



October 14, 2019

Mr. Chris Clark  
Project Manager  
A.J. Brown, Inc.  
635 Trade Center Boulevard  
Chesterfield, Missouri 63005

RE: Special Inspection Report No. 4  
Goddard School  
3395 NE Ralph Powell Road  
Lee's Summit, Missouri  
Report Period: September 15, 2019 to October 12, 2019  
Building Permit #PRCOM20190683  
Geotechnology, Inc. Project No.: J034913.01

Dear Mr. Clark:

This letter with attachments will constitute our Special Inspection transmittal for the above referenced project. Representatives of Geotechnology, Inc. have provided field observation and testing services for reinforced concrete during the report period. Our services have been provided on a part-time basis as scheduled by representatives of A.J. Brown, Inc. The compliance of materials or work not observed by our personnel is not addressed, or implied, by this or any previous report.

### **Summary of Activities**

#### **Reinforced Concrete**

Field tests were performed and compressive strength test specimens cast with concrete placed in the slab-on-grade on September 24. The recent concrete compressive strength test results are enclosed.

### **Status of Compliance**

The specific items discussed above in this report appeared to be in general compliance with the contract documents.

**Closure**

The results of our field observations and testing were reported to authorized personnel during our site visits. If you have any questions regarding this report, or if we may be of further service, please contact us.

Respectfully submitted,

**GEOTECHNOLOGY, INC.**



Peter F. Brull, P.E.  
Senior Engineer



Steve Damron  
CMT Department Manager

Attachments: Concrete Cylinder Test Results

cc: Mr. Ryan Elam – City of Lee's Summit  
Ms. Sara Beck – City of Lee's Summit  
Mr. Jim Hostler – A.J. Brown, Inc.  
Geotechnology S.I. File



Report Date: 09/17/2019

Client: A.J. Brown Inc.

Project: J034913.01

Goddard School Lee's Summit

Lee's Summit, MO

## Concrete Cylinder Test Results

General Contractor: A.J. Brown, Inc.

Temperature/Weather: 91°F Sunny

Site Contact: Jim Hostler

Contractor: Beacon Contracting, LLC

Set No.: 1

Sample Location: Spread footing at Grid B/12

Cast Date: 08/19/2019

### FIELD DATA (ASTM C31)

|  |              |                        |                          |
|--|--------------|------------------------|--------------------------|
| Slump, ASTM C143 (in.):                    | 3.75         | Supplier:              | Geiger Ready-Mix         |
| Air Content, ASTM C231 (%):                | 6.2          | Mix Design:            | A4UC517V445              |
| Conc. Temp., ASTM C1064 (°F):              | 89           | Truck/Ticket No.:      | 344/886958               |
| Unit Weight, ASTM C138 (p.c.f.):           | 141.6        | Batch Time:            | 13:23:00                 |
| Yield, ASTM C138 (ft. <sup>3</sup> ):      | --           | Sample Time:           | 14:00:00                 |
| Truck/Accum. Quantity (yd. <sup>3</sup> ): | 10/10        | Mixing Time (min.):    | 37                       |
| Sampled From, ASTM C172:                   | Truck Chute  | Initial Curing Method: | Sealed                   |
| Specified Strength (psi):                  | <b>3,000</b> | Cylinders Cast By:     | Tresor V. Vesolo-Mouanda |
| Average Strength (psi):                    | <b>4,667</b> | Received in Lab:       | 08/20/2019               |

### Laboratory Data (ASTM C39 / C1231 / C617)

| Cylinder ID | Cylinder Weight (lbs.) | Cross Sec. Area (sq.in.) | Cylinder Diameter (in.) | Maximum Load (lbs.) | Compressive Strength (psi) | Fracture/Capping Type * | Test Date  | Cylinder Test Age (day) |
|-------------|------------------------|--------------------------|-------------------------|---------------------|----------------------------|-------------------------|------------|-------------------------|
| 7065-1-1    | --                     | 12.57                    | 4.00                    | 46880               | 3730                       | 2/N                     | 08/26/2019 | 7                       |
| 7065-1-2    | --                     | 12.57                    | 4.00                    | 51020               | 4060                       | 2/N                     | 09/16/2019 | 28                      |
| 7065-1-3    | --                     | 12.57                    | 4.00                    | 62820               | 5000                       | 5/N                     | 09/16/2019 | 28                      |
| 7065-1-4    | --                     | 12.57                    | 4.00                    | 62110               | 4940                       | 2/N                     | 09/16/2019 | 28                      |

