

Job Stamp

04-0120F4
SFOBB SAS

Const. Calendar: 861

Project Work Day No.: 1071

Date: 04/22/2009

Inspectors	Start	07:30	Stop	14:00
Hours				
Shift Hours		07:00		17:00

ASSISTANT RESIDENT ENGINEER'S

CONTRACTOR – ABFJV, Subs SDI and CMC-RS

HOURS - ITEM NO.

EQUIPMENT AND/OR LABOR:			#34 Prestressing Cast-in-Place Concrete (Pier W2)								IDLE OR DOWN	REMARKS	
Equip. #	NO. MEN	DESCRIPTION (Of Equipment or Labor)										Name	Contractor
1	1	Field Superintendent	8									Ralph Craig	SDI
2	1	Ironworker Foreman	8									Erin Jones	SDI
3	1	Ironworker Journeyman	8									Darrin Kurz	SDI
4	1	Ironworker Journeyman	8									James Carriker	SDI
5	1	Ironworker Journeyman	8									Randy Hill Jr.	SDI
HPU-E-30-10K-02	1	A-Frame Ram Support	8										SDI
HPU-D-110-3K-02	1	Hydraulic Pumping Unit								8			SDI
SPH.60.3K.06	1	Strand Pushing Unit								8			SDI
CH600-8-110	1	600 Ton Ram	8										SDI
CH820-8-03	1	820 Ton Ram								8			SDI

Weather: Sunny with mild temperatures – Hi 83°F Low 52°F (per weather.com forecast)

Description of Operations @ W2 Cap Beam:

ABF

- Continued bushing the concrete surfaces of the W2E vertical PT blockout.
- Continued to remove vertical/battered strongbacks (double channels and tubing) and timber forms (plywood and 4"x6"s) on the the west end of the cap beam. Continued chipping polystyrene blockout for the W2W Hinge K assembly grout pads.
- Continued cleaning the bearing plates and hex nuts of the long vertical PT bars at W2W.
- Began to vacuum and blow out water in the ducts of the long vertical PT bars at W2W.

SDI

- Completed installation of the anchor heads and wedges for the 26 transverse tendons (CBT-11 to 36) on both ends of the cap beam.
- Stressed the first stage transverse tendons from number 1 (CBT-15) to number 14 (CBT-30) in the sequence on the south end of the cap beam.

Notes:

- 1) The sequence of stressing first stage transverse tendons CBT-11 to 36 was specified by the latest revision in Submittal 150 dated July 13th, 2007.
- 2) Assumed anchor set for the strand/wedges is 9mm.

- 3) A strain indicator (serial number 59432) was used to monitor the 100% P_{jack} (1183 kips) load on CBT-15, 14, and 16
- 4) Saman and myself witnessed this entire operation for every tendon to monitor elongation measurements, anchor set, and the load/pressure being applied by the jack. To our knowledge no strand/wire failed or slipped.
- 5) Mike Schwager was onsite for stressing tendons CBT-15, 14, and 16.
- 6) See Saman's diary for details for the safety issue with the scaffolds while stressing.

