



Town of Sudbury

Community Preservation Committee

cpc@sudbury.ma.us

www.sudbury.ma.us/cpc

RECEIVED
OCT 06 2022

Flynn Building
278 Old Sudbury Road
Sudbury, MA 01776
978-639-3387
Fax: 978-639-3314

PROJECT SUBMISSION FORM

Applicant: Town Of Sudbury Park and Recreation Dept.

Submission Date:

10/07/2022

Group or Committee Affiliation (if any): Park & Recreation Commission DPW Park Department Youth Softball Adult Softball

Applicant Address:

Dennis A. Mannone Jr.
Park & Recreation Dept.
40 Fairbank Road Sudbury Ma. 01776

Purpose (please select all that apply):

- Open Space & Recreation
 Community Housing
 Historic Resource

Applicant Email & Phone Number:

Mannonned@sudbury.ma.us 978-639-3259

Project Manager Email & Phone Number:

Mannonned@sudbury.ma.us 978-639-3259

Project Name: Frank Feeley Field Improvement Phase II

Project Description:

Sudbury Youth girls softball and adult softball operates there program on all three fields at Frank Feeley fields. These fields are in need of improvement and have safety concerns which are underway and being address in the already approved Phase I. This project will be bid out this Spring for improvements underway late spring early summer. We are request funds to complete Phase II of this project which will address the Feeley #2 safety concerns, ADA accessible and drainage issues in the outfields of Feeley #1 & #2 (See Attached)

Costs:

Fiscal Year	Total Project Cost	CPC Funds Requested	Other Funding Sources (Amount and Source)
2024	899,668	899,668	SGS Fundraising
2025			
2026			
2027			
2028			
Total			

How does this project meet the General Criteria and Category Specific Criteria for Community Preservation Committee projects (see attached)?

This Project qualifies in the Recreation Category for CPC projects

Does this project fall within the jurisdiction or interest of other Town Boards, Committees, Commissions, or Departments? If so, please list the boards, committees, commissions, or departments, whether applications and/or presentations have been made, and what input or recommendations have been given.

Park & Recreation Commission, DPW Department, Park Department, Facility Department

For Community Preservation Committee Use:

Form Received On: 10-6-22

Project Presented to CPC On: _____

Reviewed By: R Poteat

Determination: _____

Frank Feeley Field Park Improvements

Statement of Need:

The Frank Feeley Field is home to town tennis courts, as well as several softball fields and a baseball field. There is (1) 90 Ft lighted baseball diamond with a press box, bleachers, concession area and restrooms; (3) 60 Ft softball diamonds on two field levels and (6) tennis courts.

The softball diamonds have several safety issues regarding lack of protection from foul balls and the sun. Further, the swamp-like conditions on the two lower fields limit utilization during the key playing season. Due to encroaching steep slopes between fields and extensive water run-off from the parking lot and upper field, attempts to provide permanent benches fail due to shifting grounds.

Sudbury Girls Softball (SGS) is requesting funding for field improvements for the softball fields at Feeley Fields to provide a safe environment for the girls and adults softball to play. Our primary concern is safety for the children. The following request for funding focuses on immediate safety needs of the three softball fields at Feeley. Future funding requests also noted in this document, seek to address substantial usability issues at the lower two Feeley fields.

Phase I – Address Safety Issues Concerns (Bidding Phase I Late Winter/Spring) work to begin summer 2023

The girls' softball fields in Sudbury do not have protective dugouts which is common in all other ball fields in Sudbury, to shield the players from foul balls, overthrows and peak sun. SGS is requesting funds for the construction of dugouts for Upper Feeley and Feeley #1 softball diamonds.

Second, due to the close proximity of the tennis courts to the field at Upper Feeley, foul balls are frequently hit onto the tennis courts or the area where children, spectators and families are sitting or standing during games. The lack of protection from foul balls is creating a dangerous environment. SGS is requesting funding to construct a protective netting on the first base side of Upper Feeley softball diamond to provide spectator and tennis player protection. It should be noted that when the citizens of Sudbury are playing tennis, their backs are to the softball field, so there is little warning as a hard-hit foul ball flies into the court. We have been lucky to date that a spectator or a resident of Sudbury playing tennis while a softball game or practice takes place has not had a significant injury due to a stray flying softball.

Third, the SGS batting cage sits in the Feeley Field parking lot which has a steady flow of cars coming in and out of the area. SGS is requesting funding to build a

Timber guardrail to provide a barrier between the batting cage and the parking lot for the SGS players who practice frequently in the SGS batting cage.

This Phase I request will provide substantive safety improvements to (2) primary softball diamonds, Upper Feeley and Feeley #1, as well as the key practice area around the batting cage.

An additional component of the Phase 1 request is for CPC funds to contribute towards the design costs associated with all the field improvements. Design costs will include accounting for the significant water issues at Lower Feeley fields and how to level the slope to manage drainage utilizing retaining wall(s) and other methods to manage the water flow. The design will accommodate the current accessibility issues that exist.

Phases II Updated

SGS would like the Committee to consider future funding to complete the key repairs to bring all three of the Feeley softball diamonds up to the standards of other town fields.

In future phases, SGS feels it is critical to address the swamp-like conditions at the Feeley #1 and #2 softball diamonds. Due to Upper Feeley and parking lot run-off, combined with generally wet conditions in lower Feeley, large parts of the outfield, as well as, the third base line and bench area at Feeley #1 and the first base line and bench area at Feeley #2 are unusable for weeks at a time due to swamp conditions. There have been wet springs were SGS could not use all of their fields until the middle of June, when the season is almost over. The puddles create hazards for the players and coaches and are a breeding ground for insects and mosquitos due to the stagnant water. Stagnant water increases the threat of mosquitoes who may carry disease such as Eastern Equine Encephalitis (EEE), West Nile, etc. It is critical to minimize areas of stagnant water at these softball fields.

Due to the challenging location of Feeley #2 with little access for construction equipment, SGS believes construction of dugouts at Feeley #2 should be done at a later juncture (Phase II) because of the potential field disruption by the construction.

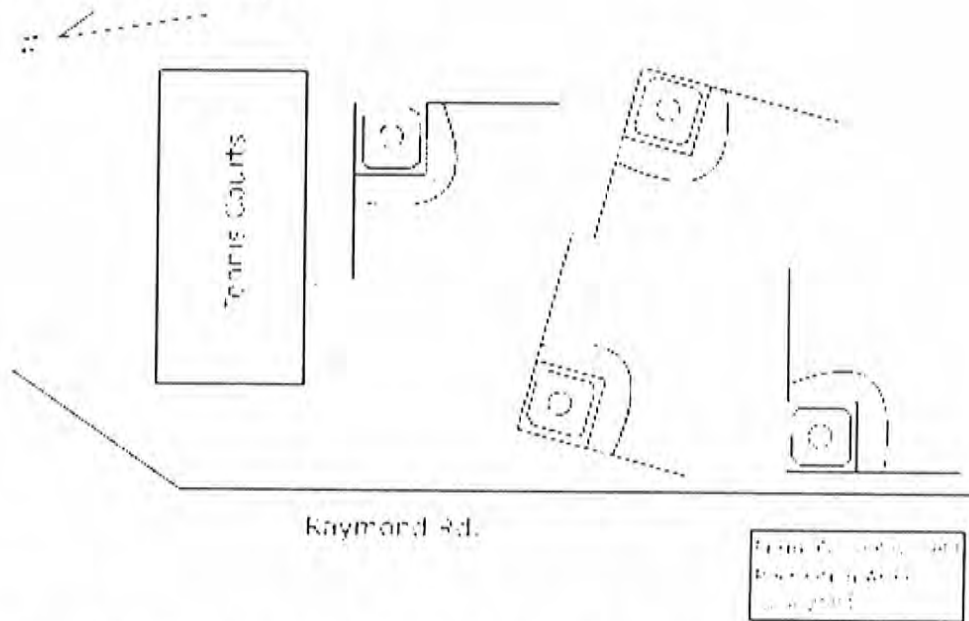
Phase II is extremely critical, but the most disruptive phase of SGS's request which would be the water remediation work that is needed on both lower Feeley diamonds #1 and #2. Installing interceptor drain to capture the Upper Feeley water run-off combined with a network of field drainage piping would enable SGS and other interested groups and families the ability to enjoy fully functioning softball fields all year round, including the wet season. Due to the disruption, SGS feels this project should be done in a separate phase and the critical safety projects serve as first priority.

SGS has seen a continued growth in girl/family participation. SGS has expanded its age groups and has programs throughout the year ranging from kindergarten through high school. In addition, the work over the past decade that SGS has done building interest and participation in town is showing results at the high-school level.

With the continued growth in participation, SGS needs all three Feeley softball diamonds available and fully operational during all three seasons Spring, Summer and Fall.

SGS respectfully requests consideration by the Committee to support the design and development of the Feeley softball field improvements funded by the Community Preservation Act funds.

Feeley Field Map



<https://www.bing.com/maps?v=2&cp=42.35655%7E-71.42033&style=o&lvl=1&tilt=-90&dir=0&alt=-1000&scene=2874195&rtp=null%7Enull&wa=wsignin1.0>

Community Preservation Committee General Criteria

- Eligibility for Community Preservation Act (CPA) funding

This project is eligible for Community Preservation Act (CPA) funding according to the requirements described in the CPA legislation.

Improvement project meets the Recreation category of CPA eligibility since it is rehabilitating the surface of an outdoor recreational facility on property dedicated to outdoor activity. The Frank Feeley Field improvements would increase use of these recreational areas, serving the general public (available to all residents), and expands the use to allow all access to all area of the fields.

- Endorsements by other municipal boards or departments

The Frank Feeley Field Park is endorsed by the following Municipal Boards, Committees, Departments, and community organizations:

- Parks & Recreation Commission
- Parks & Recreation Department
- Public Works Department
- Parks and Grounds Department
- Sudbury Youth Girls Softball
- Sudbury Adult Ladies Softball
- Sudbury Men's Softball League

- Saves resources that would otherwise be threatened and/or serve a currently under-served population:

Our goal is to have a similar structure as the boys' baseball fields providing safety and shelter from stray balls. To date, we are not aware of any capital funds being slated for the improvement of the fields for softball. This request for funding is to keep this vibrant softball community strong with quality fields that may be equal or similar to the fields used by the baseball community.

- Either serve more than one CPA purpose (especially in linking open space, recreation, and community housing) or demonstrate why serving multiple needs is not feasible.

- **Demonstrate practicality, feasibility, urgency**

The safety of the players, bystanders and citizens of Sudbury who use the tennis courts continues to be a pressing concern. Sudbury Girls Softball is a thriving community. SGS provide a forum for girls in Sudbury to learn a great team sport, develop confidence and athleticism. The instruction provided for girls K-9 has led to successful seasons at Curtis Middle School and Lincoln Sudbury high school. SGS and Sudbury Women's Softball need Feeley Fields to continue to practice and play softball in a safe environment. Without much needed improvements, SGS will continue to underutilize Feeley fields due to the unsafe and wet conditions.

- **Demonstrate that the project can be implemented expeditiously and within budget.**

Funding at the May 2023 ATM will enable the project to be bid on during 2023-2024 season with an anticipated construction commencement early Spring 2024 or sooner.

Park & Recreation Dept. has been working with Warner Larson Landscape Architects to break down the project into sections based on scope of work. These costs reflect realistic costs also factoring in markups for contingency, general conditions, overhead, profit and 2 years escalation. We are basing our budget numbers on recent prevailing-wages projects that factor in more durable dugout construction and accessibility. The more sections that are done at one time may lead to design/mobilization savings.

