

January 27, 2025

Mr. Brian Maenner
Vice President of Development
Intrinsic Development
3622 Endeavor Avenue
Columbia, Missouri 65201

RE: Special Inspection Report No. 1
Village at Discovery Park – Lot 4
1921 NE Discovery Avenue
Lee' Summit, Missouri
Report Period: December 1, 2024 to December 28, 2024
Permit No.: PRCOM20240340
UES Project No.: A23129.00089.004
Legacy Project No: J044702.05

Dear Mr. Maenner:

This letter with attachments will constitute our Special Inspection transmittal for the above referenced project. Representatives of UES have provided field observation and testing services for subgrade evaluation and engineered fill during the report period. Our services have been provided on a part-time basis as scheduled by representatives of Advanced Excavation, LLC. 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

Subgrade Evaluation

Following removal of the vegetation, the subgrade for the building pad was observed on December 3. The exposed grades were observed with respect to stability and moisture content prior to fill placement. The exposed grades were also proofrolled with a fully-loaded off-road dump truck to aid in evaluating the stability of the underlying soils.

Engineered Fill

Field density tests and visual observations were performed in engineered fill placed for the building pad and parking garage between December 3 and December 5. The engineered fill consisted primarily of clays except within the top two feet of the building pad. On-site crushed limestone was placed as low-volume-change material within the top two feet of the building pad. The fill was placed in approximately 8- to 9-inch lifts and compacted with a self-propelled sheepsfoot roller or vibratory smooth drum roller. The test results were evaluated using existing moisture-density (standard Proctor) relationship tests. Results of the field density tests 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,

UES



Peter F. Brull, P.E.
Senior Engineer



Steve Damron
CMT Department Manager

Attachments: Field Density Test Results

- cc: Mr. Joe Frogge – City of Lee's Summit
Mr. Aaron Addis – Intrinsic Development
Mr. Earl Peterson – Intrinsic Development
Mr. AJ Dolph – Rosemann & Associates, PC
UES S.I. File

**Village at Discovery Park – Lot 4
Variance/Discrepancy List**

NOTE: Items resolved during the report period are shaded

Variance Number	Date Opened	Date Closed	Description
-			



Client: Intrinsic Development
 Project: A23129.00089.004
 Village at Discovery Park - Lot 4 J044702.05
 Lee's Summit, MO

Field Density Test Results

Report Date: 12/04/2024

Area Being Filled: Building pad

Description of Fill Material: (1) 4424: Crushed limestone

TABULATION OF FIELD DENSITY TEST RESULTS (ASTM D6938)

Test No.	Test Location	Elevation (feet) +/-	Max. Dry Den. @ Optimum Moisture (pcf @ %)	In Place Dry Density (pcf)	In Place Moisture (%)	Probe Depth	Percent Compaction	Moisture Tolerance (-/+)	Min. Comp. Spec. (%)	Result
1	Building pad Grid D.5/11.5	959.0	122.5@7.5 ⁽¹⁾	120.40	4.10	8"	98.3	--/--	95	Pass
2	Building pad Grid F.5/9.5	959.5	122.5@7.5 ⁽¹⁾	123.30	5.00	8"	100.7	--/--	95	Pass
3	Building pad Grid E.5/7.5	960.0	122.5@7.5 ⁽¹⁾	122.50	4.40	8"	100.0	--/--	95	Pass
4	Building pad Grid F.5/6.5	960.5	122.5@7.5 ⁽¹⁾	121.00	4.00	8"	98.8	--/--	95	Pass
5	Building pad Grid F/4	961.3	122.5@7.5 ⁽¹⁾	117.60	5.20	8"	96.0	--/--	95	Pass
6	Building pad Grid F.5/1.5	961.3	122.5@7.5 ⁽¹⁾	118.10	4.30	8"	96.4	--/--	95	Pass
7	Building pad Grid C.5/2.5	961.3	122.5@7.5 ⁽¹⁾	121.20	4.10	8"	98.9	--/--	95	Pass
8	Building pad Grid D.7/11.5	959.8	122.5@7.5 ⁽¹⁾	118.10	6.00	8"	96.4	--/--	95	Pass
9	Building pad Grid F.5/9.5	960.3	122.5@7.5 ⁽¹⁾	119.50	4.90	8"	97.6	--/--	95	Pass
10	Building pad Grid E.5/7.5	960.8	122.5@7.5 ⁽¹⁾	117.50	5.00	8"	95.9	--/--	95	Pass
11	Building pad Grid F.5/6.5	961.3	122.5@7.5 ⁽¹⁾	118.90	5.20	8"	97.1	--/--	95	Pass
12	Building pad Grid F/4	962.1	122.5@7.5 ⁽¹⁾	119.10	4.60	8"	97.2	--/--	95	Pass
13	Building pad Grid F/1.5	962.1	122.5@7.5 ⁽¹⁾	124.00	5.50	8"	101.2	--/--	95	Pass
14	Building pad Grid C.5/2.5	962.1	122.5@7.5 ⁽¹⁾	117.10	5.10	8"	95.6	--/--	95	Pass

