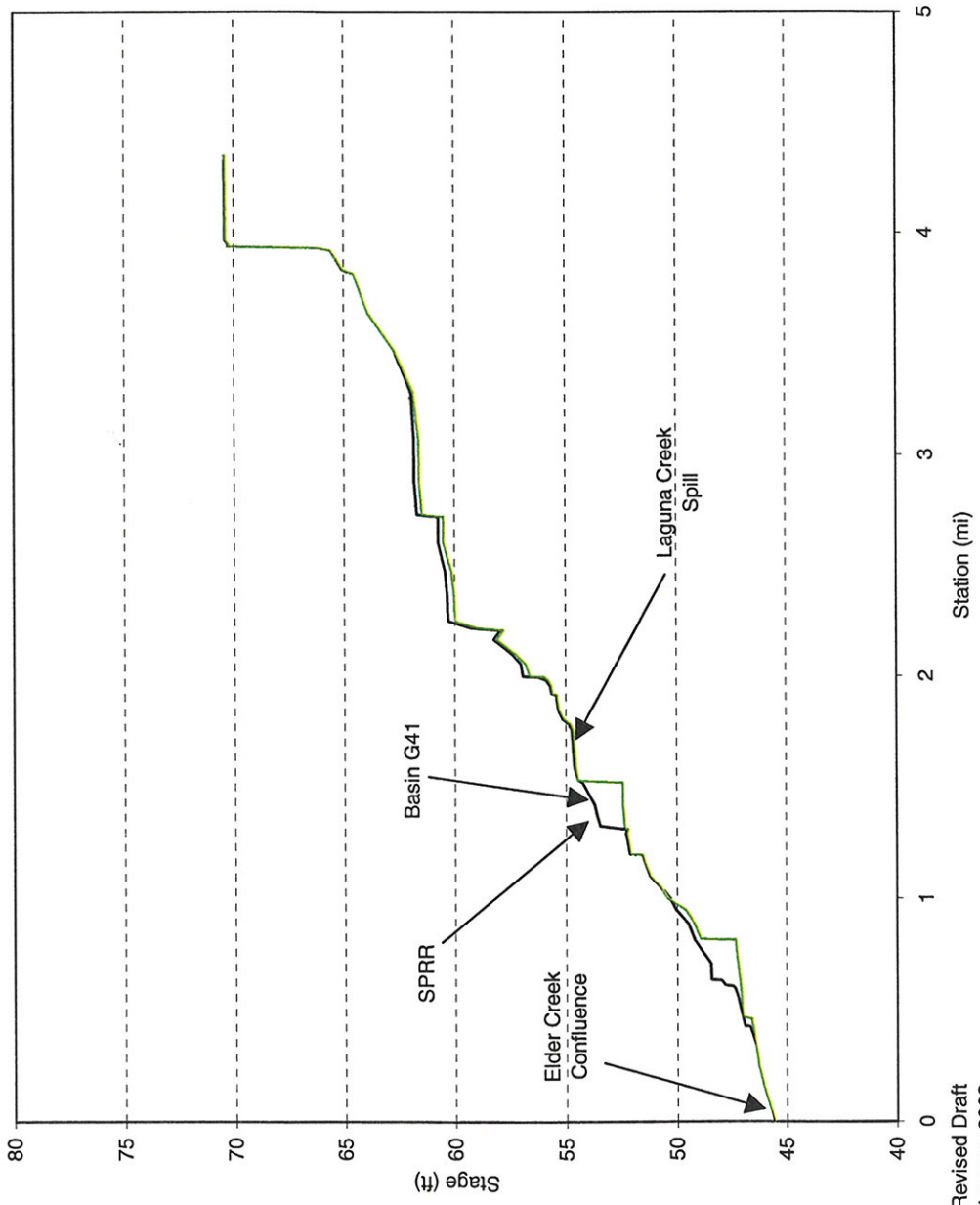
— Existing 100-Year
— Phase B - 100-Year

