Meeting of the Central Valley Flood Protection Board
September 11, 2015

Staff Report

Reconsideration Hearing for Application No. 19045
to consider a Protest submitted by Mr. Joseph La Perle on August 28, 2015
Sacramento County

1.0 – ITEM

Reconsider Central Valley Flood Protection Board's (Board) August 28, 2015 decision to approve Permit No. 19045, along Elder Creek (Attachment A) to include a protest submitted by Mr. Joseph La Perle on August 28, 2015 (Attachment B) as part of the public record.

2.0 – APPLICANT

Sacramento County Department of Water Resources (County)

3.0 – PROJECT LOCATION

The project is located north of McCoy Avenue and follows Elder Creek to a point approximately 0.21 miles east of Hedge Avenue, in Sacramento County (Attachment A). This reach of Elder Creek is located in an urbanizing area, according to the Sacramento County master plan, and is within a watershed that drains approximately 7.8 square miles. This reach of Elder Creek is upstream of the USACE federal project levee system and State Plan of Flood Control (SPFC) facilities comprised of the South Sacramento County Streams Group and Sacramento River levees.

Mr. La Perle's property is located south of Elder Creek and north of McCoy Avenue, parallel to the left (south) bank of Elder Creek, and is near the downstream end of the proposed work under Application No. 19045.

4.0 – APPLICATION BACKGROUND

- Application received by Board staff on May 1, 2015
- Ten (10) day letter sent to the applicant on May 12, 2015
- Application deemed incomplete by Board staff on May 28, 2015

- Application deemed complete on July 31, 2015 and staff:
  - assigned an application number
  - sent the application transmittal to the U.S. Army Corps of Engineers
  - scheduled the application for the August 28, 2015 Board meeting
  - sent the 30-day letter to the applicant
  - sent out adjacent landowner letters, including Mr. La Perle's (Attachment C)
- Staff report and recommendation published to Board's website August 21, 2015
- Mr. La Perle came to the Board's office to speak with staff regarding this application on August 26, 2015
  - Mr. La Perle spoke with administrative staff, who informed him that the item would be heard by the Board on Friday, August 28, 2015.
  - Mr. La Perle indicated that he had not received notification of the project until just recently because his notice had been sent to an incorrect address.
  - Administrative staff notified the staff project manager to contact Mr. La Perle as soon as possible to answer his questions.
- Board staff project manager and administrative staff promptly (within 30 minutes) called Mr. La Perle to answer his questions, where staff:
  - notified Mr. La Perle of the action to take place on August 28, 2015
  - notified Mr. La Perle of staff's recommendation
  - answered several basic project questions that were asked
  - gave Mr. La Perle the contact information for the applicant
  - sent Mr. La Perle an email link that would allow him to view the published staff report and have access to the website where the agenda was also published (which included the time and location of the meeting on August 28, 2015)
- The applicant spoke with Mr. La Perle on August 26, 2015 to answer his questions about the overall project and Mr. La Perle was sent a copy of the Drainage Report that he had requested from the applicant
- Mr. La Perle sent an email protesting the project to staff at 10:33 pm on August 27, 2015, which was not seen by staff until approximately 11:30 am on August 28, 2015 (due to remote access issues at the venue and staff's participation in the meeting)
- On August 28, 2015, shortly after 9 am, the Board approved Permit No. 19045 on the Consent Calendar and Mr. La Perle was either not in attendance or chose to not make any public comments

Due to Mr. La Perle's protest and the delayed notification, staff with the applicant's consent has not executed the permit and is requesting that the Board reconsider its prior approval and hear Mr. La Perle's protest.

The applicant's goal is to complete construction before the rainy season, but no later than November 1, 2015 to meet Regional Water Quality Control Board requirements. The applicant has indicated to staff that construction can be completed prior to this deadline if a permit is issued on September 11, 2015. Without approval at this upcoming meeting, the applicant has stated it is unlikely that they will be able to construct the project in 2015.

5.0 – RECONSIDERATION INFORMATION

California Code of Regulations, Title 23 (Title 23) outlines the authority and procedural guidelines for reconsiderations in § 30 (Section 30). Per Section 30 one of four reasons must exist to reconsider an item.

1) *Irregularity in the proceeding, or any ruling, or abuse of discretion which prevented a fair hearing;*
2) *The decision or order is not supported by substantial evidence;*
3) *There is relevant evidence which could not reasonably been produced previously; or*
4) *Error in law.*

Because Mr. La Perle's protest was submitted prior to the hearing, but not received by staff prior to the Board's consideration of the permit on August 28, 2015, and because the adjacent landowner notification was sent to the incorrect address, staff has determined that the there was an irregularity in the proceeding and is recommending that the matter be reconsidered. The applicant has been notified of the protest and is in agreement with staff's recommendation.

6.0 – MR. LA PERLE'S PROTEST

Mr. La Perle's protest (Attachment B) referenced the following key points:

- The adjacent landowner letter that was sent to him on July 31, 2015 was sent to an incorrect address, which did not leave him enough time to respond prior to the meeting
- He has concerns regarding drainage impacts due to fill that is associated with development that is near his property
- He would like his concerns heard and properly addressed at a Board meeting

6.1 – Staff Analysis and Determinations

Staff sent the adjacent landowner notification to Mr. La Perle's address as indicated in County records (Attachment C). Mr. La Perle indicates that the address is incorrect and that he, therefore, did not receive the letter until just before the hearing. Because of the alleged delay in the notice and because Mr. La Perle's protest was submitted, but not received by the Board in time to consider it prior to its action on August 28, 2015, staff recommends that the Board reconsider its action.

Mr. La Perle's protest letter did not provide any new technical flood control issues for staff to consider. Staff's recommendation, based on public safety and flood control issues, made at the August 28, 2015 meeting remain unchanged (as outlined in the August 28, 2015 staff report – Attachment D).

It is Board staff's understanding that Mr. La Perle's concerns regarding the drainage impacts relate to fill being placed adjacent to his property as part of the County's overall development plan. This work will be occurring outside of the floodplain, will not have any adverse impacts on flood control, and is outside of the scope of this application and the board's jurisdiction. The proposed improvements to Elder Creek, that the Board is permitting, improve flood control for this area of the creek and do not adversely affect upstream or downstream hydraulics.

7.0 – CEQA ANALYSIS

The findings made in Section 8.0 of the August 28, 2015 staff report (Attachment D) remain valid because no new information was submitted by Mr. La Perle's protest that would require the findings be modified. Mr. La Perle's concerns do not relate to impacts within the Board's jurisdiction or within the scope of the requested action. Rather, his concerns relate to other aspects of the development that have been reviewed by the County for CEQA purposes.

8.0 – CALIFORNIA WATER CODE SECTION 8610.5 CONSIDERATIONS

The findings made in Section 9.0 of the August 28, 2015 staff report (Attachment D) remain valid because no new information was submitted by Mr. La Perle's protest that would require the findings be modified.

Mr. La Perle's concerns have been carefully considered and staff's engineering judgement remains unchanged. The bank grading along Elder Creek (as part of the proposed project) will improve flood protection for the surrounding area and grading outside of the floodplain (as part of the County's future development) is not anticipated

to adversely affect flood control or Mr. La Perle's property. The drainage for the entire area (including work outside the floodplain) has been evaluated by the County as part of their larger development project and all grading impacts will be mitigated by the County. The proposed project is not anticipated to cause any adverse effects on drainage in the area.

9.0 – STAFF RECOMMENDATION

Staff recommends that the Board reconsider its August 28, 2015 action in order to address Mr. La Perle's previously submitted protest. Upon reconsideration, staff recommends that the Board:

Find:

- That the protest submitted by Mr. La Pele does not offer any new information regarding flood control, and, therefore

Uphold:

- The Board's August 28, 2015 decision adopting the required CEQA findings and approving Permit No. 19045.

10.0 – LIST OF ATTACHMENTS

A – Location Maps

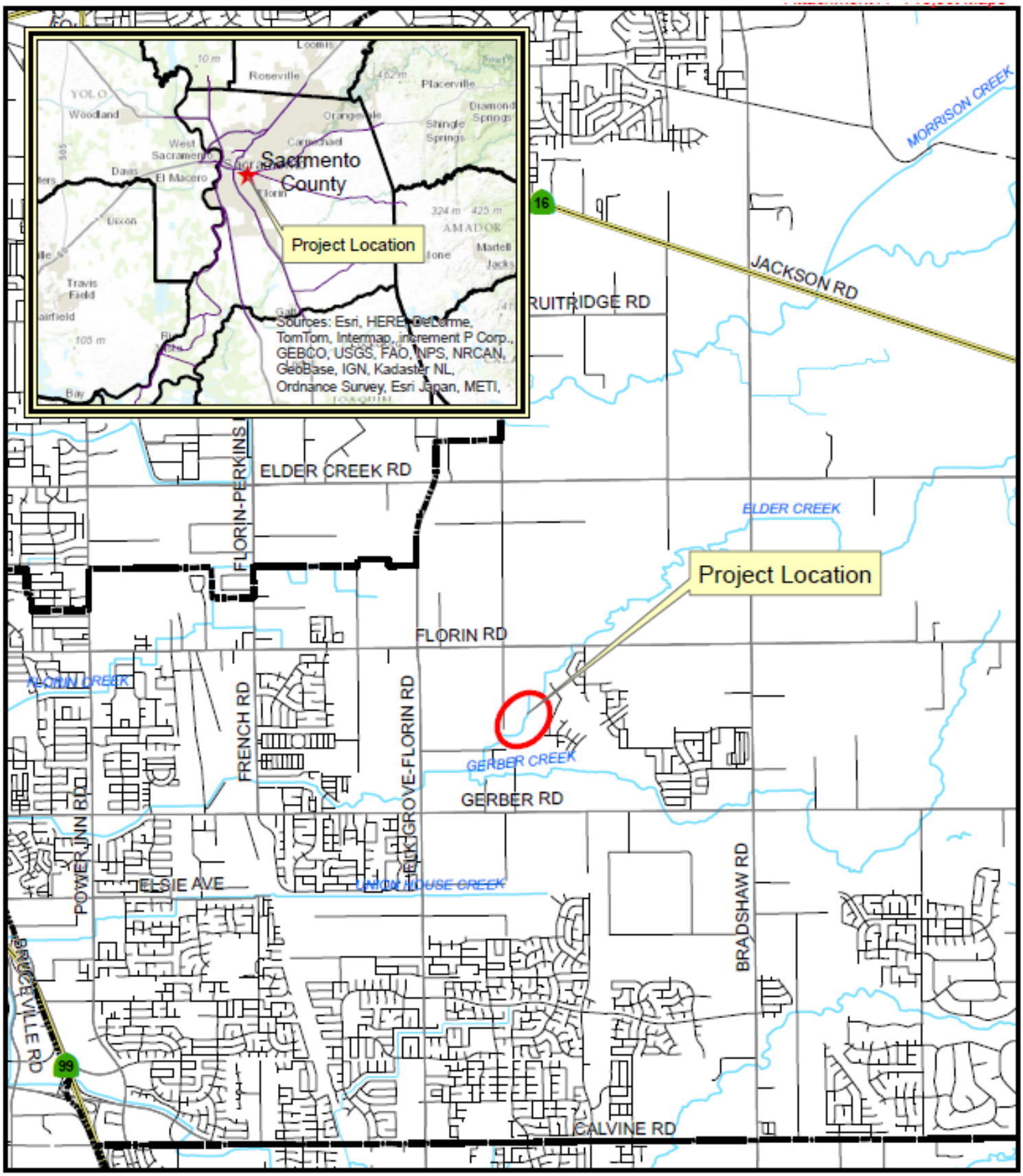
B – Mr. La Perle Protest (submitted August 28, 2015 at 5:33 am via email)

C – Adjacent Landowner Information for Mr. La Perle

D – Published Staff Report from the August 28, 2015 Board Meeting

E – Applicant's Response to Mr. La Perle's Protest

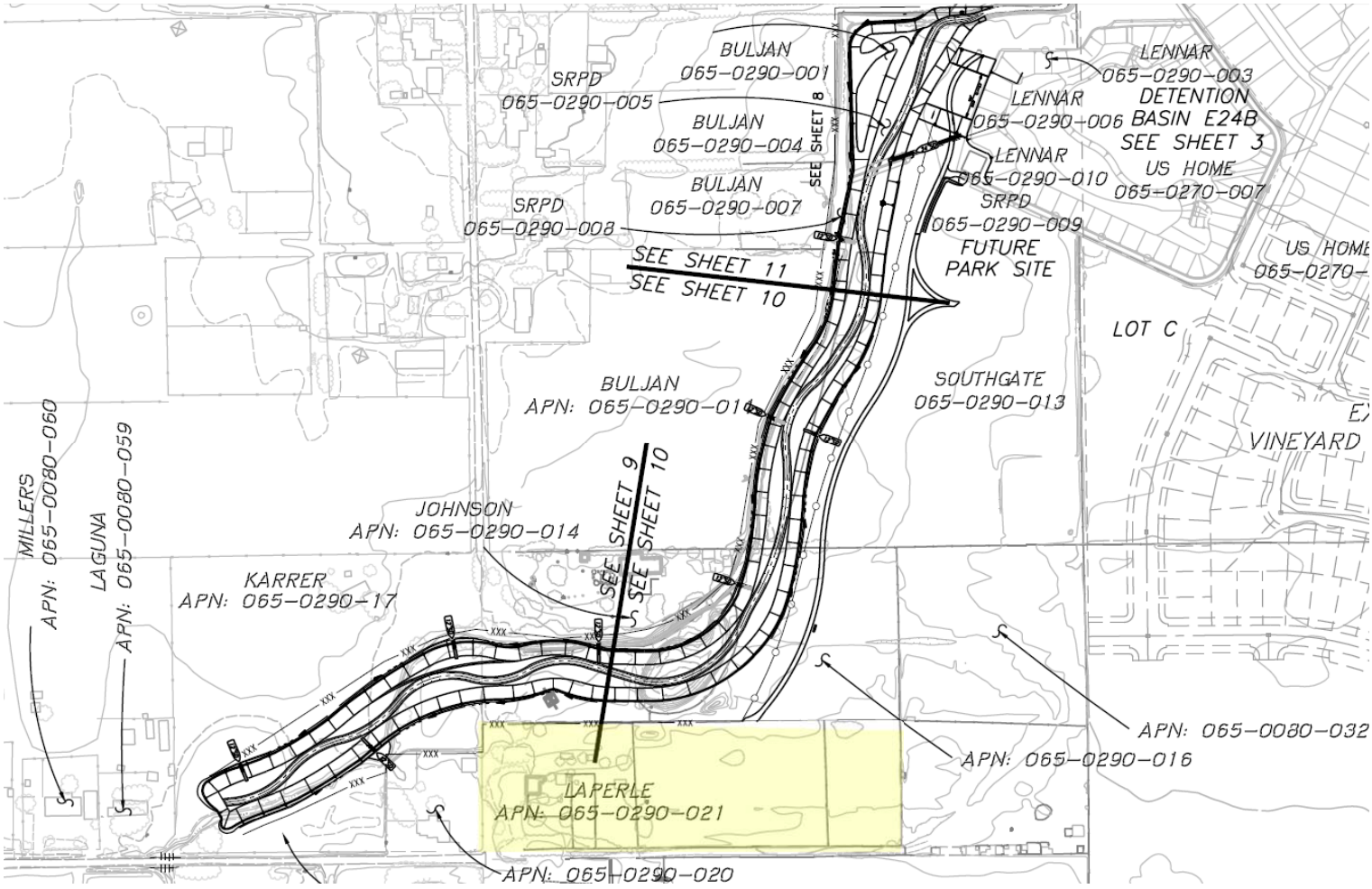
Prepared By:	Nancy Moricz, PE, Senior Engineer, Planning Branch
Environmental Review:	Andrea Buckley, Senior Environmental Scientist (Specialist)
Staff Report Review:	Eric Butler, PE, Supervising Engineer, Projects & Environmental Branch Chief
	Len Marino, PE, Chief Engineer
	Nicole Rinke, Deputy Attorney General
	Leslie Gallagher, Acting Executive Officer



Vicinity Map
Phase 1A Elder Creek Improvements

0 4,000
Feet
1 inch = 4,000 feet

SACRAMENTO COUNTY
Department of Water Resources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SRPD
065-0290-005
BULJAN
065-0290-004
BULJAN
065-0290-007
SRPD
065-0290-008
SEE SHEET 8
LENNAR
065-0290-003
DETENTION
BASIN E24B
SEE SHEET 3
LENNAR
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LENNAR
065-0290-010
US HOME
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SRPD
065-0290-009
FUTURE
PARK SITE
SEE SHEET 11
SEE SHEET 10
LOT C
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SOUTHGATE
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VINEYARD
MILLERS
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LAGUNA
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JOHNSON
APN: 065-0290-014
SEE SHEET 9
SEE SHEET 10
KARRER
APN: 065-0290-17
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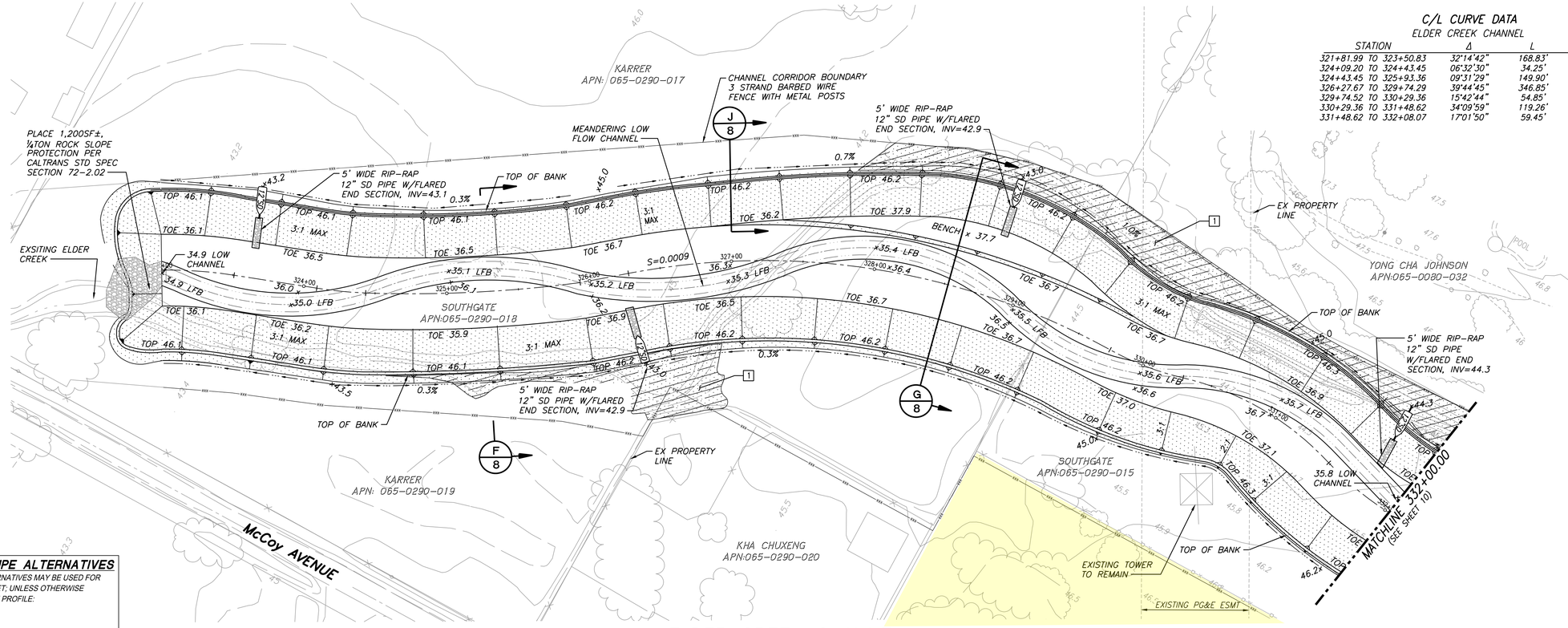


C/L CURVE DATA
ELDER CREEK CHANNEL

STATION	Δ	L	R
321+81.99 TO 323+50.83	32°14'42"	168.83'	300.00'
324+09.20 TO 324+43.45	06°32'30"	34.25'	300.00'
324+43.45 TO 325+93.36	09°31'29"	149.90'	901.76'
326+27.67 TO 329+74.29	39°44'45"	346.85'	500.00'
329+74.52 TO 330+29.36	15°42'44"	54.85'	200.00'
330+29.36 TO 331+48.62	34°09'59"	119.26'	200.00'
331+48.62 TO 332+08.07	17°01'50"	59.45'	200.00'

REGISTERED PROFESSIONAL ENGINEER
PAUL ROBERT HART
No. 49154
CIVIL
STATE OF CALIFORNIA

FOR MACKAY & SOMPS

NOTE: DATUM FOR THIS PROJECT IS NGVD 29

PRELIMINARY
NOT FOR
CONSTRUCTION

0 20 40 80
SCALE: 1"=40'

PLAN KEYNOTES

[1] EXISTING CREEK SECTIONS THAT FALL OUTSIDE OF PROPOSED CHANNEL BANKS MUST BE FILLED IN TO ALLOW FOR PROPER DRAINAGE.

NOTE TO THE CONTRACTOR

REMOVE EXISTING FENCE WITHIN CREEK SECTION.

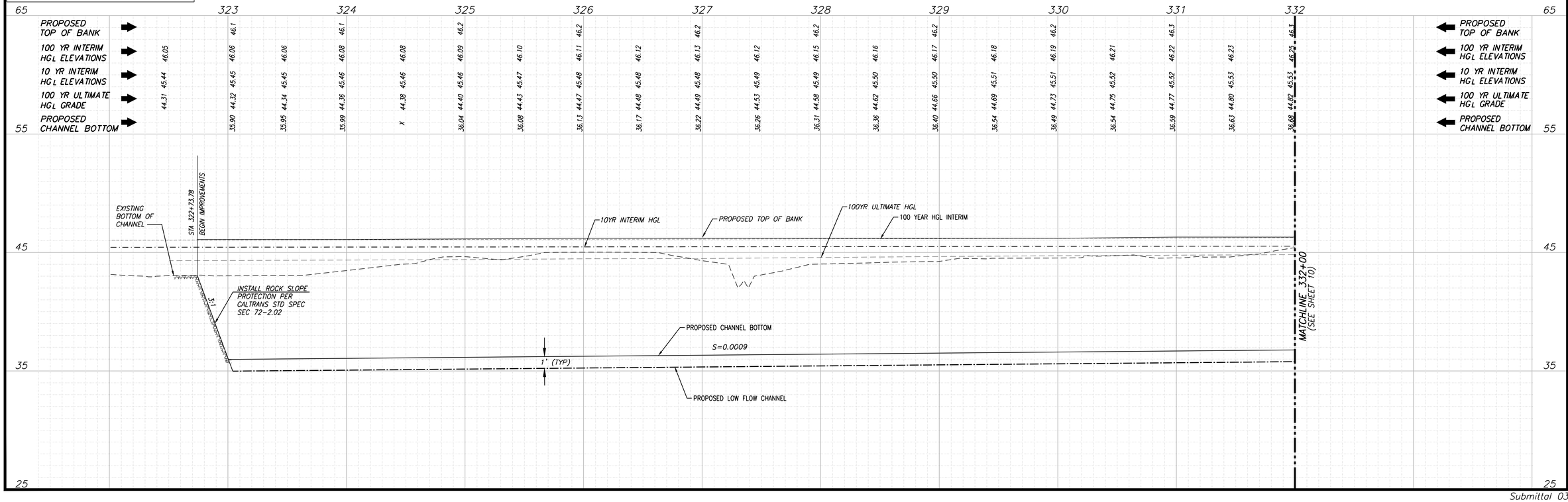
STORM DRAIN PIPE ALTERNATIVES

THE FOLLOWING PIPE ALTERNATIVES MAY BE USED FOR STORM DRAIN ON THIS SHEET; UNLESS OTHERWISE SPECIFIED AS "ONLY" IN THE PROFILE:

- RCP (CL-3, SIZE 12")
- CMP (SIZE 12")

PIPE ALTERNATIVES MUST MEET OR EXCEED DEPTH AND STRENGTH REQUIREMENTS OF SPECIFIED PIPE.

