

ROAD COMMISSION FOR OAKLAND COUNTY

SPECIAL PROVISION  
FOR  
**CONCRETE FOR TRAFFIC SIGNAL WORK**

RCOC/TOC:JJ

PAGE 1 OF 4

RCOC20SP818C  
ORG:05-07-2021

**a. Description**

This work consists of constructing concrete according to the plans and the *Michigan Department of Transportation (MDOT) 2020 Standard Specification for Construction* except as herein provided.

**b. Materials**

1. Concrete mix designs and Concrete Quality Control Plans are required to be submitted and approved prior to the start of construction.
2. The contractor is responsible for all Quality Control per section 1002 of the *MDOT 2020 Standard Specifications for Construction* and at a minimum must provide one 7 day and two 28-day cylinder tests per truck load. Cylinder tests must be either 6 inches x 12 inches or 4 inches x 8 inches as approved by the Engineer. Quality Assurance testing will be as per section 1003 of the *MDOT 2020 Standard Specifications for Construction*.
3. RCOC reserves the right to verify or test concrete and testing procedures as directed by the Engineer.

Granular materials for use as fill, backfill, subbase, and filter aggregates must be as Class II Granular Material.

**c. Construction**

1. Concrete Quality Control  
Concrete Field-Testing Reports signed by the certified (MCA certified Michigan Concrete Technician Level I or Level II) concrete technician must be submitted to the project engineer within 24 hours of each field test.

Cylinder Break Reports signed by the certified testing technician must be submitted to the project engineer within 24 hours of the cylinder break. Before installing poles, provide cylinder break reports to engineer to verify strength requirements per section 820.03 1.

2. RCOC Concrete Producer's Certificate  
RCOC Concrete Producer's Certificate will be given to the RCOC Inspector at the time of concrete placement.

### 3. Foundations

All foundations must be poured in a single pour.

### 4. Cold Weather Protection

All signal related concrete must be protected from freezing. When cold weather (air temperature has fallen to, or is expected to fall below 40 degrees Fahrenheit) within 7 calendar days of anticipated concrete placement, the contractor must submit a detailed plan including, but not limited to:

A. Producing, transporting, placing

B. Protecting

C. Curing

D. Temperature monitoring of concrete during cold weather

E. Action plan if concrete temperatures are not being maintained during curing period

F. Temperature monitoring and warming of metal surfaces

G. Procedures for accommodating abrupt changes in weather conditions

H. Quality Control early break cylinders

Contractor plan for number and interval for breaks to verify concrete has gained enough strength during curing period before cold weather protection can be removed. Include plan for curing cylinders (early break cylinders will need to be placed as close to and as close to the same conditions that is being used to protect the concrete, early break cylinders cannot be lab cured). Results must be forwarded to Traffic Signal Engineer.

I. Curing period

The curing period for cold weather protection is defined as when concrete attains at least 70 percent of the required minimum 28-day compressive strength and for at least 5 days after concrete placement.

J. The plan must include blanket insulation, plastic, and forms being in place for a minimum of 28 calendar days after concrete placement.

K. Corrective action plan

Complete this work in accordance with section 706.03 J. of the *MDOT 2020 Standard Specifications for Construction*. The contractor must have all material and equipment required for protection available at or near the project before commencing cold weather concreting. The contractor must not commence placement until the plan is approved by the Project Engineer. Any costs for cold weather protection, heating materials, or winter plant start up and operation shall not be paid for separately.

**d. Measurement and Payment**

All costs associated with this work are included in the unit prices for the relevant concrete items and will not be paid separately.

ROAD COMMISSION FOR OAKLAND COUNTY  
CONCRETE  
PRODUCER'S CERTIFICATE

GENERAL NAME OF PROJECT		
PRODUCER'S NAME		
PLANT LOCATION	MDOT PLANT NO.	
CONTRACTOR		
CEMENT SOURCE	TYPE	LBS/CYD
SLAG CEMENT or FLY ASH	TYPE	LBS/CYD
FINE AGGREGATE SOURCE		
FA PIT NUMBER	SPECIFICATION	LBS/CYD
COARSE AGGREGATE SOURCE		
CA PIT NUMBER	SPECIFICATION	LBS/CYD
CA TYPE: <input type="checkbox"/> LIMESTONE <input type="checkbox"/> NATURAL <input type="checkbox"/> SLAG		
INTERMEDIATE AGGREGATE SOURCE		
IA PIT NUMBER	SPECIFICATION	LBS/CYD
IA TYPE: <input type="checkbox"/> LIMESTONE <input type="checkbox"/> NATURAL <input type="checkbox"/> SLAG		
NAME OF A.E. AGENT		OZ/CWT.
NAME OF WATER REDUCER		OZ/CWT.
NAME OF RETARDER		OZ/CWT.
OTHER ADDITIVE		OZ/CWT. OR LBS/CYD
WATER BATCHED (LBS/CYD)	%FA MOISTURE	% CA MOISTURE
WEIGHTS SHOWN ARE: <input type="checkbox"/> ACTUAL <input type="checkbox"/> SSD		

PRODUCER'S AGENT

SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

This certifies that all materials in this concrete meet the specifications of the Road Commission for Oakland County; that BATCH WEIGHTS are as shown above, and that all concrete shipped this date to this project will meet these specifications within allowable tolerances, NO Recertification will be required for any changes in mix proportions.