



Compressive Strength of Concrete

Test Method: ASTM C 39

Report Date: 9/9/2020

Sample: 4911

Cole Garner Geotechnical

1070 West 124th Ave
Suite 300
Westminster, CO 80234
Phone: 303.996.2999

Client:

KB Home Colorado Inc.
7807 East Peakview Avenue, Suite 300
Centennial, CO 80111

Project:

19.23.042
Trails at Crowfoot
Crowfoot Valley Road and Bayou Gulch Road
Parker, CO

Sample Details

Set #:	1	Technician:	Anthony Bath	Batched:	09:30 MDT
Specimen Size:	4" X 8"	Cast By:	Anthony Bath	Sampled:	10:13 MDT
Specimens In Set:	5	Date Cast:	06/29/20	Cast:	10:27 MDT
Truck / Ticket #:	112 / WCR84599821	Sampled From:	Chute	Truck Empty:	
Contractor:	P.E.I.	Placement Method:	Chute	Placement Time:	

Location

Placement Location:	30 - Curb and Gutter
Location Details:	Blue Heart Ct, West side of block 1, Units (17-20) Rock Daisy St, South side of block 2, Tract J, Mock Orange Ave, Block 2, Lot (1-4) Block 1, Units 22&24&26, North of block 2 Tract I
Sample Location / Notes:	North side of Blue Heart Ct

Batch Log

Supplier:	Aggregate Industries	Mix Design:	7456120	Strength:	4500 (psi)
On-Site Admixtures:	None			Air:	5.0 - 8.0 (%)
				Slump:	1 - 4 (in)

Specifications

Field Measurements

Weather:	Sunny	Slump (in):	3-1/4 (ASTM C143)	Plastic Unit Weight:	146.8 (lb/ft³) (ASTM C138)
Air Temperature (F):	75	Concrete Temp (F):	79 (ASTM C1064)	Air Content:	5.0 (ASTM C231)
				Load Volume:	10 (yd³)

Lab Test Results

Testing Lab: Cole Garner Westminster, 1070 W 124th Avenue, Suite 300, Westminster, CO, 80234										
Specimen Number	Test Age Days	Test Date	Field / Lab Cure Days	Average Cylinder Diameter (in)	Cylinder Area (in²)	Max Load (lbs)	Strength (psi)	Fracture Type	Break Remark	Capping Method
1-1	7	07/06/20	1 / 6	4.00	12.57	78,710	6,260	3		N
1-2	28	07/27/20	1 / 27	4.00	12.57	94,020	7,480	3	PS	N
1-3	28	07/27/20	1 / 27	4.00	12.57	91,160	7,250	3	PS	N
1-4	28	07/27/20	1 / 27	4.00	12.57	94,760	7,540	3	PS	N
1-5	28 H	07/27/20	1 / 27							

Test Age Average Strengths (psi): 28 Day - 7420

Capping Methods

PS: The break result meets or exceeds 100% of the required strength. Tested By: Samuel Garner (1,2,3,4,5) Checked In : 06/30/2020 (1,2,3,4,5)	N: Unbonded Caps (ASTM C1231)
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TYPE 1 TYPE 2 TYPE 3 TYPE 4 TYPE 5 TYPE 6



Compressive Strength of Concrete

Test Method: ASTM C 39

Report Date: 9/9/2020
Sample: 4931

Cole Garner Geotechnical
1070 West 124th Ave
Suite 300
Westminster, CO 80234
Phone: 303.996.2999

Client:
KB Home Colorado Inc.
7807 East Peakview Avenue, Suite 300
Centennial, CO 80111

Project:
19.23.042
Trails at Crowfoot
Crowfoot Valley Road and Bayou Gulch Road
Parker, CO

Sample Details			
Set #:	2	Technician:	Gus Sorge
Specimen Size:	4" X 8"	Cast By:	Gus Sorge
Specimens In Set:	5	Date Cast:	06/30/20
Truck / Ticket #:	9226 / Wcr84599860	Sampled From:	Chute
Contractor:	PEI	Placement Method:	Chute
Batched:	09:40 MDT	Sampled:	10:30 MDT
Cast:	10:40 MDT	Truck Empty:	
Placement Time:			

Location	
Placement Location:	30 - Curb and Gutter
Location Details:	Blue Heart Ct from Tract D to Rock Daisy St
Sample Location / Notes:	Approximately 10' North of Tract D

Batch Log	Specifications
Supplier: Aggregate Industries	Strength: 4500 (psi)
On-Site Admixtures: None	Air: 5.0 - 8.0 (%)
	Slump: 1 - 4 (in)

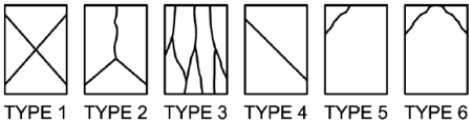
Field Measurements			
Weather: Clear	Slump (in): 4 (ASTM C143)	Plastic Unit Weight: 142.4 (lb/ft³) (ASTM C138)	
Air Temperature (F): 71	Concrete Temp (F): 78 (ASTM C1064)	Air Content: 7.0 (ASTM C231)	
		Load Volume: 10 (yd³)	

Lab Test Results

Testing Lab: Cole Garner Westminster, 1070 W 124th Avenue, Suite 300, Westminster, CO, 80234

