 architecture + engineering	
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PROJECT MANUAL FOR:	
13 E. Seminary Street	
Shell Renovation	
Mercersburg, PA	
Rockwell Construction /	
Newcomer Associates	
April 13, 2022	
April 13, 2022	
1105 Sheller Avenue Chambersburg, PA 17201	
Tel: 717 263 0101 Fax: 717 263 7380	

### **INDEX TO SPECIFICATIONS**

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GEOTECHNICAL REPORT

#### **DIVISION 0 – BIDDING INFORMATION**

#### 0.1 THE PROJECT

- Project shall be defined as Shell Renovation to 13 E. Seminary Street, Mercersburg, PA. The project shall be a Design-Build Contract based on Newcomer Associates Drawings and Specifications. The scope of the work includes complete design services, permitting, and construction of the project including site development, utilities infrastructure and support structures. Project includes, but is not limited to, the following:
  - Stabilize existing exterior envelope with structural steel frame per structural analysis.
  - New engineered steel frame replaces current wood structure. Wood structure removal to follow stabilization of exterior envelope.
  - New roof including structure with dormers
  - Stabilize exterior masonry both buildings and connector walls
  - Exterior walls cleaned up and tuckpointed as needed
  - New plywood decked floors
  - Interior new floors, construction stair at connector only, exposed brick walls, clean dust/debris free
  - New windows, doors and lintels similar in architecture. Refer to A201 Elevation.
  - Exterior site (sidewalks, parking, etc.) repair as required from installation of building utilities.
  - New main utilities to building per code.
  - Tuck point exposed interior brick as needed and noted on structural analysis.
  - Remove chimneys at west building to below roof line.

#### 0.2 DEFINITIONS

- 1. The word "Owner" in these Specifications refers to the authorized Owner's representatives.
- 2. The word "Contractor" in these Specifications means "Contractor engaged by the Owner" for Owner's Self-Developed projects.
- 3. The word "Project Manager" in these Specifications means "Project Manager is the Owner's designated representative."
- 4. The word "Provide" in these Specifications means to furnish and install, complete and ready for intended use.

#### 0.3 HARB BOROUGH

1. Property is located within the historic area and has been approved by HARB.

#### 0.4 DRAWINGS AND SPECIFICATIONS

1. The Contractor shall provide the Owner with any deviations and/or substitutions from the Contract Drawings, and Specifications in written form for approval.

#### 0.5 CODE COMPLIANCE

1. The Contractor is responsible for code verification and compliance with requirements of authorities having jurisdiction, and for compliance with all applicable requirements. Any revision required by code must be coordinated with the Project Manager.

referencing to the panel/circuit breaker locations.

f. Floor plan drawings with plumbing fixtures, connections, piping, valve locations, shutoffs, etc.

#### 1.13 WARRANTIES

1. A two (2) year warranty is required on the entire project including materials and labor. A minimum fifteen (15) year NDL roofing warranty is required. Equipment manufacturer warranties shall benefit and inure to Owner.

#### 1.14 SUMMARY BUILDING STABILIZATION – EXTERIOR/INTERIOR

1. The existing building wall/floor structure/exterior envelope will be stabilized and made weather tight. Work includes, but is not limited to, a new structural steel frame to stabilize exterior masonry walls and support new floor system, new roof including structure, new windows/doors and new utilities to the building to provide a building shell for future tenant spaces.

# 1.15 TECHNICAL SPECIFICATIONS (See drawings for additional information, and submit shop drawings of all materials for review and approval.)

#### **DIVISION 2 – DEMOLITION**

- 1. Removal of existing bearing and non-bearing interior walls as indicated on drawings.
- 2. Removal of flooring and floor joists all floors.
- 3. Removal of existing roofing.
- 4. Removal of existing roof trusses.
- 5. Removal of connector, north wall.
- 6. Removal of existing windows and doors.
- 7. Removal of existing concrete sidewalks/curbs and brick pavers as needed
- 8. Removal of existing lintels, sills and trim at windows and doors.
- 9. Removal of north (2 story) concrete block addition.
- 10. Removal of all existing chimneys under roof line except chimney within parapet walls.
- 11. Removal of all loose & hanging debris and clean to be dust free
- 12. Fire escape removal on rear of building and associated anchor point touch-ups
- 13. Removal of old utilities at minimum above ground and on the exterior of building. Identify any utilities that remain and/or abandoned in place.
- 14. Removal of existing boiler(s) at basement.
- 15. Removal of central stairs at east and west buildings.

#### **DIVISION 3 – CONCRETE**

- 1. Provide piers and interior grade beams to support new interior structural steel frame. Refer to Structural Drawings.
- 2. Provide new concrete ramps, turn down slabs, and transformer pad as noted on drawings.
- 3. Provide poured-in-place concrete at doors where required.

#### **DIVISION 4 – MASONRY – TOTAL BUILDING**

- 1. Mason to have experience in historic masonry repointing.
- 2. Existing painted brick may remain. No other brick is to be painted.

- 3. Existing spalled brick to be replaced to match; salvage any existing brick to be removed for the Work for re-use.
- 4. Sound, re-stabilize, and repoint all visible brick wythes at interior and exterior of entire building (Competent interior plaster to remain in place, typical.) Refer to Structural Drawings for additional notes.
- 5. Repoint visible exterior and interior stone perimeter foundation.
- 6. Repair/repoint remaining former interior bearing walls as needed to stabilize following selective demolition for steel beam routing and new floor joist clearance.
- 7. Removal of failed mortar shall not damage existing brick or stone. Mortar joint removal to be raked out minimum 2 2.5 times the height of the joint. Head joints shall not be overcut when raked out.
- 8. Minimize water and use gentle stream only to flush raked joints.
- 9. New portland lime mortar Type O is to match weathered color, texture, tooling, and joint profile of original mortar at brick and stone areas. Portland cement to conform to ASTM C 150 and lime to conform to ASTM C207. Sand per ASTM C 144 to match existing appearance in color, texture and gradation. Submit mortar samples prior to wall sample panel construction.
- 10. Sample stone and brick repointing 3' x 3' panels in existing wall at location by G.C.to be provided for Architect, Owner, and HARB approval.
- 11. Provide new precast lintels at all windows and doors as noted matching former wood lintel design. Submit shop drawings for review and approval.
- 12. Provide new precast sills at windows and doors as noted. Submit shop drawings for review and approval.
- 13. All mortar cleaning as necessary to be done with a stiff brush only after mortar is dried but not set within 1-2 hours.
- 14. Maintain materials and surrounding air temperature to minimum 40 degrees F prior to, during, and 48 hours after completion of masonry work.
- 15. Maintain materials and surrounding air temperature to maximum 100 degrees F prior to, during, and 48 hours after completion of masonry work.

#### **DIVISION 5 – METALS**

- 1. Provide new structural steel frame within existing building to support floors and stabilize exterior walls. Refer to structural drawings.
- 2. Provide new steel beams (where noted), and lintels at existing window openings in conjunction with new precast lintels.
- 3. Provide new floor joists.

#### **DIVISION 6 – CARPENTRY**

- 1. Provide new <sup>3</sup>/<sub>4</sub>" tongue and groove sub-floor.
- 2. Provide new wood roof trusses.
- 3. Provide new plywood roof deck.
- 4. Provide wood trim and exterior grade MDF panels where noted.
- 5. Salvage, repair, and reinstall decorative wood cornices, soffits, fascia.

#### **DIVISION 7 – THERMAL AND MOISTURE PROTECTION**

- 1. Roof
  - a. Provide 30# felt per drawings.

- b. Provide metal drip edge.
- c. Provide ice and water shield per drawings.
- d. Provide architectural standing seam metal roof.
- e. Provide metal fascia per drawings.
- f. Reinstall salvaged metal cornice.
- g. Provide metal gutter and downspouts.
- h. Provide EPDM at existing single story construction.
- 2. See drawings for new metal siding.

#### **DIVISION 8 – DOORS AND WINDOWS**

- 1. Provide aluminum storefronts and aluminum clad wood windows per drawings within existing masonry opening. Double hung with 6/6 muntin pattern to match existing unless noted/shown otherwise.
- 2. Provide new aluminum storefronts and aluminum clad doors and frames per drawings, including new hardware as scheduled. Factory finished colors to be selected from manufacturers full range of colors by Owner.

#### **DIVISION 22 – PLUMBING**

- 1. Water and separate sprinkler entry only; see Utility drawings.
- 2. Sanitary exit to main; see Utility drawings.
- 3. Re-use/replace downspout boots with scoping as noted below.

