

17 July 2018

Mr. Timothy Schneider  
New York State Department of Environmental Conservation (NYSDEC)  
Division of Environmental Remediation, Region 8  
6274 East Avon-Lima Road  
Avon, New York 14414-9519

VIA ELECTRONIC MAIL

**Subject: Amendment #2  
Interim Remedial Measures #2 Work Plan  
Former Sperry Remington Site #c808022  
Elmira, Chemung County**

Dear Mr. Schneider:

On behalf of Unisys Corporation (Unisys), Geosyntec Consultants, Inc. and its New York engineering affiliate, Beech and Bonaparte Engineering, P.C. (collectively, Geosyntec) are submitting this second amendment (Amendment #2) to the Interim Remedial Measures Work #2 Plan (IRM #2 Work Plan) for the Former Sperry Remington Site – North Portion (Site #c808022) (Site) in Elmira, New York. On 26 April 2016, Unisys applied to enter the Site into the NYSDEC Brownfields Cleanup Program (BCP) with the consent of Elmira City School District (ECSD). NYSDEC gave an initial determination that the BCP application was complete on 10 June 2016 and received public comments until 22 July 2016. The BCP Agreement for the Site was executed on 23 March 2017. Unisys proposed IRM #2 at the Site in accordance with the BCP Agreement on 15 March 2018 with revisions on 10 April 2018. The purpose of IRM #2 has been to remove soils impacted by polychlorinated biphenyls (PCBs) within areas of the Site in which ECSD plans to construct capital improvements in 2018 including the rear parking lot. Agency comments were received on 29 May 2018 and a Final IRM #2 Work Plan was submitted on 6 June 2018. NYSDEC gave conditional approval for work to proceed on IRM #2 on 20 June 2018. Geosyntec provided a response to approval conditions on 22 June 2018. The Revised Final IRM #2 Work Plan was submitted in response to agency comments on 13 July 2018.

The purpose of this Amendment #2 is to request approval for modifications to the design of IRM #2 as presented in the Final IRM #2 Work Plan dated 6 June 2018 and the 22 June 2018 Response to Conditional Approval. The proposed modifications address changes to plans to support excavations and subsurface utilities to remain in place during construction in response to refusal encountered at multiple locations during sheet pile wall installation. Subsurface utilities to remain in place include natural gas, electric, potable water and stormwater. Based on the observed depth of the stormwater, potable water line and fire loop, it is expected that partial sections of the stormwater and potable water lines will be supported during excavation and kept in service.

## PROPOSED MODIFICATIONS

### Excavation and Subsurface Utilities Support Plans (Amend Section 2.2)

Temporary support of excavation (SOE) and benching will be required for areas of the Site with excavation depths of four (4) feet or greater. For the excavation area located along the south side of the K-Wing of the EHS building and the southern property boundary, steel sheet piles were proposed to provide SOE for excavation depths of approximately ten (10) feet below ground surface (ft bgs) and to support subsurface natural gas and electric lines at the boundaries of Phases 1 and 2 of the excavation. Steel sheet pile wall installation began on 23 June 2018 along the southern property boundary to establish the TSCA Accumulation Area. Concrete piers were observed in the trench excavated for sheet pile installation. Sheet pile installation progress was slower than anticipated due subsurface obstructions. Sheet piles installed on the western end of the southern sheet pile wall have bowed out. To date, sheet pile wall has been installed for a length of approximately 84 feet on the southern property line and a length of approximately 37 feet to form the eastern wall of the TSCA Accumulation Areas as shown on **Figure 1**. The latter is not being used to provide temporary SOE. On 29 June 2018, Geosyntec requested to modify the sequence for sheet pile wall installation and relocate the crane for sheet pile installation to the EHS building in order to meet the schedule for Phase 1 excavation and backfill. NYSDEC provided email approval and the modification has been documented in Amendment #1 to IRM #2 Work Plan dated 3 July 2018. Concrete blocks covered with poly sheeting were placed at the northern boundary of the TSCA Accumulation Area and a second line of silt fence was installed south of the property boundary. Sheet pile installation for the Phase 1 excavation began on 30 June 2018. Sheet pile refusal was encountered at multiple locations south of the EHS building, north of the gas line and at the western edge of the milled asphalt as shown on **Figure 1**. Geosyntec has determined that further sheet pile installation is not feasible for the IRM #2 construction schedule due to subsurface obstructions. Revised Construction Drawings are included as **Attachment 1**.

Excavation side slopes of two (2) horizontal to one (1) vertical (2H:1V) will be implemented in the following areas in place of sheet pile wall installation:

- South of the EHS building in Phase 1 after benching two (2) ft bgs approximately four (4) feet from building foundation;
- North of the gas line in Phase 1;
- South of the electric line in Phase 3;
- North of the southern property line in Phase 3, after benching three (3) feet from the property line. This excavation will occur west of the installed sheet pile wall; and
- East and west side of the Phase 3 excavation from the current ground surface to the proposed excavation depth.

Excavation side slopes of one (1) horizontal to one (1) vertical (1H:1V) will be implemented in Phase 2 between the active utilities lines:

- South of the gas line in Phase 2 after excavation to the top of the gas line; and
- North of the electric line in Phase 2 after excavation to the top of the electric line.

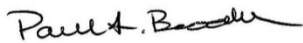
Excavation side slopes of two (2) horizontal to one (1) vertical (2H:1V) will be implemented in other areas of the Site with adequate space. Concrete blocks covered with poly sheeting will be used as the northern boundary of the TSCA Accumulation Area. Pre-installation of alternative supports for subsurface utilities is not feasible due to anticipated refusal for driven supports and the schedule for turnover of Phases 1 and 2 of the IRM #2 excavation to ECSD for capital improvement construction. Support for utilities will be put in place as the excavation progress and utilities are discovered. Partial excavation under utility lines may be used to accommodate vertical support. PCB-impacted soil including PCB remediation waste as defined in 40 CFR §761.3 Toxic Substances Control Act (TSCA) that is also defined in 6 NYCRR Part 371.4 (e) as a hazardous waste containing PCBs will be left in place below the slope of the excavations. The approximate extent of PCB-impacted soils to be left in place is shown on Figure 2 through 9 for each two-foot excavation interval. Unisys acknowledges that where PCBs that remain in place above cleanup goals will be addressed as part of the final remedy. PCB confirmation samples will be collected along the sidewall of sloped excavations in those areas to document the level of PCBs that remain in place. The maximum spacing between PCB confirmation samples will be thirty (30) linear feet. Confirmation sample locations and depths will be surveyed and included in the as-built drawings of the excavation.

