

Field Observation Report

| Project Number: | 2200330 | | | | | |
|---------------------------------|---------------------------|--|--------------|--|--|--|
| Project Name: | East Granby Warehouse | | | | | |
| Date of Field Visit: | June 28, 2022 | | | | | |
| Weather Conditions: | Sunny | Temperature: | Approx. 66°F | | | |
| Prepared By: | Taylor Joubert, EIT | | | | | |
| Copies of Report Hav | re Been Sent To: 🔲 Client | Contractor | Other | | | |
| Client: | | ntractor: | | | | |
| GFI Partners, 133 Pearl Stre | | BL Companies 220 Norwood Park South, Suite 201 | | | | |
| | | | • | | | |
| Boston, MA 02 | | Norwood, MA 02062 | | | | |

Five test pits were excavated by a mini excavator and described to varying depths under the supervision of Matthew Bruton, registered Connecticut Professional Engieer. According to the Web Soil Survey, soils within the area of the pits are described by the USDA-NRCS as Udorthents-Urban land complex.

Additionally, an infiltration test using the falling head method was conducted on soil from Test Pit #1. Infiltration testing was conducted by taking two samples of soil using a pipe hammered into the side wall of the test pit. There was approximately 5.5 inches of soil in the cylinder. The pipes were placed in a bucket full of highly permeable sand where each sample was presoaked. After the water had saturated the soil sample, the cylinder was refilled and monitored to see how far the water level dropped every thirty seconds. These measurements were used to find the infiltration rate.

Field Observation Report

| Pit Number | Pit Location (Decimal Degrees) | Observed Limiting Layer | Infiltration Test Depth (inches below the surface) | Infiltration Rate (inches/hour) |
|----------------|-----------------------------------|--------------------------------|--|---------------------------------------|
| Test Pit #1 | 41.934, -72.7099 | 90 inches, Light Brown Sand | Sample Taken | 134.59 |
| Test Pit #2 | 41.9315, -72.7097 | 84 inches, Light Brown Sand | Not Conducted | N/A |
| Test Pit #3 | 41.9316, -72.7106 | 72 inches, Light Brown Sand | Not Conducted | N/A |
| Test Pit #4 | 41.9306, -72.7105 | 66 inches, Light Brown Sand | Not Conducted | N/A |
| Test Pit #5 | 41.9305, -72.7098 | 96 inches, Light Brown Sand | Not Conducted | N/A |
| | | | | |
| | | | | |

A test pit location map, soil profile logs, photographs, and USDA-NRCS Soil Survey information are attached.

FALLING HEAD PERMEABILITY TEST

PROJECT: Proposed Warehouse Renovation PROJECT #2200330 East Granby, CT DATE: 7/6/2022

C.D.C. BY:

TEST PIT#

1

SAMPLE TP-1.1

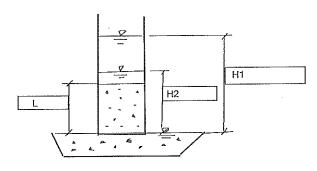
5.50

in.

SAMPLE LENGTH: 5.50 SAMPLE DEPTH (BELOW EG):

3.00 ft

presoak start: 1:24 pm presoak finish: 1:25 pm



 $K = \frac{(H1 - H2) \times L}{(\times (H1 + H2)/2)}$

| Time | H1 | H2 | H1 - H2 | (H1 + H2)/2 | К | К |
|--|-------|-------|---------|-------------|-----------|-----------|
| (min.) | (in.) | (in.) | | | (in/min.) | (ft./day) |
| | | | | | | |
| 0.000 | 8.500 | 8.500 | 0.000 | 8.500 | | |
| 0.500 | 8.500 | 7.000 | 1.500 | 7.750 | 2,129 | 255.484 |
| 1.000 | 8.500 | 5.500 | 3,000 | 7,000 | 2.357 | 282.857 |
| | | | | | | |
| 0.000 | 8.500 | 8,500 | 0.000 | 8.500 | - | |
| 0.500 | 8,500 | 7.000 | 1.500 | | 2,129 | 255,484 |
| 1.000 | 8,500 | 5.500 | 3.000 | 7.000 | 2.357 | 282.857 |
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| | | | | L | Average≔ | 269.171 |
| | | | | | or | 134.59 |
| | | | | | Ui | 104.00 |



