

**CLOSURE REPORT
BRIGGS NURSERY INC.
DEBRIS DISPOSAL AREA
OLYMPIA, WASHINGTON**

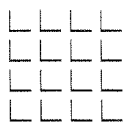
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1.0	INTRODUCTION.....	1
2.0	BACKGROUND	1
3.0	SITE SETTING.....	2
3.1	GEOLOGIC SETTING.....	2
3.2	CENTRAL KETTLE.....	3
4.0	2001 PARTIAL REMOVAL ACTION.....	4
4.1	SOIL STOCKPILE SAMPLING AND ANALYSIS	4
4.2	POST-EXCAVATION CONFIRMATION SOIL SAMPLING AND ANALYSIS	6
5.0	2002 EXPLORATORY ACTIVITIES.....	7
5.1	2002 SOIL BORINGS	7
5.2	PHASE 2 TEST PITS AND HAND AUGER BORINGS.....	8
5.2.1	<i>Test Pit Results.....</i>	<i>8</i>
5.3	CENTRAL KETTLE SAMPLING	9
5.3.1	<i>1996 Sediment and Water Sampling.....</i>	<i>9</i>
5.3.2	<i>2002 Hand Auger Results</i>	<i>9</i>
6.0	2002 REMOVAL ACTION.....	10
6.1	REMEDIAL ACTION APPROACH.....	10
6.1.1	<i>Temporary Erosion and Sedimentation Control Measures</i>	<i>10</i>
6.1.2	<i>Stormwater Control</i>	<i>11</i>
6.1.3	<i>Excavation.....</i>	<i>12</i>
6.2	CLEAN OVERBURDEN SOIL STOCKPILE SAMPLING AND ANALYSIS	14
6.3	POST-EXCAVATION CONFIRMATION SAMPLING AND ANALYSIS	14
6.4	WASTE DISPOSAL	15
6.5	FINAL GRADING AND SITE RESTORATION.....	15
7.0	CONCLUSIONS	16
8.0	REFERENCES.....	18

List of Tables

- Table 1 – Number of Samples Collected for Volume of Excavated Soil
- Table 2 – Summary of 2001 Stockpile 1 through 5, and 7 Soil Analytical Results
- Table 3 – Summary of Stockpile 6 Soil Analytical Results
- Table 4 – Summary of 2001 Post-Excavation Soil Grid Sampling Results
- Table 5 – Summary of 2002 Exploratory Boring Analytical Results
- Table 6 – Summary of 2002 Exploratory Test Pit and Hand Auger Analytical Results
- Table 7 – Summary of 2002 Clean Overburden Stockpiles Analytical Results
- Table 8 – Summary of 2002 Post-Excavation Soil Grid Sampling Analytical Results

List of Figures

- Figure 1 – Site Location
- Figure 2 – Location of Nursery Debris Disposal Area
- Figure 3 – Geographic Extent of Waters and Wetlands of the Central Kettle
- Figure 4 – Debris Disposal Area Exploration Locations
- Figure 5 – Pre-Excavation Project Plan
- Figure 6 – Post-Excavation Sampling Grid
- Figure 7 – Post-Excavation Project Area

APPENDICES

- Appendix A – Photographs of Removal Actions
- Appendix B – Waste Disposal Documentation
- Appendix C – Laboratory Results
- Appendix D – MTCA Statistical Evaluation of Dieldrin, 2001 Post-Excavation Sample Results
- Appendix E – Exploratory Logs: Boring, Test Pits, and Hand Augers

1.0 INTRODUCTION

This Closure Report presents the results of a soil removal action conducted at the Briggs Nursery Debris Disposal Area located at 4407 Henderson Boulevard SE, Olympia, Washington (Figure 1). The removal actions were performed under the Model Toxics Control Act (MTCA), WAC 173-340, and were completed in two phases. Phase I was performed under the Voluntary Cleanup Program (VCP) in the fall of 2001.

WAS NOT IN VCP PROGRAM
IN 2001. 2P

Phase II of the removal action was performed in 2002 under Agreed Order No. DE 02TCPSR-4593 between Briggs Nursery, Inc. and the State of Washington Department of Ecology (Ecology). Three work plans outlining the removal action methodology were prepared and approved by Ecology: the "Work Plan, Briggs Nursery, Inc., Farm Debris Disposal Area, Olympia, Washington" (September 17, 2001), Phase I remedial Action Work Plan (RAP) (August 8, 2002); and Phase II RAP (September 11, 2002).

This Closure Report summarizes the results of the soil removal action by providing "cradle to grave" information such as waste characterization delineation of the lateral and vertical extent of debris removed, post-excavation sampling analytical results, site closure, site restoration activities, and disposal locations.

2.0 BACKGROUND

Briggs Nursery, Inc. is the owner and operator of an active 120-acre wholesale nursery located at the intersection of Yelm Highway and Henderson Boulevard SE at Sections 35 and 36, Township 18 North, Range 2 West, latitude 47°00'19"N, longitude 122°53'06"W. The Debris Disposal Area was formerly located in a discrete area within the north and west portion of the nursery (Figure 2).

From approximately the 1930s through the early 1980s, a natural depression located on the west side of the nursery property and east of the Central Kettle was used as a depository for solid waste generated from the nursery operations (Figure 2). The types of wastes placed in this depression include plastic sheeting, plastic pots, tree stumps, scrap metal, wood debris, bottles, and other miscellaneous wastes. The Debris Disposal Area was overlain by clean fill material during grading activities.

As part of its nursery operations, Briggs Nursery, Inc. historically applied pesticides in accordance with manufacturer specifications. In addition, full or partially full pesticide containers were not disposed in the Debris Disposal Area.

Aerial photographs that bracket the operational life of the nursery disposal site were assessed. The photographs were taken in 1936, 1968, 1977, 1986, 1997, and 1999, respectively. The 1936

photograph shows a small swale to the east of the Central Kettle in an apparently undisturbed state. During this time, the perimeter of the Central Kettle was heavily wooded and the kettle was dry. Several trees were located within the swale and a small gully appeared to run westward from the swale to the Central Kettle.

By 1968, the swale had been cleared, excavated, enlarged and waste materials were being disposed within it. The kettle was still dry at this time and the perimeter remained wooded. By 1977, the swale excavation appeared to have been filled to grade with waste materials. Clearing seemed to have extended further westward, although the kettle perimeter is still wooded and the kettle remains dry. By 1986, waste materials appeared to have been being disposed of within the gully and down the kettle slope. The kettle slope was partially cleared at this time and it was dry. By 1987, the waste site was closed and was being used for plant production and container storage. By that time all waste disposal in the area had ceased.

By 1997, the topography around the waste area was noticeably altered by regrading activities. The flanks and slopes of the kettle were cleared of trees, and a berm and road were apparently constructed across the western portion of the fill area. The Central Kettle consisted of ponding water. A significant portion of irrigation water runoff from nursery operations had been directed to the kettle. Waste material was being placed to the west down the slope towards the kettle. By 1999, vegetation had been reestablished on the cleared slopes, with the color of the vegetation to the west of the Debris Disposal Area noticeably darker than the surrounding slopes. This darker area is attributed to grass seeding, with the grasses reestablished and slopes stabilized as a result of the nursery revegetation efforts. Water remained ponded within the kettle, with algae growth noticeable.

Differences in water elevation in the kettle observed in aerial photographs over time more likely reflect the time of year the photographs were taken than Briggs' water regime.

3.0 SITE SETTING

3.1 GEOLOGIC SETTING

The Briggs Property is located on a north trending late Pleistocene glacial drift upland adjacent to the Deschutes River Valley. Soils within the site area are agriculturally mapped as Yelm fine sandy loam (15 to 30 percent slopes) and geologically as Vashon Outwash Sand. Vashon Outwash Sand is described as a recessional and proglacial stratified outwash sand.

Most of the property is on gently sloped sandy outwash terraces, but the terraces also include deeply inset kettle-type depressions (Figure 2). Kettles form as a result of melted ablative or "dead ice" that has separated from a glacier (Muller and Oberlander 1984). The terraces and side slopes are comprised of volcanic ash, mantled outwash sands and silty sand layers, including

weakly cemented sandy subsoil layers. The kettle bottoms are composed of deep muck deposits in the centers, and interstratified mucks, silts, and sands near the edges.

3.2 CENTRAL KETTLE

In 1996, a wetlands delineation of the Central Kettle was performed and summarized in a report prepared by L.C. Lee & Associates, Inc. for Briggs Development Company, Inc. (L.C. Lee & Associates, Inc., 1996). In addition, a "Preliminary Mitigation and Monitoring Plan for Briggs Urban Village Stormwater Facility, 4407 Henderson Boulevard SE, Thurston County, Washington" prepared by L.C. Lee & Associates, Inc for Briggs Development Company, Inc. dated September 25, 1997 describes the characteristics of the Central Kettle. The following description of the Central Kettle is based on the information contained in the two reports.

The Central Kettle was delineated as containing 4.27 acres of Class II wetlands (Figure 3). The 100-foot wetland buffer encompasses the side slopes of the kettle. Slopes of the kettle have been logged and steepened on the east and south and are now predominately vegetated with upland grasses, herbs, and invasive shrubs.

The hydrology of the kettle is dominated by surfacewater flow to the kettle from the surrounding nursery area, which is then lost through evapotranspiration and infiltration. Irrigation water runoff and storm water is piped directly into the kettle, keeping the water levels artificially high, especially during dry months. Two earthen dams are located on the western side of the kettle. Approximately 13 years ago, the dams were constructed by Briggs Nursery, Inc. to prevent flooding on neighboring property. In high water years, water may flow from east to west, but only under extreme circumstances. The Central Kettle loses water via subsurface flow and evapotranspiration. There are no streams flowing into or out of the kettle.

Soils within the kettle are mapped as Yelm fine sandy loam (15 to 30 percent slopes) (Pringle 1990). Hyrdic soils were found within the wetland boundaries (L.C. Lee & Associates, Inc. 1997).

4.0 2001 PARTIAL REMOVAL ACTION

During the fall of 2001, Briggs Nursery Inc. initiated a clean up action of the Debris Disposal Area. The scope of work and methodology for evaluating waste materials encountered during the cleanup were documented in the "Work Plan, Briggs Nursery, Inc., Farm Debris Disposal Area, Olympia, Washington" dated September 17, 2001 (ENTRIX 2001). The Work Plan was provided to and approved by the Thurston County Health Department and the State of Washington Department of Ecology.

Approximately ten feet of clean fill (approximately 4,500 cubic yards [cys]) overlying the buried debris waste was excavated and stockpiled. The excavation of waste material began on the east-side of the Debris Disposal Area and proceeded in a westerly direction toward the Central Kettle. Solid waste co-mingled with soil was screened on-site and separated. During excavation and screening activities, visual inspection of materials and organic vapor monitoring (using a photoionization detector [PID]) were performed to assist in identifying and segregating different types of waste material. Photographs of the excavation are provided in Appendix A.

Solid wastes were placed in containers and trucked offsite for transportation by rail to Rabanco's landfill facility in Roosevelt, Washington. Approximately 3,700 tons of solid waste was removed from the Debris Disposal Area. The waste disposal documentation is provided in Appendix B.

Individual screened soil stockpiles were generated based on daily production rates and samples were collected for chemical analysis to evaluate waste characteristics. The results are discussed in Section 4.1.

Other wastes such as scrap metal, untreated wood debris, and tree stumps were excavated and segregated. Approximately 12 tons of scrap metal was transported off-site for recycling at Tidewater Inc., Olympia, Washington. Approximately 30 cys of wood debris was excavated from the debris waste area and transported to R. L. Rogers in Olympia, Washington for grinding.

