

Job Stamp

04-0120F4

SFOBB SAS

Const. Calendar: 16

Project Work Day No.: 1226

Date 09/24/2009

Inspectors	Start	06:30	Stop	11:40
Hours		12:20		14:00
Shift Hours		06:30		15:00

ASSISTANT RESIDENT ENGINEER'S

CONTRACTOR – ABFJV, Sub SDI

HOURS - ITEM NO.

EQUIPMENT AND/OR LABOR:

Equip. #	NO. MEN	DESCRIPTION (Of Equipment or Labor)	#34 Prestressing Cast-In-Place Concrete (Pier W2)	#37 Cable Tie -Down										IDLE OR DOWN	REMARKS	
															Name	Contractor
1	1	Ironworker Superintendent	3	5											Ralph Craig	SDI
2	1	Ironworker Foreman	3	5											Erin Jones	SDI
3	1	Ironworker Journeyman	3	5											Randy Hill Jr.	SDI
4	1	Ironworker Apprentice	3	5											Bounthaby Singharath	SDI
5	1	Ironworker Apprentice	3	5											Will Hobbs	SDI
	1	Whisperwatt Power Generator	3										5			SDI
	1	Colloidal grout mixer & pump	3										5			SDI
412-10-7088	1	Forklift		1									7			SDI, Hertz
CH600-8-105	1	Hydraulic Ram (Strand)											8			SDI
HPU-D-110-3K-02	1	Hydraulic Pushing Unit		1									7			SDI
SDI-HPU-D-110-3K	1	Hydraulic Pushing Unit											8			SDI
HPU-E-20-10K-03	1	A Frame											8			SDI
	1	A Frame (600 Ton)		1									7			SDI
SPH.60.3K.06	1	Strand Pushing Guide											8			SDI
SPH-60-3K-04	1	Strand Pushing Guide		1									7			SDI
	1	Strand Pack Spool Jig		1									7			SDI
	1	Winch w/combustible motor											8			SDI
	1	Winch w/out motor											8			SDI
	1	Winch w/out motor											8			SDI
	1	Connex Box											8			SDI

REC'D H31 OCT-16 #011255

**Weather:** Overcast in the morning, sunny in the afternoon with mild temperatures – Hi 83°F Low 54°F (per weather.com forecast)

**Description of Operations @ W2 Cap Beam:**

ABF

- Placed the W2W cable tie down precast slab with the upper grease caps placed in the corners.
- Bushed the concrete surfaces at the south end CBT-16 to 22 blackout.
- Added vertical 2"x4" supports underneath the south CBT-23 to 36 blackout forms.
- Miscellaneous work and cleanup on the suspended soffit.

- Assisted SDI with moving material and equipment from the ground to the top of the W2 cap beam.
- ABF foreman Terry Cronk, and Nigel Lohse assisted Lalit, Gil, Ken Beede, Rick Magentti, and myself with the concrete crack inspection in all four void areas. Cracks patterns to be fixed were spray painted silver. Prior to entry into the confined space the air was tested.

## SDI

- Grouted all 32 vertical PT tendons at W2W and W2E today. A couple of tests were performed on the grout taken from the mixer for VT-13W, and from the outlet grout tube for VT-1E with the following results:
  - Efflux time;  $t_e = 22$  seconds,  $t_e = 22$  seconds
  - Ambient Air Temperature;  $T_A = 56^\circ\text{F}$
  - Grout Temperature;  $T_G = 74^\circ\text{F}$  (Caltrans) @ 7:15am,  $T_G = 70^\circ\text{F}$  (Smith Emery) @ 8:11am
  - Grout Unit Weight;  $\gamma_G = 140\text{pcf}$  (S.G. = 2.24),  $\gamma_G = 139\text{pcf}$  (S.G. = 2.22), using the Caltrans mud balance. The minimum required for compressive strength is 135pcf using the mud balance.
  - Bleed test was done which proved the grout wasn't segregating.
  - One set (3 grout cubes) were made for both vertical tendons and stored near the W2W cable tie down blockout.