## CLOSING

Geosyntec appreciates the opportunity to submit this work plan amendment to the NYSDEC, NYSDOH and ECSD. If you have any questions, please contact Mr. Kevin Krueger of Unisys at (651) 687-2210.

Sincerely,

Geosyntec Consultants, Inc.



Paul Brookner  
Principal/Project Director  
Geosyntec Consultants, Inc.



Aron Krasnopoler, Ph.D., P.E.  
Project Engineer/Project Manager  
Beech and Bonaparte Engineering P.C.

Copies to: Bernette Schilling, NYSDEC  
Ben Conlon, NYSDEC  
Michael Cruden, NYSDEC  
Heidi Dudek, NYSDEC  
Dave Harrington, NYSDEC  
Dawn Hettrick, NYSDOH  
Justin Deming, NYSDOH

Kevin Krueger, Unisys  
Elizabeth Parker, Unisys  
Michael G. Murphy, Beveridge & Diamond  
Michael Dunn, ECSD  
Hillary Austin, ECSD  
Tom Johnson, Sterling Environmental  
Amanda Castagnetti, Sterling Environmental

- Attachments:
- Figure 1 – Sheet Pile Installation Progress and Refusal
  - Figure 2 – Proposed Excavation – Rear Parking Lot – 0-2 ft bgs
  - Figure 3 – Proposed Excavation – Rear Parking Lot – 2-4 ft bgs
  - Figure 4 – Proposed Excavation – Rear Parking Lot – 4-6 ft bgs
  - Figure 5 – Proposed Excavation – Rear Parking Lot – 6-8 ft bgs
  - Figure 6 – Proposed Excavation – Rear Parking Lot – 8-10 ft bgs
  - Figure 7 – Proposed Excavation – Rear Parking Lot – 10-12 ft bgs
  - Figure 8 – Proposed Excavation – Rear Parking Lot – 12-14 ft bgs
  - Figure 9 – Proposed Excavation – Rear Parking Lot – 14-16 ft bgs
  - Figure 10 – Proposed Excavation – Rear Parking Lot – 16-18 ft bgs
  - Attachment 1 – Construction Drawings

### Certification










*I Aron Krasnopoler certify that I am currently a NYS registered professional engineer as defined in 6 NYCRR Part 375 and that this Amendment #2 to the Interim Remedial Measures #2 Work Plan for the Former Sperry Remington Site – North Portion dated 17 July 2018 was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).*




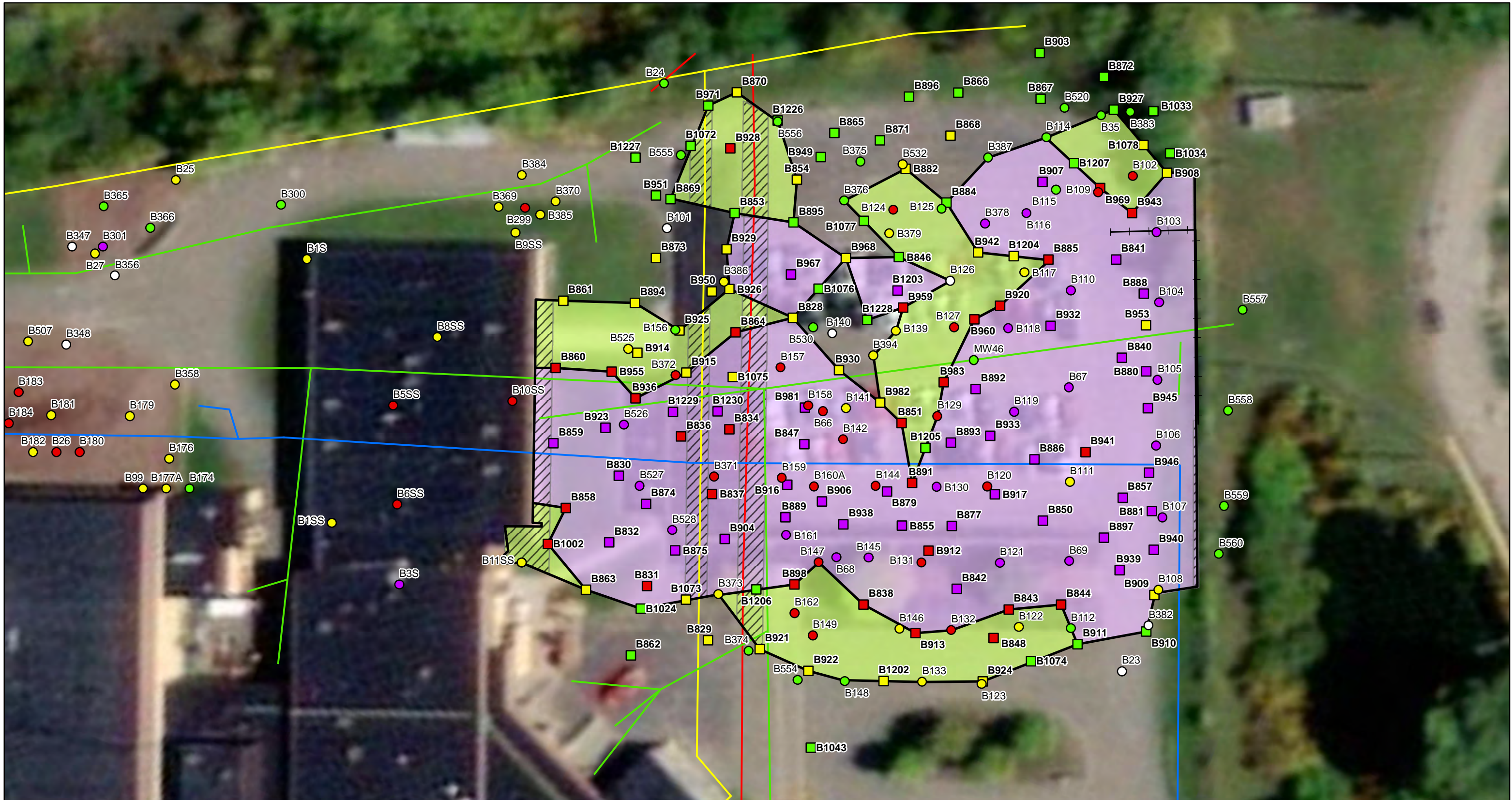
7/17/18

Aron Krasnopoler, P.E.