#### **DIVISION 23 – HVAC (not applicable)**

#### **DIVISION 26 – ELECTRICAL (see drawings)**

#### **DIVISION 31 – SITE CONSTRUCTION**

- 1. Contractor shall provide site specific soils investigation in the design of foundations and pavement. Any testing provided by Owner is for informational purposes only. Contractor shall take full responsibility for subsurface conditions and shall perform all other testing the contractor deems necessary. See attached geotechnical report.
- 2. Contractor shall provide valid certification that the site is free of any materials classified environmentally hazardous.
- 3. Provide proper drainage must be provided for all roadway/walkway surfaces and subsurface where necessary. It shall be the responsibility of the Contractor to eliminate the possibility of flooding on the site and water ingress to the building.
- 4. Provide proper drainage for all paved and open areas shall be provided. Subsurface drainage systems, in lieu of surface runoff shall be provided as required to drain and stabilize the pavement base. All roof drainage is to be carried from the site by underground piping.
- 5. Stormwater management shall utilize best management practices and provide stormwater calculations, if required, for approval by local authority.

#### **DIVISION 32 – EXTERIOR IMPROVEMENTS**

- 1. Remove and replace concrete sidewalk/curb and brick pavers/cobblestones as required for utility work or damage during construction.
- 2. Underground storm sewer from downspouts to be scoped to main in street and reused if intact.

▶ TRIAD Listens, Designs & Delivers



January 18, 2022

Mr. Matt Shirk Rockwell Construction, Inc. 12348 Rockwell Lane Mercersburg, Pennsylvania 17226

RE: Summary Letter of Limited Geotechnical Exploration 13 East Seminary Street Mercersburg, Pennsylvania Triad Project No. 03-21-0940

Dear Mr. Shirk:

Triad Engineering, Inc. (Triad) has completed a limited exploration at the above referenced project site at 13 East Seminary Street in Mercersburg, Pennsylvania. It was requested that we evaluate the shallow subsurface conditions of the existing three-story structure and determine if they are suitable for support of the new proposed interior steel grade beam supported on isolated pier foundations. The project plan indicates a required foundation bearing pressure of 2,000 psf. Most of the basement is exposed earth with varying overhead clearances. Several rooms include concrete floors.

### **FIELD EXPLORATION**

On January 11 and 12, 2022, Triad representatives performed twenty-three hand augers, and at each location, either a Dynamic Cone Penetrometer (DCP) or a Wildcat® DCP was utilized depending on overhead clearance. The testing was performed at the approximate locations indicated on Figure A-1 attached to this letter. The test locations were established by evaluating existing site conditions and access.

Detailed descriptions of materials encountered in the hand augers are contained on the attached logs. Figure No. 1 contains a description of the classification system and terminology utilized.

### **CONCLUSION AND RECOMMENDATIONS**

Based on the subsurface information obtained from the field exploration, it is our opinion that the residual soils are suitable for support of the proposed isolated pier foundations and interior steel grade beam.

Old fill materials were encountered in most of the test locations. The old fill appeared to be placed in an uncontrolled manner. There is the potential for unsuitable old fill to be encountered within isolated areas of the site. Additionally, soft soils were encountered

in test location B-5 ranging from 2 to 5 feet below existing grade. However, it appeared that the soft soils encountered in hand auger B-5 were likely due to probing along the edge of a rock pinnacle or through a fracture. Based on the results of the field exploration and our experience with similar projects, it is our opinion that unsuitable old fill, soft soils, and miscellaneous debris generated during the demolition work should be completely removed and should be replaced with new controlled fill.

We recommend that the design team, owner, and contractor include a contingency in the budget for over-excavation and replacement of unsuitable old fill and soft soils, and a unit rate for this item should be included in the bid.

Based on the exposed rock observed during our field exploration, we anticipate that hard bedrock will be encountered within some of the foundation excavations. Typical construction methods for partial hard rock bearing conditions would include removal of bedrock to a depth of 1 foot below the bearing level and backfilling with soil fill to provide a cushion. We anticipate that undercutting the rock a minimum of one foot would require extreme effort and may not be practical. We anticipate foundation bearing directly on bedrock will experience negligible settlement. Therefore, we recommend that the designer consider this condition when preparing the foundation plans and other structural and architectural details for the project.

### **LIMITATIONS**

This summary letter has been prepared for the exclusive use of Rockwell Construction, Inc. for specific application to the proposed project located at 13 East Seminary Street in Mercersburg, Pennsylvania. The work has been performed in accordance with generally accepted geotechnical engineering practices. No other warranty, expressed or implied, is made.

Triad's responsibilities and liabilities are limited to our client and apply only to their use of our report for the purposes described above.

We appreciate the opportunity to provide our services on this project. If you have any questions regarding this letter, or you require any additional information, please do not hesitate to contact us.

Sincerely,

### TRIAD ENGINEERING, INC.

anthan 72

Anthony R. King, E.I.T. Staff Engineer

Stephen J. Gyurisin, P.E. Geotechnical Services Manager



Attachments: Test Location Plan

Key to Identification of Soil and Weathered Rock Samples Hand Auger Logs Wildcat Logs



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JRI 1	EERING, deng.co	MERCERSBURG	DRAWN BY: ARK	CHECKED BY: SJG	PH: 301.797.6400 FAX: 301.797.242
Ξ:	D Inc.	PENNSYLVANIA	DATE: 01-14-2022	SCALE: 1"=20'	<u>OFFICE LOCATIONS</u> MARYLAND    MARYLAND    PENNSYLVANIA

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	Proje Logg Date	ect Ni jer: Stari	umb ted:	er: <u>03-</u> <u>AR</u> <u>1/1</u>	<u>21-09</u> <u>K</u> 1/22	940       Project Name:       13 East Seminary Street       Hand A         Test Location:       See Figure A-2       Hand Auger         Method:       Hand Auger       Ground Ele					Hand Au	iger I	No.: /A	<u>B-</u>	<u>8</u>
-	Date	Con	ipiei	ed: <u>1/1</u>				g Company <u>.</u>	nad Engineering, inc.			v <u>IN</u>			
	Depth (feet)	Sample No.	Sample Type	Blow Counts	Recovery (%)	RQD (RUN)	Strata Depth (ft)	Shelby Tube Core Sample	Standard Split Spoon Auger Probe MATERIAL DESCR	IPTION		RQD (Strata)	Water Level	Graphic Log	Strata Elevation
F								Gray sandy	SILT, very loose to loo	se, little grave	l, dry				
							0.5	Brown silty <u>C</u>	- FILL - CLAY, medium stiff to s	stiff, trace grav	el, trace				
-							1.0	sand, dry	- RESIDUU	M	ſ				
TRIAD C HAND AUGER 03-21-0940 HAND AUGERS.GPJ 03-12-0039 YALE DRIVE EXTENSION TEST PITS.GPJ 1/18/22	_ 5.0 _								REFUSALATIO	JFEEI					
								P: F:	Remarks:	Hand auger prob augering. Densi Wildcat DCP Te attached Wildcat	e dry during and ties are based o sting corrected I DCP logs.	d upor n the N' Valu	resul ie. F	pletion ts of th lease s	of e see

							HAND AUGER LOG	Sh	neet	1	of <u>1</u>
Proje	ect Nu	ımb	er: <u>03-2</u>	21-09	<u>40</u>	Proje	t Name: <u>13 East Seminary Street</u> Hand A	uger	No.:	<u>B</u> -	9
Logg	jer:	ار م	ARK	<u>&lt;</u>		Test L	ocation: <u>See Figure A-2</u>				
Date	Start	ed: plet	<u>1/11</u> ed: 1/11	/22		Drillin	a: <u>Hand Auger</u> a Company:Triad Engineering, Inc. Ground Fle	ev.: N	/A		
			.cu. <u>1/11</u>				Goompany <u>inaa Engineening, inc.</u> Groana El				
iet)	40.	ype		(%)	Î	th (ft)	Shelby Tube Split Spoon	ata)	vel	bo-	Ę
oth (fe	nple N	ple T	Blow	very	D (RL	Dept		) (Stra	er Le	phic L	Strata evatic
Dep	San	Sam	Counts	Reco	RQI	Strata	Sample Probe	RQL	Wat	Gra	ол <u>т</u>
								$\perp$			
						0.6	gravel, trace brick fragments, trace coal, dry, trace ash - FILL -				
							Tan brown silty <b>CLAY</b> , stiff to very stiff, dry				
							soft to medium stiff				
						2.0	- RESIDUUM -				
							REFUSAL AT 2.0 FEET				
	-										
- 	-										
5											
-											
_ 5.0 _	-										
	-										
4											
	-										
10.0											
							Remarks: Hand auger probe dry during a augering Densities are based	nd upor	n con resul	npletion	ı of e
				U			P: Wildcat DCP Testing corrected F: attached Wildcat DCP logs.	N' Valu	ue. F	Please	see