| TP-1 |
|---------------------|
| BL Project #2200330 |
| June 28, 2022 |

| | | T | EST PIT | FIELD] | LOG | | | |
|--|--|--|-----------------|--|--|---|---|---------------|
| PERSONI Connor Campbel Matthew Bruton- | | | | | | Ground Surface Elevation Datum NAVD 8 Temperature 66 Weather Sunny | | |
| Depth | | SOIL D | ESCRIPTIO | N | | Excav. Effort | Cobble and Boulder Data | Remark No, |
| 0"-3" 3"-15" 15"-90" | Pavement Red Gravelly Subbase Light Brown Sand | Bottom of Te | st Pit at 90" (| (7'-6'') | | E E | | |
| REMARKS: 1. Ground wate 2. Bedrock was | r was not observed. not observed | | | | | | | |
| TEST PIT PLA | | Letter Designation Cobble (C) Small (S) Medium (M) Large (L) | 1 | LEG TONS USED TIVE TERMS) 0-10% 10-20% 20-35% 35-50% | END QUALITATIVE TERMS OCCASIONAL FEW FREQUENT NUMEROUS | E - Easy M - Moderate D - Difficult | AVATION EFFOR Observed Depth to Groundwater | г |

NOTES

- TEST PIT 2:

 EXISTING GRADE AT APPROXIMATELY ELEVATION 169.5.

 PROPOSED GRADE AT APPROXIMATELY ELEVATION 166.1.

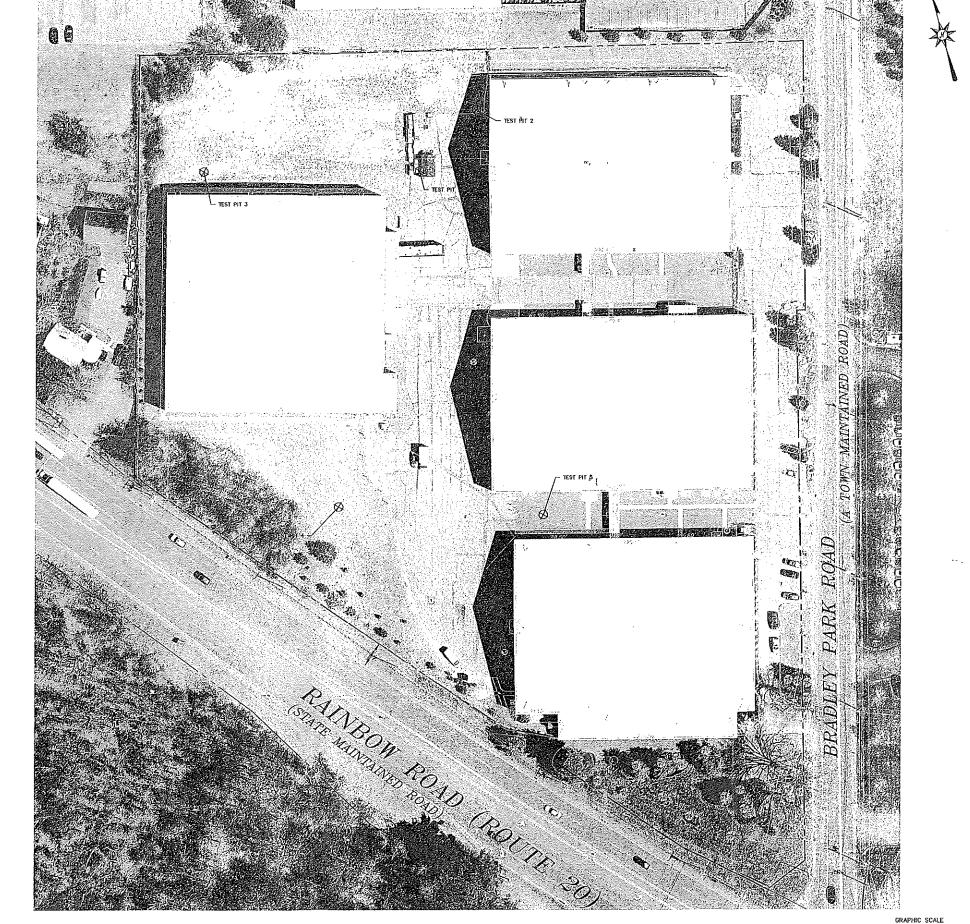
 DIG DOWN TO ELEVATION 161.5 FOR SOIL OBSERVATIONS.