Phase 2: Includes safety needs for Lower Feeley 2, ADA, drainage and irrigation for the lower Feeley fields \$899,668

<u>Feeley Field Sudbury - Phase-2 - Renovation Cost Estimate</u>					
9/30/2022					
Field area		sf	120,000		
Description	Quantity	Unit	Unit Cost	Estimated Cost	
SITE PREPARATION & DEMOLITION					
Site mobilization	1	ls	\$10,000.00	\$10,000.00	
Site construction fence	1,200	lf	\$12.00	\$14,400.00	
Site Construction gate & construction entrance	1	loc	\$5,000.00	\$5,000.00	
erosion control wattles	1,200	lf	\$6.00	\$7,200.00	
remove and dispose of benches	2	ea	\$500.00	\$1,000.00	
prep skinned infield for re-surfacing (2 fields)	17,000	sf	\$0.15	\$2,550.00	
deep core areate lawn, R&D of cores	100,000	sf	\$0.45	\$45,000.00	
				\$85,150.00	SITE PREP DEMO SUBTOTAL
EARTHWORK AND SOIL PROFILE					
sand top dressing	309	cy	\$55.00	\$16,975.31	
50mm drainage system (@20' OC)	3,500	lf	\$18.00	\$63,000.00	
8" collector pipe	420	lf	\$65.00	\$27,300.00	

outlet structure	1	ea	\$4,500.00	\$4,500.00	
install sand slits (@ 12" OC)	100,000	sf	\$0.55	\$55,000.00	
skinned infield top dressing/resurfacing	17,000	sf	\$1.25	\$21,250.00	
				\$188,025.31	EARTHWORK SUBTOTAL
SITE IMPROVEMENTS					
Bit Conc, 4" Thick	2,000	sf	\$4.00	\$8,000.00	
Concrete team areas, 6" Thick	500	sf	\$12.00	\$6,000.00	
Concrete bleacher areas, 4" Thick	500	sf	\$12.00	\$6,000.00	
infiltration stone (infiltration trench)	100	cy	\$52.00	\$5,200.00	
4" corrugated underdrain pipe	125	lf	\$40.00	\$5,000.00	
irrigation - spray heads and valves	100,000	sf	\$1.25	\$125,000.00	
irrigation - connection point/supply line	350	lf	\$20.00	\$7,000.00	
irrigation - controller	1	ls	\$5,000.00	\$5,000.00	
over seed field (slice seed install)	100,000	ls	\$0.35	\$35,000.00	
general lawn seed on disturbed areas	1	ls	\$2,500.00	\$2,500.00	
new CLF	50	lf	\$70.00	\$3,500.00	
retaining wall	120	lf	\$225.00	\$27,000.00	
Polyboard 2-tier bench (Sportsfield Specialties)	4	ea	\$3,500.00	\$14,000.00	
Gameshade Dugout (Sportsfield Specialties)	2	ea	\$19,500.00	\$39,000.00	
Structural Eng Stamp (Sportsfield Specialties)	1	ea	\$2,200.00	\$2,200.00	
Shipping (Sportsfield Specialties)	1	ea	\$2,500.00	\$2,500.00	
softball bases and plate	1	ls	\$7,500.00	\$7,500.00	
bleachers (for both field #1 and Field #2)	2	ea	\$10,000.00	\$20,000.00	
bleachers - shipping and assembly/install	2	ea	\$2,500.00	\$5,000.00	
				\$325,400.00	SITE IMPROVEMENT SUBTOTAL
			Total Site Development	\$598,575.31	

Feeley Field Sudbury - Phase-2 -Renovation Cost Estimate

9/30/2022

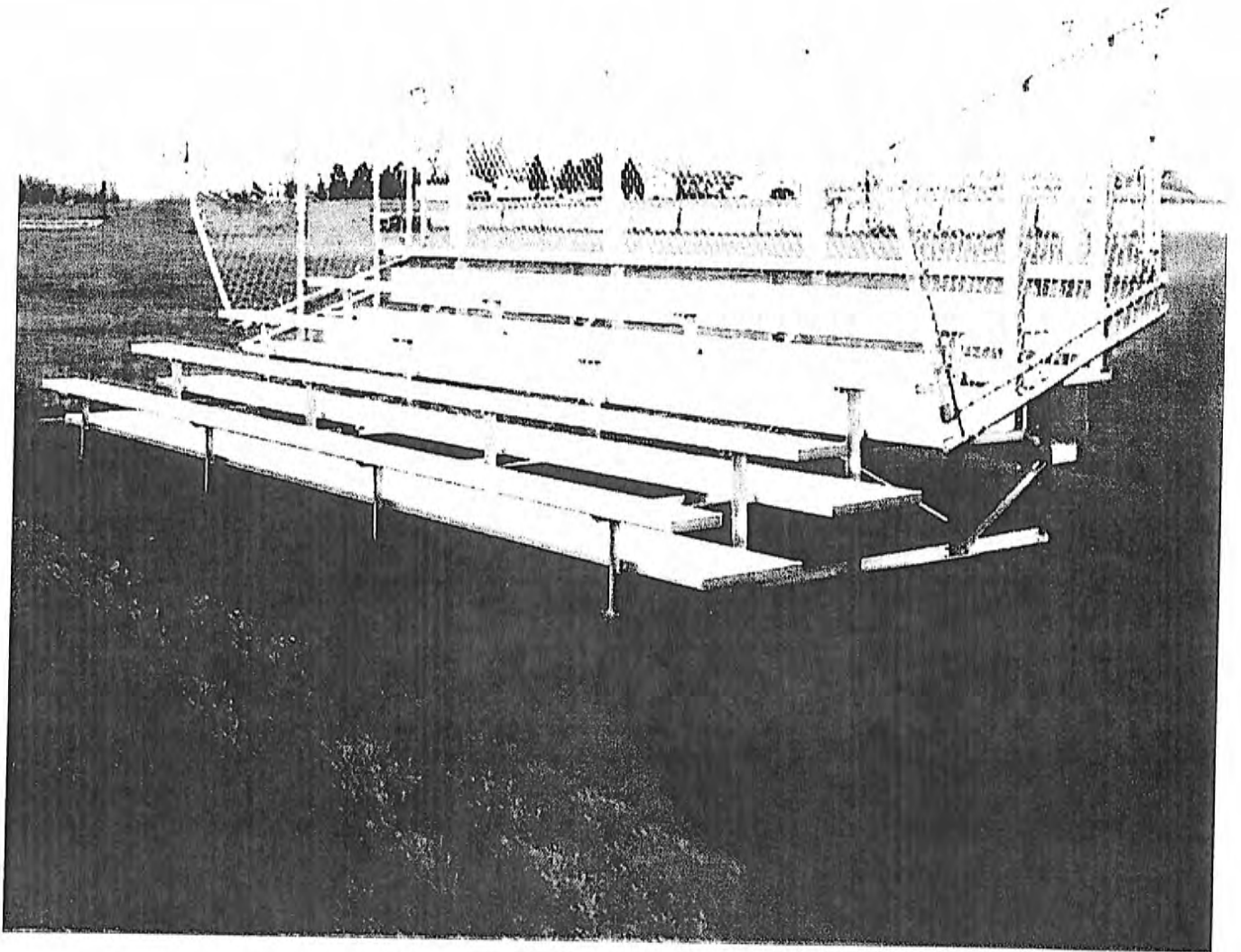
Description	Field area	Quantity	Unit	120,000 Unit Cost	Estimated (
SITE PREPARATION & DEMOLITION					
Site mobilization		1	ls	\$10,000.00	\$10,000.00
Site construction fence		1,200	lf	\$12.00	\$14,400.00
Site Construction gate & construction entrance		1	loc	\$5,000.00	\$5,000.00
erosion control wattles		1,200	lf	\$6.00	\$7,200.00
remove and dispose of benches		2	ea	\$500.00	\$1,000.00
prep skinned infield for re-surfacing (2 fields)		17,000	sf	\$0.15	\$2,550.00
deep core areate lawn, R&D of cores		100,000	sf	\$0.45	\$45,000.00
					\$85,150.00
EARTHWORK AND SOIL PROFILE					
sand top dressing		309	cy	\$55.00	\$16,975.30
50mm drainage system (@20' OC)		3,500	lf	\$18.00	\$63,000.00
8" collector pipe		420	lf	\$65.00	\$27,300.00
outlet structure		1	ea	\$4,500.00	\$4,500.00
install sand slits (@ 12" OC)		100,000	sf	\$0.55	\$55,000.00
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					\$325,400.00

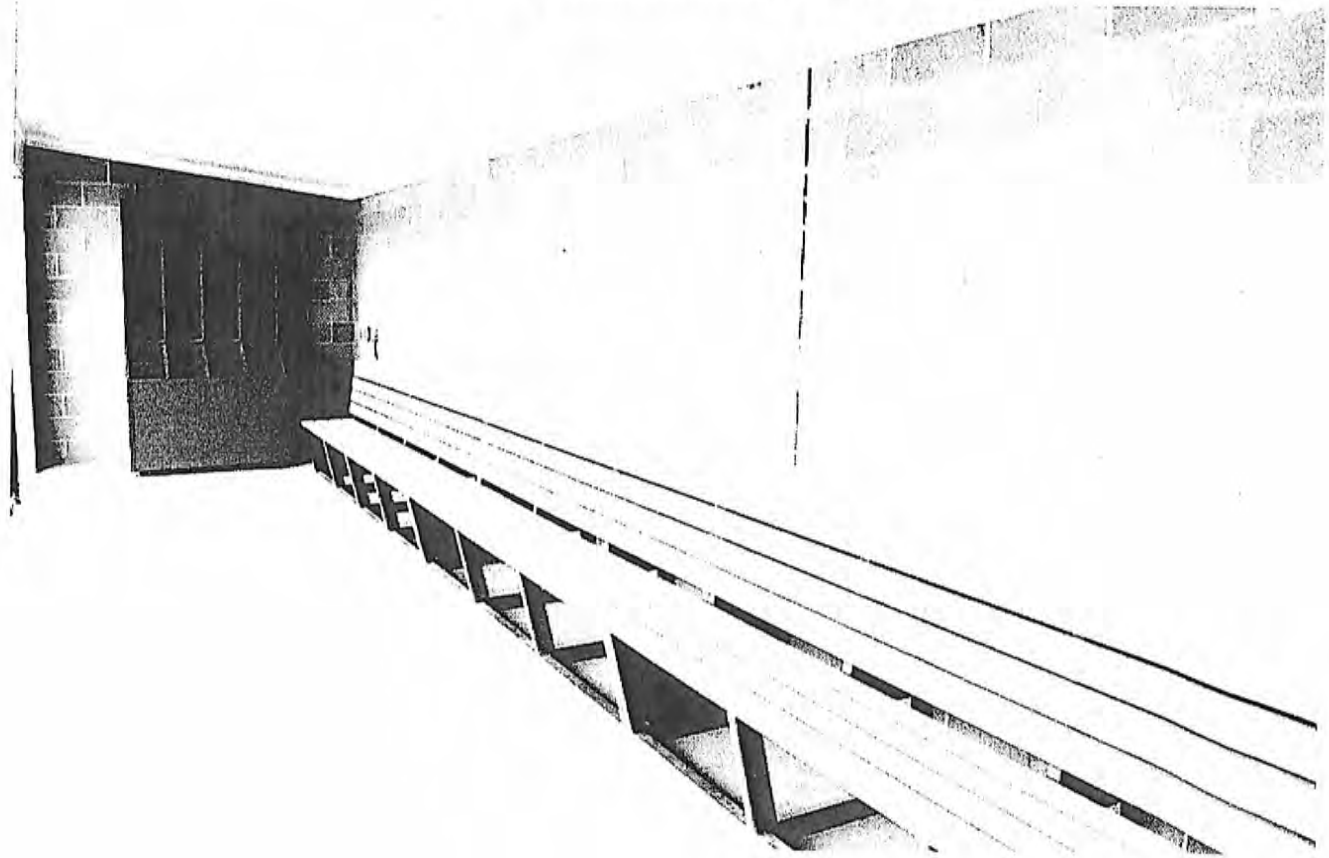
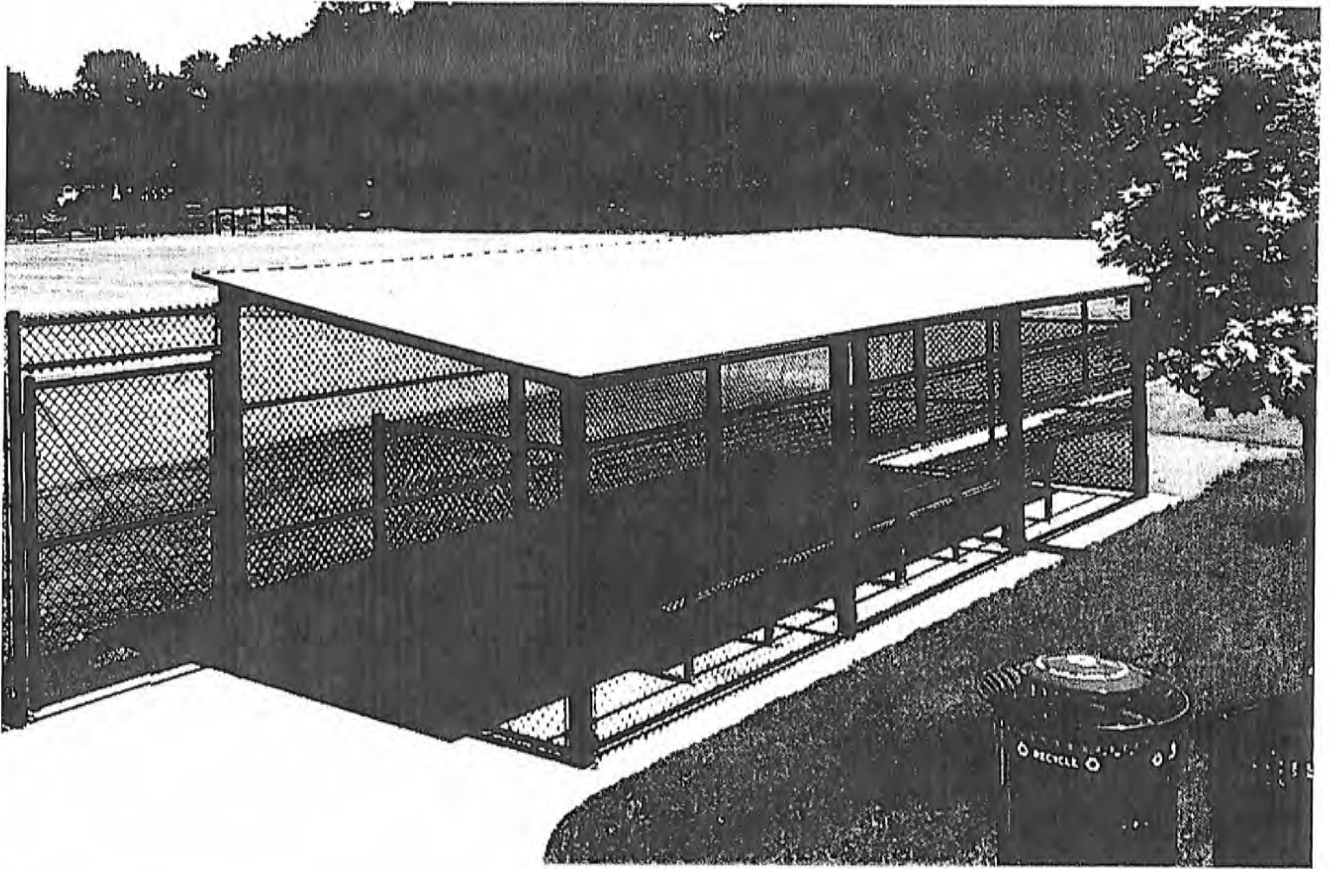
Total Site
Development \$598,57

