

DEVELOPMENT RESPONSE ACTION PLAN
IMPLEMENTATION REPORT
BRAUN INTERTEC
JANUARY 6, 2005 LEAK 0175

RECEIVED

JAN 11 2005

**Development Response Action Plan
Implementation Report
for Minnesota Pollution Control Agency**

Minnehaha Place Condominiums
5247 Minnehaha Avenue South
Minneapolis, Minnesota

Professional Certification:

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Geologist under the laws of the State of Minnesota.



Richard E. Hansen, PG
Senior Consultant
License Number: 30658
January 6, 2005



Project BL-04-06188

Braun Intertec Corporation

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January 6, 2005

Project BL-04-06188

Mr. Mark Koplitz
Voluntary Petroleum Investigation and Cleanup Program
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

Dear Mr. Koplitz:

Re: Development Response Action Plan Implementation Report; Minnehaha Place
Condominiums, 5247 Minnehaha Avenue South, Minneapolis, Minnesota, MPCA Closed
Leak #8723

Braun Intertec Corporation (Braun Intertec) has prepared the attached Development Response Action Plan (DRAP) Implementation Report, which describes environmental activities conducted during excavations of new apartment building foundations in Minneapolis, Minnesota (site).

The attached DRAP Implementation Report documents environmental activities performed to evaluate the soils encountered during the excavation activities with respect to known areas of petroleum-impacted soils. Petroleum impacted soils were evaluated and managed in accordance with the report entitled *Development Response Action Plan and Construction Contingency Plan, Apartment Building, 5247 Minnehaha Avenue South, Minneapolis, Minnesota*; dated September 8, 2004, and the DRAP approval letter dated November 12, 2004.

If you have questions regarding this DRAP Implementation Report or the project in general, please call me at (952) 995-2450.

Sincerely,

BRAUN INTERTEC CORPORATION



Richard E. Hansen, PG
Senior Consultant

Enclosure:
DRAP Implementation Report

c: Mr. Neil Hyde, CSS Builders, Inc.

Development Response Action Plan Implementation Report

Minnehaha Place Condominiums

5247 Minnehaha Avenue South, Minneapolis, Minnesota

1.0 Introduction

Braun Intertec Corporation (Braun Intertec) has prepared the attached Development Response Action Plan (DRAP) Implementation Report, which describes environmental activities conducted during excavation of two-story basement parking level of a proposed apartment building foundation in Minneapolis, Minnesota (site).

This DRAP Implementation Report documents environmental activities performed to evaluate the soils encountered during the excavation activities with respect to known areas of petroleum-impacted soils. Petroleum impacted soils were evaluated and managed in accordance with the report entitled *Development Response Action Plan and Construction Contingency Plan, Apartment Building, 5247 Minnehaha Avenue South, Minneapolis, Minnesota*; dated September 8, 2004, and the DRAP approval letter dated November 12, 2004. A copy of the Minnesota Pollution Control Agency-approved DRAP letter is provided in Appendix A.

The DRAP described how the excavated materials were to be screened for the possible presence of petroleum impacts during the construction activities. This plan also described the protocols to be followed for proper handling, on-site management, and possible off-site disposal of petroleum-impacted soils, vapor barrier installation and passive vapor extraction during redevelopment, if encountered.

2.0 Project Background

For information pertaining to previous environmental investigations at the site, please refer to the "Request of Closure" VPIC Application and related documents, previously submitted, for more detailed project background information.

3.0 DRAP Implementation

3.1 Field Observations

On several days in September and November 2004, Braun Intertec mobilized to the site to oversee the excavation of the two-story basement parking levels and associated foundation footings at the referenced site to evaluate suspected petroleum impacts.

The soil samples retrieved from the excavation and test pits were examined by a Braun Intertec environmental technician for staining and other apparent signs of contamination. In addition, the soil samples were screened for the presence of organic vapors with a PID. The PID was equipped with a 10.6-electron-volt lamp and calibrated to an isobutylene standard. The PID was used to test fresh surfaces of soil retrieved from the excavation and to perform headspace analyses, as recommended by the MPCA. Groundwater was not encountered in the excavation or any of the test pits completed at the site.

Petroleum impacts were encountered at depths ranging from the surface to 12 feet below grade, and ranging in thickness from 4 to 12 feet. The observed impacts appear to be confined mostly to the former pump island locations. The field readings encountered during the excavation of the impacted soil ranged from non-detect to 6,800 ppm. The reading decreased rapidly in all directions with the center of the excavation being the most impacted. On September 22, 2004, three test pits were excavated near the west entrance to the site to investigate the extent of soil impacts. All soil samples screened from the test pits were below background levels.

