

MINOR CONCRETE PLACEMENT

THE WORK SHALL CONSIST OF FURNISHING, FORMING, PLACING, FINISHING, CURING PORTLAND CEMENT CONCRETE, FURNISHING AND PLACING OF STEEL REINFORCEMENT OR OTHER APPURTENANCES AS REQUIRED ON THE CONSTRUCTION DRAWINGS. (TYPICAL ITEMS INCLUDE: CMP PIPE SUPPORTS, CMP DROP INLET RISER BOTTOMS, CONCRETE CROSSINGS, HOODED INLET PIPE PROTECTION, DROP INLET PIPE PROTECTION AND OTHER MINOR NON-STRUCTURAL CONCRETE PLACEMENTS)

THE CONTRACTOR SHALL OBTAIN FROM THE SUPPLIER A BATCH DELIVERY TICKET FOR EACH LOAD OF CONCRETE BEFORE UNLOADING AT THE SITE. UPON COMPLETION OF THE CONCRETE PLACEMENT, COPIES OF ALL BATCH TICKETS SHALL BE PROVIDED TO THE TECHNICIAN.

CONCRETE MIX:

THE CONCRETE MIX SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3,500 PSI, AT LEAST 564 POUNDS PER CUBIC YARD OF CONCRETE CEMENTITIOUS MATERIAL, A MAXIMUM WATER-CEMENT RATIO SHALL NOT EXCEED 0.53, AN AIR CONTENT OF 6 ± 1.5 PERCENT (BY VOLUME), AND A MAXIMUM SLUMP OF 5 INCHES.

AGGREGATES:

THE FINE AGGREGATE (ASTM C 33) OVEN DRY WEIGHT SHALL BE 30-45 PERCENT OF THE TOTAL OVEN DRY WEIGHT OF THE COMBINED COARSE AND FINE AGGREGATES. THE COARSE AGGREGATES SHALL BE GRAVEL OR CRUSHED STONE CONFORMING TO ASTM C 33

REINFORCING STEEL:

REINFORCING STEEL SHALL BE FREE FROM LOOSE RUST, OIL, GREASE, PAINT, OR OTHER DELETERIOUS MATTER. STEEL BARS FOR CONCRETE REINFORCEMENT SHALL MEET THE REQUIREMENTS OF ASTM A 615.

PLACEMENT DETAILS:

FORMS AND REINFORCEMENT SHALL BE ACCURATELY PLACED AS SHOWN ON THE DRAWINGS AND SECURED IN POSITION IN A MANNER THAT WILL PREVENT ITS DISPLACEMENT DURING THE PLACEMENT OF CONCRETE.

PRIOR TO PLACEMENT OF CONCRETE, THE FORMS AND SUBGRADE SHALL BE FREE OF CHIPS, SAWDUST, DEBRIS, WATER, ICE, SNOW, EXTRANEIOUS OIL, MORTAR, OR OTHER HARMFUL SUBSTANCES OR COATINGS. ALL SURFACES SHALL BE FIRM AND DAMP PRIOR TO PLACING CONCRETE. CONCRETE SHALL NOT BE PLACED ON MUD, DRIED EARTH, UNCOMPACTED FILL, FROZEN SUBGRADE, OR IN STANDING WATER.

CONCRETE SHALL BE DELIVERED TO THE SITE AND DISCHARGED WITHIN $1\frac{1}{2}$ HOURS AFTER THE INTRODUCTION OF THE MIXING WATER TO THE CEMENT AND AGGREGATES. CONCRETE SHALL BE DEPOSITED AS CLOSELY AS POSSIBLE TO ITS FINAL POSITION. CONCRETE SHALL BE CONSOLIDATED BY HAND OR MECHANICAL METHODS, IN A MANNER TO PREVENT SEGREGATION OF AGGREGATES, AROUND ALL REINFORCEMENT AND EMBEDDED ITEMS AS NECESSARY TO INSURE DENSE CONCRETE.

ALL PLACEMENT SHALL BE DONE IN A MANNER THAT PREVENTS INCORPORATION OF SUBGRADE MATERIAL INTO THE CONCRETE. ALL CONCRETE SHALL HAVE A UNIFORM GRADE, MAINTAINING THE SPECIFIED THICKNESS. SURFACES SHALL BE FREE FROM ROCK POCKETS, OR HONEYCOMB AREAS OR OTHER HARMFUL IRREGULARITIES OR DEFECTS.

FORMS SHALL BE REMOVED WITHOUT DAMAGE TO THE CONCRETE.

CONCRETE SHALL BE CURED FOR A PERIOD OF AT LEAST 7 CONSECUTIVE DAYS AFTER IT IS PLACED. EXPOSED CONCRETE SURFACES SHALL BE KEPT CONTINUALLY WET DURING THE ENTIRE CURING PERIOD OR UNTIL CURING COMPOUND IS APPLIED.

CURING COMPOUND SHALL BE A LIQUID MEMBRANE-FORMING COMPOUND SUITABLE FOR SPRAYING ON THE CONCRETE SURFACE. THE CURING COMPOUND SHALL MEET THE REQUIREMENTS OF ASTM C 309. TYPE 2 (WHITE PIGMENTED).



United States
Department of
Agriculture

Natural Resources
Conservation Service

MINOR CONCRETE PLACEMENT

CLIENT: _____

COUNTY: _____

Designed _____	Date _____
Drawn _____	
Checked _____	
Approved _____	

Drawing Name
WI-051

Date
06/14

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