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- [x] City box number D-1
- [ ] Title/cover page w/the following info:
  - [ ] Company (author) name
  - [ ] Report Date
  - [ ] Project name
  - [ ] Company's job number
  - [x] City DCLU project number (7-digit number)
  - [ ] City Permit number (6-digit number)
  - [ ] Kroll map index number (3-digit number, w?/E,W,N,S)
  - [ ] Green label
  - [x] Site address (may be on 1st or 2nd page of text)
- [ ] Executive Summary and associated figures
- [ ] Table of Contents
- [x] Project Location Plan/Map or Vicinity Map
- [x] Site Plans, Boring Location Plans, or Exploration Plans
- [ ] Survey
- [x] Geologic Maps
- [x] Cross Sections/Subsurface Profiles
- [ ] Fill or Peat Thickness Maps and Contour Maps
- [x] Boring Logs
- [ ] Geology Text (if no logs)
- [ ] Soil Classification Key/Boring Log Key
- [ ] Probe Logs
- [x] Test Pit Logs
- [ ] Monitoring Well Logs
- [ ] Cone Penetrometer Logs
- [ ] Shear Wave Velocity Measurements
- [ ] Groundwater Maps
- [ ] GW Elevation Tables/Data
- [ ] Soils Lab Testing (Geotechnical) Summary Tables
  - [ ] Grain Size Analyses/Hydrometer Analyses
  - [ ] Atterberg Limits
  - [ ] Strength tests: Triaxial, Unconfined, Direct Shear
  - [ ] Organic Content
  - [ ] ^{14}C or Radiocarbon Testing
  - [ ] Other_____
- [ ] Soil Chemical Analytical Testing Summary Tables
- [ ] Water/Groundwater Chemical Analytical Summary Tables
- [ ] Comments_____

_____

- [ ] Date Copied 2/24 By _____

#9707004

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DEPT CONSTRUCTION AND LAND USE
LAND USE DIVISION

August 13, 1998

Russell Keys
Moss Bay Construction, Inc.
2719 Taylor Drive
Everett, Washington 98203

1319 Dexter Av North

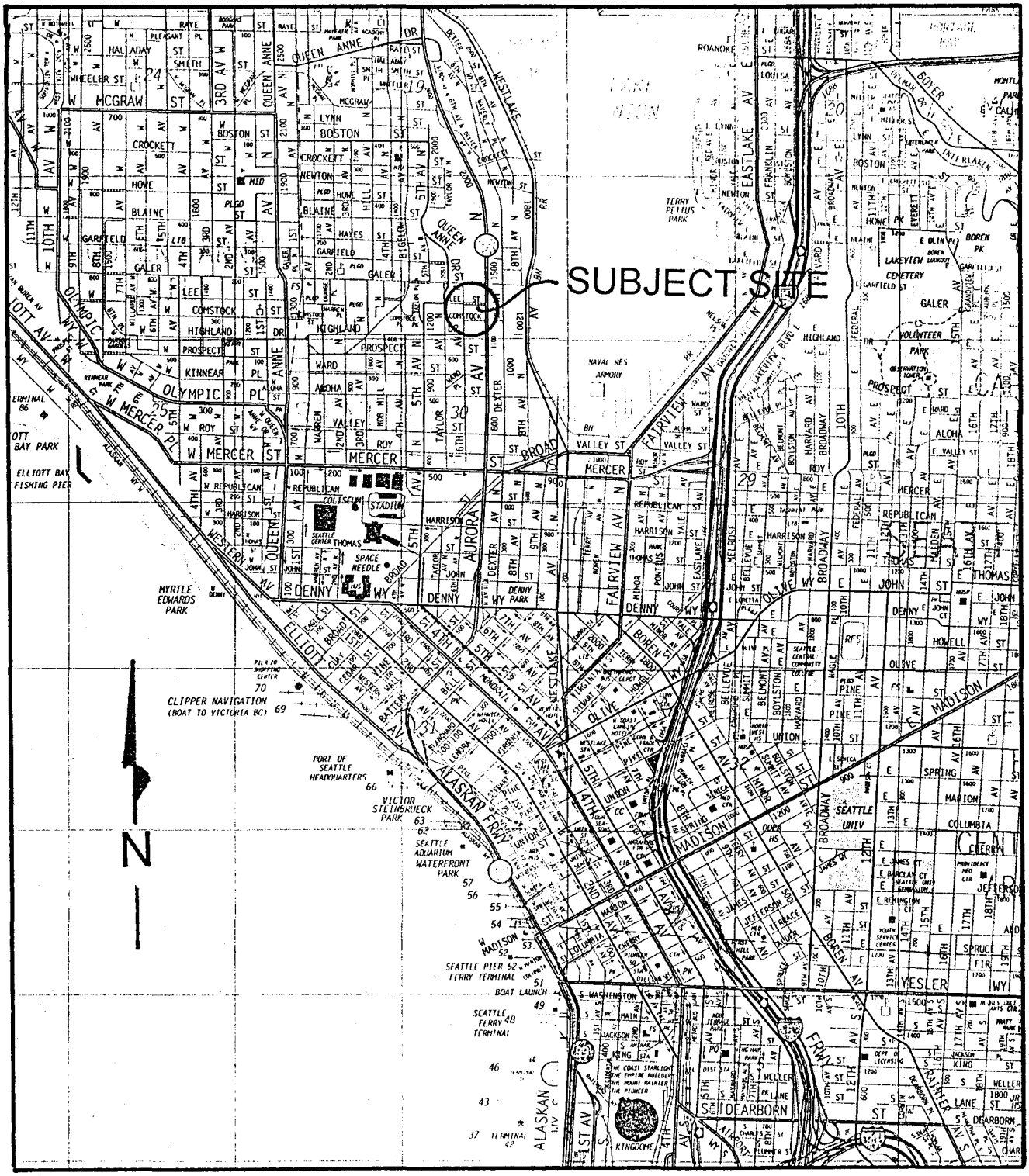
Summary of Subsurface Explorations and Preliminary Geotechnical Engineering Recommendations, Proposed Dexter Apartments, 1300 Block of Dexter Avenue North, Seattle, Washington
Project No. 8002-003

This report presents the results of a preliminary geotechnical engineering study conducted for the proposed Dexter Apartments project. The following discussions summarizes my findings, and present opinions regarding geotechnical engineering considerations for the proposed development. The development site is located on the 1300 bock of Aurora and Dexter Avenues, in Seattle, (see Figure 1).