Specimen Number	Test Age Days	Test Date	Field / Lab Cure Days	Average Cylinder Diameter (in)	Cylinder Area (in²)	Max Load (lbs)	Strength (psi)	Fracture Type	Break Remark	Capping Method
2-1	7	07/07/20	1 / 6	4.00	12.57	70,890	5,640	3		N
2-2	28	07/28/20	1 / 27	4.00	12.57	84,690	6,740	5	PS	N
2-3	28	07/28/20	1 / 27	4.00	12.57	88,910	7,070	3	PS	N
2-4	28	07/28/20	1 / 27	4.00	12.57	87,520	6,960	3	PS	N
2-5	28 H	07/28/20	1 / 27							

Test Age Average Strengths (psi): 28 Day - 6920								Capping Methods		
PS: The break result meets or exceeds 100% of the required strength.								N: Unbonded Caps (ASTM C1231)		
Tested By: Samuel Garner (1,2,3,4,5)										
Checked In : 07/01/2020 (1,2,3,4,5)										





Compressive Strength of Concrete

Test Method: ASTM C 39

Report Date: 9/9/2020

Sample: 4953

Cole Garner Geotechnical

1070 West 124th Ave
Suite 300
Westminster, CO 80234
Phone: 303.996.2999

Client:

KB Home Colorado Inc.
7807 East Peakview Avenue, Suite 300
Centennial, CO 80111

Project:

19.23.042
Trails at Crowfoot
Crowfoot Valley Road and Bayou Gulch Road
Parker, CO

Sample Details			
Set #:	3	Technician:	Gus Sorge
Specimen Size:	4" X 8"	Cast By:	Gus Sorge
Specimens In Set:	5	Date Cast:	07/01/20
Truck / Ticket #:	9227 / Wcr62300104	Sampled From:	Chute
Contractor:	PEI	Placement Method:	Chute
Batched:	09:45 MDT	Sampled:	10:45 MDT
		Cast:	10:55 MDT
		Truck Empty:	
		Placement Time:	

Location	
Placement Location:	30 - Other Flatwork
Location Details:	Crossspan at Daisy St and Alpine Phlox St
Sample Location / Notes:	South end of crosspan

Batch Log		Specifications	
Supplier:	Aggregate Industries	Mix Design:	7456120
On-Site Admixtures:	None	Strength:	4500 (psi)
		Air:	5.0 - 8.0 (%)
		Slump:	1 - 4 (in)

Field Measurements			
Weather:	Clear	Slump (in):	3-3/4 (ASTM C143)
Air Temperature (F):	75	Concrete Temp (F):	84 (ASTM C1064)
		Plastic Unit Weight:	142.0 (lb/ft³) (ASTM C138)
		Air Content:	7.0 (ASTM C231)
		Load Volume:	10 (yd³)

Lab Test Results

Testing Lab: Cole Garner Westminster, 1070 W 124th Avenue, Suite 300, Westminster, CO, 80234

Specimen Number	Test Age Days	Test Date	Field / Lab Cure Days	Average Cylinder Diameter (in)	Cylinder Area (in²)	Max Load (lbs)	Strength (psi)	Fracture Type	Break Remark	Capping Method
3-1	7	07/08/20	1 / 6	4.00	12.57	63,290	5,040	3		N
3-2	28	07/29/20	1 / 27	4.00	12.57	75,780	6,030	5	PS	N
3-3	28	07/29/20	1 / 27	4.00	12.57	75,880	6,040	3	PS	N
3-4	28	07/29/20	1 / 27	4.00	12.57	75,130	5,980	5	PS	N
3-5	28 H	07/29/20	1 / 27							

Test Age Average Strengths (psi): 28 Day - 6010

Capping Methods	
PS: The break result meets or exceeds 100% of the required strength. Tested By: Samuel Garner (1,2,3,4,5) Checked In : 07/02/2020 (1,2,3,4,5)	N: Unbonded Caps (ASTM C1231)

General Remarks

Truck 2: Unit Weight 140 pcf, 8% air content, temp 84 *F, slump 4"
Truck 3: Unit Weight 143.2 pcf, 6% air content, temp 85 *F, slump 2"



TYPE 1 TYPE 2 TYPE 3 TYPE 4 TYPE 5 TYPE 6



Compressive Strength of Concrete

Test Method: ASTM C 39

Report Date: 9/9/2020
Sample: 4969

Cole Garner Geotechnical
1070 West 124th Ave
Suite 300
Westminster, CO 80234
Phone: 303.996.2999

Client:
KB Home Colorado Inc.
7807 East Peakview Avenue, Suite 300
Centennial, CO 80111

Project:
19.23.042
Trails at Crowfoot
Crowfoot Valley Road and Bayou Gulch Road
Parker, CO

Sample Details			
Set #:	4	Technician:	Gus Sorge
Specimen Size:	4" X 8"	Cast By:	Gus Sorge
Specimens In Set:	5	Date Cast:	07/02/20
Truck / Ticket #:	9619 / 62300171	Sampled From:	Chute
Contractor:	PEI	Placement Method:	
Batched:		Sampled:	10:00 MDT
		Cast:	10:10 MDT
		Truck Empty:	
		Placement Time:	

Location	
Placement Location:	30 - Curb and Gutter
Location Details:	Curb radii on Rock Daisy St North of Block 1 Lot 17, and crosspan at Rock Daisy St and Mock Orange Ave
Sample Location / Notes:	C&G radius N of B1:L17

Batch Log	Specifications
Supplier: Aggregate Industries	Strength: 4500 (psi)
On-Site Admixtures: None	Air: 5.0 - 8.0 (%)
	Slump: 1 - 4 (in)

Field Measurements			
Weather: Clear	Slump (in): 3-1/4 (ASTM C143)	Plastic Unit Weight: 146.0 (lb/ft³) (ASTM C138)	
Air Temperature (F): 82	Concrete Temp (F): 80 (ASTM C1064)	Air Content: 5.0 (ASTM C231)	
		Load Volume:	