All the soil excavated at the site was removed directly after screening since the apartment building is being constructed to within 15 feet of the property boundary. During excavation of the building footprint, impacted soil was segregated and taken off-site for disposal at the BFI Landfill in Rosemount, Minnesota. Since an underground parking structure is being constructed at the site, no vapor barrier was installed.

3.2 Laboratory Analytical Results

A soil sample was collected from the bottom of the excavation at a depth of 10 feet to 12 feet below the ground surface. The soil sample was submitted for chemical analysis of volatile organic compounds (VOCs), diesel-range organic (DRO), diesel-range organic (GRO). The results of the chemical analysis indicated that VOCs, DRO and GRO were not detected above the method detection limits. The analytical chemistry report is attached as Appendix B.

4.0 Conclusions and Recommendations

This report indicates that the DRAP was successfully implemented. Specifically we conclude the following:

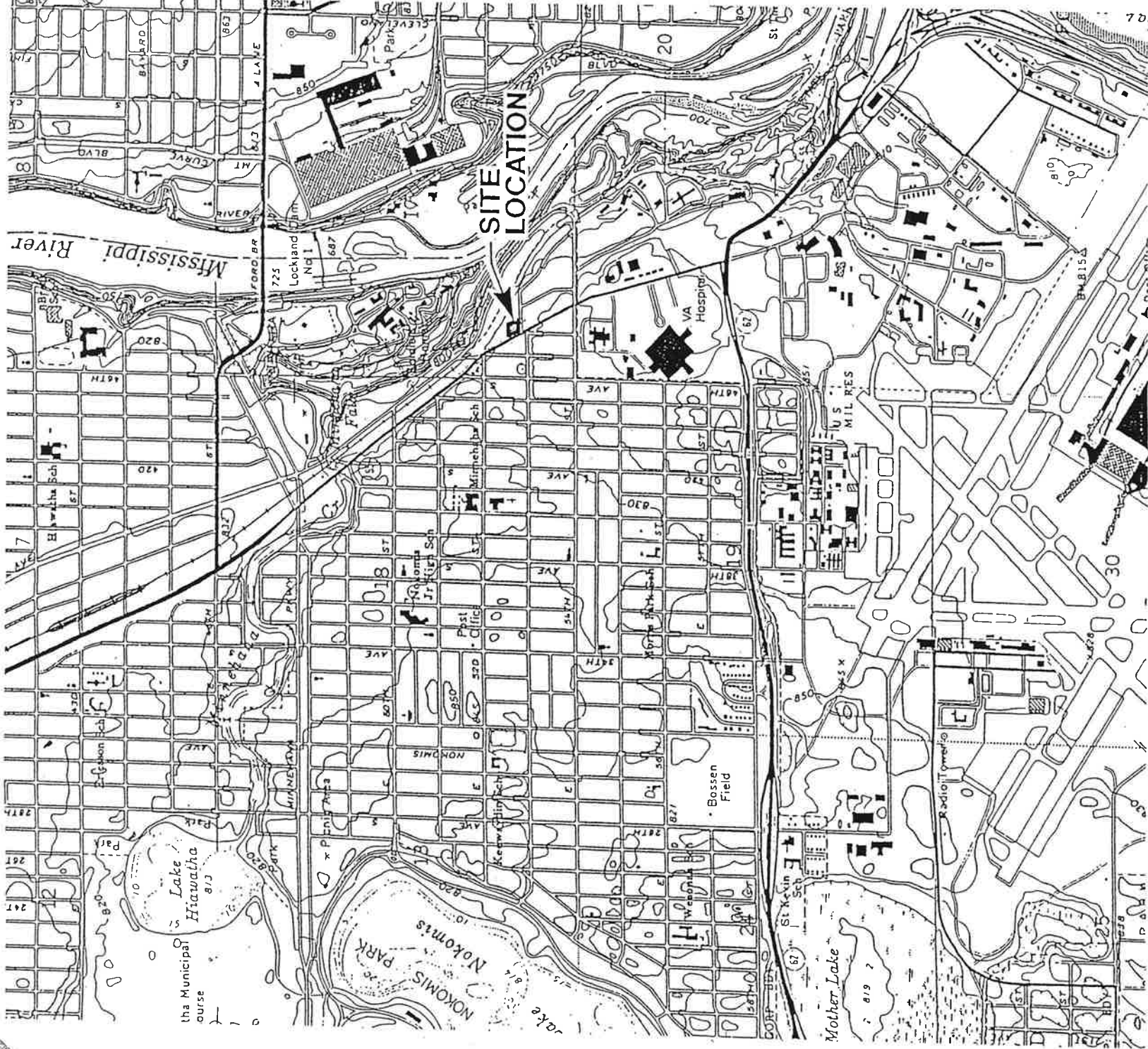
- Approximately 950 cubic yards of petroleum-contaminated soils were generated during excavation of the proposed building were stockpiled and removed from the Site, and disposed of at the BFI Landfill in Rosemount, Minnesota in accordance with the DRAP.