SUMMARY			
TOTAL TRADE COST			\$ 598,575
PRICE ESCALATION CONTINGENCY TO START	7.5%		\$ 44,893
DESIGN CONTINGENCY	2.5%		\$ 14,964
SUB-TOTAL			\$ 658,433
GC OH&P	12.5%		\$ 82,304
CONSTRUCTION CONTINGENCY	10.0%		\$ 74,074
TOTAL OF ALL CONSTRUCTION			\$ 814,811

Design Fees (Thru project completion)			
Warner Larson Site Design	10%		\$ 59,858
Warner Larson Permitting	budget		\$ 15,000
Civil Engineer for Permitting (included above)			
Irrigation Design	budget		\$ 10,000
TOTAL OF ALL DESIGNER FEES			\$ 84,858

TOTAL OF ALL COMPLETE PROJECT	\$ 899,668
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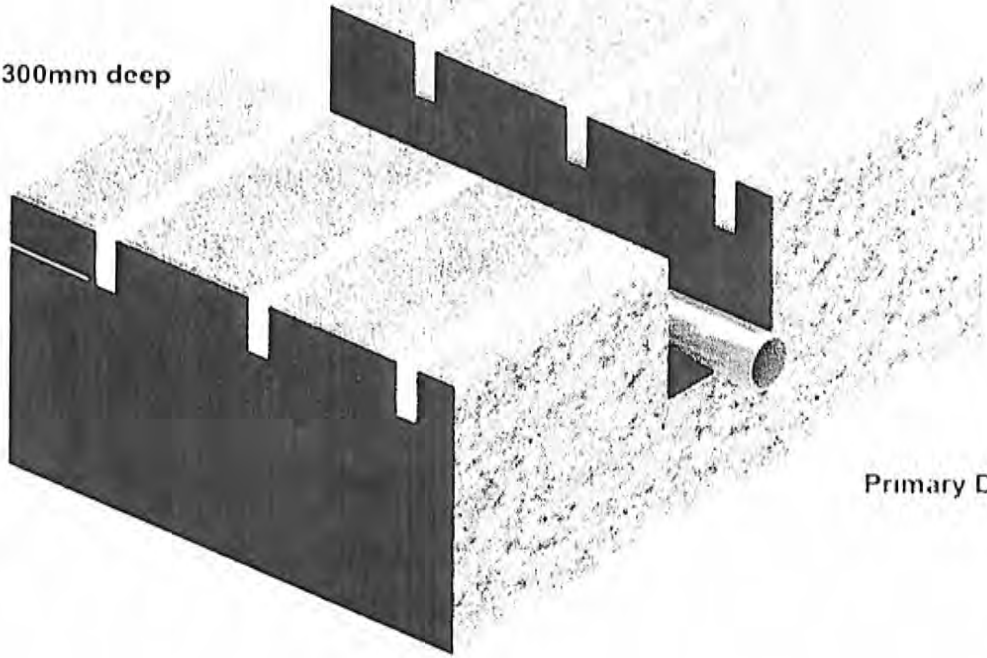


Sand Slits

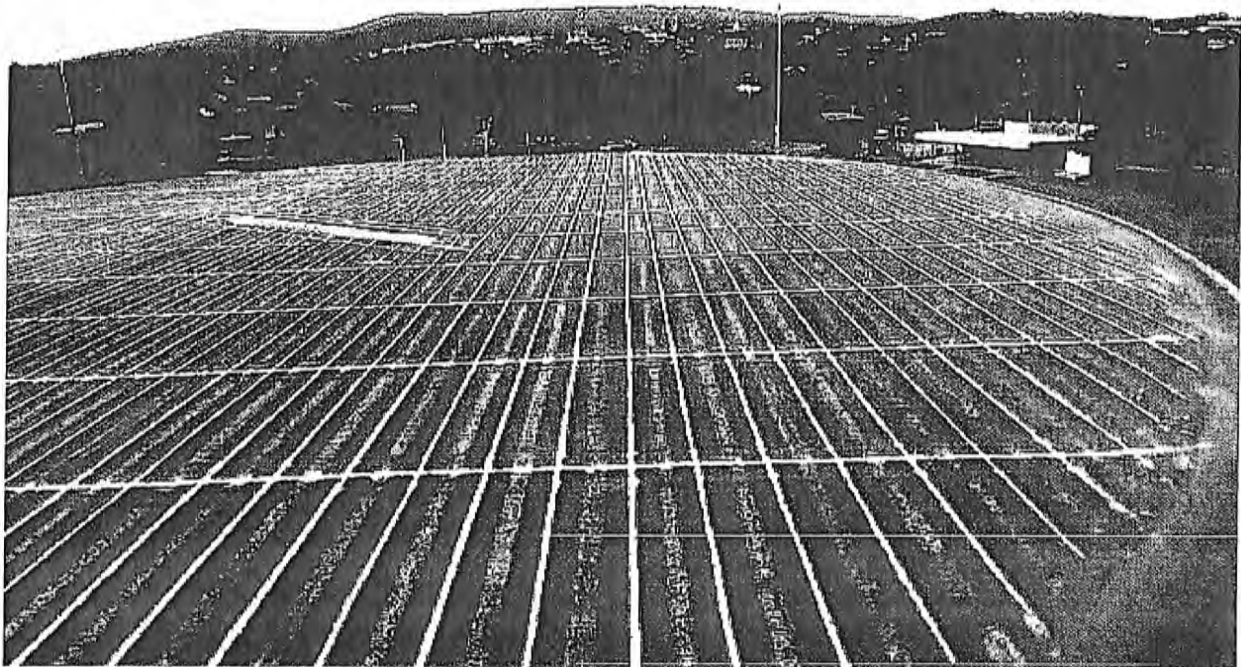
Sand Slits (50-70mm wide)

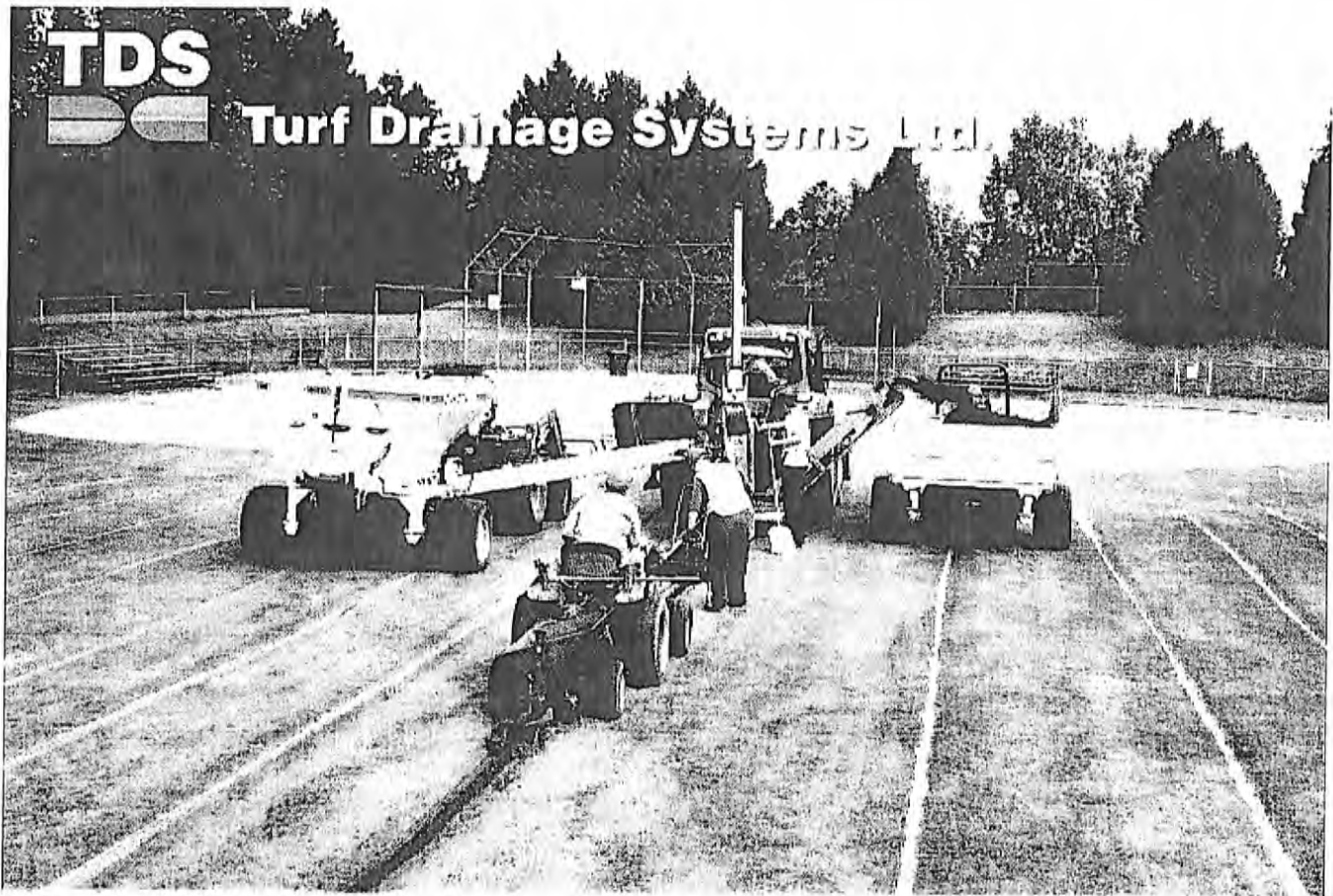
1 - 1.5m apart

200 - 300mm deep



Primary Drain





Demonstrate that project alternatives and alternative funding mechanisms have been fully explored.

SGS is starting a fundraising campaign and has committed to contributing at least \$10,000. Park & Rec Commission may be able to allocate some funding towards the design or the project itself from other sources such as the money available in the Meadow Walk fund.

- **Produce an advantageous cost/benefit value**

This is a complex that is underused because of the drainage and safety concerns and with these improvements it would allow us to plan for the future needs of the SGS program vs looking for a new piece of land in town.

- **Leverage additional public and/or private value**

We will be using the resources of the DPW, Parks department as well as the Park & Recreation staff to help with this project.

- **Preserve or utilize currently owned town assets**

This is a Town owned asset in need of repair and upgrades based on safety and playability concerns.

Memorandum



Date: July 7, 2022
Recipient: Town of Sudbury Park & Recreation
Attention: Mr. Dennis Mannone
Copy To: Warner Larson Landscape Architects - Mr. Josh Millonig, LEED AP
Sender: Jonathan W. Patch, P.E.
Project: Frank Feeley Field Renovation; 200 Raymond Road; Sudbury, MA
Project No: 7435
Subject: Geotechnical Data Memorandum

Introduction

This memorandum presents the results of our subsurface exploration program for the above-referenced project site. Refer to the Project Location Plan, **Figure 1**, for the general site locus. This memorandum was prepared in accordance with our proposal for geotechnical engineering services dated January 13, 2022, and your subsequent authorization. These services are subject to the limitations contained herein.

