

Agency: Commerce, Community and Economic Development**Grants to Municipalities (AS 37.05.315)****Grant Recipient: Matanuska-Susitna Borough School District****Federal Tax ID: 92-6000034****Project Title:****Project Type: Remodel, Reconstruction and Upgrades**

Matanuska-Susitna Borough - Colony High School Field Turf Installation

State Funding Requested: \$785,000
One-Time Need**House District: 13 / G****Brief Project Description:**

Renovate and resurface outdoor asphalt running track at Colony High School to create a high-performance 'sanctioned' track. The old surface has become a serious safety hazard for the students in the track and field program.

Funding Plan:

Total Project Cost:	\$785,000
Funding Already Secured:	(\$0)
FY2012 State Funding Request:	<u>(\$785,000)</u>
Project Deficit:	\$0

*Funding Details:**FY06 partial state funding - \$170,000 (reappropriated in FY11)***Detailed Project Description and Justification:**

The Mat-Su Borough School District (MSBSD) spans approximately 25,000 square miles, an area larger than the entire state of West Virginia. The MBSD is home to 43 schools! With a district wide enrollment of approximately 16,470 students, Mat-Su is the second largest school District in Alaska--behind Anchorage. There is a current need for new schools to be added to the district, from elementary to high school, which will increase the demands for quality tracks and fields.

There are currently only two running tracks in the State that qualify as a 'sanctioned track' for sanctioned track meets - one in Juneau and the other in Fairbanks. With the Mat-Su Borough population growth exceeding all other areas in the State, it only makes sense that this centrally-located school district should have a sanctioned track.

This project will significantly enhance the Borough's economy through the many school teams and their families that would come to the Mat-Su Valley for track meets and tournaments...using hotels, restaurants, gas, and supplies.

In addition, overweight and obesity are on the rise in Alaska, affecting individuals of all ages, of all racial and ethnic backgrounds, and with all levels of education and income. This relatively rapid increase in obesity rates will have lasting impacts on the health and quality of life of Alaskans, as well as on the healthcare system long into the future. Two out of three Alaska adults are overweight or obese, and many of these adults are already or will soon be dealing with obesity-related health issues, such as diabetes, heart disease, cancer and high blood pressure. Alaska's youth are affected

**\$785,000
Approved**

by obesity as well, and they too will be facing significant obesity-related chronic diseases in their future. A safe running track in the Mat-Su Valley will encourage Alaskans to walk or run to stay fit, a win-win for the individual and the healthcare system.

The blacktop surface now being used on the track is expensive and difficult to maintain. At this time, the material has deteriorated to a point where repair is not practical and resurfacing would be the only way to repair.

One of the biggest issues, however, is that this hard asphalt surface has caused many injuries to students and community members due to bumps, holes, and cracks from frost heaves, etc., and the risk for increased injury is due to the hard surface. We need to replace this track with a newer more user-friendly material. (See back-up document)

We submitted a request in FY06 for this project at a cost of \$675,000, and received a partial grant of \$170,000. We were unable to secure additional funding in following years, neither from the State nor from bonds. In FY11, we reappropriated the partial funds to another project.

A 2009 subsurface investigation was performed on the soil beneath the current track, and the tests revealed the soil to be inferior and poor grade. Due to the additional soil site work required prior to track resurfacing and increased costs since FY06, the new request is for \$785,000.

We need to improve this track to ensure our students, as well as community members, have a safe place to run. The Colony High School track will continue to be a serious safety issue until a proper resurfacing has been completed. Thank you for your review of our request and we hope there will be a serious consideration to fully fund this project.

Project Timeline:

This project, if fully funded, will be completed in FY12.

Entity Responsible for the Ongoing Operation and Maintenance of this Project:

Mat-su Borough School District

Grant Recipient Contact Information:

Name: Don Carney
 Title: Facilities Coordinator
 Address: 3901E Bogard Rd
 Wasilla, Alaska 99654
 Phone Number: (907)376-0806
 Email: don.carney@matsuk12.us

Has this project been through a public review process at the local level and is it a community priority? Yes No



Mission: Mat-Su Borough School District prepares students for success

Matanuska-Susitna Borough School District

OPERATIONS & MAINTENANCE DEPARTMENT

Henry Cottle, Director

3901 E. Bogard Road

Wasilla, Alaska 99654

(907)376-0806 Fax (907)376-7866

February 25, 2011

Carl Gatto
600 East Railroad Avenue
Wasilla, Alaska 99654

Attn: Karen Sawyer
Fax: 1-907-465-2381

Re: Track Resurfacing/ Colony High School

Thank you for reconsidering this project (Track Resurfacing) at Colony High School.

Attached is a new cost estimate and backup material data sheet. A letter of support from the school administrators will be sent to you on Friday, February 25, 2011.

If you should have any questions or concerns, please contact us at 1-907-376-0806 and we will be happy to assist you.

Thank you,

Don Carney
Assistant Director
Operations & Maintenance
Matanuska-Susitna Borough School District

Hello,

For our District 13 capital projects list, we need more information on the following projects:

1. Colony High School – Renovate and Resurface Outdoor Running Track

- a. This is another project that has been requested for several years.
We were awarded partial funding in FY06, but we could not get additional funding, even through bonds. That grant was set to lapse last year, so so the borough re-appropriated it to another Palmer project.
- b. Don said he is getting the most recent cost estimates for this project.
Do to the results of our soils testing the new cost estimate is \$785,000. There is a large amount of sight work required
- c. Please submit a support letter for documentation.
We have attached the soils report and will send more info from the Borough as soon as we can get it.
- d. I will be using information from previous CAPSIS entries on this project.

We are hopeful that some, if not all, MSBSD projects are accepted by the Finance Committee. First, we will be meeting with Rep. Keller's and Sen. Menard's office tomorrow to discuss the top priorities for our District G-which includes District 13 and 14. The three offices have to agree on the projects submitted to the Finance Committee. These top priorities will be submitted Monday morning, February 28th, to the Finance Committee for inclusion into the Capital Budget. However, please be aware there is no guarantee that the Committee will include all of our requests.

I will keep you posted as the process develop. Thanks for all your work on creating your list of projects, and for the follow-up to our requests. Please call me if you have any questions.

Karen

*Karen Sawyer, Staff
Office of Representative Carl Gatto
State Capitol, Room 118
Juneau AK 99801*

*465-5025 direct
465-2381 fax
Karen_Sawyer@legis.state.ak.us*



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e-mail: mhpe@mtaonline.net

February 26, 2009

Matanuska-Susitna Borough
350 E. Dahlia
Palmer, Alaska 99645

Attn: John Harris

Subject: Colony H.S. Track Soils

Dear Mr. Harris,

This letter is a summary of the findings of a limited soils investigation of the soils under the outdoor track at Colony High School in Palmer, AK. Below is a quick summary of the soils encountered. More details can be found on the logs and lab reports attached.

The subsurface investigation was conducted February 12, 2009, and consisted of four borings drilled by Discovery Drilling using a hollow-stem auger on a truck mounted Mobile Drill B53 drill rig. The borings were in the outer lane at locations on the north, south, east and west portions of the track. Approximate test pit locations as measured by school district employees by tape in the field are shown on the Test Boring Location Map attached. Exploration was supervised and the test pits logged by Joy Vaughn.

Originally the plan was to continuously sample the soils shallower than 4.5 feet by driving a split spoon. The frozen soil contained large particles and could not be easily penetrated by the split spoon; therefore, to obtain most of the samples the auger was pulled and the samples were collected directly off the auger flights.

