



OFFICE: 1167 Hobson Mill Drive, Naperville, IL 60540

PHONE (630) 606-0776

Total # of Pages: 46

ADDENDUM #: 1

PROJECT: 2023 Athens Park Development

PREPARED BY: Tod Stanton

DATE PREPARED: 10/5/2023

COPIES TO: Registered Plan Holders

OWNER: Lemont Park District

The Park District requests that only registered plan holders contact Design Perspectives for questions and concerns regarding this project. Please sign the Addendum section in the Project Manual as acknowledgement of this Addendum.

NOTE: The following items are clarifications or modifications to the bid documents. Please replace the old bid form pages with the new ones provided in this Addendum

ITEM #1 Clarification: Vinyl Coated Chain Link Coated Steel Wire

The industry standard of zinc coated steel wire is approved to be used as a substitution to aluminized chain link fence that is listed in the specification.

ITEM #2 Modification: Bid Form Item F. 1 Parking Lot Construction Drive Paving

The bid item has been revised with the drive and parking lot asphalt paving with the Standard & Heavy-Duty Paving broken out as separate bid items.

ITEM #3 Clarification: Civil CAD Files

The Grading CAD File has been provided. The use of this information in this file is at your discretion.

ITEM #4

Clarification: Type 202 Asphalt Paving (Park Pathway)

The asphalt paving depth is 3". The stone depth is 8".

ITEM #5

Clarification: Soils Report

An older soils report has been provided. The use of this information in this file is at your discretion.

ITEM #6

Clarification: Item C. Site Remediation

The scope of work/performance specification has been generated as illustrated below.

Product Recovery System

In the area indicated in architectural site plan, provide a complete product recovery system consisting of the items below. Contract is for materials and installation only. Future monitoring and maintenance are by others.

- 10'x10' premanufactured roofed enclosure with pair of 3'-0" 7'-0" doors with locking latch bolts and padlock hasp.
- 4" poured in place concrete slab with welded wire mesh on 4" compacted stone fill.
- (4), 4" diameter well casings, with wells screened from 5'-20' below ground surface within 30' radius of centralized storage shed.
- Recovery system to be a Solar Sipper Build inclusive but not limited to the items below.
 - Recovery pump lines to run below new grade surface from recovery well to central pump. Allow 50' feet of tubing from each well.
 - Recovery pump with automated shut off systems at each well location.
 - Solar Sipper pump system to power central pump at pump enclosure
- *Solar Sipper System provider
 - Geotech Environmental Equipment, Inc.
 - www.geotechenv.com

ITEM #7

Clarification: Item M. 1 Bandshell

The structure can be fabricated by a manufacturer as a kit of parts to be installed but must match exactly the architectural plans.

ITEM #8

Clarification: Bid Form Item D – Grading & Drainage - Structural Fill

The contractor needs to provide all structural fill to fulfill the grading requirements of the project. Please see Civil Plans. The Park District will provide the topsoil to fulfill the grading requirements of the project.

Contractor Soils/Aggregate Summary:

The soils and aggregate for the proposed work are depicted on plan sheets C0.3 and C0.4 and are comprised of following items:

- Non-Structural fill – In-situ soils or Imported soil for lawn/landscape areas consisting of MWRD biosolids, topsoil, SM (silty sand, sand-silt mixtures), SC (Clayey sands, sand-clay mixtures), ML (inorganic silts, very fine sands, rock flour, silty or clayey fine sands), or CL (Inorganic clays of low to medium plasticity, gray clays, sandy clays, silty clays, lean clays).
- Structural Fill – Imported fill for areas under structures or pavements consisting of SM (silty sand, sand-silt mixtures), SC (Clayey sands, sand-clay mixtures), ML (inorganic silts, very fine sands, rock flour, silty or clayey fine sands), or CL (Inorganic clays of low to medium plasticity, gray clays, sandy clays, silty clays, lean clays). Drainage or Fill Aggregates may also be used for structural fill.
- Drainage Aggregate - Naturally or artificially graded mixture of washed stone or washed crushed gravel or uncrushed gravel conforming to State of Illinois, Department of Transportation Gradation CA-7, or VecoBase engineering fill aggregates.
- Fill Aggregate - Naturally or artificially graded mixture of washed stone or washed crushed gravel or uncrushed gravel conforming to State of Illinois, Department of Transportation Gradation CA-1 or CA-7.

ITEM #9

Modification: Item Q – Wetland Soil Mix

The wetland seed soil shall be a sandy topsoil blend (60% sand, 25% topsoil, 10% clay and 5% pea gravel) a 6" layer of sandy topsoil shall be mixed with a 2" layer of decomposed compost to establish the 8" layer of amended sandy topsoil layer with filter fabric separator for the wetland seed areas.

ITEM #10

Clarification: Type 204 Artificial Turf

K9 Grass Classis by Forever Lawn is an approved equal.

Contact Justin @ 920-901-0361
justin@chicago.foreverlawn.com

ITEM #11

Modification: Gates

The double maintenance gates will not be self-closing and self-latching.

The single-entry gates only need to self-closing. The materials should be heavy duty, commercial grade gate hinges.

ITEM #12

Clarification: 4' High Fencing

All fencing will have a bottom rail.

ITEM #13

Modification: Bid Form Item O.2 General Fencing Construction Double Gate

The quantity has been changed to 3.

ITEM #14

Clarification: Testing & Inspections

All testing and inspections are the responsibility of the contractor.

ITEM #15

Clarification: Contract

The contract will be an AIA document.

ITEM #16

Modification: Tree Removals

The Owner will not remove the trees as previously indicated. Please include in your demolition & removals lump sum price the removal of trees in the project area. Please see the updated bid form.

ITEM #17

Clarification: Truncated Domes

All truncated domes will be installed in concrete.

ITEM #18

Modification: Bid Form Item F. 3 Curb & Gutter

The bid item has been revised with the B6.12 Curb & Gutter with the different Barrier Curb Types and Flush Paver Curb broken out as separate bid items.

B. PROPOSAL

PROPOSAL FORM – 2023 ATHENS PARK DEVELOPMENT

Sealed Bids shall be received on or before 2:00 pm, Thursday, October 19, 2023 at the Centennial Community Center, 16028 127th Street, Lemont, IL 60439.

ATHENS PARK

Item	Description	Approx. Quantity	Unit	Unit Price	Subtotal
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A. MOBILIZATION & PROJECT START UP

1. Project & site mobilization including all construction staking, temporary bathroom, plastic construction fence in general work areas, metal construction fence at playground area and bond costs.

For Completing Mobilization & Project Start Up Item 1 Lump Sum _____

B. DEMOLITION & REMOVALS

1. Remove all items including all footings, misc. site elements, wells, concrete walks, curbing and footings, asphalt paving & aggregate base, **tree clearing/removal, stumps grinding/removal & all organic debris removal**, fencing and any other incidental items as shown and/or noted on Plans. Haul off and legally dispose of materials from the site.

For Completing Demolition & Removals Item 1 Lump Sum _____

C. SITE REMEDIATION

1. Cut, fill and abandon existing monitoring wells as identified on drawings and per the requirements indicated.
2. Cut, modify and cap existing monitoring wells as identified and per requirements indicated to accommodate new site grading
3. Provide new product removal system as indicated on plans, including new wells, monitoring shed, pumps, piping and solar system.

For Completing Site Remediation Items 1, 2 & 3 Lump Sum _____

D. GRADING

1. Strip and stockpile all useable topsoil encountered during grading operations. Topsoil will be used to fulfill the requirements of this project.

