

JKM

STATE OF CALIFORNIA	Job Stamp	7-day Const. Calendar	Day No. 943 to 947
DEPARTMENT OF TRANSPORTATION	SFOBB SAS	Project Work Day No.	Day No. 1153 to 1157
Form HC-10A (Rev. 6/80)	04-0120F4	Date	07/13/09 to 07/17/09

Inspectors Hours	Start	0630	Stop	1500
Shift Hours	Start	0630	Stop	1500

ASSISTANT RESIDENT ENGINEER'S

CONTRACTOR – ABFJV

EQUIPMENT AND/OR LABOR:		HOURS - ITEM NO.										REMARKS			
Equ ip. #	NO. MEN	DESCRIPTION (Of Equipment or Labor)	Item 48 – Bar Reinforcing Steel (Bridge)										IDLE OR DOWN	Name	Contractor
		Regional Steel													

Description of Operation:

ABF

- See L. Mathur & M. Bruce diary for labor, equipment and remarks.

Office

7/13/09 ✓

- Misc job related office tasks.
- Review & responded to email.
- Wrote diaries.
- Attended weekly staff meeting.
- Determined PMIV Action requested on ABF-Rfl-00180R00 – Subject: Shyway OBG Lowering, which included drawings for Hinge A details No. 9 is not for my review.
- Prepared calc sheet for bid item 133 for pay estimate 39.

7/14/09 ✓

- Misc job related office tasks.
- Review & responded to email.
- Wrote diaries.
- Grout strength Caltrans and ABF's data for W2 PT tendons has significant variance in results but consistent between ABF and CTs.
- Discussed with G. Klebanov variance W2 PT tendon grout strength. G. Klebanov will discuss with TYLin.
- Prepared summary of W2 PT tendon grout strength which includes ABF's data and Caltrans. Provided copy to TYLin per G. Klebanov request.
-

7/15/09

- Misc job related office tasks.
- Review & responded to email.
- Wrote diaries.
- Attended Construction Hazardous Waste Management training – 6 hour course.

7/16/09

- Misc job related office tasks.
- Review & responded to email.
- Wrote diaries.
- Discussed with B. Boal ABF's request for payment (item 133) for additional 15% for survey plan of E/W OBG. B. Boal after some research agreed to pay ABF per request.
- Revised calc. Sheet for bid item 133.
- Received request to review ABF-SUB-001261R0 in PMIV. Discussed this submittal with J. Beede. J. Beede said submittal was complete and for me to write approval letter.
- J. Beede provided me with his comments and analysis of W2 PT grout results. See attached.
- Wrote approval letter for ABF-SUB-001261R0 and requested G. Klebanov and G. Lai to review and comment. Revised letter and requested A. Smith to expedite and process. See attached letter.
- Drafted letter to ABF regarding W2 PT grout strength and requested G. Klebanov and G. Lai to review and comment.
- Attended bi-weekly safety meeting.
- Revised letter for

7/17/09

- Misc job related office tasks.
- Review & responded to email.
- Wrote diaries.
- Assisted with going away celebration for T. Daszko.
- Revised letter to ABF regarding W2 PT grout strength and requested A. Smith expedite and process. See attached letter.

Inspector:

Pamela Gagnier



Trans Engineer (C)/Asst. Struct. Rep

Attachment
7/14/09

Sika Grout Compression Data for PT						
Cast Date		ABF @ Day Break	Each [psi]	Avg [MPa]	Caltrans Day Break	
02/13/09	E2 Cross Beam PT Tendon Grout	No Data		79.1	CT broke 49 days	
02/17/09	E2 Cross Beam PT Tendon Grout	"		68.3	CT broke @ 45 days	
02/18/09	E2 Cross Beam PT Tendon Grout	63		58.6	CT broke @ 44 days	
02/17/09	E2 Cross Beam PT Tendon Grout	No Data		63.3	CT broke @ 45 days	
04/30/09	W2 - CBT-22	10580 @ 28	18504			
		10540 @ 28	17342	123.6	CT Broke @ 28 days	
		11040 @ 28				
04/30/09	W2 - CBT-16	11250 @ 28	7639			
		10510 @ 28	10049	61.6	CT Broke @ 28 days	
		11470 @ 28	9133			
04/30/09	W2 - CBT-12	4760 @ 28	7900			
		3410 @ 56	9540	61.6	CT Broke @ 28 days	
		"	9350			
05/01/09	W2 - CBT-25	5780 @ 28	7690			
		6460 @ 56	5730	43	CT Broke @ 68 days	
		No Data	5340			
05/01/09	W2 - CBT-24 & 26	6160 @ 28	7900			
		8080 @ 56	9540	62	CT Broke @ 68 days	
		8430 @ 56	9350			
05/01/09	W2 - VBE on W2E	5870 @ 28	5710			
		7270 @ 56	6270	45	CT Broke @ 68 days	
		No Data	7420			
05/04/09	W2 - VBE on W2W	13990 @ 28	5610			
		13200 @ 28	8350	59	CT Broke @ 68 days	
		13820 @ 28	11410			