These samples are inferior for a few reasons. The auger always causes breakage of larger particles; however, when the soil is frozen the grinding and breakage is much more severe. A sieve analysis of such material will show a larger proportion of small particles and fines than the in-situ material. Auger samples are actually a mixture of the soils they pass through. For instance, a layer of clean gravel over silt would be mixed to become silty gravel on the auger. A small silt seam would not be noticed. Additionally, gravel was observed falling from the auger as it was pulled to collect samples. When the bottom of the hole was shallow, the sample was collected by hand from the bottom.

Split spoon samples are also less than representative, especially in frozen soil. The spoon crushes and/or drives out larger particles, which also tends to skew samples toward a greater amount of fines than the in-situ material.

The split spoon sampler that was used had an outside diameter of 3 inches and an inside diameter of 2.5 inches. The blow count was recorded according to the effort of a 300-pound hammer with a 30-inch drop, known as the North American Large Penetration Test (NALPT). The NALPT uses more weight and a larger sampler than the Standard Penetration Test (SPT) so the blow counts **are not** equivalent to standard penetration numbers. The blow counts give an indication of the density and/or the presence of large particles (cobbles) in the soil. In this case, the high blow counts are also due to the frozen condition of the soil. The large sampler was used because it permits recovery of better samples than the SPT in soils with significant gravel content.

General descriptions of the soils encountered are recorded on the right side of the boring logs attached. Where these disagree with the lab samples, the log shows our opinion of the in place soil before sampling degradation. Also shown are properties such as cobble presence, which were implied by the drilling action in the field but not reflected in the samples.

The moisture content, blow count, type and location of samples, and the general soil type are shown graphically on the left side. The logs show the number of blows required to advance the sampler from 6" to 18" below the beginning of each split-spoon sample as "blows per foot". The actual blow counts are shown on the test data summary. Note that these are not standard penetration blow counts. Standard penetration blow counts would be higher.

As indicated above, it is not possible to produce an exact soil profile because of the way the samples had to be collected. A couple of the shallow samples had enough small gravel fracture to suspect a thin layer a D-1 may be under the pavement. The remainder of the samples appear to be pit run gravel containing cobbles. The gravel frost class seems to vary between NFS and F1. Some of the subgrade soil has below 6 percent fines. We believe the remainder probably has less than 10 percent fines in place.

It is trusted this information meets your present requirements.

Sincerely,

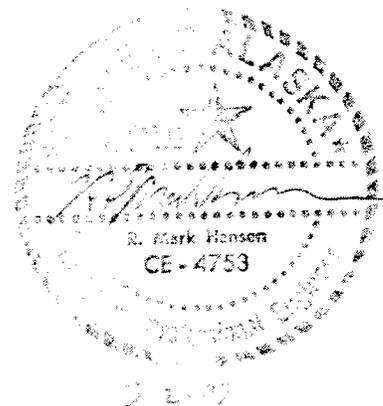
Joy A Vaughn, Engineer

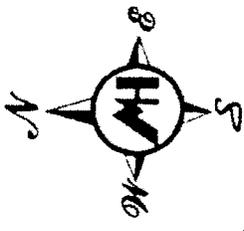
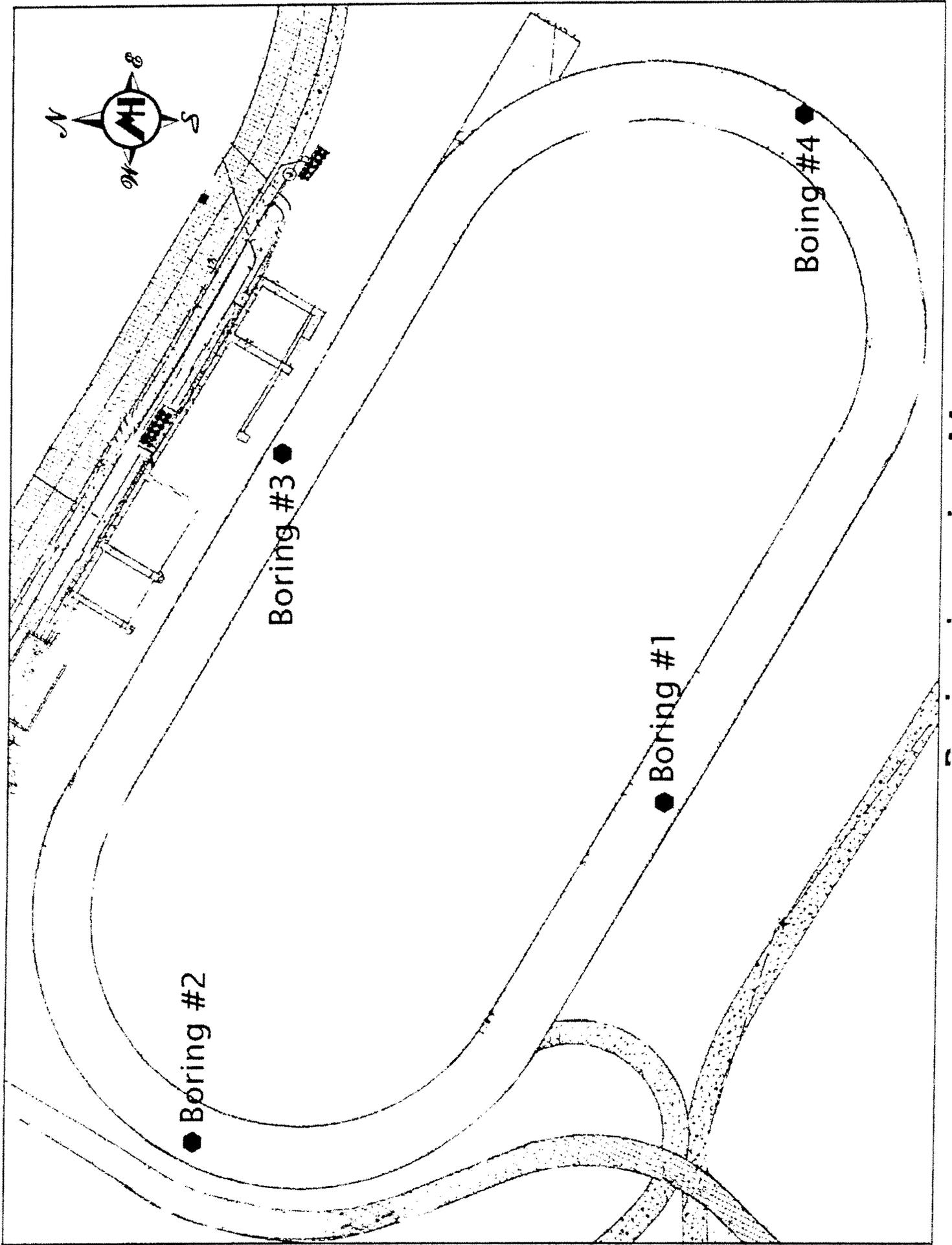
Reviewed by:



Mark Hansen, PE

Attachments: Boring Location Map
 Soils Logs Plates 1-4
 3 Sieve Reports
 Lab Summary
 ASTM Soil Classification Chart
 Frost Design Soil Classification