Background

The project site fronts onto Raymond Road to the west and is bounded by residential property to the north, residential properties to the northeast, and Landham Brook and associated wetland areas to the south and southeast. Frank Feeley Field contains parking areas, six (6) tennis courts, three (3) softball fields, one (1) lighted baseball field, a press box, bleachers, concession area, and restrooms. A sloped grade change of approximately 12 feet separates the northern portion of the site (which is occupied by Upper Feeley Field, the tennis courts, and a paved parking area) from Feeley Softball Fields #1 & #2 in the central portion of the site.

It is understood that the project may include the addition of dugouts and spectator seating (concrete pad with surface mounted dugout canopy and free-standing bleachers) to Feeley Softball Field #1 while addressing water/runoff issues on the slope between the northern parking lot and Feeley Softball Fields #1 & #2. The project may also include the addition of dugouts to Upper Feeley Field and Feeley Softball Field #2 as well as drainage remediation of the outfields in Feeley Softball Fields #1 & #2.

Subsurface Explorations

A subsurface exploration program consisting of seven (7) test pit explorations was performed to obtain subsurface information to add in the design of the proposed

Memorandum



renovations. The test pits were performed with a mini-excavator on May 20, 2022, by the Sudbury Department of Public Works under contract to others and were observed by a McPhail field representative. Test pit logs are attached. Approximate locations of the explorations are indicated on the enclosed **Figure 2**, Subsurface Exploration Plan.

Soil and Groundwater Conditions

The soil classifications contained herein and on the subsurface exploration logs were determined using the modified MIT Soil Classification System which utilizes the following descriptive terms to describe the percentage of soil components:

<i>Descriptive Term</i>	<i>Proportion of Total by Weight</i>
"Trace"	0% to 10%
"Some"	10% to 20%
Adjective (e.g., Sandy, Silty, Gravelly, Clayey)	20% to 35%
"And"	35% to 50%
"Mixture"	Soils containing three components of which comprise at least 25% of the total are classified as "A well-graded mixture of"

Based on the subsurface explorations, our laboratory testing, and our general knowledge of the geology of the surrounding area, the following is a description of the generalized subsurface conditions across the site encountered from ground surface downward.

An approximate 0.5- to 2-foot thickness of topsoil was encountered at ground surface in each test pit, which consists of compact, dark brown to black, silty sand with trace gravel and roots. Grain size analyses of samples of the topsoil are presented in the enclosed **Figure 3**.

Underlying the topsoil, a natural alluvial deposit and/or a reworked alluvial fill was encountered in each test pit. In test pits TP-2, TP-6, and TP-7, the topsoil was underlain by a 2- to 3-foot thickness of reworked alluvial fill material which was observed to consist of compact, light brown to orange sand with some silt and trace gravel, varying to sandy silt with trace gravel. The natural alluvial deposit varies in consistency from a compact, light brown to tan to orange, fine to medium sand with some silt, to a sandy silt with trace gravel, and to a silt with trace clay, sand, and gravel. Grain size analyses of samples of the coarse, granular portion of the reworked alluvial fill and natural alluvial deposit are presented in the enclosed **Figure 4**, and grain size analyses of samples of the fine, cohesive portion of the natural alluvial deposit are presented in the enclosed **Figure 5**. The test pits were terminated in the alluvial deposit at depths varying from 4 to 7 feet below ground level.

Groundwater was not observed upon completion within test pits TP-1 through TP-5. Groundwater was observed in test pits TP-6 and TP-7 at depths of 5 and 3 feet, respectively, below the existing ground surface. Redoximorphic features including oxidation

Memorandum



and mottling, which may be indicative of the seasonal high groundwater level, were observed in test pits TP-3 through TP-7 at depths varying from about 2.3 to 4.5 feet below the existing grade. It is anticipated that groundwater levels across the project site may vary from those reported herein based on factors such as the level of water in Landham Brook, normal seasonal changes, runoff during or following periods of heavy precipitation, and alterations to existing drainage patterns.

Conclusions

Portions of the on-site soils contain a high percentage of fines (silt and clay size particles), making them relatively impervious. This likely results in surface water becoming trapped at shallow depths and causes standing water in the outfields of Feeley Softball Fields #1 and #2. It is understood that a perforated underdrainage piping system may be installed to improve the drainage of the fields.

Where needed, conventional soil-supported spread footing foundations are considered appropriate for the proposed site improvements.

Stockpiles of excavated soil intended for on-site reuse should be protected against increases in moisture content by securely covering the stockpiles at all times with 6 mil polyethylene for protection from precipitation and also as a dust mitigation measure. The placement and compaction of on-site soils should be completed during relatively dry and non-freezing conditions. If the earthwork operations are performed during a wet and/or cold period, it is anticipated that portions of the on-site soil will be unsuitable for re-use on site.

Final Comments

We trust that the above is sufficient for your present requirements. Should you have any questions concerning the geotechnical design recommendations presented herein, please do not hesitate to call us.

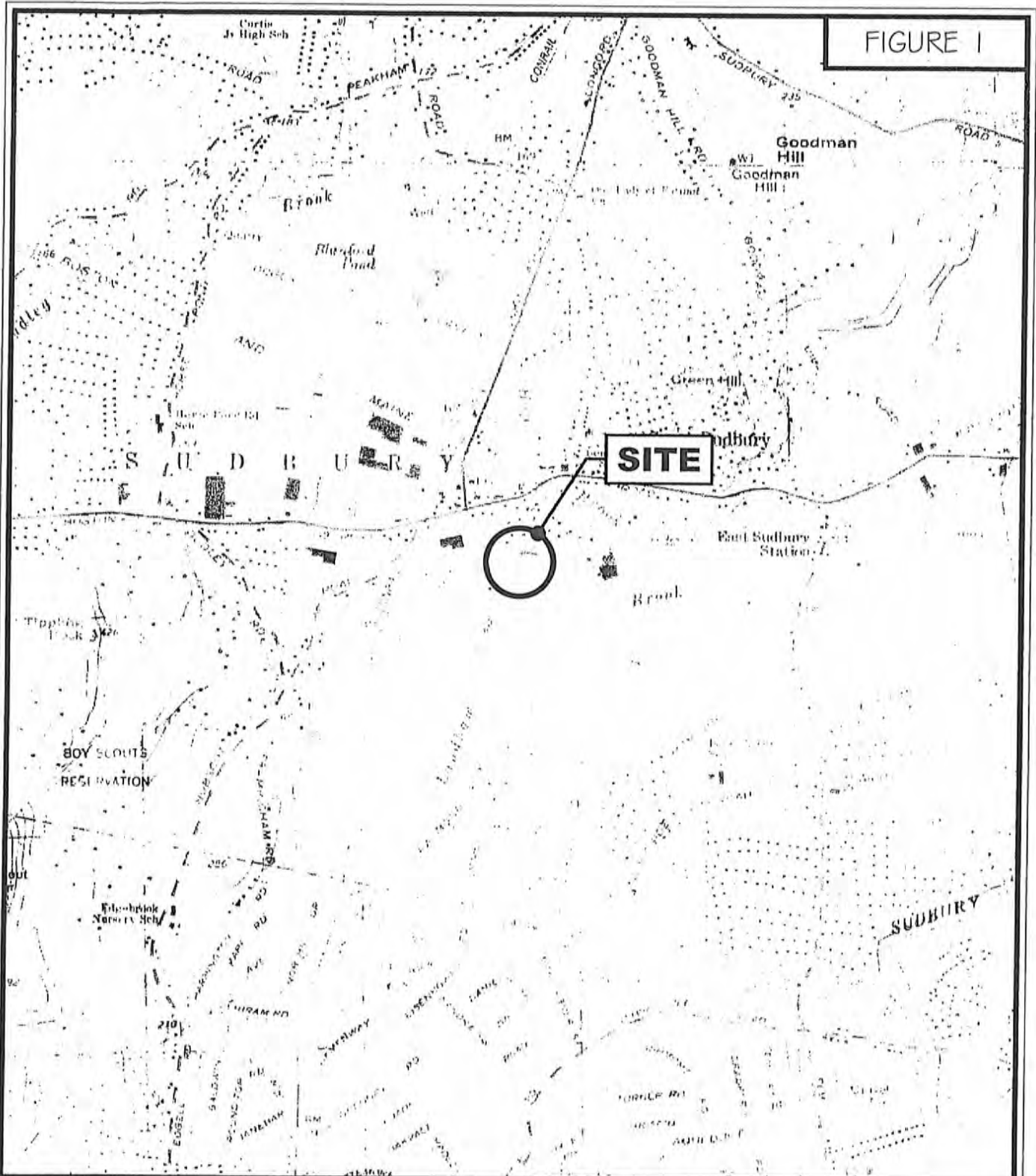
Attachments:

- Figure 1: Project Location Plan
- Figure 2: Subsurface Exploration Plan
- Figure 3: Grain Size Distributions – Topsoil
- Figure 4: Grain Size Distributions – Alluvial Deposit/Alluvial Fill
- Figure 5: Grain Size Distributions – Alluvial Deposit
- Test Pit Logs

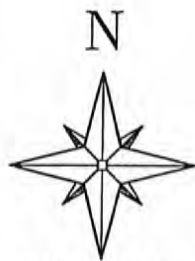
\\McPhail-fs2\McPhail\Working
Documents\Reports\7435_FeeleyFieldSudbury_GeotechDataMemorandum_070722.docx

JWP/esh

FIGURE 1



Geotechnical and
Geoenvironmental Engineers
2269 Massachusetts Avenue
Cambridge, MA 02140
617/868-1420
617/868-1423 (Fax)
www.mcphailgeo.com