ELDER CREEK CHANNEL
STA 322+00.00 TO STA 332+00.00



Submittal 03-13-2015

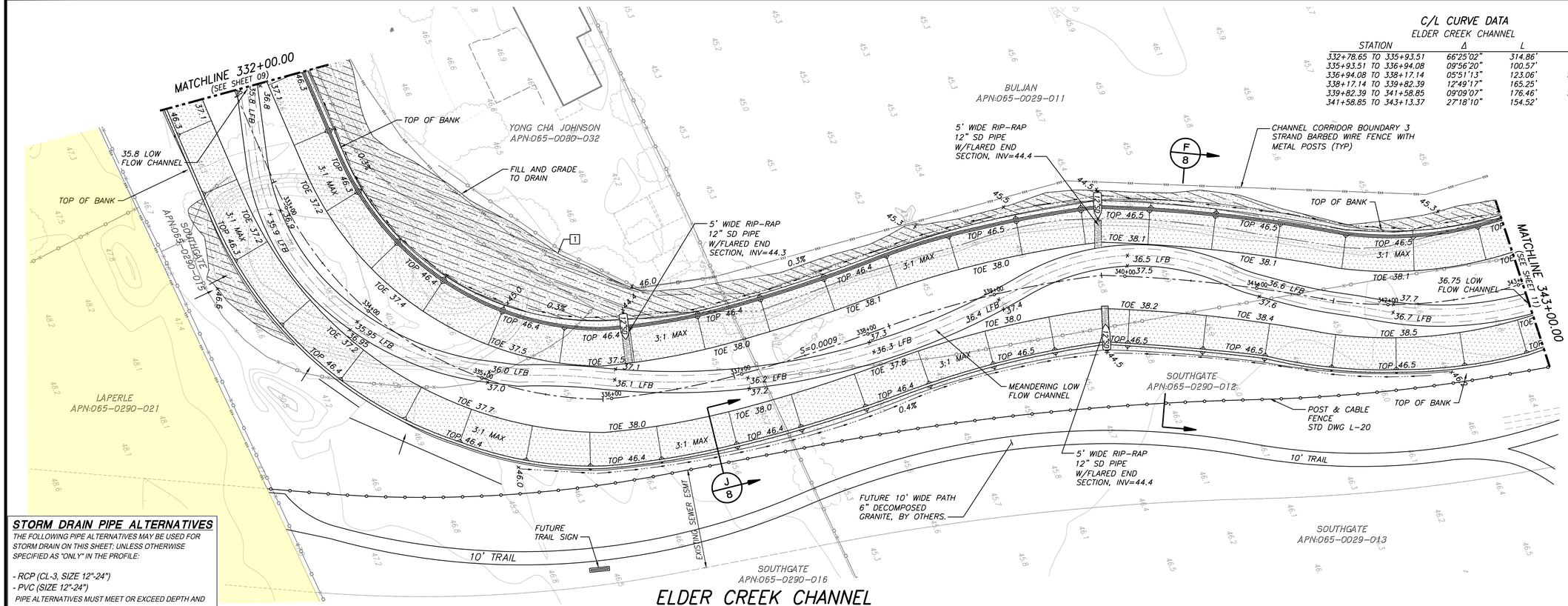
No.	Description	Init.	Date	By	Date
		Engineer		AGENCY APPROVAL	

DATE: MARCH 2015
SCALE: 1"=40' H, 1"=4' V
DRAWN BY: STAFF
DESIGNED BY: VH
CHECKED BY: PH

MacKAY & SOMPS
CIVIL ENGINEERS PLANNERS SURVEYORS
1552 Eureka Road, Suite 100, Roseville, CA 95661 (916) 773-1189

PLAN FOR THE IMPROVEMENT OF
ELDER CREEK PHASE 1A
ELDER CREEK STA 322+00.00 TO 332+00.00
COUNTY OF SACRAMENTO CALIFORNIA

SHEET 9 OF 18
PROJECT NO. 27095-EC1



C/L CURVE DATA
ELDER CREEK CHANNEL

STATION	Δ	L	R
332+78.65 TO 335+93.51	66°25'02"	314.86'	271.62'
335+93.51 TO 336+94.08	09°56'20"	100.57'	579.74'
336+94.08 TO 338+17.14	05°51'13"	123.06'	1204.59'
338+17.14 TO 339+82.39	12°49'17"	165.25'	738.45'
339+82.39 TO 341+58.85	09°09'07"	176.46'	1104.74'
341+58.85 TO 343+13.37	27°18'10"	154.52'	324.26'

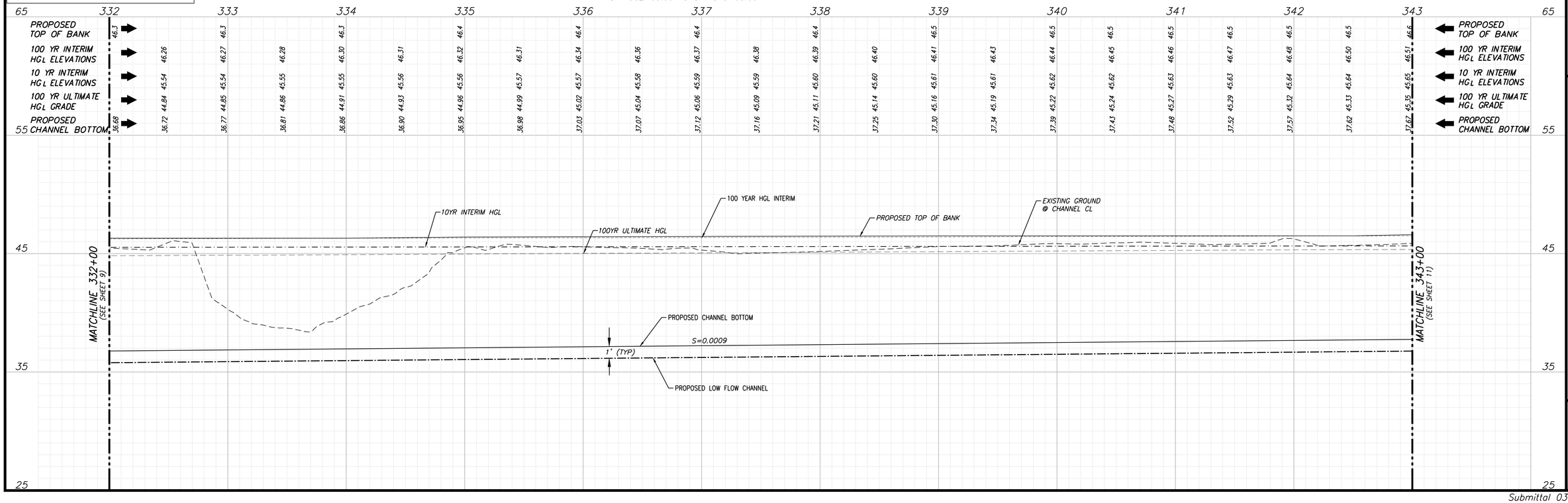
STORM DRAIN PIPE ALTERNATIVES

THE FOLLOWING PIPE ALTERNATIVES MAY BE USED FOR STORM DRAIN ON THIS SHEET; UNLESS OTHERWISE SPECIFIED AS "ONLY" IN THE PROFILE:

- RCP (CL-3, SIZE 12"-24")
- PVC (SIZE 12"-24")

PIPE ALTERNATIVES MUST MEET OR EXCEED DEPTH AND STRENGTH REQUIREMENTS OF SPECIFIED PIPE.

ELDER CREEK CHANNEL
STA 332+00.00 TO STA 343+00.00



RECISTERED PROFESSIONAL ENGINEER
PAUL ROBERT HART
No. 49154
CIVIL
STATE OF CALIFORNIA

FOR MACKAY & SOMPS

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PRELIMINARY NOT FOR CONSTRUCTION

0 20 40 80
SCALE: 1"=40'

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NOTE TO THE CONTRACTOR

REMOVE EXISTING FENCE WITHIN CREEK SECTION.

No.	Description	Init	Date	By	AGENCY APPROVAL	Date
		Engineer				

DATE: MARCH 2015
SCALE: 1"=40' H, 1"=4' V
DRAWN BY: STAFF
DESIGNED BY: WH
CHECKED BY: PH

MACKAY & SOMPS
ENGINEERS PLANNERS SURVEYORS
1552 Eureka Road, Suite 100, Roseville, CA 95661 (916) 773-1189

PLAN FOR THE IMPROVEMENT OF
ELDER CREEK PHASE 1A
ELDER CREEK STA 332+00.00 TO 343+00.00
COUNTY OF SACRAMENTO CALIFORNIA

SHEET 10 OF 18
PROJECT NO. 27095-EC1

Submittal 03-13-2015

Attachment A - Location Maps

Moricz, Nancy@DWR

From: glamphotography@yahoo.com
Sent: Thursday, August 27, 2015 10:33 PM
To: Moricz, Nancy@DWR
Subject: Protestant

Dear Nancy,

As per our conversation yesterday, August 26, 2015 where I stated to you that I just received your letter dated July 31, 2015 because the address was improperly labeled to 9091 McCoy. My address is 9101 McCoy. I am officially stating that I protest the improvement to elder Creek directly adjacent to my property running approximately 300 feet parallel to my north.

I'm very disappointed I was not notified within the 21 day notice. Neither was I informed where or which Board would be convened. However I feel my rights should not be deleted for a mistake I am not responsible for.

I am in protestant to the project and have grave concerns of future flooding. The plan is clearly to only mitigate the needs of Lennar's new housing project. As I stated to you and the engineers yesterday, Lennar has changed the original grade to five feet higher than it has existed for hundreds of years. My house and crops fall down stream from there project and are very closely encroached by this drainage corridor project. I would like my concerns heard and properly addressed. I am sending this email because I was not afforded the time to properly declare this in writing.

As a fourth generation farmer in Elk Grove and a Native California Wintu Indian Tribal member I take my land and environment very seriously and will use any means legally necessary to fight for my rights. Thank you for your cooperation and time.

Sincerely,

Joseph La Perle

Attachment C - Adjacent Landowner Information for Mr. La Perle

STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY EDMUND G. BROWN JR., GOVERNOR

CENTRAL VALLEY FLOOD PROTECTION BOARD
3310 El Camino Ave., Rm. 151
SACRAMENTO, CA 95821
(916) 574-0609 FAX: (916) 574-0682
PERMITS: (916) 574-0685 FAX: (916) 574-0682

July 31, 2015

Joseph Jay Laperle
9091 McCoy Avenue
Sacramento, California 95829

This letter is to inform you that the Central Valley Flood Protection Board has received an application concerning works to be performed at a property adjacent to yours. The Board has received an application from Sacramento County Department of Water Resources for a project as described below.

Description: To improve a 3,000 feet reach of Elder Creek. The improved channel and drainage corridor will create wetland, riparian, and upland habitats within an established Open Space Preserve.

Location: The project is located north of McCoy Avenue and follows Elder Creek to a point approximately 0.21 miles east of Hedge Avenue.
Section 6, T7N, R6E, MDB&M
(Elder Creek, Sacramento County)

If you have any comments on the project that relate to flood control issues, please forward them to the Central Valley Flood Protection Board at 3310 El Camino Avenue, Room 151, Sacramento, California, 95821, within twenty days from the date of this letter.

If you wish to protest this application, you must notify the Board in writing, with the word PROTEST in the subject line, within twenty days from the date of this letter. Protests must include:

(1) The name, address, and telephone number of the protestant;
(2) A clear statement of the protestant's objections; and
(3) An explanation of how the protestant will be adversely affected by the proposed project.

Protests must be based solely upon flood control concerns or, where the Board is acting

as lead agency under CEQA, environmental concerns.

Since January 1, 2008, the Board has been required to hold an evidentiary hearing for any matter that requires the issuance of a permit. If you do not protest this application within twenty days from the date of this letter, you will have waived your right to participate in the hearing as a protestant including the right to present and rebut evidence, although you may still comment as a member of the public. If there are no protestants to this application, the Board may place the item on its consent calendar and act based on the staff report and any evidence that was submitted to Board staff.

Please refer to application number 19045 BD when communicating with this office. For further information, contact Nancy Moricz of my staff at (916) 574-2381.

Sincerely,

Nancy Moricz, Senior Engineer, WR
Projects Section
Central Valley Flood Protection Board

PARCELQUEST | Search | Label / Export | Report | Account | Support

Find My Parcels

Hide Tools

Layers

ACTIVE LAYER

Parcel

Manage Layers

DISPLAY LAYERS

- [x] Parcels
- [ ] Topography

Lat: 38.489972° Zoom
Lon: -121.366825° 17

Results

Print

Display Type: List View | Page Layout: Show Map | Total Pages: 1 [page: 1]

all none	ID	Co	APN	Owner	S Street Address	S City State Zip	Lot Acres	Transfer Doc#
☑	1	SAC	065-0290-021-0000	LAPERLE JOSEPH JAY	9091 MCCOY AVE	SACRAMENTO CA 95829-1114	6.000	1006251242

* The information provided here is deemed reliable, but is not guaranteed.

Total Pages: 1 [page: 1] Records:1 Rows per page: 50

Meeting of the Central Valley Flood Protection Board
August 28, 2015

Staff Report

Sacramento County Department of Water Resources
Elder Creek Improvements – Phase 1A, Sacramento County

1.0 – ITEM

Consider Central Valley Flood Protection Board (Board) approval to complete the Elder Creek Phase 1A Improvement Project to re-align, deepen, widen, and construct drainage features for approximately 3,000 linear feet of Elder Creek (Attachment A) through Permit No. 19045 (Attachment B).

2.0 – APPLICANT

Sacramento County Department of Water Resources (County)

3.0 – PROJECT LOCATION

The project is located north of McCoy Avenue and follows Elder Creek to a point approximately 0.21 miles east of Hedge Avenue, in Sacramento County (Attachment A). This reach of Elder Creek is located in an urbanizing area, according to the Sacramento County master plan, and is within a watershed that drains approximately 7.8 square miles. This reach of Elder Creek is upstream of the USACE federal project levee system and State Plan of Flood Control (SPFC) facilities comprised of the South Sacramento County Streams Group and Sacramento River levees.

4.0 – PROJECT DESCRIPTION

The County is proposing to complete the Elder Creek Phase 1A Improvement Project as the first phase of the broader Drainage Master Plan improvements for the North Vineyard Station Specific and Florin Vineyard Community Plans for Sacramento County. The Phase 1A improvements will re-align, deepen, widen and construct drainage features for approximately 3,000 linear-feet of Elder Creek, starting just upstream of McCoy Avenue, and will provide the topography needed to create wetland, riparian, and upland habitats within the established Open Space Preserve. Construction activities include: excavation of approximately 60,000 cubic-yards of material to re-align, deepen, and improve the channel to an average top width of

approximately 100 feet and a bottom width of 50 feet; installation of eight (8) 12-inch outfall pipes with end wall structures and one (1) 24-inch detention basin outfall pipe and concrete end wall structure; construction of a 100-foot wide overflow weir to connect the existing detention basin to the channel; placement of approximately 650 tons of rock slope protection (RSP) at the overflow weir, release points into the channel, and at the channel access ramp; and seeding of slopes for erosion protection. No vegetation plantings are included in the Phase 1A improvements (Attachment C).

The overall Drainage Master Plan was designed to provide a 100-year level of flood protection, along with water quality, open space, and recreation benefits, and will allow implementation of future phases of the project including residential development. It includes a re-aligned meandering channel with adjacent wetlands, wetland and riparian benches, and nesting islands creating several open space corridor enhancements for the area.

5.0 – AUTHORITY OF THE BOARD

California Water Code § 8534, 8590 – 8610.5, and 8700 – 8710

Title 23:

- § 6 – Need for a Permit
- § 112 – Streams Regulated and Nonpermissible Work Periods
- § 116 – Borrow and Excavation Activities – Land and Channel
- § 121 – Erosion Control
- § 123 – Pipelines, Conduits and Utility Lines
- § 130 – Patrol Roads and Access Ramps

6.0 – AGENCY COMMENTS AND ENDORSEMENTS

The comments and endorsements associated with this project from all pertinent agencies are shown below:

- The U.S. Army Corps of Engineers' (USACE) non-federal letter was received on August XX, 2015 and indicated that the USACE District Engineer has no comments or recommendations regarding flood control because the project does not affect a federally constructed project. This letter has been incorporated into the permit as Exhibit A.

- Sacramento County Department of Water Resources endorsed the project on April 28, 2015 with no conditions.

7.0 – PROJECT ANALYSIS

7.1 – Hydraulic Summary

The County's Master Plan includes the project location within an urbanizing area, but since the Elder Creek watershed area is less than ten (10) square miles, the proposed Elder Creek Phase 1A improvements are exempt from the State's 200-year Urban Level of Flood Protection requirements. The project was therefore analyzed using the 100-year design discharge. The County intends to design future phases of development along Elder Creek, including residential housing, in accordance with the 200-year urban level of protection standards. The County is also working closely with the Sacramento Area Flood Control Agency to ensure that upstream development does not adversely impact the downstream federal levee project.

The hydraulic analysis indicates that the proposed project will result in no adverse upstream or downstream hydraulic impacts. Computed localized WSE changes ranged from a decrease of 0.02 feet to an increase of 0.05 feet.

The material removed for channel widening and deepening will be relocated within the project area to raise elevation-deficient bank locations in order to contain flows up to the 100-year discharge within the improved channel banks. This will provide the necessary flood protection improvements to meet the FEMA 100-year level of protection for this reach of Elder Creek.

Based on review of the submitted project designs and hydraulic analysis Board staff has determined that the proposed project would improve localized flood protection in this portion of the Elder Creek watershed, and is not anticipated to create any adverse hydraulic impacts to either the Sacramento River Flood Control Project (SRFCP) or SPFC facilities downstream. The project will also complete the initial phase of improvements to enable subsequent creation of multi-benefit enhancements consistent with the County's Master Plan.

7.2 – Geotechnical Summary

Based on review of the submitted project designs Board staff concurs with the County's assessment indicating that the proposed project will cause no adverse geotechnical impacts to Elder Creek, the SRFCP, or SPFC facilities, because all excavated materials and imported RSP will be placed per current Title 23 standards.

8.0 – CEQA ANALYSIS

Board staff has prepared the following California Environmental Quality Act (CEQA) findings:

The Board, acting as a responsible agency under CEQA, has independently reviewed the Draft Environmental Impact Report (DEIR, SCH No. 1996032057, July 1997) for the North Vineyard Station Specific Plan and the Final Supplemental Environmental Impact Report (FSEIR, SCH No. 2004032104, July 2004), and the Mitigation Monitoring and Reporting Plan (MMRP) on the North Vineyard Station Specific Plan Amendment, Financing Plan, and Water Treatment Facilities Project prepared by the lead agency, Sacramento County (incorporated herein by reference). These documents, including project design, may be viewed or downloaded from the Board website at http://www.cvfpb.ca.gov/meetings/2015/08-28-2015.cfm under a link for this agenda item, and are also available for review in hard copy at the Board and Sacramento County offices.

Sacramento County, as the lead agency, determined that the project described in the FSEIR would have a significant effect on the environment on November 10, 2004 and adopted Resolution No. 2004-1399 (including Statement of Facts, Findings, Impacts and Mitigation Measures, Statement of Overriding Considerations).

Based on its independent review of the FSEIR, the Board finds that although the proposed project could have a potentially significant effect on the environment, revisions have been made to the project and/or agreed to by the project proponent that reduce the environmental impacts to less than significant. The Board finds that there are no direct or indirect environmental effects of the drainage features along Elder Creek which have not been previously addressed by the DEIR or FSEIR. Sacramento County found that significant and unavoidable impacts to air resources from increased vehicle traffic may occur, however these impacts are not related to the proposed drainage features described above. Pursuant to CEQA, the Board as a responsible agency is responsible for mitigating and avoiding only the direct and indirect environmental effects of those parts of the project which it decides to carry out, finance, or approve [CEQA Guidelines Section 15096(g); Public Resources Code § 21002.1(d)].

The project proponent has incorporated mandatory mitigation measures into the project plans to avoid identified impacts or to mitigate such impacts to a point where no significant impacts will occur. Moreover, such changes or alterations are within the responsibility and jurisdictions of another public agency, Sacramento County, and such changes have been adopted by that agency. These mitigation measures are included in the project proponent's FSEIR and address impacts to air quality,

biological resources, cultural resources, noise, and transportation and circulation. The description of the mitigation measures are further described in the certified FSEIR.

The documents and other materials which constitute the record of the Board's proceedings in this matter are in the custody of Leslie Gallagher, Acting Executive Officer, Central Valley Flood Protection Board, 3310 El Camino Ave., Rm. 151, Sacramento, California 95821.

9.0 – CALIFORNIA WATER CODE SECTION 8610.5 CONSIDERATIONS

- Evidence that the Board admits into its record from any party, federal, State or local public agency, or nongovernmental organization with expertise in flood or flood plain management:

  The Board has considered all the evidence presented in this matter, including the application for Permit No. 19045, supporting technical documentation provided by the County, as well as all evidence submitted up through the hearing on this matter.

- The best available science related to the scientific issues presented by the executive officer, legal counsel, the Department of Water Resources, or other parties that raise credible scientific issues:

  In making its findings, the Board has used the best available science relating to the issues presented by all parties. On the important issue of hydraulic impacts the County used the HEC-RAS hydraulic model. This model is considered as the best available scientific tool for the purpose of evaluating effects to water surface elevation and velocity for the increased level of detail needed for the proposed project.

- Effects of the decision on the facilities of the State Plan of Flood Control (SPFC), and consistency of the proposed project with the Central Valley Flood Protection Plan (CVFPP) as adopted by Board Resolution 2012-25 on June 29, 2012:

  The proposed project is expected to result in no adverse hydraulic or geotechnical impacts on the facilities of the SPFC and is consistent with the CVFPP and current Title 23 standards because the project is anticipated to produce no significant increases in water surface elevation, increases in channel velocities, or adverse geotechnical impacts on the SRFCP or SPFC facilities.

- Effects of reasonable projected future events, including, but not limited to, changes in hydrology, climate, and development within the applicable watershed:

  The proposed project provides a multi-benefit design for the development of this reach of Elder Creek as an urbanizing area within a 7.8 square mile watershed. This is the first phase of the County's Master Plan in this area, and it provides needed

flood protection improvements as well as open space corridor enhancements. It is not anticipated to create any adverse impacts to any surrounding projects because it has been incorporated into the County's Master Plan for future area development.

10.0 – STAFF RECOMMENDATION

Staff recommends that the Board:

Adopt:

- the CEQA findings;

Approve:

- draft Encroachment Permit No. 19045, in substantially the form provided;

Direct:

- the Executive officer to take the necessary actions to execute the permit and file a Notice of Determination with the State Clearinghouse.

11.0 – LIST OF ATTACHMENTS

A – Project Maps

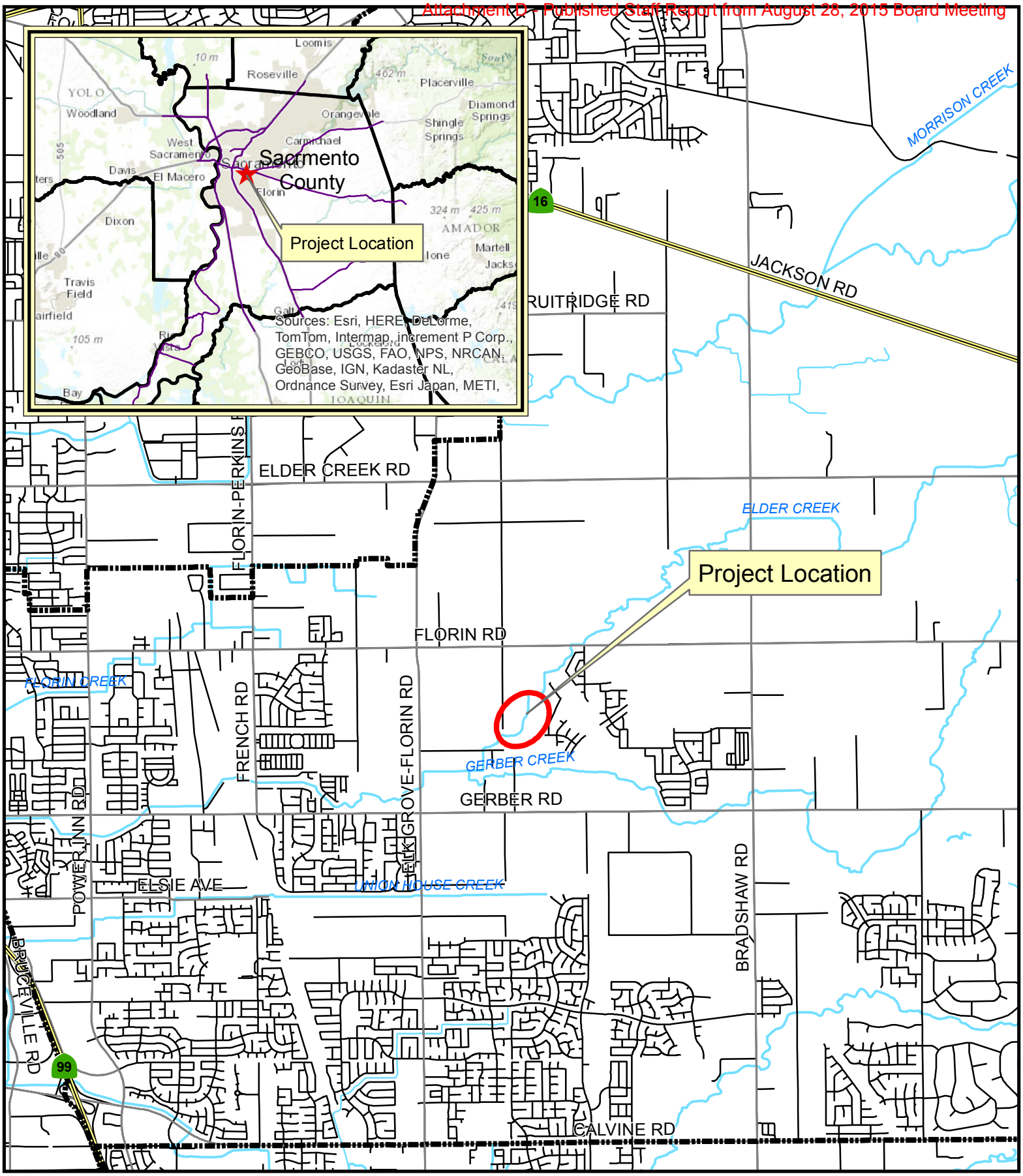
B – Draft Permit No. 19045

Exhibit A: USACE 408 Non-fed Letter

C – Project Drawings

D – Hydraulic Information

Prepared By:	Nancy Moricz, PE, Senior Engineer, Planning Branch
Environmental Review:	Andrea Buckley, Senior Environmental Scientist (Specialist)
Staff Report Review:	Eric Butler, PE, Supervising Engineer, Projects & Environmental Branch Chief
	Mitra Emami, PE, Supervising Engineer for Len Marino, PE, Chief Engineer
	Nicole Rinke, Deputy Attorney General
	Leslie Gallagher, Acting Executive Officer

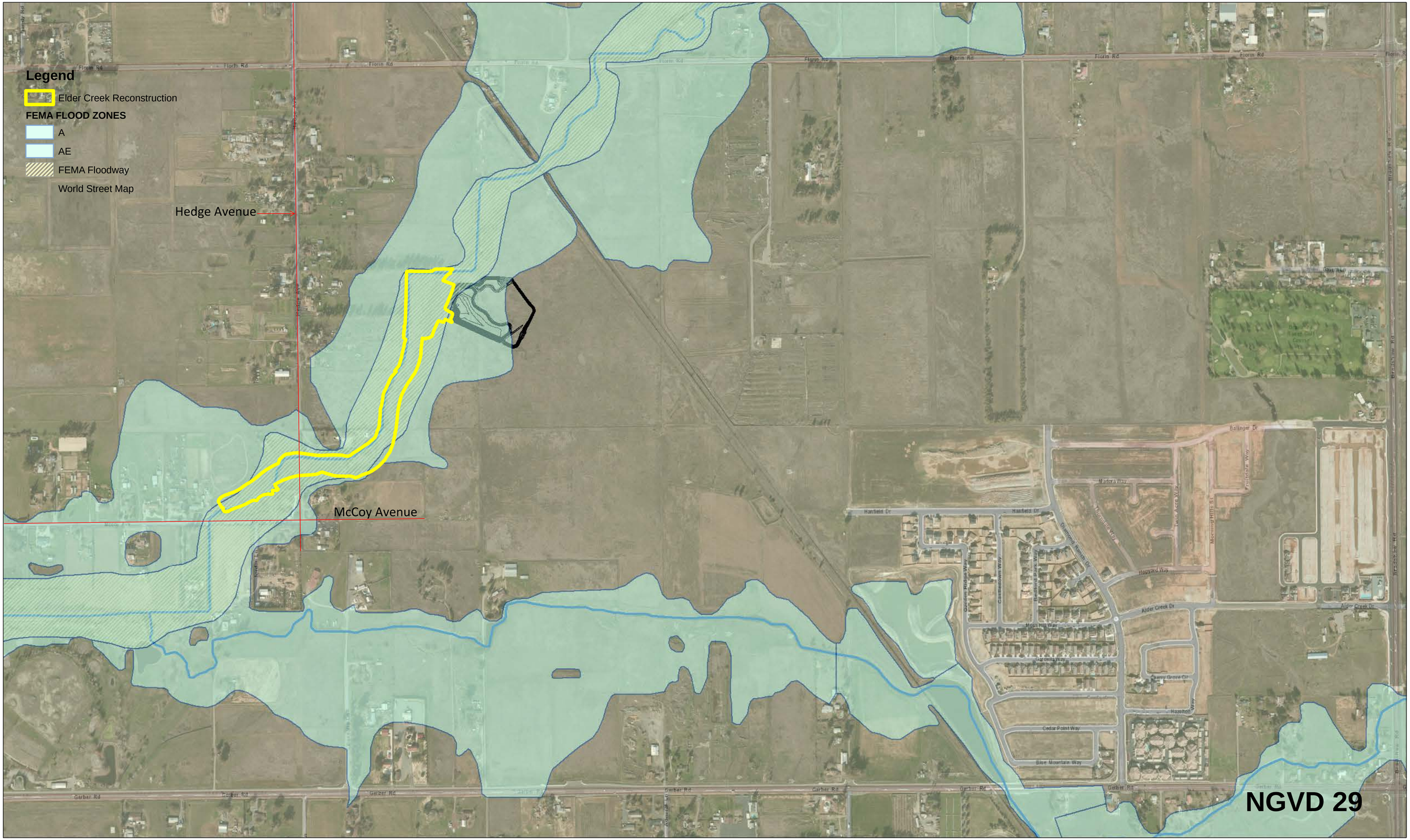


Vicinity Map
Phase 1A Elder Creek Improvements

0 4,000
Feet
1 inch = 4,000 feet

SACRAMENTO COUNTY
Department of Water Resources

ELDER CREEK AND GERBER CREEK



CIVIL ENGINEERING SOLUTIONS, INC.