\* Fracture type as shown in Figure 2, ASTM C39 / Capping type: N - Neoprene Pads; B - Bonded; G - Ground

### Remarks:

Reviewed by:

Peter F. Brull

CC: Clark, Chris (A.J. Brown Inc.) (e)

Hostler, James (A.J. Brown Inc.) (e)

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Report Date: 09/19/2019

Client: A.J. Brown Inc.

Project: J034913.01

Goddard School Lee's Summit

Lee's Summit, MO

## Concrete Cylinder Test Results

General Contractor: A.J. Brown, Inc.

Temperature/Weather: 95°F Sunny

Site Contact: Jim Hostler

Contractor: Beacon Contracting, LLC

Set No.: 1

Sample Location: Footings at Line 15, Line C.5 to 15 feet east of Line A

Cast Date: 08/20/2019

### FIELD DATA (ASTM C31)

|  |             |                        |                   |
|--|-------------|------------------------|-------------------|
| Slump, ASTM C143 (in.):                    | 5.00        | Supplier:              | Geiger Ready-Mix  |
| Air Content, ASTM C231 (%):                | 7.0         | Mix Design:            | A4UC517V445       |
| Conc. Temp., ASTM C1064 (°F):              | 85          | Truck/Ticket No.:      | 453/887115        |
| Unit Weight, ASTM C138 (p.c.f.):           | --          | Batch Time:            | 12:01:00          |
| Yield, ASTM C138 (ft. <sup>3</sup> ):      | --          | Sample Time:           | 13:50:00          |
| Truck/Accum. Quantity (yd. <sup>3</sup> ): | 10/10       | Mixing Time (min.):    | 109               |
| Sampled From, ASTM C172:                   | Truck Chute | Initial Curing Method: | Sealed/Curing Box |
| Specified Strength (psi):                  | 3,000       | Cylinders Cast By:     | Eric N. Behrens   |
| Average Strength (psi):                    | 4,340       | Received in Lab:       | 08/21/2019        |

### Laboratory Data (ASTM C39 / C1231 / C617)

| Cylinder ID | Cylinder Weight (lbs.) | Cross Sec. Area (sq.in.) | Cylinder Diameter (in.) | Maximum Load (lbs.) | Compressive Strength (psi) | Fracture/Capping Type * | Test Date  | Cylinder Test Age (day) |
|-------------|------------------------|--------------------------|-------------------------|---------------------|----------------------------|-------------------------|------------|-------------------------|
| 7262-1-1    | --                     | 12.57                    | 4.00                    | 39960               | 3180                       | 2/N                     | 08/27/2019 | 7                       |
| 7262-1-2    | --                     | 12.57                    | 4.00                    | 56720               | 4510                       | 5/N                     | 09/17/2019 | 28                      |
| 7262-1-3    | --                     | 12.57                    | 4.00                    | 55420               | 4410                       | 2/N                     | 09/17/2019 | 28                      |
| 7262-1-4    | --                     | 12.57                    | 4.00                    | 51510               | 4100                       | 5/N                     | 09/17/2019 | 28                      |

\* Fracture type as shown in Figure 2, ASTM C39 / Capping type: N - Neoprene Pads; B - Bonded; G - Ground

Remarks:

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Peter F. Brull

CC: Clark, Chris (A.J. Brown Inc.) (e)

Hostler, James (A.J. Brown Inc.) (e)

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Report Date: 09/19/2019

Client: A.J. Brown Inc.

