STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

Form HC-10A (Rev. 6/80)

Job Stamp
04-0120F4
SFOBB SAS

Const. Calendar Day No. 719
Project Work Day No. 929
Date 12/01/2008

Shift Hours Start 7.00 Stop 3:30
Inspector Shift 7:00 AM to 3:30 PM

ASSISTANT RESIDENT ENGINEER'S

CONTRACTOR – ABFJV

EQUIPMENT AND/OR LABOR:

Equip. #	NO. MEN	DESCRIPTION (Of Equipment or Labor)	HOURS - ITEM NO. #38 Str. Concrete, Bridge	# 48 Bar Reinforcement Steel	CCO							IDLE OR DOWN	REMARKS Name	Contractor
1	1	Gen. Foreman											Terry Cronk	ABF E2
2	1	Pile Driver	8										Tony Crieghton	ABF
3	1	Pile Driver	4		4								George Mcneil	ABF
4	1	Laborer	8										Jose Molina	ABF
5	1	Laborer	8										Rigiberto Campos	ABF
6	1	Pile Driver J/M	8										Audre Hudson	ABF
7	1	Pile Driver/Welder	8										Henry Wheat	ABF
8	1	Elevator Operator	8										Howard Schroyer	ABF
9	1	Pile Driver Foreman	8										Nigel Lohse	ABF
10	1	Pile Driver	8										Aaron Gilpatrick	ABF
11	1	Pile Driver											Andrew Adams	ABF E2
12	1	Pile Driver	8										Kurt Chaission	ABF
13	1	Pile Driver										Vac	Jesse Johnasen	ABF
14	1	Crane Operator	8										Richard	ABF
15	1	Operator Apprentice/oiler	8										Ross Scott	ABF
16	1	Pile Driver	8										Abasi Delley	ABF
17	1	Pile Driver	8										Kenneth Reynolds	ABF
18	1	Labor	8										Joseph Ruiz	ABF
		Iron workers											Tim Greenlee etc	ABF/RSC
	1	Old Crane 1300											Crane	ABF
	1	1st Man Lift S-125												Hertz Rental
	1	Lincoln Vantage Welding M/C 768-50-4005										8		ABF
	1	Lincoln Vantage Welding M/C 768-50-4009										8		ABF
	1	Lincoln Vantage Welding M/C 768-30-4032										8		Hertz Rental
	1	Lincoln Vantage Welding M/C 768-30-4014												Hertz Rental, deck
	1	MQ Power Generator 220												ABF Main power
	1	MQ Whisper Watt 7000 549-07-5006												ABF deck
	1	MQ Whisper Watt 7000 549-20-4007												ABF

REC'D *09 JAN-06 #0008207

46.02

	1	MQ Whisper Watt 7000 549-20-4044										8		ABF
	1	Ingersoll Rand Air compressor 20-2183										8		ABF central
	1	Ingersoll Rand Air Compressor 006-18-4293										8		ABF
	1	Ingersoll Rand Air Compressor 185R										8		ABF Deck
	1	Ingersoll Rand Air Compressor 006-18-4297										8		ABF
	1	Ingersoll Rand Flood Lights 536-40-6831												ABF power
	1	Genie 541-4000N Flood Lights 536-40-7044												ABF
	1	Genie 541-4000N Flood Lights 536-40-4839												ABF
	1	Genie 541-4000N Flood Lights 536-40-4843												ABF
	1	Genie 541-4000N Flood												ABF
	1	Genie 541-4000N Flood												ABF deck power
	1	Forklift Hertz Rental 544D-10	8											ABF
	1	Pickup	8											ABF
	1	Elevator	8											ABF

Weather: Coudy morning, slightlywindy & cold, High 61F Low 48F

Description of Operation:

Iron workers are working for Pour 5.
They are installing the rebars.
They are installing the longitudinal ducts off the east wall to the cages.

ABF continues installing the Thermal Control Piping for Pour-5.
ABF continues cleaning up on the top and at the ground level.