FEMA FLOODPLAIN AND FLOODWAY 100-YEAR

0 150 300 600
Feet

ELDER CREEK PH1 EXC.
JUNE 2015

EXHIBIT FP-F

STATE OF CALIFORNIA
THE RESOURCES AGENCY

THE CENTRAL VALLEY FLOOD PROTECTION BOARD

PERMIT NO. 19045 BD

This Permit is issued to:

Sacramento County Department of Water Resources
827 7th Street, Room 301
Sacramento, California 95814

To complete the Elder Creek Phase 1A Improvement Project as the first phase of the broader Drainage Master Plan improvements for the North Vineyard Station Specific and Florin Vineyard Community Plans for Sacramento County. The Phase 1A improvements will re-align, deepen, widen and construct drainage features for approximately 3,000 linear-feet of Elder Creek, starting just upstream of McCoy Avenue, and will provide the topography needed to create wetland, riparian, and upland habitats within the established Open Space Preserve. Construction activities include: excavation of approximately 60,000 cubic-yards of material to re-align, deepen, and improve the channel to an average top width of approximately 100 feet and a bottom width of 50 feet; installation of eight (8) 12-inch outfall pipes with end wall structures and one (1) 24-inch detention basin outfall pipe and concrete end wall structure; construction of a 100-foot wide overflow weir to connect the existing detention basin to the channel; place approximately 650 tons of rock slope protection (RSP) at the overflow weir release points into the channel, and at the channel access ramp; and seed slopes for erosion protection. No vegetation plantings are included in the Phase 1A improvements.

The project is located north of McCoy Avenue and follows Elder Creek to a point approximately 0.21 miles east of Hedge Avenue. (Section 6, T7N, R6E, MDB&M, Elder Creek, Sacramento County).

NOTE: Special Conditions have been incorporated herein which may place limitations on and/or require modification of your proposed project as described above.

(SEAL)

Dated: _____ _____

Executive Officer

GENERAL CONDITIONS:

ONE: This permit is issued under the provisions of Sections 8700 – 8723 of the Water Code.

TWO: Only work described in the subject application is authorized hereby.

THREE: This permit does not grant a right to use or construct works on land owned by the Sacramento and San Joaquin Drainage District or on any other land.

FOUR: The approved work shall be accomplished under the direction and supervision of the State Department of Water Resources, and the permittee shall conform to all requirements of the Department and The Central Valley Flood Protection Board.

FIVE: Unless the work herein contemplated shall have been commenced within one year after issuance of this permit, the Board reserves the right to change any conditions in this permit as may be consistent with current flood control standards and policies of The Central Valley Flood Protection Board.

SIX: This permit shall remain in effect until revoked. In the event any conditions in this permit are not complied with, it may be revoked on 15 days' notice.

SEVEN: It is understood and agreed to by the permittee that the start of any work under this permit shall constitute an acceptance of the conditions in this permit and an agreement to perform work in accordance therewith.

EIGHT: This permit does not establish any precedent with respect to any other application received by The Central Valley Flood Protection Board.

NINE: The permittee shall, when required by law, secure the written order or consent from all other public agencies having jurisdiction.

TEN: The permittee is responsible for all personal liability and property damage which may arise out of failure on the permittee's part to perform the obligations under this permit. If any claim of liability is made against the State of California, or any departments thereof, the United States of America, a local district or other maintaining agencies and the officers, agents or employees thereof, the permittee shall defend and shall hold each of them harmless from each claim.

ELEVEN: The permittee shall exercise reasonable care to operate and maintain any work authorized herein to preclude injury to or damage to any works necessary to any plan of flood control adopted by the Board or the Legislature, or interfere with the successful execution, functioning or operation of any plan of flood control adopted by the Board or the Legislature.

TWELVE: Should any of the work not conform to the conditions of this permit, the permittee, upon order of The Central Valley Flood Protection Board, shall in the manner prescribed by the Board be responsible for the cost and expense to remove, alter, relocate, or reconstruct all or any part of the work herein approved.

SPECIAL CONDITIONS FOR PERMIT NO. 19045 BD

THIRTEEN: All work completed under this permit, as directed by the general and special conditions herein, shall be accomplished to ensure that the work is not injurious to adopted plans of flood control, regulated streams, and designated floodways under Central Valley Flood Protection Board (Board) jurisdiction, as defined in California Code of Regulations, Title 23. This permit only applies to the completion of work in the project description located within, or adjacent to and having bearing on Board jurisdiction, and which directly or indirectly affects the Board's jurisdiction. This special condition shall apply to all subsequent conditions herein.

LIABILITY AND IMDEMNIFICATION

FOURTEEN: The permittee shall defend, indemnify, and hold the Board and the State of California,

including its agencies, departments, boards, commissions, and their respective officers, agents, employees, successors and assigns (collectively, the "State"), safe and harmless, of and from all claims and damages related to the Board's approval of this permit, including but not limited to claims filed pursuant to the California Environmental Quality Act. The State expressly reserves the right to supplement or take over its defense, in its sole discretion.

FIFTEEN: The permittee is responsible for all liability associated with construction, operation, and maintenance of the permitted facilities and shall defend, indemnify, and hold the Board and the State of California; including its agencies, departments, boards, commissions, and their respective officers, agents, employees, successors and assigns (collectively, the "State"), safe and harmless, of and from all claims and damages arising from the project undertaken pursuant to this permit, all to the extent allowed by law. The State expressly reserves the right to supplement or take over its defense, in its sole discretion.

SIXTEEN: The Board and Department of Water Resources (DWR) shall not be held liable for damages to the permitted project resulting from releases of water from reservoirs, flood fight, operation, maintenance, inspection, or emergency repair.

SEVENTEEN: If the permittee does not comply with the conditions of the permit and enforcement by the Board is required, the permittee shall be responsible for bearing all costs associated with the enforcement action, including reasonable attorney's fees. Permittee acknowledges that State law allows the imposition of fines in enforcement matters.

AGENCY CONDITIONS

EIGHTEEN: A letter from the U.S. Army Corps of Engineers (USACE) District Engineer dated August XX, 2015, is attached to this permit as Exhibit A in reference to the project.

NINETEEN: The permittee agrees to incur all costs for compliance with local, State, and Federal permitting. If any conditions issued by other agencies conflict with any of the conditions of this permit, then the permittee shall resolve conflicts between any of the terms and conditions that agencies might impose under the laws and regulations it administers and enforces.

PRE-CONSTRUCTION

TWENTY: The permittee shall contact the Board by telephone at (916) 574-0609, and submit the enclosed postcard to schedule a preconstruction conference. Failure to do so at least 20 working days prior to start of work may result in delay of the project.

TWENTY-ONE: Thirty (30) calendar days prior to start of any demolition and/or construction activities within the floodway, the permittee shall submit to the Chief Engineer two sets of plans, specifications and supporting geotechnical and/ or hydraulic impact analyses, for any and all temporary, in channel cofferdam(s), gravel work pad(s), work trestle(s), scaffolding, piles, and/or other appurtenances that are to remain in the floodway during the flood season from November 1 through April 15. The Board shall acknowledge receipt of this submittal in writing within ten (10) working days of receipt, and shall work with the permittee to review and respond to the request as quickly as possible. Time is of the

essence. The Board may request additional information as needed and will seek comment from the USACE and / or local maintaining agency when necessary. The Board will provide written notification to the permittee if the review period is likely to exceed thirty (30) calendar days.

TWENTY-TWO: Prior to commencement of work, the permittee shall create a photo record, including associated descriptions, of the existing site conditions. The photo record shall be certified (signed and stamped) by a licensed land surveyor or licensed civil engineer registered in the State of California and submitted to the Board within 30 days of beginning the project.

TWENTY-THREE: The permittee shall provide supervision and inspection services acceptable to the Board.

CONSTRUCTION

TWENTY-FOUR: No construction work of any kind shall be done during the flood season from November 1 to April 15 without prior approval of the Board.

TWENTY-FIVE: All work approved by this permit shall be in accordance with the submitted drawings and specifications except as modified by special permit conditions herein. No further work, other than that approved by this permit (stated in the permit description), shall be done in the area without prior approval of the Board.

TWENTY-SIX: All addenda or other changes made to the submitted documents by the permittee after issuance of this permit shall be submitted to the Chief Engineer for review and approval prior to incorporation into the permitted project. The submittal shall include supplemental plans, specifications, and supporting geotechnical, hydrology and hydraulics, or other technical analyses. The Board shall acknowledge receipt of the addendum or change submittal in writing within ten (10) working days of receipt, and shall work with the permittee to review and respond to the request as quickly as possible. Time is of the essence. The Board may request additional information as needed and will seek comment from the USACE and / or the local maintaining agency when necessary. The Board will provide written notification to the permittee if the review period is likely to exceed thirty (30) calendar days. Upon approval of the submitted documents the permit shall be revised, if needed, prior to construction related to the proposed changes.

TWENTY-SEVEN: No material stockpiles, temporary buildings, or equipment shall remain in the floodway during the flood season from November 1 to April 15 without prior approval of the Board.

TWENTY-EIGHT: Temporary access ramps and/or roads shall be removed from the floodway during flood season from November 1 through April 15, and after completion of the project.

TWENTY-NINE: All debris generated by this project shall be disposed of outside the floodway.

THIRTY: Fill material shall be placed only within the area indicated on the approved plans.

THIRTY-ONE: Backfill material for excavations shall be placed in four (4) to six (6) inch layers and compacted to at least the density of the adjacent, firm, undisturbed material.

THIRTY-TWO: All fill materials shall be placed in four (4) to six (6) inch layers and compacted to a relative compaction of not less than 90 percent per ASTM D 1557-91 or 97 percent per ASTM D 698-91 above optimum moisture content. Field density tests shall be taken by a certified soils laboratory to verify compaction of the fill placed.

THIRTY-THREE: Revetment shall be uniformly placed and properly transitioned into the bank or adjacent revetment and in a manner which avoids segregation.

THIRTY-FOUR: Quarry rock shall be used on slopes steeper than three (3) horizontal to one (1) vertical. Cobbles may be used on three (3) horizontal to one (1) vertical or flatter slopes.

THIRTY-FIVE: The recommended minimum thickness of revetment, measured perpendicular to the bank is 18 inches below the usual water surface and 12 inches above the usual water surface.

THIRTY-SIX: The revetment shall not contain any reinforcing steel, floatable, or objectionable material. Asphalt or other petroleum-based products may not be used as fill or erosion protection on the levee section or within the floodway.

THIRTY-SEVEN: Adequate revetment shall be placed at the discharge end of outfall pipes to prevent erosion.

THIRTY-EIGHT: The waterward end of the discharge pipe shall be constructed to direct the flow away from the bank to prevent erosion.

THIRTY-NINE: Pipes shall have a minimum 12 inches of cover.

FORTY: The permittee shall be responsible for all damages due to settlement, consolidation, or heave from any construction-induced activities.

FORTY-ONE: Except with respect to the activities expressly allowed under this permit, the work area shall be restored to the condition that existed prior to start of work.

VEGETATION / ENVIRONMENTAL MITIGATION

FORTY-TWO: The permittee will be responsible for securing any necessary permits incidental to habitat manipulation and restoration and will provide any biological surveying, monitoring, and reporting needed to satisfy those permits.

FORTY-THREE: No plantings, other than erosion control seeding, shall be performed within the project area without prior approval of the Board.

FORTY-FOUR: Cleared trees and brush (or pruning therefrom) shall be completely burned or removed from the floodway, and downed trees or brush shall not remain in the floodway during the flood season from November 1st to April 15th.

POST-CONSTRUCTION

FORTY-FIVE: Within 120 days of completion of the project, the permittee shall submit to the Board and DWR a copy of as-built drawings and a certification report, stamped and signed by a licensed civil engineer registered in the State of California, certifying the work was performed and inspected in accordance with the Board permit conditions and submitted drawings and specifications.

OPERATIONS AND MAINTENANCE

FORTY-SIX: After each period of high water, debris that accumulates at the site shall be removed from the floodway when reasonably determined as necessary by the Board.

FORTY-SEVEN: The permittee shall be responsible for repair of any damages to the channel, banks, floodway, or any other flood control facilities due to construction, operation, or maintenance of the proposed project.

FORTY-EIGHT: The permittee shall maintain the permitted project within the utilized area in the manner required and as requested by the authorized representative of the Board, or any other agency responsible for maintenance.

FORTY-NINE: If any feature of the project adversely impacts the successful execution, functioning, maintenance, or operation of the Elder Creek floodway, or downstream facilities of the Sacramento River Flood Control Project, the permittee must either remove the feature, or mitigate for the adverse impact of the feature at the permittee’s expense after approval of the proposed mitigations by the Board. If the permittee does not comply, the Board may modify or remove the feature at the permittee’s expense.

PROJECT ABANDONMENT, CHANGE IN PLAN OF FLOOD CONTROL

FIFTY: If the project land is to be sold, the transfer of interest shall not occur without written notification to the Board, and the permit with all conditions shall be transferred to the new owner. The permittee is required to notify the prospective new owner of the need to apply for a name change permit from the Board.

FIFTY-ONE: If the project, or any portion thereof, is to be abandoned in the future, the permittee shall abandon the project under direction of the Board, at the permittee's cost and expense.

FIFTY-TWO: The permittee may be required, at permittee's cost and expense, to remove, alter, relocate, or reconstruct all or any part of the permitted project) if removal, alteration, relocation, or reconstruction is necessary as part of or in conjunction with any present or future flood control plan or project or if damaged by any cause. If the permittee does not comply, the Board may remove, alter, relocate, or reconstruct the permitted project at the permittee's expense.

END OF CONDITIONS

ATTACHMENT B – Exhibit A: USACE Non-Fed Letter

This letter has not yet been received by Board staff; however, it is expected to arrive prior to the Board Meeting on August 28, 2015

3-18-2015 09:55:05 vusval P:\27095_PH2\Data Transfer\Out\2015\Sacramento County\CIBFP\01-VC2-EC1A-CVR.dwg
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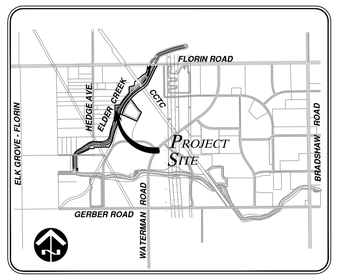
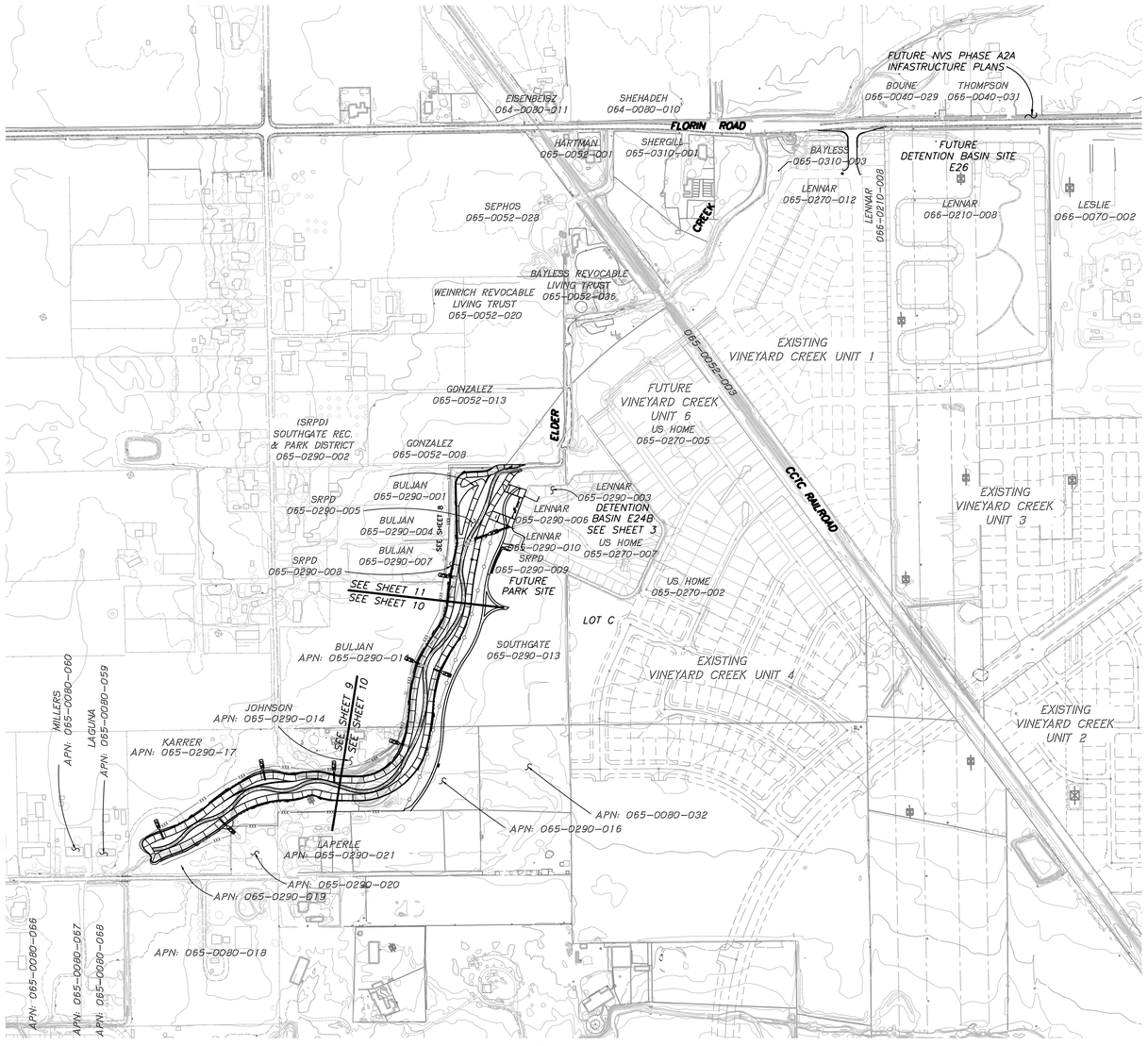
Improvement Plans For
ELDER CREEK PHASE 1A
COUNTY OF SACRAMENTO, CALIFORNIA



VICINITY MAP
NTS



SITE PLAN
SCALE: 1"=200'

LEGEND

PROPOSED	DESCRIPTION	EXISTING
	CREEK CENTERLINE	
	RIGHT-OF-WAY	
	FENCE	
X	TREE REMOVAL	
	DRAINAGE SWALE	
	SLOPE	
12"SD	STORM DRAIN (SIZE INDICATED)	12"SD
	OVERLAND RELEASE	

WARNING NOTE:
EXISTING OVERHEAD LINES IN THE VICINITY OF THE CONSTRUCTION AREA. THE CONTRACTOR TO EXERCISE CAUTION.

SWPPP NOTE:
EROSION AND SEDIMENT CONTROL MEASURES FOR THIS PROJECT SHALL BE IN SUBSTANTIAL COMPLIANCE AT ALL TIMES WITH THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) PREPARED FOR THE PROJECT IN ACCORDANCE WITH THE STATE'S GENERAL PERMIT FOR CONSTRUCTION ACTIVITIES. ACCORDING TO STATE LAW, IT IS THE RESPONSIBILITY OF THE PROPERTY OWNER THAT THE SWPPP IS KEPT UP-TO-DATE TO REFLECT CHANGING SITE CONDITIONS AND IS AVAILABLE ON THE PROJECT SITE AT ALL TIMES FOR REVIEW BY LOCAL AND STATE INSPECTORS.

CONTRACTOR RESPONSIBILITY
CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD THE COUNTY OF SACRAMENTO AND THE DESIGN CONSULTANT HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE COUNTY OF SACRAMENTO OR THE DESIGN CONSULTANT.

UNAUTHORIZED CHANGES & USES
UNAUTHORIZED CHANGES & USES: THE DESIGN CONSULTANT PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

ELECTRONIC LINEWORK
ELECTRONIC VERSIONS OF THE LINEWORK ON THIS PLAN MAY NOT BE CONSISTENT WITH OTHER DIMENSIONS, NOTES, DETAILS, OR DESCRIPTIONS WHICH CONTROL THE INTENDED DESIGN. ELECTRONIC VERSIONS OF THIS PLAN ARE NOT TO BE USED TO ESTABLISH THE LOCATION OF PROPERTY OR IMPROVEMENTS IN THE FIELD.

ALL PLANS ASSOCIATED WITH THIS PROJECT ARE SUBJECT TO THE CONDITIONS OF MITIGATION MONITORING AND REPORTING PROGRAM (03-628- SVB-0385). FOR ANY QUESTIONS REGARDING COMPLIANCE WITH THE MMRP DOCUMENT, CONTACT MMRP STAFF IMMEDIATELY AT (916) 874-7914.

S.W.R.C.B.:
N.O.I. TO COMPLY WITH THE TERMS OF THE GENERAL PERMIT TO DISCHARGE STORM WATER ASSOCIATED WITH CONSTRUCTION ACTIVITY (WQ ORDER NO. 99-08-DWQ)

PAVEMENT QUANTITIES
ASPHALT CONCRETE _____TONS
AGGREGATE BASE _____TONS

BENCHMARK:
339D6 ELEV. 66.73 B.M. 1D-1
1-1/2" BRASS DISC STAMPED "SAC. CO. BM. 1D-1" LOCATED 3' FROM NORTH END OF NORTHWEST WINGWALL OF CONCRETE BRIDGE ON VINEYARD RD. APPROXIMATELY 0.6 MILE NORTH OF CALVINE RD. SEE L.L. M-24B, PG. BM-35. LEVELS RUN FROM U.S.C. & G.S. P-834, 1947. (MARCH 1961)

Know what's **below.** **Call** before you dig.

REGISTERED PROFESSIONAL ENGINEER
PAUL ROBERT HART
No. 49154
CIVIL
STATE OF CALIFORNIA

FOR MACKAY & SOMPS

NOTE: DATUM FOR THIS PROJECT IS NGVD 29

PRELIMINARY NOT FOR CONSTRUCTION

N

0 300 600
SCALE: 1"=300'

NOTE:
PHASE 1B OF ELDER CREEK FROM E24B TO 900 LF NORTH OF FLORIN ROAD CANNOT BE CONSTRUCTED UNTIL RIGHT-OF-WAY FOR THIS AREA HAS BEEN OBTAINED.