● Boring #2

● Boring #3

● Boring #1

● Boring #4

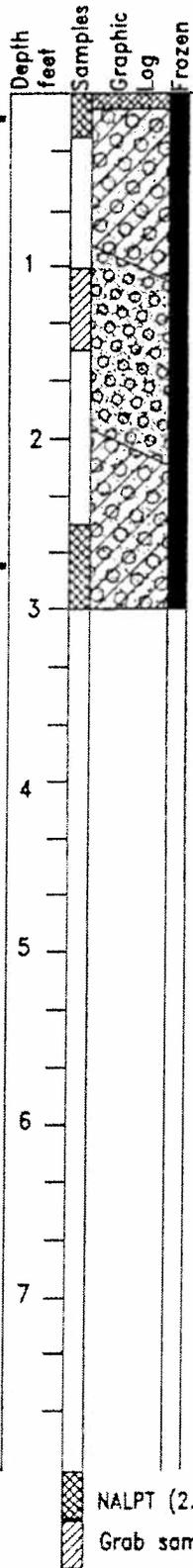
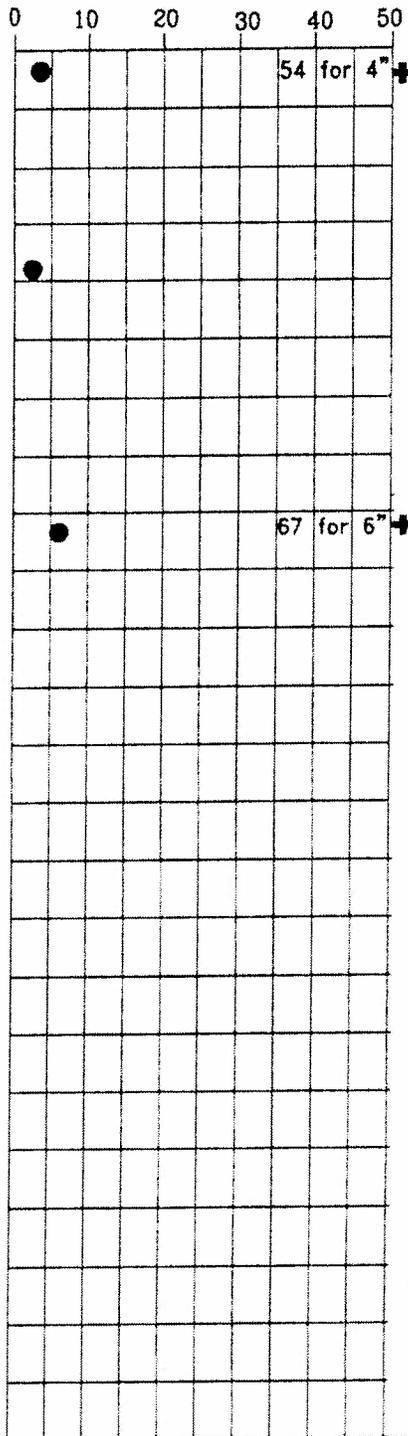
Log of Boring 1

Drilled: February 12, 2009

Equipment: Mobile Drill B53

Location: S side of track, 14' from end of bleachers, 5.5' from S edge of pavement, see map

- + Blows / Foot
- Moisture Content %



Depth feet	Description	Other Testing
0 - 0.5	Asphalt concrete pavement	
0.5 - 2.5	F1/F2 TAN WELL GRADED GRAVEL WITH SILT AND SAND TO WELL GRADED SAND WITH SILT AND GRAVEL (GW-GM/SW-SM) damp, occasional cobbles. D-1 likely under pavement. Fill.	
2.5 - 3	NFS, TAN POORLY GRADED GRAVEL WITH SAND (GP) occasional cobbles, all sand sizes, damp. Fill.	
3 - 7	F1/F2 TAN WELL GRADED GRAVEL WITH SILT AND SAND TO WELL GRADED SAND WITH SILT AND GRAVEL (GW-GM/SW-SM) occasional cobbles, all sand sizes, wood, damp. Fill. Silt content probably less than 10%. Bottom of exploration 3'	SA #200=15.7%

- + Blows / Foot
- Moisture Content %

NALPT (2.5" I.D. split spoon, 300# Hammer, 30" drop)
 Grab sample off of auger



Mark Hansen P.E.
 Consulting Engineers Testing Laboratories
 P.O. Box 4323, Palmer, AK 99645
 (907) 745-4721 Fax (907) 746-4721
 Job No.: 09003 Date: February 2009

Log of Boring 1
 Colony H.S. Track
 Matanuska-Susitna Borough
 350 E. Dahlia
 Palmer, AK 99645

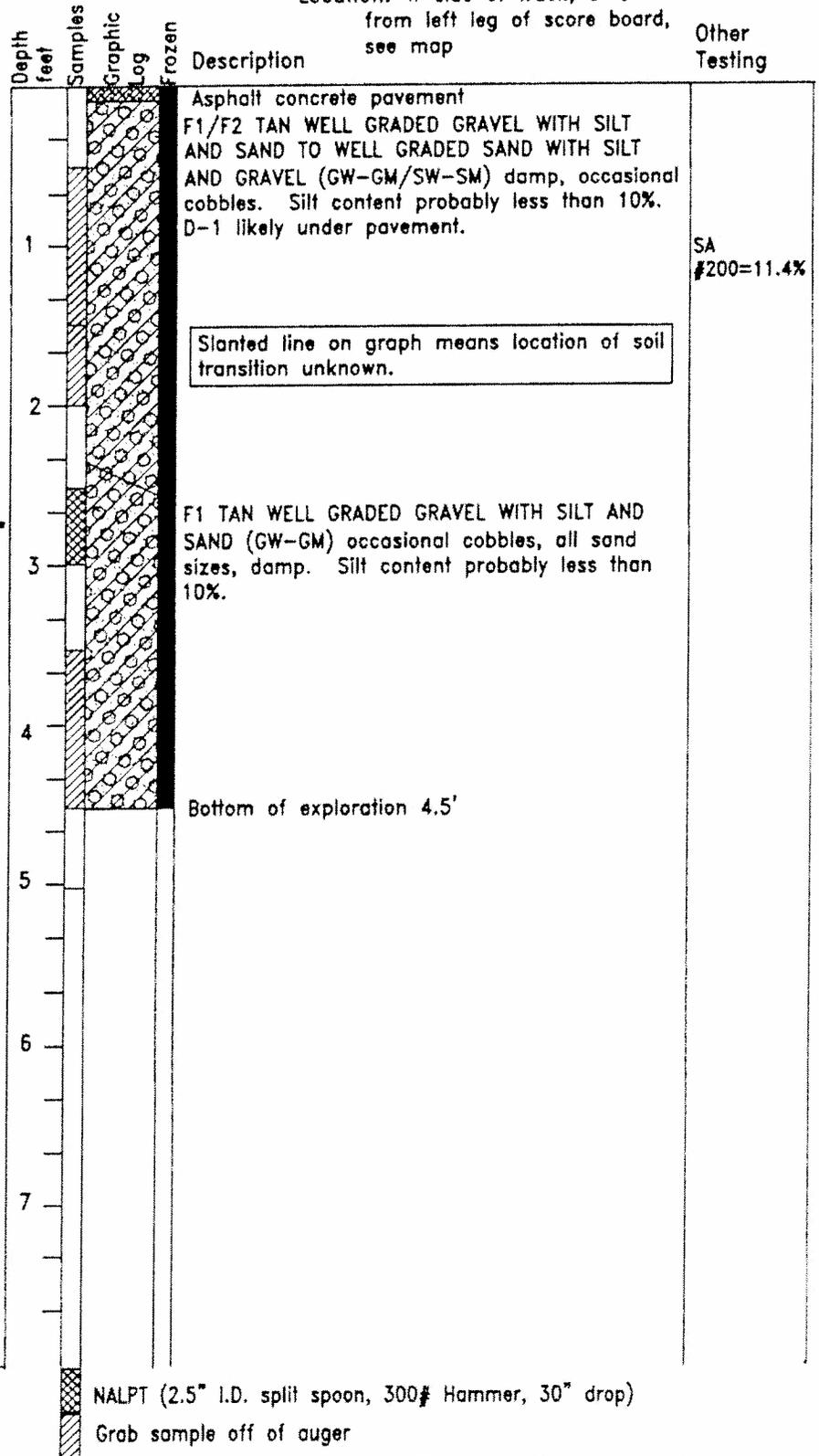
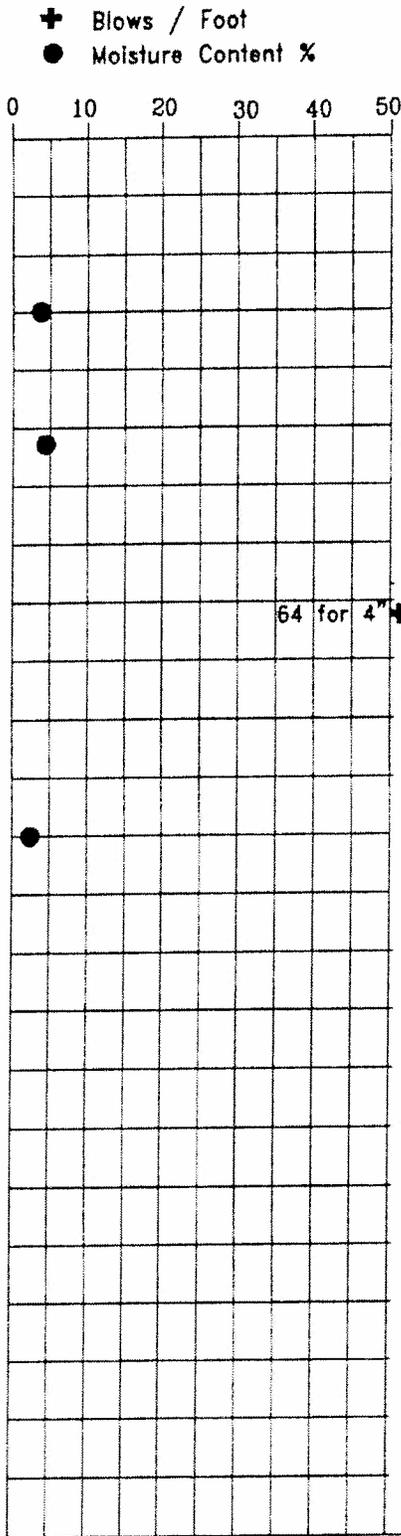
Log of Boring 2