Project: J034913.01

Goddard School Lee's Summit

Lee's Summit, MO

## Concrete Cylinder Test Results

General Contractor: A.J. Brown, Inc.

Temperature/Weather: 95°F Sunny

Site Contact: Jim Hostler

Contractor: Beacon Contracting, LLC

Set No.: 2

Sample Location: Footing at 15 feet east of Line A, Line 1 to 3

Cast Date: 08/20/2019

### FIELD DATA (ASTM C31)

|  |             |                        |                   |
|--|-------------|------------------------|-------------------|
| Slump, ASTM C143 (in.):                    | 4.75        | Supplier:              | Geiger Ready-Mix  |
| Air Content, ASTM C231 (%):                | 6.8         | Mix Design:            | A4UC517V445       |
| Conc. Temp., ASTM C1064 (°F):              | 84          | Truck/Ticket No.:      | 309/887141        |
| Unit Weight, ASTM C138 (p.c.f.):           | --          | Batch Time:            | 15:16:00          |
| Yield, ASTM C138 (ft. <sup>3</sup> ):      | --          | Sample Time:           | 15:50:00          |
| Truck/Accum. Quantity (yd. <sup>3</sup> ): | 10/40       | Mixing Time (min.):    | 34                |
| Sampled From, ASTM C172:                   | Truck Chute | Initial Curing Method: | Sealed/Curing Box |
| Specified Strength (psi):                  | 3,000       | Cylinders Cast By:     | Eric N. Behrens   |
| Average Strength (psi):                    | 4,637       | Received in Lab:       | 08/21/2019        |

### Laboratory Data (ASTM C39 / C1231 / C617)

| Cylinder ID | Cylinder Weight (lbs.) | Cross Sec. Area (sq.in.) | Cylinder Diameter (in.) | Maximum Load (lbs.) | Compressive Strength (psi) | Fracture/Capping Type * | Test Date  | Cylinder Test Age (day) |
|-------------|------------------------|--------------------------|-------------------------|---------------------|----------------------------|-------------------------|------------|-------------------------|
| 7262-2-1    | --                     | 12.57                    | 4.00                    | 39260               | 3120                       | 2/N                     | 08/27/2019 | 7                       |
| 7262-2-2    | --                     | 12.57                    | 4.00                    | 60890               | 4850                       | 5/N                     | 09/17/2019 | 28                      |
| 7262-2-3    | --                     | 12.57                    | 4.00                    | 59830               | 4760                       | 2/N                     | 09/17/2019 | 28                      |
| 7262-2-4    | --                     | 12.57                    | 4.00                    | 54060               | 4300                       | 2/N                     | 09/17/2019 | 28                      |

\* Fracture type as shown in Figure 2, ASTM C39 / Capping type: N - Neoprene Pads; B - Bonded; G - Ground

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**Report Date:** 10/03/2019**Client:** A.J. Brown Inc.**Project:** J034913.01

Goddard School Lee's Summit

Lee's Summit, MO

## Concrete Cylinder Test Results

**General Contractor:** A.J. Brown, Inc.**Temperature/Weather:** 85°F Ptl. Cloudy**Site Contact:** Jim Hostler**Contractor:** Beacon Contracting, LLC**Set No.:** 1**Sample Location:** Footing at 30 feet west of Line D, Line 1 to 8**Cast Date:** 08/29/2019