SHEET INDEX

ENGINEER
MACKAY & SOMPS CIVIL ENGINEERS, INC.
1552 EUREKA ROAD, SUITE 100
ROSEVILLE, CA 95661
CONTACT: VANESSA HUMPHREY
PHONE (916) 773-1189

GEOTECHNICAL ENGINEER
WALLACE-KUHL & ASSOCIATES
3050 INDUSTRIAL BLVD.
WEST SACRAMENTO, CA 95691
CONTACT: STEVE FRENCH
PHONE: (916)372-1434

DEVELOPER/OWNER
LENNAR HOMES OF CALIFORNIA
1420 ROCKY RIDGE ROAD., SUITE 320
ROSEVILLE, CA 95661
CONTACT: LARRY GUALCO
PHONE: (916) 746-8500

PLANS SHALL COMPLY WITH THE 2010 CALIFORNIA FIRE CODE AND NFPA 24

UTILITY REPRESENTATIVES

UTILITY	REPRESENTATIVES		PHONE
U.S.A.			1-800-227-2600
FIRE	SAC METRO FIRE DEPT.	CURTIS BANKS	916-942-3300
GAS	P.G.&E.	YVONNE CHATMAN	916-386-5453
ELECTRIC	S.M.U.D.	ERICA VALDEZ	916-732-7312
TELEPHONE	FRONTIER COMMUNICATIONS	ENGINEERING DEPT.	916-691-5601
WATER	SAC. COUNTY WATER AGENCY	MARIO AMBRIZ	916-874-6851
SEWER	SACRAMENTO CO. (SASD)	ERIC SCHOLTZ	916-876-6065
TRUNK SEWER	SAC. CO. (CSD-1 TRUNK)	CONNIE FORD	916-876-6010
DRAINAGE	COUNTY OF SACRAMENTO	DIMITRY MEZENTSEV	916-874-8569
T.V.CABLE	COMCAST	DAVE LUCAS	916-927-2225

WDID #:5S34C367565

APPROVED BY:

DIRECTOR OF COUNTY ENGINEER DATE

SACRAMENTO COUNTY MUNICIPAL SERVICES AGENCY

PROJECT TITLE:
ELDER CREEK PHASE 1A

ASSESSORS PARCEL NUMBER:
064-0080-010, 064-0080-011, 065-0052-001, 065-0052-003, 065-0052-008, 065-0052-013, 065-0080-018, 065-0052-020, 065-0052-028, 065-0052-036, 065-0080-068, 065-0080-059, 065-0270-002, 065-0270-005, 065-0270-007, 065-0270-012, 065-0290-001, 065-0290-002, 065-0290-003, 065-0290-004, 065-0290-005, 065-0290-006, 065-0290-007, 065-0290-008, 065-0290-009, 065-0290-010, 065-0290-011, 065-0290-013, 065-0290-014, 065-0290-015, 065-0290-016, 065-0290-017, 065-0290-018, 065-0290-019, 065-0290-020, 065-0290-021, 065-0310-001, 065-0310-003, 066-0040-029, 066-0040-031,

MAP COORDINATES: 302000/2184000

APPROVED:

ORDER NUMBER: DRAINAGE FEE:

CHECKED BY: DRAINAGE APPROVED:

No.	Description	Init	Date	By	AGENCY APPROVAL	Date

DATE: MARCH 2015
SCALE: AS NOTED
DRAWN BY: STAFF
DESIGNED BY: PH
CHECKED BY: PH

MACKAY & SOMPS ENGINEERS PLANNERS SURVEYORS
1552 Eureka Road, Suite 100, Roseville, CA 95661 (916) 773-1189

PLAN FOR THE IMPROVEMENT OF
ELDER CREEK PHASE 1A
COVER SHEET
COUNTY OF SACRAMENTO CALIFORNIA

SHEET 1 OF 18
PROJECT NO. 27095-EC1

Submittal 03-13-2015

COUNTY OF SACRAMENTO REQUIRED NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE COUNTY OF SACRAMENTO STANDARD CONSTRUCTION SPECIFICATIONS AND IMPROVEMENT STANDARDS. WHERE INCONSISTENCIES EXIST, THE LATEST EDITION SHALL TAKE PRECEDENCE.
2. PUBLIC CONVENIENCE, PUBLIC SAFETY AND TRAFFIC CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH SECTIONS 6-12 AND 6-13 OF THE STANDARD CONSTRUCTION SPECIFICATIONS AND AS DIRECTED BY THE COUNTY INSPECTOR. SAFE VEHICULAR AND PEDESTRIAN ACCESS SHALL BE PROVIDED AT ALL TIMES DURING CONSTRUCTION.
3. THE CONSULTING ENGINEER SHALL NOTIFY THE COUNTY OF SACRAMENTO CONSTRUCTION INSPECTION OFFICE UPON COMPLETION OF STAKING. (PHONE 875-2700).
4. THE CONTRACTOR SHALL NOTIFY THE COUNTY OF SACRAMENTO CONSTRUCTION INSPECTION OFFICE TWO WORKING DAYS PRIOR TO THE INTENTION TO COMMENCE WORK. THE CONTRACTOR SHALL NOT START ANY GRADING UNTIL THE COUNTY COMPLETES A PRE-CONSTRUCTION MEETING. (PHONE 875-2700).
5. THE COUNTY OF SACRAMENTO IS A MEMBER OF THE UNDERGROUND SERVICE ALERT (U.S.A.) ONE-CALL PROGRAM. THE CONTRACTOR, OR ANY SUBCONTRACTOR FOR THIS CONTRACT, SHALL NOTIFY MEMBERS OF U.S.A. TWO WORKING DAYS PRIOR TO PERFORMING ANY EXCAVATION WORK BY CALLING THE TOLL-FREE NUMBER (1-800-227-2600). (THOMAS BROS. PAGE 338, INDEX J-1 & J-2 2006 EDITION)
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING SURVEY MONUMENTS AND OTHER SURVEY MARKERS DURING CONSTRUCTION. ALL SUCH MONUMENTS OR MARKERS DESTROYED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTORS EXPENSE.
7. ALL SERVICE SEWERS SHALL HAVE FOUR TO FIVE FEET OF COVER AT THE PROPERTY LINE OR RIGHT-OF-WAY, UNLESS OTHERWISE NOTED ON PLANS.
8. EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH SECTION 11 OF THE COUNTY OF SACRAMENTO IMPROVEMENT STANDARDS.
9. PRIOR TO REQUESTING FINAL ACCEPTANCE OF IMPROVEMENTS, THE CONSULTING ENGINEER SHALL SET SURVEY MONUMENTS AS SPECIFIED IN SECTION 12-1, COUNTY OF SACRAMENTO IMPROVEMENT STANDARDS.
10. WHENEVER THE WORK AREA IS ADJACENT TO A TRAFFIC LANE AND THERE IS A CUT, DITCH, OR TRENCH MORE THAN TWO INCHES DEEP, THE CONTRACTOR SHALL MAINTAIN CONTINUOUS BARRICADES SPACED AT APPROXIMATELY 20- FOOT INTERVALS FOR THE FIRST 100 FEET FROM THE BEGINNING OF THE CUT, DITCH, OR TRENCH, AND AT APPROXIMATELY 50-FOOT INTERVALS THEREAFTER. IF THE CUT, DITCH, OR TRENCH IS MORE THAN 10 FEET FROM A TRAFFIC LANE, THE BARRICADE SPACING MAY BE GREATER, BUT SHALL NOT EXCEED 200 FEET.
11. UNLESS SPECIFICALLY SET FORTH AS SPECIAL PROVISIONS, ALL MARKED LANES OF TRAFFIC SHALL BE UNOBSTRUCTED ON FLORIN ROAD IN EACH DIRECTION DURING THE PEAK TRAFFIC HOURS OF 7:00 TO 8:00AM AND 3:30 TO 6:00PM. A TRAFFIC LANE SHALL BE CONSIDERED UNOBSTRUCTED IF IT IS SURFACED WITH ASPHALT AND IS AT LEAST TEN FEET WIDE.
12. A TRAFFIC CONTROL PLAN SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO SACRAMENTO COUNTY CONSTRUCTION MANAGEMENT DIVISION FOR REVIEW AT LEAST 20 DAYS PRIOR TO COMMENCEMENT OF ANY WORK. AN ENCROACHMENT PERMIT OR PLAN APPROVAL MUST FIRST BE OBTAINED PRIOR TO ANY WORK COMMENCING WITHIN THE COUNTY RIGHT-OF-WAY.

GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY TO IT'S SATISFACTION THE TYPES, LOCATIONS, SIZES, AND/OR DEPTH OF EXISTING UTILITIES WITHIN THE WORK AREA. A REASONABLE EFFORT HAS BEEN MADE TO LOCATE AND DELINEATE THE EXISTING UTILITIES BASED ON AVAILABLE RECORDS. HOWEVER, THE ENGINEER ASSUMES NO RESPONSIBILITY FOR COMPLETENESS OR ACCURACY OF SUCH DELINEATION OF UTILITIES, NOR FOR THE EXISTENCE OF ADDITIONAL BURIED OBJECTS OR UTILITIES NOT SHOWN ON THESE DRAWINGS WHICH MAY BE ENCOUNTERED. ANY DISCREPANCIES BETWEEN THE PLANS AND ACTUAL EXISTING CONDITIONS DISCOVERED BY THE CONTRACTOR SHOULD BE REPORTED TO THE ENGINEER IMMEDIATELY. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ALL EXISTING UTILITIES AND FOR PROTECTION OF OR DAMAGE TO THEM.
2. THE OFFICE OF MACKAY & SOMPS SHALL BE NOTIFIED AT LEAST 2 WORKING DAYS PRIOR TO THE BEGINNING OF STAKING FOR EACH CONSTRUCTION PHASE (PHONE 773-1189).
3. IF THE DEVELOPER ELECTS TO HAVE A REGISTERED CIVIL ENGINEER OR LICENSED LAND SURVEYOR OTHER THAN THE ENGINEER WHO PREPARED THESE IMPROVEMENT PLANS PROVIDE THE CONSTRUCTION STAKING, IT SHALL PROVIDE TO THE DIRECTOR IN WRITING, THE NAME OF THE INDIVIDUAL OR FIRM ONE WEEK PRIOR TO THE STAKING OF THE PROJECT FOR CONSTRUCTION. THE DEVELOPER SHALL THEN BE RESPONSIBLE FOR APPROVING ALL CONSTRUCTION, THE PREPARATION OF REVISED PLANS FOR CONSTRUCTION CHANGES, AND THE PREPARATION OF AS-BUILT PLANS ON COMPLETION OF THE CONSTRUCTION. THE DEVELOPER'S NOTIFICATION OF A CHANGE IN THE FIRM PROVIDING CONSTRUCTION STAKING SHALL BE ACKNOWLEDGMENT THAT IT ACCEPTS RESPONSIBILITY FOR DESIGN CHANGES AND AS-BUILT INFORMATION, AS NOTED ABOVE.
4. ALL PHASES OF CONSTRUCTION SHALL BE INSPECTED AND APPROVED BY THE COUNTY OF SACRAMENTO OR ITS AUTHORIZED REPRESENTATIVE PRIOR TO PROCEEDING WITH SUBSEQUENT PHASES. ANY IMPROVEMENTS CONSTRUCTED WITHOUT INSPECTION OR CONTRARY TO INSTRUCTIONS OF THE COUNTY OF SACRAMENTO SHALL NOT BE ACCEPTED FOR MAINTENANCE.
5. ALL EXCAVATIONS OF 5 FEET OR MORE IN DEPTH SHALL REQUIRE AN EXCAVATION PERMIT FROM THE STATE OF CALIFORNIA, DEPARTMENT OF INDUSTRIAL SAFETY.
6. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL SEWER SERVICE LOCATION STAKES WITH A REPRESENTATIVE OF THE OFFICE OF MACKAY & SOMPS (PHONE 773-1189) PRIOR TO CONSTRUCTION; IMMEDIATELY AFTER WHICH MACKAY & SOMPS SHALL TERMINATE THEIR LIABILITY FOR THE CORRECT LOCATION OF SAID SERVICE LOCATIONS.
7. THE CONSULTING ENGINEER HAS VERIFIED IN THE FIELD AND HAS SHOWN HEREIN THE LOCATION AND ELEVATION OF ALL EXISTING STORM DRAIN FACILITIES TO WHICH THIS PROJECT IS CONNECTING UNLESS OTHERWISE NOTED ON THESE PLANS.
8. UPON JOB COMPLETION, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE, IN WRITING, INFORMATION TO MACKAY & SOMPS REGARDING ANY CHANGES MADE DURING CONSTRUCTION; PIPE ALTERNATES CHOSEN; AS WELL AS ANY OTHER INFORMATION WHICH IS REQUIRED TO BE SHOWN ON THE "RECORD DRAWINGS".
9. THE CONTRACTOR SHALL VERIFY TO IT'S SATISFACTION ANY AND ALL CONTROL SUPPLIED BY THE ENGINEER, FOR THE USE WITH THE CONTRACTOR'S GPS SYSTEM. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF SAID CONTROL. A REASONABLE EFFORT WILL BE TAKEN TO INSURE ACCURACY OF SAID CONTROL. ANY DISCREPANCIES WITHIN SAID CONTROL MUST BE REPORTED TO THE ENGINEER IMMEDIATELY.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FIELD CHANGES THAT ARE MADE WHICH ARE NOT SHOWN ON THESE IMPROVEMENT PLANS, UNLESS CHANGES WERE APPROVED BY THE ENGINEER AND GOVERNING AGENCY PRIOR TO CONSTRUCTION. ANY DISCREPANCIES FOUND WITHIN THESE PLANS OR FOUND BETWEEN THESE PLANS AND THE EXISTING CONDITIONS IN THE FIELD MUST BE REPORTED TO THE ENGINEER IMMEDIATELY. THE ENGINEER SHALL BE GIVEN A REASONABLE AMOUNT OF TIME TO CORRECT ANY DISCREPANCIES.
11. DIMENSIONS SHOWN ON PLANS ARE TO THE CENTERLINE OF PIPE AND OR MANHOLES, UNLESS OTHERWISE NOTED.

STORM DRAIN NOTES

1. ALL CONSTRUCTION AND MATERIALS FOR DRAINAGE SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE COUNTY OF SACRAMENTO IMPROVEMENT STANDARDS AND STANDARD CONSTRUCTION SPECIFICATIONS. WHERE DISCREPANCIES EXIST, APPROPRIATE NOTES SHALL BE ADDED TO THE PLANS, TAKING PRECEDENCE OVER THE STANDARD CONSTRUCTION SPECIFICATIONS.
2. THE MINIMUM COVER REQUIREMENTS DURING CONSTRUCTION FOR TEMPORARY CONSTRUCTION VEHICLE LOADING SHALL BE 4-FEET FOR METAL AND PLASTIC PIPE, AND 3-FEET FOR REINFORCED CONCRETE PIPE.
3. THE CONTRACTOR SHALL PLACE THE PROPER STRENGTH PIPE IF TRENCH CONDITIONS ENCOUNTERED DIFFER FROM THE DESIGN TRENCH.
4. DRAINAGE IN PUBLIC ROW AND DRAINAGE EASEMENTS SHALL CONFORM TO THE FOLLOWING:
   DRAINAGE PIPE MATERIAL SHALL CONFORM TO SECTION 36 AND SECTION 50 (EXCLUDING 50-20, WHICH IS NOT ALLOWED) OF THE STANDARD CONSTRUCTION SPECIFICATIONS. DRAINAGE MANHOLES SHALL CONFORM TO SECTION 39 OF THE STANDARD CONSTRUCTION SPECIFICATIONS/AND SHALL BE CONSTRUCTED ACCORDING TO SACRAMENTO STANDARDS.
5. TESTING OF DRAINAGE SYSTEMS
   DRAINAGE IN PUBLIC ROW AND DRAINAGE EASEMENTS SHALL CONFORM TO THE FOLLOWING:
   DRAINAGE PIPE, INCLUDING DRAIN INLET LATERALS, SHALL BE TESTED IN CONFORMANCE WITH SECTION 38-10 OF THE STANDARD CONSTRUCTION SPECIFICATIONS.
   STORM DRAIN MANHOLES SHALL BE TESTED IN CONFORMANCE WITH SECTION 39-4.02 OF THE STANDARD CONSTRUCTION SPECIFICATIONS.
6. RESILIENT CONNECTORS, IN CONFORMANCE WITH SECTION 39-2.02 AND STD DWG 9-7A OF THE STANDARD CONSTRUCTION SPECIFICATIONS, ARE REQUIRED BETWEEN PRE-CAST MANHOLE AND PIPE, AND BETWEEN PRE-CAST DROP INLET AND PIPE. WATER STOPS ARE FOR PIPE TO CAST-IN-PLACE MANHOLE/DROP INLET CONNECTIONS.
7. EROSION CONTROL STRUCTURES (STD DWG 9-27) SHALL BE CLASS B CONCRETE, NOT GROUTED COBBLE.
8. ALL DRAINAGE INLETS IN PUBLIC ROW AND DRAINAGE EASEMENTS SHALL HAVE A PERMANENT STORM DRAIN MESSAGE "NO DUMPING - FLOWS TO CREEK" OR OTHER APPROVED MESSAGE CONSISTENT WITH SECTION 9-14G AND STD. DWGS. 11-10A AND 11-10B OF THE SACRAMENTO COUNTY IMPROVEMENT STANDARDS.
9. ALL CONNECTIONS TO DRAINAGE INLETS MUST BE ON THE FACE OR SIDE ALLOWING A MINIMUM OF 6 INCHES FROM THE CORNER AT ONE INLET. CONNECTIONS TO CORNERS OF DRAIN INLETS IS NOT ALLOWED.

MMRP NOTES

THE DEVELOPER SHALL CONTACT THE DEPARTMENT OF ENVIRONMENTAL REVIEW AND ASSESSMENT TWO DAYS PRIOR TO THE PRE-CONSTRUCTION MEETING (PHONE 874-7914)

AIR QUALITY

1. PRIOR TO CONSTRUCTION THE PROJECT REPRESENTATIVE SHALL PROVIDE A PLAN FOR APPROVAL BY THE COUNTY OF SACRAMENTO AND SMAQMD DEMONSTRATING THAT THE HEAVY-DUTY (> 50 HORSEPOWER) OFF-ROAD VEHICLES TO BE USED IN THE CONSTRUCTION PROJECT, INCLUDING OWNER, LEASED AND SUBCONTRACTOR VEHICLES, WILL ACHIEVE A PROJECT WIDE FLEET-AVERAGE 20 PERCENT NOX REDUCTION AND 45 PERCENT PARTICULATE REDUCTION FLEET AVERAGE;
2. PRIOR TO CONSTRUCTION, THE PROJECT REPRESENTATIVE SHALL SUBMIT TO THE THE COUNTY OF SACRAMENTO AND SMAQMD A COMPREHENSIVE INVENTORY OF ALL OFF-ROAD CONSTRUCTION EQUIPMENT, EQUAL TO OR GREATER THAN 50 HORSEPOWER, THAT WILL BE USED AN AGGREGATE OF 40 OR MORE HOURS DURING ANY PORTION OF THE CONSTRUCTION PROJECT. THE INVENTORY SHALL INCLUDE THE HORSEPOWER RATING, ENGINE PRODUCTION YEAR, AND HOURS OF USE OR FUEL THROUGHPUT FOR EACH PIECE OF EQUIPMENT. THE INVENTORY SHALL BE UPDATED AND SUBMITTED MONTHLY THROUGHOUT THE DURATION OF THE PROJECT, EXCEPT THAT AN INVENTORY SHALL NOT BE REQUIRED FOR ANY 30-DAY PERIOD IN WHICH NO CONSTRUCTION ACTIVITY OCCURS. AT LEAST 48 HOURS PRIOR TO THE USE OF SUBJECT HEAVY-DUTY OFF-ROAD EQUIPMENT, THE PROJECT REPRESENTATIVE SHALL PROVIDE SMAQMD WITH THE ANTICIPATED CONSTRUCTION TIMELINE INCLUDING START DATE, AND NAME AND PHONE NUMBER OF THE PROJECT MANAGER AND ON-SITE FOREMAN.
3. THE PROJECT SHALL ENSURE THAT EMISSIONS FROM ALL OFF-ROAD DIESEL POWERED EQUIPMENT USED ON THE PROJECT SITE DO NOT EXCEED 40 PERCENT OPACITY FOR MORE THAN THREE MINUTES IN ANY ONE HOUR. ANY EQUIPMENT FOUND TO EXCEED 40 PERCENT OPACITY SHALL BE REPAIRED IMMEDIATELY, AND THE COUNTY OF SACRAMENTO AND SMAQMD SHALL BE NOTIFIED WITHIN 48 HOURS OF IDENTIFICATION OF NON-COMPLIANT EQUIPMENT. A VISUAL SURVEY OF ALL IN-OPERATION EQUIPMENT SHALL BE MADE AT LEAST WEEKLY, AND A MONTHLY SUMMARY OF THE VISUAL SURVEY RESULTS SHALL BE SUBMITTED THROUGHOUT THE DURATION OF THE PROJECT, EXCEPT THAT THE MONTHLY SUMMARY SHALL NOT BE REQUIRED FOR ANY 30-DAY PERIOD IN WHICH NO CONSTRUCTION ACTIVITY OCCURS. THE MONTHLY SUMMARY SHALL INCLUDE THE QUANTITY AND TYPE OF VEHICLES SURVEYED AS WELL AS THE DATES OF EACH SURVEY. THE SMAQMD AND/OR OTHER OFFICES MAY CONDUCT PERIODIC SITE INSPECTIONS TO DETERMINE COMPLIANCE. NOTHING IN THIS SECTION SHALL SUPERSEDE OTHER SMAQMD OR STATES RULES OR REGULATIONS. PRIOR TO CONSTRUCTION, CONTACT INFORMATION FOR RESPONSIBLE PROJECT REPRESENTATIVE SHALL BE PROVIDED TO DERA.
4. THE FOLLOWING CONSTRUCTION-RELATED MEASURES APPLY TO CONSTRUCTION ACTIVITIES WITHIN THE SPECIFIC PLAN AREA:
   A. WATER EXPOSED, GRADED SURFACES AT LEAST TWO TIMES PER DAY AND IF POSSIBLE; KEEP SOIL MOIST AT ALL TIMES.
   B. PROPERLY MAINTAIN DIESEL AND/OR GAS FUELED CONSTRUCTION EQUIPMENT.
   C. WATER HAUL ROADS AT LEAST TWO TIMES PER DAY.
   D. USE LOW VOC ARCHITECTURAL COATINGS.

CULTURAL RESOURCES

SHOULD ANY CULTURAL RESOURCES, SUCH AS STRUCTURAL FEATURES, UNUSUAL AMOUNTS OF BONE OR SHELL, ARTIFACTS, HUMAN REMAINS, OR ARCHITECTURAL REMAINS BE ENCOUNTERED DURING ANY DEVELOPMENT ACTIVITIES, WORK SHALL BE SUSPENDED AND THE DEPARTMENT OF ENVIRONMENTAL REVIEW AND ASSESSMENT SHALL BE IMMEDIATELY NOTIFIED AT 874-7914 AT THAT TIME. THE DEPARTMENT OF ENVIRONMENTAL REVIEW AND ASSESSMENT WILL COORDINATE ANY NECESSARY INVESTIGATION OF THE SITE WITH APPROPRIATE SPECIALISTS AS NEEDED. THE PROJECT PROPONENT SHALL BE REQUIRED TO IMPLEMENT ANY MITIGATION DEEMED NECESSARY FOR THE PROTECTION OF THE CULTURAL RESOURCES. IN ADDITION, PURSUANT TO SECTION 5097.97 OF THE STATE PUBLIC RESOURCES CODE, AND SECTION 7050.5 OF THE STATE HEALTH AND SAFETY CODE, IN THE EVENT OF THE DISCOVERY OF HUMAN REMAINS, ALL WORK IS TO STOP AND THE COUNTY CORONER SHALL BE IMMEDIATELY NOTIFIED. IF THE REMAINS ARE DETERMINED TO BE NATIVE AMERICAN, GUIDELINES OF NATIVE AMERICAN HERITAGE COMMISSION SHALL BE ADHERED TO IN THE TREATMENT AND DISPOSITION OF THE REMAINS.

MMRP NOTES - CONT.

WETLAND

PROVIDE EVIDENCE OF COMPLIANCE WITH THE WETLAND IMPACTS & MITIGATION, TO DERA, PRIOR TO THE START OF CONSTRUCTION.

PRIOR TO APPROVAL OF ANY GRADING AND/OR BUILDING PERMITS FOR ANY DEVELOPMENT IN AREAS OF THE SITE DESIGNATED JURISDICTIONAL WETLANDS AND/OR WITHIN FIFTY FEET OF THOSE WETLANDS, THE PROJECT APPLICANT OR PROPERTY OWNER SHALL OBTAIN ALL APPLICABLE PERMITS FROM THE STATE DEPARTMENT OF FISH AND WILDLIFE (CDFW), US FISH AND WILDLIFE SERVICE (USFWS) AND THE U.S. ARMY CORPS OF ENGINEERS (CORPS) AND SHALL PAY TO THE COUNTY OF SACRAMENTO AN AMOUNT BASED ON A RATE OF $35,000 PER ACRE IF LESS THAN 1:1 REPLACEMENT/COMPENSATION OCCURS THROUGH THE FEDERAL PERMITTING PROCESS FOR THE WETLANDS DELINEATED ON THE PROJECT SITE. ANY PAYMENT DUE SHALL BE COLLECTED BY THE DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT AND DEPOSITED IN THE COUNTY WETLANDS RESTORATION TRUST FUND. A COPY OF ANY/ALL REQUIRED CORPS AND DFG PERMITS AND VERIFICATION OF ANY REQUIRED PAYMENT SHALL BE SUBMITTED TO THE DEPARTMENT OF ENVIRONMENTAL REVIEW AND ASSESSMENT.

BIOLOGICAL SURVEY

PROVIDE A COPY OF THE USFWS BIOLOGICAL OPINION, ALONG WITH DOCUMENTATION OF COMPLIANCE WITH ALL MEASURES OF BIOLOGICAL OPINION, TO DERA, PRIOR TO THE START OF CONSTRUCTION.

MITIGATION MEASURE: TRICOLORED BLACKBIRD

PRIOR TO THE APPROVAL OF GRADING PLANS, SUBMIT A TRICOLORED BLACKBIRD MITIGATION PLAN TO THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE (CDFW) FOR REVIEW AND APPROVAL. THE PLAN SHALL INCLUDE THE FOLLOWING:

1. PRELIMINARY SURVEYS TO DETERMINE THE PRESENCE OF NESTING TRICOLORED BLACKBIRDS;
2. AVOIDANCE OF ACTIVE NESTING COLONIES PRESENT ON THE SITE TO THE EXTENT POSSIBLE THROUGH ESTABLISHMENT OF TEMPORARY SETBACKS AROUND THE COLONIES UNTIL A QUALIFIED BIOLOGIST VERIFIES THAT YOUNG BIRDS HAVE SUCCESSFULLY FLEDGED.