Drilled: February 12, 2009

Equipment: Mobile Drill B53

Location: W side of track, 8' 3" from left leg of score board, see map

Other Testing



+ Blows / Foot
● Moisture Content %



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Job No.: 09003 Date: February 2009

Log of Boring 2

Colony H.S. Track
Matanuska-Susitna Borough
350 E. Dahlia
Palmer, AK 99645

Plate
2

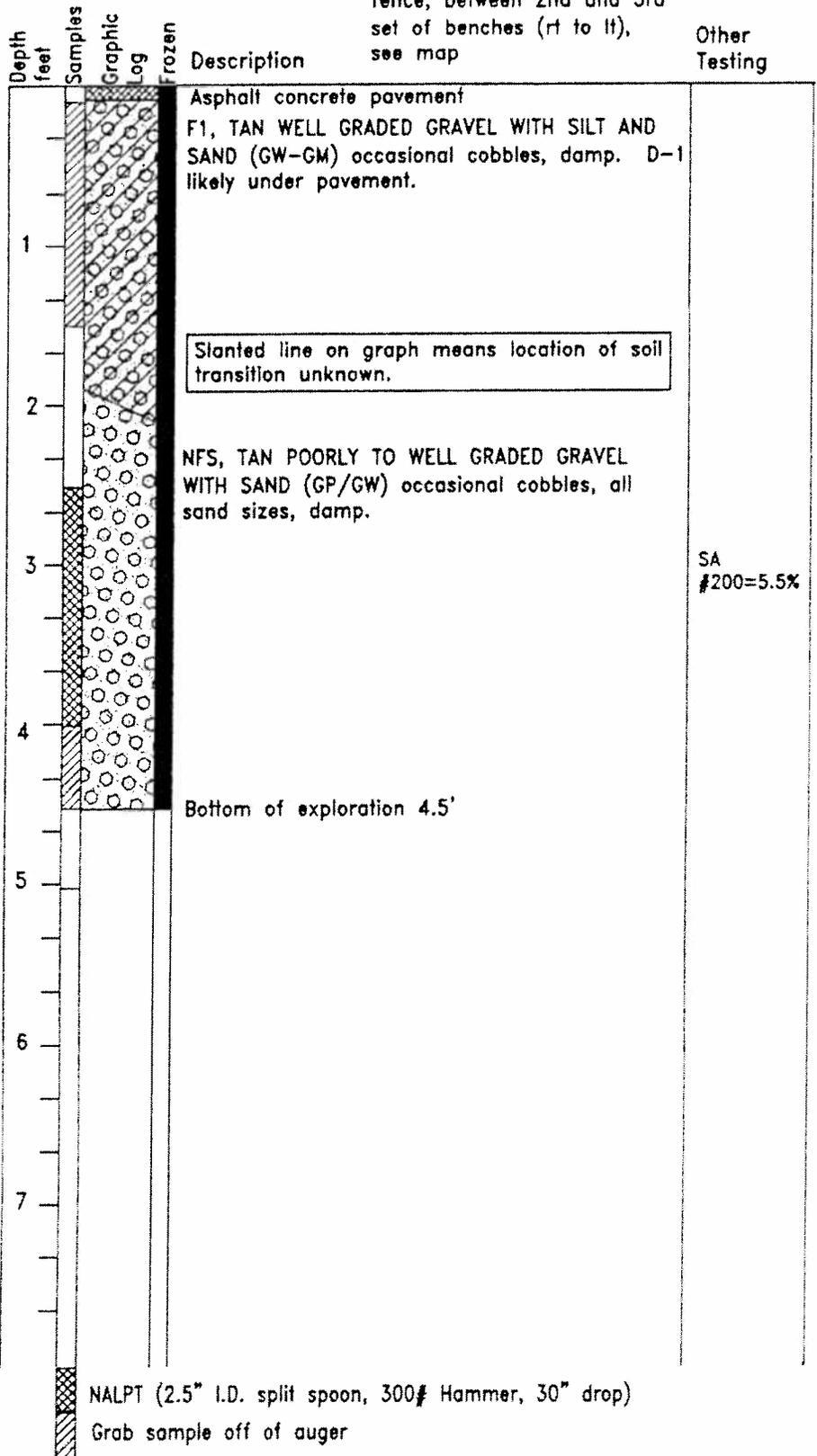
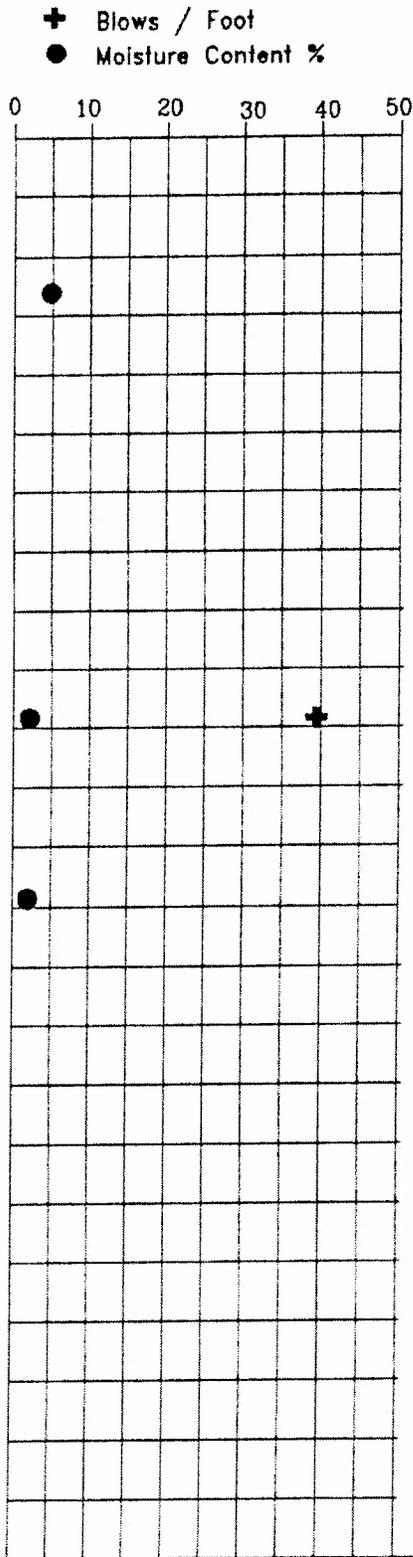
Log of Boring 3

