STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

Job Stamp
04-0120F4
SFOBB SAS

Const. Calendar: 645
Project Work Day No.: 845
Date 09/18/2008

Inspectors	Start	06:30	Stop	11:00
Hours		12:10		12:40
Shift Hours		06:30		15:00

ASSISTANT RESIDENT ENGINEER'S **CONTRACTOR – ABFJV, sub Conco**

Weather: Sunny with mild temperature – Hi 68°F Low 55°F (per weather.com forecast)

ABF

- Continued to prepare the steel deviation saddle forms and then weld the dead-end transverse sleeve pipe assembly for CBT-2 and CBT-6 at W2E to the forms.
- Began to install bearing plates for continuity tendons E-1B to E-13B on the west wall.
- Cleaned debris from stripping the pour 3 north blockout forms.
- Continued to install trumpets at the east bulkhead from E-37B to E-42B and E-1A towards E-42A.
- Prepared gang panel forms for the west walls near the deviation saddles.

Conco

- Placed approximately 41m^3 of conventional concrete (Mix design No. 160061) in the vertical bar blockouts near W2E and W2W.

Time (military)	Concrete Temperature (°F)	Location where temperature was taken	Comments
06:40	Concrete pump was mobilized. The spacing between rows 12 to 18 and 21 to 27 at W2W North Hinge K assembly was fixed. The spacing went from 385mm to 350mm which is within the tolerance of ± 25mm of the plan dimension of 330mm.		
07:25	First truck arrives on the jobsite. Air temperature at the hopper = 57°F		
07:40	67	Concrete in the wheel-barrow from 1st truck	Slump from the first truck was 8 ½"
07:50	Started placing concrete in the south corner of the W2E blockout. I told the Conco laborers and Nigel that the concrete can't be pushed to the corner with the vibrators per section 51-1.09 of the Standard Specs.		
08:00	67	South end of W2E	Temperature taken next to placed concrete
08:10	Pamela informed me that ABF plans to use Rugasol-S prior to spraying curing compound on the concrete.		
08:15	70	North end of W2E	
08:25	67	E-19B west wall	
08:40	67	In between W2E Hinges	
08:53	Done placing concrete at W2E vertical bar blockout.		
09:05	Began placing concrete in the W2W vertical bar blockout. I informed Nigel and Branden that they are using Rugasol-S at their own risk since it wasn't approved and Sika (the manufacterer) recommends testing this admixure with non-Sika products such as the curing compound.		
09:09	Air temperature at W2W vertical bar blockout = 58°F		
09:21	66	W-21B continuity tendon	
09:35	65	W-15B continuity tendon	See photo below.
09:40	Nigel informed me that Rugasol-S has been applied to the surface of the W2E vertical bar blockout. After the concrete lost it's "sheen" then curing compound would be sprayed immediately on the surface. I asked him if he was going to place curing mats on the surface and he said it wasn't necessary.		
09:55	62	W-20B continuity tendon	
10:10	68	In between W-28B and W-29B continuity tendons	
10:17	Done placing concrete at W2W vertical bar blockout.		
10:26	Curing compound was sprayed on the W2E vertical bar blockout surface, see photo below.		
10:34	**66**	E-15B continuity tendon	Measurement was taken in the shade after curing compound was applied.
11:00	Left the jobsite for lunch.		

Time (military)	Concrete Temperature (°F)	Location where temperature was taken	Comments
12:15	**67**	E-20B continuity tendon	Measurement taken in the shade after curing compound was applied. The concrete surface was hard at this time and the air temperature at this location was 65°F.
12:30	**80**	In between the vertical bar rows 111-117 and 120-126.	Measurement taken in the sun after curing compound was applied. The concrete surface was hard at this time. I recommeded to Nigel that the W2E vertical bar blockout surface should be sprayed again since it appeared that not enough was applied.
12:40	Asked Nigel and Branden one more time if they were going to use curing mats in addition to the curing compound and they said no. I showed them the data sheet from Sika (manufacturer of Rugasol-S) and point out the sentences on placing curing mats and checking the compatibility of the admixtures (Rugasol-S and curing compound). Left the jobsite		

* Temperatures were obtained with the Fluke-63 Infared Thermometer. The Fluke-63 was calibrated the day before and during concrete placement with a mercury thermometer.