Other miscellaneous wastes were separated and transported off-site for disposal or recycling. Two 55-gallon drums of spent oil filters were transported to Arcom Oil for disposal/recycling. Fifteen 55-gallon drums containing empty plastic containers, flattened metal paint containers, flattened drums, other small empty flattened metal containers, poly sheeting and an inert white powder substance were taken to PCRCD, LLC (non-metal waste) and Schnitzer Steel (metal waste). One battery was taken to NAPA Auto Parts for recycling.

4.1 SOIL STOCKPILE SAMPLING AND ANALYSIS

Approximately 16,000 cys of soil were excavated and stockpiled on the site. The depth of the excavation ranged from 20 to 25 feet below ground surface (bgs).

One clean overburden stockpile, labeled “Clean Fill Stockpile” and six debris-screened soil stockpiles, labeled Stockpiles 1 through 6 were generated during the 2001 removal action. The Clean Fill Stockpile was approximately 4,500 cys and Stockpiles 1 through 6 ranged from 100 to 4,500 cys.

Discrete soil samples were collected at different depths of each stockpile in accordance with “Guidance for Remediation of Petroleum Contaminated Soils,” Washington State Department of Ecology Toxics Cleanup Program, 91-93 dated November 1995 (revised). In general, the number of samples collected was based on the volume of the stockpiles as shown in Table 1.

TABLE 1
Number of Samples Collected
Based on Volume of Excavated Soil

Cubic Yards of Soil	Minimum Number of Samples
0-100	3
101-500	5
501-1000	7
1001 – 2000	10
>2000	10 + 1 for each additional 500 cys

During excavation and sample collection, PID measurements were not measured above ambient background levels. Each sample was collected into laboratory-provided screw cap glass (4-oz) jars. Dedicated sampling equipment was utilized. Chain of custody documentation was maintained throughout the process. The samples were analyzed by Environmental Services Network (ESN), an Ecology-accredited laboratory. The laboratory results are provided in Appendix C.

Soil sample analytical results collected from the Clean Fill Stockpile and Stockpiles 1 through 5 are summarized in Table 2. The Clean Fill Stockpile samples were analyzed for metals using Environmental Protection Agency (EPA) Method 7000 series. Metal concentrations were below MTCA Method A, Method B, or natural background soil levels.

Soil samples collected from Stockpiles 1, 2, and 3 were analyzed for a broad suite of chemical constituents: metals, semi-volatiles, petroleum hydrocarbons, chlorinated pesticides, and organophosphorous pesticides. Although low levels (less than 8 ug/kg or parts per billion [ppb]) of aldrin, DDD, DDE, DDT, dieldrin, and endosulfan were detected, the concentrations were below MTCA Method A or B soil cleanup levels. In addition, other chemical constituents were either undetected or below MTCA Method A, B, and/or natural background levels (Table 2). Based on these results and telephone communication with Ecology, the analytical program was

then reduced to metals and chlorinated pesticides (Personal communication, Melody Allen, ENTRIX personal communication with Mike Blum, Ecology, September 27, 2001).

The analytical results of soil samples collected from Stockpiles 4, 5 and 7 were similar to the results found in Stockpiles 1 through 3 (Table 2). Chemical constituents were either undetected or below MTCA Method A, B, and/or natural background levels. Low levels of aldrin, DDD, DDE, DDT, dieldrin, and endosulfan were detected, but were also below MTCA Method A or B cleanup levels.

Stockpile 6 was comprised of soils excavated from the northwest corner of the excavating, which occurred between October 10, 2001 to October 19, 2001 (Figure 4). Analytical results from soils excavated between October 10 and October 15 show concentrations of chlorinated pesticides below MTCA cleanup levels (Table 3). However, two samples from soils excavated between October 17 and October 19 show concentrations of aldrin (0.93 mg/kg), DDD (0.89 mg/kg), and DDT (6.6 mg/kg) in soil above MTCA Method A and B cleanup levels (Table 3). Because of inclement fall weather, the excavation was prepared for closure through the winter months and Stockpile 6 was covered with plastic sheeting and secured.

On May 16, 2002, Stockpile 6 was divided into seven smaller stockpiles based on the excavation sequence and analytical results described in the previous paragraph. More in-depth sampling and analysis was performed to further evaluate pesticide concentrations in the soil. The additional laboratory results are summarized in Table 3.

Concentrations of aldrin, dieldrin, and DDT in soil were present above MTCA Method A and B cleanup levels, in five of the seven smaller stockpiles. Because pesticide concentrations in Stockpile 6 were above cleanup levels, approximately 4,187 tons of pesticide-affected soil was transported off-site and disposed of at the Olympic View Landfill located in Bremerton, Washington as part of the 2002 removal action. Waste disposal documentation for Stockpile 6 is also provided in Appendix B.

4.2 POST-EXCAVATION CONFIRMATION SOIL SAMPLING AND ANALYSIS

Prior to the temporary closure of the Debris Disposal Area during the winter of 2001, post-excavation confirmation samples were collected from the northwest corner of the excavation area (Figure 5). A 25-foot by 25-foot confirmation sampling grid was established in the base of the excavation. The northwest area of the excavation was not included in the 2001 post-excavation grid sampling effort because of pesticide-affected soil above MTCA Method A and B cleanup levels that was discovered in Stockpile 6. At that time, the lateral and vertical extent of pesticide-affected soil in this area was undefined.

The sampling grid was labeled A through I as shown on (see Figures 5 and 6) Soil samples were collected from each grid cell on the floor of the excavation and at random locations halfway up

the sidewalls. The samples were analyzed by ESN for metals, petroleum hydrocarbons, chlorinated pesticides, and organophosphorous pesticides.

The laboratory results of 2001 post-excavation grid samples indicated that chemical constituents were below MTCA Method A, Method, B and natural background levels with the exception of dieldrin concentrations in two samples (Table 4). Dieldrin concentrations ranged from 0.065 mg/kg to 0.098 mg/kg and were slightly above the MTCA Method B residential level of 0.06 mg/kg.

A statistical analysis of dieldrin concentrations in post-excavation soil samples was performed in accordance with Ecology guidance and is presented in Appendix D. The statistical analysis indicates that concentration of dieldrin in the 2001 grid sampling area is below MTCA Method B residential clean up limits. Based on these results, additional excavation at the two grid locations was not performed.

5.0 2002 EXPLORATORY ACTIVITIES

5.1 2002 SOIL BORINGS

The results of the 2001 soil removal action indicated that the lateral and vertical extent of pesticide-affected soil in the northwest corner of the excavation area was undefined. Therefore, in April 2002, four exploratory borings, NW-1, NW-2, NW-3, and NW-4 were advanced to approximately 25 feet bgs to further evaluate the presence of pesticide-affected soil (Figure 4). The boring logs are provided in Appendix E.

Soil samples were collected from each boring and analyzed for chlorinated pesticides. The results are summarized in Table 5. The analytical results indicated that concentrations of aldrin, DDD, DDT and dieldrin were above the MTCA A and B residential cleanup levels at depths ranging between 10 and 15 feet bgs. Chlorinated pesticides were undetected in samples collected below these depths.

Seven additional borings, P-1 through P-7, were advanced on the east-side perimeter of the Central Kettle to assess the lateral and vertical extent of solid waste and pesticide affected soil (Figure 4). Solid wastes were observed in borings P-1 through P-7 at depths ranging from seven to 25 feet bgs. The boring locations extended along a 120-foot length of the kettle perimeter. The logs are also provided in Appendix E.

Soil samples were collected from each boring and analyzed for chlorinated pesticides. Chlorinated pesticides, aldrin, and dieldrin, were detected at concentrations of above MTCA Method B soil cleanup levels up to 25 feet bgs (Table 5).

The combined results of the 2001 remedial action and the 2002 exploratory borings indicate that the lateral and vertical extent of solid waste and pesticide-affected soil was not defined and appeared to extend down the east slope of Central Kettle.

5.2 PHASE 2 TEST PITS AND HAND AUGER BORINGS

Additional exploratory and the approach to site remediation was outlined in the Agreed Order between Briggs Nursery, Inc. and Ecology. The exploratory scope of work included additional test pits and hand augers excavations on the east slope of the Central Kettle to further evaluate the nature and extent of solid waste and potential pesticide-affected soil. The exploration and sampling methodology are further described in the Phase II Work Plan.

5.2.1 Test Pit Results

On August 15 and 16, 2002, a series of three test pits were excavated along three traverse lines parallel to the slope in the suspected waste area (a total of nine test pits), and one test pit was excavated south of the suspected waste area (Figure 4). The layout and location of the test pits was selected to further delineate the lateral and vertical extent of the waste.

The test pits were excavated using a tracked excavator capable of excavating below ground surface to depths of 26 feet when set up on level ground. Groundwater was not encountered in any of the test pit explorations. Groundwater is likely present at depths greater than 35 feet bgs. At the test pit locations, the ground surface was sloped and the maximum excavation depth varied from 20 to 26 feet. Generally, all of the explorations were terminated at depths ranging from 10 to 26 feet bgs in undisturbed native material except for test pits TP-2 and TP-9, which were terminated within the debris waste after reaching the maximum excavation depth at 22 and 20 feet, respectively.

The test pits typically encountered a layer of overburden material composed of "reworked native soil" that extended to depths varying from 3 to 26 feet bgs. Beneath the reworked native material the explorations encountered "debris waste," "soil and wood debris," or undisturbed "native soils" depending on the location. Debris wastes were encountered in test pits TP-2, TP-3, TP-4, and TP-9. The debris waste at these locations was typically encountered within 2 to 4 feet bgs, and consisted of dark black organic soils mixed with pieces of plastic plant containers, shredded plastic sheeting, metal, and wood debris. The remaining test pits typically encountered either natural wood debris and soil or native soils beneath the reworked native material. Test pit logs are provided in Appendix E.

Soil samples collected from the test pits were submitted for chlorinated pesticide and metals analysis. The analytical results are summarized in Table 6 and the analytical reports are provided in Appendix C. Metal concentrations in all test pit soil samples were either undetected or were below natural background levels or MTCA Method A or B cleanup levels. Chlorinated pesticides were not detected in test pits TP-1, TP-4 through TP-6, TP-8, and TP-9. Although low

levels of select chlorinated pesticides were detected in TP-2, TP-3, and TP-7, aldrin (0.54 mg/kg) was the only compound detected above the MTCA Method B cleanup level and was present only in one composite sample collected from TP-2 at depths of 10, 16, and 22 feet bgs.

The materials found in borings and test pits on the east side of the Central Kettle were evaluated and the approximate lateral and vertical extent of waste that required excavation was identified (Figure 4).

5.3 CENTRAL KETTLE SAMPLING

The discovery of solid wastes discovered on the east slope of the Central Kettle prompted additional sediment samples to evaluate whether solid wastes were present at the eastern base of the Central Kettle. Briggs Nursery, Inc. previously collected sediment in the Central Kettle in 1996. The 1996 sampling are summarized below followed by the recent sampling results.

5.3.1 1996 Sediment and Water Sampling

In 1996, L.C. Lee & Associates collected a surface water sample from the Central Kettle. The water sample was analyzed for metals, chlorinated pesticides and PCBs, and herbicides. All constituents were reported undetected at the analytical detection limit.

In 1996, Landau & Associates collected a sediment sample between four and 10 inches bgs in the Central Kettle. The condition of the sediment reportedly did not allow retrieval of the target sample interval (12-18 inches). The sample was analyzed for TCLP volatile, semi-volatiles, pesticides, and metals; nitrate and nitrite; ortho-phosphorous; pH; and dioxin/furans. These constituents were either undetected or reported at low levels.