Drilled: February 12, 2009

Equipment: Mobile Drill B53

Location: N side of track, 9' from fence, between 2nd and 3rd set of benches (rt to lt), see map

Other Testing



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Job No.: 09003 Date: February 2009

Log of Boring 3

Colony H.S. Track
 Matanuska-Susitna Borough
 350 E. Dahlia
 Palmer, AK 99645

Plate
 3

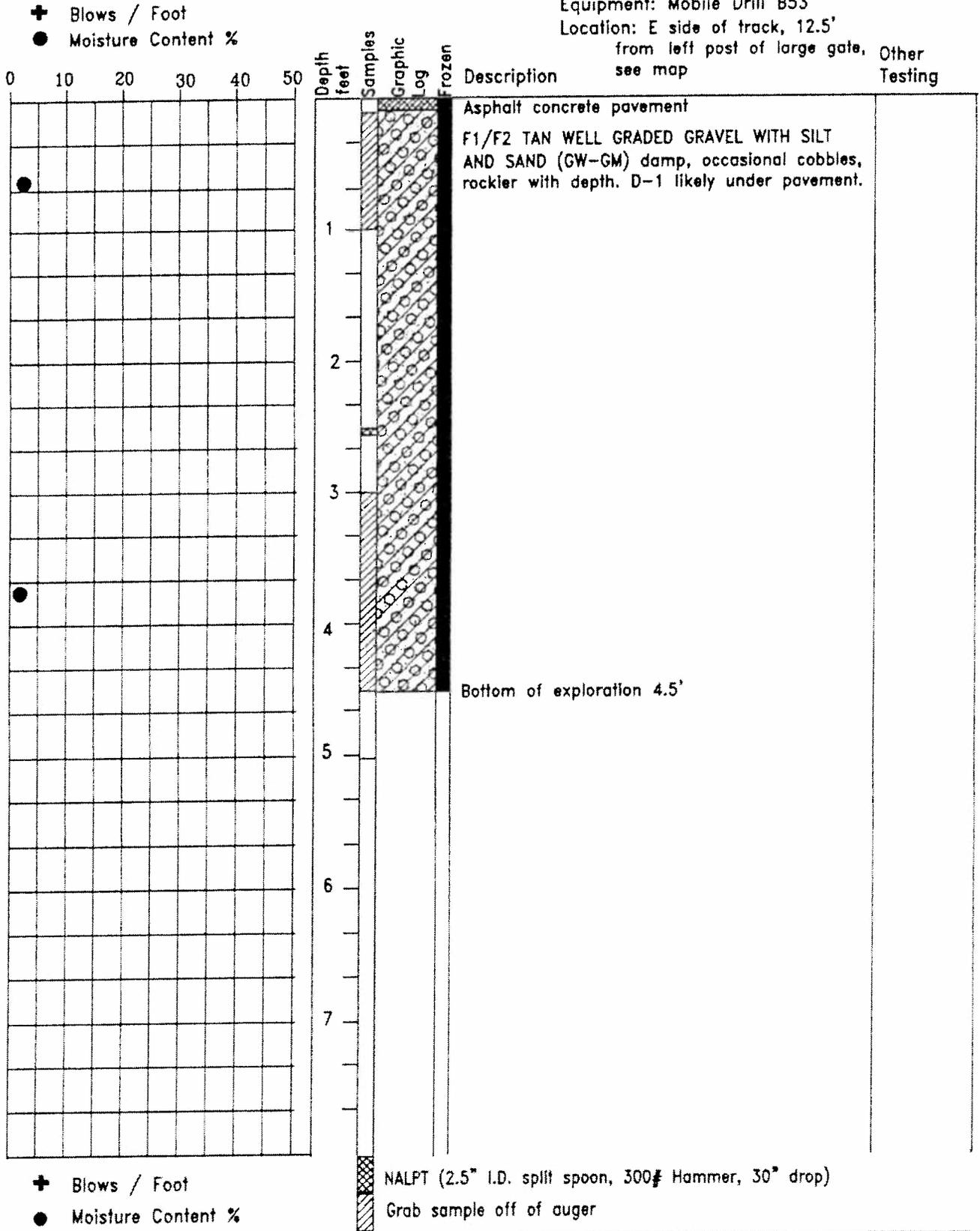
Log of Boring 4

Drilled: February 12, 2009

Equipment: Mobile Drill B53

Location: E side of track, 12.5'

from left post of large gate, Other
see map Testing



Mark Hansen P.E.

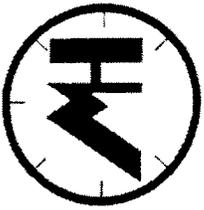
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 (907) 745-4721 Fax (907) 746-4721

Job No.: 09003 Date: February 2009

Log of Boring 4

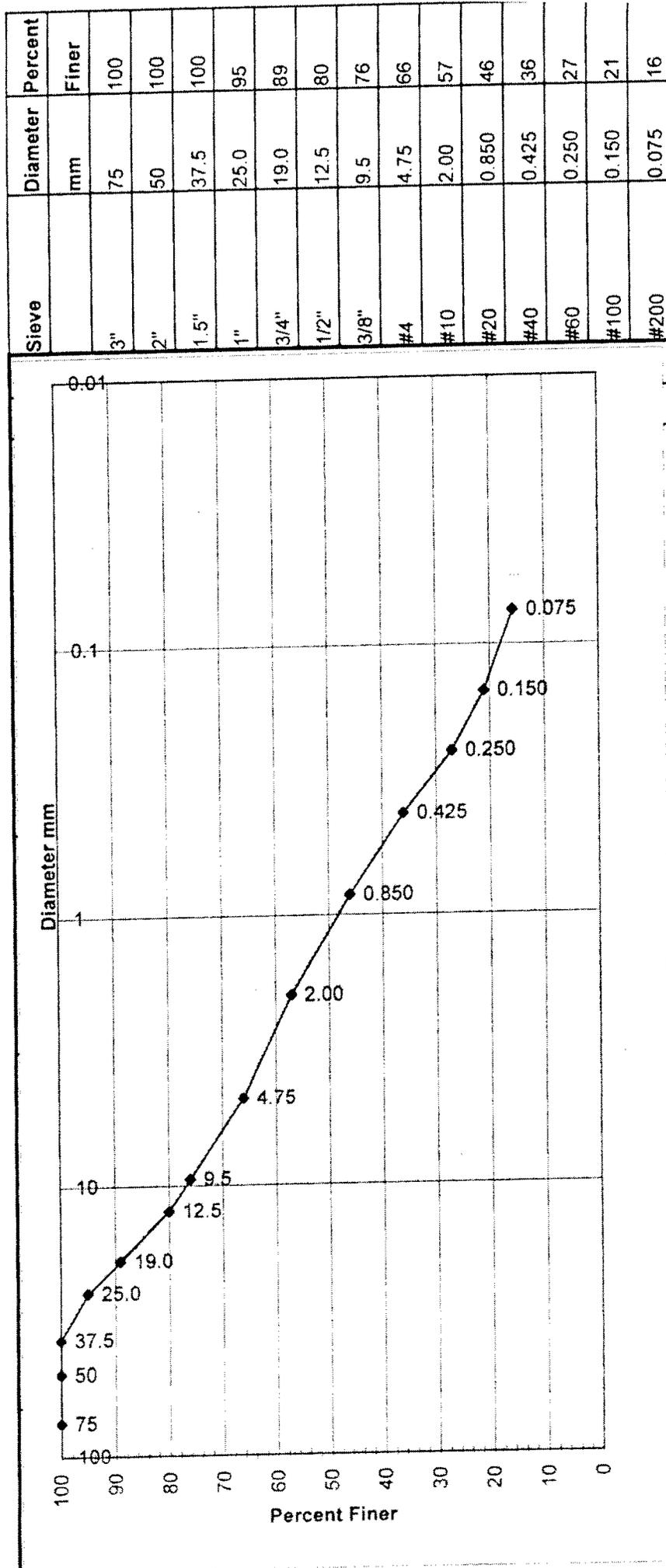
Colony H.S. Track
 Matanuska-Susitna Borough
 350 E. Dahlia
 Palmer, AK 99645