Grouting started at 7:07am and was completed at 8:50am. The water level was set to 230mm to produce 10 gallons (80pints) of water. This was done since 20lb bags (19pints) of ice were used to cool the grout temperature down. The ice was added in the grout mixer tank. Eight bags of cementitious grout were used with a total water quantity of 99pints to yield 12.38 pints of water used per bag. It took approximately 1 minute and 45 seconds on average to grout each vertical tendon. It should be noted that the outlet grout tube for VT-11W broke while grouting and had to be replaced. This tendon was regouted/recharged to ensure that grout came out of the grout cap again. Lalit assisted me with inspection of the grouting operation particularly at the bottom (dead end). The mixing and grout placement (top and bottom) operations appeared satisfactory. ABF-QCM Chuck Kanapicki, and SDI-Engineer Mike Schwager were not onsite for the grouting operations today. Only Smith Emery technician Joel Nader was onsite to perform quality control.

- Placed extra grout in the vertical bars vents which weren't "topped off" back in May. There was a drop in the grout head when some of these bars were grouted back in May. Some were topped off at the time and some weren't.
- Cleaned up the grouting mixer/pump and work area where the equipment was placed. Also demobilized the grout mixer/pump and generator on the ground under the center of the W2 cap beam.
- Covered six strand packs shipped to the jobsite yesterday with plastic. These strand packs are still under the center of the W2 cap beam on the ground.
- Mobilized all 28 upper anchorheads and grease caps on the top of the W2 cap beam near their connex box.
- Continued to install split shim plates for four tendons in the south W2E caisson. A total of 6 sets of split shim plates have been installed from east to west along the south pattern.

### Office and work:

- Wrote today's diary.

### 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

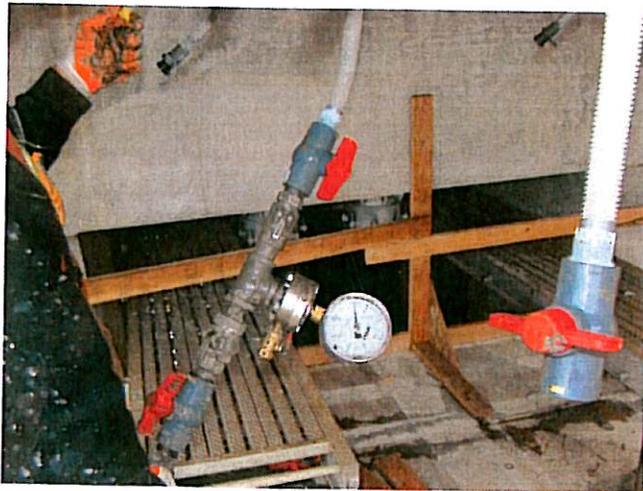


File Name:	Sept-24-2009 W2 Cap 001
Date:	09-24-09
By Int:	M Bruce

Description: 20lbs bags of ice were used to cool the grout temperature down. The grouting pump/mixer used may increase the temperature of the grout by mixing it too fast. Steam was seen rising off the grout in the mixing tank when the grout temperatures were over 90°F. Also there was a build up of hardened grout in the pump when the temperatures were too high. This indicates that the hydration process was premature.

File Name:	Sept-24-2009 W2 Cap 002
Date:	09-24-09
By Int:	M Bruce

Description: SDI ironworkers grouting vertical tendon VT-16W and Smith Emery testing the grout mix.



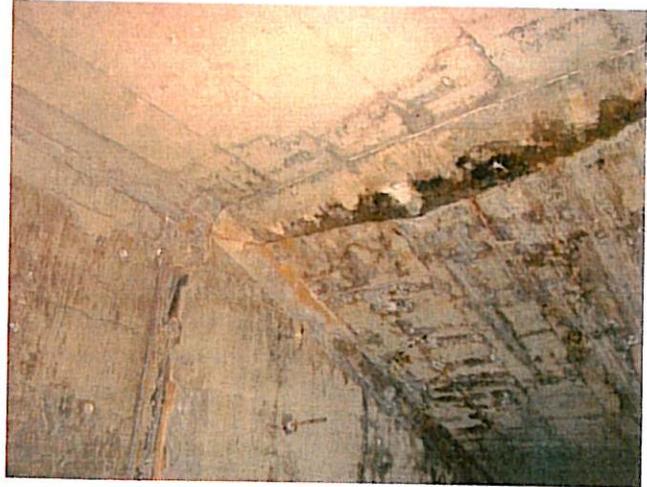
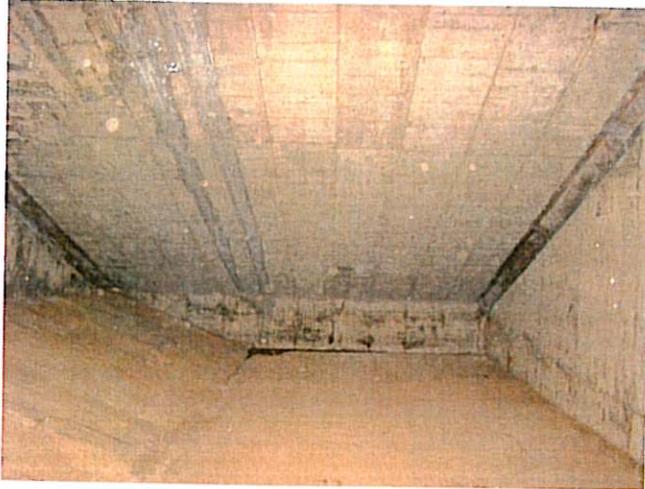
File Name:	Sept-24-2009 W2 Cap 004
Date:	09-24-09
By Int:	M Bruce