### FIELD DATA (ASTM C31)

|   |              |                               |                  |
|---|--------------|-------------------------------|------------------|
| <b>Slump, ASTM C143 (in.):</b>                  | 3.00         | <b>Supplier:</b>              | Geiger Ready-Mix |
| <b>Air Content, ASTM C231 (%):</b>              | 6.3          | <b>Mix Design:</b>            | A4UC517V445      |
| <b>Conc. Temp., ASTM C1064 (°F):</b>            | 83           | <b>Truck/Ticket No.:</b>      | 377/887829       |
| <b>Unit Weight, ASTM C138 (p.c.f.):</b>         | 143.2        | <b>Batch Time:</b>            | 12:00:00         |
| <b>Yield, ASTM C138 (ft.<sup>3</sup>):</b>      | --           | <b>Sample Time:</b>           | 12:30:00         |
| <b>Truck/Accum. Quantity (yd.<sup>3</sup>):</b> | 10/10        | <b>Mixing Time (min.):</b>    | 30               |
| <b>Sampled From, ASTM C172:</b>                 | Truck Chute  | <b>Initial Curing Method:</b> | Sealed           |
| <b>Specified Strength (psi):</b>                | <b>3,000</b> | <b>Cylinders Cast By:</b>     | Linda A. Souder  |
| <b>Average Strength (psi):</b>                  | <b>5,880</b> | <b>Received in Lab:</b>       | 08/30/2019       |

### Laboratory Data (ASTM C39 / C1231 / C617)

| Cylinder ID | Cylinder Weight (lbs.) | Cross Sec. Area (sq.in.) | Cylinder Diameter (in.) | Maximum Load (lbs.) | Compressive Strength (psi) | Fracture/Capping Type * | Test Date  | Cylinder Test Age (day) |
|-------------|------------------------|--------------------------|-------------------------|---------------------|----------------------------|-------------------------|------------|-------------------------|
| 7808-1-1    | --                     | 12.57                    | 4.00                    | 52740               | 4200                       | 2/N                     | 09/05/2019 | 7                       |
| 7808-1-2    | --                     | 12.63                    | 4.01                    | 75460               | 5980                       | 5/N                     | 09/26/2019 | 28                      |
| 7808-1-3    | --                     | 12.63                    | 4.01                    | 70660               | 5590                       | 5/N                     | 09/26/2019 | 28                      |
| 7808-1-4    | --                     | 12.63                    | 4.01                    | 76720               | 6070                       | 2/N                     | 09/26/2019 | 28                      |

\* Fracture type as shown in Figure 2, ASTM C39 / Capping type: N - Neoprene Pads; B - Bonded; G - Ground

### Remarks:

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Peter F. Brull

**CC:** Clark, Chris (A.J. Brown Inc.) (e)

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Report Date: 10/03/2019

Client: A.J. Brown Inc.

Project: J034913.01

Goddard School Lee's Summit

Lee's Summit, MO

## Concrete Cylinder Test Results

General Contractor: A.J. Brown, Inc.; Beacon Contracting, LLC

Temperature/Weather: 71°F Clear

Site Contact: Jim Hostler

Contractor: Beacon Contracting, LLC

Set No.: 1

Sample Location: Slab-on-grade at 0 to 8 feet south, 0 to 25 feet east of the building northwest corner Cast Date: 09/24/2019

### FIELD DATA (ASTM C31)

|  |             |                        |                       |
|--|-------------|------------------------|-----------------------|
| Slump, ASTM C143 (in.):                    | 6.25        | Supplier:              | Geiger Ready-Mix      |
| Air Content, ASTM C231 (%):                | 2.0         | Mix Design:            | P6UC564V446           |
| Conc. Temp., ASTM C1064 (°F):              | 78          | Truck/Ticket No.:      | 324/890008            |
| Unit Weight, ASTM C138 (p.c.f.):           | 148.8       | Batch Time:            | 06:33:00              |
| Yield, ASTM C138 (ft. <sup>3</sup> ):      | --          | Sample Time:           | 07:15:00              |
| Truck/Accum. Quantity (yd. <sup>3</sup> ): | 10/20       | Mixing Time (min.):    | 42                    |
| Sampled From, ASTM C172:                   | Truck Chute | Initial Curing Method: | Sealed                |
| Specified Strength (psi):                  | 4,000       | Cylinders Cast By:     | Tresor Vesolo-Mouanda |
| Average Strength (psi):                    | 5,320       | Received in Lab:       | 09/25/2019            |

