

**SUBMITTAL TO THE FLOOD CONTROL AND WATER CONSERVATION DISTRICT BOARD
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**



301B

FROM: General Manager-Chief Engineer

SUBMITTAL DATE:
December 20, 2011

SUBJECT: East Cathedral Channel Levee,
Arenas Canyon Levee and Palm Canyon Wash
Project Nos. 6-0-00010 and 6-0-00040
Professional Services Agreement – Amendment No. 4

RECOMMENDED MOTION:

1. Ratify and approve Amendment No. 4 between the District and Nolte Associates, Inc. (Consultant);
2. Authorize the Chairman to execute Amendment No. 4 on behalf of the District;
3. Authorize the General Manager-Chief Engineer to extend time for performance for an additional year.

BACKGROUND:

On September 4, 2007 (Item 11.9) the Board of Supervisors approved a Professional Services Agreement which set forth the terms and conditions by which Consultant would perform engineering analysis to determine levee criteria for East Cathedral Channel Levee, Arenas Canyon Levee and Palm Canyon Wash.

(Continued on page 2)

WARREN D. WILLIAMS
General Manager-Chief Engineer

KEC:bjj

FINANCIAL DATA

F.Y. 11-12 District Cost:	\$60,000
Current F.Y. County Cost:	N/A
Annual Net District Cost:	\$138,689

In FY 11-12 Budget:	Yes
Budget Adjustment:	No
For Fiscal Year:	FY 11-12,12-13

SOURCE OF FUNDS:

25160 947500 525440 - Professional Services

Positions To Be Deleted Per A-30	<input type="checkbox"/>
Requires 4/5 Vote	<input type="checkbox"/>

APPROVE

C.E.O. RECOMMENDATION:

BY:
Alex Gann

County Executive Office Signature

Dept't Recomm.: Consent Policy

Per Exec. Ofc.: Consent Policy

FORM APPROVED BY COUNTY COUNSEL
BY: NEAL R. KIPNIS
DATE: Departmental Concurrence

FISCAL PROCEEDURES APPROVED
BY: JAM M. CHAND, FINANCIAL DIRECTOR
DATE: 12/5/2011

Prev. Agn. Ref.:

District: 4th

Agenda Number:

11.1

**FLOOD CONTROL AND WATER CONSERVATION DISTRICT BOARD SUBMITTAL
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

SUBJECT: East Cathedral Channel Levee,
Arenas Canyon Levee and Palm Canyon Wash
Project Nos. 6-0-00010 and 6-0-00040
Professional Services Agreement – Amendment No. 4

SUBMITTAL DATE: December 20, 2011

Page 2

BACKGROUND (continued):

Amendment No. 1 was executed on November 18, 2008 (agenda item 11.5) extending the time for performance to June 30, 2009.

Amendment No. 2, extending the time for performance to June 30, 2010, was approved by the Board on June 30, 2009 (agenda item 11.7).

Amendment No. 3, extending time for performance to June 30, 2011, was approved by the Board on September 14, 2010 (agenda item 11.2).

Amendment No. 4 is extending time for performance to June 30, 2013 to perform additional scope of services. The additional work is required to further assist the District in providing additional analysis and addressing Federal Emergency Management Agency's concerns associated with levee accreditation requirements .

County Counsel has approved the amendment as to form and Consultant has executed the amendment.

FINANCIAL INFORMATION:

Sufficient funds are included in District's Budget for FY 2011-2012 and will be included in FY-2012-2013.