Wood Rodgers, Inc.
Sacramento, CA

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January 2003

FIGURE 19

GERBER CREEK MAXIMUM WATER SURFACE PROFILE
PHASE B



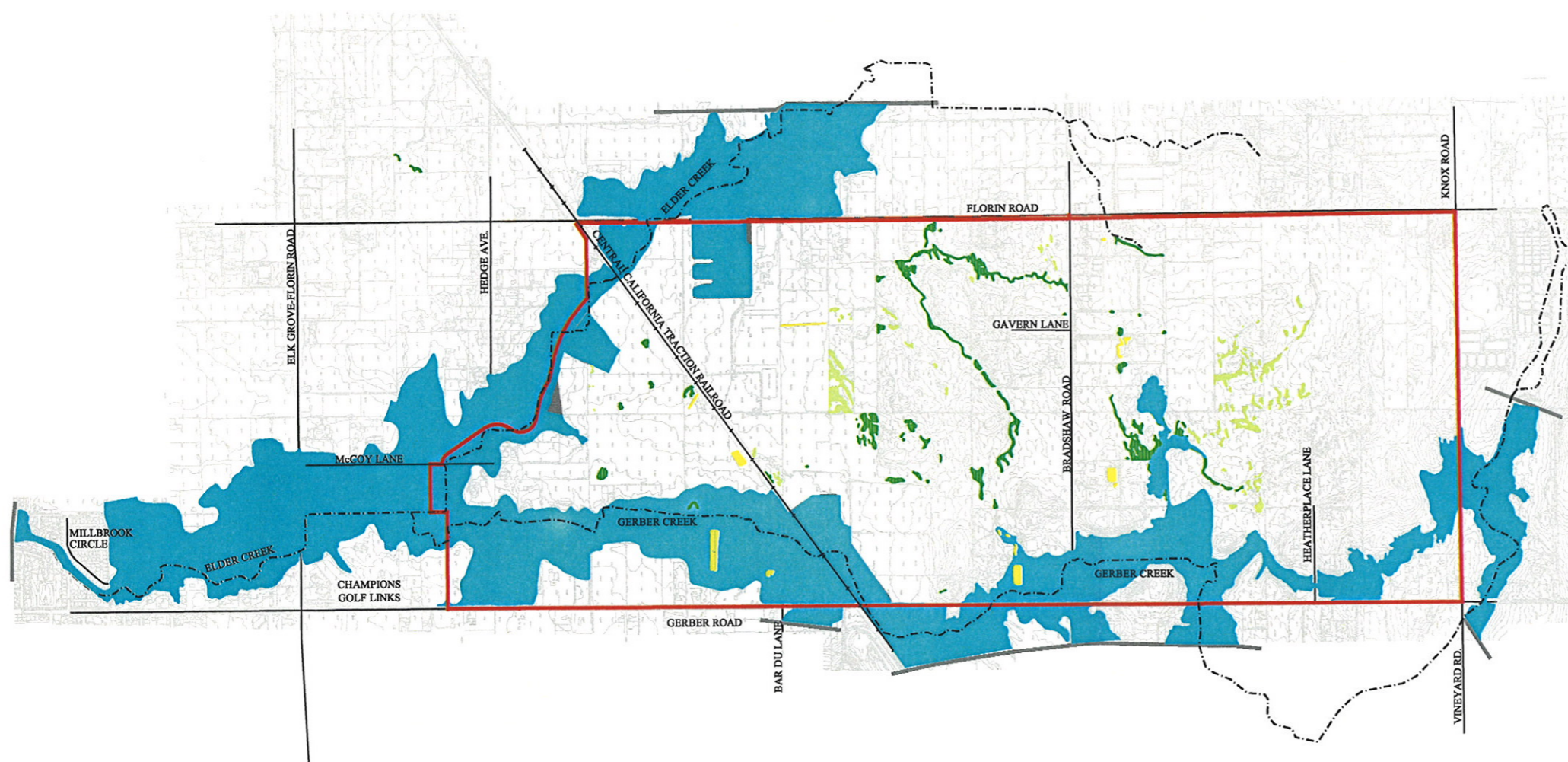
Existing 100-Year
Phase B - 100-Year

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Sacramento, CA

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January 2003

FIGURE 20

File: I:\PROJECTS\2008-02 NVSSP\CAD\DRWT\11-6-02\11_25PHASEC_FFIGURE.DWG Last edited: 01/14/03 © 11:11 by: kurd



LEGEND

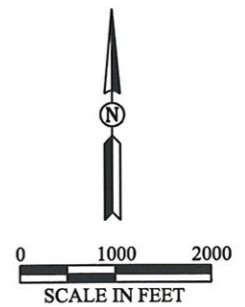
- 100-Year Floodplain (UNET Model)
- Removed 100-Year Floodplain from Previous Phase
- Vernal Pool
- Seasonal Wetland
- Stock Pond
- NVSSP Boundary
- Creek
- Major Road
- Railroad
- Limit of Floodplain Mapping

NOTE

The 100-year floodplain is based upon existing conditions (UNET model) derived from Sacramento County Department of Public Works, Water Resources Division, "Elder and Gerber Creeks Technical Appendix: UNET Analysis", dated January 1997.

SOURCE

The wetland delineation is based upon the "North Vineyard Station Specific Plan Technical Appendix: Biotic Resources," prepared by Sugnet and Associates Environmental Consultants, dated May 3, 1996.



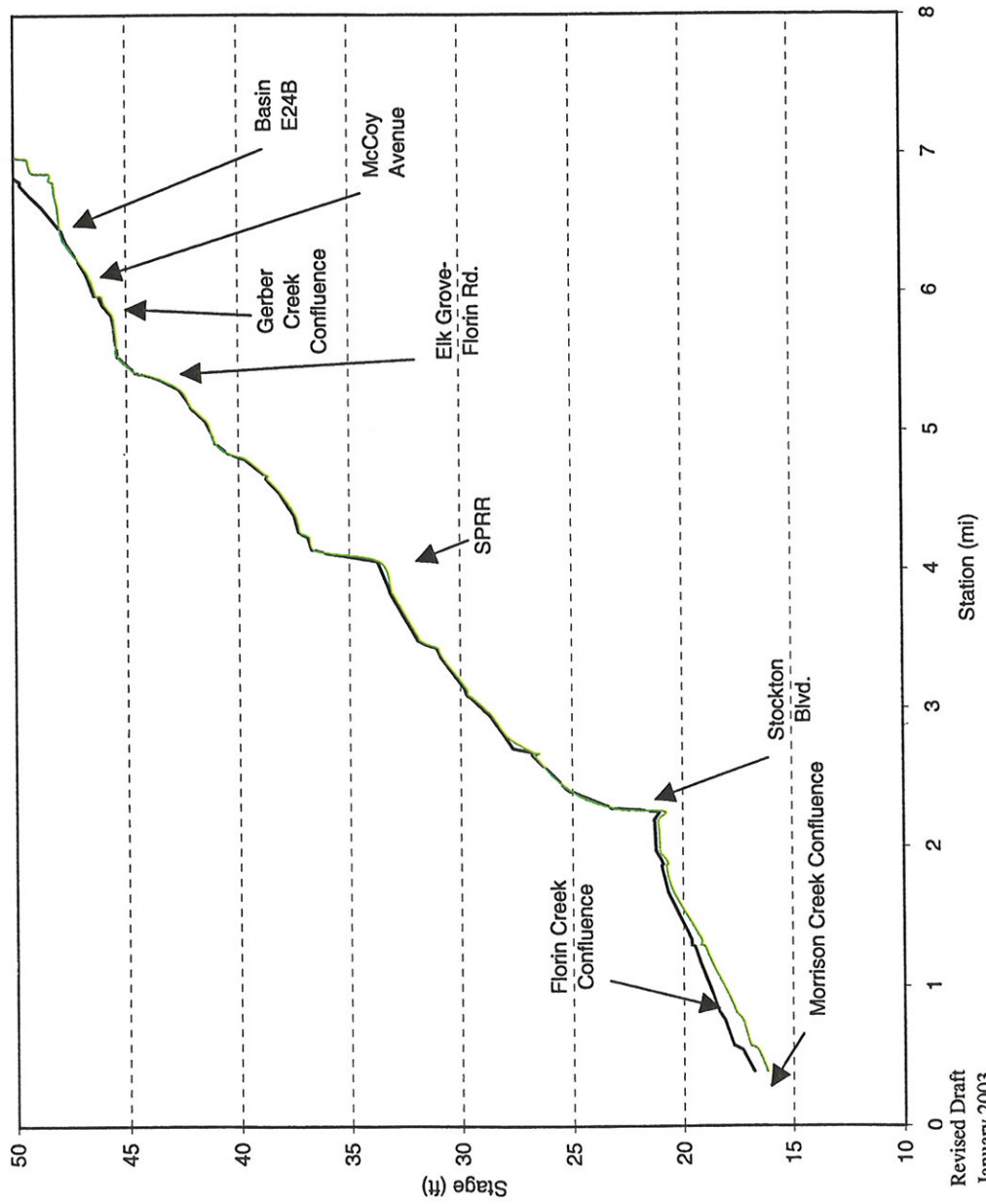
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NORTH VINEYARD STATION SPECIFIC PLAN
DRAINAGE MASTER PLAN
UPDATE AND PHASING