ABF continues sand blasting the Pour-4 rebars and surface. Today they are trying to remove all the used blasting sand from the pour 4 area before the rains begin.

RSC is working on finishing the remaining transverse and longitudinal ducts.

ABF is lowering the duct # 43 located on south end on west face by 50 mm. According to drawing 470, the duct is located 980 below the top of concrete surface. There is a 750 mm deep Finger Joint at this location. This gives the clearance from real conc surface to C/L of duct #43 as 980-750 = 230 mm. But it was measured to be only 195 mm. ABF agreed to lower the block-out (about 600 x 1200) containing #43 and 1B by 50 mm thus giving a clearance of 245 mm. The ducts 42B and 44 were measured to be 250 mm and are not required to be lowered.

ABF's George worked on it on a CCO and spent 4 hours in lowering and resealing the blockout.

ABF surveyors are working marking elevations on the rebars for concrete pour.

Additional Work at or outside of the W2 Site:

a) The contractor continues to erect trusses for Temporary Towers A & B on E-Line.
b) ABF is removing the rocks at Tower C location. The removed locations will be filled with native soils removed originally and sitting on spoils near by.
c) Attended Gil's Staff Meeting at 8 AM.
d) Attended E2 Pre-Pour Meeting with ABF in WDC conference room at 1:30 PM.
   - Jim Davidson gave a hand out containing information about the Concrete Pour.
   - The 1st truck will be there at 9 PM
   - 1450 M^3 of concrete.

- Mix No 161790, same as on W2 Pour 4
- They will use Amador and mariposa Plants.
- They will start with Amador Plant and then start the mariposa plant after 4 hours.
- Thermal Control will be same as for W2 Pour 4.
- There was an Email from the Thermal control engineer confirming this.
- They will have initial slump flow tests at the plant to make sure that the trucks leave with good concrete. The slump will be re-verified at the job site for the 1st few truck. Gil reserved the right to test as many trucks as required if the concrete does not look good at the site.
- Test cylinders will be made at the job site.
- ABF's Charles presented a sheet from Pour 2 relating the readings for the slump at the plant and at the site. Charles table also related the slump flow vs. truck pressure meter readings.

Lalit Mathur, P.E. Trans Engineer (D)/Asst. Struct. Rep

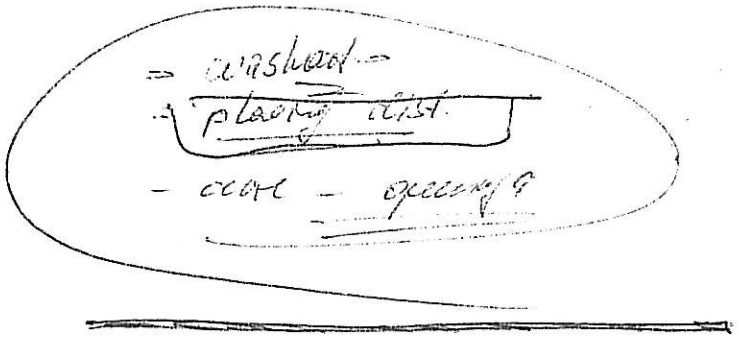
E2 CONCRETE PLACEMENT PRE POUR MEETING AGENDA

- **DECEMBER 1, 2008 1:30 PM**
- **ABF, CALTRANS**

- **GENERAL**
  - 1450 M^3
  - SCC MIX NO. 161790
  - CEMEX ORDER NO. 33686
  - POUR DATE DECEMBER 5, 2008
  - CONCRETE ONSITE 9:00 PM
  - TWO PLANTS – AMADOR AND MARIPOSA
  - 140 M^3 / HR – 70 M^3 / HR FOR THE FIRST ~~THREE~~ FOUR HOURS