J. Beede Comments

7/16/09

W2 PT Grout
Results

/

A review of the compressive strength results for the recent W2 Cap Beam Tendon grouting indicated that approximately nine out of twenty cube samples failed to comply with the minimum 8000 psi twenty- eight days strength requirement. An analysis of the grouting data indicated that the strength variation ranged from a high of 18,504 to a low of 5,340 psi. This strength variance reflects in the overall quality control of the grouting operations and will require adjustment in the grouting operations, mainly in the control of the grout mix, uniformity of grout density and water content and strict adherence to the grout manufacture's mixing and batching recommendations.

The quality of the grouting operation must be improved in order to minimize the overall variance in the strength test results. At a minimum it is essential that the added mix water be controlled, that the obtainment of uniformity between batches be improved and the sampling and fabrication of the grout cube strength specimens be performed in accordance with the approved test methods.

J. Reede Analysis 7/16/89

UNIT WEIGHT AND ABSOLUTE VOLUME CALCULATIONS
 SIKS GROUT, PT 800 - EZ CROSS BEAM TENDON GROUT

MIX WATER/PT. (1.04 lb/PT)	WEIGHT POUNDS	VOLUME, H ₂ O WT/GAL	VOLUME OF GROUT 50# (196.6)	VOLUME OF GROUT	WT OF GROUT GROUT + H ₂ O #/cu ft	DENSITY #/cu ft
8 pts.	8.32	0.133 cu ft.	.254	0.387	58.32	150.6
9	9.36	0.150 "	"	0.404	59.36	146.9
10	10.40	0.166 "	"	0.420	60.40	143.8
11	11.44	0.183 "	"	0.437	61.44	140.6
12	12.48	0.200 "	"	0.454	62.48	137.6
12.5	13.00	0.208 "	"	0.462	63.00	136.4
13	13.52	0.216 "	"	0.470	63.52	135.1
14	14.56	0.233 "	"	0.487	64.56	132.5
14.5	15.08	0.241 "	"	0.495	65.08	131.5

14B Reede
 2.16

63.02

453.0

941.5

Diary Attachment
7/16/09

DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge Program

333 Burma Rd.
Oakland, CA 94607
(510) 622-5660, (510) 286-0550 fax



*Flex your power
Be energy efficient!*

July 17, 2009

Contract No. 04-0120F4
04-SF-80-13.2 / 13.9
Self-Anchored Suspension Bridge
Letter No. 05.03.01-004697

Michael Flowers
Project Executive
American Bridge/Fluor, A JV
375 Burma Road
Oakland, CA 94607

Dear Michael Flowers,

W2 Cap Beam Tendon Grouting

A review of the compressive strength test results for the recent W2 Cap Beam tendon grouting indicated that approximately nine out of twenty cube samples failed to comply with the minimum 8000psi at twenty-eight days strength per the grout manufacturer's strength recommendations. An analysis of Caltrans grouting data indicated that the strength variation ranged from a high of 18,504 to a low of 5,340psi.

Please provide the following information to the Department:

1. A clear explanation of the cause of grout strength variance.
2. A description of the actions ABF will take to ensure grout strength consistency, and compliance with contract requirements and approved submittals.

Pending further investigation by the Department, no further grouting of tendons is permitted.

If you have any questions, please contact Gil Klebanov at (510) 286-0510.

