

## Pre-Cast and Cast-in-Place

When a job is let, awarded, designed, and even after the work begins, a contractor may not know if or how much of the pre-cast and cast-in-place materials will be used. Sometimes both can be used.

To allow a contractor to use both pre-cast and cast-in-place products and to minimize the number changes to material conversion factors use this procedure to handle the sample and testing requirements for both with a single acceptance method. Below is an example of materials linked to a catchbasin:

The screenshot shows a software window titled 'Materials' with a 'Sample and Testing' tab. It contains the following information:

- Item: 611-12.02, Spec Year: 2000, Item System Unit: E, Item Unit: EACH
- Desc. 1: CATCH BASINS, TYPE T2, > 4' - 8' DEPTH
- Desc. 2: (empty)

Material Code	Material Full Name	Status	Material Short Name
604.01.001A	Class A, Concrete Mix	A	Class A Concrete
907.01.003	Steel (Reinforcing)	A	Reinforcing Steel
T2.611	T2 Manhole, Catchbasin, Endwall	A	T2 Manhole Catchb Ew
T2.611.1	Grey Iron Castings	A	Grey Iron Castings

Below the table, the 'Material Code' is set to 604.01.001A (Class A, Concrete Mix). The 'Conversion Factor' is 0.00000. There is an unchecked checkbox for 'Approved Source Required'. The 'Special Instruction' box contains the text: 'quantity based on plans and std. dwg. Test as indicated in SOP 1-1. Payment for poured in place structures will require SBR certs to be attached to a T2 and submitted same as precast structure using material code T2.611'.

### FIELD - Operations Inspector Creates Sample Record for 604.01.001A

FIELD - Operations Inspector opens the Maintain Sample Information window and creates a sample record for the **604.01.001A - Class A, Concrete Mix** material, and associates the contract item(s).

The sample should contain the following information:

- Material: **604.01.001A - Class A, Concrete Mix.**
- Smpl Type: **Acceptance**
- Acpt Meth: **Acceptance**
- **PCC Mix Design number (on addtl sample data tab)**
- Destination Lab: **DEST - TDOT Field Testing**
- Test Method: **M016 - Field Tests of Freshly Mixed Concrete**

The field inspector will also copy this sample and modify it for cylinder samples coming to the HQ lab for acceptance testing. NOTE: 7 day (or other info only) cylinders will not require a SiteManager sample.

## **FIELD - Operations Office Staff Creates Sample Record for T2.611**

FIELD - Operations Office Staff opens the Maintain Sample Information window and creates a sample record for the **T2.611** material and associates the contract item and pay quantities from the paper T2.

FIELD - Operations Office Staff prints/collects the following to send to the Regional M&T Office to review and accept as done for the precast T2 certification:

- Paper T2 and precast structure certifications

OR

- T2 listing items and item quantities represented and Certifications for steel bar reinforcement

## **FIELD - Operations Office Staff Creates Sample Record for Grates**

All manholes and catch basin grates use either Grey Iron Castings or Structural Steel material for the grates. The producer/supplier will submit a T2 with certifications for both materials.

A SiteManager sample will be created using material codes T2.611.1- Grey Iron or T2.611.2- Structural Steel. The poundage for each line item will need to be entered on the "Contract" tab of the sample. Weights for each structure are listed in the special instruction section for the item/material in report RR069

In order to make partial payments as the work progresses, the material has a zero conversion factor.