KEC:bjj
P8/142467

PROFESSIONAL SERVICES AGREEMENT

East Cathedral Channel Levee,
Arenas Canyon Levee and Palm Canyon Wash
Project Nos. 6-0-00010 and 6-0-00040
Amendment No. 4

1
2
3
4 The RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION
5 DISTRICT, hereinafter called "DISTRICT" and NOLTE ASSOCIATES, INC., hereinafter
6 called "CONSULTANT", previously entered into that certain Agreement, dated September 4,
7 2007, for the Project described as the East Cathedral Canyon Levee, Arenas Canyon Levee and
8 Palm Canyon Wash, hereinafter called "AGREEMENT"; and

9
10 On November 18, 2008 DISTRICT and CONSULTANT entered into Amendment No. 1
11 to extend the time for performance for AGREEMENT to June 30, 2009; and

12 On June 30, 2009 DISTRICT and CONSULTANT entered into Amendment No. 2 to
13 extend the time for performance for AGREEMENT to June 30, 2010; and

14 On September 14, 2010, DISTRICT and CONSULTANT entered into Amendment No.
15 3 to extend the time for performance for AGREEMENT to June 30, 2011; and based upon
16 comments received from the Federal Emergency Management Agency's (FEMA) review of the
17 Levee Certification Reports prepared by CONSULTANT, DISTRICT wishes to extend time for
18 performance for CONSULTANT to further assist the DISTRICT in providing additional
19 analysis and addressing FEMA's concerns associated with its levee accreditation requirements.
20

21 NOW, therefore, the parties hereto mutually agree to amend AGREEMENT as follows,
22 effective June 30, 2011:

23 Provision 2 of the AGREEMENT is changed to read:

24
25 2. SCOPE OF SERVICES – CONSULTANT, as an independent contractor, shall
26 perform all technical and professional services including but not limited to expertise,
27 supervision, equipment, facilities, materials, labor, and other incidental services necessary to
28

1 fully and adequately perform in a complete, skillful and professional manner those consulting
2 services separately described on Attachment "A" attached hereto and made a part hereof.

3 Provision 3 of the AGREEMENT is changed to read:

4 3. TIME FOR PERFORMANCE - CONSULTANT shall not commence performance
5 of any work or services, for any reason whatsoever, until DISTRICT has provided
6 CONSULTANT with a written Notice to Proceed authorizing CONSULTANT to initiate work
7 pursuant to this Agreement. The term of this Agreement shall start on the date the Agreement is
8 executed by DISTRICT'S Board of Supervisors, and end on June 30, 2013 with an option for
9 one (1) additional one-year extension. Prior to the termination date of this Agreement, this
10 Agreement may be extended for an additional fiscal year by mutual written consent of
11 DISTRICT and CONSULTANT. No payment will be made for any work or services performed
12 prior to issuance of said Notice to Proceed.
13

14 Provision 4 of the AGREEMENT is changed to read:

15 4. COMPENSATION - DISTRICT shall pay CONSULTANT for professional
16 services performed and expenses incurred in accordance with CONSULTANT'S fee schedule as
17 set forth on Attachment "B" attached hereto and made a part hereof. Unless otherwise
18 specifically stated in Attachment B, DISTRICT shall not be responsible for payment of any of
19 CONSULTANT's expenses related to this Agreement. The total amount of compensation paid to
20 CONSULTANT under this Agreement shall not exceed the sum of one hundred thirty-eight
21 thousand six hundred eight-nine dollars (\$138,689) unless a written amendment to this
22 Agreement is executed by both parties prior to performance of additional services.
23
24

25 Provision 20, per this Amendment, is added to AGREEMENT:
26
27
28

1 20. DISCREPANCY – In the event of a conflict between the terms of this Agreement,
2 including any documents attached to or incorporated into the Agreement, the following
3 precedence of documents shall, unless otherwise stated, apply (with the earlier listed document
4 controlling): the main agreement; Attachment "A"; and Attachment "B".