ſ								HA	ND AUG	<b>BER LOG</b>			Sh	leet	<u>1</u>	of <u>1</u>
	Proje Logg Date	ect Nu er: Starl	umbo ed:	er: <u>03-2</u> <u>ARk</u> <u>1/11</u>	2 <b>1-09</b>	<u>40</u>	Project Test L Metho	ct Name: .ocation: od:	13 East Se See Figure Hand Auge	eminary Stree A-2 er	<u>et</u>	Hand Au	iger	No.:	<u>B-</u>	<u>10</u>
	Date	Com	plet	ed: <u>1/11</u>	/22		Drillin	g Company	y <u>:Triad Engi</u> i	neering, Inc.		Ground Ele	v.: <u>N</u>	<u>/A</u>		
	Depth (feet)	Sample No.	Sample Type	Blow Counts	Recovery (%)	RQD (RUN)	Strata Depth (ft)	Shelby Tube Core Sample	Stan Split Prot	dard Spoon er ie NTERIAL DESCRI	PTION		RQD (Strata)	Water Level	Graphic Log	Strata Elevation
							0.3	Gray blac	kish tan sar	idy <u>SILT</u> , loos	e, little gravel	, trace				
	. <u>-</u>								REI	- FILL - FUSAL AT 0.3	3 FEET					
22/01/1 0/20	 															
	_ 5.0 _															
	· -															
-1340 חאואם אטפרהט. ר																
- ואואם ט חאואם אטטברו	10.0															
	TRIA	D EN	GIN	EERING	D			P: F:		Remarks:	Hand auger prob augering. Densi Wildcat DCP Te attached Wildcat surface in two se	be dry during an ties are based o sting corrected l t DCP logs. Ref eperate offsets.	d upor on the N' Valu fusal a	n corr result ue. P it the	npletion ts of th Please s ground	of e see I

ſ								HAND AUGER LOG	Sh	neet	1	of <u>1</u>
	Proje Logg Date Date	ect Nu jer: Stari Corr	umb ted: tple	er: ted:	<u>03-21-0</u> <u>ARK</u> 1/12/22 1/12/22	940	Projec Test L Metho Drillin	And AAnd AAccation:See Figure A-2Ad:Hand AugerBg Company:Triad Engineering, Inc.Ground Element	uger ev.: <u>N</u>	No.: / <u>/A</u>	<u>B-</u>	<u>11</u>
-	Depth (feet)	Sample No.	Sample Type	Blo Coui	w nts (%)	RQD (RUN)	Strata Depth (ft)	Shelby Tube Split Spoon Core Sample Auger Probe MATERIAL DESCRIPTION	RQD (Strata)	Water Level	Graphic Log	Strata Elevation
TRIAD C HAND AUGER 03-21-0940 HAND AUGERS.GPJ 03-12-0039 YALE DRIVE EXTENSION TEST PITS.GPJ 1/18/22	5.0 _						0.7	Gray blackish tan sandy SILT, loose, little gravel, trace brick fragments, trace coal, dry, trace ash - FILL - Tan SILT, medium stiff to hard, dry REFUSAL AT 0.9 FEET	nd upoi			- of e
								P: Wildcat DCP Testing corrected F: attached Wildcat DCP logs.	N' Valı	ue. F	Please	see

								HAND AUGER LOG	Sheet <u>1</u>	of <u>1</u>
Pr Lc Da	oject ogger ate S	t Nu r: start	ımb ed:	per: <u>03-2</u> <u>ARI</u> 1/12	<u>21-09</u> <u>&lt;</u> 1/22	<u>40</u>	Proje Test I Metho	t Name: <u>13 East Seminary Street</u> Hand A ocation: <u>See Figure A-2</u> d: <u>Hand Auge</u> r	uger No.: <u>B</u>	<u>-12</u>
Da	ate C	om	ple	ted: <u>1/1</u>	1/22	1	Drillin	g Company <u>Triad Engineering, Inc.</u> Ground Ele	ev.: <u>N/A</u>	1
th (feet)		nple No.	ple Type	Blow	very (%)	) (RUN)	Depth (ft)	Shelby Tube Split Spoon	) (Strata) er Level ohic Log	strata svation
Dep		San	Sam	Counts	Recc	RQI	Strata		RQD Wat Gray	0.0
		1		4-9-6				Tan <u>SILT</u> , trace sand, dry		
		2		2-2-6			0.5	Tan silty <u>CLAY</u> , trace sand, dry		
-	-	3		7-8-5						
		4		5-10			1.8	- RESIDUUM -		
-								REFUSALAT 1.8 FEET		
1/18/22	-									
PITS.GPJ										
SI _ 5.0	0									
EXTENSIC										
	-									
2-0039 YAI										
GPJ 03-12	-									
AUGERS.										
40 HAND	-									
8 03-21-09										
ID AUGER	+									
AD C HAN										
Ĕ <u>10</u> .	.0							Remarks: Hand auger probe dry during an augering. Blow counts were de	d upon completio termined utilizing	n of a
					U,			P: DCP.	0	

ſ								HAND AUGER LOG	She	eet	1	of <u>1</u>
	Proje	ect N	umt	ber: <u>03-2</u>	21-09	<u>40</u>	Proje	ct Name: <u>13 East Seminary Street</u> Hand Au	ıger N	<b>l</b> o.:	<u>B</u> -	<u>.13</u>
	Logg	jer:		ARK	<u>&lt;</u>		Test L	ocation: <u>See Figure A-2</u>				
	Date	Star	ted:	<u>1/11</u>	/22		Metho	nd: <u>Hand Auger</u>		^		
	Date	Con	ipie			1		g Company <u>, mad Engineening, inc.</u> Ground Elev	v <u>IN/</u>	<u>A</u>		
	at)	ō	be		(%	Î	(ft)	Shelby Standard	ta)	e	b	-
	h (fee	ole N	le Ty	Blow	ery (	(RUI	Depth		(Stra	r Lev	hic Lo	rata /atior
	Deptl	Sam	Samp	Counts	Seco	RQD	trata [	Core Auger Sample Probe	gD	Wate	Grap	Elev St
							ۍ ۲	MATERIAL DESCRIPTION				
		1		6-14-11				Tan <u>SILT</u> , trace sand, dry				
		2		9-8-5			0.5	- RESIDUOM -				
		2		E 7 1E				Tarrointy <u>OEAT</u> , trace sand, ary				
	_	3		5-7-15								
		4		10-12-14-12								
							2.2	- RESIDUUM -				
8/22												
PJ 1/1	. –											
ITS.G												
EST P	5.0											
LNOIS	_ 0.0 _											
XTEN												
RIVE E												
ALE DF												
039 Y/												
3-12-0												
GPJ 0												
BERS.												
D AUG												
0 HAN												
21-094												
R 03-												
AUGE												
HAND												
IAD C												
ĔĹ	10.0							Remarks: Hand auger probe dry during and	d upon	com	npletior	n of
								augering. Blow counts were det DCP.	ermine	d uti	ilizing	а
								F:				
	TRIA	D EN	GI	NEERING	, INC	•						

ſ								HA	ND	AUGER LOO	G		Sł	neet	<u>1</u>	of <u>1</u>
	Proje Logg Date	ect Nu er: Starl	umb ed:	oer: <u>03-2</u> <u>ARk</u> 1/11	<u>21-09</u> <u>&lt;</u> 1/22	<u>40</u>	Projec Test L Metho	ct Name: .ocation: od:	<u>13  </u> See Har	East Seminary Str e Figure A-2 nd Auger	<u>reet</u>	Hand Au	ıger	No.:	<u>B</u> -	<u>14</u>
	Date	Com	ple	ted: <u>1/11</u>	/22	1	Drilling	g Compan	y <u>:Tria</u>	ad Engineering, Inc.	<u>.</u>	Ground Ele	v.: <u>N</u>	<u>/A</u>	1	
	Depth (feet)	Sample No.	Sample Type	Blow Counts	Recovery (%)	RQD (RUN)	Strata Depth (ft)	Shelby Tube Core Sample	e [	Standard Split Spoon Auger Probe			RQD (Strata)	Water Level	Graphic Log	Strata Elevation
F		1		11-10			03	Tan <u>SILT</u> ,	, trac	e sand, dry						
	-							\		REFUSAL AT (	D.3 FEET					
	_ 5.0 _															
	-															
	-															
	10.0	7		Δ	D	)		P: F:		Remarks	: Hand auger pr augering. Blo DCP. Refusa in two seperat	obe dry during an w counts were det l at 2 inches below e offsets.	d upor ermin / the g	n com ed ut	npletior ilizing a d surfa	n of a ce