<b>Legend</b>		<u>Notes</u> Aerial imagery provided by ArcGIS Online.	 
<ul style="list-style-type: none"> <li> Discovered Concrete</li> <li> Sheet Pile</li> <li> Sheet Pile Refusal</li> </ul>	<b>Utilities</b> <ul style="list-style-type: none"> <li> Natural Gas</li> <li> Electric</li> <li> Water</li> <li> Storm Sewer</li> </ul>		

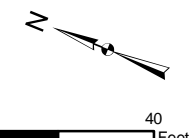
<b>Observed Obstructions and Sheet Pile Progress</b>	
Former Sperry Remington Site North Portion IRM#2 Elmira, New York	
 <i>an affiliate of Geosyntec Consultants</i>	
Columbia, Maryland	July 2018
<b>Figure 1</b>	



**Legend**

Total PCB Results Soil (2018 PDI)	Total PCB Results Soil (Historic)	Excavation Classification	Pre-Delineated	Utilities
<ul style="list-style-type: none"> <li><span style="color: green;">■</span> 0 - 1 mg/kg</li> <li><span style="color: yellow;">■</span> 1 - 10 mg/kg</li> <li><span style="color: red;">■</span> 10 - 50 mg/kg</li> <li><span style="color: purple;">■</span> &gt; 50 mg/kg</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: white;">○</span> Non-Detect</li> <li><span style="color: green;">○</span> 0 - 1 mg/kg</li> <li><span style="color: yellow;">○</span> 1 - 10 mg/kg</li> <li><span style="color: red;">○</span> 10 - 50 mg/kg</li> <li><span style="color: purple;">○</span> &gt; 50 mg/kg</li> </ul>	<ul style="list-style-type: none"> <li><span style="background-color: #e0ffe0;">■</span> Non-Hazardous</li> <li><span style="background-color: #e0e0ff;">■</span> TSCA</li> </ul>	<ul style="list-style-type: none"> <li><span style="border-bottom: 1px solid black; width: 20px; display: inline-block;"></span> Pre-Delineated</li> <li><span style="border-bottom: 1px dashed black; width: 20px; display: inline-block;"></span> Not Excavated Due to Sloping</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: yellow;">—</span> Natural Gas</li> <li><span style="color: red;">—</span> Electric</li> <li><span style="color: blue;">—</span> Water</li> <li><span style="color: green;">—</span> Storm Sewer</li> <li><span style="color: black;">—</span> Sheet Pile</li> </ul>

**Notes**  
 "SSHS-" prefix removed from locations.  
 PDI - Predesign Investigation  
 ft bgs - Feet below ground surface  
 Sloping extents are approximate. Actual location to be determined in the field based on field-verified utility locations.  
 Aerial imagery provided by ArcGIS Online.



**Proposed Excavation  
Rear Parking Lot (2-4 ft bgs)**

Former Sperry Remington Site North Portion IRM#2  
Elmira, New York

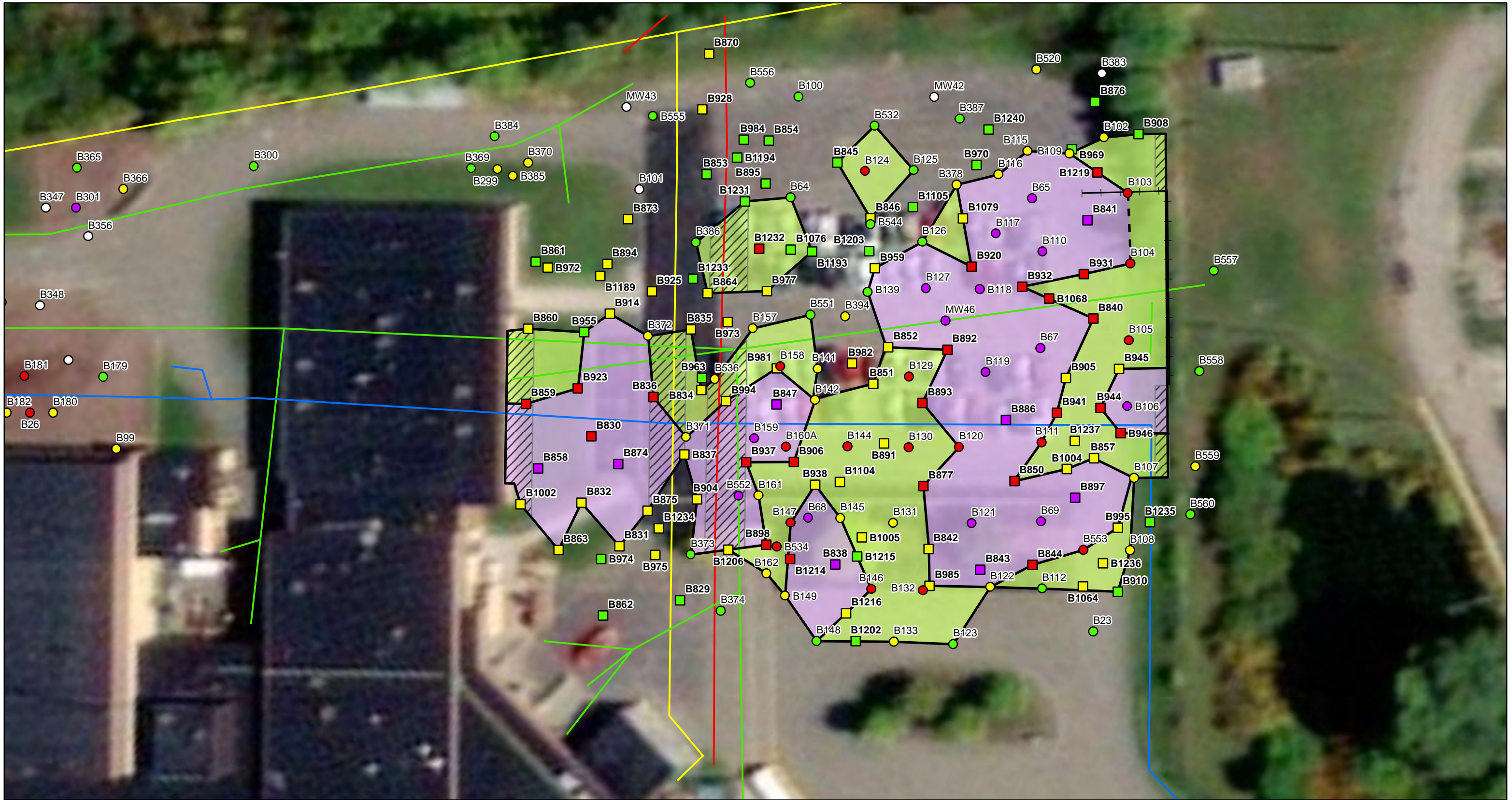
**Beech and Bonaparte**  
engineering p.c.  
*an affiliate of Geosyntec Consultants*