Sediment in the Central Kettle was sampled in 1996; however, because solid wastes were discovered on the east slope of the Central Kettle, additional sediment samples were collected to further evaluate the base of the slope. The results of the 1996 sampling effort are summarized followed by the recent sampling results.

5.3.2 2002 Hand Auger Results

Three hand augers (HA-1 through HA-3) were completed at the bottom of the Central Kettle near the base of the slope and below the proposed excavation area. The hand augers were excavated to depths varying from 5 to 16 feet. Groundwater was not encountered in any of the hand auger explorations. Soils encountered typically consisted of a layer of loose overburden material composed of "reworked native soil" overlying undisturbed native soils. Debris waste was not encountered in any of the hand auger borings. All of the explorations were terminated in undisturbed native soils. The reworked native materials typically extended to depths varying from 2 to 13 feet bgs. Hand auger logs are provided in Appendix E.

Sediment samples were collected from each hand auger and submitted for chlorinated pesticide and metal analysis. The analytical results indicate that metals and chlorinated pesticides were either undetected, detected at low levels, or were below the MTCA Method A or B cleanup levels (Table 6). These results suggest that solid waste debris has not extended to the base of the eastern slope of the Central Kettle.

6.0 2002 REMOVAL ACTION

6.1 REMEDIAL ACTION APPROACH

The 2002 Removal Action approach was based on the estimated lateral and vertical extent of solid waste and pesticide affected soil in the Debris Disposal Area. Initial remedial activities included the installation of temporary erosion and sedimentation control measures and site drainage controls prior to initiating excavation activities. Subsequently, full-scale remediation was performed by Envirocon, Inc (Envirocon) with oversight by ENTRIX and PacRim Geotechnical Inc. Remedial activities through site restoration are described in this section.

6.1.1 Temporary Erosion and Sedimentation Control Measures

A Drainage and Erosion Control Plan was prepared in conformance with the City of Olympia "Drainage Design and Erosion Control Manual" and was provided as Appendix B of the Phase II Remedial Action Plan. The plan addressed the managing of surface water around the site and described what erosion control features would be implemented during and after the excavation of the waste was completed.

Prior to starting the excavation of debris waste, temporary erosion and sedimentation control measures were implemented. These measures consisted of installing silt fencing, reinforcing the silt fence with hay bales, installing a stabilized construction entrance, and redirecting surface water flow around the project area (Figure 5).

Silt fencing was originally installed along the sides and downhill of the proposed excavation area prior to excavating the test pits on the east slope of the Central Kettle. During the removal action, the silt fence was repaired as necessary and hay bales were placed behind the fencing at the bottom of the slope to provide reinforcement. Surface water did not accumulate behind the fence during the removal action.

The stabilized construction entrance was installed along the haul road on the north side of the 2001 excavation area. The road was constructed using 2 to 4 inch quarry spalls and ballast rock. During excavation, the condition of the road was monitored and additional rock was added when necessary or the road was regraded to maintain the integrity of the road surface.

Additional wood chip berms were constructed along the western edge of the Debris Stockpile Area and along the northern edge of the Overburden Stockpile Area (Figure 5). The berms were placed to help contain surface water and loose debris within the project area.

6.1.2 Stormwater Control

Prior to excavation, the existing surface water drainage was temporarily redirected to prevent surface water from flowing into the excavation or stockpiling areas. The redirected water was discharged either into the North Kettle or into the Central Kettle via an alternate pathway constructed around the excavation area.

6.1.2.1 Existing Drainage (Prior to the 2002 Removal Action)

Prior to the 2002 removal action, irrigation water and storm water originating from the nursery areas to the east and south of the Debris Disposal Area drained to the Central Kettle. Rain and irrigation water was collected in open ditches in these areas. The ditches drained into two existing catch basins. Catch Basin 1 (CB #1) is located to the southeast of the excavation area, and Catch Basin 2 (CB#2) is located on the upland area south of the Overburden Stockpile Area (Figure 5).

Catch basin CB#1 collected the surface water drainage from the nursery area east of the site, and Catch basin CB#2 collected the surface water from the nursery area to the south of the site. Both catch basins discharged into the Central Kettle via two 12-inch diameter corrugated metal pipes at the toe of the slope beyond the proposed excavation area (Figure 5).

Surface water from the area northeast of the site drained into a ditch along the north side of the proposed haul road and along the northern edge of the Landfill Waste Stockpile Area. The ditch routed the water to the North Central Kettle.

6.1.2.2 Rerouting of Drainage During Excavation

Surface water flow was routed around the project area by excavating shallow ditches and reversing the flow in some of the existing ditches. Surface water that previously flowed through the project area to the Central Kettle was rerouted and drained into the North Central Kettle. The ditches were lined with gravel, and check dams were installed to prevent channel erosion.

Surface water east of the Debris Disposal Area that normally flowed to CB#1 as shown in Figure 5, was rerouted to the North Kettle by reversing the flow in the ditch along the east side of the project area. This directed surface water flow to the North Kettle via another ditch located on the north side of the haul road.

Water that originally flowed into CB#2 from the area south of the project area was routed past CB#2 into a temporary swale constructed at the southern edge of the Overburden Stockpile Area.

Water that accumulated in the swale was lost through evaporation and infiltration. An overflow ditch was available in case of wet weather, however, the swale did not overflow during the project.

A dike was constructed along the west edge of the 2001 excavation area to prevent any surface water from flowing into the proposed excavation area. The dike was constructed using the native soil within the 2001 excavation area where previous grid sampling had indicated "clean" soil conditions. The dike was approximately 4 feet in height. During excavation it did not rain and water did not accumulate in the area behind the dike.

6.1.3 Excavation

After installation of the Temporary Erosion and Sedimentation Control Measures (TESC) measures the contractor began excavation of the clean overburden material and debris waste. Three stockpile areas were designated to segregate and manage different waste types: Debris Waste Stockpile Area, Overburden Stockpile Area, and Natural Wood Debris Stockpile (Figure 5).

Excavation was completed using a large tracked excavator. Two 25 ton off-road dump trucks were used to transport the excavated material to the stockpile areas. The clean overburden material was placed in six stockpiles located in the Overburden Stockpile Area, located on the south side of the project area. Stockpiles were limited in size to less than 1,000 cys. The stockpiles were surveyed and the volume of overburden material is approximately 5,190 cys (8,044 tons).

Samples of the stockpiled material were randomly collected for confirmation testing after each stockpile had been filled to its maximum size. The results are discussed in Section 6.2.

Envirocon began excavating debris waste after the clean overburden material was removed from an area and stockpiled. The large excavator and off-road dump trucks were used to excavate and transport the waste either directly to Olympic View Landfill or for temporary on-site stockpiling. Occasionally, clean overburden material was placed over the debris waste to maintain a temporary haul road. This material was then considered to be contaminated and was hauled off with the debris waste.

The debris waste was stockpiled in the Debris Waste Stockpile Area at the northeast corner of the project area (Figure 5). The debris waste was dumped into one large pile and was not separated into individual stockpiles. A second excavator loaded the debris waste into highway legal dump trucks with trailers, which then hauled the material to the Olympic View Landfill near Bremerton, Washington. While on site, the highway trucks traveled on a designated haul road to prevent them from tracking debris off site.

A 2000-gallon water truck was on site full time during excavation activities to spray the site and haul roads to prevent significant quantities of dust from being generated. During excavation water was sprayed over the excavation area and on to the excavator bucket for dust suppression. Dust was kept to acceptable levels throughout the excavation period.

The debris waste typically consisted of organic-rich potting soil and silty sand, mixed with plastic debris, visqueen sheeting, Styrofoam, wood, and metal debris, with occasional concrete fragments. In general, the soil to debris ratio was estimated to be about 70 percent.

Excavation depths extended to about 27 feet below the existing ground surface near the center of the excavation area. Groundwater was not encountered during excavation. Excavation was completed within the area as originally planned, except at the southeast corner of the project area. Excavation of debris waste extended towards the southeast corner and required removal of an existing catch basin (CB#1) and associated piping. The excavation in this area was approximately 30 feet wide, 70 feet long, and 12 feet deep. After grid sampling was completed and the results were obtained the excavated area at the southeast corner was backfilled in order to establish a stable slope and drainage configuration.

Visual examination of the excavation material was performed to identify and separate any potential petroleum-based or other chemical waste that did not fit the expected waste profile based on the 2001 removal action and subsequent exploration activities. Although steel 55-gallon drums were on site and available for storing suspect waste, none was encountered during the removal action. Suspect waste was not observed during excavation.

When there was visual evidence that the material encountered at the base of the excavation appeared free of debris waste and was similar in appearance to the native material, test pits were completed to verify that all of the debris waste had been removed. The test pits were excavated to depths of 3 to 8 feet, and native soil consisting of light brown silty sand was typically encountered below the waste in all of the test pits.

As expected, along the south side of the project area, a significant amount of natural wood debris, composed of tree stumps, logs, branches and roots mixed with the native silty sand, was encountered (Figure 5). This material had been placed during previous regrading activities adjacent to the site. In the central portion of the project area this material had been placed over the debris waste and was removed.

Test pits excavated along the southern portion of the project area prior to full-scale remediation indicated that wood debris had been placed directly over the native soil and underlying debris waste was not present. Observations and additional test pits during completed during excavation

confirmed that the debris waste did not extend beneath the wood debris mixed with soil and a portion of the natural wood debris was left in place. A significant quantity of the natural wood debris was removed and treated as debris waste, in order to grade the slope to a stable 2 Horizontal to 1 Vertical configuration. The area where the existing wood debris was left in place is shown on Figure 5.

Excavation of the debris waste was completed on a fast track schedule to decrease the possibility of excavating during wet weather. Excavation of the debris waste was completed in approximately 10 days during dry weather conditions. Approximately 9,982 cys (15,519 tons) of debris waste was removed from the project area.

6.2 CLEAN OVERBURDEN SOIL STOCKPILE SAMPLING AND ANALYSIS

Approximately 5,190 cys of clean overburden was removed and stockpiled into six clean overburden stockpiles. In general, the number of samples collected from the stockpiles was based on the sample scheme shown in Table 1. The samples were submitted for chlorinated pesticide analysis by ESN. The laboratory reports are provided in Appendix C.

The results indicate that chlorinated pesticides were either undetected or were below MTCA B residential soil cleanup level (Table 7).

6.3 POST-EXCAVATION CONFIRMATION SAMPLING AND ANALYSIS

Following the removal of solid wastes and pesticide-affected soils from the Debris Disposal Area, post-excavation soil samples were collected to determine whether pesticide concentrations in soil were below the MTCA Method A or B soil cleanup levels. A sampling grid system was used to provide spatial coverage over the excavation and former stockpile areas. The grid system from the 2001 partial removal action was extended to the areas remediated in 2002 and was also comprised of 25-foot by 25-foot grid squares (Figure 6). Individual grids were labeled numerically north to south and alphabetically east to west. The 2002 excavation area was labeled J through S and the area underlying the former stockpiles was labeled AA through II.

One discrete soil sample from each individual grid was collected from the base of the excavation and analyzed for metals, petroleum hydrocarbons, chlorinated pesticides, and organophosphorous pesticides by ESN and STL (an Ecology-accredited laboratory). The laboratory reports are provided in Appendix C.

The laboratory results indicate that all post-excavation confirmation samples contained constituents were either undetected, below MTCA cleanup levels, or were below natural background concentrations (Table 8). Based on these results, the site was prepared for restoration and closure as discussed in Section 6.5

6.4 WASTE DISPOSAL

During the 2002 Removal Action, approximately 9,982 cys (15,519 tons) of solid waste commingled with soil was excavated from the Debris Disposal Area and removed off-site for landfill disposal. This total includes 2,700 cys (4,187 tons) of pesticide-affected soil contained in Stockpile 6. Envirocon transported the waste by truck to the Olympic View Landfill located in Bremerton Washington. Waste disposal documentation is provided in Appendix B.