Item	Description	Approx. Quantity	Unit	Unit Price	Subtotal
12.	Dry Well Inlet	17	EA	_____	_____
13.	Storm Manhole 4' Dia. with Outlet Control Structure	1	EA	_____	_____
14.	12" Flared End Section With Grate	2	EA	_____	_____
15.	OBS Well/Cleanouts	3	EA	_____	_____
16.	Wye Connections	2	EA	_____	_____
17.	Rip Rap	1	LS	_____	_____
F.	PARKING LOT CONSTRUCTION				
1a.	Standard Duty Asphalt Pavement (Stone Base, Binder & Surface Course) (Drive & Parking Lot)	1,280	SY	_____	_____
1b.	Heavy Duty Asphalt Pavement (Stone Base, Binder & Surface Course) (Drive Parking Lot)	3,300	SY	_____	_____
2.	Permeable Pavers Pavement (Parking Lot)	10,250	SF	_____	_____
3a.	6" Barrier Curb	1,450	LF	_____	_____
3b.	Depressed 6" Barrier Curb	130	LF	_____	_____
3c.	Depressed Flush Permeable Pavers Curb	570	LF	_____	_____
4.	Asphalt Paving Path Connector	150	SY	_____	_____
5.	Type 201 5" Concrete Paving (Parking Lot)	4,720	SF	_____	_____
6.	Parking Lot Pavement Striping	1	LS	_____	_____
7.	Parking Lot Signs & Posts	1	LS	_____	_____
8.	Furnish & Install Truncated Domes	1	LS	_____	_____
9.	Furnish & Install Bollards	4	EA	_____	_____

Item	Description	Approx. Quantity	Unit	Unit Price	Subtotal
6.	Install Only Litter Can Surface Mount	1	EA	_____	_____
7.	Install Only Standard 4 Seat Picnic Table SiteScapes Surface Mount	1	EA	_____	_____
8.	Install Only ADA 3 Seat Picnic Table SiteScapes Surface Mount	1	EA	_____	_____
9.	Install Only Solar Umbrella SiteScapes	2	EA	_____	_____

M. BANDSHELL CONSTRUCTION

1. Furnish & install complete bandshell construction as shown on plans to fulfill the intent of the plans, specifications and details. (See Architectural & Structural Plans)

For Completing Bandshell Construction Item 1

Lump Sum _____

N. SITE ELECTRICAL CONSTRUCTION

1. Furnish & install electrical work to include the installation of all fixtures, poles, feeders, circuits, controls, and miscellaneous appurtenances to fulfill the intent of the plans, specifications and details.

For Completing Site Electrical Construction Item 1

Lump Sum _____

O. GENERAL FENCING CONSTRUCTION

1.	Furnish & Install 4' Vinyl Coated Chain Link Fence (Boundary)	1,600	LF	_____	_____
2.	Furnish & Install 4' Black Vinyl Coated Line Fence Double Gate (12' Opening)	3	EA	_____	_____

Item	Description	Approx. Quantity	Unit	Unit Price	Subtotal
38.	Furnish & Install Wetland Zone C Seed Mix with Blanket (PRA8)	12,500	SF	_____	_____
39.	Furnish & Install Custom Forest Seed Mix with Blanket (PRA9)	2,800	SF	_____	_____
40.	Spread Bio-Solids Provided By Park District	1	LS	_____	_____
41.	Furnish & Install Wetland Soil Mix	1	LS	_____	_____
R.	GENERAL CONSTRUCTION				
1.	Unsuitable Soil Conditions Removal & Install 3" Rock (Allowance to be Credit Back to Owner Any Unused Portion)	150	CY	_____	_____
2.	Owner Project Allowance (Allowance to be Credit Back to Owner Any Unused Portion)	1	LS	\$75,000	\$75,000
3.	Preparation of SWPPP manual & all site inspections per MWRD permit requirements	1	LS	_____	_____
4.	Preparation of All Documents For MWRD RFI permit closeout including As-Built Construction Plans & Volume Calculations	1	LS	_____	_____
5.	Preparation of Topo Survey After Construction	1	LS	_____	_____

ATHENS PARK – BASE BID

\$_____



SOIL AND MATERIAL CONSULTANTS, INC.

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www.soilandmaterialconsultants.com
us@soilandmaterialconsultants.com

January 31, 2013
File No. 20897

Mr. Ben Wehmeier, Village Administrator
Village of Lemont
418 Main Street
Lemont, IL 60439

Re: Geotechnical Investigation
Lemont Sports Complex
Tri-Central Parcel
Lemont, Illinois

Dear Mr. Wehmeier:

The following is our report of findings for the geotechnical investigation completed for the proposed Lemont Sports Complex located at Tri-Central Parcel in the Village of Lemont, Illinois.

The investigation was requested to determine current subsurface soil and water conditions at select boring locations. The findings of the field investigation and the results of laboratory testing are intended to assist in the planning, design and construction of proposed site improvements.

PROPOSED IMPROVEMENTS

We understand it is proposed to construct a sports complex building on the south portion of the property just west of Lemont Road. The new building is expected to consist of precast wall panels and be supported on shallow depth foundations. Interior slabs will be supported on prepared subgrade soils with a proposed finished floor elevation of 594.70 feet. Improvements exterior to the building are expected to include pavement areas, sidewalks and related underground improvements.

SCOPE OF THE INVESTIGATION

The field investigation included obtaining 28 borings at the locations requested and as indicated on the enclosed sketch. The boring locations were established using field taping methods and accuracy. Surface elevations were estimated to the nearest foot using the data presented on the topographic survey, Sheet C101 dated January 16, 2013, performed by GRAEF.

We auger drilled the borings to refusal which ranged from 0.0 feet to 4.0 feet below the existing surface elevations. Soil samples were obtained using a split barrel sampler advanced utilizing an automatic SPT hammer. Soil profiles were determined in the field and soil samples returned to our laboratory for additional testing including determination of moisture content. The results of all field determinations and laboratory testing are included in summary with this report.

8 WEST COLLEGE DRIVE • ARLINGTON HEIGHTS, IL 60004

SOIL BORINGS • SITE INVESTIGATIONS • PAVEMENT INVESTIGATIONS • GEOTECHNICAL ENGINEERING
TESTING OF • SOIL • ASPHALT • CONCRETE • MORTAR • STEEL

RESULTS OF THE INVESTIGATION

Enclosed are boring logs indicating the soil conditions encountered at each location. Site surface conditions include vegetation, pavement materials, debris, and fill soil conditions.

Fill soil conditions were encountered overlying bedrock at each of the boring locations with the exception of borings 18, 24 and 27 where the bedrock was present at the surface. Composition of the fill includes the presence of topsoil fill and uncontrolled sand/gravel, crushed limestone, silt/clay/sand/gravel, sand/limestone and silt/sand/gravel mixtures extending to depths of 0.5 feet to 4.0 feet at these boring locations. The topsoil fill is classified as black to brown silt/clay mixtures with traces of sand, gravel, and roots usually present. The limits of fill placement were not determined within the scope of this investigation.

The top of bedrock was encountered at depths of 0.0 feet to 4.0 feet below the existing surface elevations. The upper portion of bedrock at location 18 was weathered to allow power auger drilling to refusal at 1.0 feet below the surface. Refusal was encountered almost immediately at the other locations. It should be noted any excavation below the top of bedrock will be very difficult.

The following table summarizes depth ranges below existing grade, the magnitude of soil strength within these ranges and other information:

<u>Boring</u>	<u>Surface Elevation (feet)</u>	<u>Top of Bedrock Elevation (feet)</u>	<u>Depth Range Below Existing Surface (feet)</u>	<u>Soil Strength (lbs./sq.ft.)</u>	<u>Recorded Water Levels, W.D./A.D. (feet)</u>
1	591	587	0.0 to 4.0 Below 4.0	*none 10,000	dry/dry
2	588	585.5	0.0 to 2.5 Below 2.5	*none 10,000	dry/dry
3	588	586	0.0 to 2.0 Below 2.0	*none 10,000	dry/dry
4	587	585.5	0.0 to 1.5 Below 1.5	*2,000 10,000	0.5/0.5
5	587	584.5	0.0 to 2.5 Below 2.5	*2,000 10,000	1.5/1.5
6	588	587	0.0 to 1.0 Below 1.0	*2,000 10,000	dry/dry

<u>Boring</u>	<u>Surface Elevation (feet)</u>	<u>Top of Bedrock Elevation (feet)</u>	<u>Depth Range Below Existing Surface (feet)</u>	<u>Soil Strength (lbs./sq.ft.)</u>	<u>Recorded Water Levels, W.D./A.D. (feet)</u>
7	587	585.5	0.0 to 1.5 Below 1.5	*2,000 10,000	dry/dry
8	587	584.5	0.0 to 2.5 Below 2.5	*2,000 10,000	dry/dry
9	588	586	0.0 to 2.0 Below 2.0	*2,000 10,000	1.0/1.0
10	587	585.7	0.0 to 1.3 Below 1.3	*2,000 10,000	dry/dry
11	588	587.3	0.0 to 0.7 Below 0.7	*2,000 10,000	dry/dry
12	589	587	0.0 to 2.0 Below 2.0	*2,000 10,000	1.0/1.0
13	590	587.7	0.0 to 0.5 0.5 to 2.3 Below 2.3	*none *2,000 10,000	2.0/2.0
14	589	588.5	0.0 to 0.5 Below 0.5	*2,000 10,000	dry/dry
15	588	586.7	0.0 to 1.3 Below 1.3	*2,000 10,000	dry/dry
16	589	588.5	0.0 to 0.5 Below 0.5	*2,000 10,000	dry/dry
17	588	587	0.0 to 1.0 Below 1.0	*2,000 10,000	0.5/0.5
18	589	589	0.0 to 1.0 Below 1.0	3,000 10,000	dry/dry
19	589	587.5	0.0 to 1.5 Below 1.5	*2,000 10,000	dry/dry

<u>Boring</u>	<u>Surface Elevation (feet)</u>	<u>Top of Bedrock Elevation (feet)</u>	<u>Depth Range Below Existing Surface (feet)</u>	<u>Soil Strength (lbs./sq.ft.)</u>	<u>Recorded Water Levels, W.D./A.D. (feet)</u>
20	589	587	0.0 to 2.0 Below 2.0	*2,000 10,000	dry/dry
21	588	586.7	0.0 to 1.3 Below 1.3	*2,000 10,000	0.0/0.0
22	588	586.7	0.0 to 1.3 Below 1.3	*2,000 10,000	0.0/0.0
23	589	587.7	0.0 to 1.3 Below 1.3	*2,000 10,000	0.25/0.25
24	588	588	Below 0.0	10,000	dry/dry
25	589	588	0.0 to 1.0 Below 1.0	*2,000 10,000	0.0/0.0
26	588	587.5	0.0 to 0.5 Below 0.5	*2,000 10,000	0.0/0.0
27	588	588	Below 0.0	10,000	dry/dry
28	589	588.3	0.0 to 0.7 Below 0.7	*2,000 10,000	0.0/0.0

* Not recommended for support of foundations.
 Note: Surface and top of bedrock elevations are approximate.