Plate
 4



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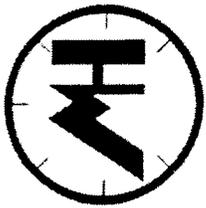
P.O. Box 4323 Palmer, AK 99645-4323 Phone: (907) 745-4721 Fax: (907) 746-4721
 e-mail: mhpe@mtaonline.net



Client: **Mat-Su Borough School District** Soil Description: **Silty Sand with Gravel** Date: **2/23/2009**

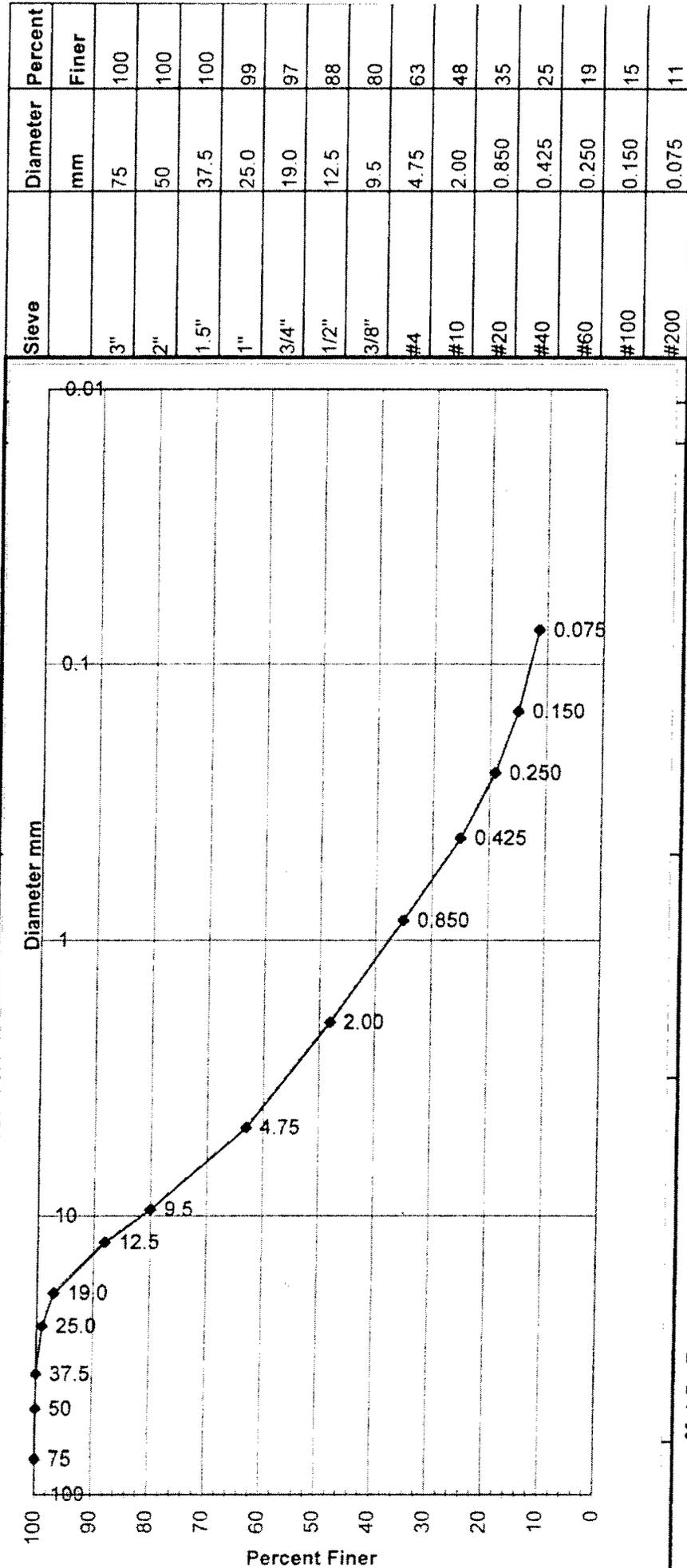
Project: **Colony Track** Unified Classification: **SM** $C_u = 22$ Sample Date: **2/12/2009**

Sample Location: **Boring #1** Depth: **2.5 to 3'** $C_c = 0.2$ Proj. No.: **09003**

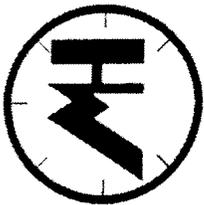


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Client: **Mat-Su Borough School District** Soil Description: **Well Graded Sand with Silt and Gravel**
 Project: **Colony Track** Unified Classification: **SW-SM**
 Sample Location: **Boring #2**
 Depth: **6" to 1.5'**
 Date: 2/23/2009
 Sample Date: 2/12/2009
 C_u = 80
 C_c = 1.9
 Proj. No.: 09003