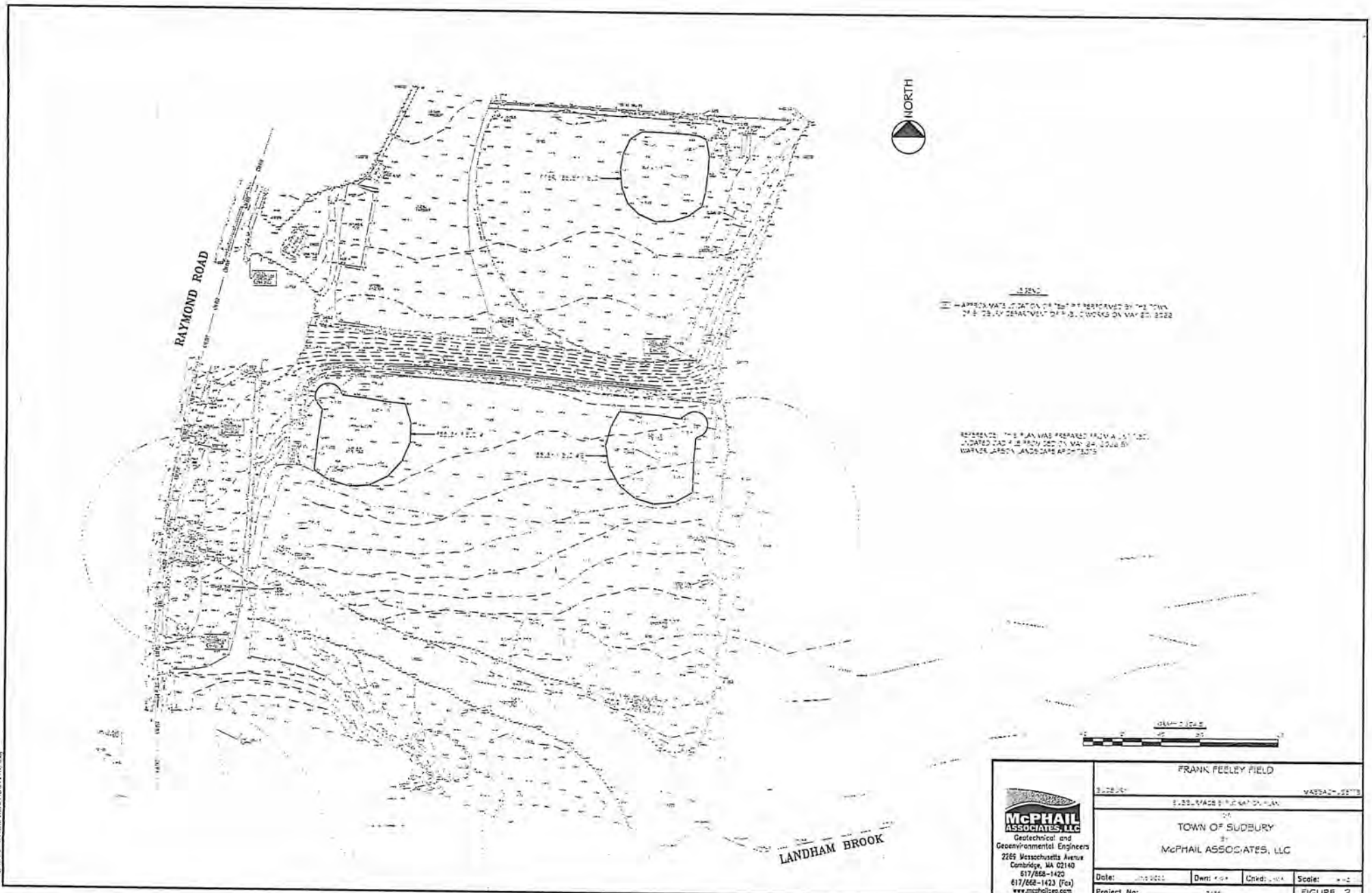
SCALE 1:25,000

PROJECT LOCATION PLAN


FRANK FEELEY FIELD

SUDBURY

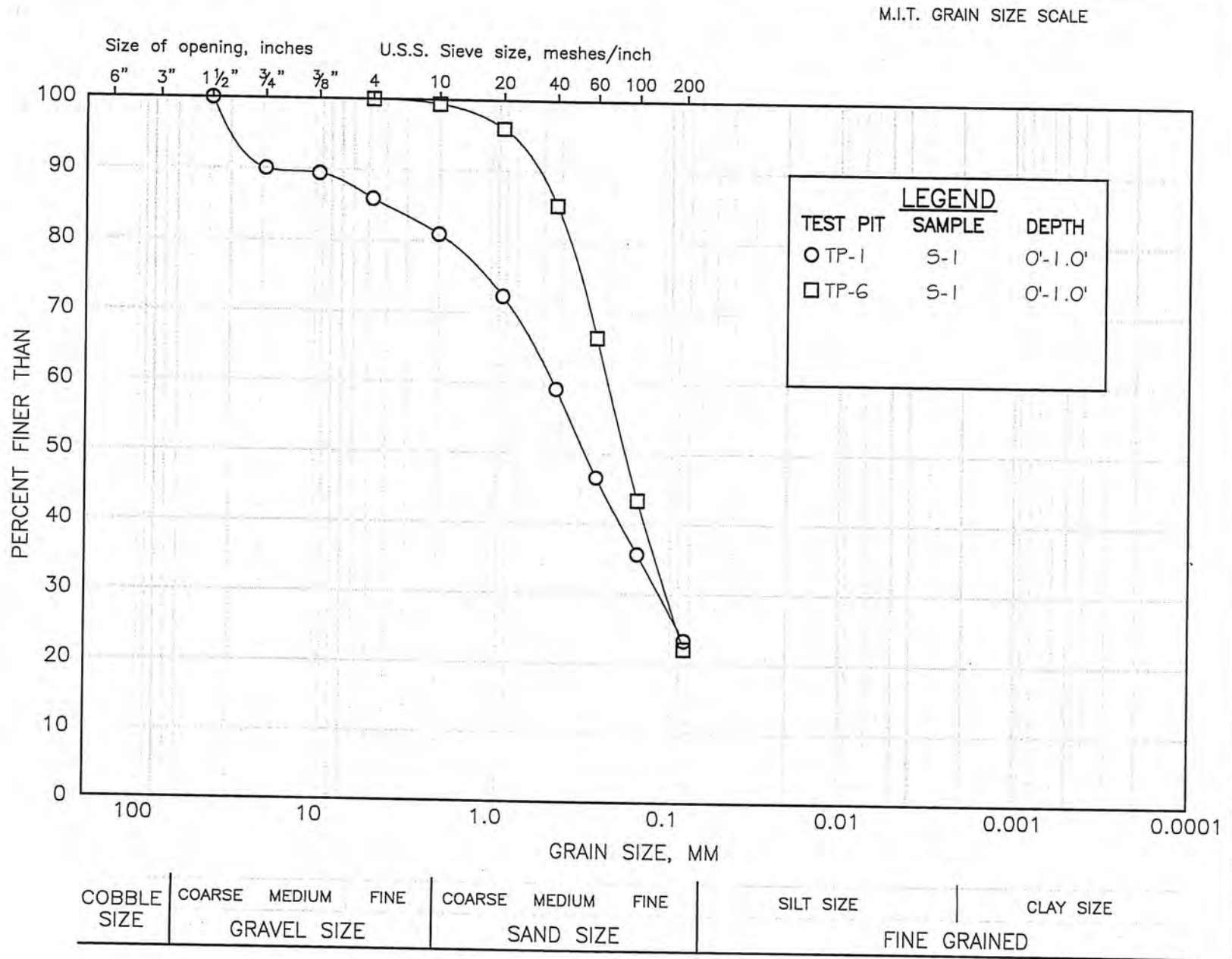
MASSACHUSETTS



10:11:46 AM - 10/11/2011 10:11:46 AM

 <p> McPHAIL ASSOCIATES, LLC Geotechnical and Geoenvironmental Engineers 2255 Massachusetts Avenue Cambridge, MA 02140 617/858-1420 617/668-1423 (Fax) www.mcpgeo.com </p>	FRANK FEELEY FIELD		
	SUBURB - MASSACHUSETTS		
	TOWN OF SUDBURY		
	McPHAIL ASSOCIATES, LLC		
Date: 1/10/2011	Drawn: K.M.A.	Checked: J.M.A.	Scale: 1"=100'
Project No: 2415			FIGURE 2

