



CONCRETE QA CORRELATION

PROJECT NAME: HMA Resurfacing 20 + Location
MDOT CONTROL SECTION: 8200
MDOT JOB NUMBER: 205935A,207914A
PROJECT ENGINEER: Kevin Surhigh
INSPECTOR: Jose M.Vinuya
QC TESTER: Gilbert Guzman

DATE: 9/24/2020
SOMAT JOB NUMBER: 2019086C
CLIENT: HRC
CONTRACTOR: Merlo Construction
CITY: [REDACTED]
QC COMPANY: CTI

CONCRETE INFORMATION

CONCRETE COMPANY:	Superior Materials	TRUCK NUMBER:	3206
MIX DESIGN #:	P155E7CQA032	PLANT LOCATION (CITY):	Detroit
CONCRETE GRADE:	P1	TOTAL QUANTITY (CYDS):	32
PWL/NON-PWL:	Non PWL	QUANTITY AT SAMPLE (CYDS):	8

POUR LOCATION (STATION, STRUCTURE, ETC...)

Used for curb at Linwood Avenue east side from Davison Avenue to Fenkell Avenue.

TEST RESULTS

	QC (CONTRACTOR)	QA (SOMAT)	TOLERANCE	MEETS TOLERANCE (Y/N)
SAMPLE TIME (Hrs/Min):	10:00AM	10:00AM		
AIR CONTENT (%):	6.4	6.6	+/- 0.8 PERCENT	Yes
CONCRETE TEMP. (°F):	78	78	+/- 2.0 DEGREES	Yes
AIR TEMP. (°F):	62	62		

REMARKS:

Both QA and QC field technicians performed correlation test and the results are within tolerance.

FIELD REPRESENTATIVE: Jose M. Vinuya

DATE: 9/24/2020

PROJECT MANAGER(s): Steve Drummond, P.E.

DATE: 9/24/2020



Concrete Cylinder Test Report

PROJECT INFO - DRAFT ONLY

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

Client	HRC	Date Of Placement	09/24/2020
Project Name	HMA Resurfacing 20+ Locations	Specimen Type	Concrete Cylinder
Project Number	2019086C	Contractor	merlo
Project Location	Detroit, MI	Concrete Supplier	Superior Materials, LLC
MDOT Job Number	205935A, 207914A	Field Tested By	Jose Vinuya
MDOT Control Section	82000	Date Issued	09/24/2020

Results Recorded In	English Units
Supplier Mix Description	MDOT P1 - 3" Slump

DESIGN PARAMETER

Mix Design Number	0739 P155E7CQA032				
Design Compressive Strength (psi)	3500				
Air (% Max)	8.5	Slump (in Max)	3.00	Unit Weight (lbs/ft ³)	
Air (% Min)	5.5	Slump (in Min)	0		

TESTING DATA

Placed	32.00	+/- yds ³ /ft ³ of concrete at the following location:	Used for the curb at Linwood Avenue east side from Davison Avenue to Fenkell Avenue
--------	-------	--	---

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)
10:00 AM	3210	2.75	6.60	0.0	62	78	1	0	8

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	80430						28	10/22/2020		
1	80431						28	10/22/2020		

Average 28 Day Compressive Strength (psi): 0

*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 not meet project specifications.

Remarks:	
Results Reported To:	
Report Approved By:	Jose Vinuya



Concrete Cylinder Test Report

PROJECT INFO - DRAFT ONLY

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

Client	HRC	Date Of Placement	09/24/2020
Project Name	HMA Resurfacing 20+ Locations	Specimen Type	Concrete Cylinder
Project Number	2019086C	Contractor	merlo
Project Location	Detroit, MI	Concrete Supplier	Superior Materials, LLC
MDOT Job Number	205935A, 207914A	Field Tested By	Jose Vinuya
MDOT Control Section	82000	Date Issued	09/24/2020

Results Recorded In	English Units
Supplier Mix Description	Structure Adjustment

DESIGN PARAMETER

Mix Design Number	0675 P155ERCQA032				
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)	3.50		

TESTING DATA

Placed	40.00	+/- yds ³ /ft ³ of concrete at the following location:	Used for the sidewalk and ADA Ramps at Linwood Avenue east side from Davison Avenue to Fenkell Avenue.
--------	-------	--	--

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)
2:15 PM	3201	5.00	6.10	0.0	77	84	1	0	10

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	80432						28	10/22/2020		
1	80433						28	10/22/2020		

Average 28 Day Compressive Strength (psi): 0

*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 not meet project specifications.

Remarks:	
Results Reported To:	
Report Approved By:	Jose Vinuya