**PHASE C
RESIDUAL 100-YEAR FLOODPLAIN**

WOOD RODGERS, INC.
SACRAMENTO, CALIFORNIA

ELDER CREEK MAXIMUM WATER SURFACE PROFILE
PHASE C



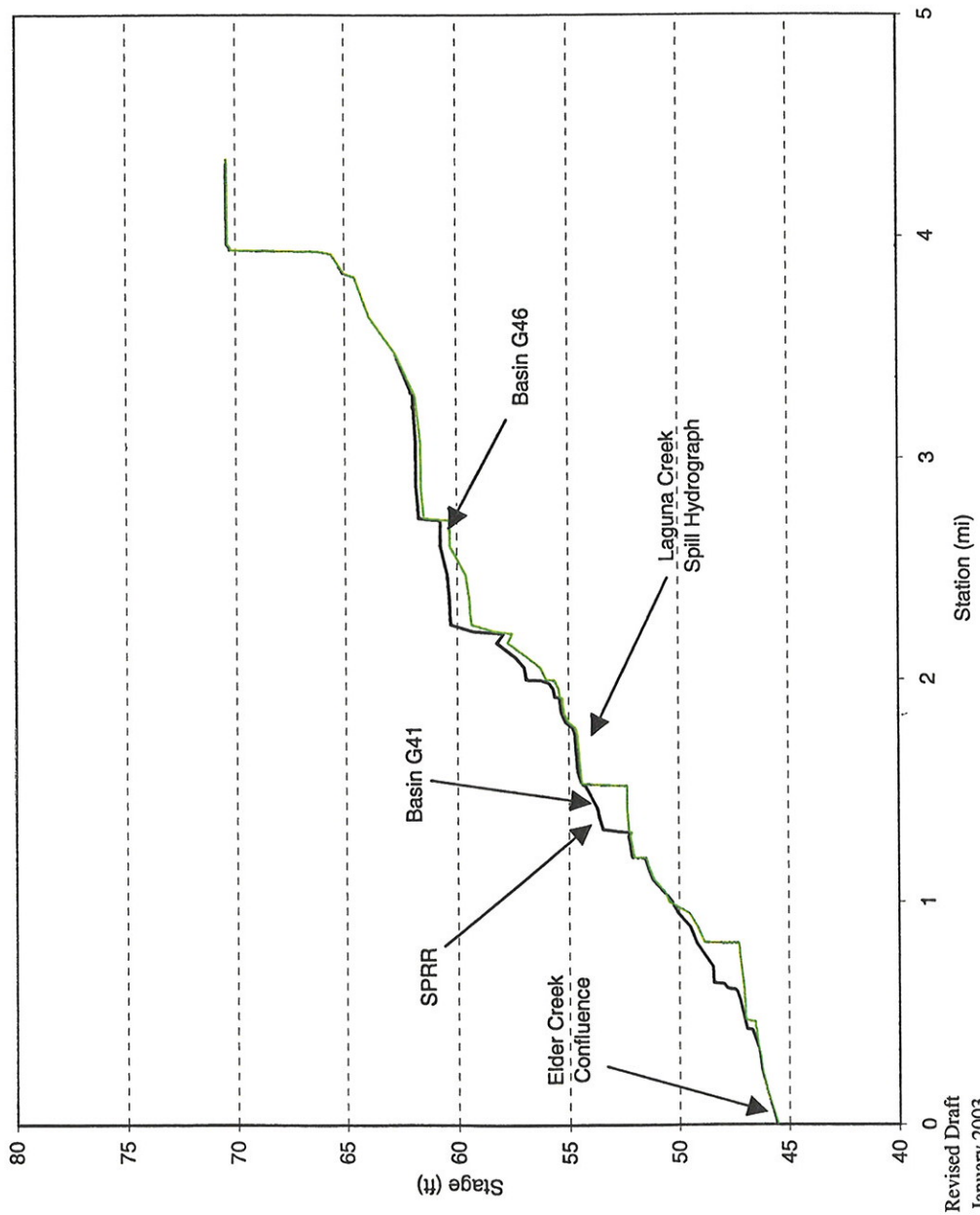
— Existing 100-Year
— Phase C - 100-Year

Wood Rodgers, Inc.
Sacramento, CA

Revised Draft
January 2003

FIGURE 22

GERBER CREEK MAXIMUM WATER SURFACE PROFILE
PHASE C



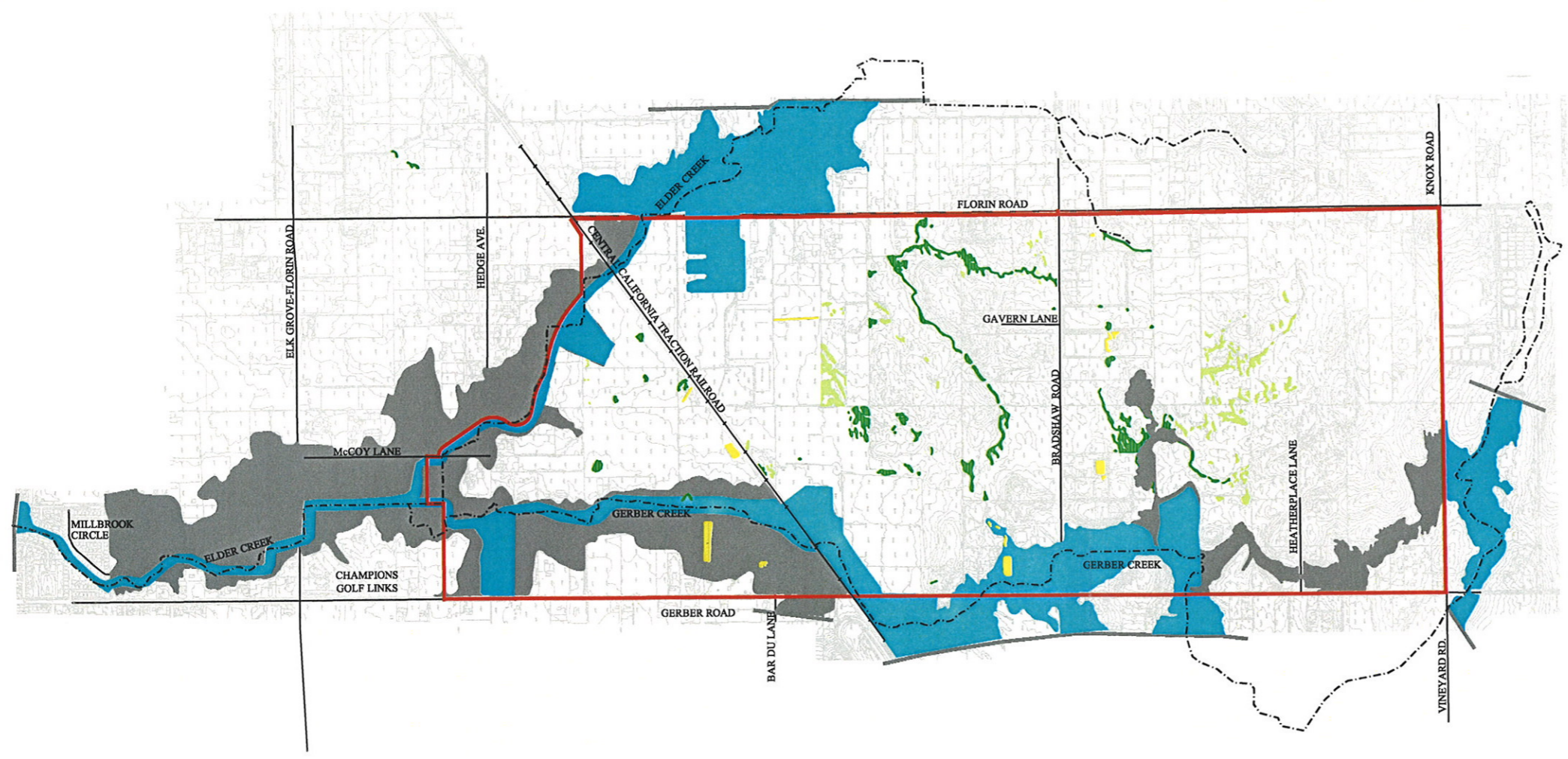
— Existing 100-Year
— Phase C - 100-Year