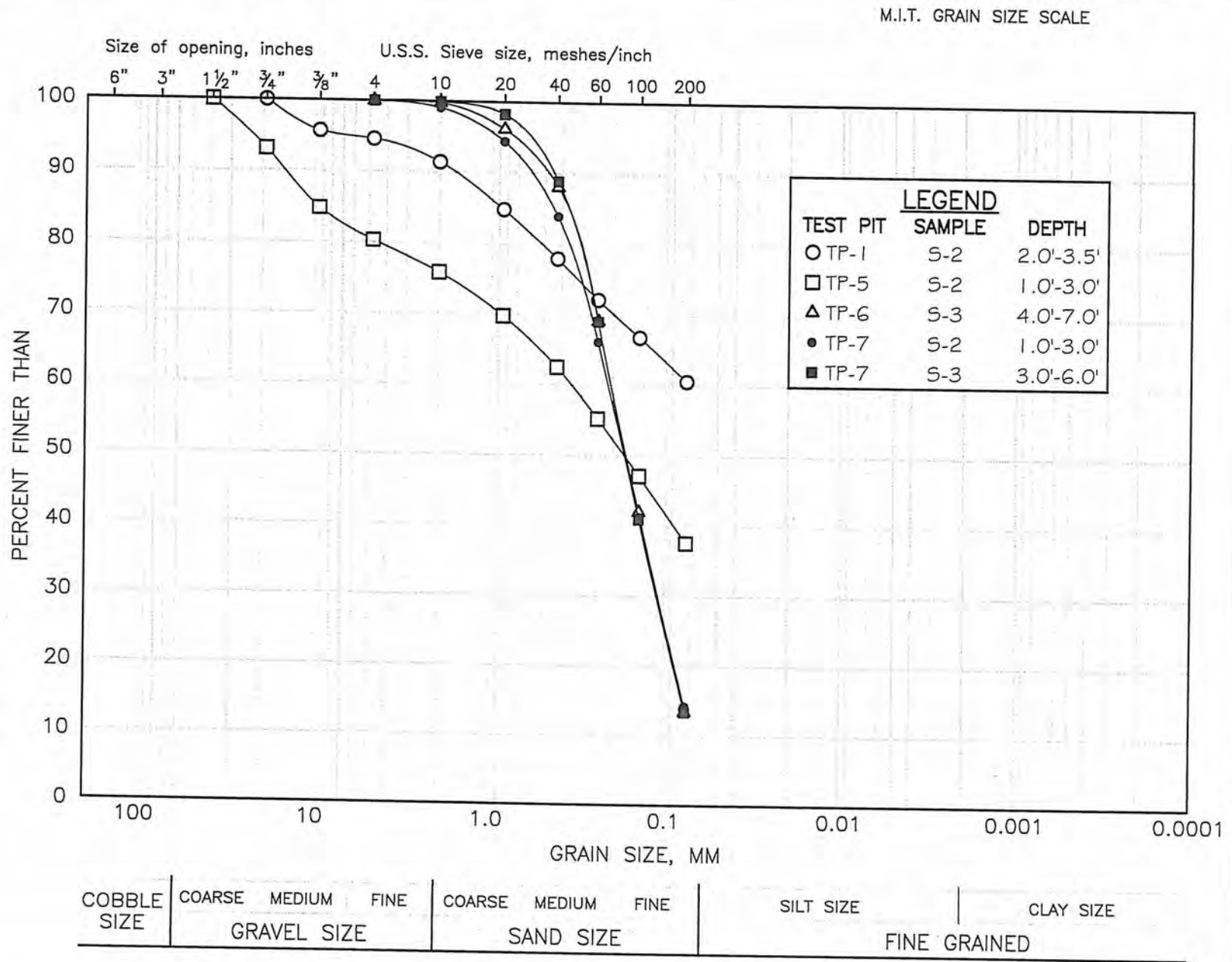
MCPHAIL ASSOCIATES, LLC



GRAIN SIZE DISTRIBUTION
TOPSOIL

FIGURE 3

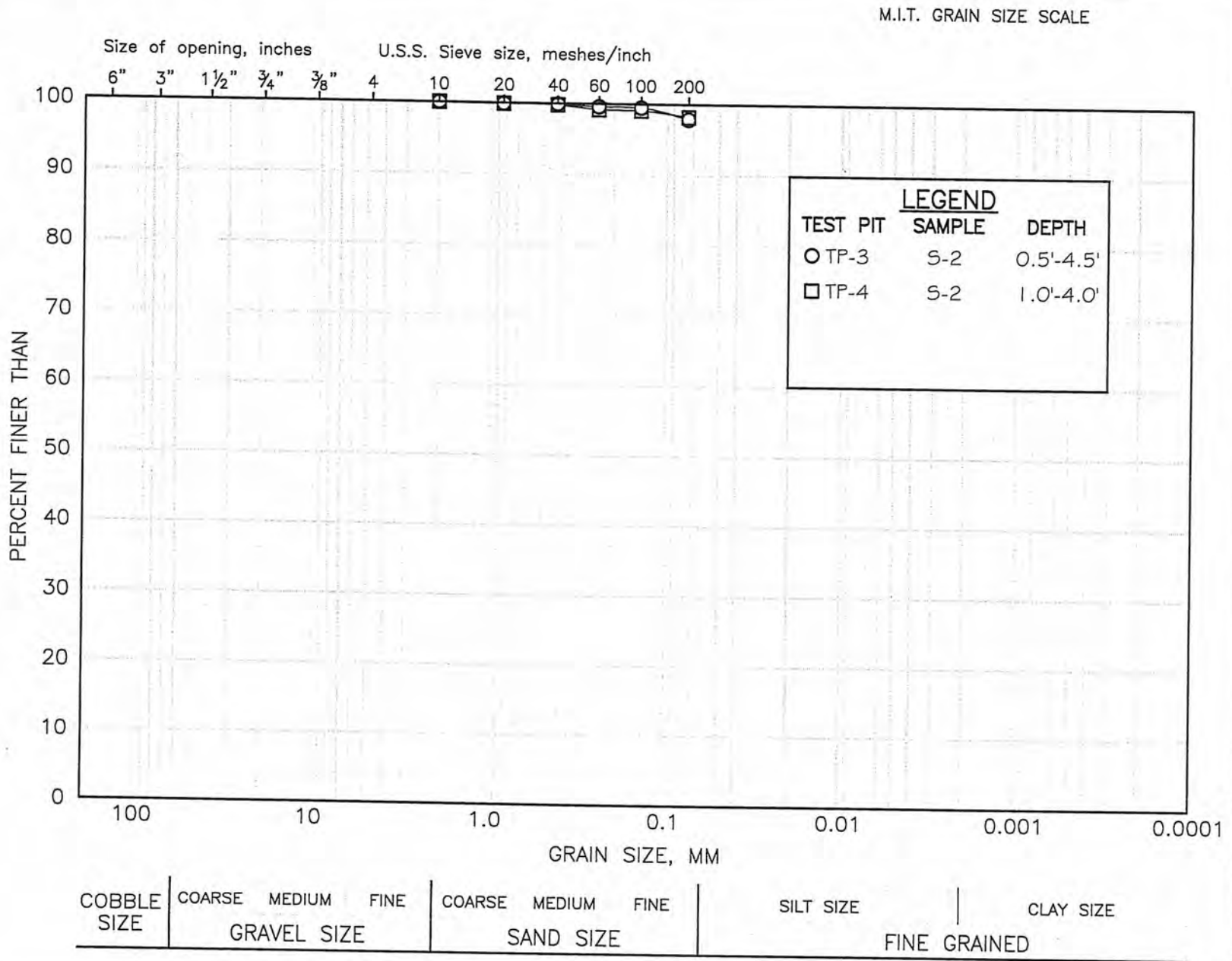
MCPHAIL ASSOCIATES, LLC



GRAIN SIZE DISTRIBUTION
ALLUVIAL DEPOSIT/ALLUVIAL FILL

FIGURE 4

McPHAIL ASSOCIATES, LLC



GRAIN SIZE DISTRIBUTION
ALLUVIAL DEPOSIT

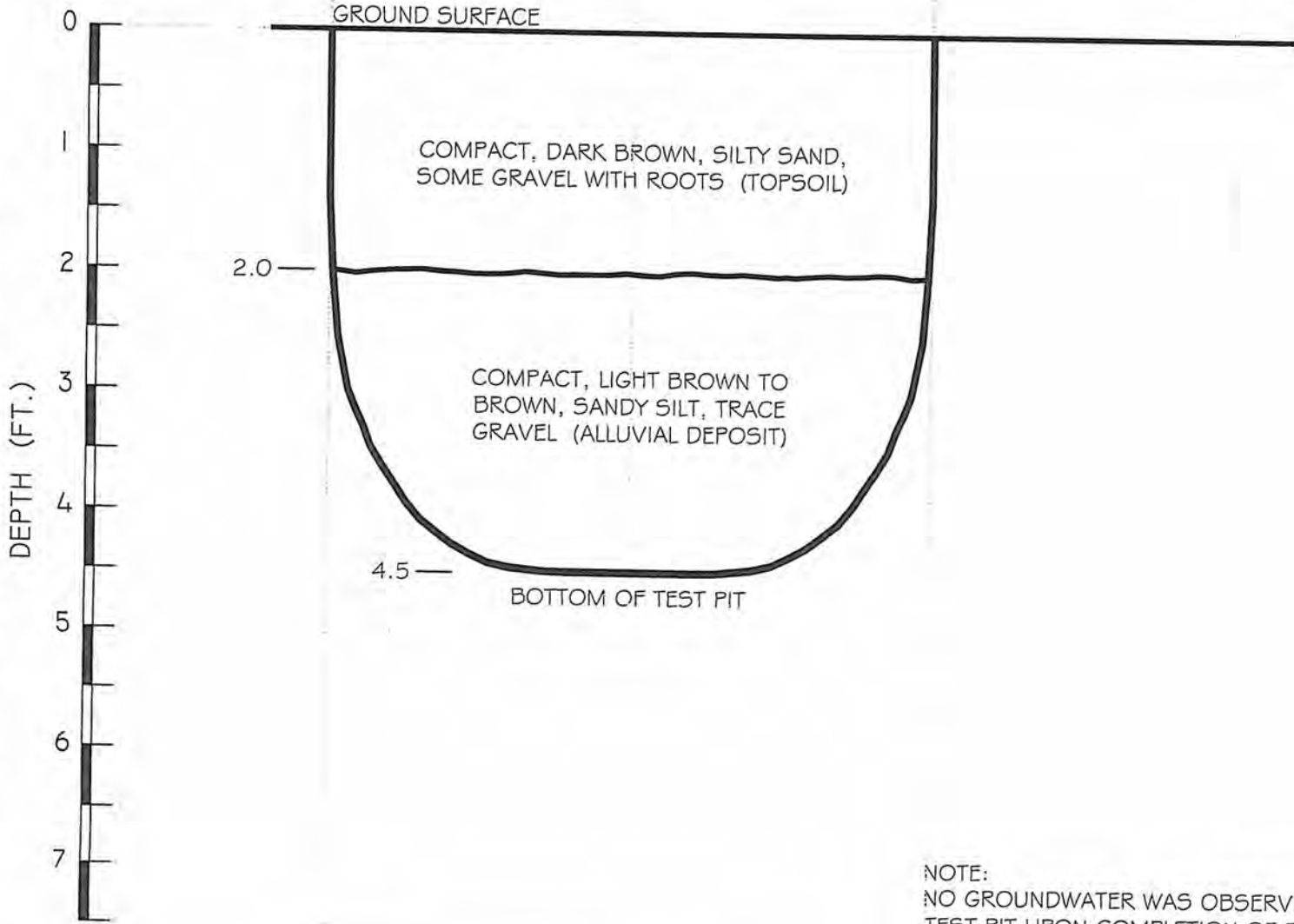
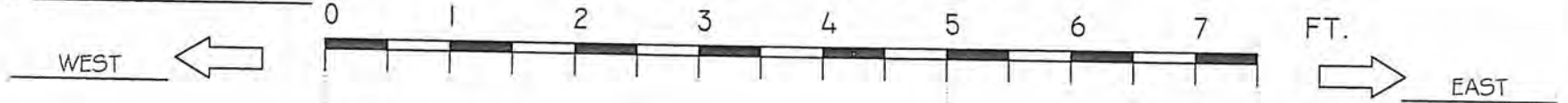
FIGURE 5

JOB NO. 7435

DATE MAY 20, 2022

TEST PIT LOG

TEST PIT NO. 1



McPHAIL ASSOCIATES, LLC

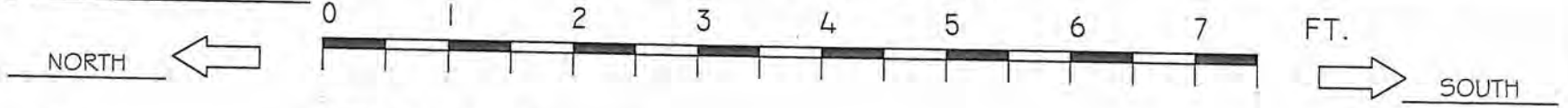
NOTE:
NO GROUNDWATER WAS OBSERVED IN OPEN
TEST PIT UPON COMPLETION OF EXCAVATION

JOB NO. 7435

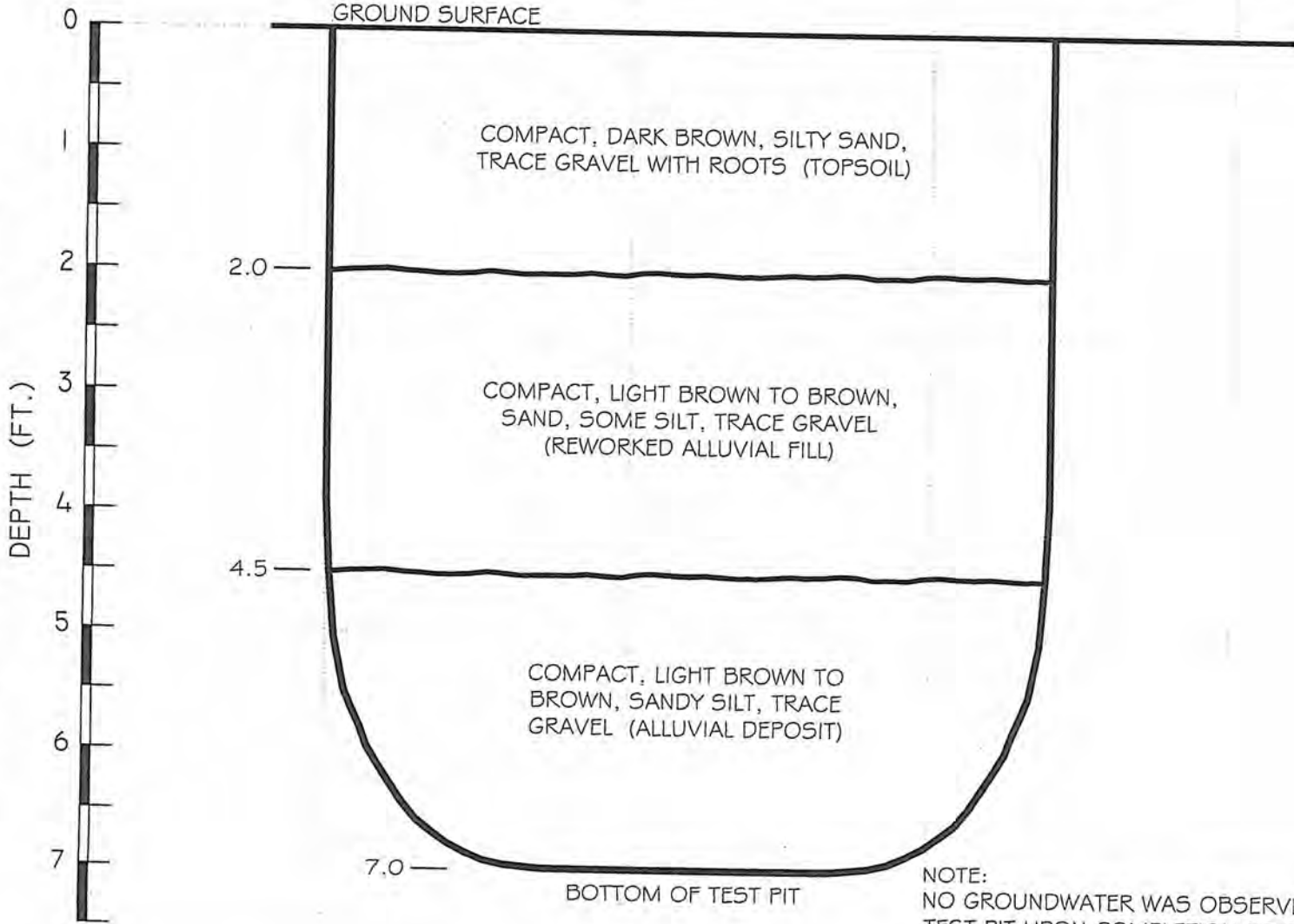
DATE MAY 20, 2022

TEST PIT LOG

TEST PIT NO. 2



McPHAIL ASSOCIATES, LLC



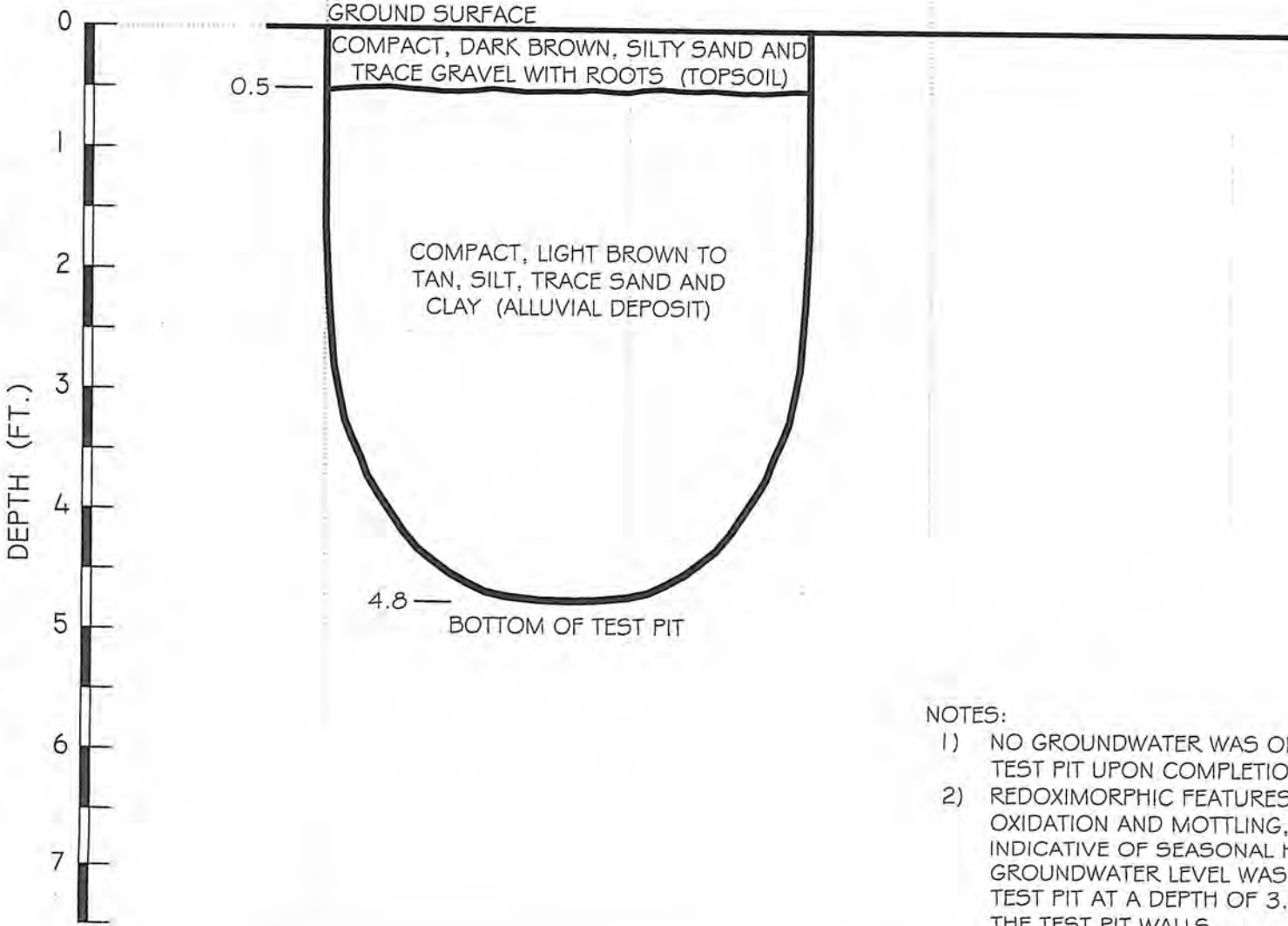
NOTE:
NO GROUNDWATER WAS OBSERVED IN OPEN
TEST PIT UPON COMPLETION OF EXCAVATION