- End of the excavation depth maximum was 12 feet below current grade and petroleum contamination was observed to that depth on the northeastern half of the site. However, analytical chemistry testing did not detect petroleum impacts in the deepest excavation.
- The building includes an underground parking structure and therefore does not require the placement of a vapor barrier between the basement and the underlying sub-grade materials.

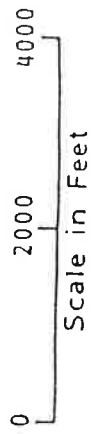
Based on the results presented in this report, we recommend that this work be considered a final remedial action. Braun Intertec recommends that a Completion of Voluntary Action Letter be issued to CSS Builders by the MPCA regarding the identified petroleum release.

5.0 Standard of Care

In performing its services, Braun Intertec used that degree of care and skill ordinarily exercised under similar circumstances by reputable members of its profession practicing in the same locality. No other warranty is made or intended.



Source: St. Paul West, Minnesota Quadrangle, 7.5 Minute Series, 1993.



QUADRANGLE LOCATION

Figure 1
 SITE LOCATION
 Holiday-Minnehaha Avenue

Appendix A

MPCA DRAP Approval Letter



Minnesota Pollution Control Agency

November 12, 2004

Mr. Neil Hyde
CSS Builders, Inc.
2440 North Charles Street
North St. Paul, MN 55109

RE: Approval of Voluntary Response Actions for Petroleum Contamination
Site: Former Holiday Station store #22/Minnehaha Place Condominiums, 5247
Minnehaha Avenue South, Minneapolis
Site ID#: LEAK00008723

Dear Mr. Hyde:

The Minnesota Pollution Control Agency (MPCA) Voluntary Petroleum Investigation and Cleanup (VPIC) program staff has reviewed the following documents regarding your intent to manage petroleum contaminated soils during development at the above-referenced site:

- “Development Response Action Plan and Construction Contingency Plan dated September 8, 2004, prepared by Braun Intertec.
- MPCA leaksite file LEAK00008723 and associated documents.

Based on the information provided, the MPCA VPIC staff are approving the above-referenced plan with the following modifications listed.

1. Petroleum contaminated soils encountered at the site, at or greater than 10 parts per million (PPM) (PID), should be excavated and properly managed at an MPCA approved off-site treatment/disposal facility.
2. Petroleum contaminated soils at or greater than 10 PPM (PID) encountered in the building footprints/foundations should be removed and properly managed as part of the development plan. If contaminated soils remain a vapor barrier should be installed. A two-foot cover of clean fill should be placed over impacted soils in all building footprints.
3. At the time of review, the MPCA had not received building plans for the site. If underground parking will exist for the future building, with an active ventilation system, a vapor barrier as stated in item 2 above will not be required
4. Petroleum contaminated soils at or greater than 10 PPM (PID) encountered during the installation of underground utilities should be removed and properly managed as part of the development plan. If PID readings are above 10 PPM, a vapor barrier should be installed.

520 Lafayette Rd. N.; Saint Paul, MN 55155-4194; (651) 296-6300 (Voice); (651) 282-5332 (TTY); www.pea.state.mn.us

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Mr. Neil Hyde

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November 12, 2004

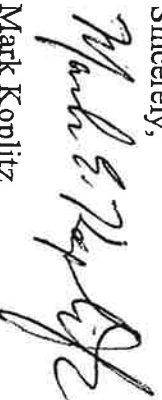
5. Petroleum contaminated soils that exhibit PID headspace readings at or greater than 10 PPM in "green space" areas should be removed and properly managed. A four-foot zone of clean soil should exist in "green space" areas, along with a vegetative cover.
6. Appropriate permits for the discharge and treatment of petroleum contaminated ground water should be acquired, if necessary.
7. Follow-up soil sampling should be conducted, upon the completion of petroleum contaminated soil excavation.

Approval assumes that an implementation report will be provided to the MPPCA summarizing the voluntary cleanup work once completed. If subsequently obtained information indicates that the proposed activities are inappropriate or inadequate, the MPPCA may request modifications in the proposed work.

This letter does not apply to other types of contamination if present at the site. Approval of this plan does not suggest that any of the costs incurred will be eligible for reimbursement from the PetroBoard.

If you have any questions regarding this letter, please call me at 651/296-7999.