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January 2003

FIGURE 23

File: I:\PROJECTS\208-02_NVSSP\CAO\DRAWING\11-6-02\11_25PHASED_FFIGURE.DWG Last edited: 01/14/03 @ 11:12 by: leurd



LEGEND

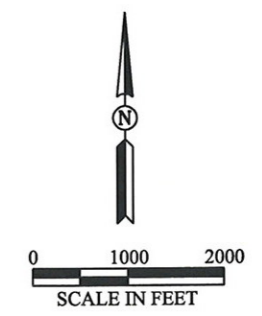
- 100-Year Floodplain (UNET Model)
- Removed 100-Year Floodplain from Previous Phase
- Vernal Pool
- Seasonal Wetland
- Stock Pond
- NVSSP Boundary
- Creek
- Major Road
- Railroad
- Limit of Floodplain Mapping

NOTE

The 100-year floodplain is based upon existing conditions (UNET model) derived from Sacramento County Department of Public Works, Water Resources Division, "Elder and Gerber Creeks Technical Appendix: UNET Analysis", dated January 1997.

SOURCE

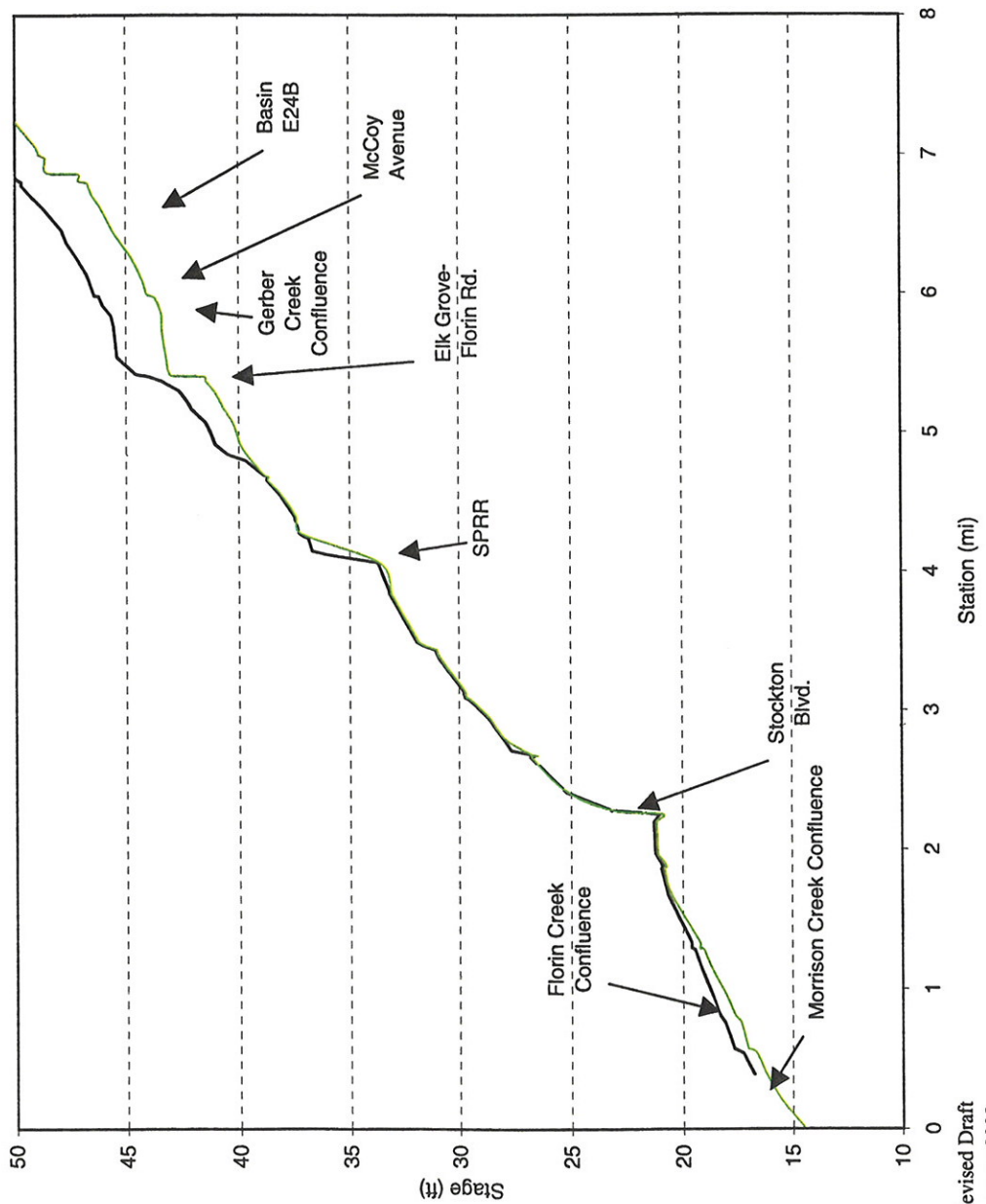
The wetland delineation is based upon the "North Vineyard Station Specific Plan Technical Appendix: Biotic Resources," prepared by Sugnet and Associates Environmental Consultants, dated May 3, 1996.