CMC-RS

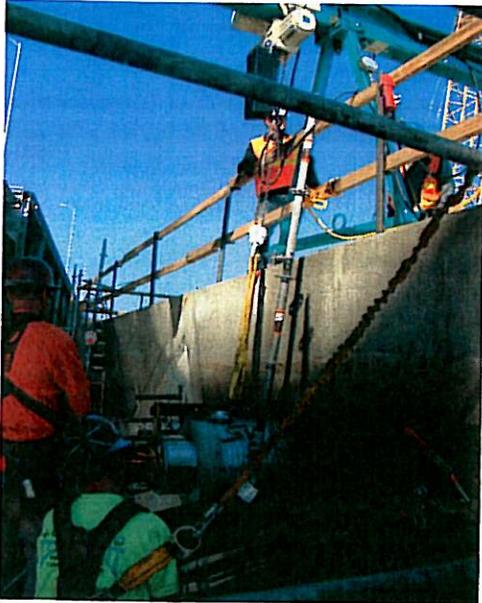
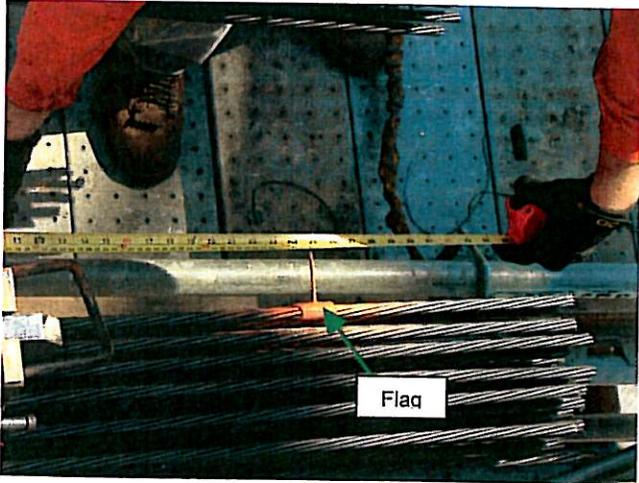
- Continued to place #19 horizontal reinforcement at the W2E construction joint with the OBG, see Lalit's diary for additional details and labor.

Office work:

- Began to review elongations for transverse tendons stressed today.
- Began to write today's diary.
- Discussed with Saman and TY-Lin designer James Duxbury the initial low elongations compared to the calculated first end theoretical values. The outcome of this discussion was to notify TY-Lin about the current situation and to prepare for elongations out of the $\pm 7\%$ tolerance. All of us agreed to wait and see the result on the 2nd end before taking any action. If the total elongations remained low after both ends were stressed, then numerous options would have to be explored. Options included recalculating the theoretical elongation based on the friction and wobble coefficients, stressing to 105% P_{jack} , accepting values outside the $\pm 7\%$ tolerance, etc.
- Reviewed the RFI to stress the long vertical bars simultaneously with the transverse tendons.
- Reviewed ram calibration charts for B-36 and B-117 rams which will be used to stress the long vertical bars. Also began to review the stressing protocol for the long vertical PT bars in between the Hinge K assemblies.

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:	Apr-22-2009 W2 Cap 002		
Date:	04-22-09	By Int:	M Bruce
Description:	Stressing CBT-15 on the south end of the cap beam.		
File Name:	Apr-22-2009 W2 Cap 003		
Date:	04-22-09	By Int:	M Bruce
Description:	Elongation measurement of 627mm prior to releasing the jack pressure and before wedges (anchor) set for CBT-12. The first end elongation measurement is done by stressing to 20% P_{jack} and setting a flag, this takes out the "slack" in the cable and also sets the wedges on the dead end. The strand is then stressed to 100% P_{jack} . The measurement is taken at 80% of the total elongation since the flag was set at a specified point (300mm).		

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



File Name:	Apr-22-2009 W2 Cap 004
Date:	04-22-09
By Int:	M Bruce

Description: SDI stressing operation on the south end of the cap beam at CBT-20 looking east.

File Name:	Apr-22-2009 W2 Cap 005
Date:	04-22-09
By Int:	M Bruce

Description: There were numerous occasions where the scaffold members made it difficult to place the ram on the anchor head for CBT-11 to 22. ABF foreman Nigel Lohse was made aware of this situation numerous times. Also the horizontal restraint wasn't adequate as yellow rope was tied from the scaffold to the handrail.



File Name:	Apr-22-2009 W2 Cap 006
Date:	04-22-09
By Int:	M Bruce

Description: Ironworkers used a winch to pry the scaffold posts away from the ram body to enable access. Both ABF and SDI were informed that this situation was unsafe and a better solution was needed for performing this work.

File Name:	Apr-22-2009 W2 Cap 008
Date:	04-22-09
By Int:	M Bruce

Description: Ironworkers positioning the 600-ton ram on the south end of CBT-23. This task includes putting the strand through the ram, aligning the ram normal to the anchorhead/bearing plate, and re-gripping the strand after each piston stroke limit of the jack. One ironworker was on the dead end checking for slip and notifying the ram operator that the wedges and anchorhead were engaged at 20% P...