It is expected that foundations can be supported on the bedrock or properly placed and compacted structural fill. The existing soils in the noted ranges are not considered able to support foundations, even at reduced design bearing values, due to long-term settlement considerations.

FOUNDATIONS

The presence of uncontrolled fill soils along with the proposed foundation elevations indicate a building pad should be constructed prior to excavating for building foundations. This site preparation is necessary to establish adequate support for foundations and floor slabs. The procedure should include removal of unsuitable surface conditions including vegetation, fill soils, pavement materials, and other deleterious conditions to the top of bedrock. Variations in the depth of removal can be expected due to fill soils and naturally changing bedrock

elevations. The soil removal should extend beyond the outside edge of exterior foundation wall footings to a distance at least equal to the depth of fill that will be present beneath the footings.

Structural fill should be placed on the prepared subgrade in lifts not to exceed 8.0 inches when uncompacted. Each lift should exceed the minimum compaction requirement prior to placement of the next lift. We recommend a minimum of 95% compaction based on the modified proctor test, ASTM D-1557. If high soil moisture content prevents achieving minimum compaction requirements then it will be necessary to disc and aerate the soil. Compaction requirements also apply to backfill placement around foundations and within trench excavations located below subgrade supported improvements.

When the building pad has been prepared according to the above procedures continuous and isolated footing foundations may be considered for support of building loads. These foundations can be supported on the bedrock or the properly placed and compacted structural fill. A net allowable bearing value of 3,000 lbs./sq.ft. is available for design of foundations supported on the structural fill. This value can be used to size foundations for support of structure dead and live loads. Increased bearing values are available at bedrock elevations. The feasibility of using a higher value is best determined after our review of proposed foundation details and elevations.

All exterior building foundations should extend at least 42.0 inches below exposed surface elevations to provide adequate protection against uplift due to freezing of the supporting soils. Foundations for unprotected improvements should extend at least 48.0 inches below exposed surface elevations. We recommend providing adequate reinforcing steel in foundation walls and piers to minimize the effects of long-term differential settlement.

FLOOR SLABS

Floor slabs planned for support on the existing fill soil conditions are expected to undergo excessive long-term settlement as the soils consolidate under loading and as they shrink due to desiccation. Slabs may be considered for support on the bedrock or properly placed and compacted fill soils. This is feasible when the soils supporting the slabs are prepared in accordance with the recommendations for Subgrade Soil Preparation.

SUBSURFACE WATER

The boring logs and the above table indicate the depth at which subsurface water was encountered in the bore holes at the time of the drilling operations and during the period of these readings. It is expected that fluctuations from the water levels recorded will occur over a period of time due to variations in rainfall, temperature, subsurface soil conditions, soil permeability and other factors not evident at the time of the water level measurements.

DEWATERING

Excavations may require dewatering due to subsurface water seepage and/or surface precipitation. This water can be removed by standard sump and pump operations. Soils

exposed at foundation, slab or undercut elevations should not be permitted to become saturated. Loss of bearing strength and stability may occur thus requiring additional soil excavation.

Fill soils, non-cohesive soils and others can be unstable when saturated. These soils tend to cave or run when submerged or disturbed. The stability of exposed embankments is minimal to non-existent as confining soil pressures are removed. Proper drainage within excavations is necessary at all times, particularly when excavations extend below anticipated water levels and below saturated soils.

The contractor should be made responsible for designing and constructing stable temporary excavations. Also, the contractor should shore, slope, bench or restrain the sides of the excavations as required to maintain stability of both the excavation sides and bottom. In no case, should the slope, slope heights, or excavation depth exceed those in the local, state, and federal safety regulations.

SUBGRADE SOIL PREPARATION

The procedure in all areas of subgrade supported improvements should include the removal of unsuitable surface conditions including vegetation, unsuitable fill soils, significant debris, and other deleterious conditions which may be encountered. Above grade areas should be cut to design subgrade elevations. Exposed subgrade soils should be leveled, compacted and proof-rolled in the presence of the Soil Engineer. Proof-rolling may reveal areas of unstable soil conditions, requiring additional removal. If areas of the existing crushed limestone fill are found to be unstable this material can likely be aerated and re-compacted with a large vibratory roller.

Structural fill can be placed on soils prepared to the satisfaction of the Soil Engineer. The fill should be placed in lifts not to exceed 8.0 inches when uncompacted. Each lift should exceed minimum compaction requirements prior to placement of the next lift. We recommend a minimum of 95% compaction based on the modified Proctor test, ASTM D-1557, be achieved within building areas. A minimum of 90% compaction should be achieved beneath exterior improvements such as pavements and sidewalks. Compaction requirements also apply to backfill placement around foundations and within trench excavations located below subgrade supported improvements.

FILL SOURCES

There is very little onsite non-organic soils suitable for reuse as fill. Offsite sources will be necessary to construct the building pad and should be approved in advance by the Soil Engineer. Aeration may be necessary to reduce soil moisture content prior to compaction. Soil borrowed from near the surface where seasonal fluctuations in soil moisture content occur may require particular attention. The moisture content of fill soils should be within approximately 3.0% of optimum moisture content as determined by the modified Proctor test for the soils to meet or exceed minimum compaction requirements.

SEISMIC DESIGN CONSIDERATIONS

A soil Site Class C has been determined for seismic design based on Table 1613.5.2 of the 2009 International Building Code. By definition, Site Class is based on the average properties of subsurface materials to a depth of 100 feet below the ground surface. Since 100-foot-deep test borings were not performed on the project, it was necessary to estimate the subsurface conditions below the exploration depths based on the test borings and our experience with the soils in this area.

CONCLUSION

The information within this report is intended to provide initial information concerning subsurface soil and water conditions on the site. Variations in subsurface conditions are expected to be present between boring locations due to naturally changing and filled soil conditions.

Our understanding of the proposed improvements is based on limited information available to us at the writing of this report. The findings of the investigation and the recommendations presented are not considered applicable to significant changes in the scope of the improvements or applicable to alternate site uses. We recommend that proposed foundation, pavement and grading plans be reviewed by our office to determine if additional considerations are necessary to address anticipated subsurface conditions.

The soils exposed in soil undercut areas should be evaluated for suitability prior to placement of structural fill, as previously indicated in this report. Soils and aggregates placed as structural fill should be tested as the work progresses to verify that minimum compaction requirements have been met. We recommend that soil conditions encountered at foundation elevations be tested to verify the presence of design soil strength prior to concrete placement.

If you have any questions concerning the findings or recommendations presented in this report, please let me know.