Previous Work

The planning and design phases of the Dexter Apartments project date back to the late 1980's. My initial work on the project addressed the 1989 development concept, and involved subsurface explorations and a review of geotechnical work done by others on the property. The review and explorations were performed in August and September of 1989. The explorations consisted of three (3) borings and five (5) backhoe pits. At the request of the owner, detailed engineering evaluations and a summarizing report were not performed at that time. Information including an exploration location map, geologic cross-sections, and draft boring and backhoe pit logs were submitted at the completion of this work, in September of 1989.

Review of a set of architectural plans prepared by the Linardic Design Group-Architects, was performed in November of 1991. A summary letter dated December 9, 1991 was prepared which briefly discussed my findings, and provided preliminary input on geotechnical considerations of the project. In May of 1993, a research involving the applicability of the City of Seattle DCLU Director's Rule 2-93 for Environmentally Critical Areas on portions of the property was conducted. My findings were summarized in a letter dated May 5, 1993. Copies of my 1991 and 1993 letters are appended at the back of this report.

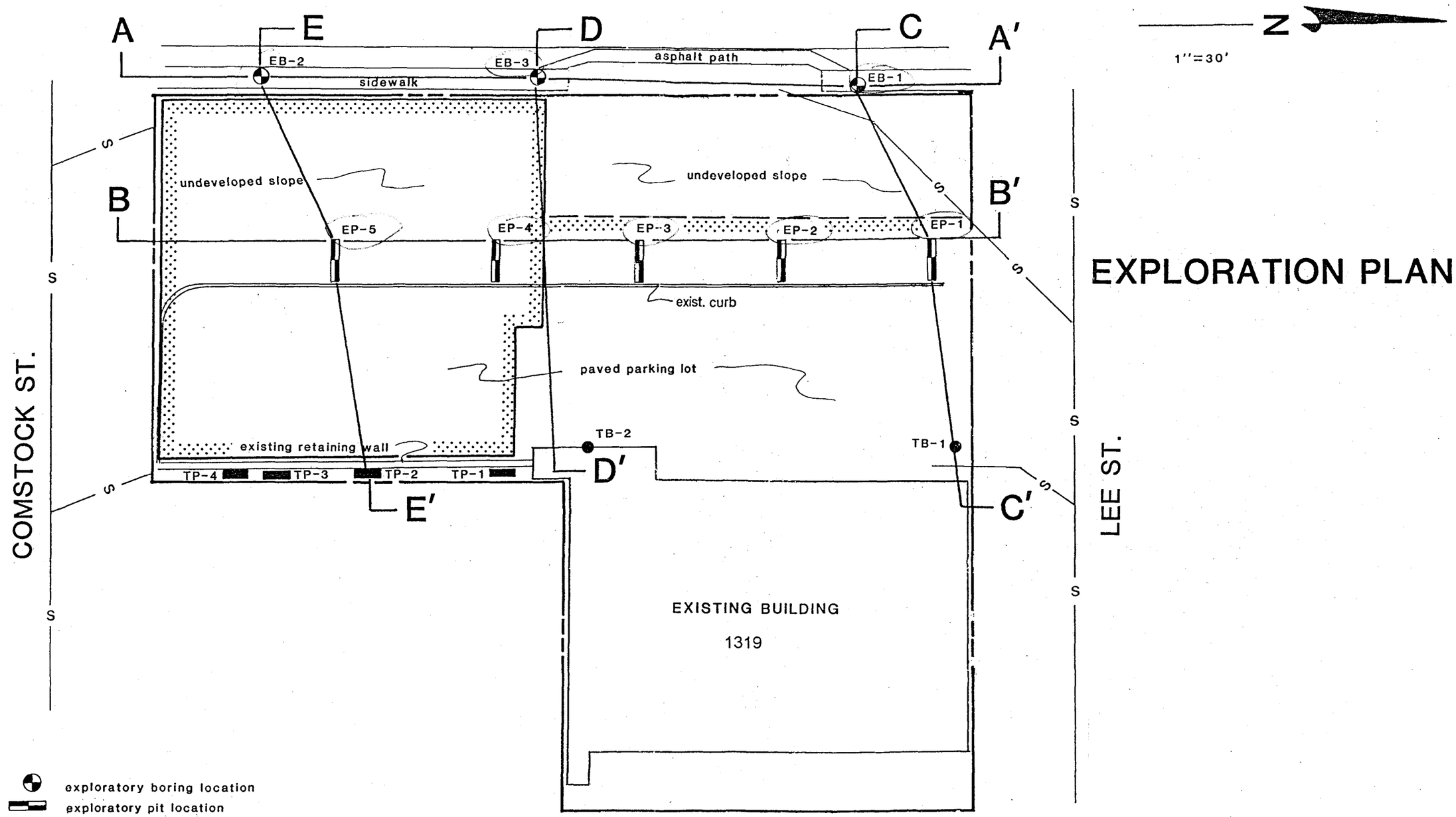


REGIONAL SETTING (no scale)

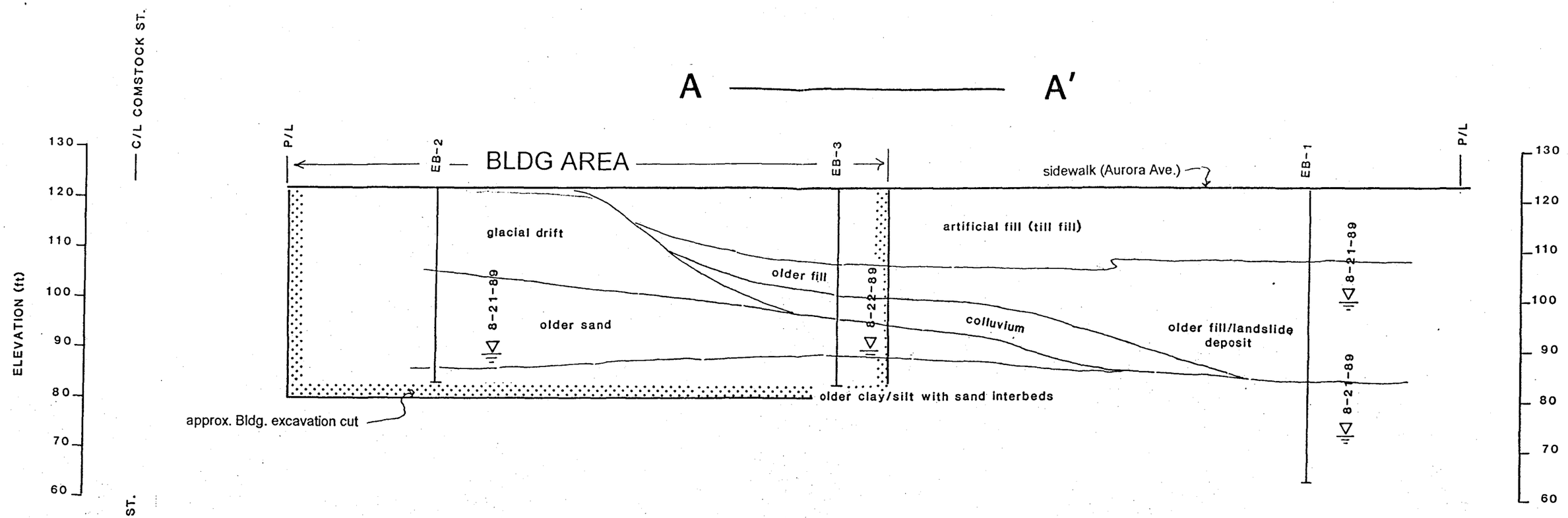
Reference: The Thomas Guide, 1996 Edition