6.5 FINAL GRADING AND SITE RESTORATION

The entire site area was graded after excavation and confirmation sampling was completed. The loose material exposed on the slopes was compacted by tracking over it with the dozer. Steep slopes that had been created during excavation were cut down and regraded so that a maximum slope inclination of 2 Horizontal to 1 Vertical (2H: 1V) was not exceeded anywhere on the site. The post excavation and regrading topography is shown on Figure 7.

At the southeast corner where catch basin CB#1 had been removed a small swale was constructed around the end of the drainage culvert so that surface water could be drained into the culvert. The ditch draining into the swale and the bottom of the swale were then armored with 2 to 6-inch minus crushed rock. Large boulders were placed around the perimeter of the swale to protect it from erosion and to keep vehicles out.

The Overburden Stockpile Area was regraded to promote drainage and eliminate areas where standing water could develop. Regrading included moving a portion of the stockpiles generated during excavation.

The Debris Waste Stockpile Area was sloped to drain back to the east away from the hillside to a shallow swale at the southeast corner of the stockpile area. Water accumulating in the swale will drain into the 2001 Excavation area. *Contacted Mel regarding "swale" testing. Swale is just a low spot on one side. No need to re-test. 2P* has already been tested as part of closure. Two sediment traps were constructed near the base of the excavation area as part of the permanent erosion and sedimentation control plan. Near the middle of the excavation area a channel was graded to direct and route the flow of storm water during the wet season. The channel was lined with 2 to 6-inch minus quarry spalls and check dams were placed in the channel to slow the flow of water. The dike that had been constructed along the west edge of the 2001 Excavation Area was cut down and regraded to reduce the amount of water that could accumulate. Lastly, several rows of hay bales were used to construct short berms on the slopes to control storm water drainage and to break the slope into shorter slope sections.

After the grading and installation of the erosion and sediment control features were completed the site was hydroseeded. The hydroseed mix consisted of a grass and native plant seeds mixed

with cellulose and a tackifying agent. A straw blanket, varying in thickness from 2 to 6 inches was blown over the hydroseeded area.

Prior to leaving the site the contractor thoroughly decontaminated all of the excavators and off-road dump trucks that had been used on site.

The TESC features will remain in place until the summer of 2003, to permit the vegetation to become established. The performance of the TESC features is being monitored on a regular basis and maintenance or modifications are being made as necessary.

7.0 CONCLUSIONS

From approximately the 1930s through the early 1980s, a natural depression encompassing approximately five acres, located on the west side of the nursery property and east of the Central Kettle was used as a depository for solid waste generated from the nursery operations. This natural depression referred to as the Debris Disposal Area was the focus of a Soil Removal Action completed under the Model Toxics Control Act under the VCP and subsequent Agreed Order between Briggs Nursery, Inc. and Ecology. The types of waste discovered in the Debris Disposal Area included plastic sheeting, plastic pots, tree stumps, scrap metal, wood debris, bottles, and other miscellaneous wastes.

Between 2001 and 2002, a total of approximately 12,400 cys (19, 219 tons) of solid-waste and pesticide-affected soil was excavated and transported off-site for landfill disposal. Wastes were disposed at both the Rabanco Landfill located in Roosevelt, Washington and the Olympic View Landfill located in Bremerton, Washington.

In addition, other miscellaneous wastes were separated and transported off-site for disposal or recycling. Two 55-gallon drums of spent oil filters were transported to Arcom Oil for disposal/recycling. Fifteen 55-gallon drums containing empty plastic containers, flattened metal paint containers, flattened drums, other small empty flattened metal containers, poly sheeting and an inert white powder substance were taken to PCRCO, LLC (non-metal waste) and Schnitzer Steel (metal waste). One battery was taken to NAPA Auto Parts for recycling.

Site drainage control measures were employed prior to and after excavation activities. The excavation extended to 27 feet bgs near the center of the excavation area. Groundwater was not encountered during excavation.

Post-excavation soil sampling was conducted after there was no visual evidence of solid waste. The analytical results of post-excavation soil samples indicate that chlorinated pesticides were either undetected or were below MTCA Method A or B residential soil clean up levels. Other chemical constituents such as metals, petroleum-based compounds, and orthophosphorous

pesticides were also undetected or were below MTCA Method A or B residential soil cleanup levels.

Approximately 9,690 cys (15,020 tons) of clean fill overlying the waste material was excavated, stockpiled on-site, sampled, and analyzed for metals and pesticides. Chemical constituents were either undetected or were below MTCA Method A or B residential cleanup levels. The clean fill material will remain on-site and be reused for general purposes.

The results of sediment sampling at the base of the eastern slope of the Central Kettle indicates that solid wastes and pesticide concentrations above MTCA residential soil cleanup levels were not present; therefore, no further action in the Central Kettle is recommended.

Site restoration measures have been implemented including erosion and sedimentation control and hydroseeding. Based on the results of the 2001 and 2002 soil removal action and completed site restoration measures, no further remedial action in the Debris Disposal Area is recommended.

8.0 REFERENCES

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TABLE 2
SUMMARY OF 2001 STOCKPILE 1 THROUGH 5 AND 7, SOIL ANALYTICAL RESULTS
BRIGGS NURSERY, INC.

MTCOA Cleanup Levels (mg/kg) ¹	Total Metals (mg/kg)											Semi-Volatiles	Total Petroleum Hydrocarbons (mg/kg)				Chlorinated Pesticides (mg/kg)						Organophosphorous Pesticides										
	Lead	Cadmium	Chromium	Arsenic	Silver	Barium	Selenium	Mercury	Copper	Zinc	Nickel		Thallium	All Compounds	Compound Specific	Gasoline Range	Diesel Range	Heavy Oils	Mineral Oil	Aldrin	4,4' DDD	4,4' DDE		4,4' DDT	Dieldrin	Endosulfan I	All Compounds						
250	2	2,000	20	400 ²	5600 ²	400 ²	2	36.4 ³	85.1 ³	4,778 ³	5.6 ²	ND ⁷	30 ⁴ or 100 ⁵	2,000	2,000	4,000	0.05 ⁶	1.6 ⁶	4.17 ⁶	0.75 ⁶	2.94 ⁶	1.0 ⁶	3.0 ⁶	1.0 ⁶	0.06 ⁶	0.07 ⁶	480 ²	Compound Specific					
091201-01a	15	<1	6	<5	<20	<20	<50	<0.5	<20	25	<20	<1	ND	NA ⁸	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
091201-01b	13	<1	12	<5	<20	<20	<50	<0.5	<20	<20	<20	<1	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
091201-01c	16	<1	13	<5	<20	<20	<50	<0.5	<20	<20	<20	<1	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
091201-02a	37	<1	12	<5	<20	<20	<50	<0.5	<20	79	<20	<1	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
091201-02b	28	<1	11	<5	<20	<20	<50	<0.5	<20	35	<20	<1	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
091201-02c	16	<1	13	<5	<20	<20	<50	<0.5	<20	22	<20	<1	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
091301-01a	6	<1	14	<5	<20	<20	<50	<0.5	<20	29	26	<1	ND	<10	<20	<40	<40	0.0012	<0.001	<0.001	<0.001	<0.001	0.0059	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA	NA		
091301-01a Dup	6	<1	13	<5	<20	<20	<50	<0.5	<20	29	24	<1	ND	<10	<20	<40	<40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
091301-01b	<5	<1	13	<5	<20	<20	<50	<0.5	<20	24	<20	<1	ND	<10	<20	<40	<40	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND	ND	
091301-01c	6	<1	12	<5	<20	<20	<50	<0.5	<20	30	<20	<1	ND	<10	<20	<40	<40	0.0014	<0.001	0.0032	<0.001	0.0077	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND	ND	
091301-02a	<5	<1	15	<5	<20	<20	<50	<0.5	<20	32	<20	<1	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
091301-02b	<5	<1	16	<5	<20	<20	<50	<0.5	<20	32	24	<1	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
091301-02c	9	<1	16	<5	<20	<20	<50	<0.5	<20	45	<20	<1	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
091301-02d	7	<1	12	<5	<20	<20	<50	<0.5	<20	NA	NA	NA	ND	<10	<20	<40	<40	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND	ND	
091301-02e	15	<1	13	<5	<20	<20	<50	<0.5	<20	NA	NA	NA	ND	<10	<20	<40	<40	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND	ND	
091301-02f	13	<1	12	<5	<20	<20	<50	<0.5	<20	NA	NA	NA	ND	<10	<20	<40	<40	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA	NA	
091301-02f Dup	13	<1	13	<5	<20	<20	<50	<0.5	<20	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
091401-02b	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA	NA	
091301-03a	7	<1	9	<5	<20	<20	<50	<0.5	<20	33	<20	<1	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
091301-03a Dup	10	<1	10	<5	<20	<20	<50	<0.5	<20	37	<20	<1	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
091301-03b	20	<1	8	<5	<20	<20	<50	<0.5	<20	45	<20	<1	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
091301-03c	13	<1	7	<5	<20	<20	<50	<0.5	<20	35	<20	<1	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
091401-03a	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.022	<0.001	<0.001	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA	NA	
091301-03d	19	<1	12	<5	<20	<20	<50	<0.5	<20	NA	NA	NA	ND	<10	<20	<40	<40	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND	ND	
091301-03d Dup	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	<10	<20	<40	<40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
091301-03e	12	<1	16	<5	<20	<20	<50	<0.5	<20	NA	NA	NA	ND	<10	<20	<40	<40	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND	ND	
091301-03f	8	<1	11	<5	<20	<20	<50	<0.5	<20	NA	NA	NA	ND	<10	<20	<40	<40	0.085	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND	ND	
091301-03f Dup	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	0.085	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA	NA	

NOTES:

- 1. - MTCOA Method A Soil Cleanup Levels for Unrestricted Land Uses unless otherwise noted
- 2. - Standard MTCOA Method B Cleanup Level
- 3. - Natural Background Soil Metal Concentrations in Washington State: Pages Sound
- 4. - Gasoline without benzene, and total of ethylbenzene, toluene, and xylene are less than 1%.

5. - All other gasoline mixture

- 6. - Ecological Indicator Soil Concentrations for Protection of Terrestrial Plants and Animals, WAC 173-340, Table 749-3
- 7. - Total, 4,4 DDT, DDD, & DDE
- 8. - Total, 4,4 DDT, DDD, & DDE
- 9. - Concentration Not Detected above Cleanup Level

TABLE 2
SUMMARY OF 2001 STOCKPILE 1 THROUGH 5 AND 7, SOIL ANALYTICAL RESULTS
BRIGGS NURSERY, INC.