Columbia, Maryland

July 2018

**Figure**

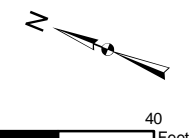
**2**



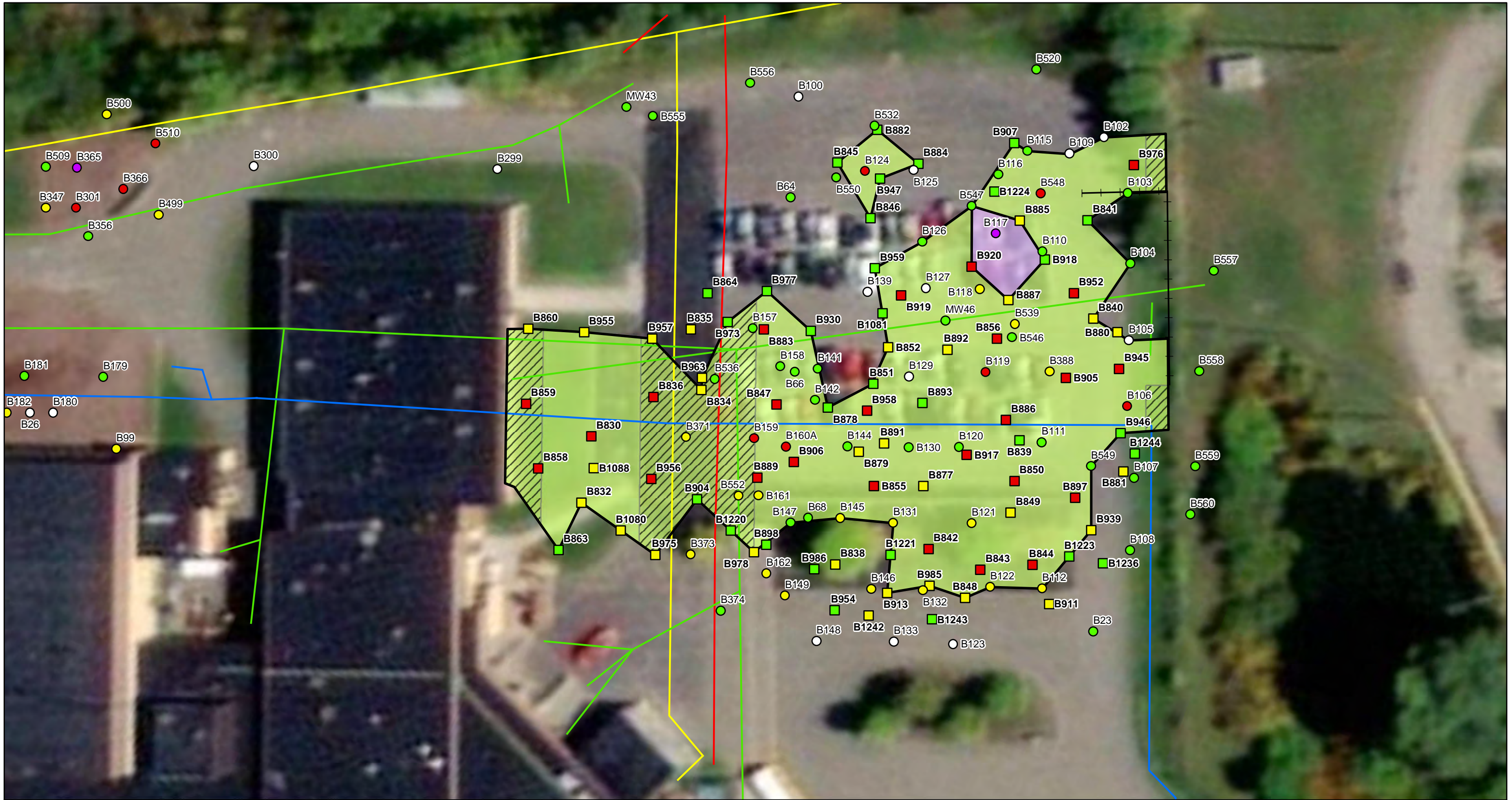
**Legend**

Total PCB Results Soil (2018 PDI)	Total PCB Results Soil (Historic)	Excavation Classification	Pre-Delineated	Utilities
0 - 1 mg/kg	Non-Detect	Non-Hazardous	—	Natural Gas
1 - 10 mg/kg	0 - 1 mg/kg	TSCA	- - -	Electric
10 - 50 mg/kg	1 - 10 mg/kg		▨	Water
> 50 mg/kg	10 - 50 mg/kg			Storm Sewer
	> 50 mg/kg			Sheet Pile

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 Aerial imagery provided by ArcGIS Online.