								HAND AUGER LOG		She	et <u>1</u>	of <u>1</u>
	Proje Loaa	ect Nu er:	umb	er: <u>03-</u> ARI	<mark>21-09</mark> K	<u>40</u>	Projec Test L	t Name: <u>13 East Seminary Street</u> H ocation: See Figure A-2	and Auge	er No	o.: <u>B</u>	<u>-15</u>
	Date	Star	ted:	1/1	1/22		Metho	d: Hand Auger				
	Date	Com	nple	ted: <u>1/1</u>	1/22		Drillin	Company: <u>Triad Engineering, Inc.</u> Grou	nd Elev.:	<u>N/A</u>	<u>.</u>	
	feet)	e No.	Type		y (%)	RUN)	pth (ft)	Shelby Tube Standard Split Spoon	10101	urata) evel	Log	ta tion
	Depth (	Sample	Sample	Blow Counts	Recover	RQD (F	itrata De	Core Auger Sample Probe			Graphic	Strat Elevat
							0	MATERIAL DESCRIPTION				
		1		12-7-4 5-7-8			0.5	Tan <u>SILT</u> , trace sand, dry - RESIDUUM -				
		2		010				Tan silty <u>CLAY</u> , trace sand, dry				
	_	3		10-7-6								
		4		7-12-11								
								- RESIDUUM -				
┢	-						2.0	PROBE TERMINATED AT 2 0 FEFT				1
2												
/18/2	-											
SPJ 1												
ITS.0												
STP												
Ë Z	_ 5.0 _											
INSIG												
EXT												
RIVE												
Ц Ц Ц												
39 Y/												
12-00												
Ч 03	-											
S.GP												
JGER												
1D AL												
HAN	-											
1-094(												
03-2												
GER												
D AU												
HAN												
IAD C												
Ĕ	10.0										ompleti	n of
								Remarks: Hand auger probe dry o augering. Blow counts	were detern	pon c nined	utilizing	a
								P: DCP.				
	TRIA	D EN	GIN	EERING	, INC			г.				

								HAND AUGER LOG	Shee	t <u>1</u>	of <u>1</u>
	Proje	ect N	umb	oer: <u>0</u> 3-	<u>21-0</u> 9	40	Proje	t Name: <u>13 East Seminary Street</u> Hand A	uger No	: <b>B</b> -	16
	Logg	jer:		AR	K		Test L	ocation: See Figure A-2	-		
	Date	Star	ted:	<u>1/1</u>	1/22		Metho	d: <u>Hand Auger</u>			
	Date	Com	nple	ted: <u>1/1</u>	<u>1/22</u>	1	Drillin	g Company <u>:Triad Engineering, Inc.</u> Ground Ele	.: <u>N/A</u>		
	(feet)	No.	Type		ry (%)	SUN)	epth (ft)	Shelby Tube Split Spoon	trata) evel	c Log	ta tion
	Depth (	Sample	Sample	Blow Counts	Recove	RQD (I	òtrata D€	Core Auger Sample Probe	RQD (S Water I	Graphic	Stra Eleva
				0.00.10			0	MATERIAL DESCRIPTION			
		1		8-20-19			0.4	Tan <u>SILT</u> , trace sand, dry RESIDUUM -	,		
		2		17-17-17				Tan silty <u>CLAY</u> , trace sand, dry			
		3		18-17-22							
		4		25-33-38							
╞							2.0	- RESIDUUM -	+		
								PROBE TERMINATED AT 2.0 FEET			
122											
1/18											
S.GPJ											
T PIT											
ON TES	_ 5.0 _										
EXTENSI											
DRIVE											
39 YALE											
03-12-00											
S.GPJ											
AUGEF											
40 HANE											
3-21-09											
JGER 0											
ND AL											
D C HA											
TRIA	10.0										
								Remarks: Hand auger probe dry during an augering. Blow counts were de DCP.	nd upon con termined u	mpletior Itilizing a	i of a
	TRIA	D EN	GIN	IEERING	i, INC	•		r:			

								<u>HAI</u>	ND AUGER LOG		She	eet	1	of <u>1</u>
	Proje	ect Nu	umb	oer: <u>03-</u>	21-09	<u>40</u>	Proje	ct Name:	13 East Seminary Street	Hand Au	ıger N	lo.:	<u>B-</u>	<u>17</u>
	Logg	er:		AR	<u>K</u>		Test L	ocation:	See Figure A-2					
	Date	Star	ted:	<u>1/1</u>	1/22		Metho	od:	Hand Auger					
	Date	Corr	nple <sup>:</sup>	ted: <u>1/1</u>	<u>1/22</u>		Drillin	g Company	r <u>Triad Engineering, Inc.</u>	Ground Ele	v.: <u>N/</u>	<u>A</u>		
	(feet)	No.	Type		ry (%)	RUN)	epth (ft)	Shelby Tube	Standard Split Spoon		trata)	evel	c Log	ta tion
	Depth (	Sample	Sample	Blow Counts	Recove	RQD (F	trata De	Core Sample	Auger Probe		RQD (S	Water I	Graphic	Stra Eleva
							ഗ		MATERIAL DESCRIPTIC	DN				
		1		5-11-26			0.5	Tan <u>SILT</u> ,	trace sand, dry - RESIDUUM -					
		2		20-29-28			0.0	Tan silty <u>C</u>	LAY, trace sand, dry					
-		3		26-25-32										
		4		27-22-32										
							2.0		- RESIDUUM -					
									PROBE TERMINATED AT	2.0 FEET				
ŀ	_													
18/22	_													
PJ 1														
ITS.G														
EST P	- 0													
NO	_ 5.0 _													
ENSIG														
EXT														
DRIVE														
ALE														
039 \														
3-12-(														
0 1 0	-													
ERS.G														
AUGE														
AND														
940 F														
3-21-0														
ER 0														
AUG	-													
TAND														
AD C I														
ĮR Į	10.0								<b></b>				1.0	
									Remarks: Han aug	a auger probe dry during an ering. Blow counts were det	a upon ermine	com d uti	pietior lizing a	n of a
								P:	DCF	D.				
	TRIA	D EN	GIN	IEERING	i, INC	•		F:						

ſ								HAND AUGER LOG	neet	<u>1</u> (	of <u>1</u>
	Proje	ect Nu	umb	oer:	<u>03-21-(</u>	094(	<u>0</u> Proj	ect Name: <u>13 East Seminary Street</u> Hand Auger	No.:	<u>B-</u>	<u>18</u>
	Logg	er:			ARK		Tes	Location: <u>See Figure A-2</u>			
	Date Date	Com	ied: iple	ted:	<u>1/12/22</u> 1/12/22	2	Drill	nod: <u>Hand Auger</u> ing Company <u>Triad Engineering, Inc.</u> Ground Elev.: <u>N</u>	<u>I/A</u>		
	eet)	No.	Type		(%)		oth (ft)	Shelby Tube Standard Split Spoon	evel	Log	a on
	Depth (f	Sample	Sample <sup>-</sup>	Blo Cou	w by the second		RQD (R trata De	Core Auger Probe	Water L	Graphic	Strat Elevati
						•	٥ ا	MATERIAL DESCRIPTION			
ſ							0.3	3.0" CONCRETE	\$ \$		
							0.5	Black brown clayey <b><u>SILT</u></b> , trace sand, moist, material has			
								foul oder			
								Brown silty CLAY trace sand moist			
								medium stiff to stiff			
ľ								stiff to very stiff			
2											
1/18/2							4.0				
GPJ								PROBE TERIVIINATED AT 4.0 FEET			
PITS.(											
ESTF	5.0										
NO	_ 5.0 _										
ENSI											
EXT											
RIVE											
ALE D											
39 Y/											
12-00											
ŝ											
S.GP											
GER											
D AU											
HAN											
-0940											
03-21											
ËR											
AUC											
HAN											
AD C											
ШШ	10.0										
								Remarks: Hand auger probe dry during and upo augering. Densities are based on the	n com result	pletion s of the	ot e
								P: Wildcat DCP Testing corrected N' Val	ue. Pl	lease s	ee
	TDIA		GIN					F: allocitor windout Dor rogs.			
	INIA	J EIN	JIL	VECK	IIVG, IIV	L.					