5 Except to the extent specifically added to, modified or amended hereunder, all of the terms,
6 covenants and conditions of said AGREEMENT dated September 4, 2007 remain in full force
7 and effect between the parties hereto.
8

9 //

10 //

11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

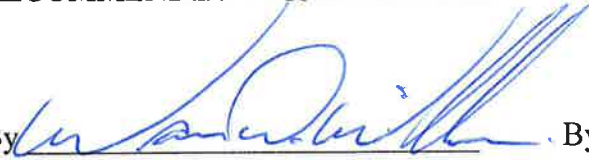
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on

(to be filled in by Clerk of the Board)

RECOMMENDED FOR APPROVAL:

RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT

By 
WARREN D. WILLIAMS
General Manager-Chief Engineer


By _____
MARION ASHLEY, Chairman
Riverside County Flood Control and
Water Conservation District Board of
Supervisors

APPROVED AS TO FORM:

ATTEST:

PAMELA J. WALLS
County Counsel

KECIA HARPER-IHEM
Clerk of the Board

By 
NEAL KIPNIS
Deputy County Counsel

By _____
Deputy

(SEAL)

Professional Services Agreement – Nolte Associates, Inc. - Amendment No. 4
11/30/11
KEC:blj

NOLTE ASSOCIATES, INC.

By Joseph S. Minner
Responsible Officer

Joseph S. Minner

Printed Name

Sr Vice President
Title

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

Professional Services Agreement – Nolte Associates, Inc. - Amendment No. 4:
11/30/11
KEC:blj

Attachment A

Task 1: Review Cherly Creek Hydrology and Hydraulic Modeling

Nolte Associates, Inc., (hereinafter also known as NV5), will review the hydrologic and hydraulic models created by the District as part of the Arenas Canyon Levee (hereinafter also known as Cherly Creek levee) improvements and eventual Conditional Letter of Map Revision (CLOMR) that will be submitted to FEMA to revise the effective special flood hazard areas and accredit the levee. Data from the District's As-Built Plans for various levee improvements for both Arenas Canyon Wash and Palm Canyon Wash from South Palm Canyon Drive downstream to the Calle Ariba crossing will be added to the NV5 hydraulic model. NV5 will incorporate the District's HEC-RAS model geometry for Cherly Creek into our hydraulic model. NV5 will prepare a brief memorandum that summarizes the review and any comments that may require revisions to the modeling and report.

Time and Materials Fee: \$9,940.00

Task 2: Assist District with Re-Submittal to FEMA of East Cathedral Channel Levee Certification

NV5 will provide assistance to the District with preparing and assembling the response to FEMA comments. and provide additional data to enable FEMA to accredit the levee system. NV5 has prepared a revised Operations & Maintenance (O&M) Plan, interior drainage mapping, and responses to FEMA's comments. The additional assistance that is anticipated in this scope of work includes: revising the HEC-RAS model and summary table to incorporate upcoming levee improvements near Highway 111; and revisions needed to the HEC-RAS workmap.

Time and Materials Fee: \$2,170.00

Task 3: Prepare CLOMR and LOMR

NV5 will prepare a CLOMR for Palm Canyon Wash, Cherly Creek, and the stretch of Arenas Canyon Wash that starts at the Canyon Heights Development, downstream to South Palm Canyon Drive where Arenas Canyon Wash confluences, to the confluence with Palm Canyon Wash, then downstream to Calle Ariba. The purpose of the CLOMR is to re-certify the levee system along this stretch of waterways. The following bullet points outline the subtasks included for the CLOMR:

- NV5 will prepare Duplicate Effective Model
- NV5 will prepare Corrected Effective Model
- Proposed Conditions Model has been revised by NV5 in Task 1 above. No additional effort is anticipated.

- NV5 will prepare the profiles for 100-year water surface elevations on 11"x17" sheets.
- NV5 will revise floodplain mapping based on revised HEC-RAS model completed in Task 1 above.
- NV5 will prepare annotated FIRMs that show the new special flood hazard areas in relation to the effective mapping. The District will provide the digital GIS mapping data used in the effective DFIRMs to make the annotated FIRMs more accurate.
- NV5 will prepare MT-2 forms (Form 1, 2, and 3).
- NV5 will prepare a cover letter that outlines the CLOMR purpose and data/explanations not shown in the MT-2 forms. NV5's experience with preparing CLOMRs/LOMRs to FEMA indicate that including a detailed cover letter is highly beneficial to the FEMA reviewer and could lead to a quicker approval.
- NV5 will coordinate with the District and FEMA to answer questions about the CLOMR package.
- NV5 will make necessary revisions to the CLOMR package based on review comments from the District and FEMA.
- The District will pay the FEMA review fees for the CLOMR.