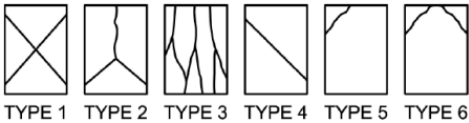
Lab Test Results

Testing Lab: Cole Garner Westminster, 1070 W 124th Avenue, Suite 300, Westminster, CO, 80234

Specimen Number	Test Age Days	Test Date	Field / Lab Cure Days	Average Cylinder Diameter (in)	Cylinder Area (in²)	Max Load (lbs)	Strength (psi)	Fracture Type	Break Remark	Capping Method
4-1	7	07/09/20	1 / 6	4.00	12.57	68,160	5,420	3		N
4-2	28	07/30/20	1 / 27	4.00	12.57	90,220	7,180	3	PS	N
4-3	28	07/30/20	1 / 27	4.00	12.57	85,100	6,770	3	PS	N
4-4	28	07/30/20	1 / 27	4.00	12.57	90,040	7,160	3	PS	N
4-5	28 H	07/30/20	1 / 27							

Test Age Average Strengths (psi): 28 Day - 7040

Capping Methods	
PS: The break result meets or exceeds 100% of the required strength. Tested By: Samuel Garner (1,2,3,4,5) Checked In : 07/03/2020 (1,2,3,4,5)	N: Unbonded Caps (ASTM C1231)





Compressive Strength of Concrete

Test Method: ASTM C 39

Report Date: 9/9/2020

Sample: 4987

Cole Garner Geotechnical
 1070 West 124th Ave
 Suite 300
 Westminister, CO 80234
 Phone: 303.996.2999

Client:
 KB Home Colorado Inc.
 7807 East Peakview Avenue, Suite 300
 Centennial, CO 80111

Project:
 19.23.042
 Trails at Crowfoot
 Crowfoot Valley Road and Bayou Gulch Road
 Parker, CO

Sample Details			
Set #:	6	Technician:	Anthony Bath
Specimen Size:	4" X 8"	Cast By:	Anthony Bath
Specimens In Set:	5	Date Cast:	07/06/20
Truck / Ticket #:	9612 / WCR62300240	Sampled From:	Chute
Contractor:	PEI	Placement Method:	Chute
Batched:	09:42 MDT	Sampled:	10:31 MDT
		Cast:	10:43 MDT
		Truck Empty:	
		Placement Time:	

Location	
Placement Location:	30 - Curb and Gutter
Location Details:	Tract B, Mock Orange Ave, North Side of the street between Rock Daisy St and Alpine Phlox St
Sample Location / Notes:	Crossspan, Rock Daisy St and Mock Orange Ave

Batch Log		Specifications	
Supplier:	Aggregate Industries	Mix Design:	7456120
On-Site Admixtures:	None	Strength:	4500 (psi)
		Air:	5.0 - 8.0 (%)
		Slump:	1 - 4 (in)

Field Measurements			
Weather:	Sunny	Slump (in):	4 (ASTM C143)
Air Temperature (F):	89	Concrete Temp (F):	83 (ASTM C1064)
		Plastic Unit Weight:	141.2 (lb/ft³) (ASTM C138)
		Air Content:	7.5 (ASTM C231)
		Load Volume:	10 (yd³)

Lab Test Results

Testing Lab: Cole Garner Westminister, 1070 W 124th Avenue, Suite 300, Westminister, CO, 80234

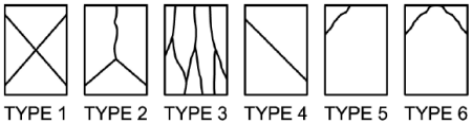
Specimen Number	Test Age Days	Test Date	Field / Lab Cure Days	Average Cylinder Diameter (in)	Cylinder Area (in²)	Max Load (lbs)	Strength (psi)	Fracture Type	Break Remark	Capping Method
6-1	7	07/13/20	1 / 6	4.00	12.57	53,960	4,290	5		N
6-2	28	08/03/20	1 / 27	4.00	12.57	70,920	5,640	5	PS	N
6-3	28	08/03/20	1 / 27	4.00	12.57	68,890	5,480	3	PS	N
6-4	28	08/03/20	1 / 27	4.00	12.57	71,040	5,650	5	PS	N
6-5	28 H	08/03/20	1 / 27							

Test Age Average Strengths (psi): 28 Day - 5590

Capping Methods	
PS: The break result meets or exceeds 100% of the required strength. Tested By: Samuel Garner (1,2,3,4,5) Checked In : 07/07/2020 (1,2,3,4,5)	N: Unbonded Caps (ASTM C1231)

General Remarks

Truck 2: 6.5% air content, 3" Slump, 84 °F Temp, 144.0 pcf Unit Weight
Truck 3: 6.5% air content, 3.5" Slump, 88 °F Temp, 142.8 pcf Unit Weight





Compressive Strength of Concrete

Test Method: ASTM C 39

Report Date: 9/9/2020

Sample: 5001

Cole Garner Geotechnical

1070 West 124th Ave
Suite 300
Westminster, CO 80234
Phone: 303.996.2999

Client:

KB Home Colorado Inc.
7807 East Peakview Avenue, Suite 300
Centennial, CO 80111

Project:

19.23.042
Trails at Crowfoot
Crowfoot Valley Road and Bayou Gulch Road
Parker, CO

Sample Details			
Set #:	5	Technician:	Gus Sorge
Specimen Size:	4" X 8"	Cast By:	Gus Sorge
Specimens In Set:	5	Date Cast:	07/07/20
Truck / Ticket #:	107 / 84600063	Sampled From:	Chute
Contractor:	PEI	Placement Method:	
Batched:	10:40 MDT	Sampled:	11:25 MDT
Cast:	11:35 MDT	Truck Empty:	
Placement Time:			

Location	
Placement Location:	30 - Other Flatwork
Location Details:	Cross pan at Mock Orange Ave and Alpine Phlox St including curb and gutter on both sides of crosspan
Sample Location / Notes:	Cross pan at Mock Orange Ave and Alpine Phlox St

Batch Log		Specifications	
Supplier:	Aggregate Industries	Mix Design:	7456120
On-Site Admixtures:	None	Strength:	4500 (psi)
		Air:	5.0 - 8.0 (%)
		Slump:	1 - 4 (in)

Field Measurements			
Weather:	Partly cloudy	Slump (in):	3-1/4 (ASTM C143)
Air Temperature (F):	88	Concrete Temp (F):	80 (ASTM C1064)
		Plastic Unit Weight:	143.6 (lb/ft³) (ASTM C138)
		Air Content:	6.5 (ASTM C231)
		Load Volume:	

Lab Test Results

Testing Lab: Cole Garner Westminster, 1070 W 124th Avenue, Suite 300, Westminster, CO, 80234

Specimen Number	Test Age Days	Test Date	Field / Lab Cure Days	Average Cylinder Diameter (in)	Cylinder Area (in²)	Max Load (lbs)	Strength (psi)	Fracture Type	Break Remark	Capping Method
5-1	7	07/14/20	1 / 6	4.00	12.57	68,710	5,470	3		N
5-2	28	08/04/20	1 / 27	4.00	12.57	82,440	6,560	3	PS	N
5-3	28	08/04/20	1 / 27	4.00	12.57	87,890	6,990	3	PS	N
5-4	28	08/04/20	1 / 27	4.00	12.57	82,850	6,590	5	PS	N
5-5	28 H	08/04/20	1 / 27							

Test Age Average Strengths (psi): 28 Day - 6710

Capping Methods	
PS: The break result meets or exceeds 100% of the required strength. Tested By: Samuel Garner (1,2,3,4,5) Checked In : 07/08/2020 (1,2,3,4,5)	N: Unbonded Caps (ASTM C1231)

General Remarks

Truck 2: unit weight 140.4 pcf, Air content 8%, Temp 82 °F, slump 4"
Truck 3: unit weight 143.2 pcf, air content 8%, temp 82 °F, slump 3.5"



TYPE 1 TYPE 2 TYPE 3 TYPE 4 TYPE 5 TYPE 6



Compressive Strength of Concrete

Test Method: ASTM C 39

Report Date: 9/9/2020
Sample: 5042

Cole Garner Geotechnical
1070 West 124th Ave
Suite 300
Westminster, CO 80234
Phone: 303.996.2999

Client:
KB Home Colorado Inc.
7807 East Peakview Avenue, Suite 300
Centennial, CO 80111

Project:
19.23.042
Trails at Crowfoot
Crowfoot Valley Road and Bayou Gulch Road
Parker, CO

Sample Details			
Set #:	7	Technician:	Gus Sorge
Specimen Size:	4" X 8"	Cast By:	Gus Sorge
Specimens In Set:	5	Date Cast:	07/09/20
Truck / Ticket #:	3177 / WCR62415824	Sampled From:	Chute
Contractor:	PEI	Placement Method:	Chute
		Batched:	09:10 MDT
		Sampled:	10:25 MDT
		Cast:	10:35 MDT
		Truck Empty:	
		Placement Time:	

Location	
Placement Location:	30 - Concrete Paving
Location Details:	North end of Rock Daisy St, alley between Block 1 Lots 1-2 and 21-22
Sample Location / Notes:	North end of Rock Daisy St in alley

Batch Log		Specifications	
Supplier:	Aggregate Industries	Mix Design:	7456120
On-Site Admixtures:	10.00 Gal Water (10 yd ³)	Strength:	4500 (psi)
		Air:	5.0 - 8.0 (%)
		Slump:	1 - 4 (in)

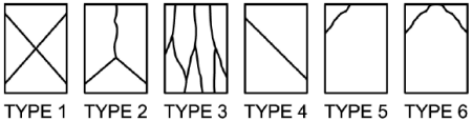
Field Measurements			
Weather:	Clear	Slump (in):	3-3/4 (ASTM C143)
Air Temperature (F):	80	Concrete Temp (F):	88 (ASTM C1064)
		Plastic Unit Weight:	142.0 (lb/ft ³) (ASTM C138)
		Air Content:	6.8 (ASTM C231)
		Load Volume:	10 (yd ³)

Lab Test Results

Testing Lab: Cole Garner Westminster, 1070 W 124th Avenue, Suite 300, Westminster, CO, 80234

Specimen Number	Test Age Days	Test Date	Field / Lab Cure Days	Average Cylinder Diameter (in)	Cylinder Area (in ²)	Max Load (lbs)	Strength (psi)	Fracture Type	Break Remark	Capping Method
7-1	7	07/16/20	1 / 6	4.00	12.57	45,640	3,630	3		N
7-2	28	08/06/20	1 / 27	4.00	12.57	59,970	4,770	3	PS	N
7-3	28	08/06/20	1 / 27	4.00	12.57	59,080	4,700	3	PS	N
7-4	28	08/06/20	1 / 27	4.00	12.57	60,970	4,850	3	PS	N
7-5	28 H	08/06/20	1 / 27							