### Laboratory Data (ASTM C39 / C1231 / C617)

| Cylinder ID | Cylinder Weight (lbs.) | Cross Sec. Area (sq.in.) | Cylinder Diameter (in.) | Maximum Load (lbs.) | Compressive Strength (psi) | Fracture/Capping Type * | Test Date  | Cylinder Test Age (day) |
|-------------|------------------------|--------------------------|-------------------------|---------------------|----------------------------|-------------------------|------------|-------------------------|
| 9735-1-1    | --                     | 12.50                    | 3.99                    | 66500               | 5320                       | 2/N                     | 10/01/2019 | 7                       |
| 9735-1-2    | --                     | --                       | --                      | --                  | --                         | --                      | 10/22/2019 | 28                      |
| 9735-1-3    | --                     | --                       | --                      | --                  | --                         | --                      | 10/22/2019 | 28                      |
| 9735-1-4    | --                     | --                       | --                      | --                  | --                         | --                      | 01/01/1900 | HOLD                    |

\* Fracture type as shown in Figure 2, ASTM C39 / Capping type: N - Neoprene Pads; B - Bonded; G - Ground

### Remarks:

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Report Date: 10/03/2019

Client: A.J. Brown Inc.

Project: J034913.01

Goddard School Lee's Summit

Lee's Summit, MO

## Concrete Cylinder Test Results

General Contractor: A.J. Brown, Inc.; Beacon Contracting, LLC

Temperature/Weather: 71°F Clear

Site Contact: Jim Hostler

Contractor: Beacon Contracting, LLC

Set No.: 2

Sample Location: Slab-on-grade at 43 to 58 feet south, 44 to 60 feet east of the building northwest corner

Cast Date: 09/24/2019

### FIELD DATA (ASTM C31)

|  |             |                        |                       |
|--|-------------|------------------------|-----------------------|
| Slump, ASTM C143 (in.):                    | 7.00        | Supplier:              | Geiger Ready-Mix      |
| Air Content, ASTM C231 (%):                | 2.4         | Mix Design:            | P6UC564V446           |
| Conc. Temp., ASTM C1064 (°F):              | 76          | Truck/Ticket No.:      | 354/890028            |
| Unit Weight, ASTM C138 (p.c.f.):           | 148.0       | Batch Time:            | 08:01:00              |
| Yield, ASTM C138 (ft. <sup>3</sup> ):      | --          | Sample Time:           | 08:30:00              |
| Truck/Accum. Quantity (yd. <sup>3</sup> ): | 10/60       | Mixing Time (min.):    | 29                    |
| Sampled From, ASTM C172:                   | Truck Chute | Initial Curing Method: | Sealed                |
| Specified Strength (psi):                  | 4,000       | Cylinders Cast By:     | Tresor Vesolo-Mouanda |
| Average Strength (psi):                    | 4,940       | Received in Lab:       | 09/25/2019            |

### Laboratory Data (ASTM C39 / C1231 / C617)

| Cylinder ID | Cylinder Weight (lbs.) | Cross Sec. Area (sq.in.) | Cylinder Diameter (in.) | Maximum Load (lbs.) | Compressive Strength (psi) | Fracture/Capping Type * | Test Date  | Cylinder Test Age (day) |
|-------------|------------------------|--------------------------|-------------------------|---------------------|----------------------------|-------------------------|------------|-------------------------|
| 9735-2-1    | --                     | 12.50                    | 3.99                    | 61810               | 4940                       | 2/N                     | 10/01/2019 | 7                       |
| 9735-2-2    | --                     | --                       | --                      | --                  | --                         | --                      | 10/22/2019 | 28                      |
| 9735-2-3    | --                     | --                       | --                      | --                  | --                         | --                      | 10/22/2019 | 28                      |
| 9735-2-4    | --                     | --                       | --                      | --                  | --                         | --                      | 01/01/1900 | HOLD                    |

\* Fracture type as shown in Figure 2, ASTM C39 / Capping type: N - Neoprene Pads; B - Bonded; G - Ground

### Remarks:

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