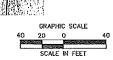
- TEST PIT S:

 EXISTING GRADE AT APPROXIMATELY ELEVATION 169.0.

 PROPOSED GRADE AT APPROXIMATELY ELEVATION 166.06.

 DIO DOWN TO ELEVATION 161.0 FOR SOIL OBSERVATIONS.





355 Research Parkway Meriden, CT 08450 (203) 630-1406 (203) 630-2615 Fox

EAST GRANBY WAREHOUSES 7, 11, 15 & 17 BRADLEY PARK ROAD EAST GRANBY, CONNECTICUT

T.R.J. T.R.J. S.M.K. 1"=40" 2200330 05/06/2022

INFILTRATION EXHIBIT

EXH-1

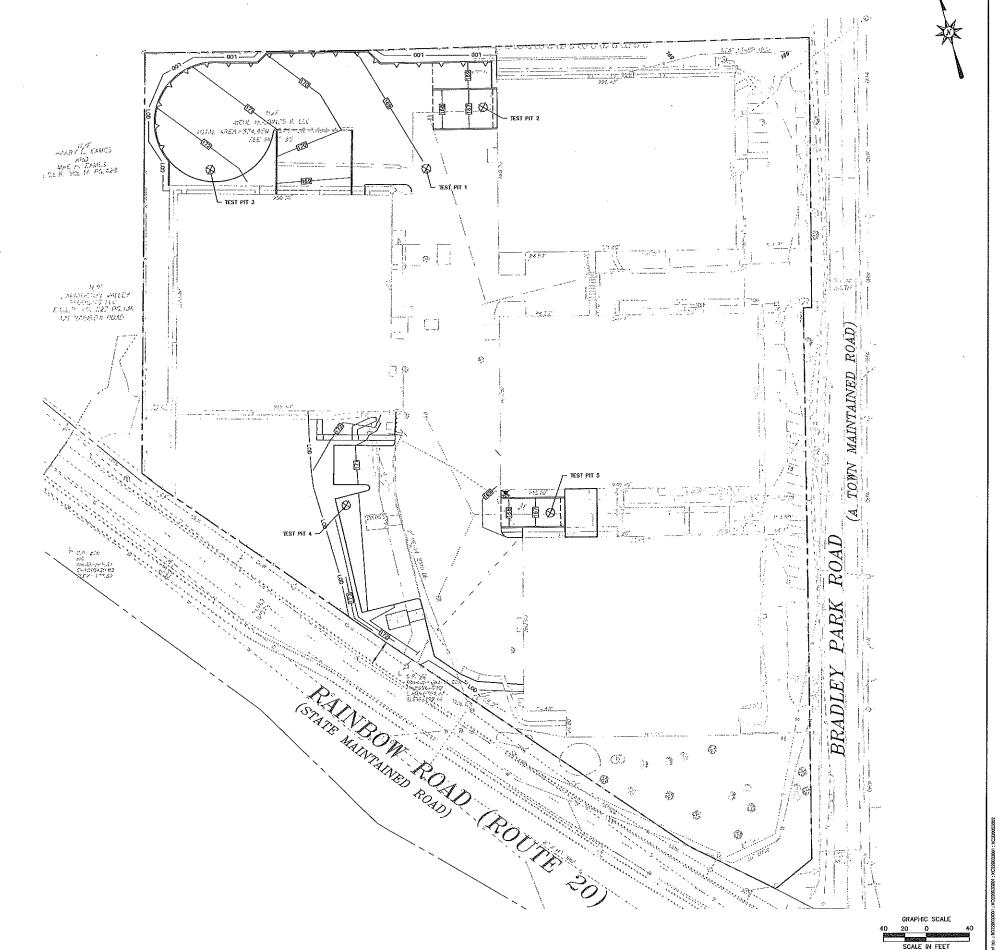
NOTES

TEST PIT 1:

- ENSTING GRADE AT APPROXIMATELY ELEVATION 168.0.