For the Letter of Map Revision (LOMR), NV5 envisions the following subtasks:

- NV5 will review the As-Built Plans for the levee improvements and compare the geometries with the data provided in the CLOMR submittal.
- NV5 will prepare the MT-2 forms (Form 1, 2 and 3).
- NV5 will coordinate with the District and FEMA to answer questions about the LOMR package.
- NV5 will make necessary revisions to the LOMR package based on review comments from the District and FEMA.
- The District will pay the FEMA review fees for the LOMR.

Time and Materials Fee: \$19,775.00

Task 4: Project Management and Coordination

This task includes time for meetings, emails, phone calls, and subconsultant coordination in regards to the project schedule and invoices. The cost estimate is based on 40 hours.

Time and Materials Fee: \$7,634.00

Task 5: Construction Materials Testing

Our scope of services will include field and laboratory testing of soil-cement materials used for rehabilitation of the flood control levee. A field soils technician will be on site full-time during soil mixing and placement and compaction. From discussion with District personnel it is estimated that construction would occur over a period of 2 months (40 eight-hour days). Specific field and laboratory tests proposed include:

- Particle size analysis of soil materials to be used for the soil cement mix in general accordance with ASTM C136 and/or ASTM C117.
- Maximum density testing of the soil cement mix in general accordance with ASTM D1557.
- Cement content tests of the plant mix using the heat method in general accordance with ASTM D5982.
- Unconfined compression testing of the soil cement mix in general accordance with ASTM D1633.
- Evaluation of in-place density of the soil cement using a nuclear density gauge in general accordance with ASTM D6938.
- Evaluation of the in-place uniformity of the mix by using the phenolphthalein test method.
- Move-on and setup of a field laboratory. From our conversations with District personnel, we anticipate that an appropriate location near the contractor's pug mill will be provided.
- Preparation of a final report (three copies) presenting the results of our testing will be submitted.

Time and Materials Fee: \$62,300.00

Task 6: Certification Efforts

Our scope for levee certification will include review of previous geotechnical reports for the project, geotechnical analyses including stability analyses of the reconstructed levees and preparation of an appropriately illustrated report addressing levee certification.

Time and Materials Fee: \$24,870.00

Task 7: Contingency (optional)

The scope of service for this task may include any optional tasks as directed by the District.

Time and Materials Fee: \$12,000.00

Fee Summary Table

Task Number	Fee
1	\$9,940.00
2	\$2,170.00
3	\$19,775.00
4	\$7,634.00
5	\$62,300.00
6	\$24,870.00
TOTAL	\$126,689.00
7 (optional)	\$12,000.00

**Riverside Flood Control and Water Conservation District
Levee Certification Project
Technical Assistance Fee Estimate**