ſ								HAND AUGER LOG	She	eet	<u>1</u>	of <u>1</u>
	Proje	ect Nu	umb	er: <u>03-2</u>	21-09	<u>40</u>	Proje	et Name: <u>13 East Seminary Street</u> Hand Au	uger N	lo.:	<u>B-</u>	<u>19</u>
	Logg	er:		<u>ARk</u>	<u>&lt;</u>		Test I	ocation: <u>See Figure A-2</u>				
	Date	Star	ed:	<u>1/12</u>	<u>2/22</u>		Metho	d: <u>Hand Auger</u>	V • NI/	^		
	Date	Corr	ipiei	iea: <u>1/12</u>				g Company <u>: mad Engineening, inc.</u> Ground Ele	v <u>IN//</u>	<u>A</u>		
	t)	ö	ь		(%	Î	(ft)	Shelby Standard	ta)	e	b	
	ן (fee	ole No	le Ty	Blow	ery (	(RUI	Jepth		(Strat	r Lev	nic Lo	rata ⁄ation
	Dept	Samp	samp	Counts	lecov	RQD	rata [	Core Auger Sample Probe	gD	Wate	Grapł	Elev
			0)		Ľ		St	MATERIAL DESCRIPTION			Ū	
							0.2	2.5" CONCRETE				
								Brown silty <u>CLAY</u> , trace sand, moist				
	_							stiff to very stiff				
ŀ	-							very stiff to hard				
ŀ	-											
N												
7/81/1	-		-				4.0					
GFJ												
2												
	_ 5.0 _											
ШЧ												
-א	_											
YALE												
2-0038												
1.02-1	_											
0.05												
NGEL												
	_											
1046												
12-21-(												
ב שני												
R H												
IRIAL	10.0											
-								Remarks: Hand auger probe dry during an augering. Densities are based of	d upon on the re	com esuli	pletior	e of
					U			P: Wildcat DCP Testing corrected attached Wildcat DCP loas.	N' Value	e. P	lease	see
	TRIA	) EN	GIN	IEERING	,INC			r:				

									<u>HAI</u>	ND AUGER LOO	3		Sh	eet	<u>1</u>	of <u>1</u>
	Proje Logg Date	ect Ni jer: Star	umt	oer:	<u>03-21</u> <u>ARK</u> <u>1/11/2</u>	<u>-094</u>	<u>40</u>	Projec Test L Metho	ct Name: _ocation: od:	13 East Seminary Stre See Figure A-2 Hand Auger	eet	Hand Au	iger I	No.:	<u>B-</u>	<u>20</u>
	Date	Corr	ıple	ted:	<u>1/11/2</u>	<u>22</u>		Drillin	g Company	y <u>:Triad Engineering, Inc.</u>		Ground Elev	v.: <u>N</u>	/ <u>A</u>		
	epth (feet)	ample No.	mple Type	Blo Cou	w nts	covery (%)	QD (RUN)	lta Depth (ft)	Shelby Tube	Standard Split Spoon			ΔD (Strata)	ater Level	raphic Log	Strata Elevation
	ŏ	ů,	Sa		1	Re	Ř	Stra			RIPTION		RG	8	อิ	ш
		1		13-35	5-50			0.5	Brown <u>SIL</u>	<u>.T</u> , trace gravel, trace sa - RESIDUU	and, dry IM -					
										REFUSAL AT 0	.5 FEET					
	· -															
/18/22																
.GPJ 1																
ST PITS																
ION TES	_ 5.0 _															
XTENSI																
RIVE E																
YALE D																
2-0039																
PJ 03-1																
ERS.G																
ND AUG																
940 HAI																
03-21-0																
UGER																
HAND A																
RIAD C F																
⊭L	10.0									Remarks	Hand auger pr	obe dry during and	d upor		pletion	of
									P: F:		augering. Blov DCP.	W COUNTS WERE DET	ermine	eu uti	iizing a	I

								HAN	ND AUGER LOG			Sh	eet	<u>1</u>	of <u>1</u>
	Proje Logg Date	ect Nu jer: Starl	umb ted:	er: <u>03-</u> <u>ARI</u> <u>1/1</u> 2	<u>21-09</u> <u>&lt;</u> 1/22	<u>40</u>	Projec Test L Metho	ct Name: _ocation: od:	13 East Seminary Stree See Figure A-2 Hand Auger	et Ha	nd Au	ger I	No.:	<u>B-</u>	<u>21</u>
	Date	Com	ple	ted: <u>1/1</u>	1/22		Drillin	g Company	<u>Triad Engineering, Inc.</u>	Groun	d Elev	.: <u>N</u>	<u>/A</u>		
	Depth (feet)	Sample No.	Sample Type	Blow Counts	Recovery (%)	RQD (RUN)	Strata Depth (ft)	Shelby Tube Core Sample	Standard Split Spoon D Auger Probe			RQD (Strata)	Water Level	Graphic Log	Strata Elevation
F		1		12				Brown <u>SIL</u>	<u>MATERIAL DESCRI</u> <u>T, trace gravel, trace san</u>	nd, dry					
ER 03-21-0940 HAND AUGERS. GPJ 03-12-0039 YALE DRIVE EXTENSION TEST PITS. GPJ 1/18/22	- 5.0						0.3		- RESIDUUM REFUSAL AT 0.3	A- FEET					
TRIAD C HAND AUG.	- 10.0							D.	Remarks:	Hand auger probe dry du augering. Blow counts w DCP.	ring and vere dete	upon rmine	com ed uti	pletion lizing a	n of

	HAND AUGER LOG Sheet <u>1</u> of <u>1</u>											
Pro	ojec	t Nu	mb	er: <u>03-2</u>	2 <u>1-09</u>	<u>40</u>	Projec	t Name: <u>13 East Seminary Street</u> Hand Auger	No.:	<u>B-</u>	<u>22</u>	
	ggei ite S	r: Starte	əd.	<u>ARK</u> 1/11	<u>(</u> /22		Test L Metho	ocation: <u>See Figure A-2</u> d: Hand Auger				
Da	ite C	Com	plet	ed: <u>1/11</u>	/22		Drilling	g Company <u>Triad Engineering, Inc.</u> Ground Elev.: <u>N</u>	<u>/A</u>			
feet)		No	Type		y (%)	(NU)	pth (ft)	Shelby Tube Split Spoon	evel	Log	a ion	
Depth (		Sample	Sample	Blow Counts	Recover	RQD (F	trata De	Core Sample Auger Probe	Water L	Graphic	Strat Elevat	
		1		10			S	MATERIAL DESCRIPTION				
		-		12			0.3	Brown <u>SILT</u> , trace gravel, trace sand, dry - RESIDUUM -				
								REFUSAL AT 0.3 FEET				
-	-											
-												
-	-											
4												
	-											
5												
50												
-	_											
4												
	-											
4												
	-											
10.				λ				Remarks: Hand auger probe dry during and upor augering. Blow counts were determin DCP_Offset test location approvimate	n com ed uti	pletior lizing a	i of a av	
								<b>F:</b> from the corner of room.	., 01	551 477	<i>y</i>	

ſ								HAND AUGER LOG	Sheet <u>1</u> of <u>1</u>
	Proje	ect Nu	ımb	er: <u>03-2</u>	21-09	<u>40</u>	Proje	t Name: <u>13 East Seminary Street</u> Hand Au	ıger No.: <u><b>B-23</b></u>
	Logg	er:		<u>AR</u>	<u>&lt;</u>		Test L	ocation: <u>See Figure A-2</u>	
	Date	Start	ed:	<u>1/12</u>	2/22		Metho	d: <u>Hand Auger</u>	
	Date	Com	plet	ted: <u>1/12</u>	<u>2/22</u>		Drillin	Ground Ele	v.: <u>N/A</u>
	feet)	e No.	Type		.y (%)	RUN)	pth (ft)	Shelby Tube Standard Split Spoon	trata) evel ? Log ta tion
	Depth (	Sample	Sample	Blow Counts	Recover	RQD (F	itrata De	Core Sample Auger Probe	RQD (S Water L Graphic Stra
							S	MATERIAL DESCRIPTION	
							0.3	3.0" CONCRETE	A A A
	-							Brown silty <u>CLAY</u> , trace gravel, trace sand, dry	
								stiff to very stiff	
	_							soft to medium stiff	
-	_							medium stiff to stiff	
1017	-						4.0	- RESIDUUM -	
								PROBE LERMINATED AT 4.0 FEET	
0									
2	5.0								
	_								
10-21-0									
	-								
0									
	-								
7-00									
	-								
	10.0								
_		DEN	GIN					P:       Hand auger probe dry during an augering. Densities are based of Wildcat DCP Testing corrected attached Wildcat DCP logs.         F:       attached Wildcat DCP logs.	d upon completion of on the results of the N' Value. Please see