Capping Methods							
PS: The break result meets or exceeds 100% of the required strength.							
Tested By: Samuel Garner (1,2,3,4,5)							
Checked In : 07/10/2020 (1,2,3,4,5)							
N: Unbonded Caps (ASTM C1231)							





Compressive Strength of Concrete

Test Method: ASTM C 39

Report Date: 9/9/2020
Sample: 5069

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Client:
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Centennial, CO 80111

Project:
19.23.042
Trails at Crowfoot
Crowfoot Valley Road and Bayou Gulch Road
Parker, CO

Sample Details			
Set #:	8	Technician:	Gus Sorge
Specimen Size:	4" X 8"	Cast By:	Gus Sorge
Specimens In Set:	5	Date Cast:	07/10/20
Truck / Ticket #:	695 / WCR84600179	Sampled From:	Chute
Contractor:	PEI	Placement Method:	Chute
		Batched:	09:30 MDT
		Sampled:	10:55 MDT
		Cast:	11:05 MDT
		Truck Empty:	
		Placement Time:	

Location	
Placement Location:	30 - Concrete Paving
Location Details:	40' South of Mock Orange Ave on Rock Daisy St to South end of Rock Daisy Trl
Sample Location / Notes:	50' South of Mock Orange Ave

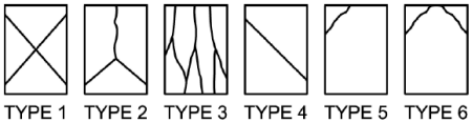
Batch Log		Specifications	
Supplier:	Aggregate Industries	Mix Design:	7456120
On-Site Admixtures:	None	Strength:	4500 (psi)
		Air:	5.0 - 8.0 (%)
		Slump:	1 - 4 (in)

Field Measurements			
Weather:	Clear	Slump (in):	4 (ASTM C143)
Air Temperature (F):	85	Concrete Temp (F):	84 (ASTM C1064)
		Plastic Unit Weight:	142.0 (lb/ft³) (ASTM C138)
		Air Content:	6.1 (ASTM C231)
		Load Volume:	10 (yd³)

Lab Test Results

Testing Lab: Cole Garner Westminster, 1070 W 124th Avenue, Suite 300, Westminster, CO, 80234										
Specimen Number	Test Age Days	Test Date	Field / Lab Cure Days	Average Cylinder Diameter (in)	Cylinder Area (in²)	Max Load (lbs)	Strength (psi)	Fracture Type	Break Remark	Capping Method
8-1	7	07/17/20	1 / 6	4.00	12.57	59,690	4,750	3		N
8-2	28	08/07/20	1 / 27	4.00	12.57	71,930	5,720	5	PS	N
8-3	28	08/07/20	1 / 27	4.00	12.57	72,570	5,770	3	PS	N
8-4	28	08/07/20	1 / 27	4.00	12.57	73,180	5,820	5	PS	N
8-5	28 H	08/07/20	1 / 27							

Test Age Average Strengths (psi): 28 Day - 5770		Capping Methods	
PS: The break result meets or exceeds 100% of the required strength.		N: Unbonded Caps (ASTM C1231)	
Tested By: Samuel Garner (1,2,3,4,5)			
Checked In : 07/11/2020 (1,2,3,4,5)			





Compressive Strength of Concrete

Test Method: ASTM C 39

Report Date: 9/9/2020

Sample: 5084

Cole Garner Geotechnical

1070 West 124th Ave
Suite 300
Westminster, CO 80234
Phone: 303.996.2999

Client:

KB Home Colorado Inc.
7807 East Peakview Avenue, Suite 300
Centennial, CO 80111

Project:

19.23.042
Trails at Crowfoot
Crowfoot Valley Road and Bayou Gulch Road
Parker, CO

Sample Details			
Set #:	9	Technician:	Rob Lopez
Specimen Size:	4" X 8"	Cast By:	Rob Lopez
Specimens In Set:	5	Date Cast:	07/11/20
Truck / Ticket #:	3184 / 84600233	Sampled From:	Chute
Contractor:	PEI	Placement Method:	Chute
Batched:	07:12 MDT	Sampled:	08:15 MDT
Cast:	08:30 MDT	Truck Empty:	08:40 MDT
Placement Time:	88 (min)		

Location	
Placement Location:	30 - Concrete Paving
Location Details:	Drive Lanes: Rock Daisy Street stations 15+70 to 13+00
Sample Location / Notes:	Pour Began at Rock Daisy Street STA 15+70 continued North.

Batch Log		Specifications	
Supplier:	Aggregate Industries	Mix Design:	7456120
On-Site Admixtures:	None	Strength:	4500 (psi)
		Air:	5.0 - 8.0 (%)
		Slump:	1 - 4 (in)

Field Measurements			
Weather:	Sunny	Slump (in):	4 (ASTM C143)
Air Temperature (F):	76	Concrete Temp (F):	74 (ASTM C1064)
		Plastic Unit Weight:	139.2 (lb/ft³) (ASTM C138)
		Air Content:	7.5 (ASTM C231)
		Load Volume:	10 (yd³)

Lab Test Results

Testing Lab: Cole Garner Westminster, 1070 W 124th Avenue, Suite 300, Westminster, CO, 80234

Specimen Number	Test Age Days	Test Date	Field / Lab Cure Days	Average Cylinder Diameter (in)	Cylinder Area (in²)	Max Load (lbs)	Strength (psi)	Fracture Type	Break Remark	Capping Method
9-1	9	07/20/20	2 / 7	4.00	12.57	57,780	4,600	3		N
9-2	30	08/10/20	2 / 28	4.00	12.57	66,620	5,300	3	PS	N
9-3	30	08/10/20	2 / 28	4.00	12.57	68,530	5,450	5	PS	N
9-4	30	08/10/20	2 / 28	4.00	12.57	68,390	5,440	5	PS	N
9-5	30 H	08/10/20	2 / 28							