- BOTTOM OF PROPOSED INFILITATION SYSTEM AT ELEVATION 165.5.

- DIC DOWN TO ELEVATION 160.0 FOR SOIL OBSERVATIONS.





355 Research Forkway Meriden, CT 06450 (203) 630-1406 (203) 630-2615 Fox

EAST GRANBY WAREHOUSES 7, 11, 15 & 17 BRADLEY PARK ROAD EAST GRANBY, CONNECTICUT

Designed
Drown
Reviewed
Scale
Project No.
Dafe
CAD Fie:
S04720033002

T.R.J. T.R.J. S.M.K. 1"=40" 2200330 05/06/2022

INFILTRATION EXHIBIT

EXH-2



| TP-1 |
|---------------------|
| BL Project #2200330 |
| June 28, 2022 |

| • | CONTRACTOR OF THE CONTRACTOR O | T | EST PIT | FIELD | LOG | | | |
|-----------------|--|--|-----------------|------------------|---|--|----------------------------------|---------------|
| PERSONI | NEL PRESENT | I | EXCAVATIO | N EQUIPMEN | ĮT | | | |
| Connor Campbel | l- BL Companies | Contractor | Total Access | Construction (| Co. | Ground Surfac | e Elevation | 72.00 |
| Matthew Bruton- | | Operator | Joe | | | Datum | NAVD | 88 |
| | | Make | Cat | Model | 303,5E CR | Temperature | 66 | |
| | | Bucket Capacity | | Reach | | Weather | Sunn | <u>y</u> |
| | 1 | | | | | ļ | Cobble and | 1 |
| Depth | | SOIL D | ESCRIPTIO | N | | Excav. Effort | Boulder Data | Remark No. |
| 0"-2" | Pavement | | | | | E | | |
| 2"-16" | Red Gravelly subbase | | E | | | | | |
| 16"-84" | Light Brown Sand | | | | | Е | | 3 |
| | | Bottom of | Γest Pit at 84' | ' (7') | | | | |
| REMARKS: | | | | | | | | |
| | | | | | | | | |
| 2. Bedrock was | r was not observed. not observed. .ving in, test pit termin | nated to avoid makin | ng a larger cut | in the pavemer | nt. | | | |
| TEST PIT PLA | N | | | LEG | | | | |
| North | COBBLES Size Range Classification 3" - 12" 12" - 24 24" - 36" 36" and Larger | Letter Designation Cobble (C) Small (S) Medium (M) Large (L) | | 10-20% 20-35% | QUALITATIVE TERMS OCCASIONAL FEW FREQUENT NUMEROUS | EXC B - Easy M - Moderate D - Difficult | Observed Depth to Groundwater | T . |



| TP-1 |
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| BL Project #2200330 |
| June 28, 2022 |