Description: Inlet at the dead end of the vertical PT tendons. The grout was pumped at a low pressure of 40psi. The tendons that I saw grouted from the bottom had grout coming out of the dead end drain tube, prior to grouting the entire tendon. Once good grout was seen at the top outlet tube and through the grout cap (fixed to the anchorhead) the pressure was increased to approximately 50psi to grout the tendon under pressure.

File Name:	Sept-24-2009 W2 Cap 009
Date:	09-24-09
By Int:	M Bruce

Description: Topping off the few vertical PT bars that weren't done back in May.

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

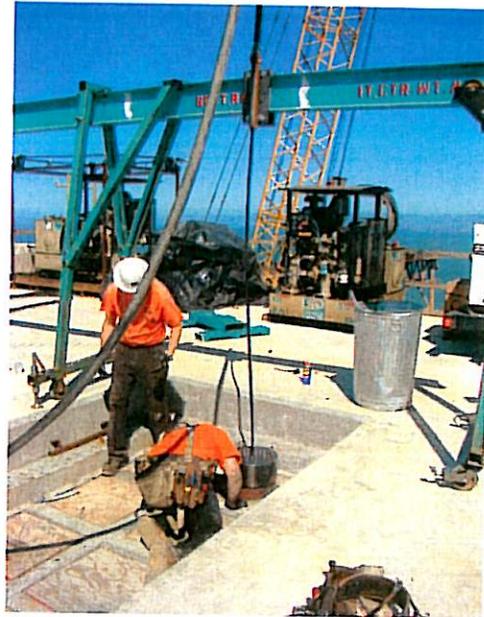
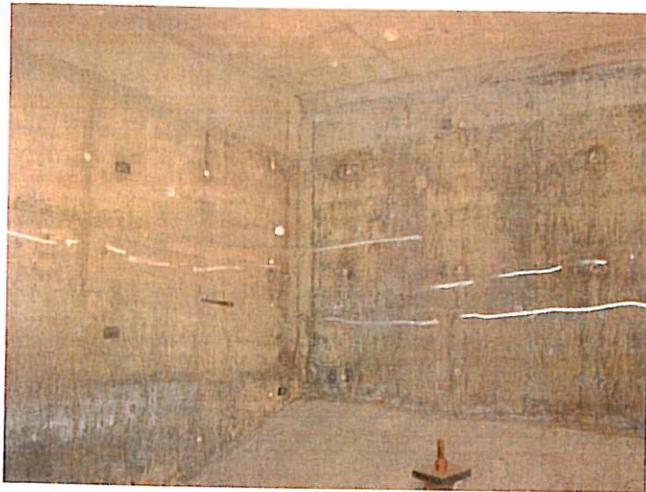


File Name:	Sept-24-2009 W2 Cap 015
Date:	09-24-09
By Int:	M Bruce

Description: Concrete surfaces in the southeast void area looking south.

File Name:	Sept-24-2009 W2 Cap 016
Date:	09-24-09
By Int:	M Bruce

Description: Concrete surface at the pour 4/6 joint in the southeast void area.



File Name:	Sept-24-2009 W2 Cap 018
Date:	09-24-09
By Int:	M Bruce

Description: Cracks that needed to be repaired which were identified with silver spray paint.

File Name:	Sept-24-2009 W2 Cap 025
Date:	09-24-09
By Int:	M Bruce

Description: Installing the first sheathed strand for the W2E southeast cable tie down tendon. The ironworkers spent most of the time assessing the operation and figuring out how they were going to efficiently install the strand.