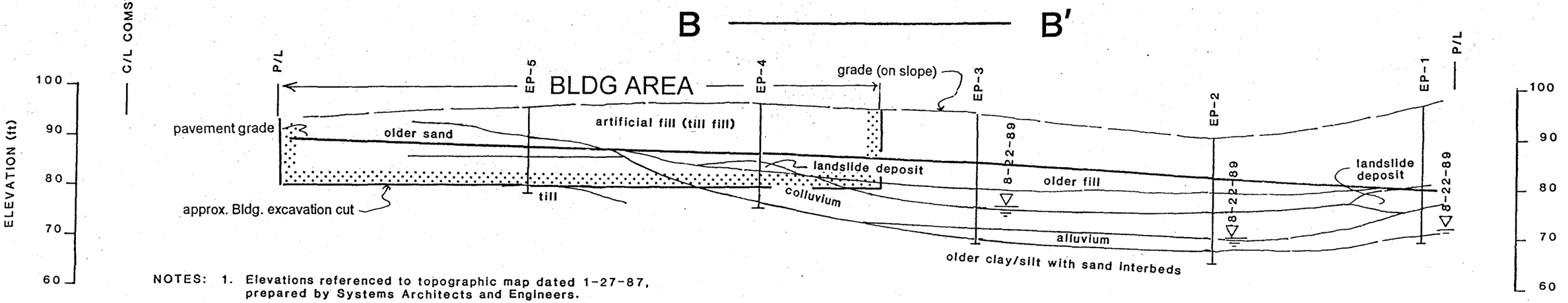
8002-003 JUNE 1998
DEXTER APARTMENTS
FIGURE 1

EXPLORATION PLAN



8002-003 SEPTEMBER 1989
DEXTER APARTMENTS
FIGURE 4
(revised JUNE 1998)



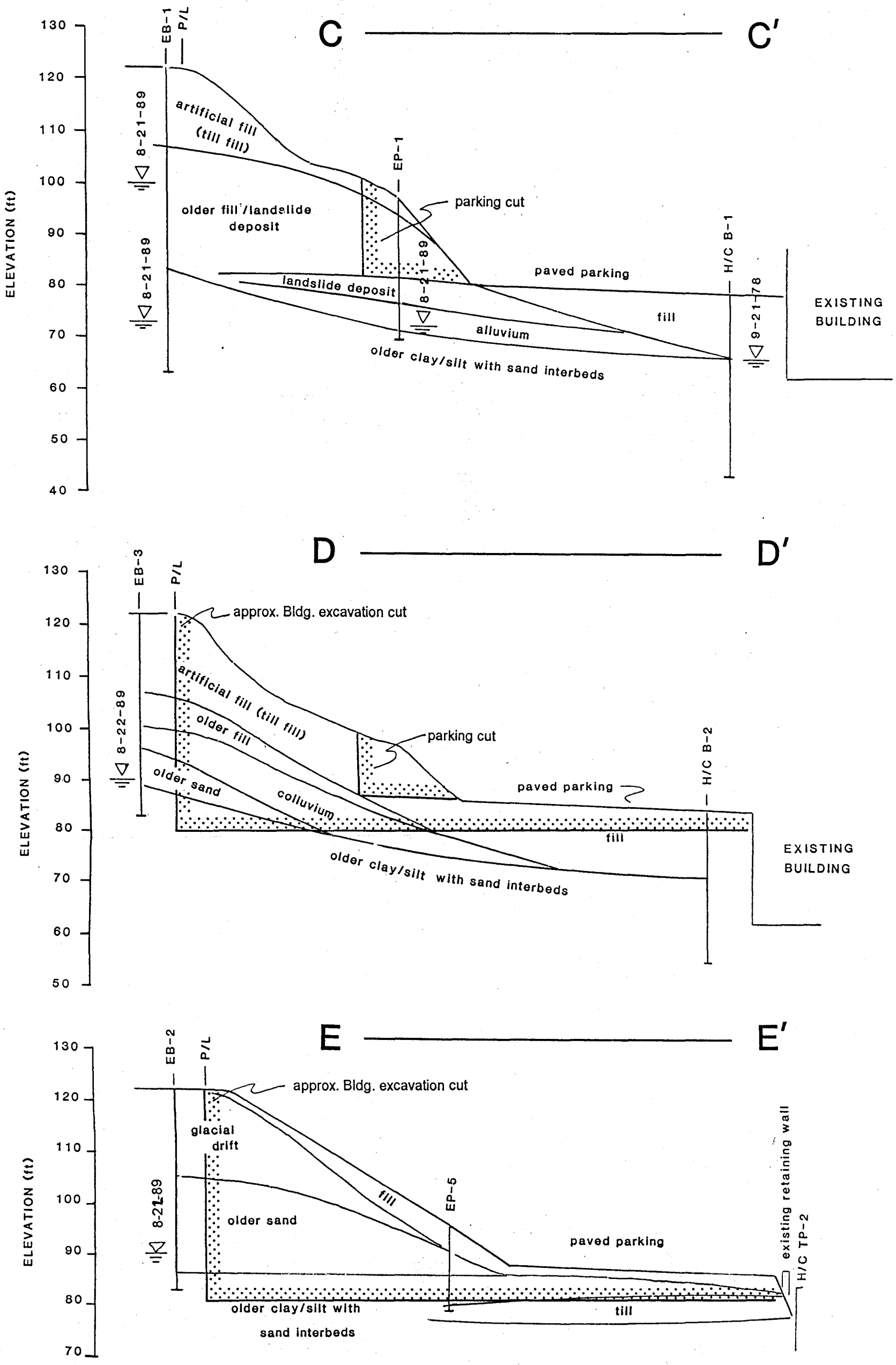


NOTES:
1. Elevations referenced to topographic map dated 1-27-87, prepared by Systems Architects and Engineers.
2. Elevations referenced to City of Seattle datum.
3. Soil units shown on the cross sections are described in detail in the accompanying exploratory pit and boring logs.
4. Explorations prefaced by H/C are referenced to work done previously by others.