Page 1 of 1

Triad Engineering, Inc. H

6 6			
1075D Sherman Avenue	PROJECT NUMBER:	03-21-940	
Hagerstown, MD 21740	DATE STARTED:	01-11-2022	
	DATE COMPLETED:	01-11-2022	
HOLE #: <u>B-4</u>	_		
CREW: ARK, TK	SURFACE ELEVATION:	N/A	
PROJECT: 13 East Seminary Street	WATER ON COMPLETION:	N/A	
ADDRESS: 13 East Seminary Street	HAMMER WEIGHT:	35 lbs.	
LOCATION: Mercersburg, Pennsylvania	CONE AREA:	10 sq. cm	

$\begin{array}{c c c c c c c c c c c c c c c c c c c $			BLOWS	RESISTANCE	GRA	PH OF CONE RE	SISTANCE		TESTED CO	NSISTENCY
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	DEI	PTH	PER 10 cm	Kg/cm <sup>2</sup>	0	50 100	150	N'	SAND & SILT	CLAY
	-		18	79.9	•••••	•••••		22	MEDIUM DENSE	VERY STIFF
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	-		13	57.7	••••••	•••••		16	MEDIUM DENSE	VERY STIFF
	-	1 ft	7	31.1	••••••	•••		8	LOOSE	MEDIUM STIFF
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	-		6	26.6	••••••	•		7	LOOSE	MEDIUM STIFF
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	-		6	26.6	••••••	•		7	LOOSE	MEDIUM STIFF
	-	2 ft	7	31.1	••••••	•••		8	LOOSE	MEDIUM STIFF
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	-		6	26.6	••••••	•		7	LOOSE	MEDIUM STIFF
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	-		7	31.1	••••••	•••		8	LOOSE	MEDIUM STIFF
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	-	3 ft	6	26.6	••••••	•		7	LOOSE	MEDIUM STIFF
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	- 1 m		7	31.1	••••••	•••		8	LOOSE	MEDIUM STIFF
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	-		6	23.2	•••••			6	LOOSE	MEDIUM STIFF
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	-	4 ft	5	19.3	•••••			5	LOOSE	MEDIUM STIFF
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	-		7	27.0	••••••	,		7	LOOSE	MEDIUM STIFF
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	-		6	23.2	•••••			6	LOOSE	MEDIUM STIFF
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	-	5 ft	7	27.0	••••••	,		7	LOOSE	MEDIUM STIFF
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	-		6	23.2	•••••			6	LOOSE	MEDIUM STIFF
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	-		6	23.2	•••••			6	LOOSE	MEDIUM STIFF
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	-	6 ft	5	19.3	•••••			5	LOOSE	MEDIUM STIFF
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	-		5	19.3	•••••			5	LOOSE	MEDIUM STIFF
-7 t -8 t -9 t -3 m $10 t-11 t-12 t-4 m$ $13 t$	- 2 m		Refusal	<b>#VALUE!</b>		<b>#VALUE!</b>		#####	<b>#VALUE!</b>	<b>#VALUE!</b>
8 ft 9 ft 3 m 10 ft 11 ft 12 ft 4 m 13 ft	-	7 ft								
- 8 ft - 9 ft - 3 m 10 ft - 11 ft - 12 ft - 4 m 13 ft	-									
- 8 ft - 9 ft - 3 m 10 ft - 11 ft - 12 ft - 4 m 13 ft	-									
9 ft - 3 m 10 ft - 11 ft - 12 ft - 4 m 13 ft	-	8 ft								
- 9 ft - 3 m 10 ft - 11 ft - 12 ft - 4 m 13 ft	-									
- 9 ft - 3 m 10 ft - 11 ft - 12 ft - 4 m 13 ft	-									
- 3 m 10 ft - 3 m 10 ft - 11 ft - 12 ft - 4 m 13 ft	-	9 ft								
- 3 m 10 ft - 11 ft - 12 ft - 4 m 13 ft	-									
- 3 m 10 ft - 11 ft - 12 ft - 4 m 13 ft	-									
- 11 ft - 11 ft - 12 ft - 4 m 13 ft	- 3 m	10 ft								
- 11 ft - 11 ft - 12 ft - 12 ft - 4 m 13 ft	-									
- 11 ft - 12 ft 	-									
- 11 ft 	-									
- 12 ft - 12 ft - 4 m 13 ft	_	11 ft								
- 12 ft 	-									
- 12 ft 	-									
- - 4 m 13 ft	_	12 ft								
- - 4 m 13 ft	_									
- 4 m 13 ft	_									
	- 4 m	13 ft								

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Triad Engineering, Inc. 1075D Sherman Avenue Hagerstown, MD 21740

PROJECT NUMBER: 03-21-940 01-11-2022 DATE STARTED: DATE COMPLETED: 01-11-2022 HOLE #: B-5 CREW: ARK, TK SURFACE ELEVATION: N/A PROJECT: 13 East Seminary Street N/A WATER ON COMPLETION: ADDRESS: 13 East Seminary Street HAMMER WEIGHT: 35 lbs. LOCATION: Mercersburg, Pennsylvania CONE AREA: 10 sq. cm

		BLOWS	RESISTANCE	GRAP	PH OF CONE RES	ISTANCE		TESTED CO	NSISTENCY
DEP	TH	PER 10 cm	Kg/cm <sup>2</sup>	0	50 100	150	N'	SAND & SILT	CLAY
-		6	26.6	•••••			7	LOOSE	MEDIUM STIFF
-		6	26.6	•••••			7	LOOSE	MEDIUM STIFF
-	1 ft	6	26.6	•••••			7	LOOSE	MEDIUM STIFF
-		4	17.8	•••••			5	LOOSE	MEDIUM STIFF
-		3	13.3	•••			3	VERY LOOSE	SOFT
-	2 ft	1	4.4	•			1	VERY LOOSE	VERY SOFT
-		1	4.4	•			1	VERY LOOSE	VERY SOFT
-		1	4.4	•			1	VERY LOOSE	VERY SOFT
-	3 ft	1	4.4	•			1	VERY LOOSE	VERY SOFT
- 1 m		1	4.4	•			1	VERY LOOSE	VERY SOFT
-		2	7.7	••			2	VERY LOOSE	SOFT
-	4 ft	5	19.3	•••••			5	LOOSE	MEDIUM STIFF
-		3	11.6	•••			3	VERY LOOSE	SOFT
-		3	11.6	•••			3	VERY LOOSE	SOFT
-	5 ft	2	7.7	••			2	VERY LOOSE	SOFT
-		Refusal	#VALUE!		<b>#VALUE!</b>		#####	#VALUE!	#VALUE!
-									
-	6 ft								
-									
- 2 m									
-	7 ft								
-									
-	~ •								
-	8 ft								
-									
-	0.0								
-	9 ft								
-									
-	10.0								
- 3 m	10 ft								
-									
-									
-	11.0								
-	11 ft								
-									
-	12.6								
-	12 H								
-									
- 1	13 ft								
- 4 m	13 N								

Triad Engineering, Inc. 1075D Sherman Avenue PROJECT NUMBER: 03-21-940 Hagerstown, MD 21740 DATE STARTED: 01-11-2022 DATE COMPLETED: 01-11-2022 HOLE #: B-7 CREW: ARK, TK SURFACE ELEVATION: N/A PROJECT: 13 East Seminary Street N/A WATER ON COMPLETION: ADDRESS: 13 East Seminary Street HAMMER WEIGHT: 35 lbs. LOCATION: Mercersburg, Pennsylvania CONE AREA: 10 sq. cm

		BLOWS	RESISTANCE	GRAPH OF CON	E RESISTANCE		TESTED CO	NSISTENCY
DEI	PTH	PER 10 cm	Kg/cm <sup>2</sup>	0 50	100 150	N'	SAND & SILT	CLAY
-		16	71.0	•••••		20	MEDIUM DENSE	VERY STIFF
-		19	84.4	••••••	••	24	MEDIUM DENSE	VERY STIFF
-	1 ft	Deflection	<b>#VALUE!</b>	#VAL	LUE!	#####	<b>#VALUE!</b>	<b>#VALUE!</b>
-								
-								
-	2 ft							
-								
-								
-	3 ft							
- 1 m								
-								
-	4 ft							
-								
-	5.0							
-	5 п							
-								
-	6 ft							
-	0 11							
- 2 m								
- 2 111	7 ft							
-	/ 10							
-								
-	8 ft							
-								
-								
-	9 ft							
-								
-								
- 3 m	10 ft							
-								
-								
-								
-	11 ft							
-								
-								
-	12 ft							
-								
-	10.0							
- 4 m	13 ft							
1								

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03-21-940

PROJECT NUMBER:

Triad Engineering, Inc. 1075D Sherman Avenue Hagerstown, MD 21740

01-11-2022 DATE STARTED: DATE COMPLETED: 01-11-2022 HOLE #: B-8 CREW: ARK, TK SURFACE ELEVATION: N/A PROJECT: 13 East Seminary Street N/A WATER ON COMPLETION: ADDRESS: 13 East Seminary Street HAMMER WEIGHT: 35 lbs. LOCATION: Mercersburg, Pennsylvania CONE AREA: 10 sq. cm

		BLOWS	RESISTANCE	GRA	PH OF	F CONE RES	ISTANCE		TESTED CO	NSISTENCY
DEF	PTH	PER 10 cm	Kg/cm <sup>2</sup>	0	50	100	150	N'	SAND & SILT	CLAY
-		3	13.3	•••				3	VERY LOOSE	SOFT
-		5	22.2	•••••				6	LOOSE	MEDIUM STIFF
-	1 ft	7	31.1	•••••	•••			8	LOOSE	MEDIUM STIFF
-		5	22.2	•••••				6	LOOSE	MEDIUM STIFF
-		6	26.6	•••••	•			7	LOOSE	MEDIUM STIFF
-	2 ft	5	22.2	•••••				6	LOOSE	MEDIUM STIFF
-		5	22.2	•••••				6	LOOSE	MEDIUM STIFF
-		10	44.4	•••••	•••••			12	MEDIUM DENSE	STIFF
-	3 ft	10	44.4	•••••	•••••			12	MEDIUM DENSE	STIFF
- 1 m		8	35.5	•••••	••••			10	LOOSE	STIFF
-		10	38.6	•••••	••••			11	MEDIUM DENSE	STIFF
-	4 ft	10	38.6	•••••	••••			11	MEDIUM DENSE	STIFF
-		13	50.2	•••••	•••••			14	MEDIUM DENSE	STIFF
-		6	23.2	•••••				6	LOOSE	MEDIUM STIFF
-	5 ft	6	23.2	•••••				6	LOOSE	MEDIUM STIFF
-		Refusal	<b>#VALUE!</b>			<b>#VALUE!</b>		#####	#VALUE!	<b>#VALUE!</b>
-										
-	6 ft									
-										
- 2 m										
-	7 ft									
-										
-										
-	8 ft									
-										
-										
-	9 ft									
-										
-										
- 3 m	10 ft									
-										
-										
-										
-	11 ft									
-										
-										
-	12 ft									
-										
-										
- 4 m	13 ft									

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03-21-940

PROJECT NUMBER:

Triad Engineering, Inc. 1075D Sherman Avenue Hagerstown, MD 21740

01-11-2022 DATE STARTED: DATE COMPLETED: 01-11-2022 HOLE #: B-9 CREW: ARK, TK SURFACE ELEVATION: N/A PROJECT: 13 East Seminary Street WATER ON COMPLETION: N/A ADDRESS: 13 East Seminary Street HAMMER WEIGHT: 35 lbs. LOCATION: Mercersburg, Pennsylvania CONE AREA: 10 sq. cm

		BLOWS	RESISTANCE	GRA	PH OF CON	E RESISTA	ANCE		TESTED CO	NSISTENCY
DE	PTH	PER 10 cm	Kg/cm <sup>2</sup>	0	50	100	150	N'	SAND & SILT	CLAY
-		9	40.0	•••••	••••			11	MEDIUM DENSE	STIFF
-		18	79.9	•••••	•••••	•		22	MEDIUM DENSE	VERY STIFF
-	1 ft	16	71.0	•••••	•••••			20	MEDIUM DENSE	VERY STIFF
-		6	26.6	•••••	•			7	LOOSE	MEDIUM STIFF
-		2	8.9	••				2	VERY LOOSE	SOFT
-	2 ft	2	8.9	••				2	VERY LOOSE	SOFT
-		3	13.3	•••				3	VERY LOOSE	SOFT
-		3	13.3	•••				3	VERY LOOSE	SOFT
-	3 ft	6	26.6	•••••	•			7	LOOSE	MEDIUM STIFF
- 1 m		9	40.0	•••••	••••			11	MEDIUM DENSE	STIFF
-		9	34.7	•••••	••••			9	LOOSE	STIFF
-	4 ft	8	30.9	•••••	••			8	LOOSE	MEDIUM STIFF
-		11	42.5	•••••	•••••			12	MEDIUM DENSE	STIFF
-		10	38.6	•••••	••••			11	MEDIUM DENSE	STIFF
-	5 ft	7	27.0	•••••	•			7	LOOSE	MEDIUM STIFF
-		Refusal	<b>#VALUE!</b>		#VAI	LUE!		#####	<b>#VALUE!</b>	<b>#VALUE!</b>
-										
-	6 ft									
-										
- 2 m										
-	7 ft									
-										
-										
-	8 ft									
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-										
-	9 ft									
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- 3 m	10 ft									
-										
-										
-										
-	11 ft									
-										
-										
-	12 ft									
-										
-										
- 4 m	13 ft									

WILDCAT DYNAMIC CONE LOO
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Triad Engineering, Inc.		
1075D Sherman Avenue	PROJECT NUMBER:	03-21-940
Hagerstown, MD 21740	DATE STARTED:	01-11-2022
	DATE COMPLETED:	01-11-2022
HOLE #: <u>B-10</u>	_	
CREW: ARK, TK	SURFACE ELEVATION:	N/A
PROJECT: 13 East Seminary Street	WATER ON COMPLETION:	N/A
ADDRESS: 13 East Seminary Street	HAMMER WEIGHT:	35 lbs.
LOCATION: Mercersburg, Pennsylvania	CONE AREA:	10 sq. cm

		BLOWS	RESISTANCE	GRAP	H OF CONE RESIS	TANCE		TESTED CO	NSISTENCY
DEI	PTH	PER 10 cm	Kg/cm <sup>2</sup>	0	50 100	150	N'	SAND & SILT	CLAY
-		6	26.6	•••••			7	LOOSE	MEDIUM STIFF
-		Refusal	<b>#VALUE!</b>		<b>#VALUE!</b>		#####	<b>#VALUE!</b>	#VALUE!
-	1 ft								
-									
-									
	2 ft								
_	2 11								
-									
-	2 ft								
1	5 ft								
- 1 m									
-									
-	4 ft								
-									
-									
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-	6 ft								
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- 2 m									
-	7 ft								
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	10.6								
- 3 m	10 ft								
-									
-									
-									
-	11 ft								
-									
-									
-	12 ft								
-									
-									
- 4 m	13 ft								

Triad Engineering, Inc. 1075D Sherman Avenue PROJECT NUMBER: 03-21-940 Hagerstown, MD 21740 DATE STARTED: 01-12-2022 DATE COMPLETED: 01-12-2022 HOLE #: B-11 CREW: ARK, TK PROJECT: 13 East Seminary Street WATER ON COMPLETION: N/A ADDRESS: 13 East Seminary Street

LOCATION: Mercersburg, Pennsylvania

SURFACE ELEVATION: 8" below surface HAMMER WEIGHT: 35 lbs. CONE AREA: 10 sq. cm

		BLOWS	RESISTANCE	GRAPH OF CONE RESISTANCE				TESTED CONSISTENCY		
DEF	PTH	PER 10 cm	Kg/cm <sup>2</sup>	0	50 100	150	N'	SAND & SILT	CLAY	
-		6	26.6	•••••			7	LOOSE	MEDIUM STIFF	
-		Refusal	<b>#VALUE!</b>		<b>#VALUE!</b>		#####	<b>#VALUE!</b>	<b>#VALUE!</b>	
-	1 ft									
-										
-										
_	2 ft									
_										
_										
	3 ft									
- 1 m	5 ft									
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-	4.0									
-	4 II									
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-										
-	5 ft									
-										
-										
-	6 ft									
-										
- 2 m										
-	7 ft									
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-										
-	8 ft									
-										
_										
_	9 ft									
	<i>)</i> II									
- 2	10 ft									
- 5 111	10 11									
-										
-										
-										
-	11 ft									
-										
-										
-	12 ft									
-										
-										
- 4 m	13 ft									

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03-21-940

PROJECT NUMBER:

Triad Engineering, Inc. 1075D Sherman Avenue Hagerstown, MD 21740

01-12-2022 DATE STARTED: DATE COMPLETED: 01-12-2022 HOLE #: B-18 CREW: ARK, TK SURFACE ELEVATION: Below Slab PROJECT: 13 East Seminary Street N/A WATER ON COMPLETION: ADDRESS: 13 East Seminary Street HAMMER WEIGHT: 35 lbs. LOCATION: Mercersburg, Pennsylvania CONE AREA: 10 sq. cm