PROJECT TASKS	Eng Manager	Senior Eng	Asst Eng	Proj Asst	Other Direct Costs	
					ODC's	Totals (\$)
Charge Rates	175	140	105	67		
Task 1 Review Cherly Creek Hydrology & HEC-RAS model for Cherly Creek and two Washes						
Review Hydrology from District	4	32				\$ 5,180
Review revised HEC-RAS model	22	2				\$ 4,130
Prepare review comments for District	2	2				\$ 630
Task Total						\$ 9,940
Task 2 Assist District with EC Re-submittal to FEMA						
Review of As-Built Plans and revise HEC-RAS model and summary table to incorporate As-Builts	2		8			\$ 1,190
Revise HEC-RAS workmap to incorporate model results	2		6			\$ 980
Task Total						\$ 2,170
Task 3 Prepare CLOMR and LOMR						
CLOMR						
Prepare Dup Eff Model and Corrective Eff Model	2		24			\$ 2,870
Prepare profiles	1		6			\$ 805
Prepare revised mapping	3		8			\$ 1,365
Prepare Annotated FIRMs	1		4			\$ 595
Prepare MT-2 forms for CLOMR submittal	3					\$ 525
Prepare cover letter for CLOMR submittal	3		10			\$ 1,575
Coordination with District and FEMA for CLOMR	12					\$ 2,100
Revise CLOMR submittal based on District & FEMA review comments	16		20			\$ 4,900
LOMR						
Review As-Builts and compare to data in CLOMR submittal	2					\$ 350
Prepare MT-2 forms for LOMR using As-Builts	2					\$ 350
Coordination with District and FEMA for LOMR	12					\$ 2,100
Revise LOMR submittal based on District & FEMA review comments	8		8			\$ 2,240
Task Total						\$ 19,775
Task 4 Project Management						
Meetings, Phone calls, emails, sub coordination	40				200	\$ 7,200
Coordination with AMEC on obtaining previous geotechnical data					434	\$ 434
Task Total						\$ 7,634
NOLTE FEE =	137	36	94	0		\$ 39,519

**COST ESTIMATE
 GEOTECHNICAL OBSERVATION AND TESTING
 CHERLY CREEK, STAGE 90
 FLOOD CONTROL LEVEE REHABILITATION PROJECT
 RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT**

<u>Levee Field Testing</u>				
Senior Soil Technician	320 hrs.	@	\$85.00 /hr.	\$27,200.00
Project Engineer/Geologist	30 hrs.	@	\$150.00 /hr.	\$4,500.00
Soil-Cement Cylinder Pickup	16	@	\$300.00 /ea.	\$4,800.00
Field Laboratory Rental	2 mo.	@	\$500.00 /mo.	\$1,000.00

<u>Laboratory Testing (soil and cement)</u>				
Maximum Density (ASTM D1557)	20 tests	@	\$155.00 ea.	\$3,100.00
Sieve Analysis (ASTM C136)	20 tests	@	\$65.00 ea.	\$1,300.00
Sieve Analysis (ASTM C117)	20 tests	@	\$75.00 ea.	\$1,500.00
Cement %-Heat Method (ASTM D5982)	30 tests	@	\$150.00 ea.	\$4,500.00
Soil-Cement Comp. Tests (ASTM D1633)	80 tests	@	\$155.00 ea.	\$12,400.00

<u>Final Report</u>				
Final Report (3 copies)	lump sum	@	\$2,000.00	<u>\$2,000.00</u>
Estimated Total for Testing and Inspection				\$62,300.00

**COST ESTIMATE
 CERTIFICATION ANALYSES AND REPORT FOR LEVEES**

<u>Research and Review</u>				
Staff Engineering Geologist/Engineer	30 hrs.	@	\$95.00 /hr.	\$2,850.00
Project Engineer/Geologist	20 hrs.	@	\$150.00 /hr.	\$3,000.00
Principal Engineer/Engineering Geologist	12 hrs.	@	\$180.00 /hr.	\$2,160.00

<u>Analysis and Report Preparation</u>				
Staff Engineering Geologist/Engineer	60 hrs.	@	\$95.00 /hr.	\$5,700.00
Project Engineer/Geologist	60 hrs.	@	\$150.00 /hr.	\$9,000.00
Principal Engineer/Engineering Geologist	12 hrs.	@	\$180.00 /hr.	\$2,160.00
Estimated Total for Certification Analyses and Report				\$24,870.00

ESTIMATED GRAND TOTAL FOR TESTING & INSPECTION CERTIFICATION ANALYSES AND REPORT	\$87,170.00
--	--------------------