Sample ID	Total Metals (mg/kg)											Semi-Volatiles	Total Petroleum Hydrocarbons (mg/kg)				Chlorinated Pesticides (mg/kg)						Organophosphorous Pesticides	
	Lead	Cadmium	Chromium	Arsenic	Silver	Barium	Selenium	Mercury	Copper	Zinc	Nickel		Thallium	All Compounds	Gasoline Range	Diesel Range	Heavy Oils	Mineral Oil	Aldrin	4,4' DDD	4,4' DDE	4,4' DDT		Dieldrin
MTCVA Cleanup Levels (mg/kg) ¹													Compound Specific	30 ¹ or 100 ⁵ 2,000 2,000 4,000				0.05 ^{1,0,1⁶} 4,17 ^{10,75⁶} 2,94 ^{2,0,1⁶} 3,0 ^{7,1,0⁶} 0,06 ^{7,0,07⁶} 480 ²						Compound Specific
091801-05B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA
091801-05c	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA
1001-01-5a	9	<1	15	<5	<50	<50	<50	<0.5	NA	NA	NA	<1	NA	NA	NA	NA	NA	<0.001	0.0048	0.0078	0.0045	<0.001	<0.001	NA
1001-01-5b	10	<1	17	<5	<50	<50	<50	<0.5	NA	NA	NA	<1	NA	NA	NA	NA	NA	<0.001	0.03	0.0057	0.048	<0.001	<0.001	NA
1001-01-5c	<5	<1	15	<5	<50	<50	<50	<0.5	NA	NA	NA	<1	NA	NA	NA	NA	NA	<0.001	0.0055	0.0054	0.0059	<0.001	<0.001	NA
1001-01-5c Dup	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.001	0.0055	0.0055	0.0064	<0.001	<0.001	NA
100301-5a	15	<1	31	<5	<50	<50	<50	<0.5	NA	NA	NA	<1	NA	NA	NA	NA	NA	0.027	0.0044	<0.001	0.0029	0.0034	<0.001	NA
100301-5b	12	<1	22	<5	<50	<50	<50	<0.5	NA	NA	NA	<1	NA	NA	NA	NA	NA	0.0049	0.0027	<0.001	0.0015	0.0049	<0.001	NA
100301-5c	<5	<1	23	<5	<50	<50	<50	<0.5	NA	NA	NA	<1	NA	NA	NA	NA	NA	0.038	0.002	<0.001	0.0015	0.0065	<0.001	NA
100301-5c Dup	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.036	0.0033	<0.001	0.0014	0.0064	<0.001	NA
102501-7a	16	<1	9	<5	<50	<50	<50	<0.5	NA	NA	NA	<1	NA	NA	NA	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA
102501-7b	10	<1	9	<5	<50	<50	<50	<0.5	NA	NA	NA	<1	NA	NA	NA	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA
102502-7c	11	<1	13	<5	<50	<50	<50	<0.5	NA	NA	NA	<1	NA	NA	NA	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA
102501-7c Dup	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA

NOTES:
¹ - MTCVA Method A Soil Cleanup Levels for Unrestricted Land Uses unless otherwise noted
² - Standard MTCVA Method B Cleanup Level
³ - Natural Background Soil Metal Concentrations in Washington State: Puget Sound
⁴ - Gasoline without benzene, and total of ethylbenzene, toluene, and xylene are less than 1%.

⁵ - All other gasoline mixture
⁶ - Ecological Indicator Soil Concentrations for Protection of Terrestrial Plants and Animals, WAC 173-340, Table 749-3
⁷ - Total 4,4' DDT, DDD, & DDE
⁸ - Concentration Not Detected above Cleanup Level

TABLE 3
SUMMARY OF STOCKPILE 6 SOIL ANALYTICAL RESULTS
BRIGGS NURSERY, INC.

MTCX Cleanup Levels (mg/kg) 1	Total Metals (mg/kg)											Chlorinated Pesticides (mg/kg)										
	Lead	Cadmium	Chromium	Arsenic	Silver	Barium	Selenium	Mercury	Thallium	Aldrin	4,4' DDD	4,4' DDE	4,4' DDT	Dieldrin	Endosulfan I	Endosulfan II	Endrin	Heptachlor				
260	<1	<1	2,000	20	400	5600	400	2	5.6	0.057/0.1 ³	4.17 ² /0.75 ³	2.94 ² /0.1 ³	3.07 ² /1.0 ³	0.087/0.07 ²	480	NE ⁴	0.2124 ²	0.47/0.22 ²				
101001-6a	6	<1	13	<5	<50	<50	<50	<0.5	<1	<0.001	0.043	0.0078	0.33	0.0087	<0.001	<0.001	<0.001	<0.001				
101001-6b	13	<1	12	<5	<50	<50	<50	<0.5	<1	<0.001	0.011	0.0082	0.067	<0.001	<0.001	<0.001	<0.001	<0.001				
101001-6b Dup	10	<1	12	<5	<50	<50	<50	<0.5	<1	<0.001	0.011	0.0084	0.068	<0.001	<0.001	<0.001	<0.001	<0.001				
101201-6a	14	<1	12	<5	<50	<50	<50	<0.5	<1	0.0018	<0.001	<0.001	0.32	<0.001	<0.001	<0.001	<0.001	<0.001				
101201-6b	8	<1	13	<5	<50	<50	<50	<0.5	<1	0.04	0.034	<0.001	0.16	0.0023	<0.001	<0.001	<0.001	<0.001				
101201-6c	5	<1	11	<5	<50	<50	<50	<0.5	<1	<0.001	<0.001	<0.001	0.019	<0.001	<0.001	<0.001	<0.001	<0.001				
101201-6c Dup	NA ⁶	NA	NA	NA	NA	NA	NA	NA	NA	<0.001	<0.001	<0.001	0.019	<0.001	<0.001	<0.001	<0.001	<0.001				
101501-6a	22	<1	15	<5	<50	<50	<50	<0.5	<1	0.0035	<0.001	<0.001	0.049	0.0019	<0.001	<0.001	<0.001	<0.001				
101501-6b	103	<1	13	<5	<50	<50	<50	<0.5	<1	0.0011	<0.001	<0.001	0.6	<0.001	<0.001	<0.001	<0.001	<0.001				
101501-6c	<5	<1	14	<5	<50	<50	<50	<0.5	<1	0.0014	0.015	<0.001	0.097	<0.001	<0.001	<0.001	<0.001	<0.001				
101501-6c Dup	<5	<1	12	<5	<50	<50	<50	<0.5	<1	0.0014	0.015	<0.001	0.095	<0.001	<0.001	<0.001	<0.001	<0.001				
101701-6a	21	<1	10	<5	<50	<50	<50	<0.5	<1	0.0031	0.025	<0.001	0.063	<0.001	<0.001	<0.001	<0.001	<0.001				
101701-6a Dup	24	<1	10	<5	<50	<50	<50	<0.5	<1	NA	NA	NA	NA	NA	NA	<0.001	<0.001	<0.001				
101701-6b	28	<1	13	<5	<50	<50	<50	<0.5	<1	0.93 ⁷	0.89	<0.001	6.6	<0.001	<0.001	<0.001	<0.001	<0.001				
101701-6c	23	<1	14	<5	<50	<50	<50	<0.5	<1	<0.001	0.018	<0.001	0.016	<0.001	<0.001	<0.001	<0.001	<0.001				
101901-6a	5	<1	<5	<5	<50	<50	<50	<0.5	<1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001				
101901-6b	11	<1	6	<5	<50	<50	<50	<0.5	<1	<0.001	0.53	<0.001	2.1	<0.001	<0.001	<0.001	<0.001	<0.001				
101901-6c	18	<1	<5	<5	<50	<50	<50	<0.5	<1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001				
2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1	<0.001	<0.001	<0.001	0.022	0.043	0.034	<0.001	<0.001				
51602 Stock6A-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.087	0.092	0.0014	0.37	0.0061	<0.001	<0.001	<0.001	<0.001				
51602 Stock6A-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.059	0.022	0.0011	0.041	0.011	0.0029	<0.001	0.0053	<0.001				
51602 Stock6A-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.43	0.0041	0.0021	0.02	0.0089	<0.001	0.0018	<0.001	<0.001				
51602 Stock6A-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0031	0.009	<0.001	0.036	0.0054	<0.001	<0.001	<0.001	<0.001				
51602 Stock6A-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.032	0.1	0.0033	0.19	0.0076	0.0026	<0.001	<0.001	<0.001				
51602 Stock6B-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.012	0.034	0.0032	0.19	0.0077	<0.001	<0.001	<0.001	<0.001				
51602 Stock6B-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.012	0.033	0.0032	0.18	0.0079	<0.001	<0.001	<0.001	<0.001				
51602 Stock6B-2 Dup	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.036	<0.001	<0.001	0.093	0.0066	<0.001	<0.001	<0.001	<0.001				
51602 Stock6B-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.011	<0.001	<0.001	<0.001	0.0036	<0.001	<0.001	<0.001	<0.001				
51602 Stock6C-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.032	<0.001	<0.001	0.16	0.0056	<0.001	<0.001	<0.001	<0.001				
51602 Stock6C-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.03	0.021	<0.001	0.012	0.0054	<0.001	<0.001	<0.001	<0.001				
51602 Stock6C-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.17	0.082	<0.001	0.13	0.019	<0.001	<0.001	<0.001	<0.001				
51602 Stock6C-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2	0.26	<0.001	0.34	0.1	<0.001	<0.001	<0.001	<0.001				
51602 Stock6C-5	NA	NA	NA	NA	NA	NA	NA	NA	NA													

NOTES:
1 - MTCX Method A Soil Cleanup Levels for Unrestricted Land Uses
2 - Standard MTCX Method B Cleanup Level
3 - Ecological Indicator Soil Concentrations for Protection of Terrestrial Plants and Animals; WAC 173-340, Table 749.3
4 - Total, 4,4' DDT, DDD, & DDE
5 - Not established
6 - Total Heptachlor, Heptachlor Epoxide
7 - Not analyzed
8 - Bold indicates concentrations above cleanup level

TABLE 3
SUMMARY OF STOCKPILE 6 SOIL ANALYTICAL RESULTS
BRIGGS NURSERY, INC.

Sample ID	Total Metals (mg/kg)										Chlorinated Pesticides (mg/kg)									
	Lead	Cadmium	Chromium	Arsenic	Silver	Barium	Selenium	Mercury	Thallium	Aldrin	4,4' DDD	4,4' DDE	4,4' DDT	Dieldrin	Endosulfan I	Endosulfan II	Endrin	Heptachlor		
MITCA Cleanup Levels (mg/kg) 1	250	2	2,000	20	400 ²	5600 ²	400 ²	2	5.6 ²	0.05 ^{3/0.1³}	4.17 ^{3/0.75³}	2.94 ^{3/0.1³}	3.07 ^{3/1.0³}	0.06 ^{3/0.07³}	480 ²	NE ⁴	0.212 ²	0.45 ^{2/0.22²}		
51602 Stock6D-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0025	0.033	0.0011	0.2	0.0025	<0.001	<0.001	<0.001	<0.001		
51602 Stock6D-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.05	<0.001	<0.001	0.16	0.0069	<0.001	<0.001	<0.001	<0.001		
51602 Stock6D-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.011	<0.001	<0.001	<0.001	0.0033	<0.001	<0.001	<0.001	<0.001		
51602 Stock6D-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.012	0.027	<0.001	0.045	0.0082	<0.001	<0.001	<0.001	<0.001		
51602 Stock6D-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0018	<0.001	0.0013	0.11	0.0027	<0.001	<0.001	<0.001	<0.001		
51602 Stock6E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0034	0.022	0.0012	0.05	0.0075	0.0026	<0.001	<0.001	<0.001		
51602 Stock6E-1 Dup	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0032	0.02	0.0012	0.05	0.0068	0.0025	<0.001	<0.001	<0.001		
51602 Stock6E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2	0.05	<0.001	0.099	0.006	<0.001	<0.001	<0.001	<0.001		
51602 Stock6E-2 Dup	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.21	0.052	<0.001	0.09	0.008	<0.001	<0.001	<0.001	<0.001		
51602 Stock6E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.05	0.076	0.0044	0.37	0.0073	<0.001	<0.001	<0.001	0.18		
51602 Stock6E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.06	0.03	<0.001	0.11	0.0052	<0.001	<0.001	<0.001	<0.001		
51602 Stock6E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0039	0.0028	<0.001	0.0088	0.0064	<0.001	<0.001	<0.001	<0.001		
51602 Stock6F-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.045	<0.001	0.0013	<0.001	0.0067	<0.001	<0.001	<0.001	<0.001		
51602 Stock6F-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.1	0.042	0.002	0.16	0.014	<0.001	<0.001	<0.001	<0.001		
51602 Stock6F-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0017	0.01	<0.001	0.015	0.0049	<0.001	<0.001	<0.001	<0.001		
51602 Stock6F-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.012	0.096	0.027	0.23	0.025	<0.001	<0.001	<0.001	<0.001		
51602 Stock6F-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.044	<0.001	<0.001	<0.001	0.0031	<0.001	<0.001	<0.001	<0.001		
51602 Side 6A	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.049	0.066	0.0021	<0.001	0.01	0.0023	<0.001	<0.001	<0.001		
51602 Side 6B	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.023	0.026	<0.001	<0.001	0.0046	<0.001	<0.001	<0.001	<0.001		
51602 Side 6C	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.1	<0.001	<0.001	<0.001	0.013	<0.001	<0.001	<0.001	<0.001		
51602 Side 6D	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.028	1.8	0.12	36	0.0038	<0.001	<0.001	<0.001	<0.001		
51602 Side 6E	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.045	0.28	0.017	1.1	0.0025	<0.001	<0.001	<0.001	<0.001		
51602 Side 6F	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.037	0.039	<0.001	<0.001	0.0067	<0.001	<0.001	<0.001	<0.001		
51602 Side 6G	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0026	0.0085	<0.001	<0.001	0.0064	0.0075	<0.001	<0.001	0.002		
51602 Side 6H	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0026	0.0026	<0.001	0.0032	0.005	0.0023	<0.001	<0.001	<0.001		
51602 Side 6I	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.001	0.0024	<0.001	<0.001	0.0046	<0.001	<0.001	<0.001	<0.001		