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NORTH VINEYARD STATION SPECIFIC PLAN
 DRAINAGE MASTER PLAN
 UPDATE AND PHASING
PHASE D
RESIDUAL 100-YEAR FLOODPLAIN
 WOOD RODGERS, INC.
 SACRAMENTO, CALIFORNIA

ELDER CREEK MAXIMUM WATER SURFACE PROFILE
PHASE D



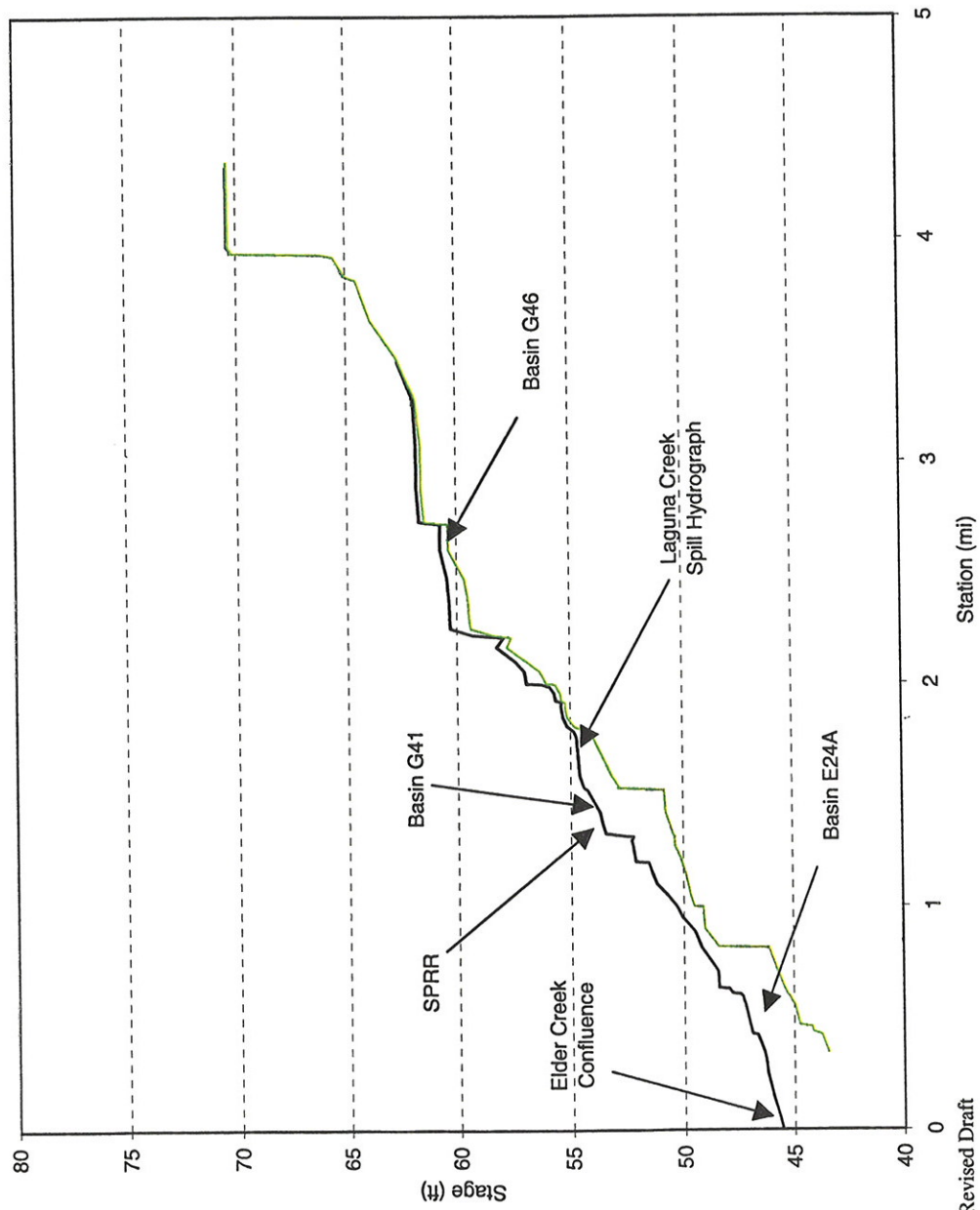
— Existing 100-Year
— Phase D - 100-Year

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January 2003

FIGURE 25

GERBER CREEK MAXIMUM WATER SURFACE PROFILE
PHASE D



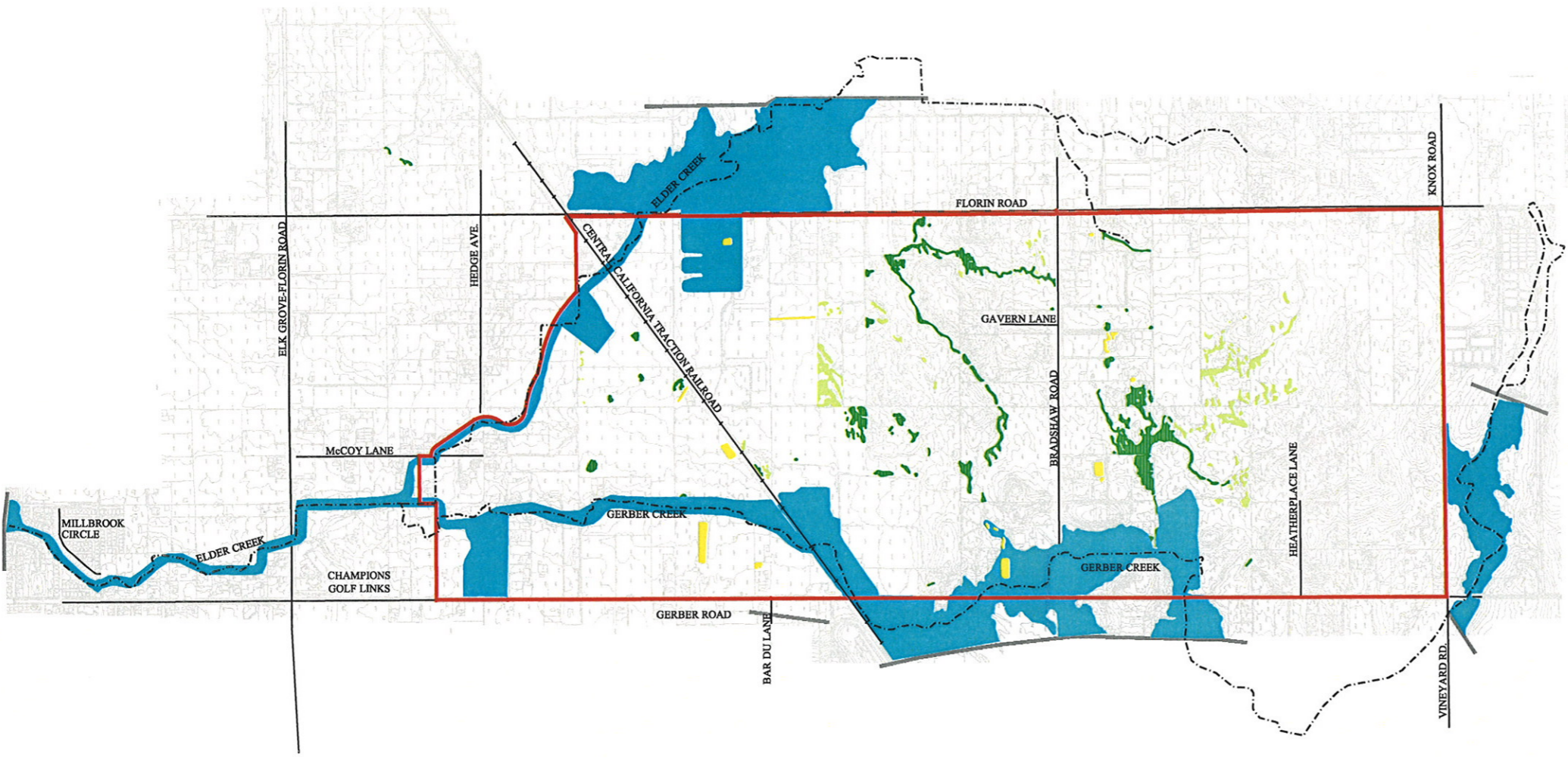
— Existing 100-Year
— Phase D - 100-Year