Very truly yours,

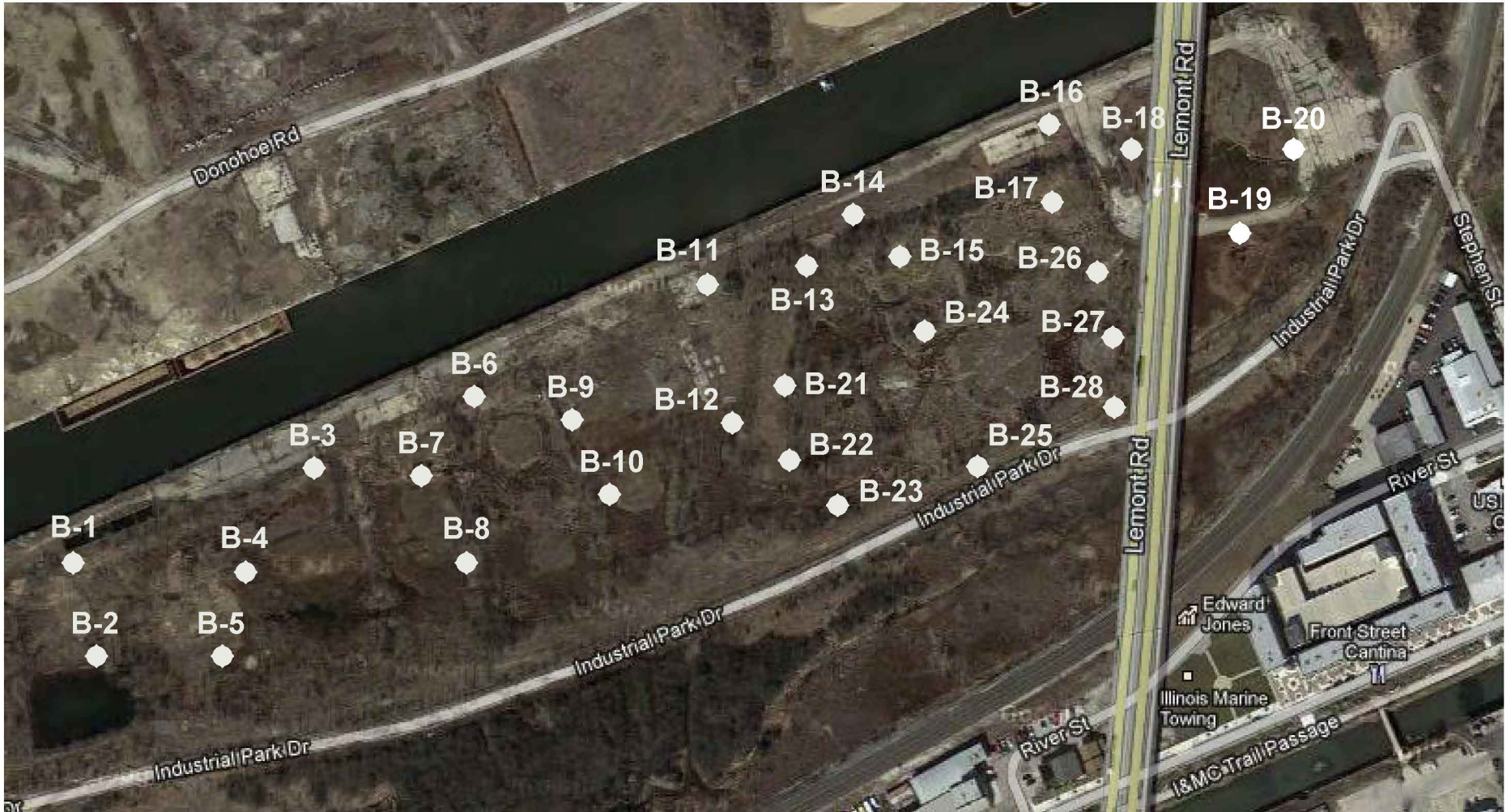
SOIL AND MATERIAL CONSULTANTS, INC.



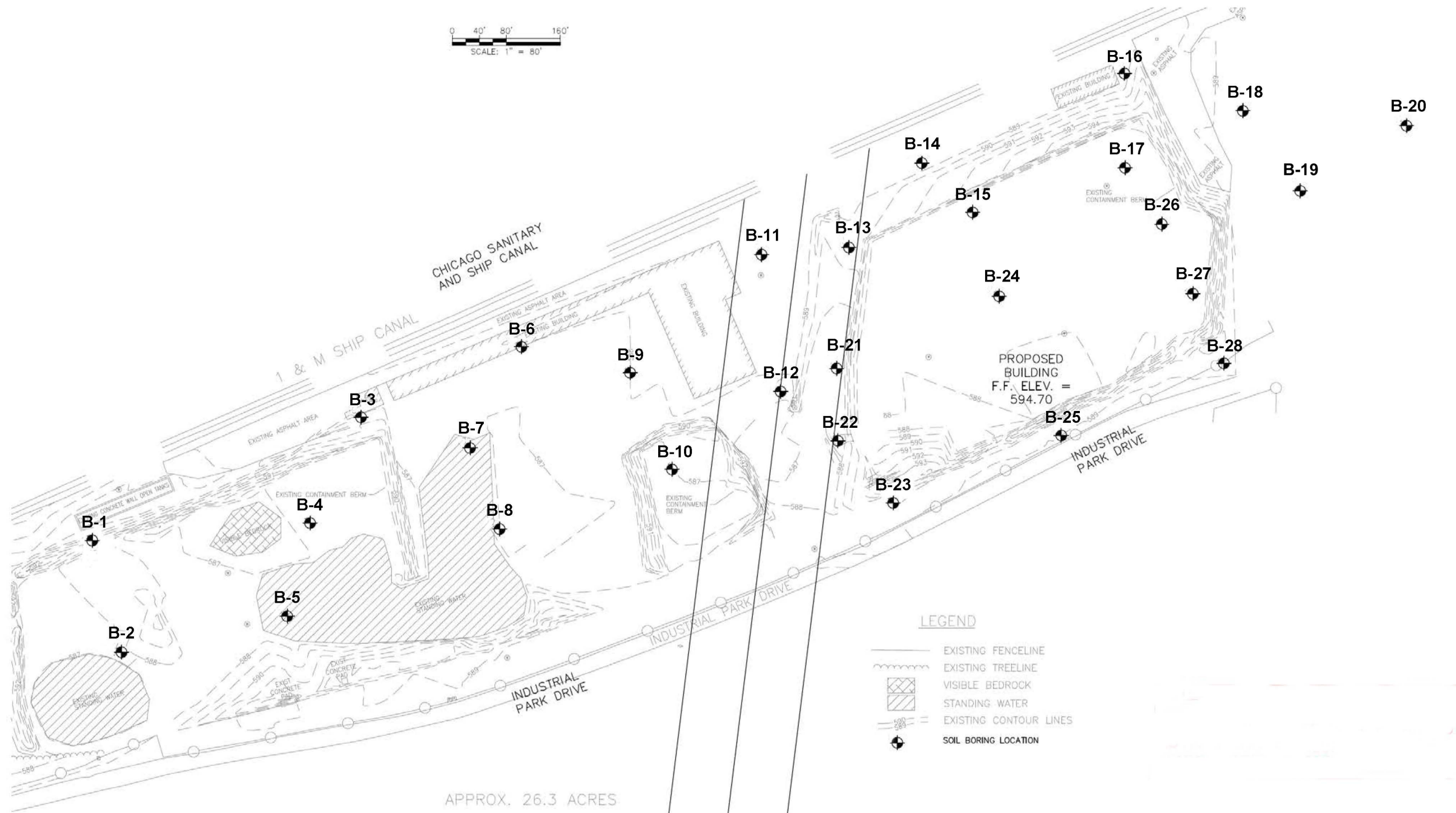
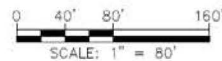
Thomas P. Johnson, P.E.
President

TPJ:ek
Enc.

cc: Mr. Brian Otte – StudioGC Architecture + BIM



	SMC	SOIL AND MATERIAL CONSULTANTS, INC.	LOCATION SKETCH
	Client:	VILLAGE OF LEMONT	
	Project:	LEMONT SPORTS COMPLEX-TRI CENTRAL PARCEL	
	Location:	LEMONT, ILLINOIS	
File No.	20897	Date:	01-30-13
		Scale:	NONE



APPROX. 26.3 ACRES

LEGEND

- EXISTING FENCELINE
- EXISTING TREELINE
- VISIBLE BEDROCK
- STANDING WATER
- EXISTING CONTOUR LINES
- SOIL BORING LOCATION

	SMC	SOIL AND MATERIAL CONSULTANTS, INC.	LOCATION SKETCH
	Client:	VILLAGE OF LEMONT	
	Project:	LEMONT SPORTS COMPLEX-TRI CENTRAL PARCEL	
	Location:	LEMONT, ILLINOIS	
File No.	20897	Date:	01-30-13
		Scale:	1"≈160'



Arlington Heights, Illinois (847) 870-0544

SOIL BORING LOG 1

Logged By: DA Page: 1 of 1

Client: Village of Lemont

File No. 20897 Date Drilled: 1/29/13

Reference: Lemont Sports Complex
Tri-Central Parcel
Lemont, IL

Comments:

Equipment: CME 45B CME 55 Hand Auger Other

CLASSIFICATION

Elevation 591' Existing Surface

1	Black silt, some clay, trace sand & gravel, damp, medium dense to very loose (topsoil) Fill
2	
3	
4	Bedrock - refusal End of Boring
5	
6	
7	
8	
9	
10	

depth, ft.	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength
	X	Δ	⊗	○
1		38.1		
2				
3	10	28.4		
4	3	30.9		
5				
6				
7				
8				
9				
10				

○ unconfined compressive strength, tons/sq.ft.
● penetrometer reading, tons/sq.ft.
1.0 2.0 3.0 4.0
X standard penetration "N", blows/ft.
Δ moisture content, %
10 20 30 40

Water encountered at dry feet during drilling operations (W.D).
Water recorded at dry feet on completion of drilling operations (A.D).
Water recorded at feet hours after completion of drilling operations (A.D).