Sincerely,



Mark Koplitz
Project Leader
Petroleum Remediation Program
Petroleum and Closed Landfill Section
Remediation Division

MEK:tf

cc: Rich Hansen, Braun Intertec, Bloomington

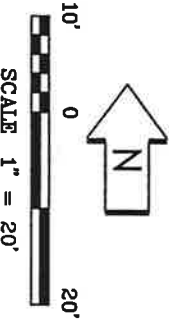
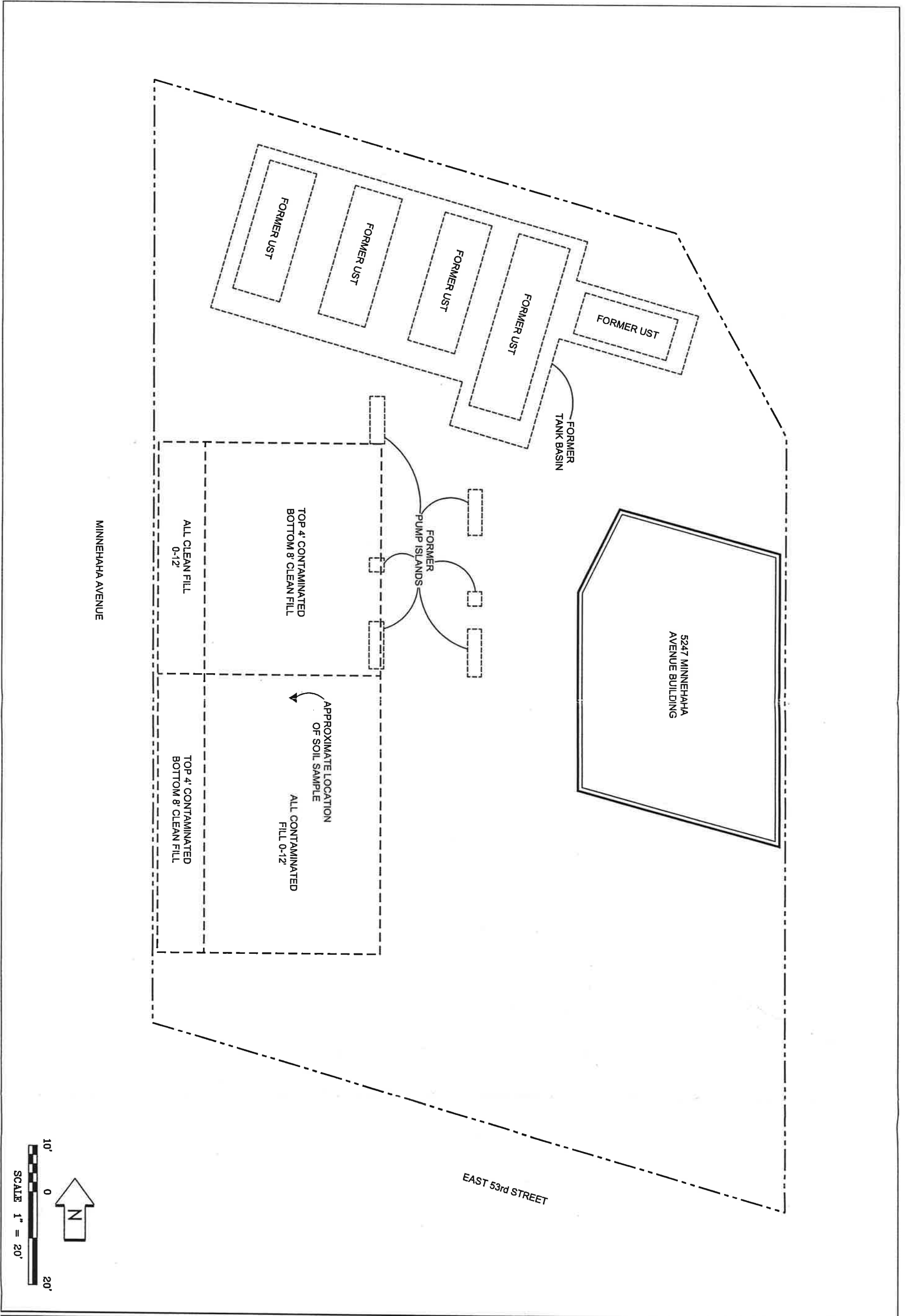


FIGURE NO.	INT	DATE
	DRAWN BY: BJB	10-15-04
	APP'D BY: MR	10-15-04
	JOB NO. BL0406188	
	DWG. NO. BL0406188	SHEET OF
	SCALE 1" = 20'	

EXTENT OF EXCAVATION
 MINNEHAHA PLACE CONDOMINIUMS
 5247 MINNEHAHA AVENUE
 MINNEAPOLIS, MINNESOTA