Sincerely,

<<< ORIGINAL SIGNED >>>

GARY PURSELL
Resident Engineer

cc: Rick Morrow
Gilel Klebanov
file: 05.03.01, 43.02.GROUT.06

DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge Program

333 Burma Rd.

Oakland, CA 94607

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July 17, 2009

Contract No. 04-0120F4
04-SF-80-13.2 / 13.9
Self-Anchored Suspension Bridge
Letter No. 05.03.01-pgagnier-
000002

Michael Flowers
Project Executive
American Bridge/Fluor, A JV
375 Burma Road
Oakland, CA 94607

Dear Michael Flowers,

W2 Cap Beam Tendon Grouting

A review of the compressive strength test results for the recent W2 Cap Beam Tendon grouting indicated that approximately nine out of twenty cube samples failed to comply with the minimum 8000 psi at twenty-eight days strength per the grout manufacturers strength recommendations. An analysis of the grouting data indicated that the strength variation ranged from a high of 18,504 to a low of 5,340 psi.

Please provide the following information to the Department:

1. A clear explanation of the cause of grout strength variance.
2. A description of actions American Bridge/Flour to ensure grout strength consistency, compliance with contract requirements and approved submittals.

Pending further investigation by the Department, no further grouting of tendons is permitted.

Sincerely,

GARY PURSELL
Resident Engineer

cc:
file: 05.03.01

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Oakland, CA 94607
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July 17, 2009

Contract No. 04-0120F4
04-SF-80-13.2 / 13.9
Self-Anchored Suspension Bridge
Letter No. 05.03.01-pgagnier-
000002

Michael Flowers
Project Executive
American Bridge/Fluor, A JV
375 Burma Road
Oakland, CA 94607

Dear Michael Flowers,

W2 Cap Beam Tendon Grouting

A review of the compressive strength results for the recent W2 Cap Beam Tendon grouting indicated that approximately nine out of twenty cube samples failed to comply with the minimum 8000 psi at twenty-eight days strength per the grout manufacturers strength recommendations. An analysis of the grouting data indicated that the strength variation ranged from a high of 18,504 to a low of 5,340 psi. This strength variance is unacceptable to the Department and is cause for rejection of the grouted tendons.

Please provide the following information to the Department:

1. A clear explanation of the cause of grout strength variance.
2. A description of actions American Bridge/Flour to ensure grout strength consistency.

Pending further investigation by the Department, no further grouting of tendons is permitted.

Sincerely,

GARY PURSELL
Resident Engineer

cc:
file: 05.03.01

DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge Program

333 Burma Rd.

Oakland, CA 94607

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7/17/09

July 17, 2009

Contract No. 04-0120F4

04-SF-80-13.2 / 13.9

Self-Anchored Suspension Bridge

Letter No. 05.03.01-004685

Michael Flowers
Project Executive
American Bridge/Fluor, A JV
375 Burma Road
Oakland, CA 94607

Dear Michael Flowers,

Concrete Testing Laboratory - Smith-Emery Company

The Department has completed reviewing Submittal ABF-SUB-001261R00, "Concrete Testing Laboratory: Smith-Emery Company," dated July 15, 2009. In accordance with Special Provision Section 10-1.45, "Concrete Structures," the proposed independent laboratory, Smith-Emery Company, is "Approved." Please note the following comment:

CATEGORY B:

1. Provide a list of certified testers and/or inspectors prior to proceeding with any testing and/or inspection.

Please contact Gil Klebanov at (510) 286-0510 if you have any questions.

Sincerely,

<<< ORIGINAL SIGNED >>>

GARY PURSELL
Resident Engineer

cc: Rick Morrow
Gilel Klebanov
file: 05.03.01, 55.1261

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July 16, 2009

Contract No. 04-0120F4
04-SF-80-13.2 / 13.9
Self-Anchored Suspension Bridge
Letter No. 05.03.01-pgagnier-
000001

Michael Flowers
Project Executive
American Bridge/Fluor, A JV
375 Burma Road
Oakland, CA 94607

Dear Michael Flowers,

Concrete Testing Laboratory: Smith-Emery Company

The Department has completed reviewing submittal ABF-SUB-001261R0, dated July 15, 2009. In accordance with Special Provisions Section 10-1.45, "Concrete Structures," the proposed independent laboratory, Smith Emery Company, has been approved with the following comment:

Category B:

1. Please provide a list of certified testers and/or inspectors prior to proceeding with any testing and/or inspection.

Please contact Gil Klebanov at (510) 286-0510 if you have any questions.

Sincerely,

GARY PURSELL
Resident Engineer

cc: R. Morrow
G. Klebanov

file: 05.03.01, 55.1261