Arlington Heights, Illinois (847) 870-0544

SOIL BORING LOG 2

Logged By: DA Page: 1 of 1

Client: Village of Lemont

File No. 20897 Date Drilled: 1/29/13

Reference: Lemont Sports Complex
Tri-Central Parcel
Lemont, IL

Comments:

Equipment: CME 45B CME 55 Hand Auger Other

CLASSIFICATION

Elevation 588' Existing Surface

depth, ft.	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	Strength and Penetration Data			
					○ unconfined compressive strength, tons/sq.ft.	● penetrometer reading, tons/sq.ft.	× standard penetration "N", blows/ft.	△ moisture content, %
					1.0	2.0	3.0	4.0
	×	△	⊗	○	10	20	30	40
1								
2								
3	9	27.7			×		△	
4								
5								
6								
7								
8								
9								
10								

Black silt, some clay & gravel, trace sand & roots, damp, loose (topsoil) - Fill

Bedrock - refusal
End of Boring

Water encountered at dry feet during drilling operations (W.D).
Water recorded at dry feet on completion of drilling operations (A.D).
Water recorded at feet hours after completion of drilling operations (A.D).

Client: Village of Lemont

File No. 20897 Date Drilled: 1/29/13

Reference: Lemont Sports Complex
Tri-Central Parcel
Lemont, IL

Comments:

Equipment: CME 45B CME 55 Hand Auger Other

CLASSIFICATION

Elevation 588' Existing Surface

depth, ft.	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	<input type="radio"/> unconfined compressive strength, tons/sq.ft. <input checked="" type="radio"/> penetrometer reading, tons/sq.ft. 1.0 2.0 3.0 4.0				
					<input checked="" type="radio"/> standard penetration "N", blows/ft. <input type="radio"/> moisture content, % 10 20 30 40				
1									
2	7	12.1			X	Δ			
3									
4									
5									
6									
7									
8									
9									
10									

Dark brown-black fine-medium sand, some coarse sand & gravel, damp, loose - Fill

Bedrock - refusal
End of Boring

Water encountered at dry feet during drilling operations (W.D.).
 Water recorded at dry feet on completion of drilling operations (A.D.).
 Water recorded at hours after completion of drilling operations (A.D.).

Client: Village of Lemont

File No. 20897 Date Drilled: 1/29/13

Reference: Lemont Sports Complex
Tri-Central Parcel
Lemont, IL

Comments:

Equipment: CME 45B CME 55 Hand Auger Other

CLASSIFICATION

Elevation 587' Existing Surface

depth, ft.	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	penetrometer reading, tons/sq.ft.				
					1.0	2.0	3.0	4.0	
					standard penetration "N", blows/ft.				
					moisture content, %				
					10	20	30	40	
1	3	28.2							
2									
3									
4									
5									
6									
7									
8									
9									
10									

Water encountered at 0.5 feet during drilling operations (W.D.).
 Water recorded at 0.5 feet on completion of drilling operations (A.D.).
 Water recorded at _____ hours after completion of drilling operations (A.D.).

Client: Village of Lemont

File No. 20897 Date Drilled: 1/29/13

Reference: Lemont Sports Complex
Tri-Central Parcel
Lemont, IL

Comments:

Equipment: CME 45B CME 55 Hand Auger Other

CLASSIFICATION

Elevation 587' Existing Surface

depth, ft	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	<input type="radio"/> unconfined compressive strength, tons/sq.ft. <input checked="" type="radio"/> penetrometer reading, tons/sq.ft. 1.0 2.0 3.0 4.0 <input checked="" type="radio"/> standard penetration "N", blows/ft. <input type="radio"/> moisture content, % 10 20 30 40
1	9	28.6			
2					
3					
4					
5					
6					
7					
8					
9					
10					

Water encountered at 1.5 feet during drilling operations (W.D.).
 Water recorded at 1.5 feet on completion of drilling operations (A.D.).
 Water recorded at _____ hours after completion of drilling operations (A.D.).

Client: Village of Lemont

File No. 20897 Date Drilled: 1/29/13

Reference: Lemont Sports Complex
Tri-Central Parcel
Lemont, IL

Comments:

depth, ft.	Equipment: <input checked="" type="checkbox"/> CME 45B <input type="checkbox"/> CME 55 <input type="checkbox"/> Hand Auger <input type="checkbox"/> Other	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	<input type="radio"/> unconfined compressive strength, tons/sq.ft. <input checked="" type="radio"/> penetrometer reading, tons/sq.ft. 1.0 2.0 3.0 4.0				
	CLASSIFICATION					<input checked="" type="checkbox"/> standard penetration "N", blows/ft. <input type="checkbox"/> moisture content, %	10	20	30	40
Elevation 588' Existing Surface		X	Δ	γ	○					
1	Black silt, some clay, trace sand & roots, very damp (topsoil) - Fill		46.3							46.3 Δ
2	Bedrock - refusal End of Boring									
3										
4										
5										
6										
7										
8										
9										
10										

Water encountered at dry feet during drilling operations (W.D).
 Water recorded at dry feet on completion of drilling operations (A.D).
 Water recorded at feet hours after completion of drilling operations (A.D).

Client: Village of Lemont

File No. 20897 Date Drilled: 1/29/13

Reference: Lemont Sports Complex
Tri-Central Parcel
Lemont, IL

Comments:

Equipment: CME 45B CME 55 Hand Auger Other

CLASSIFICATION

Elevation 587' Existing Surface

depth, ft	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	penetrometer reading, tons/sq.ft.				
					1.0	2.0	3.0	4.0	
	X	Δ	⊗	○	X standard penetration "N", blows/ft. Δ moisture content, % 10 20 30 40				
1									
2	2	40.9		X					Δ
3									
4									
5									
6									
7									
8									
9									
10									

Black silt, some clay, trace sand, gravel & roots, very damp, very loose (topsoil) - Fill

Bedrock - refusal
End of Boring

Water encountered at dry feet during drilling operations (W.D.).
 Water recorded at dry feet on completion of drilling operations (A.D.).
 Water recorded at feet hours after completion of drilling operations (A.D.).

Client: Village of Lemont

File No. 20897 Date Drilled: 1/29/13

Reference: Lemont Sports Complex
Tri-Central Parcel
Lemont, IL

Comments:

Equipment: CME 45B CME 55 Hand Auger Other

CLASSIFICATION

Elevation 587' Existing Surface

depth, ft.	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	<input type="radio"/> unconfined compressive strength, tons/sq.ft. <input checked="" type="radio"/> penetrometer reading, tons/sq.ft. 1.0 2.0 3.0 4.0 <input checked="" type="radio"/> standard penetration "N", blows/ft. <input checked="" type="radio"/> moisture content, % 10 20 30 40
1	6	36.9			
2					
3					X
3					△
4					
5					
6					
7					
8					
9					
10					

Black silt, some clay, trace sand, gravel & roots, damp, loose (topsoil) - Fill

Bedrock - refusal
End of Boring

Water encountered at dry feet during drilling operations (W.D.).
 Water recorded at dry feet on completion of drilling operations (A.D.).
 Water recorded at feet hours after completion of drilling operations (A.D.).

Client: Village of Lemont

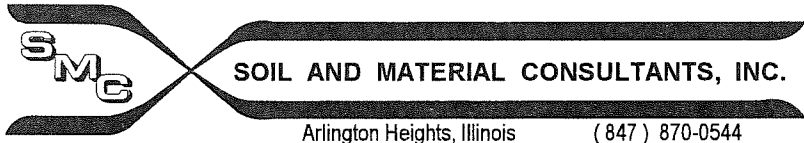
File No. 20897 Date Drilled: 1/29/13

Reference: Lemont Sports Complex
Tri-Central Parcel
Lemont, IL

Comments:

depth, ft.	Equipment: <input checked="" type="checkbox"/> CME 45B <input type="checkbox"/> CME 55 <input type="checkbox"/> Hand Auger <input type="checkbox"/> Other	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	<input type="radio"/> unconfined compressive strength, tons/sq.ft. <input checked="" type="radio"/> penetrometer reading, tons/sq.ft. 1.0 2.0 3.0 4.0			
	CLASSIFICATION					<input checked="" type="checkbox"/> standard penetration "N", blows/ft. <input type="checkbox"/> moisture content, %	10	20	30
	Elevation 588' Existing Surface	X	Δ	γ	○				
1	Brown fine sand, some gravel, trace medium-coarse sand & roots, very damp-saturated, loose - Fill	▽							
2	Bedrock - refusal End of Boring	5	16.2			X	Δ		
3									
4									
5									
6									
7									
8									
9									
10									

Water encountered at 1.0 feet during drilling operations (W.D.).
 Water recorded at 1.0 feet on completion of drilling operations (A.D.).
 Water recorded at _____ feet _____ hours after completion of drilling operations (A.D.).