<b>Proposed Excavation</b> <b>Rear Parking Lot (4-6 ft bgs)</b> Former Sperry Remington Site North Portion IRM#2 Elmira, New York		<b>Figure</b>  <b>3</b>
 an affiliate of Geosyntec Consultants		
Columbia, Maryland	July 2018	



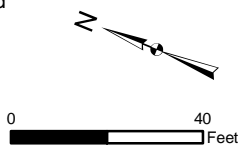
**Legend**

<b>Total PCB Results Soil (2018 PDI)</b> <span style="color: green;">■</span> 0 - 1 mg/kg <span style="color: yellow;">■</span> 1 - 10 mg/kg <span style="color: red;">■</span> 10 - 50 mg/kg	<b>Total PCB Results Soil (Historic)</b> <span style="color: white;">○</span> Non-Detect <span style="color: green;">●</span> 0 - 1 mg/kg <span style="color: yellow;">●</span> 1 - 10 mg/kg <span style="color: red;">●</span> 10 - 50 mg/kg <span style="color: purple;">●</span> > 50 mg/kg	<b>Excavation Classification</b> <span style="background-color: lightgreen;">■</span> Non-Hazardous <span style="background-color: purple;">■</span> TSCA	— Pre-Delineated <span style="border: 1px solid black; display: inline-block; width: 10px; height: 10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px);"></span> Not Excavated Due to Sloping
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**Utilities**

<span style="color: yellow;">—</span>	Natural Gas
<span style="color: red;">—</span>	Electric
<span style="color: blue;">—</span>	Water
<span style="color: green;">—</span>	Storm Sewer
<span style="color: black;">+</span>	Sheet Pile

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 Aerial imagery provided by ArcGIS Online.