JOB NO. 7435

DATE MAY 20, 2022

TEST PIT LOG

TEST PIT NO. 3



COMPACT, DARK BROWN, SILTY SAND AND TRACE GRAVEL WITH ROOTS (TOPSOIL)

COMPACT, LIGHT BROWN TO TAN, SILT, TRACE SAND AND CLAY (ALLUVIAL DEPOSIT)

McPHAIL ASSOCIATES, LLC

NOTES:

- 1) NO GROUNDWATER WAS OBSERVED IN OPEN TEST PIT UPON COMPLETION OF EXCAVATION
- 2) REDOXIMORPHIC FEATURES, INCLUDING OXIDATION AND MOTTLING, WHICH MAY BE INDICATIVE OF SEASONAL HIGH GROUNDWATER LEVEL WAS OBSERVED IN TEST PIT AT A DEPTH OF 3.5 TO 4.5 FEET ON THE TEST PIT WALLS

JOB NO. 7435

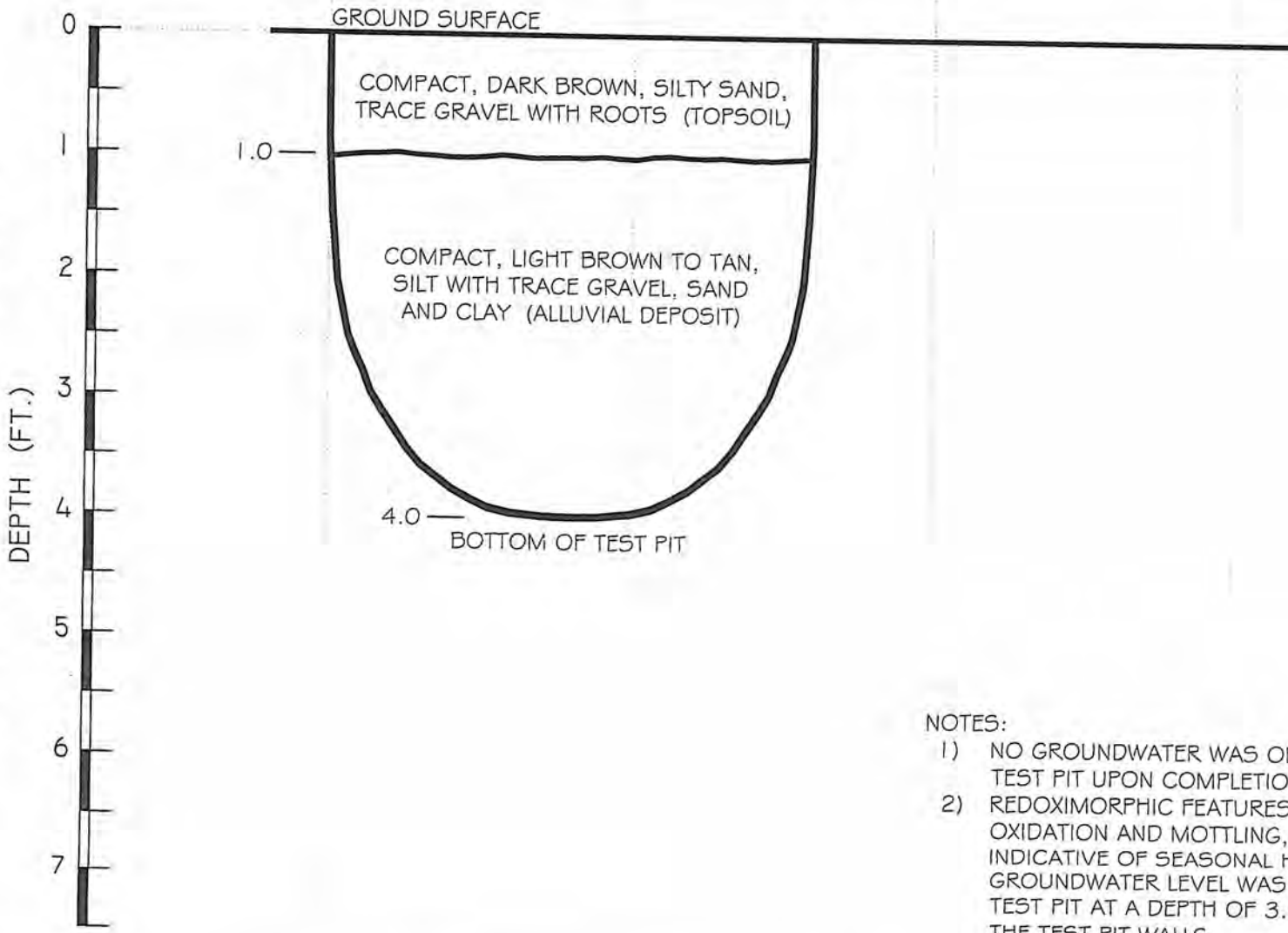
DATE MAY 20, 2022

TEST PIT LOG

TEST PIT NO. 4



McPHAIL ASSOCIATES, LLC



- NOTES:
- 1) NO GROUNDWATER WAS OBSERVED IN OPEN TEST PIT UPON COMPLETION OF EXCAVATION
 - 2) REDOXIMORPHIC FEATURES, INCLUDING OXIDATION AND MOTTLING, WHICH MAY BE INDICATIVE OF SEASONAL HIGH GROUNDWATER LEVEL WAS OBSERVED IN TEST PIT AT A DEPTH OF 3.5 TO 4.5 FEET ON THE TEST PIT WALLS

JOB NO. 7435

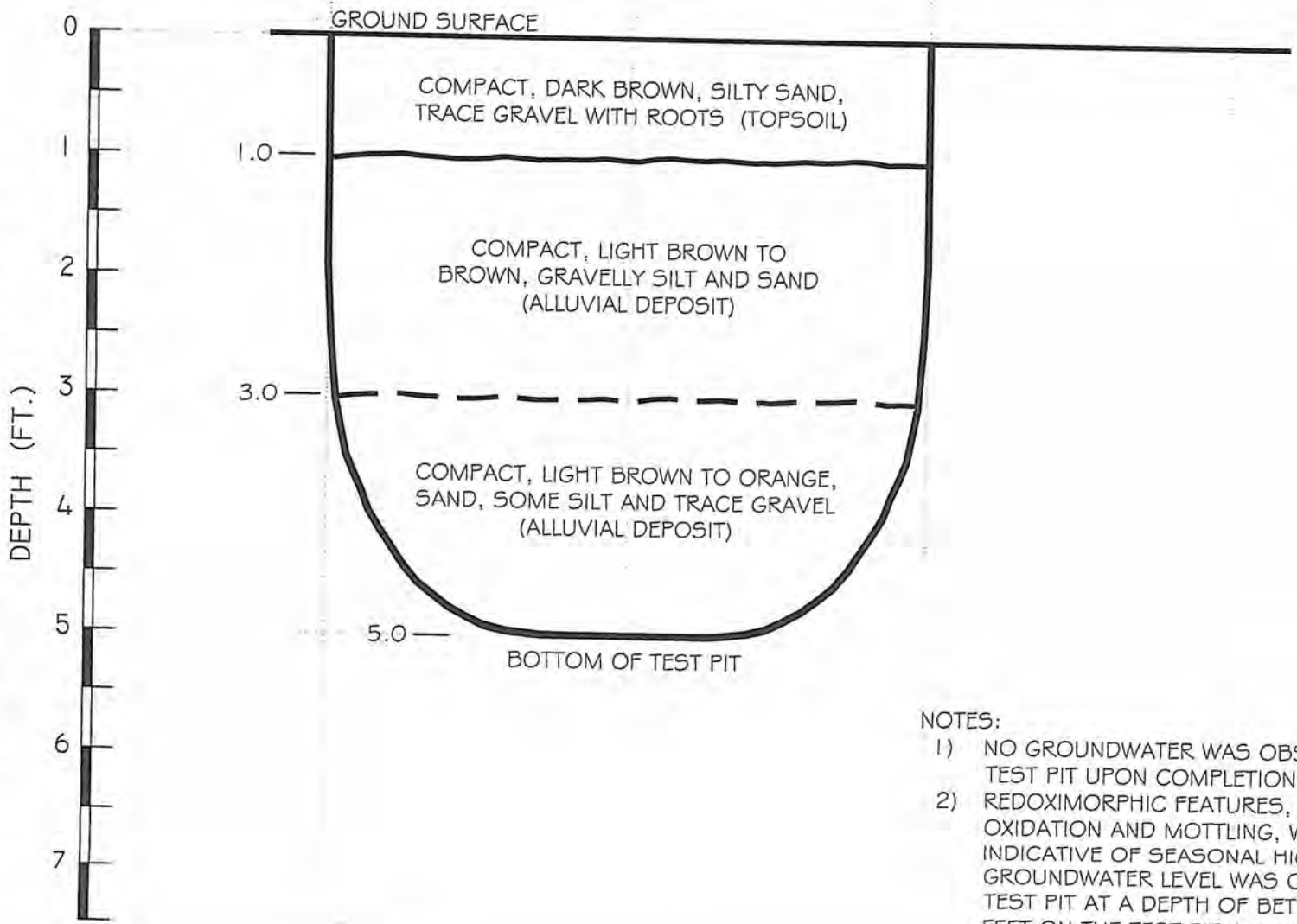
DATE MAY 20, 2022

TEST PIT LOG

TEST PIT NO. 5



McPHAIL ASSOCIATES, LLC



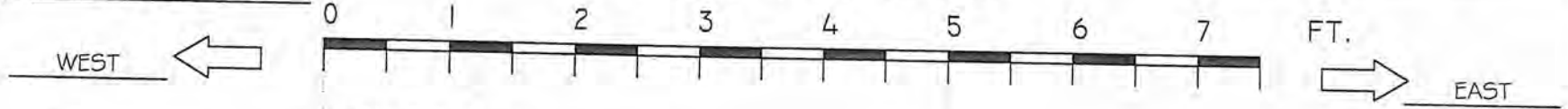
- NOTES:
- 1) NO GROUNDWATER WAS OBSERVED IN OPEN TEST PIT UPON COMPLETION OF EXCAVATION
 - 2) REDOXIMORPHIC FEATURES, INCLUDING OXIDATION AND MOTTLING, WHICH MAY BE INDICATIVE OF SEASONAL HIGH GROUNDWATER LEVEL WAS OBSERVED IN TEST PIT AT A DEPTH OF BETWEEN 4.0 TO 4.5 FEET ON THE TEST PIT WALLS