NOTES:
1. MITCA Method A Soil Cleanup Levels for Unrestricted Land Uses
2. Standard MITCA Method B Cleanup Level
3. Ecological Indicator Soil Concentrations for Protection of Terrestrial Plants and Animals, WAC 173-340, Table 746-3
4. Total: 4,4' DDT, DDD, & DDE

4. Not established
5. Total Heptachlor, Heptachlor Epoxide
6. Not analyzed
7. Bold indicates concentrations above cleanup level

TABLE 4
SUMMARY OF 2001 POST-EXCAVATION SOIL GRID SAMPLING ANALYTICAL RESULTS
BRIGGS NURSERY, INC.

MTC# Cleanup Levels (mg/kg) ¹	Total Metals (mg/kg)											Diesel and Oil (mg/kg)			Chlorinated Pesticides (mg/kg)														Organophosphorous Pesticides
	Lead	Cadmium	Chromium	Arsenic	Silver	Barium	Selenium	Mercury	Zinc	Thallium	Diesel Range	Heavy Oils	Mineral Oil	Aldrin	a-BHC	Lindane	4,4' DDD	4,4' DDE	4,4' DDT	Dieldrin	Endosulfan I	Endosulfan II	Heptachlor Epoxide	Endrin	Heptachlor	All Compounds			
290	2	2,000	20	400 ²	5600 ²	400 ²	2	85.1	5.6 ²	2,000	2,000	4,000	0.05/0.1 ⁴	NE ⁵	0.01	4.17 ⁶ /0.75 ⁶	2.94 ⁷ /0.1 ⁴	3.0/1.0 ⁸	0.067/0.07 ⁴	480 ²	NE	0.11 ⁹ /0.4 ⁶	0.22/4 ²	0.4/0.22 ²	Compend Specific				
101101 B1-S ⁷	7	<1	15	<5	<50	<50	<50	<0.5	NA ⁸	<50	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND ⁹		
101101 B1-B ⁷	<5	<1	12	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND		
101101 B2-B	<5	<1	15	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	0.0052	<0.001	<0.001	<0.001	<0.001	0.0042	0.0220	0.0220	0.0054	<0.001	0.0020	<0.001	<0.001	<0.001	ND		
101101 B2-B Dup	<5	<1	12	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	0.0058	<0.001	<0.001	<0.001	<0.001	0.0099	0.0033	0.0290	0.0059	<0.001	0.0021	<0.001	<0.001	<0.001	ND		
101101 B2-S	10	<1	12	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND		
101101 B3-B	10	<1	13	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND		
101101 B3-S	5	<1	6	<5	<50	<50	<50	<0.5	NA	<50	ND	ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND		
101101 B3-S Dup	5	<1	6	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND		
101101 B4-B	<5	<1	14	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	0.0330	<0.001	<0.001	<0.001	<0.001	<0.001	0.0044	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND		
101101 B4-B Dup	<5	<1	14	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND		
101101 B4-S	6	<1	6	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND		
101101 B4-S Dup	7	<1	5	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND		
101101 B5-B	<5	<1	14	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND	
101101 B5-S	<5	<1	6	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND	
101101 C1-B	10	<1	15	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0190	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND		
101101 C1-S	8	<1	12	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	0.0160	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND		
101101 C2-B	10	<1	11	<5	<50	<50	<50	<0.5	NA	<50	ND	ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND		
101101 C3-B	5	<1	13	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND		
101101 C4-B	5	<1	13	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0054	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND		
101101 C5-B	<5	<1	11	<5	<50	<50	<50	<0.5	NA	<50	ND	ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND		
101101 C5-B Dup	<5	<1	13	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND		
101101 D1-S	5	<1	16	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0190	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND		
101101 D2-B	<5	<1	14	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND		
101101 D3-B	<5	<1	14	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND		
101101 D4-B	<5	<1	13	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND		
101101 D4-B Dup	<5	<1	13	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND		
101101 D5-B	<5	<1	10	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND		
101101 E1-S	<5	<1	11	<5	<50	<50	<50	<0.5	NA	<50	ND	ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0190	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND		
101101 E2-B	<5	<1	8	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	0.0130	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND		
101101 E3-B	<5	<1	11	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	0.0011	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND		
101101 E4-B	<5	<1	11	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND		
101101 E5-B	7	<1	16	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND		
101101 E5-S	10	<1	11	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	0.0011	<0.001	<0.001	<0.001	<0.001	<0.001	0.0260	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND		

NOTES:

- 1 - MTC# Method A Soil Cleanup Levels for Unrestricted Land Uses unless otherwise noted
- 2 - Standard MTC# Method B Soil Cleanup Level
- 3 - Natural Background Soil Metal Concentrations in Washington State: Puget Sound
- 4 - Ecological Indicator Soil Concentrations for Protection of Terrestrial Plants and Animals, WAC 173-340, Table 749-3
- 5 - Total: 4,4' DDT, DDD, & DDE
- 6 - Total: Heptachlor, Heptachlor Epoxide
- 7 - S = SideWall Sample
- 8 - Not Analyzed
- 9 - Concentration Not Detected above Laboratory Detection Limits
- 10 - B = Bottom of Excavation Sample
- 11 - Bold indicates concentrations above cleanup level

TABLE 4
SUMMARY OF 2001 POST-EXCAVATION SOIL GRID SAMPLING ANALYTICAL RESULTS
BRIGGS NURSERY, INC.

MTC Cleanup Levels (mg/kg) ¹	Total Metals (mg/kg)										Diesel and Oil (mg/kg)			Chlorinated Pesticides (mg/kg)													Organophosphorus Pesticides		
	Lead	Cadmium	Chromium	Arsenic	Silver	Barium	Selenium	Mercury	Zinc	Thallium	Diesel Range	Heavy Oils	Mineral Oil	Aldrin	a-BHC	Lindane	4,4' DDD	4,4' DDE	4,4' DDT	Dieldrin	Endosulfan I	Endosulfan II	Heptachlor Epoxide	Endrin	Heptachlor				
250	2	2,000	20	400	2	5600	2	400	2	95.1	5.6	2,000	2,000	4,000	0.05/0.1 ⁴	NE ⁵	0.01	4.17 ² /0.75 ⁴	2.94 ² /0.1 ⁴	3.0/1.0 ⁶	0.06 ² /0.07 ⁴	480 ²	NE	0.11 ² /0.4 ⁸	0.2/24 ²	0.4/6/0.22 ²	Compound Specific		
101101 F1-S	5	<1	9	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
101101 F2-B	17	<1	17	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
101101 F3-B	<5	<1	15	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	NA	NA	0.0034	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
101101 F4-B	<5	<1	15	<5	<50	<50	<50	<0.5	NA	<50	ND	ND	ND	ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
101101 F5-B	13	<1	13	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	NA	NA	0.0160	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
101101 F5-B Dup	12	<1	12	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	NA	NA	0.0160	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
101101 F6-S	11	<1	8	<5	<50	<50	<50	<0.5	NA	<50	ND	ND	ND	ND	0.0015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
101101 F6-S Dup	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	0.0011	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
101101 G1-S	<5	<1	10	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
101101 G2-B	<5	<1	12	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
101101 G3-B	<5	<1	11	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
101101 G4-B	<5	<1	16	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	NA	NA	0.0012	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
101101 G5-S	7	<1	13	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
101101 G5-B	9	<1	15	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	NA	NA	0.0011	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
101101 H1-S	6	<1	7	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
101101 H2-B	<5	<1	16	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	NA	NA	0.0020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
101101 H3-B	5	<1	16	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
101101 H4-B	11	<1	10	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	NA	NA	0.0076	0.0041	0.0059	0.0044	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
101101 H5-B	9	<1	18	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	NA	NA	0.0073	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
101101 H5-S	<5	<1	14	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
101101 I1-S	<5	<1	11	<5	<50	<50	<50	<0.5	NA	<50	ND	ND	ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
101101 I1-S Dup	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
101101 I1-B	10	<1	10	<5	<50	<50	<50	<0.5	NA	<50	ND	ND	ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
101101 I2-B	14	<1	9	<5	<50	<50	<50	<0.5	NA	<50	ND	ND	ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
101101 I2-B Dup	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
101101 I3-B	10	<1	7	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
101101 I4-B	9	<1	6	<5	<50	<50	<50	<0.5	NA	<50	NA	NA	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
101101 I5-B	9	<1	12	<5	<50	<50	<50	<0.5	NA	<50	ND	ND	ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND

NOTES:
 1 - MTC Cleanup Levels for Unrestricted Land Uses unless otherwise noted
 2 - Standard MTC Method B Soil Cleanup Level
 3 - Natural Background Soil Metal Concentrations in Washington State, Puget Sound
 4 - Ecological Indicator Soil Concentrations for Protection of Terrestrial Plants and Animals, WAC 173.340, Table 749-3

5 - Total, 4,4' DDT, DDD, & DDE
 6 - Not established
 7 - Total, Heptachlor, Heptachlor Epoxide
 8 - S = Sidewall Sample
 9 - Not Analyzed
 10 - Concentration Not Detected above Laboratory Detection Limits
 11 - B = Bottom of Excavation Sample
 12 - Bold indicates concentrations above cleanup level

TABLE 5
SUMMARY OF 2002 EXPLORATORY BORING ANALYTICAL RESULTS
BRIGGS NURSERY, INC.