- **THERMAL CONTROL**
  - SEE ATTACHED TABLE

- **TESTING**
  - SLUMP FLOW AT PLANT
  - CYLINDERS ONSITE



Jim Davidson

From: Gajda, John [jgajda@ctlgroup.com]
Sent: Saturday, November 22, 2008 8:01 PM
To: jdavidson@abfjv.com
Subject: Use of recent W2 Pour 4/5 Modeling for the E2

Jim-

During a recent conversation, you asked if you could use the recent thermal modeling update (from our letter dated Nov. 5, 2008 for the W2 Pour 4/5 with the 700 mm pipe layout using the updated ATR for Cemex # 161790) for the E2 cap beam placement. You indicated that for the E2 placement you will be using the same concrete and the "700 mm" cooling pipe layout described in our April 14, 2008 thermal control plan for the E2 cap beam.

Based on the above information, the answer to your question is "yes"; it would be appropriate and conservative to use the tables in the referenced letter for the E2 cap beam when the referenced pipe layout and referenced concrete mix are used. It is conservative since the actual pipe spacing in the E2 beam is 700x650 mm, which is slightly less than the 700x700 mm spacing in W2 Pours 4/5.

Let me know if you have any questions-

John

John Gajda, PE (Illinois, California, and Florida)
Principal Engineer
CTLGroup
Building Knowledge, Delivering Results.
5400 Old Orchard Road
Skokie, IL 60077-1030
Phone: 847-972-3140
Fax: 847-965-6541
Cell: 847-922-1886
Email: JGajda@CTLGroup.com

Visit us at: www.MassConcreteHelp.com and www.CTLGroup.com

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UPDATED Table 14 - Predicted Temperatures* and Times* for W2 Pours 4 and 5 with R-2 Surface Insulation and the 700 mm Cooling Pipe Layout**

Modeled Temperatures, °F		Predicted Maximum Concrete Temperature, °F	Predicted Time of Max. Concrete Temperature, days	Predicted Maximum Temperature Difference†, °F	Predicted Time of Max. Temp. Difference, days	Estimated Time of Thermal Control††, days	Placement Restrictions†††
Average Air	Initial Concrete***						
30	50	114	2.6	29	4.0	9	None
	60	124	2.1	32	3.3	9	None
	70	134	1.7	35	2.9	9	None
	80	145	1.4	38	2.6	9	None
	90	157	1.2	41	2.4	9	Max Temp
40	50	115	2.6	25	3.8	8	None
	60	124	2.1	28	3.2	8	None
	70	134	1.7	31	2.8	8	None
	80	145	1.4	34	2.6	8	None
	90	157	1.2	38	2.4	8	Max Temp
50	50	117	2.6	22	3.6	7	None
	60	124	2.1	25	3.1	7	None
	70	134	1.7	28	2.8	7	None
	80	145	1.4	31	2.5	7	None
	90	157	1.2	34	2.3	8	Max Temp
60	50	123	2.5	21	3.6	7	None
	60	130	2.1	23	3.2	7	None
	70	138	1.7	26	2.8	7	None
	80	149	1.4	29	2.6	7	None
	90	160	1.2	32	2.4	7	Max Temp
70	50	129	2.5	20	3.6	7	None
	60	135	2.1	21	3.2	7	None
	70	143	1.8	24	2.9	6	None
	80	152	1.5	26	2.6	6	Max Temp
	90	162	1.2	29	2.4	7	Max Temp
80	50	130	2.2	16	3.5	7	None
	60	136	1.9	18	3.1	7	None
	70	144	1.6	20	2.8	6	None
	80	152	1.5	23	2.5	6	Max Temp
	90	162	1.3	26	2.4	6	Max Temp
90	50	132	2.2	13	3.4	7	None
	60	138	1.8	14	3.0	7	None
	70	145	1.6	17	2.7	6	None
	80	153	1.4	19	2.5	6	Max Temp
	90	163	1.2	22	2.3	6	Max Temp

* Thermal modeling results were updated based on QDRUM results for Cemex # 161790. The QDRUM testing started on September 15, 2008 and ran for 28 days. From this testing, the QDRUM had a lower early-age adiabatic temperature rise (ATR), a lower mid-age ATR, and a lower later-age ATR compared to the ATR used in our July 10, 2007 thermal control plan. To be conservative, for this modeling combined the different ATRs into a single ATR that represented the highest ATR at each age. Other than the ATR, the modeling (and assumptions) was identical to that described in the July 10, 2007 thermal control plan.