JOB NO. 7435

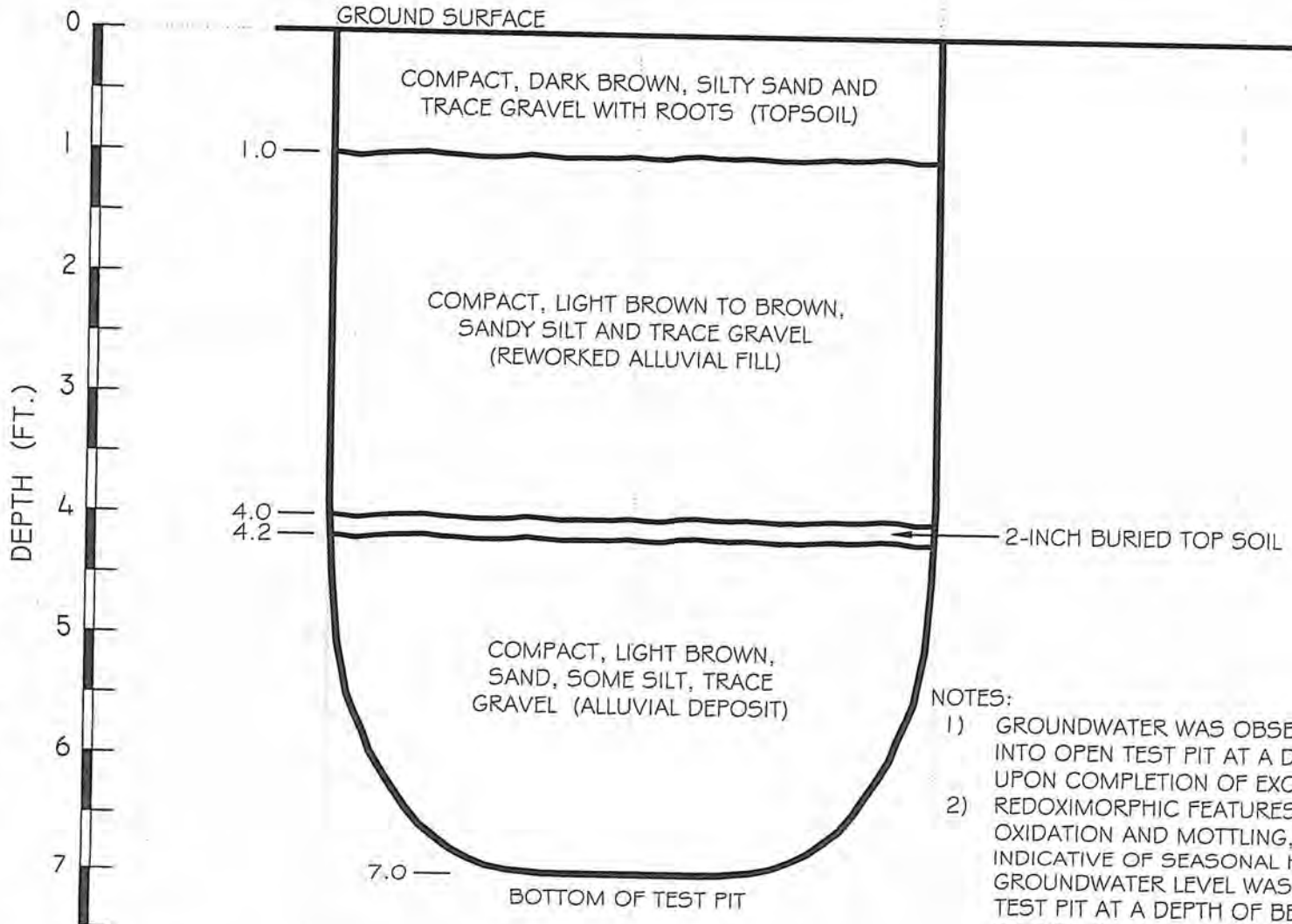
DATE MAY 20, 2022

TEST PIT LOG

TEST PIT NO. 6



McPHAIL ASSOCIATES, LLC



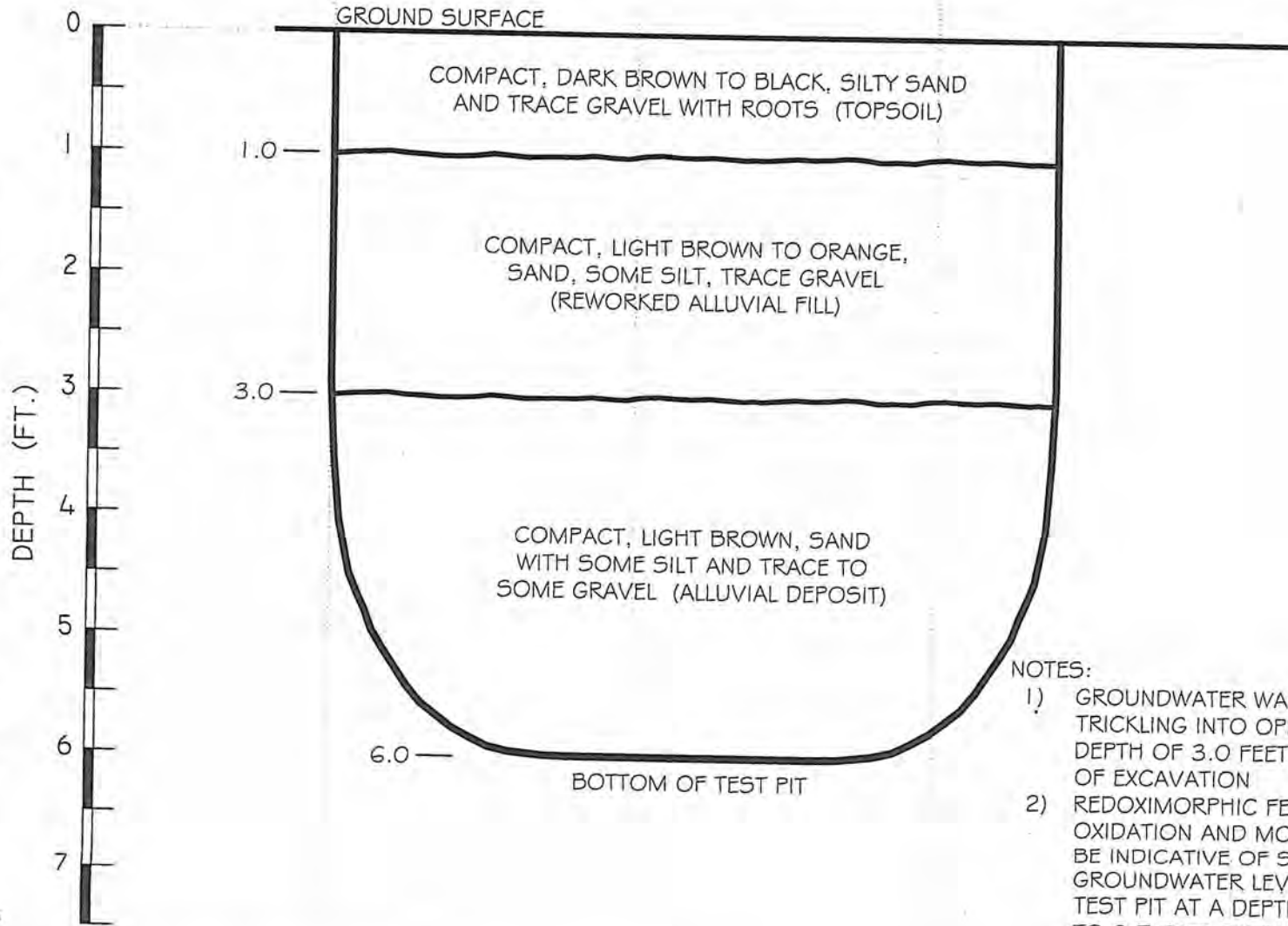
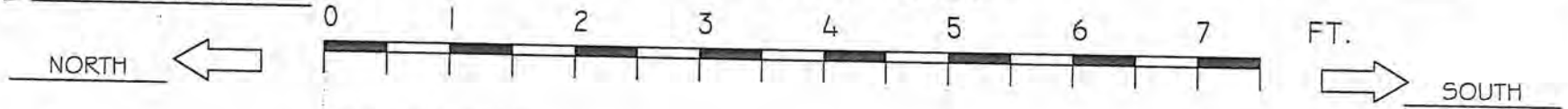
- NOTES:
- 1) GROUNDWATER WAS OBSERVED TRICKLING INTO OPEN TEST PIT AT A DEPTH OF 5.0 FEET UPON COMPLETION OF EXCAVATION
 - 2) REDOXIMORPHIC FEATURES, INCLUDING OXIDATION AND MOTTLING, WHICH MAY BE INDICATIVE OF SEASONAL HIGH GROUNDWATER LEVEL WAS OBSERVED IN TEST PIT AT A DEPTH OF BETWEEN 4.0 TO 4.5 FEET ON THE TEST PIT WALLS

JOB NO. 7435

DATE MAY 20, 2022

TEST PIT LOG

TEST PIT NO. 7



McPHAIL ASSOCIATES, LLC

- NOTES:
- 1) GROUNDWATER WAS OBSERVED TRICKLING INTO OPEN TEST PIT AT A DEPTH OF 3.0 FEET UPON COMPLETION OF EXCAVATION
 - 2) REDOXIMORPHIC FEATURES, INCLUDING OXIDATION AND MOTTLING, WHICH MAY BE INDICATIVE OF SEASONAL HIGH GROUNDWATER LEVEL WAS OBSERVED IN TEST PIT AT A DEPTH OF BETWEEN 2.3 TO 2.7 FEET ON THE TEST PIT WALLS

Feeley Field Sudbury - Phase-2 -Renovation Cost Estimate

9/30/2022

Description	Field area	sf	Unit	120,000 Unit Cost	Estimated Cost
SITE PREPARATION & DEMOLITION					
Site mobilization	1	ls		\$10,000.00	\$10,000.00
Site construction fence	1,200	lf		\$12.00	\$14,400.00
Site Construction gate & construction entrance	1	loc		\$5,000.00	\$5,000.00
erosion control wattles	1,200	lf		\$6.00	\$7,200.00
remove and dispose of benches	2	ea		\$500.00	\$1,000.00
prep skinned infield for re-surfacing (2 fields)	17,000	sf		\$0.15	\$2,550.00
deep core areate lawn, R&D of cores	100,000	sf		\$0.45	\$45,000.00
					\$85,150.00
					SITE PREP DEMO SUBTOTAL
EARTHWORK AND SOIL PROFILE					
sand top dressing	309	cy		\$55.00	\$16,975.31
50mm drainage system (@20' OC)	3,500	lf		\$18.00	\$63,000.00
8" collector pipe	420	lf		\$65.00	\$27,300.00
outlet structure	1	ea		\$4,500.00	\$4,500.00
install sand silts (@ 12" OC)	100,000	sf		\$0.55	\$55,000.00
skinned infield top dressing/resurfacing	17,000	sf		\$1.25	\$21,250.00
					\$188,025.31
					EARTHWORK SUBTOTAL
SITE IMPROVEMENTS					
Bit Conc, 4" Thick	2,000	sf		\$4.00	\$8,000.00
Concrete team areas, 6" Thick	500	sf		\$12.00	\$6,000.00
Concrete bleacher areas, 4" Thick	500	sf		\$12.00	\$6,000.00
infiltration stone (infiltration trench)	100	cy		\$52.00	\$5,200.00
4" corrugated underdrain pipe	125	lf		\$40.00	\$5,000.00
irrigation - spray heads and valves	100,000	sf		\$1.25	\$125,000.00
irrigation - connection point/supply line	350	lf		\$20.00	\$7,000.00
irrigation - controller	1	ls		\$5,000.00	\$5,000.00
over seed field (slice seed install)	100,000	ls		\$0.35	\$35,000.00
general lawn seed on disturbed areas	1	ls		\$2,500.00	\$2,500.00
new CLF	50	lf		\$70.00	\$3,500.00
retaining wall	120	lf		\$225.00	\$27,000.00
Polyboard 2-tier bench (Sportsfield Specialties)	4	ea		\$3,500.00	\$14,000.00
Gameshade Dugout (Sportsfield Specialties)	2	ea		\$19,500.00	\$39,000.00
Structural Eng Stamp (Sportsfield Specialties)	1	ea		\$2,200.00	\$2,200.00
Shipping (Sportsfield Specialties)	1	ea		\$2,500.00	\$2,500.00
softball bases and plate	1	ls		\$7,500.00	\$7,500.00
bleachers (for both field #1 and Field #2)	2	ea		\$10,000.00	\$20,000.00
bleachers - shipping and assembly/install	2	ea		\$2,500.00	\$5,000.00
					\$325,400.00
					SITE IMPROVEMENT SUBTOTAL
Total Site Development					\$598,575.31

SUMMARY	
TOTAL TRADE COST	\$ 598,575
PRICE ESCALATION CONTINGENCY TO START	7.5% \$ 44,893
DESIGN CONTINGENCY	2.5% \$ 14,964
SUB-TOTAL	\$ 658,433
GC OH&P	12.5% \$ 82,304
CONSTRUCTION CONTINGENCY	10.0% \$ 74,074
TOTAL OF ALL CONSTRUCTION	\$ 814,811

Design Fees (Thru project completion)	
Warner Larson Site Design	10%
Warner Larson Permitting	budget
Civil Engineer for Permitting (included above)	
Irrigation Design	budget
TOTAL OF ALL DESIGNER FEES	\$ 84,858

TOTAL OF ALL COMPLETE PROJECT

\$ 899,668