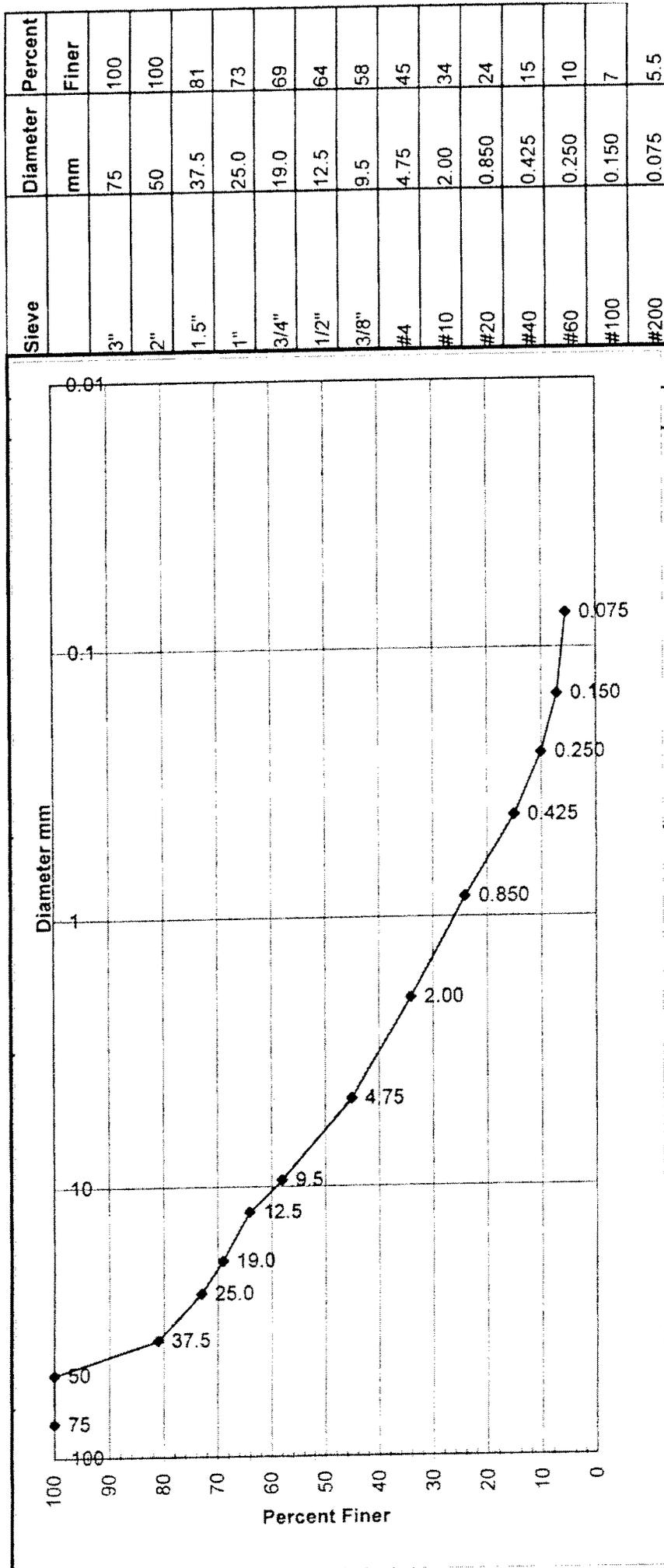


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e-mail: mhpe@mtonline.net



Client: Mat-Su Borough School District Soil Description: Poorly Graded Gravel with Silt and Sand Date: 2/23/2009

Project: Colony Track Unified Classification: GP-GM

Sample Location: Boring #3 Note: In-situ soil likely less than 5% fines, GP. $C_u = 41$ Sample Date: 2/12/2009

Depth: 2.5 to 4' $C_c = 0.8$ Proj. No.: 09003



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LABORATORY TESTING SUMMARY

Colony High School Track Matanuska-Susitna Borough School District

Exploration: February 12, 2009

Test Hole	Depth Feet	Moisture	Visual Classifications		Pass #200	Blows/6 inches (300#, 30" drop) NALPT Spoon
			Frost Class	Unified Class		
1	surface	3.7%	F1/F2	GM/SM		54 for 4"
1	12"-18"	2.7%	NFS/F1	GP/GP-GM		off auger
1	2.5-3	6.2%	F2	SM	15.7	11/67
2	6"-1.5'	3.9%	F2	SW-SM	11.4	off auger
2	1.5-2	4.4%	F2	SW-SM		off auger
2	2.5-3			fractured rock only		17/64 for 4 "
2	3.5-4.5	2.3%	F1	GW-GM		refusal/ sample off auge
3	0-1.5	4.9%	F1	GM		off auger
3	2.5-4	2.2%	NFS/F1	GP-GM	5.5	25/14/25
3	4-4.5	2.1%	NFS/F1	GP-GM		off auger
4	0-1	2.6%	F1	GM		off auger
4	1			rock		4" cobble stuck in b
4	2.5			fractured rock only		sampler refusal
4	3-4.5	1.8%	F1	GM		off auger

ASTM Soil Classification Chart

Criteria for assigning Group Symbols and Group Names Using Laboratory Tests^a

		Soil Classification	
		Group Symbol	Group name ^a
Coarse-Grained Soils More than 50% retained on No. 200 sieve	Gravels		
	More than 50% of coarse fraction retained on No. 4 sieve.	Clean Gravels Less than 5% fines ^c	GW
	Sands	Gravel with Fines More than 12% fines ^c	GP
	50% or more of coarse fraction passed No. 4 sieve	Fines classify as ML or MH Fines classify as CL or CH	GM
	Silt and Clays	Clean Sands Less than 5% fines ^d	GC
	Liquid limits less than 50	Sands with fines more than 12% fines ^d	SW
Fine-Grained Soils 50% or more passes the No. 200 Sieve	Silt and Clays	Less than 5% fines ^d	SP
	Liquid limits less than 50	Sands with fines more than 12% fines ^d	SM
	Inorganic	Fines classify as ML or MH Fines classify as CL or CH	SC
	Organic	PI > 7 and plots on or above "A" line ^f PI < 4 or plots below "A" line ^j	CL
	Liquid limit - oven dried	Liquid limit - oven dried < 0.75	ML
	Liquid limit - not dried	Liquid limit - not dried	OL
Highly organic soils	Silt and Clays	Inorganic	CH
	Liquid limits 50 or more	PI plots on or above "A" line PI plots below "A" line	MH
	Primarily organic matter, dark in color, and organic odor	Liquid limit - oven dried < 0.75	OH
	Liquid limit - not dried	Liquid limit - not dried	PT
	Organic	Organic Clay ^{k,l,m,n} Organic silt ^{k,l,m,o}	Organic Clay ^{k,l,m,p} Organic silt ^{k,l,m,q}
	Fat Clay	Elastic silt ^{k,l,m}	Peat

^a Based on the material passing the 3-in. (75-mm) sieve.

^b If field sample contained cobbles or boulders, or both, add "with cobbles or boulders, or both" to group name

^c Gravels with 5 to 12% fines require dual symbols

GW-GM well-graded gravel with silt

GW-GC well-graded gravel with clay

GP-GM poorly graded gravel with silt

GP-GC poorly graded gravel with clay

^d Sands with 5 to 12X fines require dual symbols

SW-SM well-graded sand with silt

SW-SC well-graded sand with clay

SP-SM poorly graded sand with silt

SP-SC poorly graded sand with clay

^e $Cu = D_{60}/D_{10}$ $Cc = (D_{30})^2$

$D_{10} \times D_{60}$

^f If soil contains $\geq 15\%$ sand, add "with sand" to group name

^g If fines classify as CL-ML, use dual symbol GC-GM or SC-SM

^h If fines are organic, add "with organic lines" to group name.

ⁱ If soil contains $\geq 15\%$ gravel, add "with gravel" to group name.

^j If Atterberg limits plot in hatched area, soil is a CL-ML, silty soil.

^k If soil contains 15 to 29% plus No. 200, add "with sand" or "with gravel," whichever is predominant.

^l If soil contains $\geq 30\%$ plus No. 200, predominantly sand, add "sandy" to group name.

^m If soil contains $\geq 30\%$ plus No. 200, predominantly gravel, add "gravelly" to group name.

ⁿ PI ≥ 4 and plots on or above "A" line.

^o PI < 4 or plots below "A" line.

^p PI plots on or above "A" line.

^q PI plots below "A" line.

U.S. Corps of Engineers
Frost Design Soil Classification

Frost group	Soil Type	Percentage finer than 0.02mm, by weight	Typical soil types under Unified Soil Classification System
NFS	Sands and Gravelly soils	< 3	SP, SW, GP, GW
F1	Gravelly soils	3 to 10	GW, GP, GW-GM, GP-GM
F2	(a) Gravelly soils (b) Sands	10 to 20 3 to 15	GM, GW-GM, GP-GM SW, SP, SM, SW-SM, SP-SM
F3	(a) Gravelly soils (b) Sands, except very fine silty sands (c) Clays, PI >12	>20 >15 ---	GM, GC SM, SC CL, CH
F4	(a) All silts (b) Very fine silty sands (c) Clays, P ₁ <12 (d) Varved clays and fine-grained, banded sediments	--- >15 --- ---	ML, MH SM CL, CL-ML CL and ML CL, ML, and SM; CL, CH, and ML; CL, CH, ML, and SM



MARK HANSEN P.E.