SWAINSON'S HAWK

IF CONSTRUCTION IS PROPOSED DURING THE RAPTOR BREEDING SEASON (FEBRUARY - AUGUST) A FOCUSED SURVEY FOR THE MIGRATORY BIRD NEST SHALL BE CONDUCTED WITHIN 30 DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION ACTIVITIES BY A QUALIFIED BIOLOGIST IN ORDER TO IDENTIFY ACTIVE NEST ON THE SITE. IF ACTIVE NEST ARE FOUND, NO CONSTRUCTION ACTIVITIES SHALL TAKE PLACE WITHIN 500 FEET OF THE NEST UNTIL THE YOUNG HAVE FLEDGED. TREES CONTAINING NEST THAT MUST BE REMOVED AS A RESULT OF PROJECT IMPLEMENTATION SHALL BE REMOVED DURING THE NON-BREEDING SEASON (SEPTEMBER - JANUARY). IF NO ACTIVE NEST ARE FOUND DURING THE FOCUSED SURVEY, NO FURTHER MITIGATION WILL BE REQUIRED.

PROVIDE EVIDENCE OF COMPLIANCE WITH THE SWAINSON'S HAWK FORAGING HABITAT MITIGATION, TO DERA, PRIOR TO THE START OF CONSTRUCTION.

GIANT GARTER SNAKE & NORTHWESTERN POND TURTLE

THE PROJECT SITE SHALL BE SURVEYED FOR GIANT GARTER SNAKES AND NORTHWESTERN POND TURTLE BY A QUALIFIED BIOLOGIST WITHIN 24 HOURS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES (INCLUDING CLEARING AND GRUBBING) LOCATED WITHIN 200 FEET OF ELDER OR GERBER CREEK. SURVEY OF THE AREA SHALL BE REPEATED IF A LAPSE IN CONSTRUCTION ACTIVITY OF TWO WEEKS OR GREATER OCCURS. IF A GIANT GARTER SNAKE AND/OR NORTHWESTERN POND TURTLE IS ENCOUNTERED DURING CONSTRUCTION, ACTIVITIES SHALL CEASE UNTIL APPROPRIATE CORRECTIVE MEASURES HAVE BEEN COMPLETED OR IT HAS BEEN DETERMINED THAT THE SNAKE AND/OR TURTLE WILL NOT BE HARMED. GIANT GARTER SNAKES AND NORTHWESTERN POND TURTLES ENCOUNTERED DURING CONSTRUCTION SHOULD BE ALLOWED TO MOVE AWAY ON THEIR OWN. CAPTURE AND RELOCATION OF TRAPPED OR INJURED INDIVIDUALS SHALL ONLY BE ATTEMPTED BY PERSONNEL OR INDIVIDUALS WITH CURRENT USFWS RECOVERY PERMITS. ANY INCIDENTAL TAKE SHALL BE REPORTED TO THE USFWS AT (916) 979-2725 AND DEPARTMENT OF ENVIRONMENTAL REVIEW AND ASSESSMENT AT (916) 874-7914 WITHIN ONE WORKING DAY. ANY GIANT GARTER SNAKE AND/OR NORTHWESTERN POND TURTLE SIGHTINGS SHALL BE REPORTED WITHIN 24 HOURS TO THE DEPARTMENT OF ENVIRONMENTAL REVIEW AND ASSESSMENT AT 874-7914.

"A QUALIFIED BIOLOGIST", WILL PERFORM THIS SURVEY.

PROVIDE SURVEY RESULTS, TO DERA, PRIOR TO THE START OF CONSTRUCTION.

GRADING NOTES

1. NORTH VINEYARD STATION BASIN E24B & ELDER CREEK REACH 1A(a) & 1B USED IN CONJUNCTION WITH THE FOLLOWING:
   A) SOILS REPORT PREPARED BY WALLACE-KUHL & ASSOCIATES PROJECT NO. WKA 5690.01
   B) THE SPECIFICATIONS FOR THE IMPROVEMENT OF INFRASTRUCTURE PREPARED BY MACKAY & SOMPS.
   C) THE SOILS ENGINEER TO TEST AND OBSERVE GRADING FOR THIS PROJECT IS YOUNGDAHL CONSULTING GROUP, INC.
2. ALL QUANTITIES SHOWN ON THIS PLAN ARE APPROXIMATE: CALCULATED EXCESS AND SHORTAGE ARE TO FINISHED ROUGH GRADE AND EXISTING GROUND. THE ACTUAL AMOUNT OF EARTH MOVED IS VARIABLE DEPENDENT ON COMPACTION, CONSOLIDATION, STRIPPING REQUIREMENTS, AND THE CONTRACTOR'S METHOD OF OPERATION.
3. ONE PRIMARY OBJECTIVE OF THE ROUGH GRADING PLAN IS TO ACHIEVE A DIRT BALANCE ON-SITE UNLESS OTHERWISE NOTED ON THIS PLAN. DURING ROUGH GRADING OF THIS PROJECT, CONTRACTOR SHALL COMPENSATE FOR ANY FUTURE UNDERGROUND UTILITY TRENCH SPOIL BY SELECTIVELY UNDERCUTTING STREETS AS APPROPRIATE, OR BY OTHER METHOD APPROVED BY THE ENGINEER.
4. PRE-GRADING INSPECTION: THE CONSULTING ENGINEER SHALL NOTIFY SACRAMENTO COUNTY IMMEDIATELY UPON COMPLETION OF STAKING AND TWO WORKING DAYS PRIOR TO COMMENCEMENT OF ANY GRADING BY THE CONTRACTOR. THE CONTRACTOR SHALL NOT START GRADING UNTIL COUNTY COMPLETES PRE-GRADING INSPECTION (PHONE 875-2700). ALL GRADING TO BE DONE IN CONFORMANCE WITH THE SOILS REPORT BY YOUNGDAHL CONSULTING GROUP, INC.
5. EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE COUNTY OF SACRAMENTO EROSION & SEDIMENT CONTROL STANDARDS & SPECIFICATION, OR AS APPROVED BY THE DIRECTOR OF COUNTY ENGINEERING.
6. THE COUNTY OF SACRAMENTO IS A MEMBER OF THE UNDERGROUND SERVICE ALERT (U.S.A.) ONE-CALL PROGRAM. THE CONTRACTOR, OR ANY SUBCONTRACTOR FOR THIS CONTRACT, SHALL NOTIFY MEMBERS OF THE U.S.A. TWO (2) WORKING DAYS PRIOR TO PERFORMING ANY EXCAVATION WORK BY CALLING THE TOLL-FREE NUMBER (1-800-227-2600). THOMAS BROS. 2004, PAGES 338. INDEXES A-3 AND B-3, RESPECTIVELY.

BEST MANAGEMENT PRACTICES DURING GRADING SHALL INCLUDE THE FOLLOWING DUST CONTROL MEASURES:

1. THE GRADING CONTRACTOR SHALL MAINTAIN A MINIMUM OF 2 FEET OF FREEBOARD IN ALL VEHICLES TRANSPORTING SOIL OR OTHER MATERIAL SUBJECT TO DISPERSION BY WIND.
2. ALL TRAFFIC ON UNPAVED ROAD ON THE PROJECT SITE SHALL BE LIMITED TO 15 MILES PER HOUR.

REGISTERED PROFESSIONAL ENGINEER
PAUL ROBERT HART
No. 49154
CIVIL
STATE OF CALIFORNIA

FOR MACKAY & SOMPS

NOTE: DATUM FOR THIS PROJECT IS NGVD 29

PRELIMINARY NOT FOR CONSTRUCTION

No.	Description	Init.	Date	By	AGENCY APPROVAL	Date

DATE: MARCH 2014
SCALE: AS NOTED
DRAWN BY: STAFF
DESIGNED BY: PH
CHECKED BY: PH

MACKAY & SOMPS
ENGINEERS PLANNERS SURVEYORS
1552 Eureka Road, Suite 100, Roseville, CA 95661 (916) 773-1189

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PLAN FOR THE IMPROVEMENT OF
ELDER CREEK PHASE 1A
GENERAL NOTES
COUNTY OF SACRAMENTO CALIFORNIA

SHEET 2 OF 18
PROJECT NO. 27095-EC1

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PROJECT SPECIFICATIONS

1. GENERAL

THESE PROJECT SPECIFICATIONS SHALL APPLY TO ALL DRIVEWAY AND PARKING LOT IMPROVEMENTS. THESE SPECIFICATIONS ALSO APPLY TO ROUGH GRADING AND BUILDING PAD CONSTRUCTION AS SHOWN ON THE ROUGH GRADING PLANS FOR VINEYARD CREEK THE WORK TO BE PERFORMED CONSISTS OF THE FURNISHING OF ALL LABOR, METHODS OF PROCESSES, IMPLEMENTS, TOOLS, MACHINERY, WATER AND MATERIALS NECESSARY AND REQUIRED FOR COMPLETION OF THE WORK

FOR THE PURPOSES OF THIS SPECIFICATION THE TERM "CONTRACTOR" SHALL MEAN "ALL CONTRACTORS" UNLESS OTHERWISE QUALIFIED.

2. SPECIFICATIONS AND STANDARDS

ALL WORK TO BE DONE WITH THIS PROJECT SHALL COMPLY WITH THE STANDARD SPECIFICATIONS AND STANDARD DETAILS OF THE FOLLOWING UNLESS SPECIFICALLY NOTED OTHERWISE:

- COUNTY OF SACRAMENTO

IF ANY DEVIATION FROM THE CONSTRUCTION PLANS OR SPECIFICATIONS OR AGENCY STANDARDS OR DETAILS IS MADE BY EITHER THE CONTRACTOR OR THE OWNER DURING THE COURSE OF CONSTRUCTION WITHOUT THE PRIOR NOTIFICATION, CONSENT, AND WRITTEN APPROVAL OF MACKAY & SOMPS, MACKAY & SOMPS IS NOT RESPONSIBLE FOR THE RESULTS OF SUCH DEVIATIONS.

3. QUALITY CONTROL

ALL PUBLIC IMPROVEMENT WORK BY CONTRACTOR SHALL BE DONE UNDER THE INSPECTION OF, AND TO THE SATISFACTION AND ACCEPTANCE OF, THE COUNTY ENGINEER OR THE DISTRICT ENGINEER. IN THE EVENT OF ANY DISPUTE ARISING AS TO THE INTERPRETATION OF THE LOCAL AGENCIES' SPECIFICATIONS OR DETAILS OR THE CHARACTER OF THE WORK DONE BY THE CONTRACTOR, THE DECISION OF THE CITY AND/OR DISTRICT ENGINEER SHALL BE CONCLUSIVE.

4. DISCREPANCIES

IF THE CONTRACTOR, IN THE COURSE OF THE WORK, FINDS ANY DISCREPANCY BETWEEN THE PLANS AND PHYSICAL CONDITIONS IN THE FIELD, OR ANY ERRORS OR OMISSION IN THE PLANS, IN THE LAYOUT OF SURVEY STAKES, AND/OR IN INSTRUCTIONS GIVEN, HE SHALL IMMEDIATELY INFORM MACKAY & SOMPS.

A MAJORITY OF ERRORS ARE EASILY DETECTABLE (AND CORRECTABLE WITH MINIMAL EXPENSE AND DISRUPTION) IF COMMON SENSE AND GOOD CONSTRUCTION PRACTICES ARE FOLLOWED. MACKAY & SOMPS IS NOT RESPONSIBLE FOR ERRANT CONSTRUCTION RESULTING FROM THE CONSTRUCTION PROCESS PROCEEDING BLINDLY FROM STAKES AND/OR PLANS WITHOUT CROSS REFERENCING BETWEEN THE TWO. THE CONTRACTOR SHALL CONDUCT ROUTINE CHECKS PRIOR TO AND DURING CONSTRUCTION AND INSTALLATION OF IMPROVEMENTS AND SHALL HAVE PLANS AVAILABLE AT THE JOB SITE AT ALL TIMES. CHECKS WILL INCLUDE (BUT NOT BE LIMITED TO) THE FOLLOWING TYPES OF ACTIVITIES:

PLACING STRING LEVELS ON STRINGLINE CONTROLS TO CONFIRM PROPER SLOPE BEFORE USING THEM FOR CONSTRUCTION.

A) USING STRAIGHT EDGE AND HAND LEVEL TO CONFIRM CROSS SLOPES AND ADEQUACY OF STREET DRAINAGE PRIOR TO PLACING PAVEMENT.

B) SUBMITTING SHOP DRAWINGS OF FACTORY (OR FIELD) MANUFACTURED FACILITIES WHICH CONTAIN CRITICAL DIMENSIONS OR OTHER CRITICAL CHARACTERISTICS TO MACKAY & SOMPS OR OTHER CONSULTANTS FOR ACKNOWLEDGMENT WELL IN ADVANCE OF CONSTRUCTION.

C) TO COMPARE WHAT IS BEING CONSTRUCTED IN THE FIELD TO WHAT IS SHOWN ON THE PLANS. IMPROVEMENTS SHALL NOT BE CONSTRUCTED BY USING CONSTRUCTION STAKES ALONE.

ANY TIME THE CONTRACTOR DOUBTS THE REASONABLENESS OR CORRECTNESS OF AN ELEMENT IN THE PLANS OR FIELD CONTROL STAKING, THE CONTRACTOR SHALL CONTACT MACKAY & SOMPS FOR CLARIFICATION OR CONFIRMATION. MACKAY & SOMPS WILL ENDEAVOR TO RESPOND TO ANY SUCH INQUIRY MADE IN GOOD FAITH ON A HIGHEST PRIORITY BASIS, AND WILL DO SO FREE OF CHARGE TO EITHER THE OWNER OR THE CONTRACTOR, EVEN IF THERE IS NO ERROR OR OMISSION. ANY WORK DONE AFTER SUCH A DISCOVERY, UNTIL THE PROBLEM HAS BEEN REMEDIED OR DISPELLED, WILL BE DONE AT THE CONTRACTOR'S OWN RISK.

5. PERMITS, CONFORMANCE WITH LAWS

CONTRACTOR SHALL COMPLY WITH APPLICABLE LAWS, ORDINANCES, ORDERS, RULES, AND REGULATIONS OF EVERY KIND RELATING TO THE PERFORMANCE OF THE WORK, AND IF ANY PERMIT SHALL BE REQUIRED BY ANY LOCAL GOVERNMENTAL AGENCY OR SPECIAL DISTRICT OR BE NECESSARY BY LAW, ORDINANCE, OR OTHER REGULATIONS, THE SAME SHALL BE PROCURED BY CONTRACTOR AT THEIR OWN EXPENSE.

6. SAFETY AND LIABILITY

CONTRACTOR AGREES THAT IT SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND MACKAY & SOMPS HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPT FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR MACKAY & SOMPS RESPECTIVELY. THE COST OF ASSURING JOB SAFETY INCLUDING, BUT NOT LIMITED TO FENCING, TRENCH SHORING, TRAFFIC CONTROL AND/OR TRAFFIC WARNING DEVICES SHALL BE INCLUDED IN ALL APPLICABLE BID ITEMS. JOBSITE SAFETY ASSURANCES INCLUDE PROVIDING A SAFE JOBSITE FOR THE SETTING OF CONSTRUCTION STAKES. THE DUTIES OF MACKAY & SOMPS DO NOT INCLUDE ANY REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES IN, ON, OR NEAR THE CONSTRUCTION SITE.

ALL CONTRACTORS ARE RESPONSIBLE FOR TEMPORARY TRAFFIC CONTROL AS PART OF IT'S WORK, INCLUDING THE PREPARATION OF TRAFFIC CONTROL PLANS AND OBTAINING APPROVAL OF SAME AS REQUIRED.

7. COORDINATION

CONTRACTORS ARE TO NOTIFY ALL UTILITY COMPANIES IN ADVANCE OF CONSTRUCTION TO FIELD LOCATE UTILITIES (CALL UNDERGROUND SERVICE ALERT (U.S.A.) AT 1-800-227-2600). IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXISTENCE AND LOCATION OF ALL UTILITIES.

IT IS UNDERSTOOD BY THE CONTRACTOR THAT IT WILL BE RESPONSIBLE FOR THE ADVANCE COORDINATION AND SCHEDULING OF WORK BETWEEN ITSELF AND/OR IT'S SUBCONTRACTORS AND ALL UTILITY COMPANIES.

ANY PUBLIC UTILITY INSTALLATION OBSTRUCTING THE WORK TO BE PERFORMED HEREUNDER SHALL BE MOVED AT THE EXPENSE OF THE PUBLIC UTILITY COMPANY OR OWNER AND WITHOUT COST TO THE CONTRACTOR UNLESS SPECIFIED OTHERWISE ON THE PLANS OR IN THESE SPECIFICATIONS.

NO ADDITIONAL COST SHALL BE CHARGED TO THE OWNER BY THE CONTRACTOR DUE TO DELAYS, INCONVENIENCE OR OTHER ADDITIONAL EXPENSES ASSOCIATED WITH THE PRESENCE OF SUCH OBSTRUCTIONS.

8. PRECONSTRUCTION CONFERENCE

PRIOR TO THE BEGINNING OF WORK, THERE WILL BE A PRECONSTRUCTION CONFERENCE HELD AT A TIME AND PLACE TO BE SPECIFIED BY THE OWNER. REPRESENTATIVES OF THE CITY OF ELK GROVE, MACKAY & SOMPS, OWNER, AND OTHERS AS APPROPRIATE, (I.E. SOILS ENGINEER, UTILITY COMPANIES, ETC.) WILL MEET WITH THE CONTRACTORS TO REVIEW THE PROPOSED WORK AND DISCUSS CONSTRUCTION SCHEDULING.

9. GENERAL

DEMOLITION: DEMOLITION, IF ANY, SHALL BE DONE UNDER SEPARATE CONTRACT WITH THE OWNER. CONTRACTOR SHALL BE RESPONSIBLE FOR NECESSARY DEMOLITION PERMITS FROM CITY.

EXISTING IMPROVEMENTS: PARTICULAR CARE SHOULD BE EXERCISED BY THE CONTRACTOR WHILE WORKING (ESPECIALLY CUTTING AND FILLING) NEAR ADJACENT PROPERTIES. EXTREME CARE MUST BE TAKEN WHEN WORKING AROUND ANY EXISTING FACILITIES. CONTRACTOR WILL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY IMPROVEMENT DAMAGED BY IT OR IT'S SUBCONTRACTORS OR MATERIAL SUPPLIERS.

EXISTING UTILITY SERVICES: IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROTECT AND LEAVE IN-SERVICE EXISTING UTILITY SERVICES SUCH AS GAS, POWER, COMMUNICATION, WATER, SANITARY STORM, ETC. UNLESS OTHERWISE SPECIFIED ON PLANS.

POLLUTION CONTROL: A STORM WATER POLLUTION PREVENTION PLAN WILL BE ON FILE AT THE JOB SITE. THIS PLAN DESCRIBES THE MANNER IN WHICH POTENTIAL SOURCES OF POLLUTION WILL BE MANAGED ON THE SITE AND WILL INCLUDE PROVISIONS FOR EROSION CONTROL.

THE CONTRACTOR SHALL FAMILIARIZE ITSELF WITH THE PROVISIONS OF THIS PLAN AND ALL OTHER LOCAL REQUIREMENTS AND CONDUCT ALL ITS OPERATIONS AND ACTIVITIES IN ACCORDANCE WITH SAME. THE PLAN WILL PROVIDE JOB SITE RULES FOR PROHIBITED OPERATIONS WHEN RAIN IS EXPECTED; EQUIPMENT FUELING, CLEANING, REPAIR & MAINTENANCE; MATERIAL DELIVERY, STOCKPILING & STORAGE; JOB SITE CLEANUP, ETC.. PROVISIONS OF THIS PLAN ARE NOT LIMITED TO TIMES OF INCLEMENT WEATHER.

ARRANGEMENTS FOR THE INSTALLATION, PROTECTION, AND/OR MAINTENANCE OF EROSION CONTROL MEASURES (BALES, WADDLES, BERMS, SWALES, PONDS, EROSION CONTROL FENCING, HYDROSEEDING, TEMPORARY PIPES AND DRAINS, TEMPORARY ARMORING, ETC.) REQUIRED BY THE STORM WATER POLLUTION PREVENTION PLAN ARE TO BE COORDINATED WITH THE OWNER.

IN ADDITION TO THE REQUIREMENTS NOTED ABOVE, ALL CONTRACTORS ARE TO COMPLY WITH THE FOLLOWING PROVISIONS.

- THE CONTRACTOR SHALL TRAIN ALL EMPLOYEES/SUBCONTRACTORS ON STORM WATER POLLUTION PREVENTION.
- WASHING DOWN OF STREETS OR HARD SURFACES WITH WATER THAT ENTERS THE STORM DRAINAGE SYSTEMS IS PROHIBITED. RATHER, CONTRACTORS ARE TO SWEEP ROADWAYS AS NECESSARY TO AVOID POLLUTANTS ENTERING THE STORM DRAIN SYSTEM.
- CONTRACTORS ARE TO COMPLY WITH ALL RECYCLING REQUIREMENTS OF THE LOCAL AGENCIES.
- CONTRACTORS SHALL NOT ALLOW SAW CUT SLURRY TO ENTER THE STORM DRAIN SYSTEM.
- CONTRACTORS SHALL INSPECT VEHICLES AND EQUIPMENT ARRIVING ON THE PROJECT FOR LEAKING FLUIDS AND SHALL PROMPTLY REPAIR ANY LEAKING VEHICLES OR EQUIPMENT. DRIP PANS SHALL BE USED TO CATCH LEAKS UNTIL REPAIRS ARE MADE. LEAKING FLUIDS SHALL BE PROPERLY DISPOSED

10. STREETWORK CONSTRUCTION

IN ADDITION TO GRADING, THE GRADING CONTRACTOR SHALL BE RESPONSIBLE FOR THE FOLLOWING OPERATIONS:

A. PROVIDE AND DEPOSIT IN-PLACE AT JOB SITE ALL PAVEMENT, AND BASE ROCK FOR PAVEMENT, CURB, GUTTER, SIDEWALK, HANDICAPPED RAMPS, AND DRIVEWAY APPROACHES CALLED FOR ON THE PLANS.

B. INSTALLATION OF ALL SIGNS, SURVEY MONUMENTS, PAVEMENT MARKINGS, STRIPING AND BARRICADES CALLED FOR ON THE PLANS. (NOTE THAT ALL NEW AND EXISTING MANHOLE CASTINGS, WATER VALVE BOX CASTINGS, ETC. WILL BE ADJUSTED TO GRADE AND HAVE NEW PAVEMENT PLACED AROUND CASTINGS BY THE UNDERGROUND CONTRACTOR.)

11. UNDERGROUND CONSTRUCTION

THE UNDERGROUND CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF WATER MAINS, STORM DRAINAGE, SANITARY SEWER FACILITIES AND THEIR RESPECTIVE APPURTENANCES AND CERTAIN INLETS (INCLUDING WATER QUALITY STENCILING). IT SHALL ALSO BE RESPONSIBLE FOR LOWERING NEW AND PREVIOUSLY EXISTING MANHOLES, VALVE BOXES, CLEANOUTS, ETC. TO BELOW SUBGRADE LEVEL (FOR COMPLETION OF FINISH GRADING, ROCKING AND PAVING BY THE GRADING CONTRACTOR) AND RAISING SAME TO FINISH GRADE INCLUDING ALL PATCH PAVING NECESSARY. THE UNDERGROUND CONTRACTOR SHALL ALSO PROVIDE A EFFECTIVE METHOD OF MARKING SEWER LATERALS AND WATER SERVICES FOR USE BY THE CONCRETE CONTRACTOR IN MARKING CURBS. HE SHALL ALSO MARK WATER VALVE LOCATIONS BY APPROPRIATE REFERENCE INDICATORS ON CURBS AS MAY BE REQUIRED BY THE CITY/ DISTRICT.

THE UNDERGROUND CONTRACTOR SHALL INCLUDE IN ITS BID THE COSTS OF ALL IMPORTED BACKFILL MATERIAL THAT MAY BE REQUIRED BY THE SOILS ENGINEER OR BY THE PUBLIC AGENCIES HAVING JURISDICTION. NO CLAIM FOR EXTRA PAYMENT WILL BE ALLOWED FOR IMPORTED TRENCH BACKFILL OR TRENCH BEDDING MATERIAL AS REQUIRED BY THE SOILS ENGINEER OR BY THE CITY, OR DISTRICT HAVING JURISDICTION.

THE UNDERGROUND CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND SHORING OF SEWER TRENCHES IN ACCORDANCE WITH ALL APPLICABLE OCCUPATIONAL SAFETY LAWS. COST FOR THIS SHALL BE INCLUDED IN UNIT PRICES FOR VARIOUS ITEMS OF WORK AND NO ADDITIONAL COMPENSATION SHALL BE MADE. IT IS SUGGESTED THAT THE CONTRACTOR ENGAGE A CONSULTING ENGINEER TO DESIGN SHORING.

THE UNDERGROUND CONTRACTOR IS RESPONSIBLE TO REVIEW THE PLANS AND SITE OF WORK TO DETERMINE THE EXTENT OF PAVEMENT REMOVAL AND/OR REPAIR OR OTHER REMOVAL AND REPLACEMENT OR DEMOLITION THAT WILL BE REQUIRED TO CONSTRUCT UNDERGROUND LINES THROUGH EXISTING PAVEMENT OR OTHER AREAS. COST OF PAVEMENT, REPAIR, OR OTHER REMOVAL AND REPLACEMENT AND/OR REPAIR REQUIRED SHALL BE INCLUDED IN THE UNIT PRICES OF THE APPLICABLE ITEMS OF WORK AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED THEREFORE.