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FIGURE 26

F:\PROJECTS\208-02_NVSSP\CA\DRFT_11-6-02\11_25PHASEE_FF\Figure.DWG Lot1 es:rdt 01/14/03 11:50 By: laurd



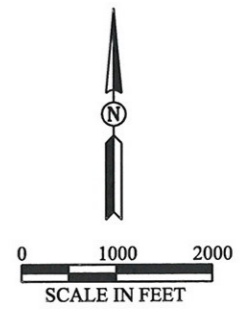
- LEGEND**
- 100-Year Floodplain (UNET Model)
 - Vernal Pool
 - Seasonal Wetland
 - Stock Pond
 - NVSSP Boundary
 - Creek
 - Major Road
 - Railroad
 - Limit of Floodplain Mapping

NOTE

The 100-year floodplain is based upon existing conditions (UNET model) derived from Sacramento County Department of Public Works, Water Resources Division, "Elder and Gerber Creeks Technical Appendix: UNET Analysis", dated January 1997.

SOURCE

The wetland delineation is based upon the "North Vineyard Station Specific Plan Technical Appendix: Biotic Resources," prepared by Sugnet and Associates Environmental Consultants, dated May 3, 1996.



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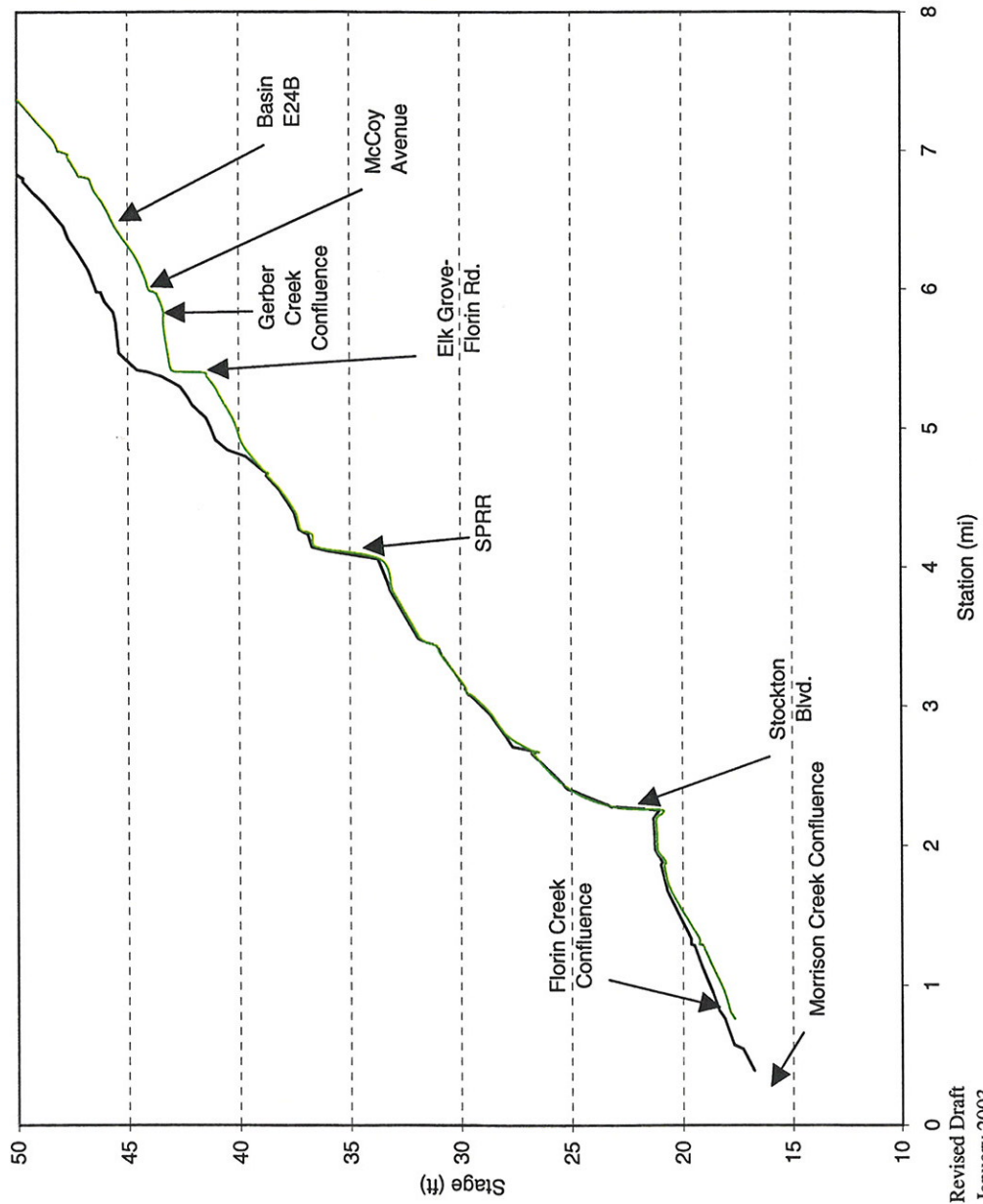
NORTH VINEYARD STATION SPECIFIC PLAN
DRAINAGE MASTER PLAN
UPDATE AND PHASING