GEOLOGIC CROSS SECTIONS

SCALE: H and V, 1"=20'

8002-003 SEPTEMBER 1989
DEXTER APARTMENTS
FIGURE 5
(revised JUNE 1998)

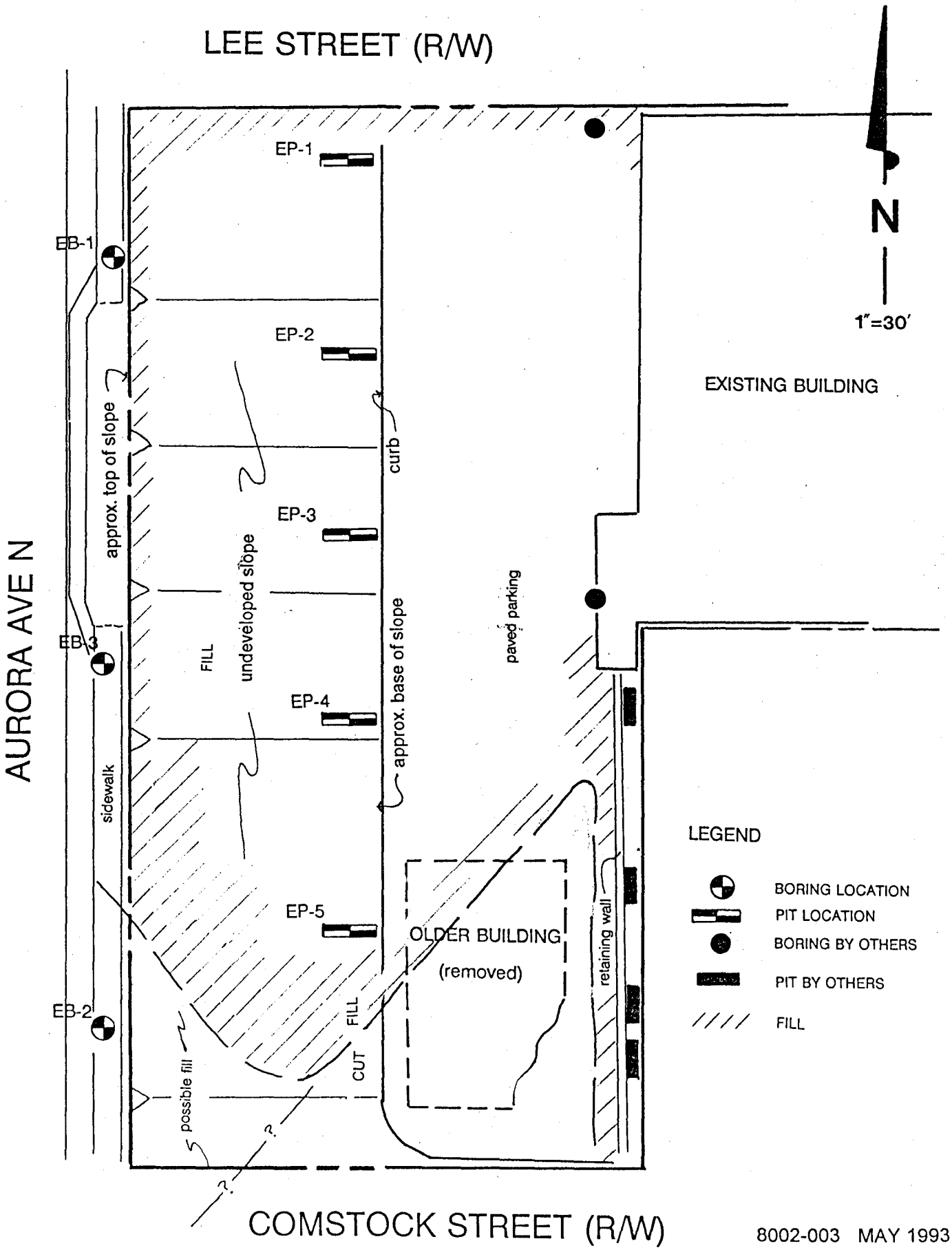


GEOLOGIC CROSS SECTIONS

SCALE: H and V, 1″=20′

NOTES:
1. Elevations referenced to topographic map dated 1-27-89, by Systems Architects and Engineers.
2. Elevations referenced to City of Seattle datum.
3. Soil units shown on cross sections are described in detail in the accompanying exploratory pit and boring logs.
4. Explorations prefaced by H/C refer to work done previously by others.

8002-003 SEPTEMBER 1989
DEXTER APARTMENTS
FIGURE 6
(revised JUNE 1998)



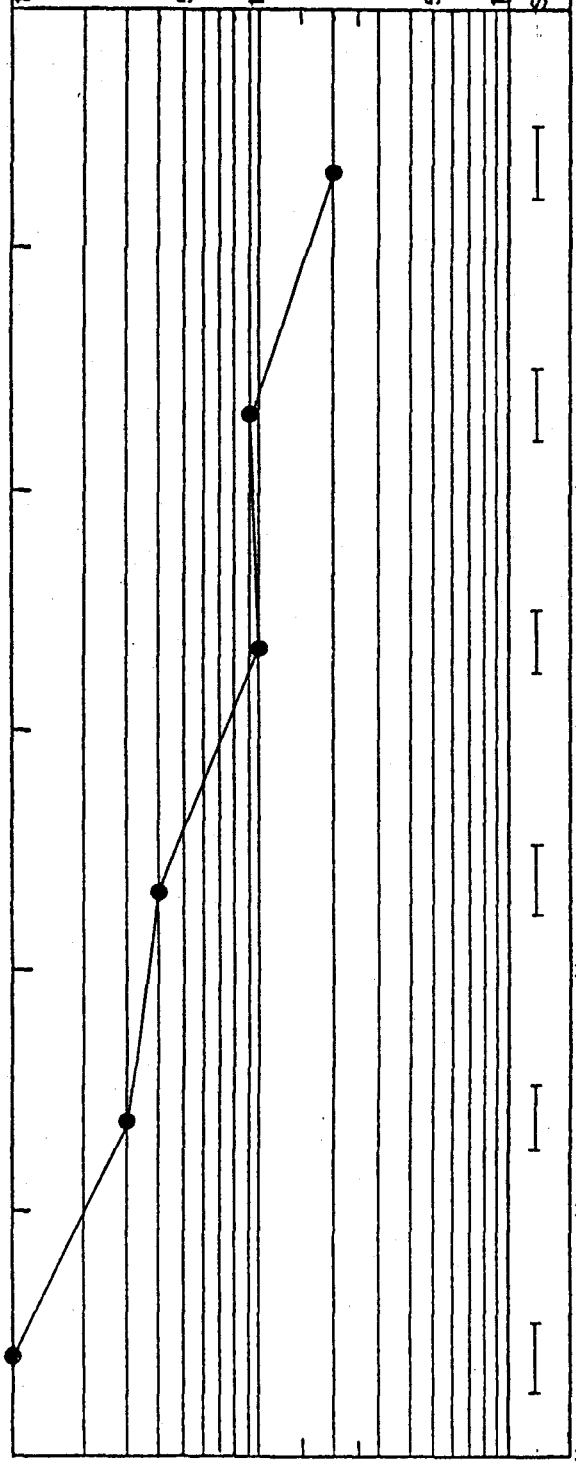
8002-003 MAY 1993
DEXTER APARTMENTS
FIGURE 3
(revised JUNE 1998)