Arlington Heights, Illinois (847) 870-0544

SOIL BORING LOG 10

Logged By: DA Page: 1 of 1

Client: Village of Lemont

File No. 20897 Date Drilled: 1/29/13

Reference: Lemont Sports Complex
Tri-Central Parcel
Lemont, IL

Comments:

Equipment: CME 45B CME 55 Hand Auger Other

CLASSIFICATION

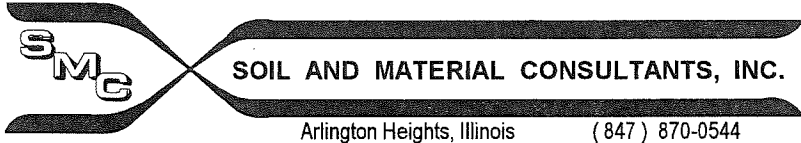
Elevation 587' Existing Surface

depth, ft.	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	Strength and Penetration Data			
					○ unconfined compressive strength, tons/sq.ft.	● penetrometer reading, tons/sq.ft.	× standard penetration "N", blows/ft.	△ moisture content, %
	×	△	γ	○	1.0	2.0	3.0	4.0
1		33.3						
2								
3								
4								
5								
6								
7								
8								
9								
10								

Black silt, some clay, trace sand, gravel & roots, damp-very damp (topsoil) - Fill

Bedrock - refusal
End of Boring

Water encountered at dry feet during drilling operations (W.D.).
Water recorded at dry feet on completion of drilling operations (A.D.).
Water recorded at dry feet hours after completion of drilling operations (A.D.).



Arlington Heights, Illinois (847) 870-0544

SOIL BORING LOG 12

Logged By: DA Page: 1 of 1

Client: Village of Lemont

File No. 20897 Date Drilled: 1/29/13

Reference: Lemont Sports Complex
Tri-Central Parcel
Lemont, IL

Comments:

Equipment: CME 45B CME 55 Hand Auger Other

CLASSIFICATION
Elevation 589' Existing Surface

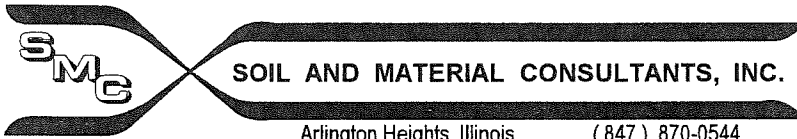
1- Brown silt, some clay, trace sand, gravel & roots, very damp, very loose (topsoil) - Fill

2- Bedrock - refusal
End of Boring

3	
4	
5	
6	
7	
8	
9	
10	

depth, ft	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	<input type="radio"/> unconfined compressive strength, tons/sq.ft. <input checked="" type="radio"/> penetrometer reading, tons/sq.ft. 1.0 2.0 3.0 4.0			
					<input checked="" type="checkbox"/> standard penetration "N", blows/ft. <input type="checkbox"/> moisture content, % 10 20 30 40			
1								
2	3	36.9			X			△
3								
4								
5								
6								
7								
8								
9								
10								

Water encountered at 1.0 feet during drilling operations (W.D.).
 Water recorded at 1.0 feet on completion of drilling operations (A.D.).
 Water recorded at _____ hours after completion of drilling operations (A.D.).



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SOIL BORING LOG 13

Logged By: DA Page: 1 of 1

Client: Village of Lemont

File No. 20897 Date Drilled: 1/29/13

Reference: Lemont Sports Complex
Tri-Central Parcel
Lemont, IL

Comments:

Equipment: CME 45B CME 55 Hand Auger Other

CLASSIFICATION

Elevation 590' Existing Surface

Black silt, some clay, sand & gravel, damp
Fill

Limestone, damp, medium dense - Fill

1

2 Bedrock - refusal
End of Boring

3

4

5

6

7

8

9

10

depth, ft.	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	<input type="radio"/> unconfined compressive strength, tons/sq.ft. <input checked="" type="radio"/> penetrometer reading, tons/sq.ft. 1.0 2.0 3.0 4.0 <input checked="" type="radio"/> standard penetration "N", blows/ft. <input type="radio"/> moisture content, % 10 20 30 40			
	X	Δ	γ	○				
1								
2	▽ 12	5.9			Δ	X		
3								
4								
5								
6								
7								
8								
9								
10								

Water encountered at 2.0 feet during drilling operations (W.D.).
 Water recorded at 2.0 feet on completion of drilling operations (A.D.).
 Water recorded at _____ feet _____ hours after completion of drilling operations (A.D.).



Arlington Heights, Illinois (847) 870-0544

SOIL BORING LOG 14

Logged By: DA Page: 1 of 1

Client: Village of Lemont

File No. 20897 Date Drilled: 1/29/13

Reference: Lemont Sports Complex
Tri-Central Parcel
Lemont, IL

Comments:

Equipment: CME 45B CME 55 Hand Auger Other

CLASSIFICATION

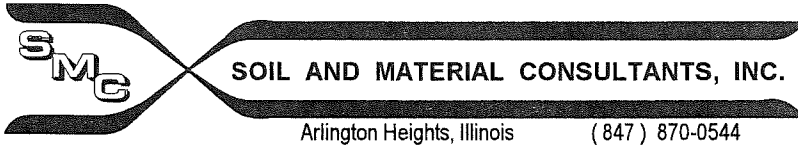
Elevation 589' Existing Surface

Black silt, some clay, trace sand, gravel & roots, very damp (topsoil) - Fill

Bedrock - refusal
End of Boring

depth, ft.	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	unconfined compressive strength, tons/sq.ft.				
					1.0	2.0	3.0	4.0	
	X	Δ	γ	○	○ unconfined compressive strength, tons/sq.ft. ● penetrometer reading, tons/sq.ft. X standard penetration "N", blows/ft. Δ moisture content, %				
		48.5							48.5 Δ
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									

Water encountered at dry feet during drilling operations (W.D).
 Water recorded at dry feet on completion of drilling operations (A.D).
 Water recorded at feet hours after completion of drilling operations (A.D).



Arlington Heights, Illinois (847) 870-0544

SOIL BORING LOG 15

Logged By: DA Page: 1 of 1

Client: Village of Lemont

File No. 20897 Date Drilled: 1/29/13

Reference: Lemont Sports Complex
Tri-Central Parcel
Lemont, IL

Comments:

Equipment: CME 45B CME 55 Hand Auger Other

CLASSIFICATION

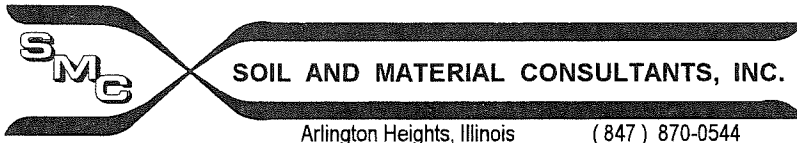
Elevation 588' Existing Surface

depth, ft.	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	<input type="radio"/> unconfined compressive strength, tons/sq.ft. <input checked="" type="radio"/> penetrometer reading, tons/sq.ft. 1.0 2.0 3.0 4.0			
					<input checked="" type="radio"/> standard penetration "N", blows/ft. <input type="radio"/> moisture content, % 10 20 30 40			
1	X	Δ 34.5	⊗	○				△
2								
3								
4								
5								
6								
7								
8								
9								
10								

Black silt, some clay, trace sand, gravel & roots, damp (topsoil) - Fill

Bedrock - refusal
End of Boring

Water encountered at dry feet during drilling operations (W.D).
 Water recorded at dry feet on completion of drilling operations (A.D).
 Water recorded at feet hours after completion of drilling operations (A.D).



Arlington Heights, Illinois (847) 870-0544

SOIL BORING LOG 16

Logged By: DA Page: 1 of 1

Client: Village of Lemont

File No. 20897 Date Drilled: 1/29/13

Reference: Lemont Sports Complex
Tri-Central Parcel
Lemont, IL

Comments:

Equipment: CME 45B CME 55 Hand Auger Other

CLASSIFICATION

Elevation 589' Existing Surface

Brown sand & limestone, very damp - Fill

Bedrock - refusal

End of Boring

1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

depth, ft.	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength					
	X	Δ	γ	○	○ unconfined compressive strength, tons/sq.ft. ● penetrometer reading, tons/sq.ft. 1.0 2.0 3.0 4.0				
					X standard penetration "N", blows/ft. Δ moisture content, % 10 20 30 40				
		14.8			△				
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									



Water encountered at dry feet during drilling operations (W.D.).
 Water recorded at dry feet on completion of drilling operations (A.D.).
 Water recorded at _____ feet _____ hours after completion of drilling operations (A.D.).