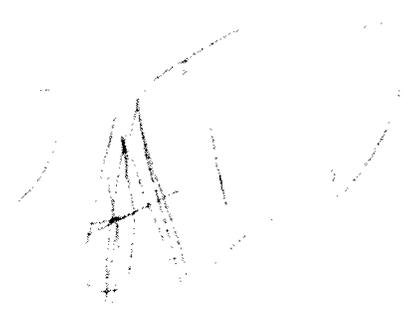
2605 N. Old Glenn Hwy
PALMER, AK 99645
(TIN) 92-0141516

INVOICE

DATE	INVOICE #
3.3.2009	09003-1

BILL TO
Matanuska Susitna Borough Attention: Accounts Payable 350 E Dahlia Avenue Palmer Ak 99645

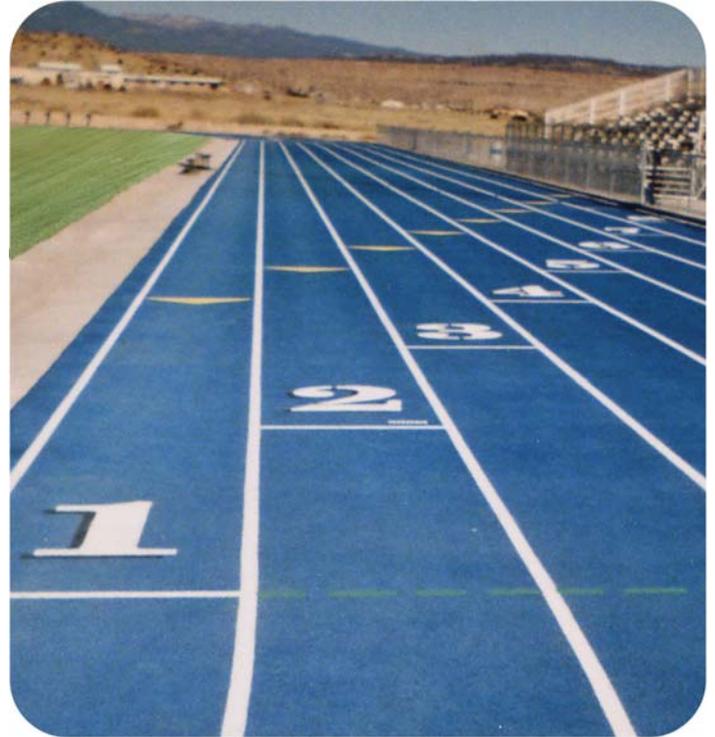
P.O. NO.	TERMS	PROJECT
2009-00003258	Due on receipt	Colony High School Track

Date	DESCRIPTION	QTY	RATE	AMOUNT
3.2.09	LUMP SUM AS P/LR PROPOSAL of \$2000 	1	2,000.00	2,000.00
Total				\$2,000.00

RSS-200

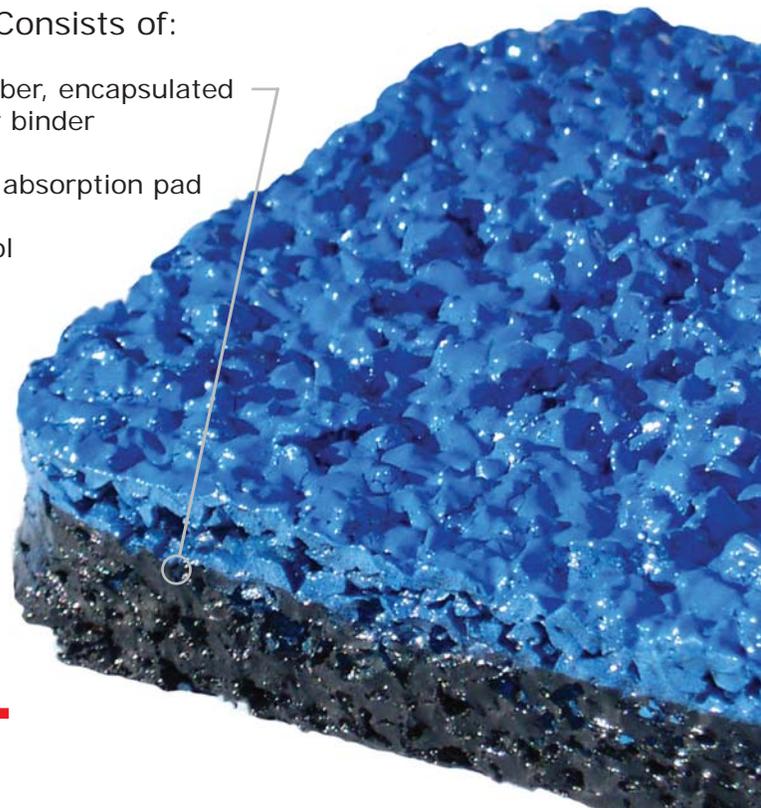
The RSS-200 synthetic track surface is a 100% latex polymer-bound track system that offers economical all-weather performance. The SBR base layers provide excellent resilience and shock absorption. Finished with two layers of colored EPDM granules, this dual-density surface provides superior performance in latex-bound systems.

The RSS-200 uses only the highest quality latex polymers and pigments to provide a durable surface with good longevity.



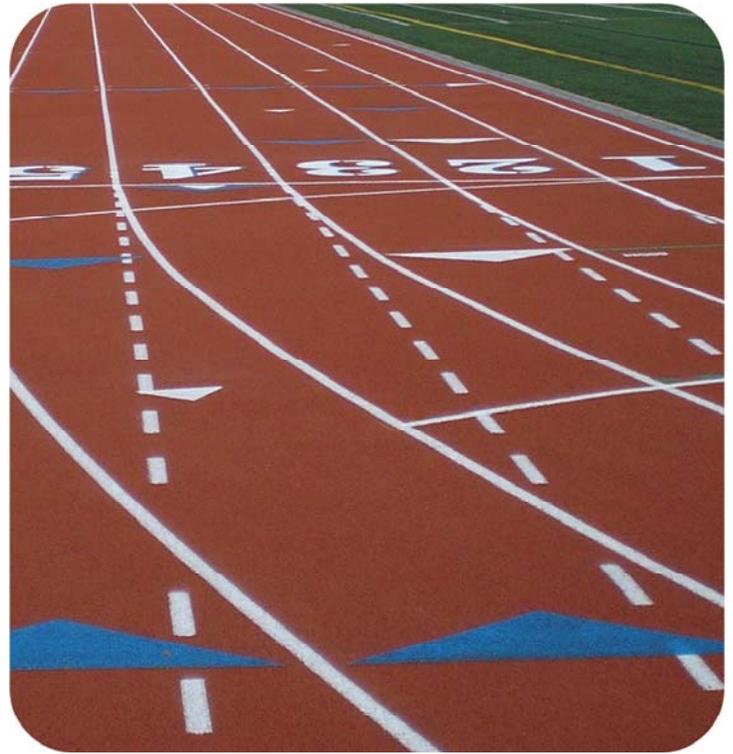
The RSS 200 Track System Consists of:

- Two layers of colored EPDM rubber, encapsulated with a pigmented latex polymer binder
- Latex-bound SBR rubber shock absorption pad
- Ideal for Middle and High School competition



RSS-5000

The RSS-5000 Synthetic Track Surface is a 100%, full-depth polyurethane-based track system designed for the highest level of competition at any venue. The force-reduction layer is comprised of very fine rubber particles mixed with a two-component flow-applied polyurethane, providing the necessary shock-absorption for elite competition and training. The top wear layer combines embedded rubber granules within the polyurethane to create outstanding rebound properties in a fast, resilient, and durable surface.



The RSS 5000 Track System consists of:

- Embedded 1-3mm EPDM rubber granules provide excellent resilience and traction
- Two-component flow-applied polyurethane flood and chip wearing course provides exceptional rebound energy
- Two-component flow applied force reduction layer provides the necessary shock-absorption for rigorous training and competition
- Ideal for all levels of competition, including international and professional