DRILLING METHOD:
ROTARY - HOLLOW STEM AUGER

BORING DESIGNATION: EB - 1
SHEET 1 OF 2

SAMPLING METHOD(S):
STANDARD PENETRATION TEST

SURFACE ELEVATION: 122 feet
DATUM: CITY OF SEATTLE



MATERIAL DESCRIPTION	TEST RESULTS
Medium dense, grey brown, silty fine sand with some gravel, damp, Fill (till fill).	
Soft, grey brown, mottled, fine sandy silt with gravel, moist (to saturated with depth), Fill/Landslide Deposit.	8-21-89 ▽
as above, Fill/Landslide Deposit, matrix grades to clayey silt in zones	Tv = 0.15 tsf Pp = 0.25 tsf

LOG OF BORING

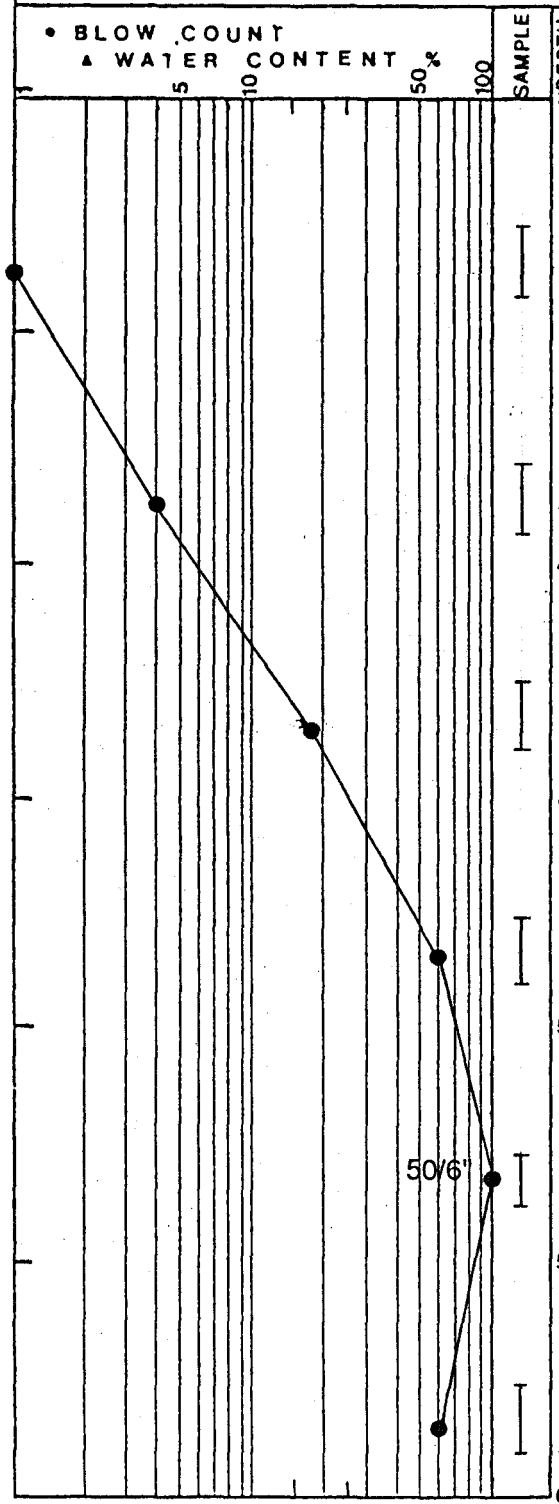
8002-003 SEPTEMBER 1989
1300 AURORA AVE NORTH
EB 1-1

DRILLING METHOD:
ROTARY - HOLLOW STEM AUGER

SAMPLING METHOD(S):
STANDARD PENETRATION TEST

BORING DESIGNATION: EB - 1
SHEET 2 OF 2

SURFACE ELEVATION: 122 feet
DATUM: CITY OF SEATTLE



DEPTH FT.	MATERIAL DESCRIPTION	TEST RESULTS
30		
	as above, Fill/Landslide Deposit	
35		
40	Very stiff, grey, clayey silt with interbeds of fine sand, damp to moist, older clay/silt with sand interbeds.	Tv = 1.0 tsf Pp = 3.0 tsf
45		
	Very dense, grey, slightly silty fine to medium sand, saturated, occasional hard clay seams.	8-21-89 ▽
50		
55		
	Hard, grey clay, moist.	
60	Terminate drilling @ 59 feet,	8-21-89