Remarks: Finished grade = 962.1

UES Representative: Seth T. Littlestone

Report Date: 12/05/2024

Area Being Filled: Building pad

Description of Fill Material: (1) 4424: Crushed limestone

TABULATION OF FIELD DENSITY TEST RESULTS (ASTM D6938)

Test No.	Test Location	Elevation (feet) +/-	Max. Dry Den. @ Optimum Moisture (pcf @ %)	In Place Dry Density (pcf)	In Place Moisture (%)	Probe Depth	Percent Compaction	Moisture Tolerance (-/+)	Min. Comp. Spec. (%)	Result
1	Building pad Grid D/11.5	960.3	122.5@7.5 ⁽¹⁾	118.70	4.20	8"	96.9	--/--	95	Pass
2	Building pad Grid F.5/9.5	960.8	122.5@7.5 ⁽¹⁾	121.20	4.80	8"	98.9	--/--	95	Pass
3	Building pad Grid E.5/7.5	961.3	122.5@7.5 ⁽¹⁾	125.00	4.70	8"	102.0	--/--	95	Pass
4	Building pad Grid F.5/6.5	961.8	122.5@7.5 ⁽¹⁾	121.80	4.60	8"	99.4	--/--	95	Pass
5	Building pad Grid F/4	962.3	122.5@7.5 ⁽¹⁾	119.50	4.90	8"	97.6	--/--	95	Pass
6	Building pad Grid F.5/1.5	962.3	122.5@7.5 ⁽¹⁾	117.50	5.30	8"	95.9	--/--	95	Pass

Report Date: 12/05/2024

Area Being Filled: Building pad

Description of Fill Material: (1) 4424: Crushed limestone

TABULATION OF FIELD DENSITY TEST RESULTS (ASTM D6938)

Test No.	Test Location	Elevation (feet) -/+	Max. Dry Den. @ Optimum Moisture (pcf @ %)	In Place Dry Density (pcf)	In Place Moisture (%)	Probe Depth	Percent Compaction	Moisture Tolerance (-/+)	Min. Comp. Spec. (%)	Result
7	Building pad Grid D/2.5	962.3	122.5@7.5 ⁽¹⁾	123.00	4.80	8"	100.4	--/--	95	Pass

Remarks: Finished grade = 962.3

UES Representative: Seth T. Littlestone

Report Date: 12/03/2024

Area Being Filled: Building pad at Line E to G, 6 to 13

Description of Fill Material: (2) 3875: brown with gray-brown fat clay (CH)

TABULATION OF FIELD DENSITY TEST RESULTS (ASTM D6938)

Test No.	Test Location	Elevation (feet) -/+	Max. Dry Den. @ Optimum Moisture (pcf @ %)	In Place Dry Density (pcf)	In Place Moisture (%)	Probe Depth	Percent Compaction	Moisture Tolerance (-/+)	Min. Comp. Spec. (%)	Result
1	Building pad Grid F/10.5	957.0	98.2@21.8 ⁽²⁾	94.90	23.80	8"	96.6	0.1/4.0	95	Pass
2	Building pad Grid F/8.5	957.0	98.2@21.8 ⁽²⁾	95.60	23.20	8"	97.4	0.1/4.0	95	Pass
3	Building pad Grid F/6.8	957.0	98.2@21.8 ⁽²⁾	95.20	22.90	8"	96.9	0.1/4.0	95	Pass
4	Building pad Grid F/10.5	957.8	98.2@21.8 ⁽²⁾	95.70	22.00	8"	97.5	0.1/4.0	95	Pass
5	Building pad Grid F/8.5	957.8	98.2@21.8 ⁽²⁾	98.20	23.80	8"	100.0	0.1/4.0	95	Pass
6	Building pad Grid F/6.8	957.8	98.2@21.8 ⁽²⁾	102.00	24.00	8"	103.9	0.1/4.0	95	Pass

Remarks: Finished grade = 961.0

UES Representative: Seth T. Littlestone