Test Age Average Strengths (psi): 30 Day - 5400

Capping Methods	
PS: The break result meets or exceeds 100% of the required strength. Tested By: Samuel Garner (1,2,3,4,5) Checked In : 07/13/2020 (1,2,3,4,5)	N: Unbonded Caps (ASTM C1231)

General Remarks

Truck 2: Slump 4", Unit Weight 139.6 pcf, Air content 7.4%, Temp 77 *F
Truck 3: Slump 3.5", Unit Weight 144.2 pcf, Air content 5.1%, Temp 77 *F



TYPE 1 TYPE 2 TYPE 3 TYPE 4 TYPE 5 TYPE 6



Compressive Strength of Concrete

Test Method: ASTM C 39

Report Date: 9/9/2020
Sample: 5089

Cole Garner Geotechnical
1070 West 124th Ave
Suite 300
Westminster, CO 80234
Phone: 303.996.2999

Client:
KB Home Colorado Inc.
7807 East Peakview Avenue, Suite 300
Centennial, CO 80111

Project:
19.23.042
Trails at Crowfoot
Crowfoot Valley Road and Bayou Gulch Road
Parker, CO

Sample Details			
Set #:	10	Technician:	Gus Sorge
Specimen Size:	4" X 8"	Cast By:	Gus Sorge
Specimens In Set:	5	Date Cast:	07/13/20
Truck / Ticket #:	9242 / 84600266	Sampled From:	Chute
Contractor:	PEI	Placement Method:	Chute
		Batched:	09:15 MDT
		Sampled:	10:25 MDT
		Cast:	10:35 MDT
		Truck Empty:	
		Placement Time:	

Location	
Placement Location:	30 - Concrete Paving
Location Details:	Parking area on Rock Daisy St Parking area on Rock Daisy Trl North side on Rock Daisy St and Rock Daisy Trl
Sample Location / Notes:	Parking area on Rock Daisy St

Batch Log		Specifications	
Supplier:	Aggregate Industries	Mix Design:	7456120
On-Site Admixtures:	None	Strength:	4500 (psi)
		Air:	5.0 - 8.0 (%)
		Slump:	1 - 4 (in)

Field Measurements			
Weather:	Cloudy	Slump (in):	3-3/4 (ASTM C143)
Air Temperature (F):	80	Concrete Temp (F):	82 (ASTM C1064)
		Plastic Unit Weight:	139.2 (lb/ft³) (ASTM C138)
		Air Content:	7.9 (ASTM C231)
		Load Volume:	10 (yd³)

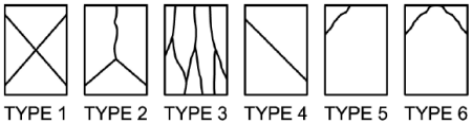
Lab Test Results

Testing Lab: Cole Garner Westminster, 1070 W 124th Avenue, Suite 300, Westminster, CO, 80234

Specimen Number	Test Age Days	Test Date	Field / Lab Cure Days	Average Cylinder Diameter (in)	Cylinder Area (in²)	Max Load (lbs)	Strength (psi)	Fracture Type	Break Remark	Capping Method
10-1	7	07/20/20	1 / 6	4.00	12.57	53,030	4,220	5		N
10-2	28	08/10/20	1 / 27	4.00	12.57	65,080	5,180	3	PS	N
10-3	28	08/10/20	1 / 27	4.00	12.57	65,530	5,210	3	PS	N
10-4	28	08/10/20	1 / 27	4.00	12.57	63,450	5,050	5	PS	N
10-5	28 H	08/10/20	1 / 27							

Test Age Average Strengths (psi): 28 Day - 5150

Capping Methods	
PS: The break result meets or exceeds 100% of the required strength.	N: Unbonded Caps (ASTM C1231)
Tested By: Samuel Garner (1,2,3,4,5)	
Checked In : 07/14/2020 (1,2,3,4,5)	





Compressive Strength of Concrete

Test Method: ASTM C 39

Report Date: 9/9/2020
Sample: 5100

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1070 West 124th Ave
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Westminster, CO 80234
Phone: 303.996.2999

Client:
KB Home Colorado Inc.
7807 East Peakview Avenue, Suite 300
Centennial, CO 80111

Project:
19.23.042
Trails at Crowfoot
Crowfoot Valley Road and Bayou Gulch Road
Parker, CO

Sample Details			
Set #:	11	Technician:	Gus Sorge
Specimen Size:	4" X 8"	Cast By:	Gus Sorge
Specimens In Set:	5	Date Cast:	07/14/20
Truck / Ticket #:	9253 / 84600298	Sampled From:	Chute
Contractor:	PEI	Placement Method:	Chute
		Batched:	08:15 MDT
		Sampled:	09:10 MDT
		Cast:	09:20 MDT
		Truck Empty:	
		Placement Time:	

Location	
Placement Location:	30 - Concrete Paving
Location Details:	Rock Daisy Trl starting from Rock Daisy St going towards Rock Daisy Ln
Sample Location / Notes:	South corner of Rock Daisy Trl and Rock Daisy St

Batch Log		Specifications	
Supplier:	Aggregate Industries	Mix Design:	7456120
On-Site Admixtures:	None	Strength:	4500 (psi)
		Air:	5.0 - 8.0 (%)
		Slump:	1 - 4 (in)

