

SPECIFICATIONS

The Town of Babylon reserves the right to test any material before and after delivery to the job site and to base acceptance or rejection on such test. If required, the Town of Babylon may direct the vendor to remove all rejected materials from the job site at the Vendors expense.

It is understood that the successful bidder will not be required to deliver during the winter months where weather conditions do not permit for standard operating procedures.

Random samples of topsoil may be taken by a representative of the Town.

Testing And Certifications

Tests to insure compliance with the material specifications may be taken at any time. The Contractor shall furnish in writing the location of the topsoil source and a letter certifying compliance with all material specifications listed.

Delivery Procedure And Basis Of Payment

The Commissioner of the Department of Public Works or their representative, prior to delivery will contact the Contractor to establish a satisfactory delivery schedule and to designate the location of the sites for the stockpiling of topsoil. The topsoil will be paid for at the unit price per cubic yard, dumped in the designated area. A delivery ticket signed and dated showing the hour and accurate yardage carried by each proposed truck will be delivered to the department representative signed prior to any site delivery during the delivery operation.

A summary sheet showing each delivery trucks license number, color, make, year, dump body measurements, water level volume in cubic yard will be furnished prior to any proposed delivery.

NO MINIMUM DELIVERY PRICE WILL BE ACCEPTED.

1. Fine Screened Topsoil

It shall be natural loam topsoil, free from subsoil, obtained from an area which has never been stripped, and from a depth of no more than one (1) foot, or less if subsoil is encountered.

It shall be of uniform quality, free from hard clods, stiff clay, hard pan, sods, partially disintegrated stone, lime, cement, ashes, slag, concrete, tar residues, tarred paper, boards, chips, sticks, or any other undesirable material.

It shall contain at least six (6) percent organic matter as determined by loss on ignition of moisture-free samples dried in accordance with the current method of the Association of Official Agricultural Chemists and the acidity range shall be PH 4.5 to 7.0 inclusive.

The mechanical analysis of the soil shall be as follows:

Passing	Retained On	Percentage
1/4" Screen	No. 100 U.S. Mesh	100%
1/4" Screen	sieve sand	40% - 60%
No. 100 U.S. mesh sieve		40% - 60%

That portion of the topsoil passing the No. 100 sieve shall consist of not more than 60% of clay as determined by the Buoyouccous Hydrometer or by the decantation method. All percentages shall be based on dry weight of sample.

2. General All Purpose Topsoil

Topsoil shall be of the surface layer of soil with no added mixture or refuse or any material toxic to plant growth and shall be reasonably free from subsoil and stumps, roots, brush, stones, clay, lumps or similar objects larger than two inches in the greatest diameter. Brush and other vegetation which will not be incorporated with the soil during handling operations shall be cut and removed. Ordinary sods, herbatious growth, such as grass and weeds, are not to be removed but are to be thoroughly broken up and intermixed with the topsoil during handling operations. Topsoil, unless otherwise specified or approved shall have an acidity range of approximately 5.5 PH to 7.6 PH when tested according to methods of testing of A.O.A.C. in effect on the date of invitation of bids. The organic content shall be not less than 3% or more than 20% or as determined by the wet combustion method (chronic acid reduction). There shall be not less than 20% or more than 80% passing the 200 mesh sieve as determined by the wash test in accordance with the standard test ASTM designation DE 11 40.

3. Orange Clay

Must be fully characteristic of the following identifiable traits:

1. Provides firm traction.
2. Provides good drainage with minimal accumulation of surface water.
3. Provides adequate moisture retention for insurance of pliable surface texture.
4. Free of all stones.
5. **Orange** in color for aesthetic quality.
6. No separation of ingredients.
7. All natural ingredients.

Mechanical Analysis

Sand - 60-65%
Silt/Clay Combined - 35-40%

Sand Sieve Analysis

<u>Screen Size</u>	<u>Percent Passing</u>
#4 (4.76 MM)	98-100%
#10 (2.00 MM)	90-98%
#18 (1.00 MM)	80-95%
#35 (.50 MM)	65-85%
#60 (.25 MM)	20-40%
#140 (.105 MM)	0-10%
#270 (.05 MM)	0-2%

4. Red Clay

Must be fully characteristic of the following identifiable traits:

1. Provides firm traction.
2. Provides excellent drainage with minimal accumulation of surface water.
3. Provides adequate moisture retention for insurance of pliable surface texture.
4. Free of all stones.
5. **Red** in color for aesthetic quality.
6. No separation of ingredients.
7. All natural ingredients.

Mechanical Analysis

Sand - 70-75%
Silt/Clay Combined - 25-30%

Sand Sieve Analysis

<u>Screen Size</u>	<u>Percent Passing</u>
#1/4" (6.3 MM)	100%
#4 (4.76 MM)	98-100%
#10 (2.00 MM)	90-98%
#18 (1.00 MM)	80-95%
#35 (.50 MM)	65-85%
#60 (.25 MM)	20-40%
#140 (.105 MM)	0-10%
#270 (.05 MM)	0-2%

5. Mound Clay Block, Moundmaster Surface or Equal

100% virgin raw clay, crushed, screened, moisturized and pressed into a block. These blocks are commonly used to build firm clay areas such as batters' boxes, coaches boxes and the high wear area on a pitching mound.