| PERSONNEL PRESENT EXCAVATION EQUIPMENT Companies Mathew Bruton-BL Companies Mathewater Mathewa | | | TF | EST PIT | FIELD 1 | LOG | | | | |
|--|----------------|---|--|---|---------------------------|-------------------------------|-------------------------------|------------------------------|---------------|--|
| Matthew Bruton-BL Companies Operator Gat | PERSON | VEL PRESENT | F | EXCAVATIO | N EQUIPMEN | Т | | | | |
| Depth SOIL DESCRIPTION Eagur. Boulder Effort Data No. 0"-6" Topsoil E 6"-72" Light Brown Sand Bottom of Test Pit at 72" (6') Bottom of Test Pit at 72" (6') REMARKS: I. Ground water was not observed. 2. Bedrock was not observed. TEST PIT PLAN COBBLES AND BOULDERS (QUANTITATIVE TERMS) Size Range Letter Chasification Designation Designati | | | mpanies Operator Joe Make Cat Model 303.5E CR | | | | | Datum NAVD 88 Temperature 66 | | |
| REMARKS: I. Ground water was not observed. 2. Bedrock was not observed. Size Range Letter Classification Designation Size Range Letter Classification Designation 3° - 12" Cobbie (C) 17° - 24 Small (S) SOME (SO) 20-35% FREQUENT 7. Observed Depth to | Depth | | SOIL D | ESCRIPTIO | V | | | Boulder | Remark No. | |
| REMARKS: I. Ground water was not observed. 2. Bedrock was not observed. TEST PIT PLAN COBBLES AND BOULDERS QUANTITATIVE TERMS Size Range Classification Designation TRACE (TR) 0-10% QUANTITATIVE TERMS Size Range Letter Classification Designation TRACE (TR) 0-10% Size Range Letter Classification J*-12" Cebble (C) 12"-24 Small (S) SOME (SO) 20-35% SOME (SO) 20-35% FREQUENT AMAY (MA) 35-50% NUMBROUS V. Observed Depth to | 0"-6" | Topsoil | | | | | E | | | |
| REMARKS: 1. Ground water was not observed. 2. Bedrock was not observed. COBLES AND BOULDERS PROPORTIONS USED QUALITATIVE (Classification Designation 3* .12* Cobble (C) LITTLE (LI) 10.20% FEW COCCASIONAL M. M-Moderate Classification 3* .12* Cobble (C) LITTLE (LI) 10.20% FEW D- Difficult SOME (SO) 20.35% FREQUENT LITTLE (LI) 10.20% FRE | 6"-72" | Light Brown Sand | | | | | Е | | | |
| 1. Ground water was not observed. 2. Bedrock was not observed. TEST PIT PLAN COBBLES AND BOULDERS PROPORTIONS USED QUALITATIVE (QUANTITATIVE TERMS) Size Range Letter Classification Designation TRACE (TR) 0-10% OCCASIONAL M-Moderate D-Difficult 12" - 24 Small (S) SOME (SO) 20-35% FREQUENT 12" Observed Depth to | | | Bottom of T | Fest Pit at 72' | (6') | | | | | |
| Z. Bedrock was not observed. TEST PIT PLAN COBBLES AND BOULDERS PROPORTIONS USED (QUANTITATIVE TERMS) Size Range Classification Designation TRACE (TR) 10-10% OCCASIONAL M - Moderate D - Difficult 12" - 24 Small (S) SOME (SO) 20-35% FREQUENT 12" - 24" - 36" Medium (M) MANY (MA) 35-50% NUMEROUS EXCAVATION EFFORT E - Easy D - Difficult TRACE (TR) D - Difficult Observed Depth to | | | | | | | | | | |
| COBBLES AND BOULDERS PROPORTIONS USED (QUANTITATIVE TERMS) Size Range Classification Designation TRACE (TR) 0-10% OCCASIONAL M - Moderate D - Difficult 12" - 24 Small (S) SOME (SO) 20-35% FREQUENT AND THE MEDIUM (SO) MANY (MA) MANY (MA) MANY (MA) QUALITATIVE EXCAVATION EFFORT E - Easy OCCASIONAL M - Moderate D - Difficult TO Observed Depth to | 2. Bedrock was | not observed. | | | | | | | | |
| Size Range Letter Classification Designation TRACE (TR) 0-10% OCCASIONAL M - Moderate D - Difficult | TEST PIT PLA | | AND BOULDERS | PROPORT | | | EXC | CAVATION EFFOR | т | |
| | → North | Size Range Classification 3" - 12" 12" - 24 24" - 36" | Letter Designation Cobble (C) Small (S) Medium (M) | (QUANTITA' TRACE (TR) LITTLE (LI) SOME (SO) | 0-10% 10-20% 20-35% | TERMS OCCASIONAL FEW FREQUENT | M - Moderate D - Difficult | - | | |



| TP-1 | |
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| BL Project #2200330 | |
| June 28, 2022 | |

