

Diary Number: _____

Inspector Name: _____

TRACS Number: _____

Date: _____

Division VI: Structures
Title: Post Tensioning - Grouting

Structure Name
Structure Number
Sequence Number
Date Stressed
Date Grouted

Attribute Numbers	Compliance	Narratives	References
0.		Portland cement for grouting shall be type II and conform to the requirements of subsection 1006-2.01.	Standard Specifications 602-2.03
1.		Steel strand for post-tensioning is installed in the ducts after completion of concrete curing. If stressing and grouting are completed within 10 calendar days, rust that forms during the 10 days will not be cause for rejection.	Standard Specifications 602-3.06 (C)
2.		The ducts are clean and free of deleterious material before grouting is placed.	Standard Specifications 602-3.07
3.		Cement grout for bonding post tensioning tendons shall consist of not more than five gallons of water per 94 pound bag of Portland cement.	Standard Specifications 602-2.03
4.		Water shall conform to the requirements of subsection 1006-2.02.	Standard Specifications 602-2.03
5.		A cutting torch was not used on pre-stressing steel (ends not burned off).	Standard Specifications 602-3.06 (C)
6.		All of the tendons in a cast in place concrete structure shall have been fully tensioned and anchored prior to any cutting or grouting operation.	Standard Specifications 602-3.07
7.		The inspector calculates the amount of grout to be used in each duct and checks against actual quantity used; documented in the daily diary.	Construction Manual 602-3.07
8.		The grout shall be mixed in mechanical mixing equipment of a type that will produce uniform and thoroughly mixed grout.	Standard Specifications 602-3.07
9.		Re-tempering of grout shall not be permitted.	Standard Specifications 602-3.07

10.		All grout shall pass through a screen with 1/8 inch maximum opening prior to being placed in grouting equipment.	Standard Specifications 602-3.07
11.		The grout shall be tested in accordance with Arizona test method 311: The efflux time immediately after mixing shall not be less than 11 seconds.	Standard Specifications 602-3.07
12.		Grouting equipment shall be capable of grouting at a pressure of 150 psi, and have a pressure gauge with a full scale reading of not more than 300 psi, maximum grouting pressure shall not exceed 250 psi.	Standard Specifications 602-3.07
13.		Standby flushing equipment shall be capable of developing a pumping pressure of 250 psi and of sufficient capacity to flush out any partial grouted duct.	Standard Specifications 602-3.07
14.		Maximum temperature of the grout shall be 90 degrees and the minimum 50 degrees.	Standard Specifications 602-3.07
15.		Grout injection pipes shall be fitted with positive mechanical shutoff valves capable of withstanding the pumping pressure, and not removed or opened until the day after the grouting operation.	Standard Specifications 602-3.07
16.		Grout shall be injected at the low end of the duct and continuously wasted at the outlet until no visible slugs of water or air are ejected.	Standard Specifications 602-3.07
17.		Outlet pipes are closed and the duct pressurized: The duct shall maintain a minimum pressure of 75 psi for a minimum of one minute; the valve at the inlet shall then be closed while maintaining this pressure.	Standard Specifications 602-3.07
18.		Blockouts for anchorage assemblies shall be abrasively blasted prior to concrete encasement.	Standard Specifications 602-3.07
19.		Quantlist Minimum Frequency is being followed, the first girder, plus once per anchorage to anchorage of structure.	Construction Bulletin 07-01