Client: Village of Lemont

File No. 20897 Date Drilled: 1/30/13

Reference: Lemont Sports Complex
Tri-Central Parcel
Lemont, IL

Comments:

depth, ft.	Equipment: <input type="checkbox"/> CME 45B <input type="checkbox"/> CME 55 <input checked="" type="checkbox"/> Hand Auger <input type="checkbox"/> Other	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	<input type="radio"/> unconfined compressive strength, tons/sq.ft. <input checked="" type="radio"/> penetrometer reading, tons/sq.ft. 1.0 2.0 3.0 4.0			
	CLASSIFICATION					<input checked="" type="checkbox"/> standard penetration "N", blows/ft. <input type="checkbox"/> moisture content, %	10	20	30
	Elevation 588' Existing Surface	X	Δ	γ	○				
1	Black silt, sand & gravel, trace roots, very damp-saturated - Fill		11.9						
	Bedrock - refusal End of Boring								
2									
3									
4									
5									
6									
7									
8									
9									
10									

Water encountered at 0.5 feet during drilling operations (W.D.).
 Water recorded at 0.5 feet on completion of drilling operations (A.D.).
 Water recorded at _____ feet _____ hours after completion of drilling operations (A.D.).



SOIL AND MATERIAL CONSULTANTS, INC.

Arlington Heights, Illinois (847) 870-0544

SOIL BORING LOG 18

Logged By: DA

Page: 1 of 1

Client: Village of Lemont

File No. 20897

Date Drilled: 1/30/13

Reference: Lemont Sports Complex
Tri-Central Parcel
Lemont, IL

Comments:

Equipment: CME 45B CME 55 Hand Auger Other

CLASSIFICATION

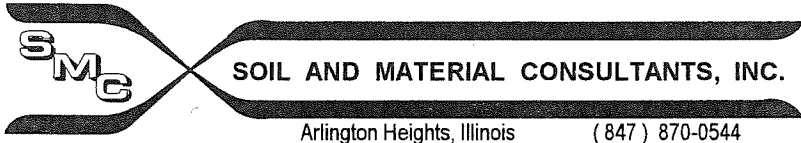
Elevation 589' Existing Surface

depth, ft.	Weathered bedrock
1	Bedrock - refusal End of Boring
2	
3	
4	
5	
6	
7	
8	
9	
10	

standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	1.0	2.0	3.0	4.0
X	Δ	γ	○				

- unconfined compressive strength, tons/sq.ft.
- penetrometer reading, tons/sq.ft.
- 1.0 2.0 3.0 4.0
- X standard penetration "N", blows/ft.
- Δ moisture content, %
- 10 20 30 40

Water encountered at dry feet during drilling operations (W.D).
 Water recorded at dry feet on completion of drilling operations (A.D.).
 Water recorded at feet hours after completion of drilling operations (A.D.).



Arlington Heights, Illinois (847) 870-0544

SOIL BORING LOG 19

Logged By: DA Page: 1 of 1

Client: Village of Lemont

File No. 20897 Date Drilled: 1/30/13

Reference: Lemont Sports Complex
Tri-Central Parcel
Lemont, IL

Comments:

Equipment: CME 45B CME 55 Hand Auger Other

CLASSIFICATION

Elevation 589' Existing Surface

1	Limestone, very damp - Fill
2	Bedrock - refusal End of Boring
3	
4	
5	
6	
7	
8	
9	
10	

depth, ft.	CLASSIFICATION	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	
		X	Δ	⌘	○	
						○ unconfined compressive strength, tons/sq.ft. ● penetrometer reading, tons/sq.ft. 1.0 2.0 3.0 4.0 X standard penetration "N", blows/ft. Δ moisture content, % 10 20 30 40
1		5	4.3			X
2						
3						
4						
5						
6						
7						
8						
9						
10						

Water encountered at dry feet during drilling operations (W.D).
 Water recorded at dry feet on completion of drilling operations (A.D.).
 Water recorded at feet hours after completion of drilling operations (A.D.).

Logged By: DA Page: 1 of 1
File No. 20897 Date Drilled: 1/30/13

Client: Village of Lemont

Reference: Lemont Sports Complex
Tri-Central Parcel
Lemont, IL

Comments:

Equipment: CME 45B CME 55 Hand Auger Other

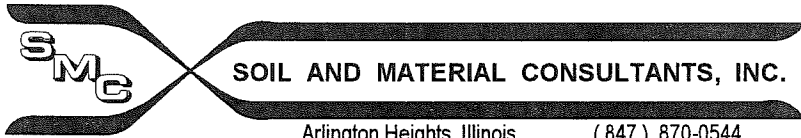
CLASSIFICATION

Elevation 589' Existing Surface

depth, ft.					
1	Limestone, damp, medium dense - Fill				
2	Bedrock - refusal End of Boring	10	5.3	X	X
3					
4					
5					
6					
7					
8					
9					
10					

standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength				
X	Δ	ϕ	○	○ unconfined compressive strength, tons/sq.ft. ● penetrometer reading, tons/sq.ft. 1.0 2.0 3.0 4.0			
				X standard penetration "N", blows/ft. Δ moisture content, % 10 20 30 40			

Water encountered at dry feet during drilling operations (W.D.).
 Water recorded at dry feet on completion of drilling operations (A.D.).
 Water recorded at dry feet hours after completion of drilling operations (A.D.).



Arlington Heights, Illinois (847) 870-0544

SOIL BORING LOG 21

Logged By: DA Page: 1 of 1

Client: Village of Lemont

File No. 20897 Date Drilled: 1/30/13

Reference: Lemont Sports Complex
Tri-Central Parcel
Lemont, IL

Comments:

Equipment: [x] CME 45B [] CME 55 [] Hand Auger [] Other
CLASSIFICATION
Elevation 588' Existing Surface

Table with 10 rows representing depth from 0 to 10 feet. Row 1 contains 'Limestone, saturated - Fill'. Row 2 contains 'Bedrock - refusal' and 'End of Boring'.

Table with 5 main columns: standard penetration, moisture content, dry unit weight, unconfined compressive strength. Includes legend for symbols and scales.

Water encountered at 0.0 feet during drilling operations (W.D.).
Water recorded at 0.0 feet on completion of drilling operations (A.D.).
Water recorded at ... feet hours after completion of drilling operations (A.D.).

Client: Village of Lemont

File No. 20897 Date Drilled: 1/30/13

Reference: Lemont Sports Complex
Tri-Central Parcel
Lemont, IL

Comments:

depth, ft.	Equipment: <input checked="" type="checkbox"/> CME 45B <input type="checkbox"/> CME 55 <input type="checkbox"/> Hand Auger <input type="checkbox"/> Other	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	<input type="radio"/> unconfined compressive strength, tons/sq.ft. <input checked="" type="radio"/> penetrometer reading, tons/sq.ft. 1.0 2.0 3.0 4.0			
	CLASSIFICATION					<input checked="" type="checkbox"/> standard penetration "N", blows/ft. <input checked="" type="checkbox"/> moisture content, % 10 20 30 40			
	Elevation 588' Existing Surface	X	Δ	ϕ	O				
1	Limestone, saturated - Fill		9.3			Δ			
2	Bedrock - refusal End of Boring								
3									
4									
5									
6									
7									
8									
9									
10									

Water encountered at 0.0 feet during drilling operations (W.D).
 Water recorded at 0.0 feet on completion of drilling operations (A.D.).
 Water recorded at _____ feet _____ hours after completion of drilling operations (A.D.).

Client: Village of Lemont

File No. 20897 Date Drilled: 1/30/13

Reference: Lemont Sports Complex
Tri-Central Parcel
Lemont, IL

Comments:

Equipment: CME 45B CME 55 Hand Auger Other

CLASSIFICATION

Elevation 589' Existing Surface

1- Black silt, some clay, trace sand, gravel & roots, very damp-saturated (topsoil) - Fill

2- Bedrock - refusal
End of Boring

3-

4-

5-

6-

7-

8-

9-

10-

11-

12-

13-

14-

15-

16-

17-

18-

19-

20-

21-

22-

23-

24-

25-


26-

27-

28-

29-

30-

depth, ft.	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	<input type="checkbox"/> unconfined compressive strength, tons/sq.ft. <input checked="" type="checkbox"/> penetrometer reading, tons/sq.ft. 1.0 2.0 3.0 4.0 <input checked="" type="checkbox"/> standard penetration "N", blows/ft. <input type="checkbox"/> moisture content, % 10 20 30 40
1	X	△ 54.5	γ	○	54.5 
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

Water encountered at 0.25 feet during drilling operations (W.D.).
 Water recorded at 0.25 feet on completion of drilling operations (A.D.).
 Water recorded at _____ feet _____ hours after completion of drilling operations (A.D.).