THE UNDERGROUND CONTRACTOR SHALL INCLUDE IN ITS BID THE COSTS OF ALL FITTINGS, SHORTER THAN STANDARD PIPE LENGTHS, OR BEVELED END PIPE THAT ARE REQUIRED TO ACHIEVE THE PIPE ALIGNMENTS SHOWN ON THE PLANS WHETHER OR NOT THESE ITEMS ARE SPECIFICALLY CALLED FOR ON THE PLANS OR BID PROPOSAL FORMS, AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED THEREFORE.

THE UNDERGROUND CONTRACTOR SHALL COMMENCE CONSTRUCTION FROM THE LOW END OF ALL GRAVITY LINES. SHOULD THE UNDERGROUND CONTRACTOR FAIL TO DO SO, AND SHOULD SUCH FAILURE RESULT IN AN UNDERGROUND SYSTEM THAT WILL NOT FUNCTION PROPERLY, THE UNDERGROUND CONTRACTOR SHALL BE RESPONSIBLE TO REMEDY THE SITUATION AT HIS OWN COST AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED THEREFORE.

THE UNDERGROUND CONTRACTOR IS RESPONSIBLE FOR REVIEWING THE PROJECT'S SOILS REPORT. IF SUBSURFACE CONDITIONS REQUIRE A CHANGE IN TRENCHING METHODS FROM THAT ANTICIPATED, NO EXTRA COMPENSATION WILL BE ALLOWED. THE CONTRACTOR IS WELCOME TO OBTAIN HIS OWN SOIL BORINGS IF HE SO DESIRES. THIS SOILS WORK SHALL BE COORDINATED WITH THE OWNER.

THE UNDERGROUND CONTRACTOR SHALL EXPOSE AND VERIFY THE ELEVATION AND ALIGNMENT OF EXISTING UTILITY SYSTEMS TO BE CONNECTED TO. DISCREPANCIES, IF ANY, SHALL BE REPORTED TO MACKAY & SOMPS IN ACCORDANCE WITH THE "DISCREPANCIES" SECTION OF THESE SPECIFICATIONS.

IT IS SOMETIMES REQUIRED OR REQUESTED THAT THE OWNER'S ENGINEER PROVIDE GRADES FOR THE UPSTREAM END OF SANITARY LATERALS. IF THIS IS DONE, THE UNDERGROUND CONTRACTOR SHALL NOT ASSUME THAT THE LATERALS ARE TO BE LAID ON A STRAIGHT GRADE FROM THE MAIN TO THE END OF THE LATERAL. THE UNDERGROUND CONTRACTOR SHALL REVIEW THE PLANS TO DETERMINE IF GRADE BREAKS IN THE LATERAL ARE NECESSARY (22.5° MAXIMUM DEFLECTION) OR IF WYES NEED TO BE SET A CERTAIN WAY TO AVOID CONFLICTS WITH OTHER UTILITIES AND SHALL CONSTRUCT THE LATERAL AND WYE.

12. GRADING/UNDERGROUND COORDINATION

A. BACKFILL FOR UTILITY LINES SHALL BE AS REQUIRED BY THE SOILS ENGINEER AND CITY/DISTRICT. BACKFILL SHALL BE OBSERVED BY THE SOILS ENGINEER. SUCH OBSERVATIONS SHALL BE SCHEDULED AND COORDINATED BY THE UNDERGROUND CONTRACTOR. SOILS ENGINEER'S FEES WILL BE PAID BY THE OWNER.

B. THE UNDERGROUND CONTRACTOR SHALL MOVE SPOILS GENERATED FROM TRENCHES TO UNDERCUT STREETS. THIS WORK SHALL BE COORDINATED WITH THE GRADING CONTRACTOR.

C. THE GRADING CONTRACTOR SHALL CONSULT WITH THE UNDERGROUND CONTRACTOR PRIOR TO GRADING SO THAT PROPER UNDERCUTTING TO ACCOMMODATE ANTICIPATED TRENCH SPOILS CAN BE ACCOMPLISHED.

D. VARIOUS AGENCIES AND/OR UTILITY DISTRICTS HAVE ESTABLISHED REQUIREMENTS FOR SUBGRADE PREPARATION WHICH MUST BE ATTAINED PRIOR TO WATER MAIN INSTALLATION. IT SHALL BE THE UNDERGROUND CONTRACTOR'S RESPONSIBILITY TO CONFORM TO THESE REQUIREMENTS AND BEAR THE COST FOR REGRADING STREET AREAS IF REQUIRED. ORIGINAL ROUGH GRADE STAKES ARE TO BE USED TO RE-ESTABLISH SUBGRADE.

13. CONCRETE CONSTRUCTION

THE CONCRETE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FOLLOWING CONSTRUCTION ITEMS:

A. CONSTRUCTION OF ALL CURB, GUTTER, SIDEWALK, HANDICAPPED RAMPS, CURB INLETS AND CONCRETE. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONCRETE REMOVAL AND DISPOSAL AS CALLED FOR ON THE PLANS UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS OR ON THE BID PROPOSAL FORM.

B. CONSTRUCTION OF ALL CURB, GUTTER, SIDEWALK AND HANDICAP RAMPS SHALL BE AS SPECIFIED ON THE COUNTY STANDARD DETAILS AND/OR AS SHOWN ON IMPROVEMENT PLANS.

C. MARKING SEWER LATERAL AND WATER SERVICE LOCATIONS IN THE CURB, AND "WATER QUALITY" STENCILING OF STORM INLETS.

D. EXPOSE AND VERIFY LOCATION OF "AS-BUILT" STORM LATERAL WHILE EXCAVATING FOR STORM WATER INLET. DISCREPANCIES, IF ANY, SHALL BE REPORTED TO MACKAY & SOMPS IN ACCORDANCE WITH THE "DISCREPANCIES" SECTION OF THESE SPECIFICATIONS.

E. IF THE CURB AND SIDEWALK IS MACHINE POURED, THE CONCRETE CONTRACTOR SHALL LEAVE "OPENINGS" THAT ARE A MINIMUM OF 10 FEET WIDE FOR THE STORM WATER INLETS OR EXPOSE, VERIFY, AND MARK THE LOCATION OF ALL STORM LATERAL STUBS PRIOR TO THE POUR IF SMALLER "OPENINGS" ARE DESIRED.

F. IF UNDERGROUND UTILITY FACILITIES ARE INSTALLED PRIOR TO POURING STORM WATER INLETS, THE CONCRETE CONTRACTOR SHALL USE APPROPRIATE CARE IN EXCAVATING FOR THE STORM WATER INLETS. IF THE UNDERGROUND UTILITY FACILITIES ARE DAMAGED THROUGH THE CONCRETE CONTRACTOR'S ACTIVITIES, THE CONCRETE CONTRACTOR WILL BE HELD RESPONSIBLE FOR SAID DAMAGES.

ABBREVIATIONS

AB	AGGREGATE BASE	MAX	MAXIMUM
AC	ASPHALT CONCRETE	MH	MANHOLE
ARV	AIR RELEASE VALVE	MIN	MINIMUM
BC	BACK-OF-CURB	PL	PROPERTY LINE
BO	BLOW-OFF	PED	PEDESTRIAN
BW	BOTTOM OF WALL	POC	POINT OF CONNECTION
C	CURB	PUE	PUBLIC UTILITY EASEMENT
CATV	CABLE TELEVISION	RCP	REINFORCED CONCRETE PIPE
C/L	CENTER LINE	R/W	RIGHT-OF-WAY
C/O	CLEAN OUT TO GRADE	RT	RIGHT
CMP	CORRUGATED METAL PIPE	SAC CO	SACRAMENTO COUNTY
CONST	CONSTRUCT	SBL	SETBACK LINE
DI	DROP INLET	S/W	SIDEWALK
DIA	DIAMETER	SMUD	SACRAMENTO MUNICIPAL UTILITIES DISTRICT
DTL	DETAIL	SD	STORM DRAIN
D/W	DRIVEWAY	SDMH	STORM DRAIN MANHOLE
ESMNT	EASEMENT	SHT	SHEET
EP	EDGE OF PAVEMENT	SS	SANITARY SEWER
EX OR EXIST	EXISTING	SSMH	SANITARY SEWER MANHOLE
F OR (F)	FUTURE	SQ FT	SQUARE FEET
FB	FLUSHING BRANCH	STD	STANDARD
FES	FLARED END SECTION	T	TELEPHONE
FG	FINISH GRADE	TB	TOP OF BANK
FH	FIRE HYDRANT	TOE	TOE OF SLOPE
FL	FLOW LINE	TOP	TOP OF BANK
G	GAS	TC	TOP OF CURB
HGL	HYDRAULIC GRADE LINE	T-MAIN	TRANSMISSION MAIN
ID	INSIDE DIAMETER	TS	TOP OF SLAB
INV	INVERT	TYP	TYPICAL
IS	IRRIGATION SLEEVE	W	WATER MAIN
LF	LINEAL FEET		
LE	LANDSCAPE EASEMENT		
LT	LEFT		

REGISTERED PROFESSIONAL ENGINEER
PAUL ROBERT WAFT
No. 49154
CIVIL
STATE OF CALIFORNIA

FOR MACKAY & SOMPS

NOTE: DATUM FOR THIS PROJECT IS NGVD 29

PRELIMINARY
NOT FOR
CONSTRUCTION

No.	Description	Init.	Date	By	AGENCY APPROVAL	Date
		Engineer				

DATE: MARCH 2015
SCALE: AS NOTED
DRAWN BY: STAFF
DESIGNED BY: PH
CHECKED BY: PH

MACKAY & SOMPS
ENGINEERS PLANNERS SURVEYORS
1552 Eureka Road, Suite 100, Roseville, CA 95661 (916) 773-1188

PLAN FOR THE IMPROVEMENT OF
ELDER CREEK PHASE 1
M&S SPECIFICATIONS

CALIFORNIA

COUNTY OF SACRAMENTO

SHEET 3 OF 18

PROJECT NO.
27095-EC1

Submittal 03-13-2015

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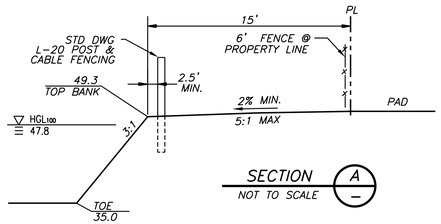

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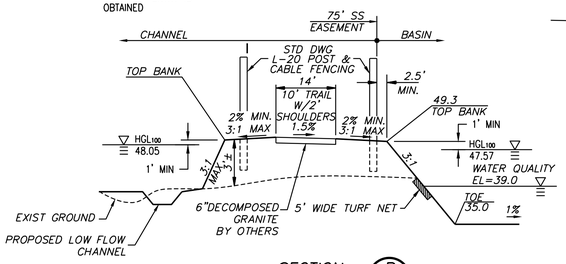
NO GRADING PERMITTED IN THIS AREA UNTIL A RIGHT-OF-ENTRY IS OBTAINED



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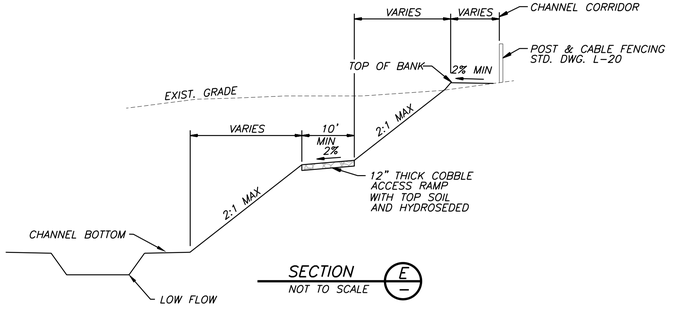

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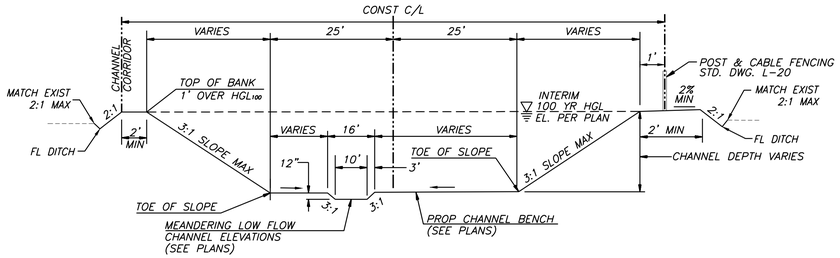

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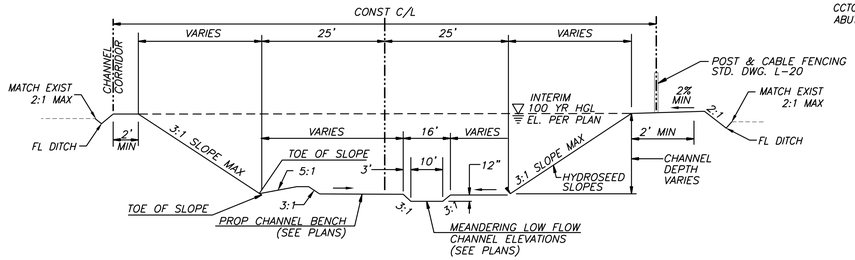

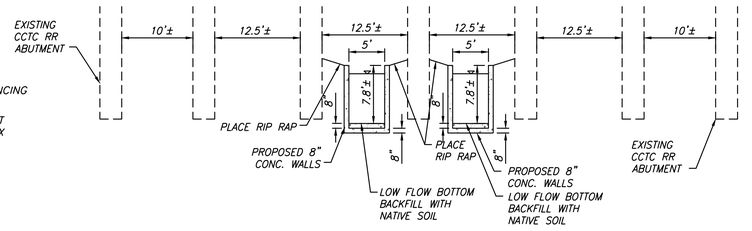

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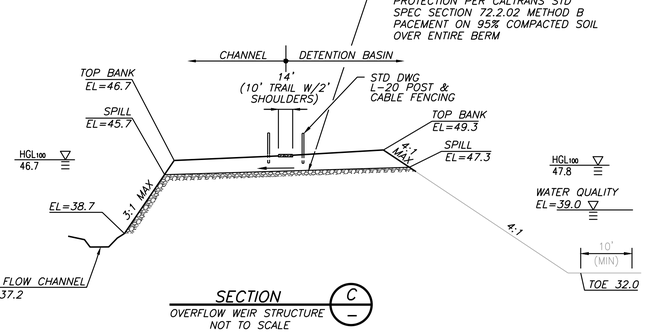

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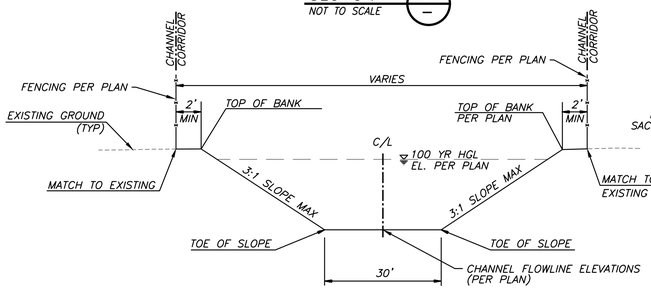

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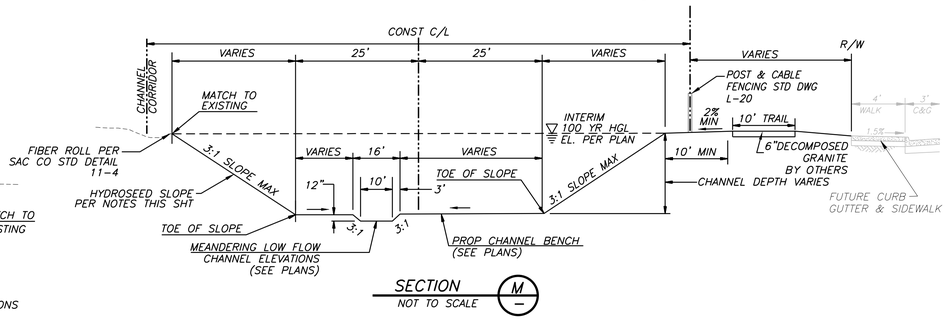

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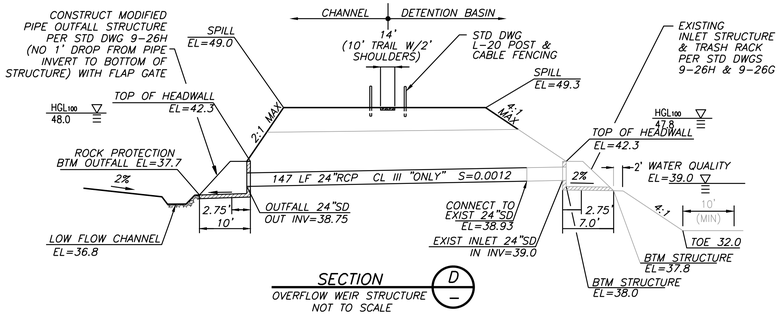

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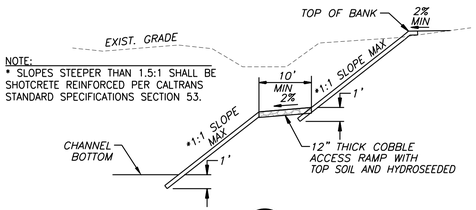

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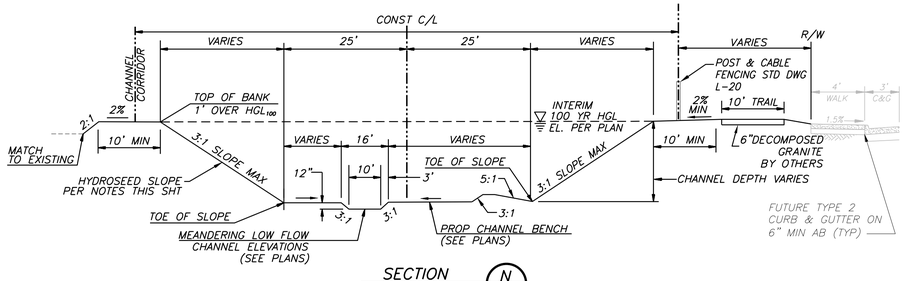

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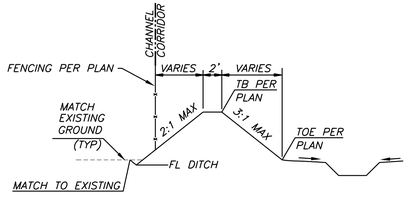

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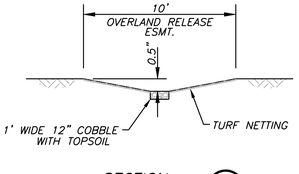

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FOR MACKAY & SOMPS

NOTE: DATUM FOR THIS PROJECT IS NGVD 29

PRELIMINARY NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
PAUL ROBERT HART
No. 49154
CIVIL
STATE OF CALIFORNIA

No.	Description	Init.	Date	By	Date
		Engineer		AGENCY	APPROVAL

DATE: MARCH 2015
SCALE: AS NOTED
DRAWN BY: STAFF
DESIGNED BY: PH
CHECKED BY: PH

MACKAY & SOMPS
ENGINEERS
PLANNERS
SURVEYORS
1552 Eureka Road, Suite 100, Roseville, CA 95661 (916) 773-1189

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PLAN FOR THE IMPROVEMENT OF
ELDER CREEK PHASE 1A
GRADING SECTIONS & DETAILS
COUNTY OF SACRAMENTO CALIFORNIA

SHEET 8 OF 18
PROJECT NO. 27095-EC1

Submittal 03-13-2015

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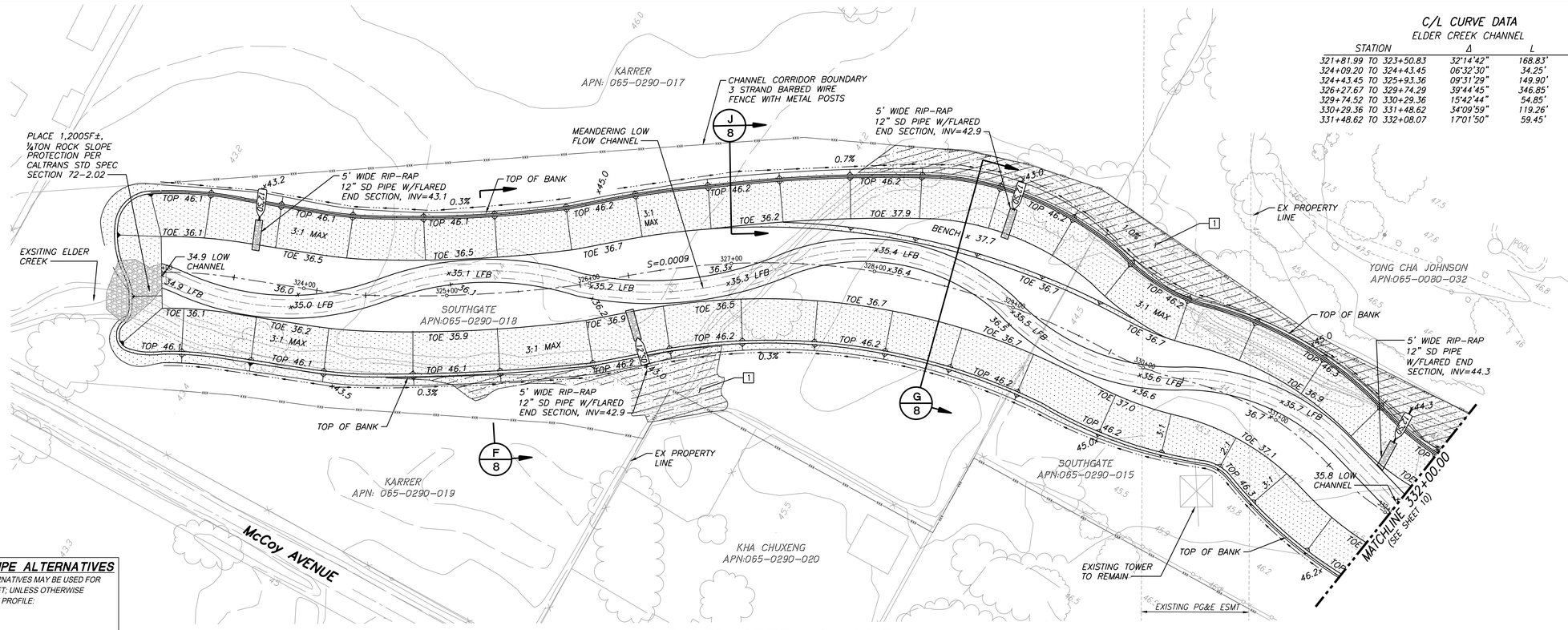


C/L CURVE DATA
ELDER CREEK CHANNEL

STATION	Δ	L	R
321+81.99 TO 323+50.83	32°14'42"	168.83'	300.00'
324+09.20 TO 324+43.45	06°32'30"	34.25'	300.00'
324+43.45 TO 325+93.36	09°31'29"	149.90'	901.76'
326+27.67 TO 329+74.29	39°44'45"	346.85'	500.00'
329+74.52 TO 330+29.36	15°42'44"	54.85'	200.00'
330+29.36 TO 331+48.62	34°09'59"	119.26'	200.00'
331+48.62 TO 332+08.07	17°01'50"	59.45'	200.00'

REGISTERED PROFESSIONAL ENGINEER
PAUL ROBERT HART
No. 49154
CIVIL
STATE OF CALIFORNIA

FOR MACKAY & SOMPS

NOTE: DATUM FOR THIS PROJECT IS NGVD 29

PRELIMINARY
NOT FOR
CONSTRUCTION

0 20 40 80
SCALE: 1"=40'

PLAN KEYNOTES

[1] EXISTING CREEK SECTIONS THAT FALL OUTSIDE OF PROPOSED CHANNEL BANKS MUST BE FILLED IN TO ALLOW FOR PROPER DRAINAGE.

NOTE TO THE CONTRACTOR

REMOVE EXISTING FENCE WITHIN CREEK SECTION.

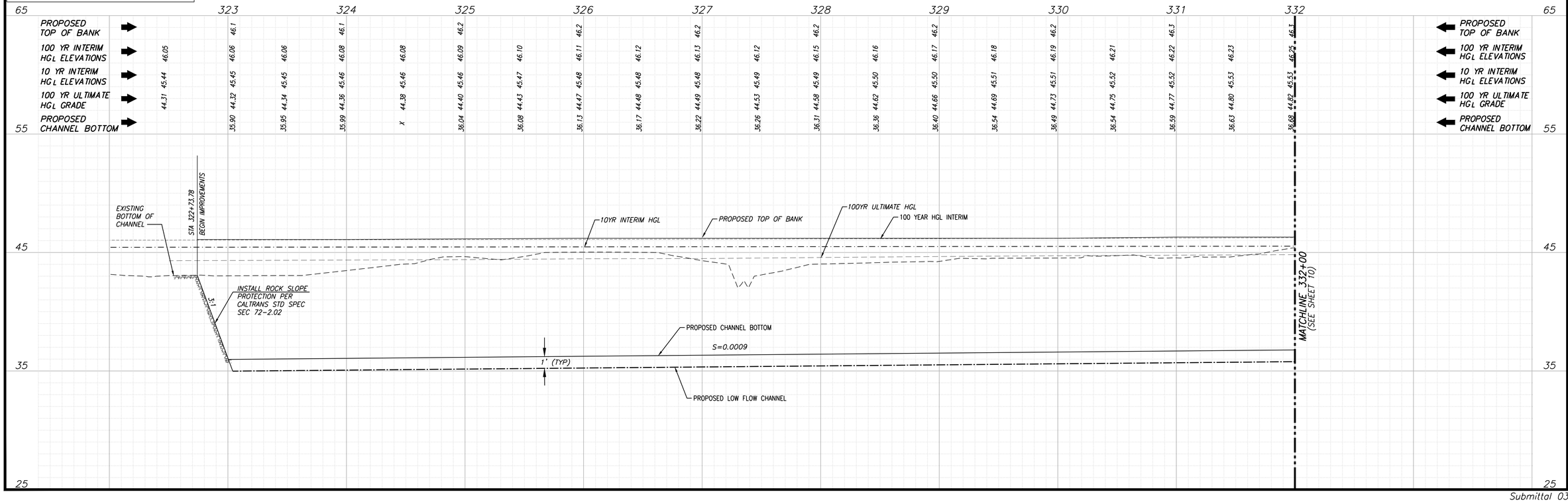
STORM DRAIN PIPE ALTERNATIVES

THE FOLLOWING PIPE ALTERNATIVES MAY BE USED FOR STORM DRAIN ON THIS SHEET; UNLESS OTHERWISE SPECIFIED AS "ONLY" IN THE PROFILE:

- RCP (CL-3, SIZE 12")
- CMP (SIZE 12")

PIPE ALTERNATIVES MUST MEET OR EXCEED DEPTH AND STRENGTH REQUIREMENTS OF SPECIFIED PIPE.