Field Measurements			
Weather:	Cloudy	Slump (in):	3-1/2 (ASTM C143)
Air Temperature (F):	78	Concrete Temp (F):	78 (ASTM C1064)
		Plastic Unit Weight:	139.2 (lb/ft³) (ASTM C138)
		Air Content:	7.9 (ASTM C231)
		Load Volume:	10 (yd³)

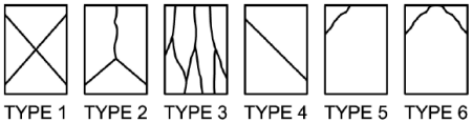
Lab Test Results

Testing Lab: Cole Garner Westminster, 1070 W 124th Avenue, Suite 300, Westminster, CO, 80234

Specimen Number	Test Age Days	Test Date	Field / Lab Cure Days	Average Cylinder Diameter (in)	Cylinder Area (in²)	Max Load (lbs)	Strength (psi)	Fracture Type	Break Remark	Capping Method
11-1	7	07/21/20	1 / 6	4.00	12.57	53,670	4,270	5		N
11-2	28	08/11/20	1 / 27	4.00	12.57	67,480	5,370	3	PS	N
11-3	28	08/11/20	1 / 27	4.00	12.57	65,580	5,220	3	PS	N
11-4	28	08/11/20	1 / 27	4.00	12.57	67,770	5,390	3	PS	N
11-5	28 H	08/11/20	1 / 27							

Test Age Average Strengths (psi): 28 Day - 5330

Capping Methods	
PS: The break result meets or exceeds 100% of the required strength.	N: Unbonded Caps (ASTM C1231)
Tested By: Samuel Garner (1,2,3,4,5)	
Checked In : 07/15/2020 (1,2,3,4,5)	





Compressive Strength of Concrete

Test Method: ASTM C 39

Report Date: 9/9/2020
Sample: 5126

Cole Garner Geotechnical
1070 West 124th Ave
Suite 300
Westminster, CO 80234
Phone: 303.996.2999

Client:
KB Home Colorado Inc.
7807 East Peakview Avenue, Suite 300
Centennial, CO 80111

Project:
19.23.042
Trails at Crowfoot
Crowfoot Valley Road and Bayou Gulch Road
Parker, CO

Sample Details			
Set #:	12	Technician:	Gus Sorge
Specimen Size:	4" X 8"	Cast By:	Gus Sorge
Specimens In Set:	5	Date Cast:	07/15/20
Truck / Ticket #:	9253 / 84600352	Sampled From:	Chute
Contractor:	Premier Earthworks	Placement Method:	Chute
		Batched:	10:18 MDT
		Sampled:	11:25 MDT
		Cast:	11:35 MDT
		Truck Empty:	
		Placement Time:	

Location	
Placement Location:	30 - Concrete Paving
Location Details:	Rock Daisy Lane, starting at Rock Daisy St to Rock Daisy Trl with parking stalls on Rock Daisy Lane
Sample Location / Notes:	Rock Daisy Lane in front of lot 1

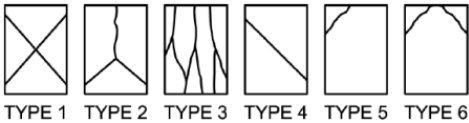
Batch Log		Specifications	
Supplier:	Aggregate Industries	Mix Design:	7456120
On-Site Admixtures:	None	Strength:	4500 (psi)
		Air:	5.0 - 8.0 (%)
		Slump:	1 - 4 (in)

Field Measurements			
Weather:	Cloudy	Slump (in):	3-1/2 (ASTM C143)
Air Temperature (F):	75	Concrete Temp (F):	78 (ASTM C1064)
		Plastic Unit Weight:	142.4 (lb/ft³) (ASTM C138)
		Air Content:	5.7 (ASTM C231)
		Load Volume:	10 (yd³)

Lab Test Results

Testing Lab: Cole Garner Westminster, 1070 W 124th Avenue, Suite 300, Westminster, CO, 80234										
Specimen Number	Test Age Days	Test Date	Field / Lab Cure Days	Average Cylinder Diameter (in)	Cylinder Area (in²)	Max Load (lbs)	Strength (psi)	Fracture Type	Break Remark	Capping Method
12-1	7	07/22/20	1 / 6	4.00	12.57	63,210	5,030	5		N
12-2	28	08/12/20	1 / 27	4.00	12.57	73,620	5,860	3	PS	N
12-3	28	08/12/20	1 / 27	4.00	12.57	74,690	5,940	3	PS	N
12-4	28	08/12/20	1 / 27	4.00	12.57	66,470	5,290	5	PS	N
12-5	28 H	08/12/20	1 / 27							

Test Age Average Strengths (psi): 28 Day - 5700		Capping Methods	
PS: The break result meets or exceeds 100% of the required strength.		N: Unbonded Caps (ASTM C1231)	
Tested By: Samuel Garner (1,2,3,4,5)			
Checked In : 07/16/2020 (1,2,3,4,5)			





Compressive Strength of Concrete

Test Method: ASTM C 39

Report Date: 9/9/2020
Sample: 5166

Cole Garner Geotechnical
1070 West 124th Ave
Suite 300
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Phone: 303.996.2999

Client:
KB Home Colorado Inc.
7807 East Peakview Avenue, Suite 300
Centennial, CO 80111

Project:
19.23.042
Trails at Crowfoot
Crowfoot Valley Road and Bayou Gulch Road
Parker, CO