Must have the following attributes:

100% naturally occurring virgin gumbo clay (ferro-aluminium silicate)		
Crystalline Silica (Quartz)	15-40%	Cas. No. 14808-60-7
Crystalline Silica (Cristobalite)	1 – 5 %	Cas. No. 14464-46-1
Melting Point	N.A.	
Vapor Pressure	mm Hg – N.A	
Bulk Density	at 23% moisture: 114 P.C.F. At 14% moisture: 85 P.C.F.	
Solubility in water	negligible	
Color	Red & Grey-Blue	
Appearance	granular, semi-hard	
Odor	odorless	
Non-Flammable		
Non-Hazardous		
Stable under all normal conditions		
Hazardous Polymerization	will not occur	
Incompatibility (materials to avoid)	none	
Size: 4"(w) X 8"(l) X 2½"(h)		
Weight: 7 lbs per block		
Packaged in 8 block set in water tight bags to retain proper moisture		

6. Mound Clay, Surface or Equal

100% naturally occurring virgin gumbo clay (ferro-aluminium silicate) finely shredded and bagged. 50 lb. bag.

Must have the following attributes:

100% naturally occurring virgin gumbo clay (ferro-aluminium silicate)		
Crystalline Silica (Quartz)	15-40%	Cas. No. 14808-60-7
Crystalline Silica (Cristobalite)	1 – 5 %	Cas. No. 14464-46-1
Melting Point	N.A.	
Vapor Pressure	mm Hg – N.A	
Bulk Density	at 23% moisture: 114 P.C.F. At 14% moisture: 85 P.C.F.	
Solubility in water	negligible	
Color	Red & Grey-Blue	
Appearance	granular, semi-hard	
Odor	odorless	
Non-Flammable		
Non-Hazardous		
Stable under all normal conditions		
Hazardous Polymerization	will not occur	
Incompatibility (materials to avoid)	none	

7. Baseball Diamond Mix, Original Premium – Beam Clay or Equal

Baseball Diamond Mix will be screened thru a 4.0 mm opening harp screen and must have the following attributes:

1. Provides firm traction.
2. Provides good drainage with minimal accumulation of surface water.
3. Provides adequate moisture retention for insurance of pliable surface texture.
4. Provides adequate compaction while retaining ability to be worked up easily during maintenance procedures.
5. Reddish, Orange color for aesthetic quality.
6. No separation of ingredients.
7. All natural ingredients: uniform silica sand predominantly .25-1.0mm and reddish/orange clay no artificial colorants.

Mechanical Analysis

Sand	-	70-80%
Silt	-	0-10% (.002mm - .05mm)
Clay	-	17-25% (less than .002mm)

Sand Sieve Analysis

<u>Screen Size</u>	<u>Percent Passing</u>
1/4" (6.3 mm)	100%
#10 (2.00mm)	85-100%
#18 (1.00mm)	65-90%
#35 (.50mm)	35-65%
#60 (.25mm)	5-25%
#140 (.105mm)	0-5%

With 0% greater than 1/4"
Maximum of 35% greater than 1.0mm
Minimum of 50% between .25mm and 1.0mm
Maximum of 25% smaller than .25mm

DENSITY: 70-80 lbs. per cubic foot or 1,890-2,160 lbs. (averaging approx. 2,000) per cubic yard. plus add 40% for compaction.

8. Medium Infield Mix – Beam Clay or Equal

Baseball Medium Infield Mix will be screened thru a 6.0 mm opening harp screen and must have the following attributes:

1. Provides firm traction.
2. Provides good drainage with minimal accumulation of surface water.
3. Provides adequate moisture retention for insurance of pliable surface texture.
4. Provides adequate compaction while retaining ability to be worked up easily during maintenance procedures.
5. Reddish, Orange color for aesthetic quality.
6. Minimal separation of ingredients.
7. All natural ingredients: uniform silica sand predominantly .25-1.0mm and reddish/orange clay no artificial colorants.

Mechanical Analysis

Sand - 75-85%
Silt - 0-10% (.002mm - .05mm)
Clay - 12-17% (less than .002mm)

Sand Sieve Analysis

<u>Screen Size</u>	<u>Percent Passing</u>
5/16" (7.94mm)	100%
#4 (4.76mm)	95-100%
#10 (2.00mm)	85-100%
#18 (1.00mm)	75-90%
#35 (.50mm)	40-70%
#60 (.25mm)	15-30%
#140 (.105mm)	0-5%

With 0% greater than 5/16"
Maximum of 25% greater than 1.0mm
Minimum of 50% between .25mm and 1.0mm
Maximum of 30% smaller than .25mm

DENSITY: 80-90 lbs. per cubic foot or 2,160-2,430 lbs. (averaging approx. 2,300) per cubic yard. plus add 40% for compaction.

All material must be naturally mined from a New York State approved singular location to ensure against hazardous debris such as petroleum products, asbestos and chemicals.

Materials must come from a natural mine site.

Material brought to a single location from various sources will be rejected, as it will be impossible to conform to the safety requirements.

SAMPLES: The Town may request samples from any bidder which would be provided at the bidders expense.

ALL FREIGHT CHARGES ARE TO BE INCLUDED. ANY BIDDER CHARGING FREIGHT MAY BE DISQUALIFIED.

NO MINIMUM REQUIREMENTS FOR DELIVERY. ANY BIDDER SETTING MINIMUMS MAY BE DISQUALIFIED.

If bidding an alternate – specifications must be INCLUDED with bid and clearly LABELED as to what item number they are referencing.

Bidders may bid an alternate manufacturer, but it must be noted on the bid.

If no alternate item or alternate mfg is listed, item bid will be determined to be the mfg and item listed in the specifications, and must be supplied as such.

Any bidder found imbalancing the bid in any of the unit prices will be cause for bid rejection.

The Town may award this bid in whole or in parts, or make no award at all, whichever is in the best interest of the Town. Bid awards are contingent upon available funding and the Town makes no guarantee that they will utilize all items on the bid.

All signatures to be original. Do not remove any pages from the bid contract. Return the bid contract in its entirety.