** The cooling pipe configuration is shown on Drawing No. 3 of the referenced thermal control plan.

*** This is the concrete temperature as it is placed (pumped) into the formwork.

† This is the maximum predicted temperature difference between temperature sensors shown on Drawing No. 8 of the referenced thermal control plan.

†† This is the estimated time until the hottest portion of the concrete has cooled to within the current temperature difference limit of the average air temperature. This estimate is for planning purposes only. Insulation should be removed based on measured data, not this estimate. Note that Pour 6 requires additional cooling of Pours 4 and 5. This is best achieved by operating the cooling pipe system for longer than required for thermal control. See the section of the thermal control plan entitled "Timing of Lifts (For Modeling)".

††† This column will indicate either "None", "Max Temp", "Temp Diff", or "Both". "None" means that excessive concrete temperatures (greater than 149°F) or temperature differences (greater than the current temperature difference limit) are not predicted for this combination of placement conditions. Do not place concrete at temperature conditions where either "Max Temp", "Temp Diff", or "Both" appears.

W2 CAP BEAM POUR 2
Slump Flow Vs Truck Pressure Meter Reading

504	30	1250	700	33
239	29	1400	750	30
502	30	1150	850	29
828	29.5	1450	700	27.5
510	30	1250	550	28.25
500	29.5	1450	500	28.5
499	31	1300	650	28.5
548	30	1450	550	27
507	30.5	1450	750	26
264	28.5	1500	650	26.5
828	28.5	1500	800	26.5
	29.7	**1377.3**	**677.3**	**28.3**

American Bridge / FLUOR. A JOINT VENTURE

SCC CONCRETE SLUMP FLOW & TRUCK SLUMP METER LOG

(Attach to Concrete Inspection report form)

Project: SFOBB Self-Anchored Suspension Bridge

Location: W2 Cap Beam Pour 2 **Date:** 5/6/08 **Contract No.:** 04-0120F4

Inspector: [signature] Kanapicki

Load	Ticket	Truck	Slump Flow Plant	Slump Meter Plant		Time	Slump Flow Field	Slump Meter Field		Time	Remarks
				Mix	Idle			Mix	Idle		
2	4060	504	30	1750	700	1:45	32/34	1300	600	245	RZJ
3	4061	239	29	1400	750	1:54	31/29		650	255	OK
3	4059	3502	30	1150	850	1:59	29		~~650~~ 1250		OK
4	4062	3828	29.5	1450	700	2:07	27.5		650	320	OK
5	4063	3510	30	1250	550	2:10	28.25			330	OK
6	4064	3500	29.5	1450	500	2:17	28.5				OK
7	4065	3499	31	1300	650	2:25	28.5			340	OK
8	4066	3540	30	1450	550	2:28	27			350	OK
9	4067	3507	30.5	1430	750	2:35	26				
10	4068	3264	28.5	1500	600	2:47	26.5				
11	4069	3571	29	1400	850	2:52					
12	4070	3505	27	1500	800	3:00					
13	4071	3257	26	1400	750	3:10					
14	4072	3239	27	1350	900	4:10					
15	4073	3582	27.5	1300	800	4:20					
16	4074	3828	28.5	1500	800	4:37	26.5	1500		5:15	
17	4075	3510	30	1350	750	4:45					
18	4076	3499	28	1500	800	4:57					

Rec'd Anson 9/2/08

Slump meter on each truck gets checked at 2 speeds; mixing speed (10 to 12 rpm) and at idle speed (1 to 3 rpm).