Sample Details			
Set #:	13	Technician:	Anthony Bath
Specimen Size:	4" X 8"	Cast By:	Anthony Bath
Specimens In Set:	5	Date Cast:	07/17/20
Truck / Ticket #:	695 / WCR84600424	Sampled From:	Chute
Contractor:	PEI	Placement Method:	Chute
		Batched:	08:13 MDT
		Sampled:	09:00 MDT
		Cast:	09:12 MDT
		Truck Empty:	
		Placement Time:	

Location	
Placement Location:	30 - Concrete Paving
Location Details:	Concrete Pavement on Mock Orange Way and Mock Orange Ct
Sample Location / Notes:	Mock Orange Way

Batch Log		Specifications	
Supplier:	Aggregate Industries	Mix Design:	7456120
On-Site Admixtures:	None	Strength:	4500 (psi)
		Air:	5.0 - 8.0 (%)
		Slump:	1 - 4 (in)

Field Measurements			
Weather:	Sunny	Slump (in):	4 (ASTM C143)
Air Temperature (F):	85	Concrete Temp (F):	77 (ASTM C1064)
		Plastic Unit Weight:	144.0 (lb/ft³) (ASTM C138)
		Air Content:	5.3 (ASTM C231)
		Load Volume:	10 (yd³)

Lab Test Results

Testing Lab: Cole Garner Westminster, 1070 W 124th Avenue, Suite 300, Westminster, CO, 80234

Specimen Number	Test Age Days	Test Date	Field / Lab Cure Days	Average Cylinder Diameter (in)	Cylinder Area (in²)	Max Load (lbs)	Strength (psi)	Fracture Type	Break Remark	Capping Method
13-1	7	07/24/20	1 / 6	4.00	12.57	72,560	5,770	3		N
13-2	28	08/14/20	1 / 27	4.00	12.57	83,930	6,680	3	PS	N
13-3	28	08/14/20	1 / 27	4.00	12.57	88,740	7,060	3	PS	N
13-4	28	08/14/20	1 / 27	4.00	12.57	83,370	6,630	3	PS	N
13-5	28 H	08/14/20	1 / 27							

Test Age Average Strengths (psi): 28 Day - 6790

Capping Methods	
PS: The break result meets or exceeds 100% of the required strength.	N: Unbonded Caps (ASTM C1231)
Tested By: Samuel Garner (1,2,3,4,5)	
Checked In : 07/18/2020 (1,2,3,4,5)	

General Remarks

Test 2: Air content = 5.0%, Slump = 4 1/2", Temp = 79 *F, Weight = 144.8 pcf
Test 3: Air content = 6.3%, Slump = 4 1/2", Temp = 77 *F, Weight = 142.8 pcf



TYPE 1 TYPE 2 TYPE 3 TYPE 4 TYPE 5 TYPE 6



Compressive Strength of Concrete

Test Method: ASTM C 39

Report Date: 9/9/2020

Sample: 5180

Cole Garner Geotechnical

1070 West 124th Ave
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Phone: 303.996.2999

Client:

KB Home Colorado Inc.
7807 East Peakview Avenue, Suite 300
Centennial, CO 80111

Project:

19.23.042
Trails at Crowfoot
Crowfoot Valley Road and Bayou Gulch Road
Parker, CO

Sample Details			
Set #:	14	Technician:	Anthony Bath
Specimen Size:	4" X 8"	Cast By:	Anthony Bath
Specimens In Set:	5	Date Cast:	07/17/20
Truck / Ticket #:		Sampled From:	Chute
Contractor:	PEI	Placement Method:	Chute
		Batched:	
		Sampled:	12:07 MDT
		Cast:	12:21 MDT
		Truck Empty:	
		Placement Time:	

Location	
Placement Location:	30 - Concrete Paving
Location Details:	Concrete Pavement on Mock Orange Way and Mock Orange Ct
Sample Location / Notes:	Mock Orange Ct

Batch Log		Specifications	
Supplier:	Aggregate Industries	Mix Design:	7456120
On-Site Admixtures:	None	Strength:	4500 (psi)
		Air:	5.0 - 8.0 (%)
		Slump:	1 - 4 (in)

Field Measurements			
Weather:	Sunny	Slump (in):	3-3/4 (ASTM C143)
Air Temperature (F):	91	Concrete Temp (F):	80 (ASTM C1064)
		Plastic Unit Weight:	145.2 (lb/ft³) (ASTM C138)
		Air Content:	5.5 (ASTM C231)
		Load Volume:	10 (yd³)

Lab Test Results

Testing Lab: Cole Garner Westminster, 1070 W 124th Avenue, Suite 300, Westminster, CO, 80234

Specimen Number	Test Age Days	Test Date	Field / Lab Cure Days	Average Cylinder Diameter (in)	Cylinder Area (in²)	Max Load (lbs)	Strength (psi)	Fracture Type	Break Remark	Capping Method
14-1	7	07/24/20	1 / 6	4.00	12.57	76,400	6,080	3		N
14-2	28	08/14/20	1 / 27	4.00	12.57	85,760	6,820	3	PS	N
14-3	28	08/14/20	1 / 27	4.00	12.57	82,410	6,560	3	PS	N
14-4	28	08/14/20	1 / 27	4.00	12.57	81,310	6,470	3	PS	N
14-5	28 H	08/14/20	1 / 27							

Test Age Average Strengths (psi): 28 Day - 6620

Capping Methods	
PS: The break result meets or exceeds 100% of the required strength. Tested By: Samuel Garner (1,2,3,4,5) Checked In : 07/18/2020 (1,2,3,4,5)	N: Unbonded Caps (ASTM C1231)