**Proposed Excavation Rear Parking Lot (6-8 ft bgs)**

Former Sperry Remington Site North Portion IRM#2  
 Elmira, New York

Beech and Bonaparte  
 engineering p.c.  
 an affiliate of Geosyntec Consultants

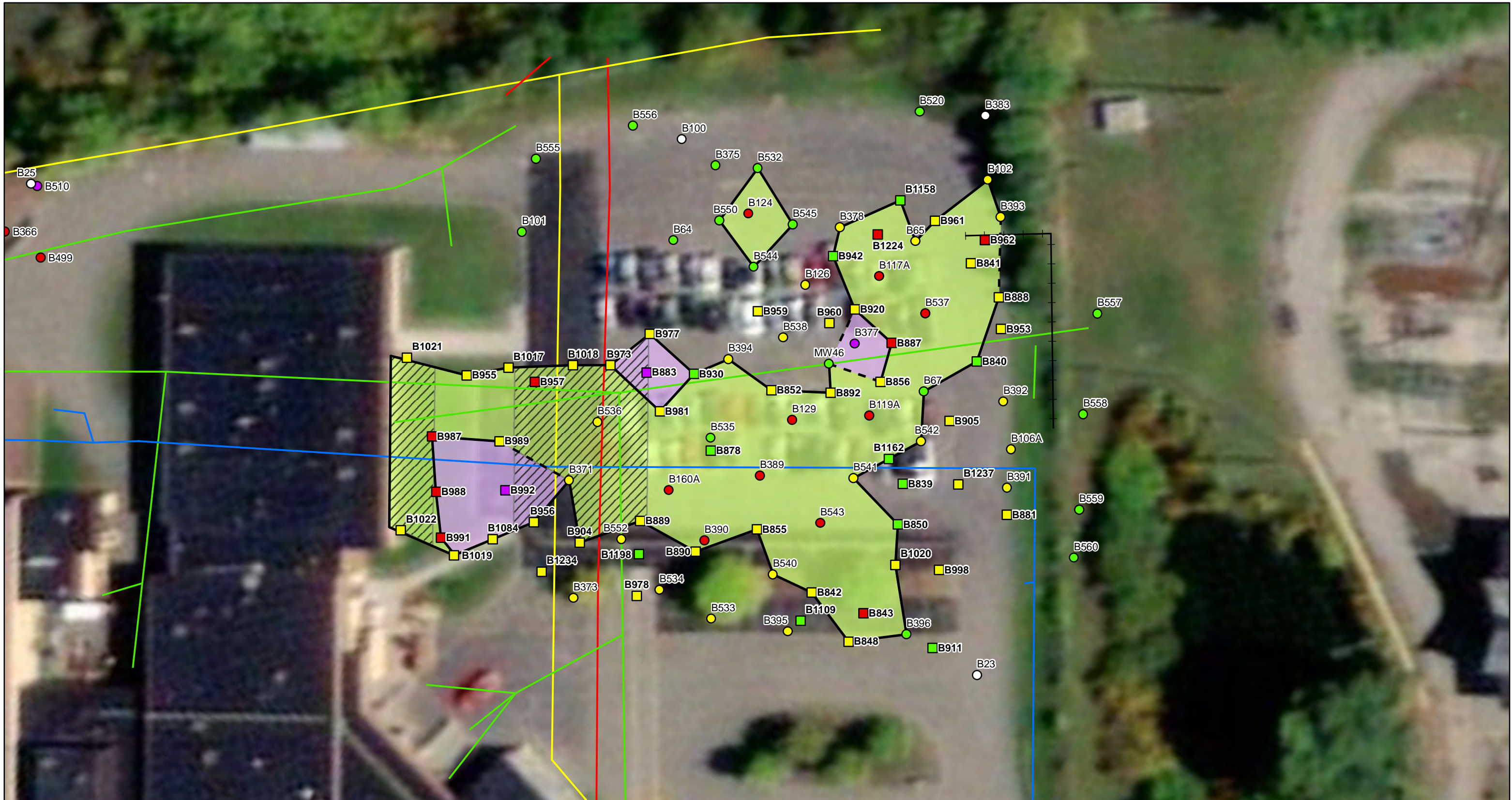
Columbia, Maryland

July 2018

**Figure**

4

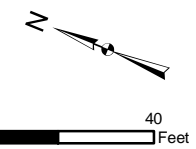




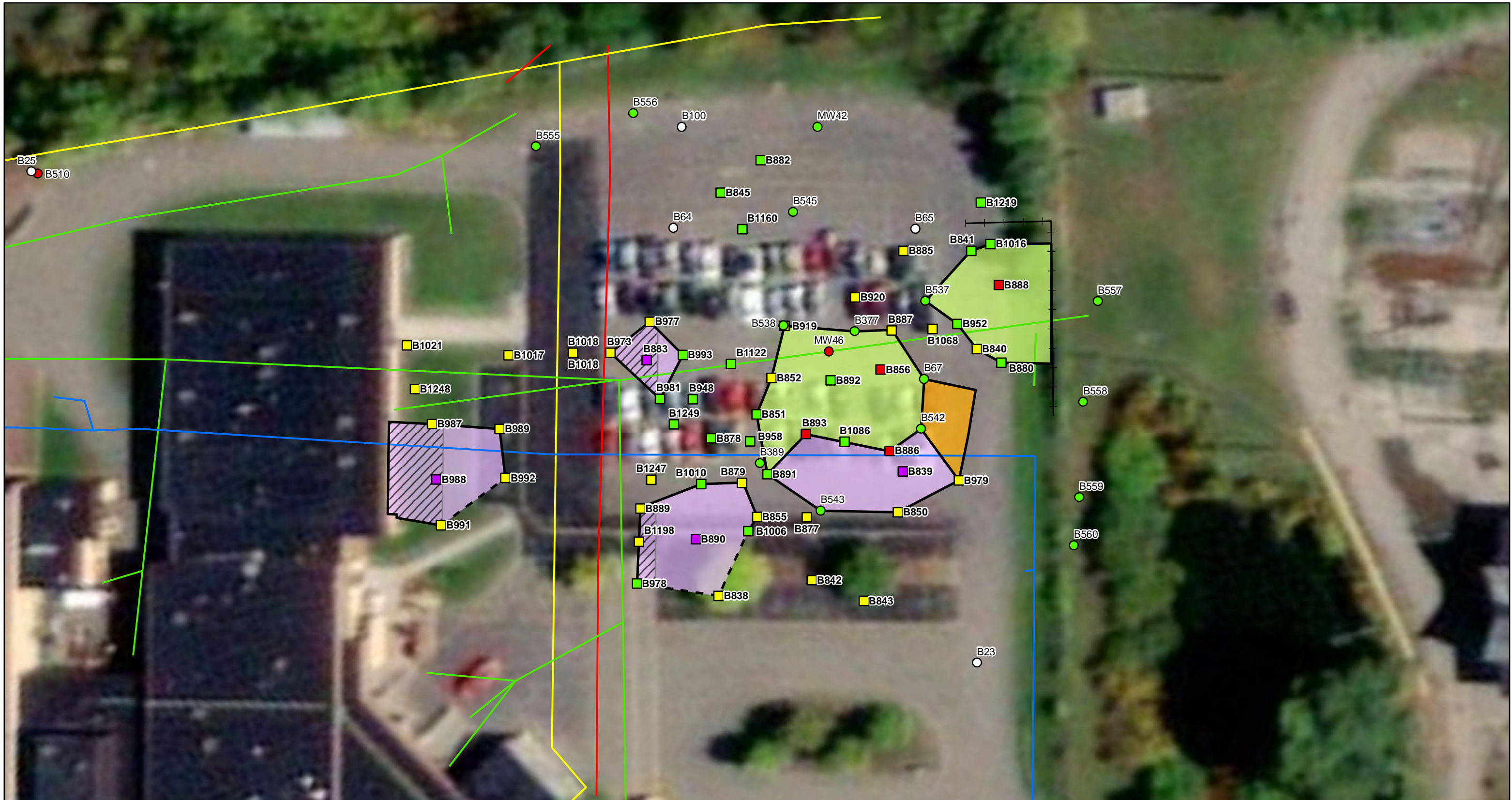
**Legend**

Total PCB Results Soil (2018 PDI)	Total PCB Results Soil (Historic)	Excavation Classification	Pre-Delineated	Utilities
<ul style="list-style-type: none"> <li><span style="color: green;">■</span> 0 - 1 mg/kg</li> <li><span style="color: yellow;">■</span> 1 - 10 mg/kg</li> <li><span style="color: red;">■</span> 10 - 50 mg/kg</li> <li><span style="color: purple;">■</span> &gt; 50 mg/kg</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: black;">○</span> Non-Detect</li> <li><span style="color: green;">○</span> 0 - 1 mg/kg</li> <li><span style="color: yellow;">○</span> 1 - 10 mg/kg</li> <li><span style="color: red;">○</span> 10 - 50 mg/kg</li> <li><span style="color: purple;">○</span> &gt; 50 mg/kg</li> </ul>	<ul style="list-style-type: none"> <li><span style="background-color: lightgreen;">■</span> Non-Hazardous</li> <li><span style="background-color: lightpurple;">■</span> TSCA</li> </ul>	<ul style="list-style-type: none"> <li><span style="border-bottom: 1px solid black; width: 20px; display: inline-block;"></span> Pre-Delineated</li> <li><span style="border-bottom: 1px dashed black; width: 20px; display: inline-block;"></span> Not Pre-Delineated</li> <li><span style="background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); width: 20px; height: 10px; display: inline-block;"></span> Not Excavated Due to Sloping</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: yellow;">—</span> Natural Gas</li> <li><span style="color: red;">—</span> Electric</li> <li><span style="color: blue;">—</span> Water</li> <li><span style="color: green;">—</span> Storm Sewer</li> <li><span style="color: black;">+</span> Sheet Pile</li> </ul>

**Notes**  
 "SSHS-" prefix removed from locations.  
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 ft bgs - Feet below ground surface  
 Sloping extents are approximate. Actual location to be determined in the field based on field-verified utility locations.  
 Aerial imagery provided by ArcGIS Online.