	Chlorinated Pesticides (mg/kg)												VOC
	Aldrin	α -BHC	Lindane	4,4' DDD	4,4' DDE	4,4' DDT	Dieldrin	Endosulfan I	Endosulfan II	Heptachlor Epoxide	Endrin	Heptachlor Epoxide	Isopropyltoluene
MTCA Cleanup Levels (mg/kg) ¹	0.05 ² /0.1 ³	NE ⁴	0.01	4.17 ² /0.75 ³	2.94 ² /0.1 ³	3.0/1.0 ³	0.06 ² /0.07 ³	480 ²	NE ⁴	0.11 ² /0.4 ⁵	2.4 ²	0.4 ⁵ /1.1 ²	
Perimeter Borings													
P1-10	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.05
P1-15	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.05
P1-25	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.05
P2-10	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.05
P2-15	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.05
P2-25	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.05
P3-10	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.05
P3-15	<0.001	<0.001	<0.001	0.27	<0.001	0.12	9.4 ⁶	<0.001	<0.001	<0.001	<0.001	<0.001	<0.05
P3-25	0.650	<0.001	<0.001	<0.001	<0.001	<0.001	1.6	<0.001	<0.001	<0.001	<0.001	0.058	<0.05
P4-10	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.14
P4-15	0.0012	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	5.2
P4-25	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.05
P5-10	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.05
P5-15	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.05
P5-25	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.05
P6-10	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	1.6	<0.001	<0.001	<0.001	<0.001	<0.001	<0.05
P6-15	<0.001	<0.001	<0.001	0.07	<0.001	0.14	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.05
P6-25	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.05
P7-10	<0.001	<0.001	<0.001	0.65	<0.001	<0.001	0.24	<0.001	<0.001	<0.001	<0.001	<0.001	<0.05
P7-15	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.05
P7-25	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.05
NW Corner of Pit Borings													
NW1-10	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.05
NW1-15	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.05
NW2-12	0.42	<0.001	<0.001	0.066	<0.001	<0.001	5.6	0.1	<0.001	<0.001	<0.001	<0.001	<0.05
NW2-17	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.05
NW2-22	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.05
NW3-10	0.14	<0.001	<0.001	13.0	0.49	50.0	5.6	0.10	<0.001	<0.001	0.53	0.16	<0.05
NW3-15	7.80	<0.001	<0.001	0.071	<0.001	<0.001	6.7	<0.001	<0.001	<0.001	<0.001	0.40	<0.05
NW3-25	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.05
NW4-12	0.82	<0.001	<0.001	0.7	<0.001	1.2	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.05
NW4-17	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.05
NW4-22	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.05

NOTES:

¹ - MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses unless otherwise noted

² - Standard MTCA Method B Soil Cleanup Level

³ - Ecological Indicator Soil Concentrations for Protection of Terrestrial Plants and Animals, WAC 173-340, Table 749-3

* - Total: 4,4' DDT, DDD, & DDE

4 - NE - Not established

5 - Total Heptachlor, Heptachlor Epoxide

6 - Bold indicates concentrations above cleanup level

TABLE 6
SUMMARY OF 2002 EXPLORATORY TEST PIT AND HAND AUGER ANALYTICAL RESULTS
BRIGGS NURSERY, INC.

MTC/A Cleanup Levels (mg/kg) ¹	Total Metals (mg/kg)										Chlorinated Pesticides (mg/kg)									
	Lead	Cadmium	Chromium	Arsenic	Silver	Barium	Selenium	Mercury	Zinc	Aldrin	4,4' DDD	4,4' DDE	4,4' DDT	Dieldrin	Endosulfan I	Endosulfan II	Endrin	Heptachlor		
TP-1 @ 15, 21 feet Comp	<5	<1	<5	<5	<20	<20	<50	<0.5	47	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		
TP-1 @ 28 feet	<5	<1	<5	<5	<20	<20	<50	<0.5	55	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		
TP-1 @ 28 feet DUP	<5	<1	<5	<5	<20	<20	<50	<0.5	53	NA ⁷	NA	NA	NA	NA	NA	NA	NA	NA		
TP-2 @ 10, 16, 22 feet Comp	20	<1	<5	<5	<20	<20	<50	<0.5	110	0.54 ⁸	0.0067	<0.001	<0.001	0.044	0.001	<0.001	<0.001	<0.001		
TP-3 @ 11&15 feet Comp	7	<1	<5	<5	<20	<20	<50	<0.5	82	<0.001	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		
TP-3 @ 22 feet	<5	<1	<5	<5	<20	<20	<50	<0.5	70	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		
TP-4 @ 7 & 15 feet Comp	8	<1	<5	<5	<20	<20	<50	<0.5	80	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		
TP-4 @ 22 feet	<5	<1	<5	<5	<20	<20	<50	<0.5	71	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		
TP-5 @ 7 & 10 feet Comp	<5	<1	<5	<5	<20	<20	<50	<0.5	55	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		
TP-5 @ 15 feet	<5	<1	<5	<5	<20	<20	<50	<0.5	50	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		
TP-6 @ 6, 10, 13 Comp	<5	<1	<5	<5	<20	<20	<50	<0.5	66	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		
TP-6 @ 23 feet	<5	<1	<5	<5	<20	<20	<50	<0.5	51	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		
TP-7 @ 3 feet	8	<1	<5	<5	<20	<20	<50	<0.5	85	<0.001	<0.001	<0.001	<0.001	0.026	<0.001	<0.001	<0.001	<0.001		
TP-7 @ 12 feet	<5	<1	<5	<5	<20	<20	<50	<0.5	49	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		
TP-7 @ 12 feet DUP	<5	<1	<5	<5	<20	<20	<50	<0.5	45	NA	NA	NA	NA	NA	NA	NA	NA	NA		
TP-8 @ 5 feet	<5	<1	<5	<5	<20	<20	<50	<0.5	67	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		
TP-8 @ 10 feet	<5	<1	<5	<5	<20	<20	<50	<0.5	77	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		
TP-9 @ 6, 12, 18 feet	54	<1	<5	<5	<20	<20	<50	<0.5	85	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		
HA-1 @ 1 feet	12	<1	<5	<5	<20	<20	<50	<0.5	130	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		
HA-1 @ 2 feet	<5	<1	<5	<5	<20	<20	<50	<0.5	48	<0.001	0.0048	<0.001	<0.001	0.019	<0.001	<0.001	<0.001	<0.001		
HA-2 @ 2.5, 4.5, 6 Comp	<5	<1	<5	<5	<20	<20	<50	<0.5	98	<0.001	<0.001	<0.001	<0.001	0.0084	<0.001	<0.001	<0.001	<0.001		
HA-2 @ 16 feet	<5	<1	<5	<5	<20	<20	<50	<0.5	65	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		
HA-3 @ 2 feet	7	<1	<5	<5	<20	<20	<50	<0.5	71	<0.001	0.0039	<0.001	0.08	<0.001	<0.001	<0.001	<0.001	<0.001		
HA-3 @ 6 feet	<5	<1	<5	<5	<20	<20	<50	<0.5	58	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		

NOTES:
¹ - MTC/A Method A Soil Cleanup Levels for Unrestricted Land Uses
² - Standard MTC/A Method B Cleanup Level
³ - Natural Background Soil Metal Concentrations in Washington State: Paper Sound
⁴ - Ecological Indicator Soil Concentrations for Protection of Terrestrial Plants and Animals: WAC 173-340, Table 749-3

⁵ - Total 4,4' DDT, DDD, & DDE
⁶ - Not established
⁷ - Not analyzed
⁸ - Bold indicates concentrations above appropriate cleanup levels
⁹ - Total Heptachlor, Heptachlor Epoxide

TABLE 7
SUMMARY OF 2002 CLEAN OVERBURDEN STOCKPILES ANALYTICAL RESULTS
BRIGGS NURSERY, INC.

		Chlorinated Pesticides (mg/kg)								
		Aldrin	4,4' DDD	4,4' DDE	4,4' DDT	Dieldrin	Endosulfan I	Endosulfan II	Endrin	Heptachlor
MTCA Cleanup Levels (mg/kg) ¹		0.05 ² /0.1 ³	4.17 ² /0.75 ³	2.94 ² /0.1 ^{3*}	3.0 ² /1.0 ^{3*}	0.06 ² /0.07 ³	480 ²	NE ⁴	0.2/24 ²	0.4 ⁵ /0.22 ²
2002 Overburden Stockpiles 1 through 6	9.23.02 Stock 1-1	<0.001	<0.001	<0.001	<0.001	0.022	0.043	0.034	<0.001	<0.001
	9.23.02 Stock 1-2	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	9.23.02 Stock 1-3	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	9.23.02 Stock 1-4	<0.001	<0.001	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	9.23.02 Stock 1-5	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	9.23.02 Stock 2-1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	9.23.02 Stock 2-2	<0.001	0.0065	0.0067	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	9.23.02 Stock 2-3	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	9.23.02 Stock 2-4	<0.001	0.0067	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	9.23.02 Stock 2-5	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	9.23.02 Stock 2-6	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	9.23.02 Stock 2-7	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	9.24.02 Stock 3-1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	9.24.02 Stock 3-2	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	9.24.02 Stock 3-3	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	9.24.02 Stock 3-4	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	9.24.02 Stock 3-5	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	9.24.02 Stock 3-6	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	9.24.02 Stock 3-7	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	9.24.02 Stock 4-1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	9.24.02 Stock 4-2	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	9.24.02 Stock 4-3	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	9.24.02 Stock 4-4	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	9.24.02 Stock 4-5	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	9.24.02 Stock 4-6	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	9.24.02 Stock 4-7	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	9.26.02 Stock 5-1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	9.26.02 Stock 5-2	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	9.26.02 Stock 5-3	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	9.26.02 Stock 5-4	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	9.26.02 Stock 5-5	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	9.26.02 Stock 5-6	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	9.26.02 Stock 5-7	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	10.1.02 Stock 6-1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	10.1.02 Stock 6-2	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
10.1.02 Stock 6-3	<0.001	0.01	<0.001	0.0066	<0.001	<0.001	<0.001	<0.001	<0.001	
10.1.02 Stock 6-4	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
10.1.02 Stock 6-5	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
10.1.02 Stock 6-6	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
10.1.02 Stock 6-7	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	

NOTES:

- ¹ - MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses
- ² - Standard MTCA Method B Cleanup Level
- ³ - Ecological Indicator Soil Concentrations for Protection of Terrestrial Plants and Animals, WAC 173-340, Table 749-3
- * - Total: 4,4' DDT, DDD, & DDE
- ⁴ - Not established
- ⁵ - Total Heptachlor, Heptachlor Epoxide