LOG OF BORING

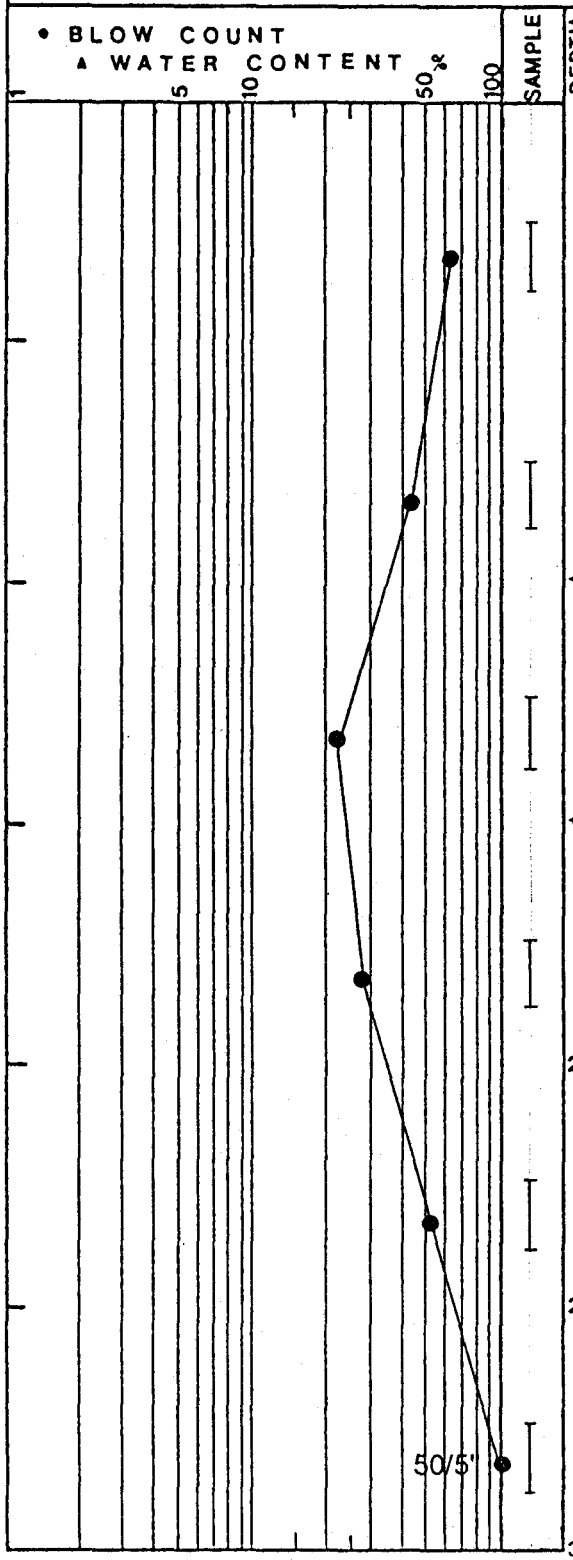
8002-003 SEPTEMBER 1989
1300 AURORA AVE NORTH
EB 1-2

DRILLING METHOD:
ROTARY - HOLLOW STEM AUGER

SAMPLING METHOD(S):
STANDARD PENETRATION TEST

BORING DESIGNATION: EB - 2
SHEET 1 OF 2

SURFACE ELEVATION: 122 feet
DATUM: CITY OF SEATTLE



DEPTH FT.	MATERIAL DESCRIPTION	TEST RESULTS
0	Very dense to medium dense, grey brown, gravelly, silty fine sand to fine sandy silt with occasional cobbles, damp to moist, glacial drift with till-like aspects.	
5		
10		
15		
20	Medium dense becomming very dense, orange to grey brown, silty fine to medium sand, damp, older sand.	
25		
30		

LOG OF BORING

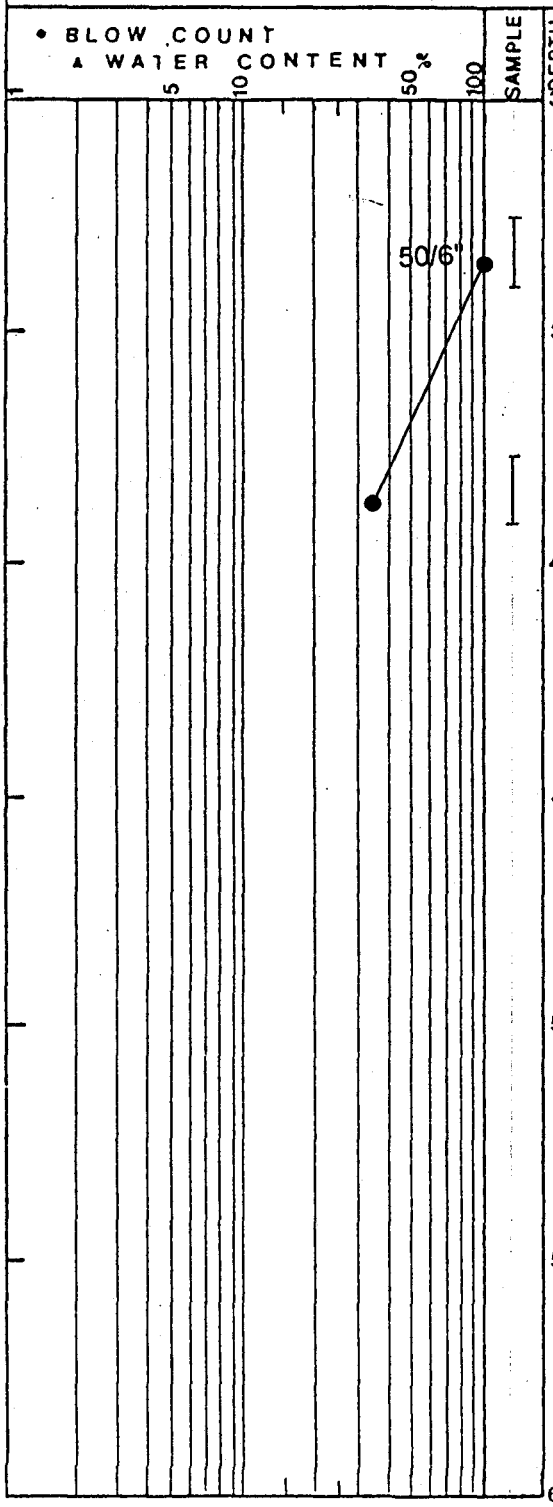
8002-003 SEPTEMBER 1989
1300 AURORA AVE NORTH
EB 2-1

DRILLING METHOD:
ROTARY - HOLLOW STEM AUGER

BORING DESIGNATION: **EB - 2**
SHEET 2 OF 2

SAMPLING METHOD(S):
STANDARD PENETRATION TEST

SURFACE ELEVATION: 122 feet
DATUM: CITY OF SEATTLE



DEPTH FT.	MATERIAL DESCRIPTION	TEST RESULTS
30	as above, saturated below about 32 feet.	8-22-89 ▽
35	Hard, grey brown, mottled, clayey silt with occasional sand seams, varved in zones.	
40	Terminate drilling @ 39 feet,	8-22-89.
45		
50		
55		
60		