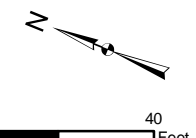
<b>Proposed Excavation Rear Parking Lot (8-10 ft bgs)</b>	
Former Sperry Remington Site North Portion IRM#2 Elmira, New York	
 an affiliate of Geosyntec Consultants	
Columbia, Maryland	July 2018
<b>Figure 5</b>	



**Legend**

<b>Total PCB Results Soil (2018 PDI)</b>	<b>Total PCB Results Soil (Historic)</b>	<b>Excavation Classification</b>	<b>Pre-Delineated</b>	<b>Utilities</b>
0 - 1 mg/kg	Non-Detect	Non-Hazardous	— Pre-Delineated	— Natural Gas
1 - 10 mg/kg	0 - 1 mg/kg	TSCA	- - Not Pre-Delineated	— Electric
10 - 50 mg/kg	10 - 50 mg/kg	Lead	▨ Not Excavated Due to Sloping	— Water
> 50 mg/kg				— Storm Sewer
				— Sheet Pile

**Notes**  
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 Sloping extents are approximate. Actual location to be determined in the field based on field-verified utility locations.  
 Aerial imagery provided by ArcGIS Online.



**Proposed Excavation  
 Rear Parking Lot (10-12 ft bgs)**

Former Sperry Remington Site North Portion IRM#2  
 Elmira, New York

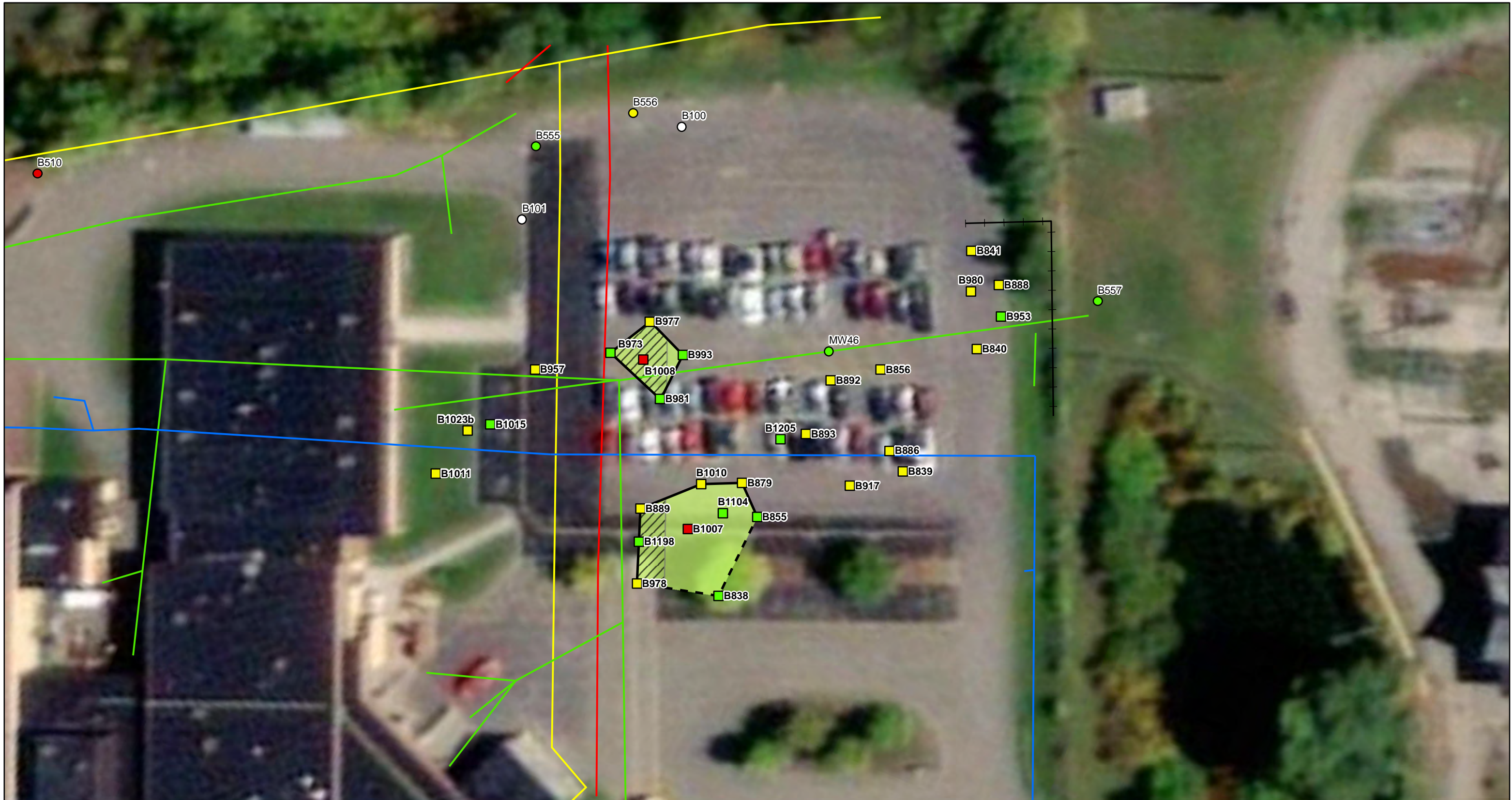
**Beech and Bonaparte**  
 engineering p.c.  
*an affiliate of Geosyntec Consultants*

Columbia, Maryland

July 2018

**Figure**

**6**



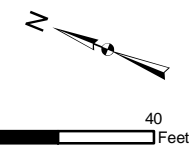
**Legend**

Total PCB Results Soil (2018 PDI)	Total PCB Results Soil (Historic)	Excavation Classification
0 - 1 mg/kg	Non-Detect	Non-Hazardous
1 - 10 mg/kg	0 - 1 mg/kg	
10 - 50 mg/kg	1 - 10 mg/kg	
	10 - 50 mg/kg	