ELDER CREEK CHANNEL
STA 322+00.00 TO STA 332+00.00



Submittal 03-13-2015

No.	Description	Init.	Date	By	AGENCY APPROVAL	Date
		Engineer				

DATE: MARCH 2015
SCALE: 1"=40' H, 1"=4' V
DRAWN BY: STAFF
DESIGNED BY: VH
CHECKED BY: PH

MacKAY & SOMPS
ENGINEERS PLANNERS SURVEYORS
1552 Eureka Road, Suite 100, Roseville, CA 95661 (916) 773-1189

PLAN FOR THE IMPROVEMENT OF
ELDER CREEK PHASE 1A
ELDER CREEK STA 322+00.00 TO 332+00.00
COUNTY OF SACRAMENTO CALIFORNIA

SHEET 9 OF 18
PROJECT NO. 27095-EC1

3-13-2015 10:49:28 xhumphray P:\27095_PH2\DES\IP\EC1\10-VC2-EC1-GP.dwg
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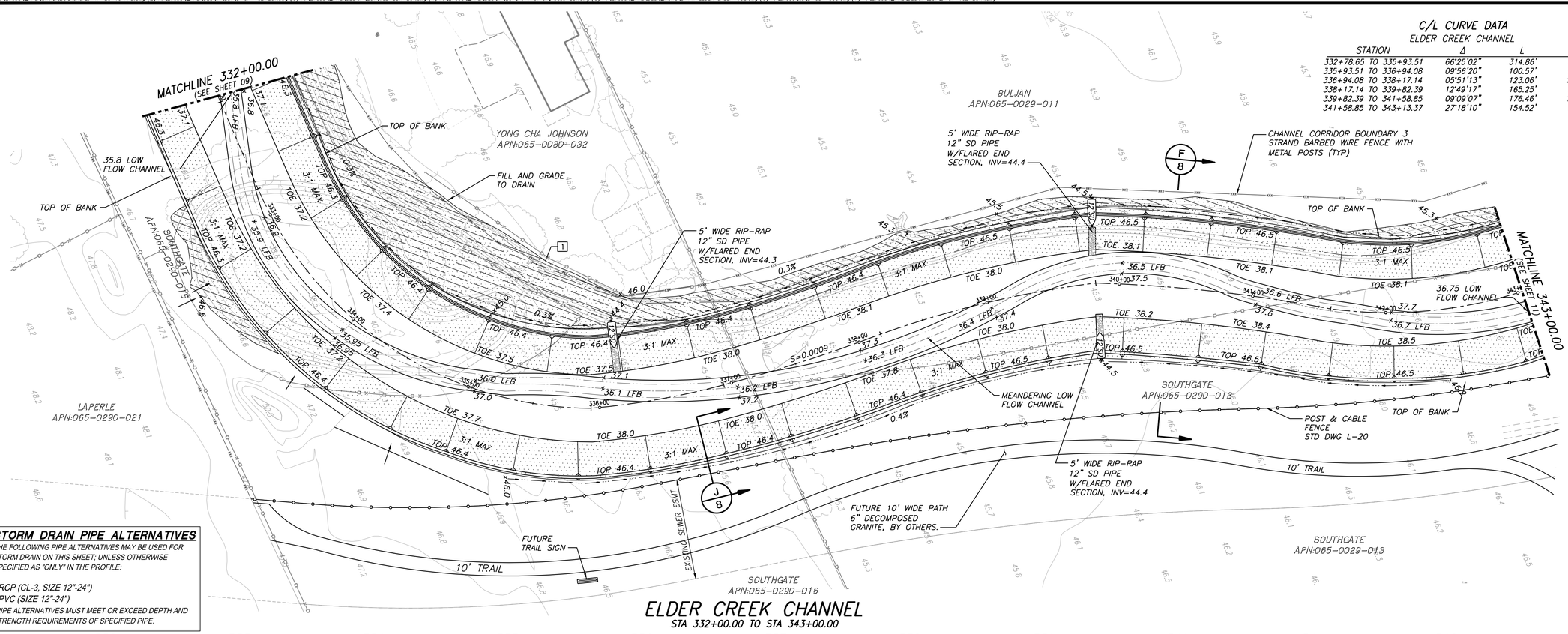


ELDER CREEK CHANNEL

STA 332+00.00 TO STA 343+00.00

C/L CURVE DATA
ELDER CREEK CHANNEL

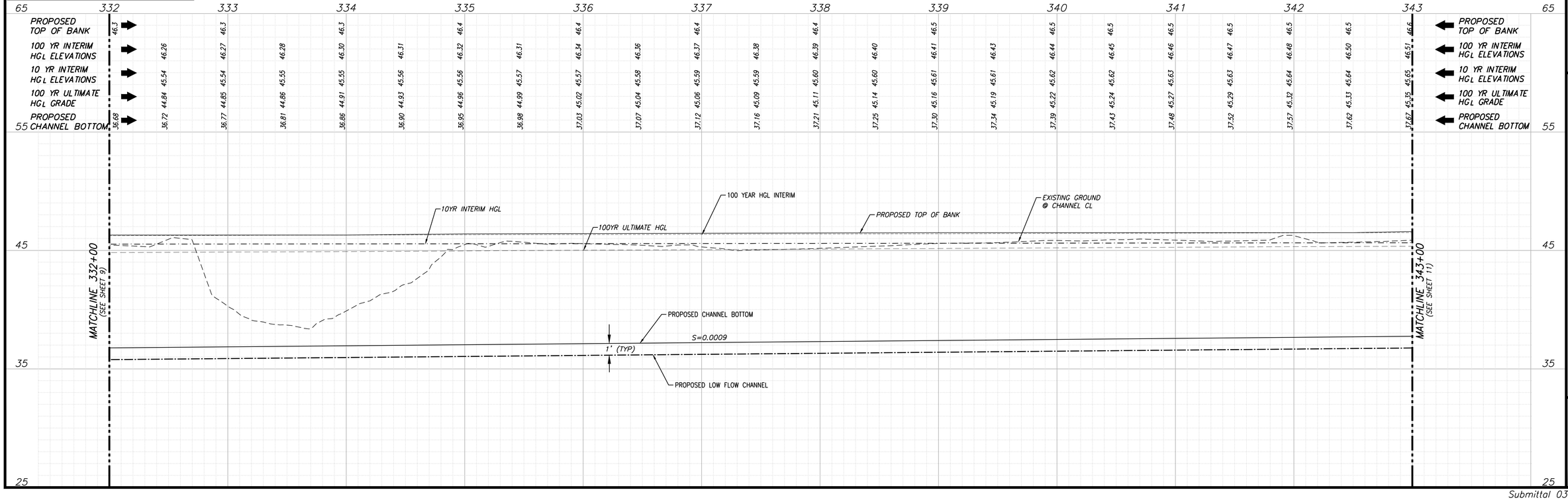
STATION	Δ	L	R
332+78.65 TO 335+93.51	66°25'02"	314.86'	271.62'
335+93.51 TO 336+94.08	09°56'20"	100.57'	579.74'
336+94.08 TO 338+17.14	05°51'13"	123.06'	1204.59'
338+17.14 TO 339+82.39	12°49'17"	165.25'	738.45'
339+82.39 TO 341+58.85	09°09'07"	176.46'	1104.74'
341+58.85 TO 343+13.37	27°18'10"	154.52'	324.26'

STORM DRAIN PIPE ALTERNATIVES

THE FOLLOWING PIPE ALTERNATIVES MAY BE USED FOR STORM DRAIN ON THIS SHEET; UNLESS OTHERWISE SPECIFIED AS "ONLY" IN THE PROFILE:

- RCP (CL-3, SIZE 12"-24")
- PVC (SIZE 12"-24")

PIPE ALTERNATIVES MUST MEET OR EXCEED DEPTH AND STRENGTH REQUIREMENTS OF SPECIFIED PIPE.



332	333	334	335	336	337	338	339	340	341	342	343
46.3	46.3	46.3	46.4	46.4	46.4	46.4	46.5	46.5	46.5	46.5	46.6
46.26	46.27	46.28	46.30	46.31	46.32	46.31	46.34	46.36	46.37	46.38	46.39	46.40	46.41	46.43	46.44	46.45	46.46	46.47	46.48	46.50	46.51
45.54	45.54	45.55	45.55	45.56	45.56	45.57	45.57	45.58	45.59	45.59	45.60	45.60	45.61	45.61	45.62	45.62	45.63	45.63	45.64	45.64	45.65
44.84	44.85	44.86	44.91	44.93	44.96	44.99	45.02	45.04	45.06	45.09	45.11	45.14	45.16	45.19	45.22	45.24	45.27	45.29	45.32	45.33	45.35
36.68	36.72	36.77	36.81	36.86	36.90	36.95	36.98	37.03	37.07	37.12	37.16	37.21	37.25	37.30	37.34	37.39	37.43	37.48	37.52	37.57	37.62	37.67

NOTE: DATUM FOR THIS PROJECT IS NGVD 29

PRELIMINARY NOT FOR CONSTRUCTION

SCALE: 1"=40'

PLAN KEYNOTES

[1] EXISTING CREEK SECTIONS THAT FALL OUTSIDE OF PROPOSED CHANNEL BANKS MUST BE FILLED IN TO ALLOW FOR PROPER DRAINAGE.

NOTE TO THE CONTRACTOR

REMOVE EXISTING FENCE WITHIN CREEK SECTION.

No.	Description	Init	Date	By	AGENCY APPROVAL	Date

DATE: MARCH 2015
SCALE: 1"=40' H, 1"=4' V
DRAWN BY: STAFF
DESIGNED BY: WH
CHECKED BY: PH

MACKAY & SOMPS
ENGINEERS PLANNERS SURVEYORS
1552 Eureka Road, Suite 100, Roseville, CA 95661 (916) 773-1189

PLAN FOR THE IMPROVEMENT OF
ELDER CREEK PHASE 1A
ELDER CREEK STA 332+00.00 TO 343+00.00
COUNTY OF SACRAMENTO CALIFORNIA

SHEET 10 OF 18
PROJECT NO. 27095-EC1

Submittal 03-13-2015

3-13-2015 13:39:20 vhumphrey P:\27095_PH2\DES\P\EC1\11-VC2-EC1-GP.dwg
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BULJAN APN: 065-0052-030

BULJAN APN: 065-0052-031

BULJAN APN: 065-0052-006

BULJAN APN: 065-0052-023

GONZALEZ APN: 065-0052-008

EX PROPERTY LINE

CHANNEL CORRIDOR

CHANNEL CORRIDOR BOUNDARY 3 STRAND BARBED WIRE FENCE WITH METAL POST (TYP)

5' WIDE RIP-RAP
12"SD PIPE W/FLARED END
SECTION INV 44.5

EX GRADE 44.5

TOP OF BANK

REMOVE EXIST 42" OUTFALL STRUCTURE & PIPE

EXISTING FENCE TO BE REMOVED

CONSTRUCT CHANNEL TRANSITION IF 1B DOES NOT GO CONCURENTLY WITH 1A

FILL AREA

MEANDERING LOW FLOW CHANNEL

10' TRAIL

POST & CABLE FENCING STD. DWG. L-20

LOW FLOW CHANNEL

BENCH EL 40.0

BENCH 45.0

MATCHLINE 343+00.00 (SEE SHEET 10)

MATCHLINE 349+20 (SEE SHEET 12)

DETENTION BASIN E24-B SEE SHEET 5

ELDER CREEK CHANNEL
STA 343+00.00 TO STA 349+20.00

C/L CURVE DATA
ELDER CREEK CHANNEL

STATION	Δ	L	R
343+00.00 TO 343+13.37	2°21'43"	13.37'	324.26'
343+25.81 TO 344+35.09	6°15'41"	109.28'	1000.00'
345+55.55 TO 347+77.71	18°11'04"	222.16'	700.00'
349+65.07 TO 352+77.64	8°57'16"	312.57'	2000.00'

REGISTERED PROFESSIONAL ENGINEER
PAUL ROBERT THAT
No. 49154
CIVIL
STATE OF CALIFORNIA

FOR MACKAY & SOMPS

NOTE: DATUM FOR THIS PROJECT IS NGVD 29

PRELIMINARY NOT FOR CONSTRUCTION

0 20 40 80
SCALE: 1"=40'

PLAN KEYNOTES

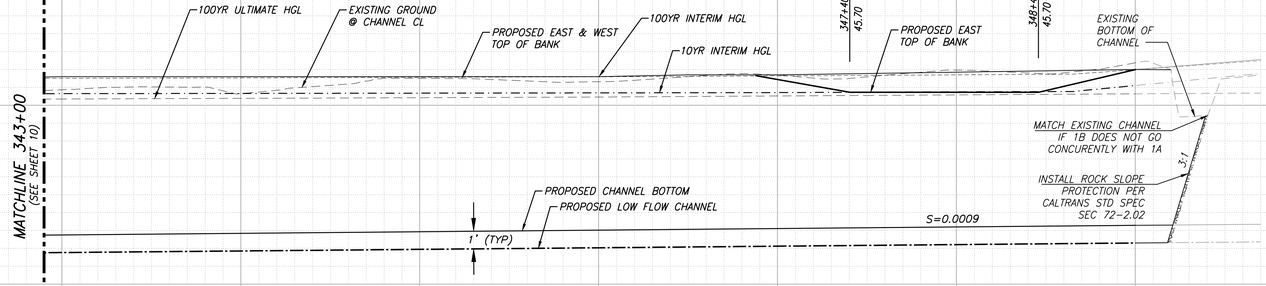
1 EXISTING CREEK SECTIONS THAT FALL OUTSIDE OF PROPOSED CHANNEL BANKS MUST BE FILLED IN TO ALLOW FOR PROPER DRAINAGE.

NOTE TO THE CONTRACTOR

REMOVE EXISTING FENCE WITHIN CREEK SECTION.

PROPOSED TOP OF BANK
100 YR INTERIM HGL ELEVATIONS
10 YR INTERIM HGL ELEVATIONS
100 YR ULTIMATE HGL GRADE
PROPOSED CHANNEL BOTTOM

342	343	344	345	346	347	348	349	350	351	352	353
PROPOSED TOP OF BANK	46.6 46.6	46.6	46.6	46.6	46.6	46.6	46.7	46.7	46.8	46.8	46.9	47.0	
100 YR INTERIM HGL ELEVATIONS	46.51	46.52	46.53	46.55	46.58	46.58	46.59	46.61	46.64	46.67	46.70	46.73	46.99	
10 YR INTERIM HGL ELEVATIONS	45.65	45.66	45.66	45.67	45.68	45.68	45.69	47.70	45.71	45.73	45.75	45.76	45.77	46.11
100 YR ULTIMATE HGL GRADE	45.35	45.37	45.39	45.40	45.42	45.44	45.46	45.49	45.52	45.55	45.58	45.61	45.64	47.35
PROPOSED CHANNEL BOTTOM	37.67	37.71	37.75	37.80	37.85	37.89	37.94	37.98	38.03	38.07	38.12	38.16	38.21	46.59
														38.25



No.	Description	Init.	Date	By	Date
		Engineer		AGENCY APPROVAL	

DATE: MARCH 2015
SCALE: 1"=40' H, 1"=4' V
DRAWN BY: STAFF
DESIGNED BY: VH
CHECKED BY: PH

MACKAY & SOMPS
ENGINEERS PLANNERS SURVEYORS
1552 Eureka Road, Suite 100, Roseville, CA 95661 (916) 773-1188

PLAN FOR THE IMPROVEMENT OF
ELDER CREEK PHASE 1A
ELDER CREEK STA 343+00.00 TO 349+20.00
COUNTY OF SACRAMENTO CALIFORNIA

SHEET 11 OF 18
PROJECT NO. 27095-EC1

Submittal 03-13-2015

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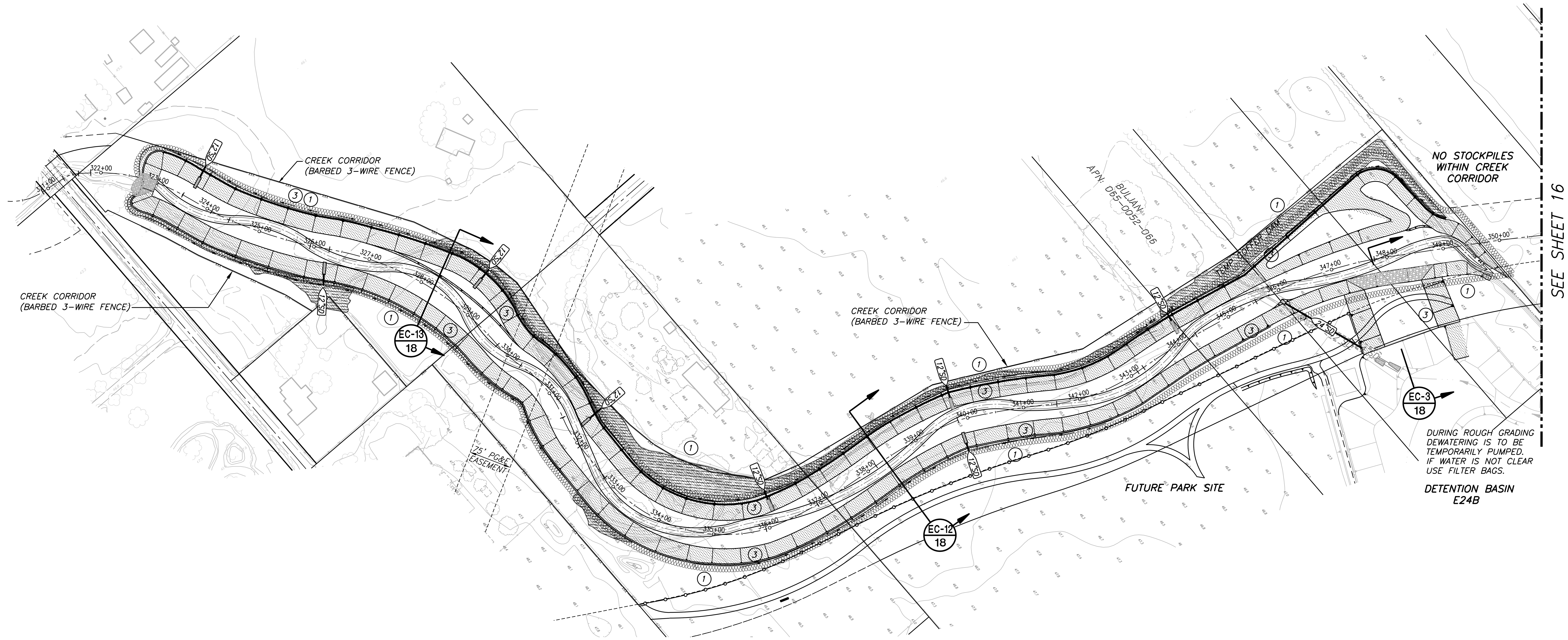
KEY

(1) FIBER ROLLS IMP STD DWG 11-4

(3) HYDROSEED IMP STD SEC 11-4 (SEE HYDROSEED NOTES ON THIS SHEET) (TYP)

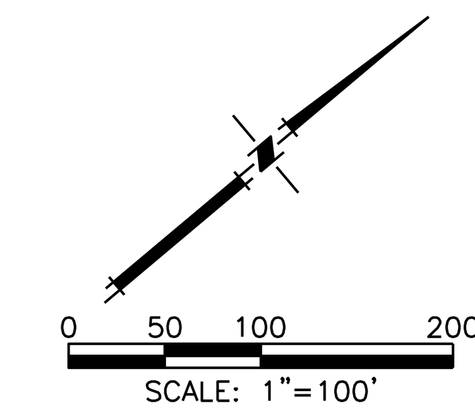


REGISTERED PROFESSIONAL ENGINEER
PAUL ROBERT HART
No. 49154
CIVIL
STATE OF CALIFORNIA

FOR MACKAY & SOMPS

NOTE: DATUM FOR THIS PROJECT IS NGVD 29

PRELIMINARY
NOT FOR
CONSTRUCTION



HYDROSEED MIXES & SPECIFICATIONS

3-STEP SEED APPLICATION PROCESS

USE 3-STEP APPLICATION PROCESS IN AREAS NOT COVERED WITH TRM OR ECB.

STEP 1: APPLY FIBER, SEED, FERTILIZER, & INNOCULANT AS SPECIFIED BELOW:

CELLULOSE WOOD FIBER	600 LBS/ACRE
SEED	AS SPECIFIED
FERTILIZER	1,000 LBS/ACRE (ORGANIC 7-2-3)
MYCORRHIZAL INOCOLATE	60 LBS/ACRE
BINDER	100 LBS./ACRE

STEP 2: APPLY STRAW MULCH: 4,000 LBS/ACRE
WEED FREE RICE,
SUBSTITUTE MUST BE APPROVED

STEP 3: APPLY FIBER & BINDER:

CELLULOSE WOOD FIBER	500 LBS/ACRE
ORGANIC BINDER	100 LBS/ACRE

1-STEP SEED APPLICATION PROCESS

USE 1-STEP APPLICATION PROCESS IN AREAS RECEIVING HYDROSEED REINFORCEMENT MAT (TRM) UNDER TRM OR ECB.

STEP 1: APPLY FIBER, SEED, FERTILIZER, & INNOCULANT AS SPECIFIED BELOW:

CELLULOSE WOOD FIBER	1,500 LBS./ACRE
SEED	AS SPECIFIED
FERTILIZER	1,000 LBS/ACRE (ORGANIC 7-2-3)
MYCORRHIZAL INOCULATE	60 LBS/ACRE
BINDER	200 LBS/ACRE

APPLY TRM OR ECB AS SPECIFIED IN GRADING PLANS.

SEED MIX - UPLAND

FOR UPLAND AREAS DOWN TO 2' ABOVE TOE OF SLOPE

SPECIES	PLS LBS/ACRE	MIN. GERM. %
NASELLA PULCHRA (PURPLE NEEDLEGRASS)	10.0	60
ELYMUS GLAUCUS (BLUE WILDRYE)	8.0	60
NASELLA CARNUA (NODDING NEEDLEGRASS)	6.0	60
MELICA CALIFORNICA (CALIFORNIA MELIC)	6.0	50
VULPIA MICROSTACHYS (THREE WEEKS FESCUE)	6.0	60
POA SECUNDA (NATIVE PINE BLUEGRASS)	3.0	80
TOTAL	39 LBS. PER ACRE (PLS)	

SEED MIX - PATH

LOW MIX FOR AREAS WITHIN 15' OF PATHS (OR AS SPECIFIED)

SPECIES	PLS LBS/ACRE	MIN. GER. %
FESTUCA RUBRA MOLATE (NATIVE RED FESCUE)	13.0	45
FESTUCA IDAHOENIS (IDAHO FESCUE)	10.0	45
FESTUCA OCCIDENTALIS (WESTERN FESCUE)	10.0	45
VULPIA MICROSTACHYS (SIX WEEKS FESCUE)	10.0	45
CLARKIA AMOENA (FAREWELL TO SPRING)	0.5	45
ESCHSCHOLZIA CALIFORNICA (CALIFORNIA POPPY)	2.0	45
LUPINUS NANUS (SKY LUPINE)	3.5	45
NEMOPHILA MENZIESII (BABY BLUE EYES)	1.5	45
TOTAL	50.5 LBS.	

FERTILIZER COMPONENT

FERTILIZER SHALL BE NATURAL-BASE,SLOW RELEASE & BALANCED IN N, P, & K. ADD MYCORRHIZAL INNOCULANT AT 30 LBS/ACRE

ANY CHANGES TO THE ABOVE SEED MIXES MUST BE APPROVED BY ECORP CONSULTING BEFORE APPLICATION.

SEED MIX - CHANNEL AND WETLANDS

FOR CHANNEL AREAS TO 2' ABOVE TOE OF SLOPE AND WETLANDS

SPECIES	PLS LBS/ACRE	MIN. GERM. %
ELYMUS TRACHYCAULUS (SLENDER WHEATGRASS)	12.0	45
HORDEUM BRACHYANTHERUM (MEADOW BARLEY)	10.0	40
LEYMUS TRICTICOIDES 'YOLO' (CREEPING WILDRYE)	9.0	45
NASELLA LEPIDA (FOOTHILL NEEDLEGRASS)	3.0	45
DESCHAMPSIA CAESPITOSA (TUFTED HAIRGRASS)	3.0	40
TOTAL	37 LBS. PER ACRE (PLS)	

HYDROSEEDING NOTES:

1. HYDROSEED MIXES AND SPECIFICATIONS SHOWN ON THESE PLANS ARE PROVIDED FOR GUIDELINES IN SUBSEQUENT VINEYARD CREEK SWPPP PLANS, BY OTHERS.

2. BEFORE SEEDING, THE CONTRACTOR SHALL SUBMIT COPIES OF ALL SEED LABELS AND ALL SEED INVOICES TO THE OWNERS OR THEIR REPRESENTATIVES IN ORDER TO PROVIDE WRITTEN EVIDENCE THAT SEED CONFORMS TO THE APPLICATION RATES, PURITY AND GERMINATION REQUIREMENTS IN THESE SPECIFICATIONS. SAMPLES OF THE APPLICATION MIXTURE WILL BE PROVIDED UPON REQUEST.