Notes:

1. Overall the placement of concrete went well as the flow looked consistent, not too "wet", and no segregation. The vibration was done proficiently around the bearing plates of the vertical bars and near the corners of the construction joint.
2. ABF Foreman Nigel Lohse directed Conco during the concrete placement regarding vibration and the sequence of placing concrete. ABF sprayed the Rugasol-S and curing compound on the concrete.
3. I never heard from ABF field engineer Branden Bedwell if there is bursting steel above the bottom plate of the vertical bars. All of the contract documents suggest that there is no bursting steel.
4. Temperatures in bold were taken at the surface of the concrete after placement, every other temperature was taken next to freshly placed concrete.
5. There were slight breezes from the west at the top of the W2 cap beam. However the formwork prevented any wind from affecting the concrete surface. Based on a humidity range of 85% for 55°F and 70% for 68°F the rate of evaporation was 0.05 $lb/ft^2/hr$ which is well below 0.2 $lb/ft^2/hr$ where precautions must be taken against plastic shrinkage cracking.

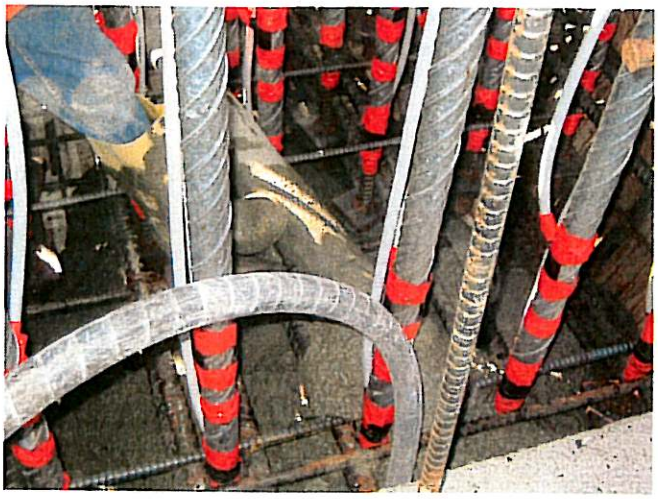
Office work:

- Wrote yesterdays and todays diaries.

Inspector:

Matt Bruce Matt Bruce Transportation Engineer (D)

EA	04-0120F4
Co-Rte-KP (PM)	SF-080-13.2/13.9 (8.2/8.7)
Structure Rep.	Rick Morrow



File Name:	Sept-18-2008 W2 Cap 004		
Date:	09-18-08	By Int:	M Bruce

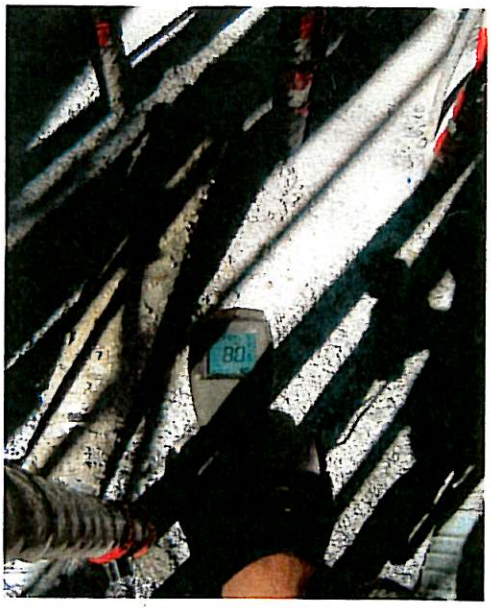
Description: Placing concrete in the W2W vertical blockout on the north end. The hose was placed in between the Hinge assemblies on both sides then slick lined as seen in the photo above.

File Name:	Sept-18-2008 W2 Cap 005		
Date:	09-18-08	By Int:	M Bruce

Description: Concrete temperature of 65°F at W-15B continuity tendon taken at 9:35am. This was compared to the mercury thermometer, which displayed a temperature of 66°F. In general the infared temperature gun has consistently been 1°F below the mercury thermometer for all concrete pours.

File Name:	Sept-18-2008 W2 Cap 006		
Date:	09-18-08	By Int:	M Bruce

Description: Concrete surface of the W2E vertical bar blockout after the Rugasol-S and curing compound was sprayed. There appeared to be ponding of the two compounds in the valleys of the roughly finished surface.



File Name:	Sept-18-2008 W2 Cap 009		
Date:	09-18-08	By Int:	M Bruce

Description: W2W concrete surface temperature of 80°F at 12:30 in between the vertical bar rows 111-117 and 120-126. As stated above this area was exposed to the sun after curing compound was applied. Also the concrete surface was hard at this time.