PHASE E
RESIDUAL 100-YEAR FLOODPLAIN

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SACRAMENTO, CALIFORNIA

FIGURE 27

ELDER CREEK MAXIMUM WATER SURFACE PROFILE
PHASE E



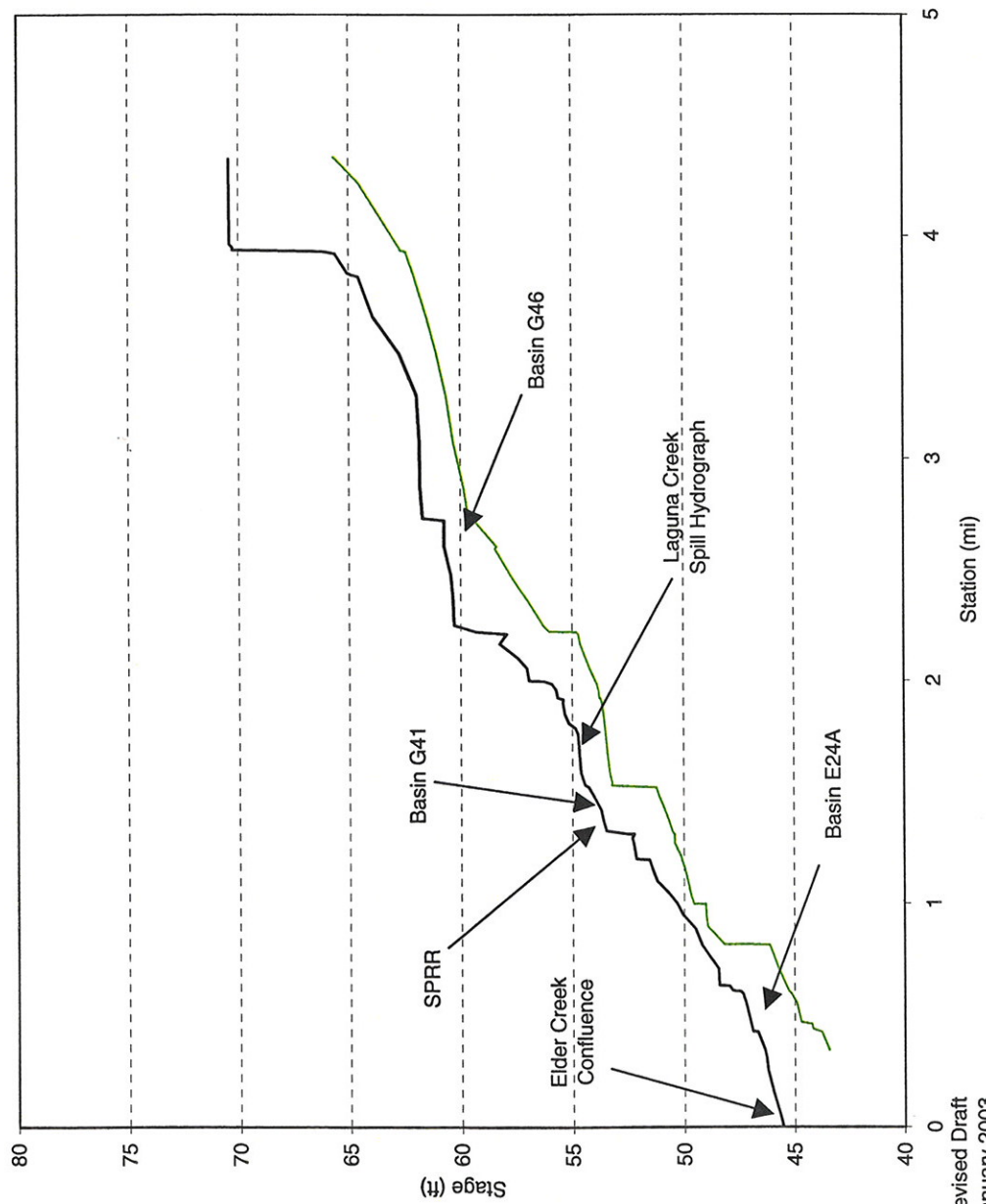
— Existing 100-Year
— Phase E - 100-Year