LOG OF BORING

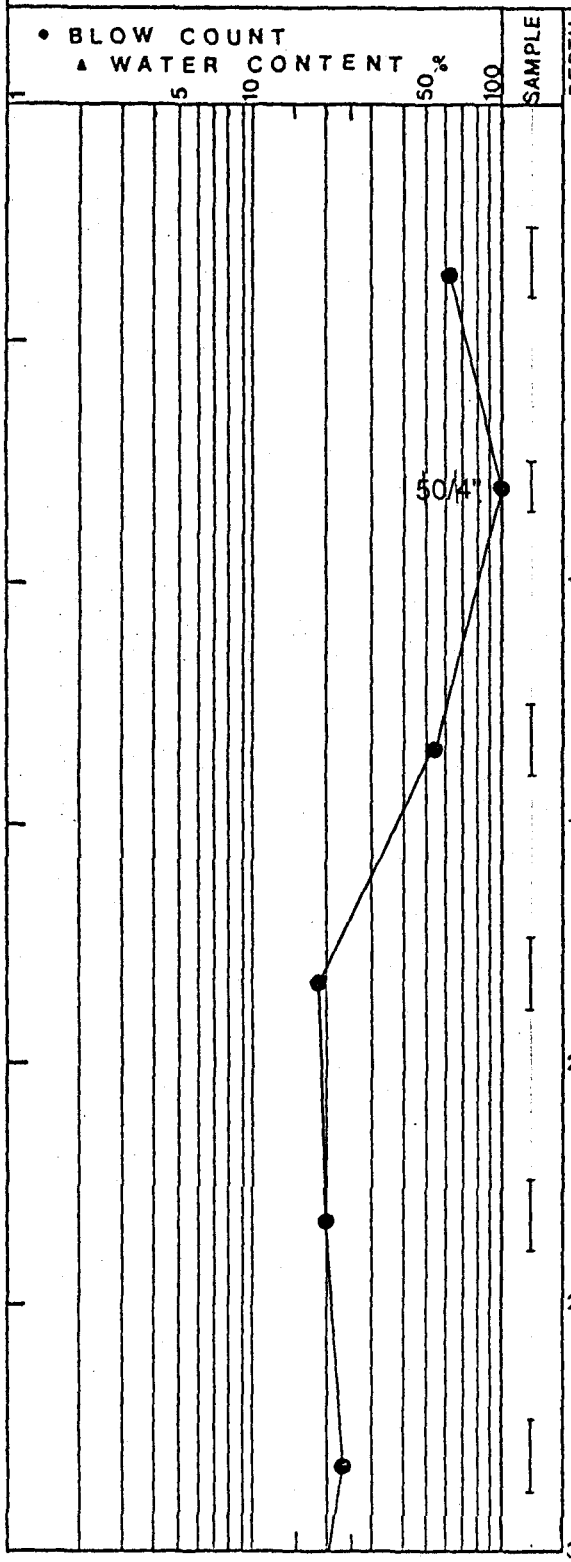
8002-003 SEPTEMBER 1989
1300 AURORA AVE NORTH
EB 2-2

DRILLING METHOD:
ROTARY - HOLLOW STEM AUGER

SAMPLING METHOD(S):
STANDARD PENETRATION TEST

BORING DESIGNATION: EB - 3
SHEET 1 OF 2

SURFACE ELEVATION: 122 feet
DATUM: CITY OF SEATTLE



DEPTH FT.	MATERIAL DESCRIPTION	TEST RESULTS
0	Very dense, grey brown, mottled in zones, poorly sorted, gravelly, silty fine sand, damp, Fill (till fill).	
15	Very stiff, grey brown with green and purple splotches, poorly sorted, fine sandy silt to silty fine sand, moist, chaotic matrix, charcoal fragments, older Fill.	
20	Stiff, grey brown, mottled, very fine sandy silt, moist, few fine roots, trace organic matter, native colluvium.	
25	Medium dense, grey brown with orange mottling, very silty fine sand, moist, zones of cementation, FeO stains.	
30		

LOG OF BORING

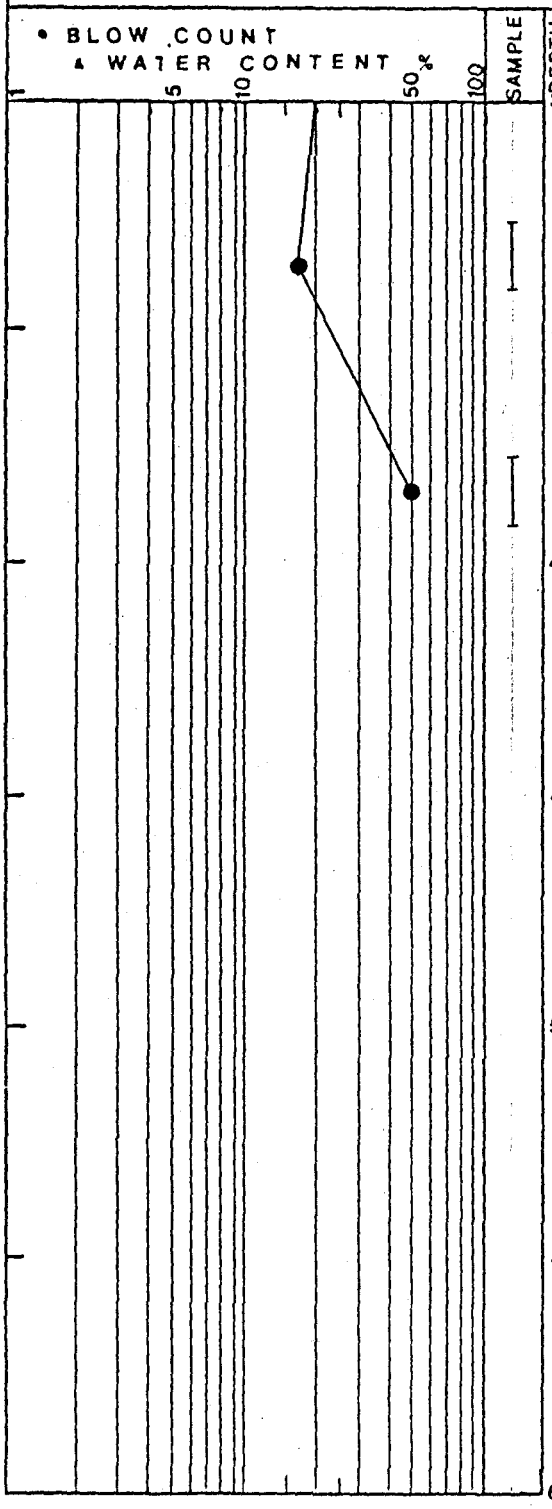
8002-003 SEPTEMBER 1989
1300 AURORA AVE NORTH
EB 3-1