3. SEED DESIGNATED WITHOUT A PURITY OR GERMINATION REQUIREMENT SHALL BE LABELED TO INCLUDE THE NAME, DATE (MONTH AND YEAR) COLLECTED, AND THE NAME AND ADDRESS OF THE SEED SUPPLIER. SEED AT THE TIME OF SOWING SHALL BE FROM THE PREVIOUS OR CURRENT YEAR'S HARVEST.

4. THE LEGUME SEED SHALL BE INOCULATED AS PER TRADE SPECIFICATIONS AND RATE SPECIFIED.

5. THE MATERIAL SHALL BE REGISTERED WITH AND LICENSED BY THE STATE OF CALIFORNIA, DEPARTMENT OF FOOD AND AGRICULTURE, AS AN "AUXILIARY SOIL CHEMICAL".

LEGEND

(KEY ITEMS SHOWN ON MAP ARE NOT TO SCALE)

2 STEP (STRAW, TACK)

GEO FABRIC/FIBER ROLL

PROTECTIVE FENCING

WDID # 5S34C341695

PERSON RESPONSIBLE FOR IMPLEMENTING THE SWPPP

NAME WALLACE-KUHL & ASSOCIATES

TELEPHONE (916) 372-1434 WORK

CELL

No.	Description	Init. Engineer Date	By AGENCY APPROVAL Date

DATE: MARCH 2013
SCALE: 1"=100'
DRAWN BY: STAFF
DESIGNED BY: VH
CHECKED BY: PH

MACKAY & SOMPS
ENGINEERS PLANNERS SURVEYORS
1552 Eureka Road, Suite 100, Roseville, CA 95661 (916) 773-1189

PLAN FOR THE IMPROVEMENT OF
ELDER CREEK PHASE 1A
EROSION CONTROL PLAN
COUNTY OF SACRAMENTO CALIFORNIA

SHEET 15 OF 18

PROJECT NO. 27095-EC1

Submittal 03-13-2015

3-13-2015 13:27:21 thumphrey P:\27095_PH2\DES\IP\EC1\18-VC2-EC1-EROS-DTLS.dwg
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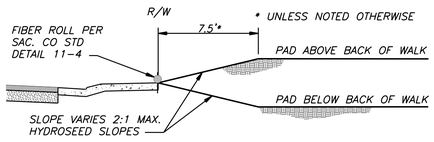
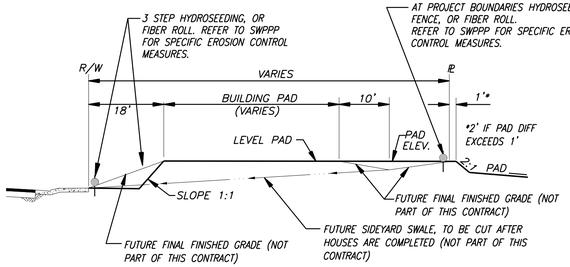


SECTION EC-1 — NOT TO SCALE



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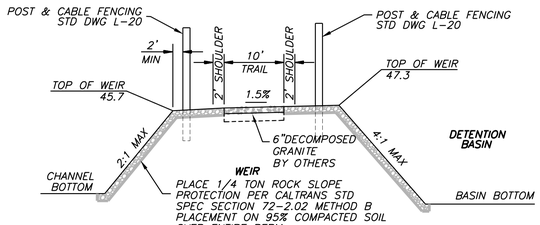

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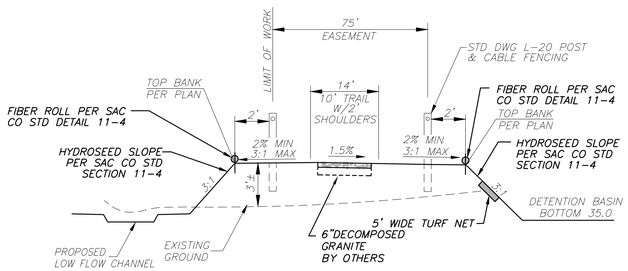
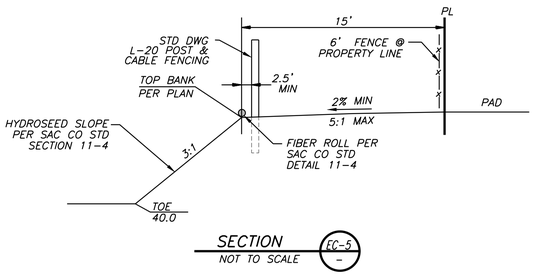
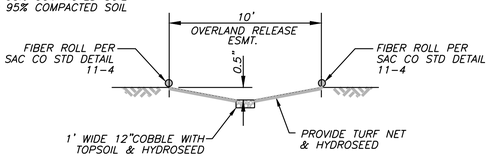


SECTION EC-4 — NOT TO SCALE

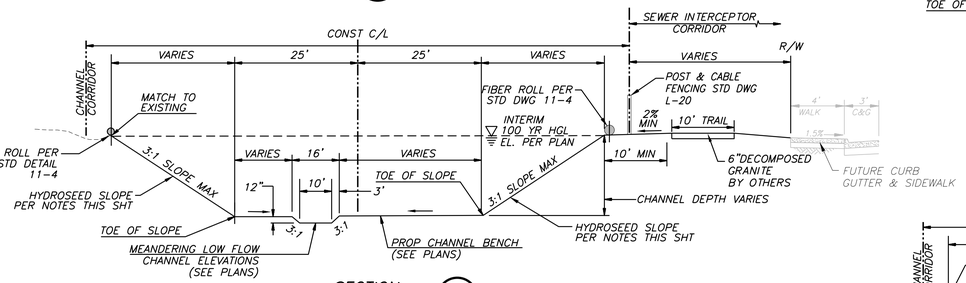


SECTION EC-5 — NOT TO SCALE

SPEC SECTION 72-2.02 METHOD B
PLACEMENT ON 95% COMPACTED SOIL
PLACEMENT ON 95% COMPACTED SOIL



SECTION EC-6 — NOT TO SCALE



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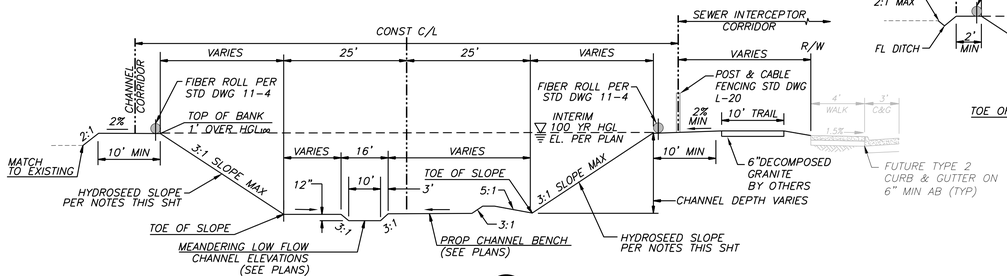
SECTION EC-8 — NOT TO SCALE



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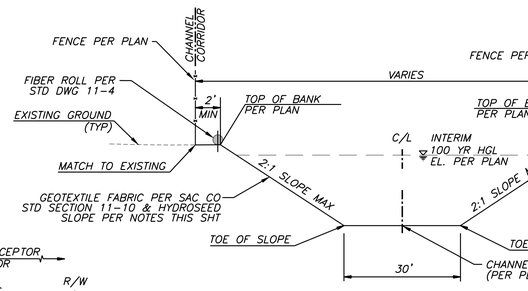
SECTION EC-10 — NOT TO SCALE



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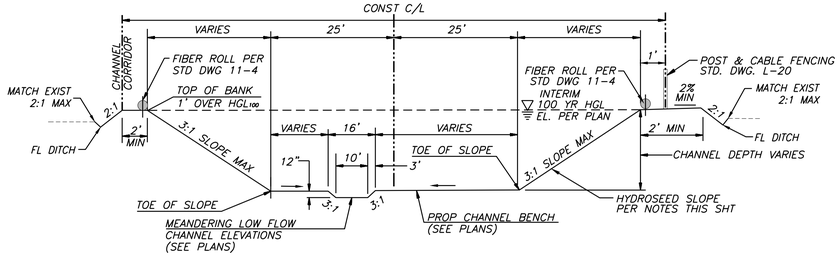

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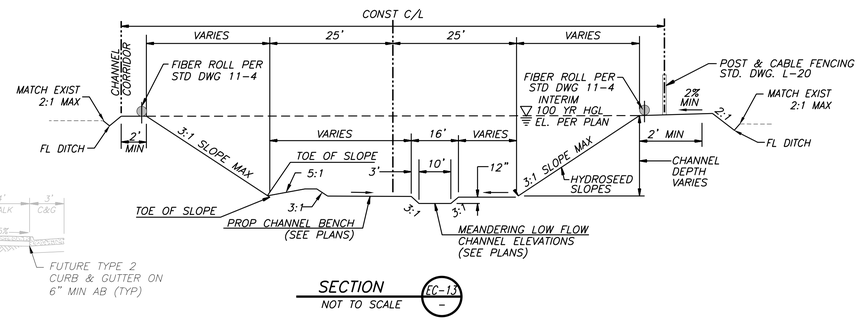

SECTION EC-13 — NOT TO SCALE

REGISTERED PROFESSIONAL ENGINEER
PAUL ROBERT HART
No. 49154
CIVIL
STATE OF CALIFORNIA

FOR MACKAY & SOMPS

NOTE: DATUM FOR THIS PROJECT IS NGVD 29

PRELIMINARY NOT FOR CONSTRUCTION

No.	Description	Init.	Date	By	Date
		Engineer		AGENCY APPROVAL	

DATE: MARCH 2015
SCALE: AS NOTED
DRAWN BY: STAFF
DESIGNED BY: PH
CHECKED BY: PH

MacKAY & SOMPS
ENGINEERS PLANNERS SURVEYORS
1552 Eureka Road, Suite 150, Roseville, CA 95661 (916) 773-1189

PLAN FOR THE IMPROVEMENT OF
ELDER CREEK PHASE 1A
EROSION CONTROL SECTIONS & DETAILS
COUNTY OF SACRAMENTO CALIFORNIA

SHEET 18 OF 18

PROJECT NO.
27095-EC1

Submittal 03-13-2015

Moricz, Nancy@DWR

From: Johnson. Michael <johnsonm@SacCounty.NET>
Sent: Thursday, August 13, 2015 11:36 AM
To: Moricz, Nancy@DWR
Cc: Booth. George; Reinhardt@mbkengineers.com
Subject: Elder Creek Phase 1 Improvements
Attachments: Elder Creek Excavation Drainage Report June 2015 (Phase 1A).pdf; Watershed Figure.pdf; RAS Profile 200-year.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Ms Moricz,

This email is in reference to our Central Valley Flood Protection Board encroachment permit applications for improvements to Elder Creek that are located upstream of the Federal Project levee system. The proposed project is Phase 1A of a larger development Master Plan that includes several miles of channel improvements and detention basins. The project will not adversely affect downstream hydraulics as determined in the attached report by Civil Solutions. This portion of Elder Creek is exempt from the State's Urban Level of Flood Protection requirements as the drainage area meets the exemption criteria of being less than 10 sq miles as shown on the attached graphic. However, even though the County is exempt from meeting ULOP requirements for this area, we do intend on requiring development to be above the 200 year floodplain as we believe this is an appropriate standard for our community. We are currently developing 200-year profiles for the build out condition to guide development in the area. We are also working closely with the Sacramento Area Flood Control Agency (SAFCA) to ensure that upstream development does not adversely affect the downstream federal levee project.

Please contact me if you have any questions or need further information.

Sincerely,

Mike

Michael Johnson, PE
Associate Civil Engineer
Department of Water Resources
(916) 874-8646

SACRAMENTO COUNTY

APPENDIX A – 100-YEAR WATER SURFACE COMPARISON TABLE

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev
				(cfs)	(ft)	(ft)
REACH1	9.039	Max WS	2014Ex100Y24H	839.19	55.28	60.89
REACH1	9.039	Max WS	E24BMcCoy100	839.08	55.28	60.89
REACH1	8.975	Max WS	2014Ex100Y24H	842.33	55.14	60.31
REACH1	8.975	Max WS	E24BMcCoy100	842.1	55.14	60.31
REACH1	8.969	Max WS	2014Ex100Y24H	842.63	54.9	60.31
REACH1	8.969	Max WS	E24BMcCoy100	842.39	54.9	60.31
REACH1	8.961			Bridge		
REACH1	8.954	Max WS	2014Ex100Y24H	842.61	54.9	60.13
REACH1	8.954	Max WS	E24BMcCoy100	842.37	54.9	60.13
REACH1	8.89	Max WS	2014Ex100Y24H	844.24	54.05	59.88
REACH1	8.89	Max WS	E24BMcCoy100	844.53	54.05	59.88
REACH1	8.811	Max WS	2014Ex100Y24H	844.49	53	59.04
REACH1	8.811	Max WS	E24BMcCoy100	844.42	53	59.04
REACH1	8.752	Max WS	2014Ex100Y24H	839.11	52.8	58.59
REACH1	8.752	Max WS	E24BMcCoy100	838.93	52.8	58.59
REACH1	8.697	Max WS	2014Ex100Y24H	834.19	52.6	58.38
REACH1	8.697	Max WS	E24BMcCoy100	834.61	52.6	58.39
REACH1	8.598	Max WS	2014Ex100Y24H	833.09	52.2	58.1
REACH1	8.598	Max WS	E24BMcCoy100	833.62	52.2	58.1
REACH1	8.565	Max WS	2014Ex100Y24H	833.3	52.15	57.93
REACH1	8.565	Max WS	E24BMcCoy100	833.95	52.15	57.93
REACH1	8.466	Max WS	2014Ex100Y24H	833.77	52.04	57.62
REACH1	8.466	Max WS	E24BMcCoy100	834.36	52.04	57.62
REACH1	8.258	Max WS	2014Ex100Y24H	836.06	51.6	56.73
REACH1	8.258	Max WS	E24BMcCoy100	836.76	51.6	56.73
REACH1	8.195	Max WS	2014Ex100Y24H	837.84	51.33	56.27
REACH1	8.195	Max WS	E24BMcCoy100	838.51	51.33	56.27

REACH1	8.105	Max WS	2014Ex100Y24H	839.51	51	55.84
REACH1	8.105	Max WS	E24BMcCoy100	840.25	51	55.84
REACH1	7.93	Max WS	2014Ex100Y24H	899.51	50.36	55.07
REACH1	7.93	Max WS	E24BMcCoy100	900.15	50.36	55.07
REACH1	7.863	Max WS	2014Ex100Y24H	901.88	50.16	54.56
REACH1	7.863	Max WS	E24BMcCoy100	902.63	50.16	54.57
REACH1	7.784			Lat Struct		
REACH1	7.783	Max WS	2014Ex100Y24H	904.28	49.88	53.82
REACH1	7.783	Max WS	E24BMcCoy100	904.45	49.88	53.82
REACH1	7.74	Max WS	2014Ex100Y24H	903.01	49.72	53.57
REACH1	7.74	Max WS	E24BMcCoy100	902.9	49.72	53.56
REACH1	7.689	Max WS	2014Ex100Y24H	743.07	49.61	53.49
REACH1	7.689	Max WS	E24BMcCoy100	744.09	49.61	53.49
REACH1	7.625	Max WS	2014Ex100Y24H	743.24	49	53.48
REACH1	7.625	Max WS	E24BMcCoy100	744.25	49	53.48
REACH1	7.6225			Bridge		
REACH1	7.62	Max WS	2014Ex100Y24H	743.23	49	53.47
REACH1	7.62	Max WS	E24BMcCoy100	744.25	49	53.47
REACH1	7.619			Lat Struct		
REACH1	7.543	Max WS	2014Ex100Y24H	641.42	48.46	52.9
REACH1	7.543	Max WS	E24BMcCoy100	642.49	48.46	52.9
REACH1	7.516	Max WS	2014Ex100Y24H	550.22	48.3	52.39
REACH1	7.516	Max WS	E24BMcCoy100	550.2	48.3	52.39
REACH1	7.318			Lat Struct		
REACH1	7.317	Max WS	2014Ex100Y24H	628.22	47.3	52
REACH1	7.317	Max WS	E24BMcCoy100	628.8	47.3	52
REACH1	7.258	Max WS	2014Ex100Y24H	604.73	47.28	51.82
REACH1	7.258	Max WS	E24BMcCoy100	604.93	47.28	51.82

REACH1	7.17	Max WS	2014Ex100Y24H	600.11	47.04	51.68
REACH1	7.17	Max WS	E24BMcCoy100	601.04	47.04	51.68
REACH1	7.16			Lat Struct		
REACH1	7.0905	Max WS	2014Ex100Y24H	550.79	46.96	51.58
REACH1	7.0905	Max WS	E24BMcCoy100	551.29	46.96	51.59
REACH1	7.012	Max WS	2014Ex100Y24H	585.24	46	51.42
REACH1	7.012	Max WS	E24BMcCoy100	585.93	46	51.43
REACH1	7.011	Max WS	2014Ex100Y24H	585.25	46	51.42
REACH1	7.011	Max WS	E24BMcCoy100	585.94	46	51.42
REACH1	7.001			Bridge		
REACH1	6.992	Max WS	2014Ex100Y24H	585.17	46	51.33
REACH1	6.992	Max WS	E24BMcCoy100	585.87	46	51.33
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REACH1	6.991			Lat Struct		
REACH1	6.99			Lat Struct		
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REACH1	6.928	Max WS	2014Ex100Y24H	817.93	46.8	51.02
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REACH1	6.83	Max WS	E24BMcCoy100	828.27	46.04	50.52
REACH1	6.8295			Lat Struct		
REACH1	6.829	Max WS	2014Ex100Y24H	873.49	46.12	50.51

REACH1	6.829	Max WS	E24BMcCoy100	875.07	46.12	50.51
REACH1	6.821			Bridge		
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REACH1	6.813	Max WS	E24BMcCoy100	875.02	45.83	50.26
REACH1	6.782	Max WS	2014Ex100Y24H	873.37	45.58	49.96
REACH1	6.782	Max WS	E24BMcCoy100	874.97	45.58	49.97
REACH1	6.751	Max WS	2014Ex100Y24H	872.28	45.28	49.41
REACH1	6.751	Max WS	E24BMcCoy100	874.9	45.28	49.41
REACH1	6.682	Max WS	2014Ex100Y24H	868.58	45.22	48.71
REACH1	6.682	Max WS	E24BMcCoy100	879.08	45.22	48.72
REACH1	6.66975*	Max WS	E24BMcCoy100	877.54	45.08	48.65
REACH1	6.6575*	Max WS	E24BMcCoy100	795.53	44.94	48.6
REACH1	6.64525*	Max WS	E24BMcCoy100	784.67	44.8	48.57
REACH1	6.633	Max WS	2014Ex100Y24H	867.48	44.66	48.5
REACH1	6.633	Max WS	E24BMcCoy100	777.02	44.66	48.55
REACH1	6.604	Max WS	E24BMcCoy100	879.23	44.06	47.9
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REACH1	6.494	Max WS	E24BMcCoy100	860.22	36.82	46.88
REACH1	6.482	Max WS	2014Ex100Y24H	860.89	43.65	48.22
REACH1	6.475	Max WS	E24BMcCoy100	858.99	36.76	46.82
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REACH1	6.436	Max WS	2014Ex100Y24H	853.72	44.01	48.13

REACH1	6.402	Max WS	E24BMcCoy100	854.33	36.44	46.54
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REACH1	6.297	Max WS	2014Ex100Y24H	831.85	42.23	47.95
REACH1	6.275	Max WS	E24BMcCoy100	847.6	35.86	46.22
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REACH1	6.243	Max WS	2014Ex100Y24H	1003.12	41.74	47.16
REACH1	6.234	Max WS	E24BMcCoy100	844.93	35.65	46.13
REACH1	6.207	Max WS	E24BMcCoy100	843.67	35.5	46.1
REACH1	6.18	Max WS	E24BMcCoy100	842.08	35.37	46.06
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REACH1	6.119	Max WS	E24BMcCoy100	836.99	35.06	45.96
REACH1	6.101	Max WS	E24BMcCoy100	835.91	34.98	45.95
REACH1	6.085	Max WS	E24BMcCoy100	834.86	39.36	45.93
REACH1	6.069	Max WS	E24BMcCoy100	833.12	39.53	45.91
REACH1	6.014	Max WS	2014Ex100Y24H	871.9	39.88	45.93
REACH1	6.007	Max WS	2014Ex100Y24H	857.17	39.36	45.9
REACH1	6.007	Max WS	E24BMcCoy100	832.07	39.36	45.88
REACH1	6.004			Culvert		

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REACH1	6.001	Max WS	E24BMcCoy100	831.74	39.87	45.88
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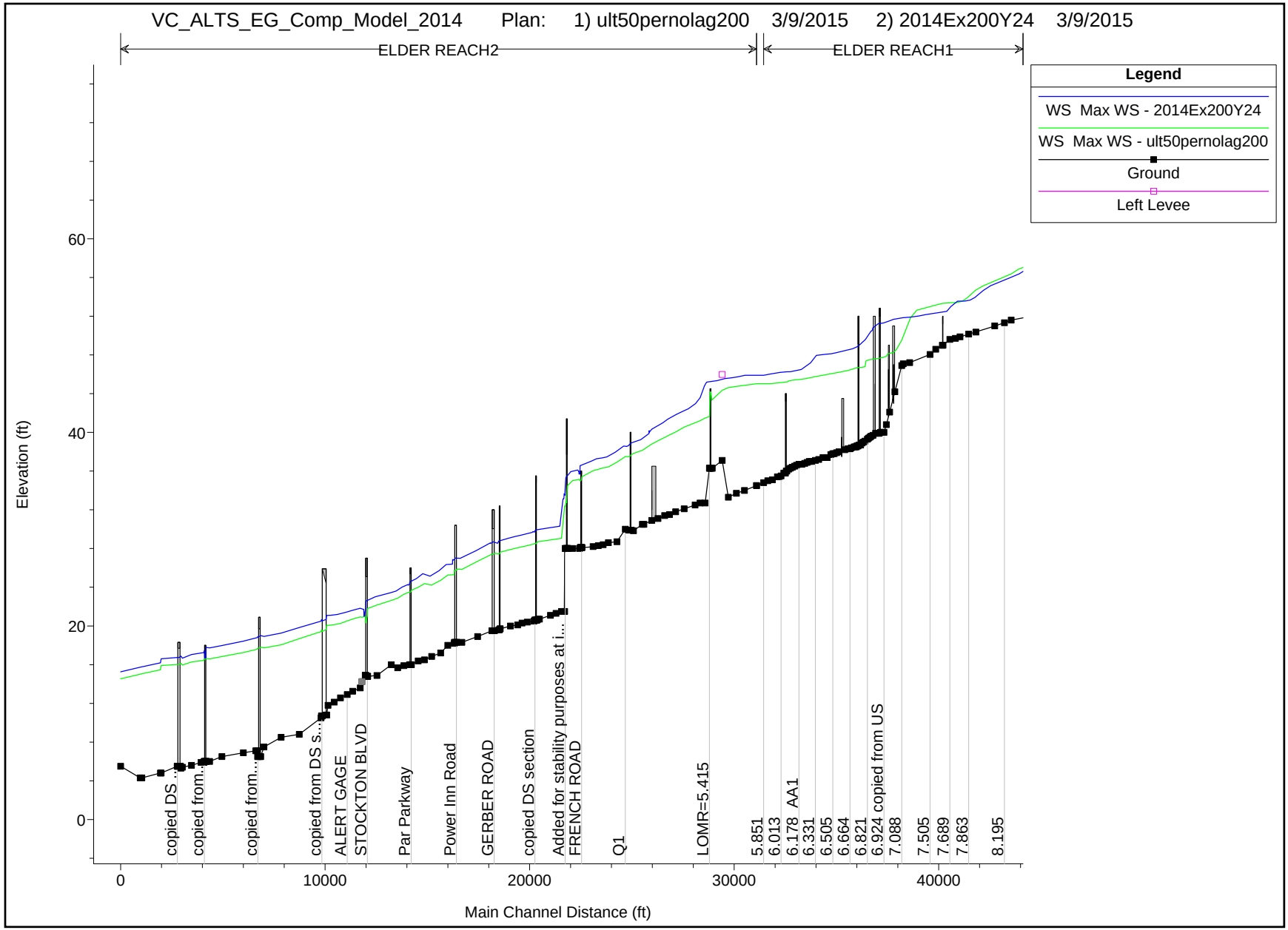
REACH1	5.816	Max WS	E24BMcCoy100	812.92	39.02	45.52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ELDER REACH1
Legend
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WS Max WS - ult50pernolag200
Ground
Left Levee
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40
60
0
10000
20000
30000
40000
Main Channel Distance (ft)
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copied from...
copied from...
copied from DS s...
ALERT GAGE
STOCKTON BLVD
Par Parkway
Power Inn Road
GERBER ROAD
copied DS section
Added for stability purposes at i...
FRENCH ROAD
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6.821
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7.505
7.689
7.863
8.195

Moricz, Nancy@DWR

From: Ric Reinhardt <Reinhardt@mbkengineers.com>
Sent: Wednesday, September 02, 2015 2:58 PM
To: Moricz, Nancy@DWR
Cc: Booth. George; Johnson. Michael
Subject: Re: 19045 Protest - Reconsideration Hearing

Nancy, Mike Johnson and I spoke with Mr La Perle on August 26th to discuss his concerns with Sacramento County's proposed project to improve Elder Creek. Most of the concerns that Mr La Perle raised were with the adjacent development and how that would adversely affect the rural nature of his community. He expressed concern with the fill associated with the development and how that would adversely affect flooding on his property. He also asked questions to better understand the Elder Creek improvements, which is the action before your Board. Mike Johnson explained that the drainage impacts associated with the development are mitigated with construction of a detention basin. Mike also explained that once all of the Elder Creek improvements are implemented, this project will lower flood elevations on Mr La Perle's property. We provided Mr La Perle with the hydraulic impact analysis that Sacramento County performed that is the basis of their conclusion that the project would not have an adverse effect on flooding. This is the same report that we provided as part of the encroachment permit application. Please let me know if you have any questions or need additional information to respond to Mr La Perle's protest.

Thanks,

Ric Reinhardt