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FIGURE 28

GERBER CREEK MAXIMUM WATER SURFACE PROFILE
PHASE E

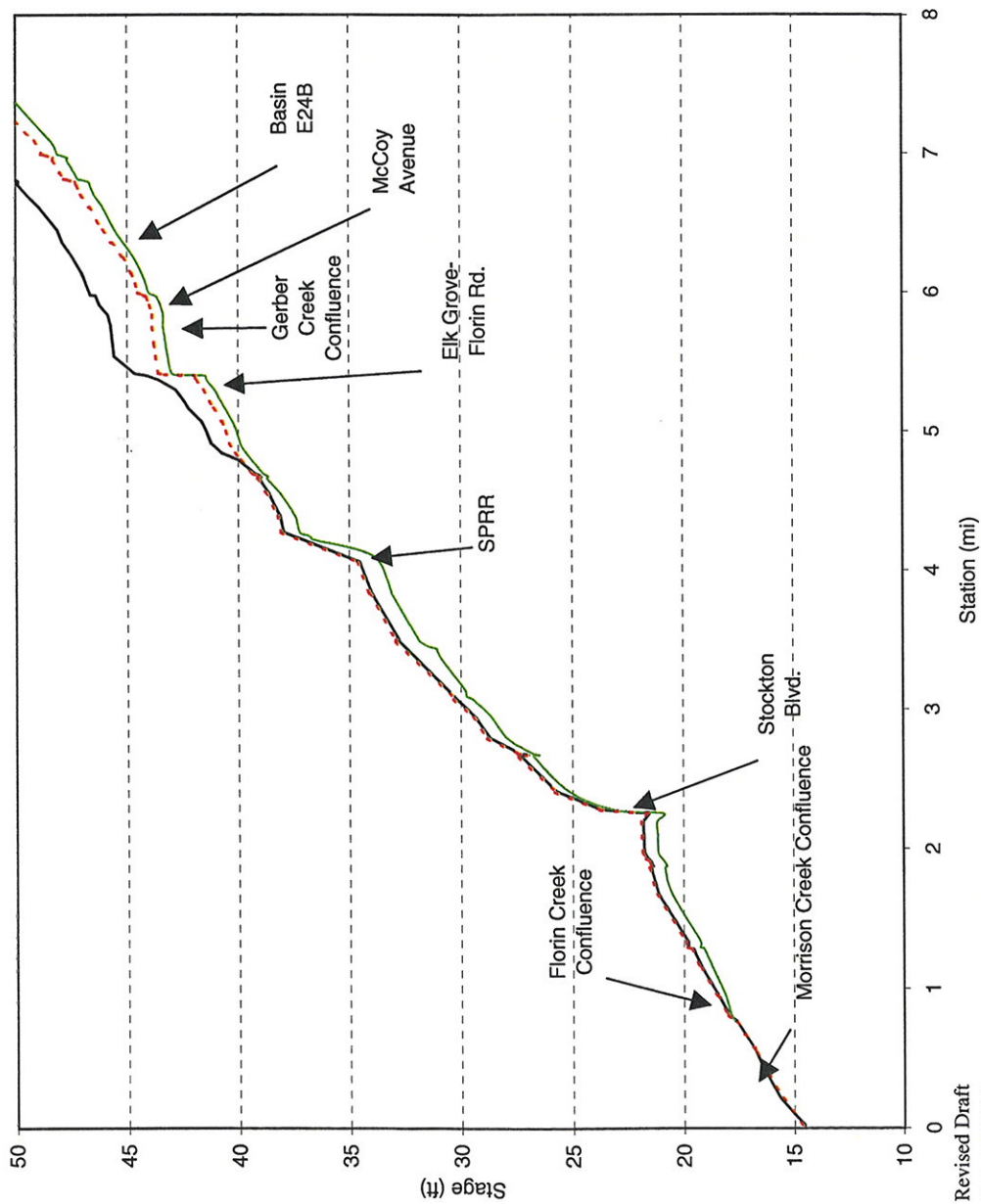


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FIGURE 29

ELDER CREEK MAXIMUM WATER SURFACE PROFILE
100-YEAR/500-YEAR COMPARISON



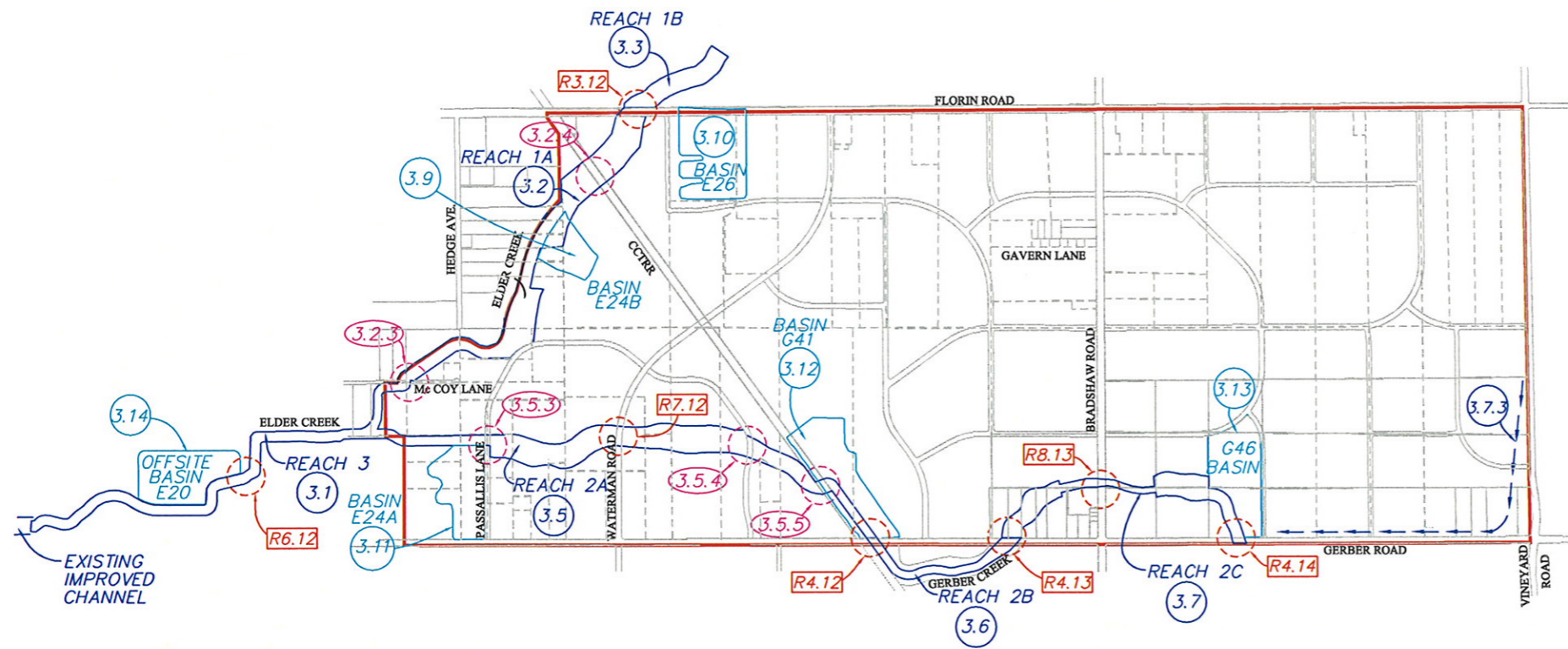
- Existing 500-Year Local
- Phase E - 100-Year
- Stand Alone 500-Year Local

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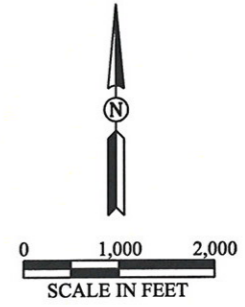
FIGURE 30

File: \\PROJECTS\208-02_NVSSP\CAD\DRIFT_11-6-02\CP-DRAINAGE_FACILITIES.DWG Last edited: 01/14/03 © 12:06 by: laurd



LEGEND

- NVSSP Boundary
- Roads, Railroad
- Property Line, Easement
- R4.12 Roadway Facility Improvements at Drainage Crossings with Project Number
- 3.2.3 Drainage Crossing Improvements with Project Number
- 3.5 Drainage Corridor Improvements with Project Number
- 3.11 Detention Basin Improvements with Project Number
- Interim Overflow Path



REVISED DRAFT

NORTH VINEYARD STATION SPECIFIC PLAN
 DRAINAGE MASTER PLAN
 UPDATE AND PHASING
**DRAINAGE FACILITIES
 PROJECT NUMBERS**
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FIGURE 31