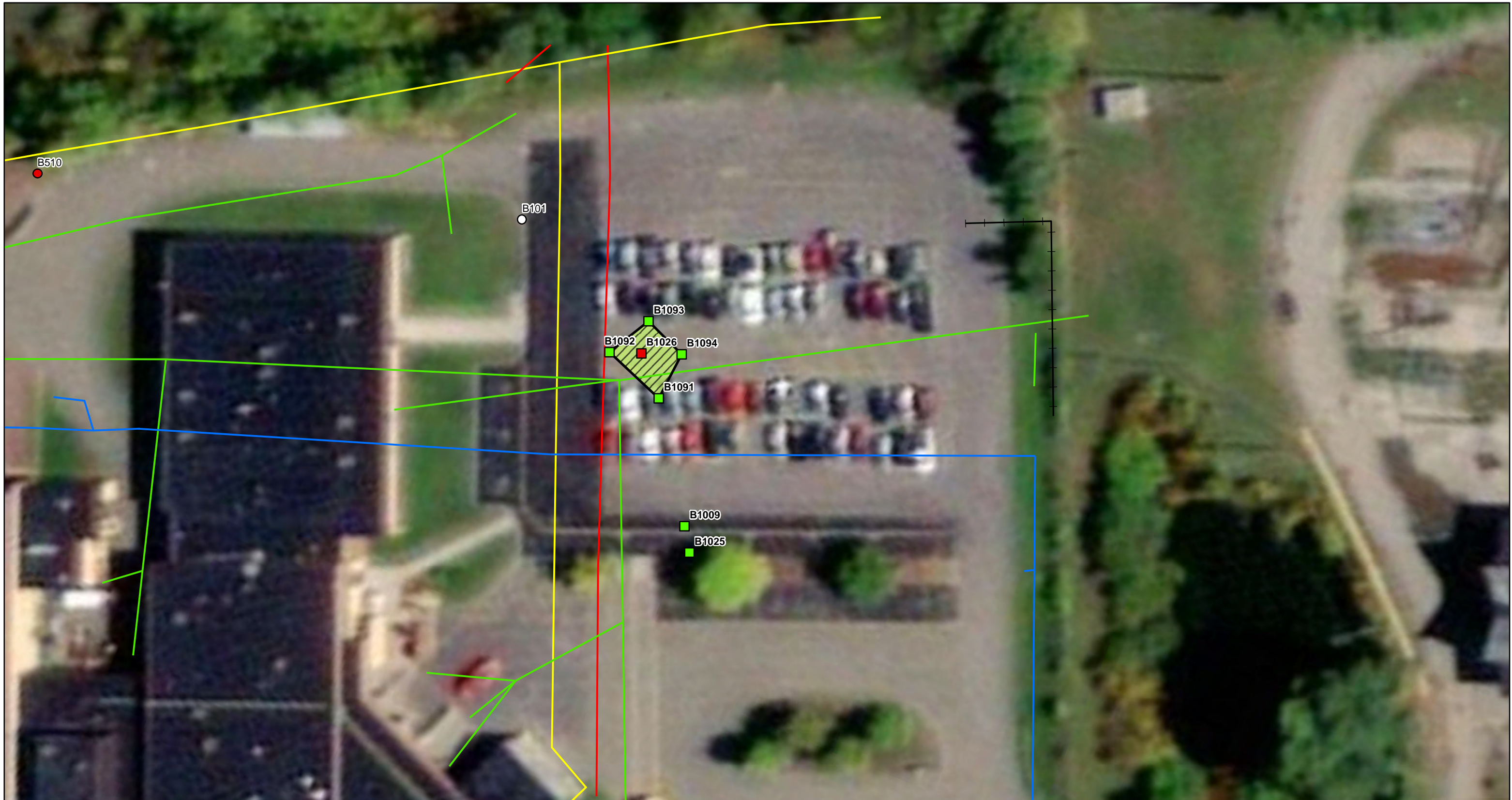
Utilities
Natural Gas
Electric
Water
Storm Sewer
Sheet Pile

Pre-Delineated	Not Pre-Delineated	Not Excavated Due to Sloping

**Notes**  
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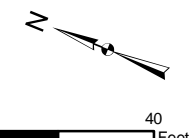
<b>Proposed Excavation</b> <b>Rear Parking Lot (12-14 ft bgs)</b> Former Sperry Remington Site North Portion IRM#2 Elmira, New York	
 <i>an affiliate of Geosyntec Consultants</i>	
Columbia, Maryland	July 2018
Figure 7	



**Legend**

- |  |  |   |  |
|--|--|---|--|
| <b>Total PCB Results Soil (2018 PDI)</b>   | <b>Total PCB Results Soil (Historic)</b>   | <b>Excavation Classification</b>  | <b>Utilities</b>   |
| <ul style="list-style-type: none"> <li><span style="color: green;">■</span> 0 - 1 mg/kg</li> <li><span style="color: red;">■</span> 10 - 50 mg/kg</li> </ul> | <ul style="list-style-type: none"> <li><span style="border: 1px solid black; border-radius: 50%; padding: 2px;">○</span> Non-Detect</li> <li><span style="color: red;">●</span> 10 - 50 mg/kg</li> </ul> | <ul style="list-style-type: none"> <li><span style="background-color: lightgreen; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Non-Hazardous</li> <li><span style="border: 1px solid black; border-style: dashed; display: inline-block; width: 15px; height: 10px;"></span> Not Excavated Due to Sloping</li> </ul> | <ul style="list-style-type: none"> <li><span style="color: yellow;">—</span> Natural Gas</li> <li><span style="color: red;">—</span> Electric</li> <li><span style="color: blue;">—</span> Water</li> <li><span style="color: green;">—</span> Storm Sewer</li> <li><span style="border-top: 1px solid black; width: 10px; display: inline-block;"></span> Sheet Pile</li> </ul> |

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 Aerial imagery provided by ArcGIS Online.



<p><b>Proposed Excavation</b>  <b>Rear Parking Lot (14-16 ft bgs)</b></p> <p>Former Sperry Remington Site North Portion IRM#2          Elmira, New York</p>	
<p><b>Beech and Bonaparte</b>          engineering p.c.</p> <p><small>an affiliate of Geosyntec Consultants</small></p>	
<p>Columbia, Maryland</p>	<p>July 2018</p>
<p><b>Figure</b> <b>8</b></p>	