



Concrete Cylinder Test Report

PROJECT INFO

ASTM C31, ASTM C39, AASHTO T23, AASHTO T22, ASTM C172, AASHTO R60

Client	AECOM	Date Of Placement	07/26/2021
Project Name	Van Dyke Improvements	Specimen Type	Concrete Cylinder
Project Number	2019057D-003	Contractor	Century Cement
Project Location	Detroit, MI	Concrete Supplier	Hercules Material Holdings, LLC
MDOT Job Number		Field Tested By	Jose Rodriguez
MDOT Control Section		Date Issued	08/23/2021

Results Recorded In	English Units
Supplier Mix Description	MDOT P1 + MR - 6" Slump

DESIGN PARAMETER

Mix Design Number	0872 P1-DETM				
Design Compressive Strength (psi)	3500				
Air (% Max)	8.5	Slump (in Max)	6.00	Unit Weight (lbs/ft ³)	
Air (% Min)	5.5	Slump (in Min)	3.00		

TESTING DATA

Placed	51.50	+/- yds ³ /ft ³ of concrete at the following location:	Northeast corner of Chandler Park Dr. & Conner st. for test 1 and Northeast corner of Warren & Conner for test number 2
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Time Tested	Truck Num	Slump ASTM C143 (in)	Air ASTM C231 or C173 (%)	Unit Weight ASTM C138 (lbs/ft ³)	Air Temp (°F)	Mix Temp ASTM C1064 (°F)	Concrete Cylinder Set	Water Added (gal)	Cumulative Concrete Placed At Test (yds ³ /ft ³)
7:07 AM	502	5.25	5.90	0.0	70	78	1	0	1

MATERIAL DATA

Concrete Cylinder Set	Concrete Cylinder Num	Diameter (in)	X-Sec Area (in ²)	Weight (lbs)	Fracture Type	Capping Process	Age Of Concrete Cylinder (Days)	Date Tested	Total Load At Failure (lbs)	Cumulative Strength (psi/mpa)
1	84920	4.00	12.57	5.50	3-(Vertical)	Unbonded Cap	28	08/23/2021	51420	4090
1	84921	4.00	12.57	5.52	3-(Vertical)	Unbonded Cap	28	08/23/2021	49880	3970

Average 28 Day Compressive Strength (psi): 4030

*Cylinders tested with Unbonded Caps followed ASTM C1231, cylinders tested with Bonded Caps followed ASTM C617.

*All Air Content % tests were performed per C231 unless otherwise noted in the remarks.

*Inspector was notified of non-conformance items, if any.

*Average Compressive Strength results did meet project specifications.

Remarks:	
Results Reported To:	AECOM(Alan Ostrowski)
Report Approved By:	Brian Gondek



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12:58 PM	600	5.50	6.60	0.0	90	87	2	0	51

MATERIAL DATA

Concrete Cylinder Set	Concrete Cylinder Num	Diameter (in)	X-Sec Area (in ²)	Weight (lbs)	Fracture Type	Capping Process	Age Of Concrete Cylinder (Days)	Date Tested	Total Load At Failure (lbs)	Cumulative Strength (psi/mpa)
2	84922	4.00	12.57	8.52	3-(Vertical)	Unbonded Cap	28	08/23/2021	42670	3390
2	84923	4.00	12.57	8.54	2-(Cone/Vertical)	Unbonded Cap	28	08/23/2021	46300	3680

Average 28 Day Compressive Strength (psi): 3535

*Cylinders tested with Unbonded Caps followed ASTM C1231, cylinders tested with Bonded Caps followed ASTM C617.

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*Inspector was notified of non-conformance items, if any.

*Average Compressive Strength results did meet project specifications.

Remarks:	
Results Reported To:	AECOM(Peter Bugar)

Report Approved By:	Brian Gondek
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