| | | Tl | EST PIT | FIELD : | LOG | | | |
|-----------------------------|---|-------------------------------------|---------------------------|--------------------------|----------------------|---|----------------------------------|--|
| PERSONI | VEL PRESENT | F | EXCAVATIO | И ЕОПЬМЕР | ĮΤ | | | |
| Connor Campbel | - BL Companies | Contractor | Total Access | Construction (| Co. | Ground Surfac | | 72.00 |
| Matthew Bruton- | BL Companies | Operator | Joe | | | Datum | NAVD | 88 |
| | • | Make | Cat | Model | 303.5E CR | Temperature | 66 | |
| | | Bucket Capacity | | Reach | | Weather | , | |
| | | | | | | | | |
| Depth | | SOIL D | ESCRIPTIO | N | | Excav. Effort | Cobble and Boulder Data | Remark No. |
| 0"-6" | Topsoil | | | | | Е | | |
| 6"-42" | Red Gravelly fill with | few roots and a occ | casional 1-2" s | stone | | Е | | |
| 42"-66" | Light Brown Sand | | | | | Е | | |
| |) | Bottom of T | est Pit at 66" | (5.51) | | | | |
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| | | | | | | | , | |
| ~ | | | | 14. July 1117 | | | | |
| <u>REMARKS:</u> | | | | | | | | |
| Ground wate Bedrock was | r was not observed, not observed. | | | | | | | The street of th |
| OROT DUE DI | N . | | | LEG | END | | | |
| TEST PIT PLA | | AND BOULDERS | | TONS USED TIVE TERMS) | QUALITATIVE TERMS | | CAVATION EFFOR | r |
| | Size Range Classification 3" - 12" | Letter Designation Cobble (C) | TRACE (TR) LITTLE (LI) | 0-10% 10-20% | OCCASIONAL FEW | E - Easy M - Moderate D - Difficult | | |
| North | 12" - 24 12" - 24 24" - 36" 36" and Larger | Small (S) Medium (M) Large (L) | SOME (SO) MANY (MA) | 20-35% 35-50% | FREQUENT NUMEROUS | ▼ | Observed Depth to Groundwater | |
| | | | <u> </u> | | <u>L </u> | L | | |



| TP-1 |
|---------------------|
| BL Project #2200330 |
| June 28, 2022 |

| TEST PIT FIELD LOG | | | | | | | | |
|--|---|--|----------------|---|---|-------------------------------------|-------------------------------|---------------|
| PERSONNEL PRESENT | | EXCAVATION EQUIPMENT | | | | | | |
| Connor Campbell- BL Companies Matthew Bruton-BL Companies | | Contractor Total Access Construction Co. | | | | Ground Surface Elevation 72.00 | | |
| | | Operator Make | Joe | | | Datum NAVD 88 | | |
| | | | Cat Model | | 303.5E CR | Temperature | 66 | |
| | | Bucket Capacity Reach | | | Weather Sunny | | | |
| | | | | | | | | |
| Depth | SOIL DESCRIPTION | | | | | Excav. Effort | Cobble and Boulder Data | Remark No. |
| 0"- 6" | Angular Gravel | | | | | Е | | |
| 6"- 6" | Landcaping Fabric | | | | | М | | |
| 6"- 96" | Light Brown Sand | | | | | Е | | 1 |
| | | Bottom of T | Fest Pit at 96 | " (8') | | | | |
| REMARKS: | r was observed at 7 fe | et. | | | | | | : |
| 2. Bedrock was | | | | | | | | |
| TEST PIT PLAN LEGEND | | | | | | | | |
| → North | Size Range Classification 3" - 12" 12" - 24 24" - 36" 36" and Larger | Letter Designation Cobble (C) Small (S) Medium (M) Large (L) | | O-10% (10-20% (20-35% (35-50% (20-35% (20-35% (35-50% (20-35% (35-50% (20-35% (20-35% (35-50% (20-35% (20-35% (35-50% (20-35% | QUALITATIVE TERMS OCCASIONAL FEW FREQUENT NUMEROUS | E - Easy M - Moderate D - Difficult | | |