		BLOWS	RESISTANCE	CE GRAPH OF CONE RESISTANCE					TESTED CONSISTENCY		
DEPTI	Н	PER 10 cm	Kg/cm <sup>2</sup>	0	50	100	150	N'	SAND & SILT	CLAY	
-		5	22.2	•••••				6	LOOSE	MEDIUM STIFF	
-		12	53.3	•••••	•••••			15	MEDIUM DENSE	STIFF	
- 1	1 ft	12	53.3	•••••	•••••			15	MEDIUM DENSE	STIFF	
-		9	40.0	•••••	••••			11	MEDIUM DENSE	STIFF	
-		10	44.4	•••••	•••••			12	MEDIUM DENSE	STIFF	
- 2	2 ft	9	40.0	•••••	••••			11	MEDIUM DENSE	STIFF	
-		13	57.7	•••••	•••••			16	MEDIUM DENSE	VERY STIFF	
-		16	71.0	•••••	•••••	•		20	MEDIUM DENSE	VERY STIFF	
- 3	3 ft	18	79.9	•••••	•••••	••••		22	MEDIUM DENSE	VERY STIFF	
- 1 m		21	93.2	•••••	•••••	•••••		-	MEDIUM DENSE	VERY STIFF	
-		28	108.1	•••••	•••••	•••••		-	MEDIUM DENSE	VERY STIFF	
- 4	4 ft	33	127.4	•••••	•••••	•••••	•••	-	DENSE	HARD	
-		33	127.4	•••••	•••••	•••••	•••	-	DENSE	HARD	
-		31	119.7	•••••	•••••	•••••	•	-	DENSE	HARD	
- 5	5 ft	27	104.2	•••••	•••••	•••••		-	MEDIUM DENSE	VERY STIFF	
-		35	135.1	•••••	•••••	•••••	•••••	-	DENSE	HARD	
-		43	166.0	•••••	•••••	•••••	•••••	-	DENSE	HARD	
- 6	6 ft	45	173.7	•••••	•••••	•••••	•••••	-	DENSE	HARD	
-		42	162.1	•••••	•••••	•••••	•••••	-	DENSE	HARD	
- 2 m		50	193.0	•••••	•••••	•••••	•••••	-	VERY DENSE	HARD	
- 7	7 ft										
-											
-											
- 8	8 ft										
-											
-											
- 9	9 ft										
-											
-											
- 3 m 10	0 ft										
-											
-											
-	1.0										
- 11	1 ft										
-											
-											
- 12	2 ft										
-											
-											
- 4 m 13	3 ft										

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Triad Engineering, Inc. 1075D Sherman Avenue Hagerstown, MD 21740

PROJECT NUMBER: 03-21-940 01-12-2022 DATE STARTED: DATE COMPLETED: 01-12-2022 HOLE #: B-19 CREW: ARK, TK SURFACE ELEVATION: Below Slab PROJECT: 13 East Seminary Street N/A WATER ON COMPLETION: ADDRESS: 13 East Seminary Street HAMMER WEIGHT: 35 lbs. LOCATION: Mercersburg, Pennsylvania CONE AREA: 10 sq. cm

BLOWS RESISTA		RESISTANCE	GRAPH OF CONE RESISTANCE		TESTED CONSISTENCY		
DE	PTH	PER 10 cm	Kg/cm <sup>2</sup>	0 50 100 150	N'	SAND & SILT	CLAY
-		8	35.5	•••••	10	LOOSE	STIFF
-		15	66.6	•••••	19	MEDIUM DENSE	VERY STIFF
-	1 ft	11	48.8	•••••	13	MEDIUM DENSE	STIFF
-		13	57.7	•••••	16	MEDIUM DENSE	VERY STIFF
-		17	75.5	•••••	21	MEDIUM DENSE	VERY STIFF
-	2 ft	24	106.6	•••••	-	MEDIUM DENSE	VERY STIFF
-		31	137.6	•••••	-	DENSE	HARD
-		15	66.6	•••••	19	MEDIUM DENSE	VERY STIFF
-	3 ft	22	97.7	•••••	-	MEDIUM DENSE	VERY STIFF
- 1 m		13	57.7	•••••	16	MEDIUM DENSE	VERY STIFF
-		15	57.9	•••••	16	MEDIUM DENSE	VERY STIFF
-	4 ft	17	65.6	•••••	18	MEDIUM DENSE	VERY STIFF
-		15	57.9	•••••	16	MEDIUM DENSE	VERY STIFF
-		12	46.3	•••••	13	MEDIUM DENSE	STIFF
-	5 ft	7	27.0	•••••	7	LOOSE	MEDIUM STIFF
-		6	23.2	•••••	6	LOOSE	MEDIUM STIFF
-		7	27.0	•••••	7	LOOSE	MEDIUM STIFF
-	6 ft	6	23.2	•••••	6	LOOSE	MEDIUM STIFF
-		7	27.0	•••••	7	LOOSE	MEDIUM STIFF
- 2 m		9	34.7	•••••	9	LOOSE	STIFF
-	7 ft	8	27.4	•••••	7	LOOSE	MEDIUM STIFF
-		12	41.0	•••••	11	MEDIUM DENSE	STIFF
-		6	20.5	•••••	5	LOOSE	MEDIUM STIFF
-	8 ft	4	13.7	•••	3	VERY LOOSE	SOFT
-		4	13.7	•••	3	VERY LOOSE	SOFT
-		5	17.1	••••	4	VERY LOOSE	SOFT
-	9 ft	4	13.7	•••	3	VERY LOOSE	SOFT
-		3	10.3	••	2	VERY LOOSE	SOFT
-		6	20.5	••••	5	LOOSE	MEDIUM STIFF
- 3 m	10 ft	4	13.7	•••	3	VERY LOOSE	SOFT
-		4	12.2	•••	3	VERY LOOSE	SOFT
-							
-							
-	11 ft						
-							
-							
-	12 ft						
-							
l- ,	10.0						
- 4 m	13 ft						

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Triad Engineering, Inc. 1075D Sherman Avenue Hagerstown, MD 21740

PROJECT NUMBER: 03-21-940 01-12-2022 DATE STARTED: DATE COMPLETED: 01-12-2022 HOLE #: B-23 CREW: ARK, TK SURFACE ELEVATION: Below Slab PROJECT: 13 East Seminary Street N/A WATER ON COMPLETION: ADDRESS: 13 East Seminary Street HAMMER WEIGHT: 35 lbs. LOCATION: Mercersburg, Pennsylvania CONE AREA: 10 sq. cm

		BLOWS	RESISTANCE	GRAPH OF CONE RESISTANCE				TESTED CO	NSISTENCY	
DEP	TH	PER 10 cm	Kg/cm <sup>2</sup>	0	50	100	150	N'	SAND & SILT	CLAY
-		12	53.3	•••••	•••••			15	MEDIUM DENSE	STIFF
-		17	75.5	•••••	•••••			21	MEDIUM DENSE	VERY STIFF
-	1 ft	13	57.7	•••••	•••••			16	MEDIUM DENSE	VERY STIFF
-		4	17.8	•••••				5	LOOSE	MEDIUM STIFF
-		3	13.3	•••				3	VERY LOOSE	SOFT
-	2 ft	3	13.3	•••				3	VERY LOOSE	SOFT
-		6	26.6	•••••	•			7	LOOSE	MEDIUM STIFF
-		12	53.3	••••••	•••••			15	MEDIUM DENSE	STIFF
-	3 ft	8	35.5	••••••	•••			10	LOOSE	STIFF
- 1 m		10	44.4	•••••	•••••			12	MEDIUM DENSE	STIFF
-		8	30.9	•••••	•			8	LOOSE	MEDIUM STIFF
-	4 ft	6	23.2	•••••				6	LOOSE	MEDIUM STIFF
-		5	19.3	•••••				5	LOOSE	MEDIUM STIFF
-		6	23.2	•••••				6	LOOSE	MEDIUM STIFF
-	5 ft	8	30.9	••••••	•			8	LOOSE	MEDIUM STIFF
-		8	30.9	••••••	•			8	LOOSE	MEDIUM STIFF
-		Refusal	<b>#VALUE!</b>		#VA	LUE!		#####	#VALUE!	<b>#VALUE!</b>
-	6 ft									
-										
- 2 m										
-	7 ft									
-										
-										
-	8 ft									
-										
-										
-	9 ft									
-										
-										
- 3 m	10 ft									
-										
-										
-										
-	11 ft									
-										
-										
-	12 ft									
-										
-										
- 4 m	13 ft									