Client: Village of Lemont

File No. 20897 Date Drilled: 1/30/13

Reference: Lemont Sports Complex
Tri-Central Parcel
Lemont, IL

Comments:

Equipment: CME 45B CME 55 Hand Auger Other

CLASSIFICATION

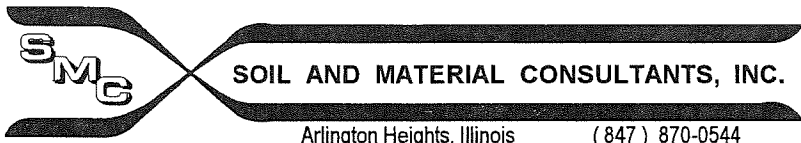
Elevation 588' Existing Surface

depth, ft.	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	unconfined compressive strength, tons/sq.ft.			
					1.0	2.0	3.0	4.0
	X	Δ	∅	○				
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

Bedrock - refusal

End of Boring

Water encountered at dry feet during drilling operations (W.D.).
 Water recorded at dry feet on completion of drilling operations (A.D.).
 Water recorded at feet hours after completion of drilling operations (A.D.).



Arlington Heights, Illinois (847) 870-0544

SOIL BORING LOG 25

Logged By: DA Page: 1 of 1

Client: Village of Lemont

File No. 20897 Date Drilled: 1/30/13

Reference: Lemont Sports Complex
Tri-Central Parcel
Lemont, IL

Comments:

Equipment: CME 45B CME 55 Hand Auger Other

CLASSIFICATION

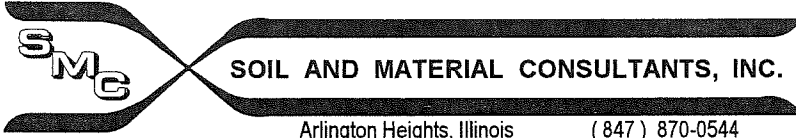
Elevation 589' Existing Surface

depth, ft.	CLASSIFICATION	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	
	Limestone, saturated - Fill	X	Δ	ϕ	○	
1	Bedrock - refusal End of Boring					
2						
3						
4						
5						
6						
7						
8						
9						
10						

○ unconfined compressive strength, tons/sq.ft.
● penetrometer reading, tons/sq.ft.
1.0 2.0 3.0 4.0

X standard penetration "N", blows/ft.
Δ moisture content, %
10 20 30 40

Water encountered at 0.0 feet during drilling operations (W.D.).
Water recorded at 0.0 feet on completion of drilling operations (A.D.).
Water recorded at _____ feet _____ hours after completion of drilling operations (A.D.).



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SOIL BORING LOG 26

Logged By: DA Page: 1 of 1

Client: Village of Lemont

File No. 20897 Date Drilled: 1/30/13

Reference: Lemont Sports Complex
Tri-Central Parcel
Lemont, IL

Comments:

Equipment: CME 45B CME 55 Hand Auger Other

CLASSIFICATION

Elevation 588' Existing Surface

Limestone, saturated - Fill

Bedrock - refusal

1 End of Boring

2

3

4

5

6

7

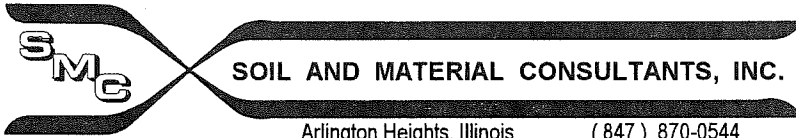
8

9

10

depth, ft.	CLASSIFICATION	standard penetration	moisture content	dry unit weight lbs./cu. ft.	unconfined compressive strength	
		X	Δ	α	○	<input type="radio"/> unconfined compressive strength, tons/sq.ft. <input checked="" type="radio"/> penetrometer reading, tons/sq.ft. 1.0 2.0 3.0 4.0 <input checked="" type="radio"/> standard penetration "N", blows/ft. <input type="radio"/> moisture content, % 10 20 30 40
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

Water encountered at 0.0 feet during drilling operations (W.D.).
 Water recorded at 0.0 feet on completion of drilling operations (A.D.).
 Water recorded at _____ feet _____ hours after completion of drilling operations (A.D.).



Arlington Heights, Illinois (847) 870-0544

SOIL BORING LOG 27

Logged By: DA Page: 1 of 1

Client: Village of Lemont

File No. 20897 Date Drilled: 1/30/13

Reference: Lemont Sports Complex
Tri-Central Parcel
Lemont, IL

Comments:

Equipment: CME 45B CME 55 Hand Auger Other

CLASSIFICATION

Elevation 588' Existing Surface

depth, ft.	CLASSIFICATION	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength					
		X	Δ	γ	○	○ unconfined compressive strength, tons/sq.ft. ● penetrometer reading, tons/sq.ft. 1.0 2.0 3.0 4.0 X standard penetration "N", blows/ft. Δ moisture content, % 10 20 30 40				
	Bedrock - refusal									
1	End of Boring									
2										
3										
4										
5										
6										
7										
8										
9										
10										

Water encountered at dry feet during drilling operations (W.D.).
 Water recorded at dry feet on completion of drilling operations (A.D.).
 Water recorded at feet hours after completion of drilling operations (A.D.).



General Notes

SAMPLE CLASSIFICATION

Soil sample classification is based on the Unified Soil Classification System, the Standard Practice for Description and Identification of Soils (Visual-Manual Procedure), ASTM D-2488, the Standard Test Method for Classification of Soils for Engineering Purposes, ASTM D-2487 (when applicable), and the modifiers noted below.

CONSISTENCY OF COHESIVE SOILS

Term	Qu -tons/sq. ft.	N (unreliable)
Very Soft	0.00 - 0.25	0 - 2
Soft	0.26 - 0.49	3 - 4
Stiff	0.50 - 0.99	5 - 8
Tough	1.00 - 1.99	9 - 15
Very Tough	2.00 - 3.99	16 - 30
Hard	4.00 - 7.99	30 +
Very Hard	8.00 +	

RELATIVE DENSITY OF GRANULAR SOILS

Term	N - blows/foot
Very Loose	0 - 4
Loose	5 - 9
Medium Dense	10 - 29
Dense	30 - 49
Very Dense	50 +

IDENTIFICATION AND TERMINOLOGY

Term	Size Range
Boulder	over 8 in.
Cobble	3 in. to 8 in.
Gravel	-coarse 1 in. to 3 in.
	-medium 3/8 in. to 1 in.
	-fine #4 sieve to 3/8 in.
Sand	-coarse #10 sieve to #4 sieve
	-medium #40 sieve to #10 sieve
	-fine #200 sieve to #40 sieve
Silt	0.002 mm to #200 sieve
Clay	smaller than 0.002 mm

Modifying Term Percent by Weight

Trace	1 - 10
Little	11 - 20
Some	21 - 35
And	36 - 50

Moisture Condition

Dry
Damp
Very Damp
Saturated

DRILLING, SAMPLING & SOIL PROPERTY SYMBOLS

CF	- Continuous Flight Auger
HS	- Hollow Stem Auger
HA	- Hand Auger
RD	- Rotary Drilling
AX	- Rock Core, 1-3/16 in. diameter
BX	- Rock Core, 1-5/8 in. diameter
NX	- Rock Core, 2-1/8 in. diameter
S	- Sample Number
T	- Type of Sample
J	- Jar
AS	- Auger Sample
SS	- Split-spoon (2 in. O.D. with 1-3/8 in. I.D.)
ST	- Shelby Tube (2 in. O.D. with 1-7/8 in. I.D.)
R	- Recovery Length, in.
B	- Blows/ 6 in. interval, Standard Penetration Test (SPT)
N	- Blows/ foot to drive 2 in. O.D. split-spoon sampler with 140 lb. hammer falling 30 in., (STP)
Pen.	- Pocket Penetrometer reading, tons/ sq. ft.
W	- Water Content, % of dry weight
Uw	- Dry Unit Weight of soil, lbs./ cu. ft.
Qu	- Unconfined Compressive Strength, tons/ sq. ft.
Str	- % Strain at Qu.
WL	- Water Level
WD	- While Drilling
AD	- After Drilling
DCI	- Dry Cave-in
WCI	- Wet Cave-in
LL	- Liquid Limit, %
PL	- Plastic limit, %
PI	- Plasticity Index (LL-PL)
LI	- Liquidity Index [(W-PL)/PI]