DRILLING METHOD:
ROTARY - HOLLOW STEM AUGER

SAMPLING METHOD(S):
STANDARD PENETRATION TEST

BORING DESIGNATION: **EB - 3**
SHEET 2 OF 2

SURFACE ELEVATION: 122 feet
DATUM: CITY OF SEATTLE



MATERIAL DESCRIPTION	TEST RESULTS
occasional thin clay seams	8-22-89 ▽
Very stiff, grey, clay, moist, occasional thin fine to medium sand seams.	
V dense, grey, silty sand, sat.	
Terminate drilling @ 39 feet,	8-22-89

LOG OF BORING

8002-003 SEPTEMBER 1989
1300 AURORA AVE NORTH
EB 3-2

EXPLORATION PIT LOGS

EP-1 Surface elevation, 97 feet (pavement elevation 80 feet)

Depth (ft)	
0.0 - 3.5	Dense, light grey brown, silty sand with gravel, damp, Fill (till fill).
3.5 - 16.0	Medium dense to dense, light brown, silty fine sand to fine sandy silt with occasional pea gravel, damp, Fill.
16.0- 17.0	Dense, reddish brown grading to grey brown with depth, silty sand with gravel, FeO stain, native zone of weathering.
17.0- 20.0	Dense, reddish brown, silty sand and gravel, damp, light cementation in zones.
20.0- 21.0	Stiff to very stiff, grey, sandy silt, damp, somewhat broken texture.
21.0- 25.0	Medium dense to dense, brown, silty sand with occasional gravel, damp.
25.0- 26.5	Medium dense, grey brown, sand and gravel with silt/clay in the matrix, water bearing.
	* ground water seepage at about 25 feet (elevation 72 feet)
26.5- 27.5	Medium dense/hard, interbedded fine sand and clayey silt, wet, irregular bedding, slickensides with striations.
	Terminate pit @ 27.5 feet, 8-22-89

Note: Pit depths from 0 to 17 feet refer to soils encountered on bank rising above pavement level. Ground water encountered at about 8 feet below pavement level (elevation 72 feet).

EP-2 Surface elevation, 90 feet (pavement elevation 82 feet).

Depth (ft)	
0.0 - 5.0	Dense, light brown, silty sand with gravel, damp, Fill (till fill).
5.0 - 14.5	Medium dense to dense, brown, silty sand with some gravel, damp, older Fill, loosens with depth.
14.5- 20.0	Medium dense, grey, fine sandy silt to silty fine sand with root tubes, moist, turns to a greenish/blue grey color with minor organic fragments and peaty pockets with depth. Wood fragments to 1.5 feet, decaying organic odor. Purplish pockets to 1 inch beyond a depth of about 18 feet.

EXPLORATION PIT LOGS (CONT)

EP-2 (CONT)

20.0- 23.0 Medium stiff to stiff, brown and grey, mottled, sandy clayey silt, with water bearing sand seams, saturated.

Becomes reddish brown to brown, silty to slightly silty sand, cemented.

* Ground water seepage at about 20 feet (elevation 70 feet)

23.0- 25.0 Medium dense, grey, slightly silty to silty fine to medium sand (with slickensided sandy clayey silt fragments from 23 to 23.5 feet), moist, unconformable contact at 23 feet.

Terminate pit @ 25 feet, 8-22-89

Note: Pit depths from 0 to 8.0 feet refer to soils encountered on bank rising above pavement level. Ground water seepage encountered at about 12.0 feet below pavement level (elevation 70 feet.

EP-3 Surface elevation, 95 feet (pavement elevation 85 feet)

Depth (ft)

0.0 - 15.0 Medium dense to dense, light brown, silty sand with gravel, damp, Fill (till fill).

15.0- 18.0 Loose to medium dense, grey brown, silty sand to sandy silt, moist, older fill.

18.0- 18.5 Compact, dark brown peat layer, moist.

18.5- 23.0 Medium, grey, silty, clayey sand and gravel, saturated, water bearing gravels. Zones of stiff, greenish grey with brown mottling, clayey silt to silty clay, saturated.

* Ground water seepage at about 18.5 feet (elevation 76.5 feet)

23.0- 25.5 Stiff, brown with grey mottling, sandy clayey silt, wet, grades into medium dense, grey and brown mottled, silty to slightly silty fine to medium sand.

25.5- 26.0 Hard, grey, clayey silt, wet, contact broken and slickensided for about 3 inches along a dark grey zone. Soils below this zone appear lighter grey and are unbroken.

Terminate pit @ 26 feet, 8-22-89

Note: Pit depths from 0 to 10.0 feet refer to soils encountered on bank rising above pavement level. Ground water seepage encountered at about 8.0 feet below pavement level (elevation 76.5 feet).

EXPLORATION PIT LOGS (CONT)

EP-4 Surface elevation, 97 feet (pavement elevation 87 feet)

Depth (ft)	
0.0 - 12.0	Medium dense to dense, light brown, silty sand with gravel, damp, Fill (till fill).
12.0- 13.5	Very stiff, grey, clayey silt and silty sand, moist, matrix broken and slickensided, Landslide Deposit.
13.5- 19.0	Very stiff, grey with green, organic clay, moist, layers of sandy clayey silt and silty sand.
19.0- 19.5	Hard, grey, clayey silt, moist, broken and hackled, slickensides.
19.5- 21.0	Hard, grey with brown mottling, clayey silt, moist, varved silt.
	Terminate pit @ 21 feet, 8-22-89

Note: Pit depths from 0 to 10 feet refer to soils encountered on bank above pavement level.

EP-5 Surface elevation, 96 feet (pavement elevation 88 feet)

Depth (ft)	
0.0 - 6.0	Medium dense to dense, light brown, silty sand with gravel, damp, Fill (till Fill).
6.0 - 10.0	Dense, brown grading to grey, fine sandy silt, damp, grades into a dense, fine to medium sand.
10.0- 10.5	Hard, grey, clayey silt, damp, broken.
10.5- 16.0	Hard, grey, clayey silt, damp, sand stringer @ 14 feet.
16.0- 17.0	Very dense, grey, poorly sorted, gravelly, silty fine sand, damp, glacial till.
	Terminate pit @ 17.0 feet, 8-88-89

Note: Pit depths from 0 to 8 feet refer to soils encountered on the bank rising above pavement level.