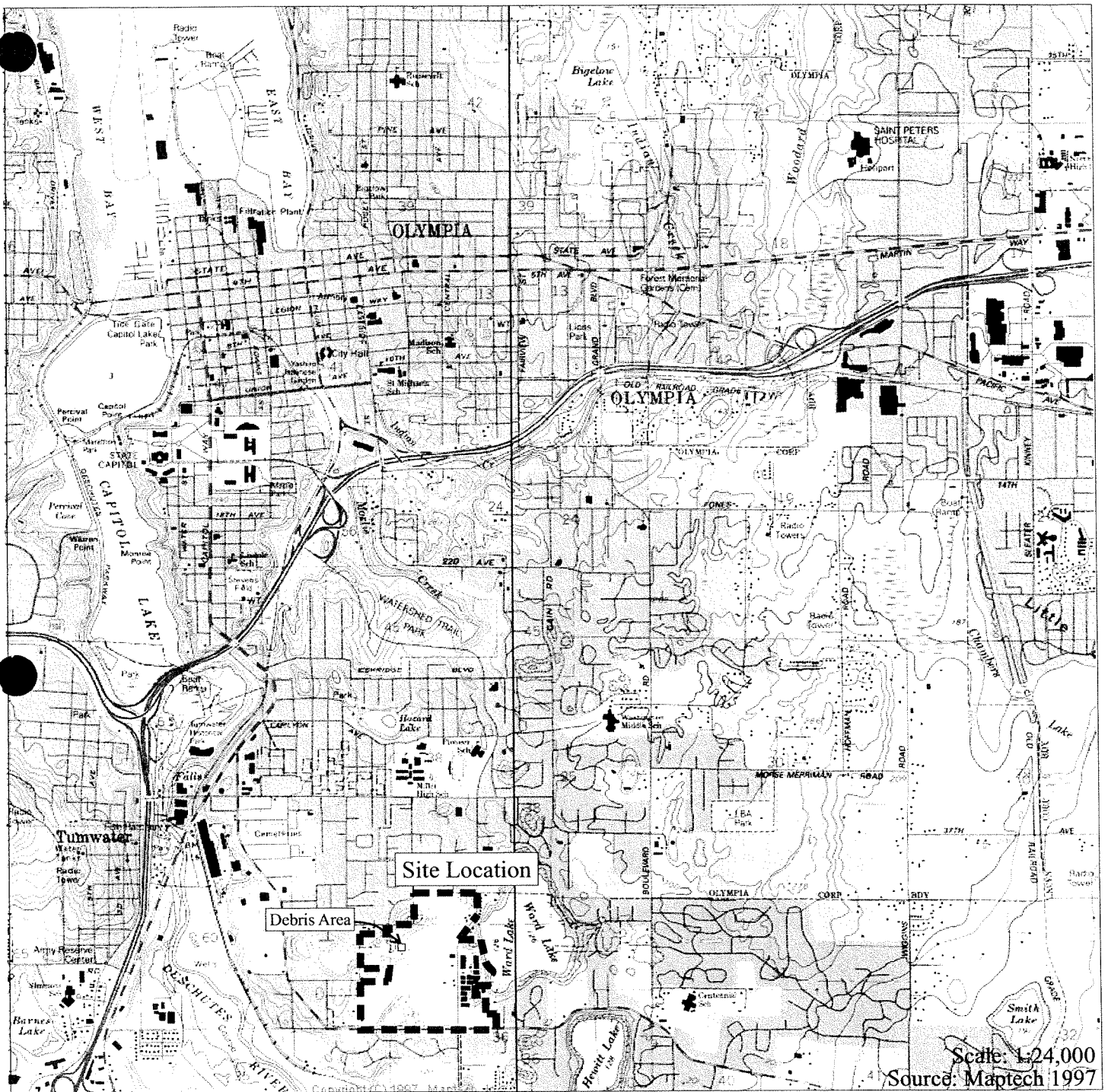
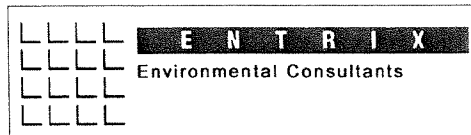


Figure 1. Site Location
Brigg's Nursery, Inc.
4407 Henderson Boulevard
Olympia, Washington



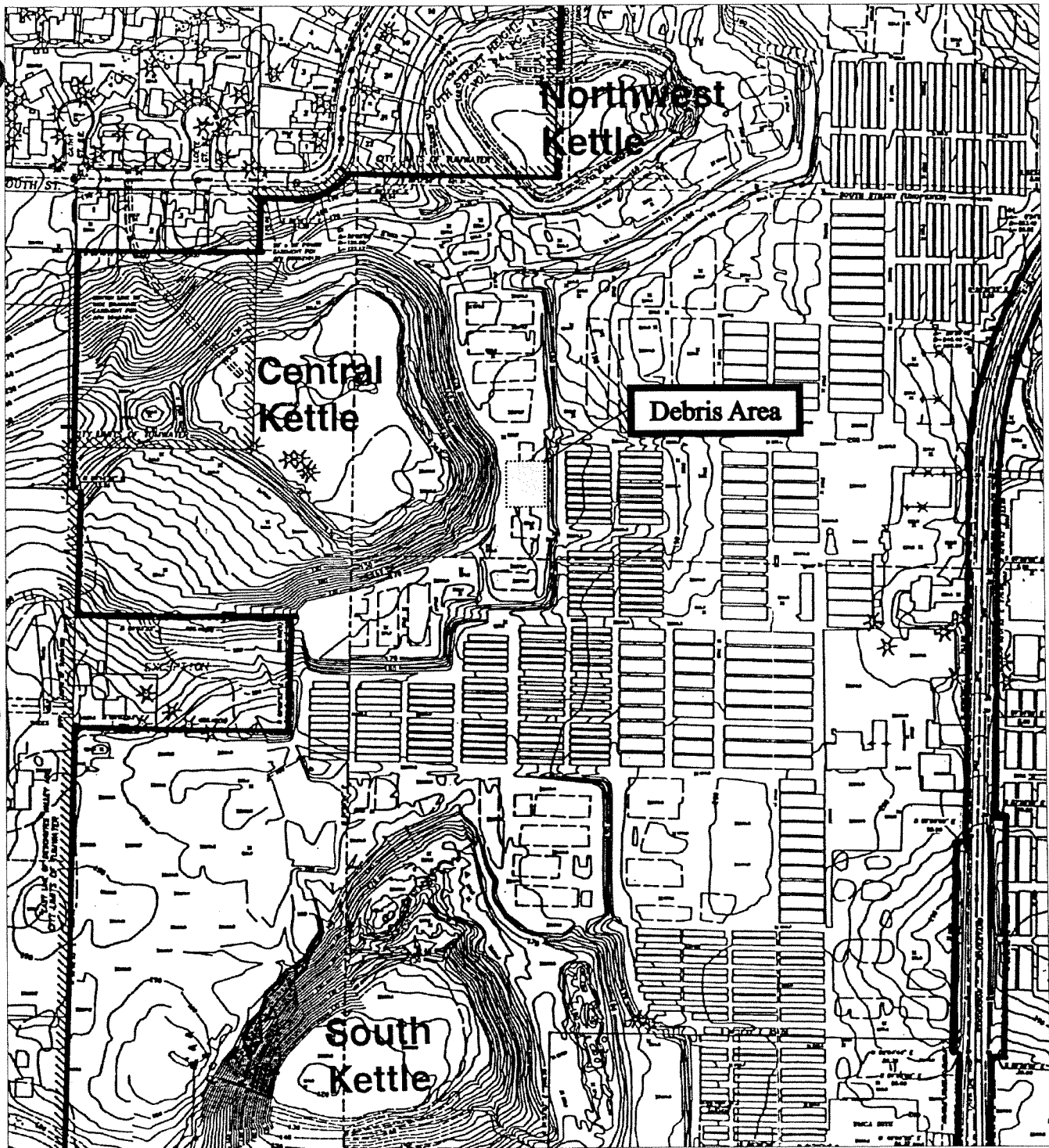
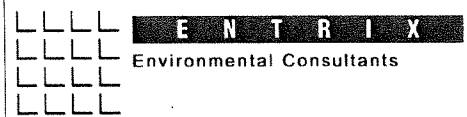



Figure 2. Location of Nursery Debris Disposal Area
 (See Exhibit A of the Agreed Order)
 Brigg's Nursery, Inc.
 4407 Henderson Boulevard
 Olympia, Washington





SCALE 1" = 100'

 WETLANDS


 NORTH

Figure 3. Geographic Extent of Waters & Wetlands of the Central Kettle
 Brigg's Nursery, Inc.
 4407 Henderson Boulevard
 Olympia, Washington

Source: L.C. Lee & Associates, Inc. 1997

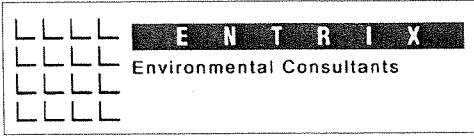
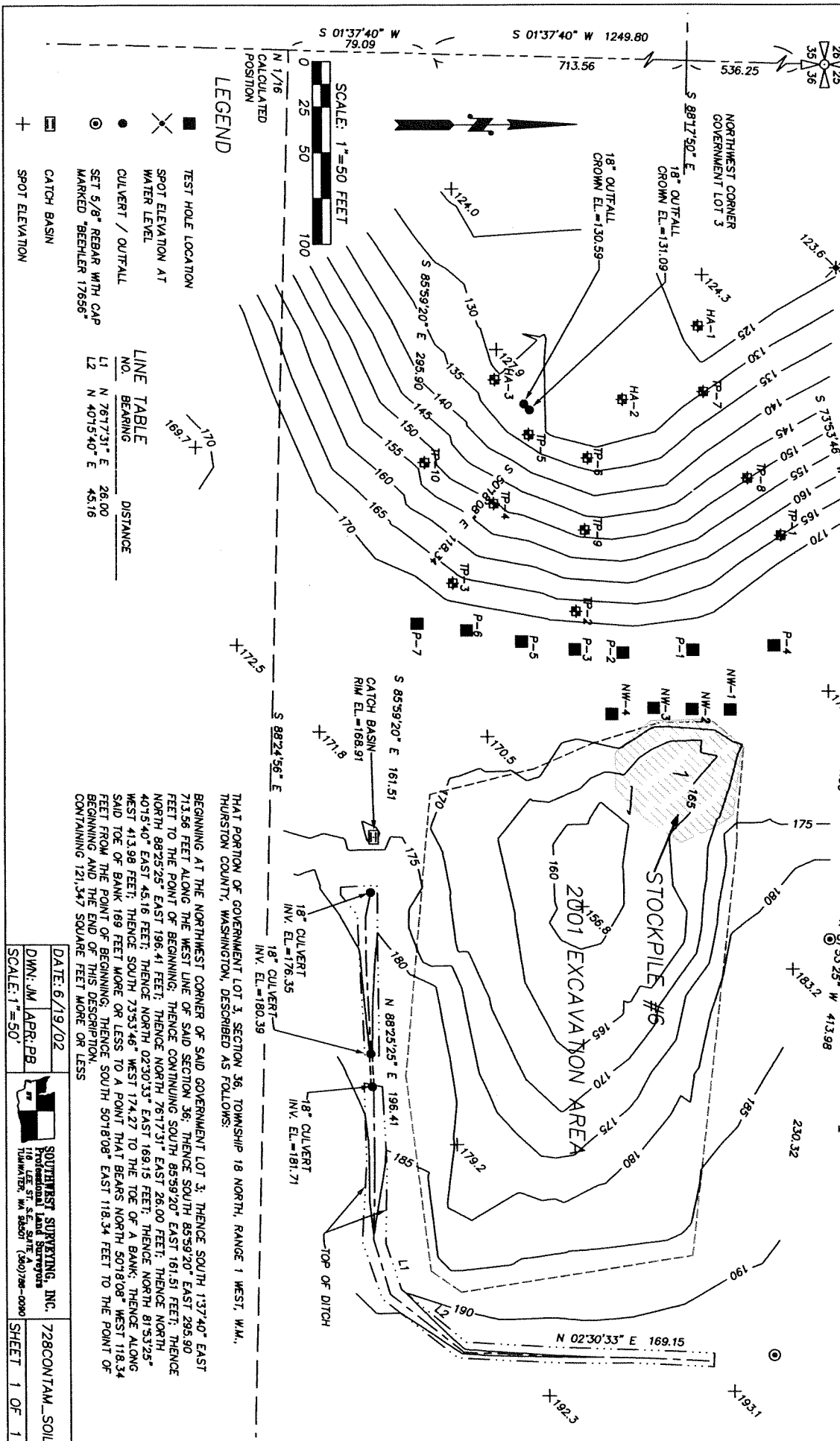


Figure 4: Debris Disposal Area
Exploration Locations



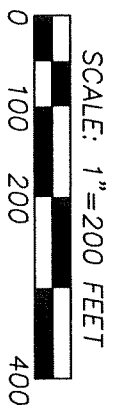
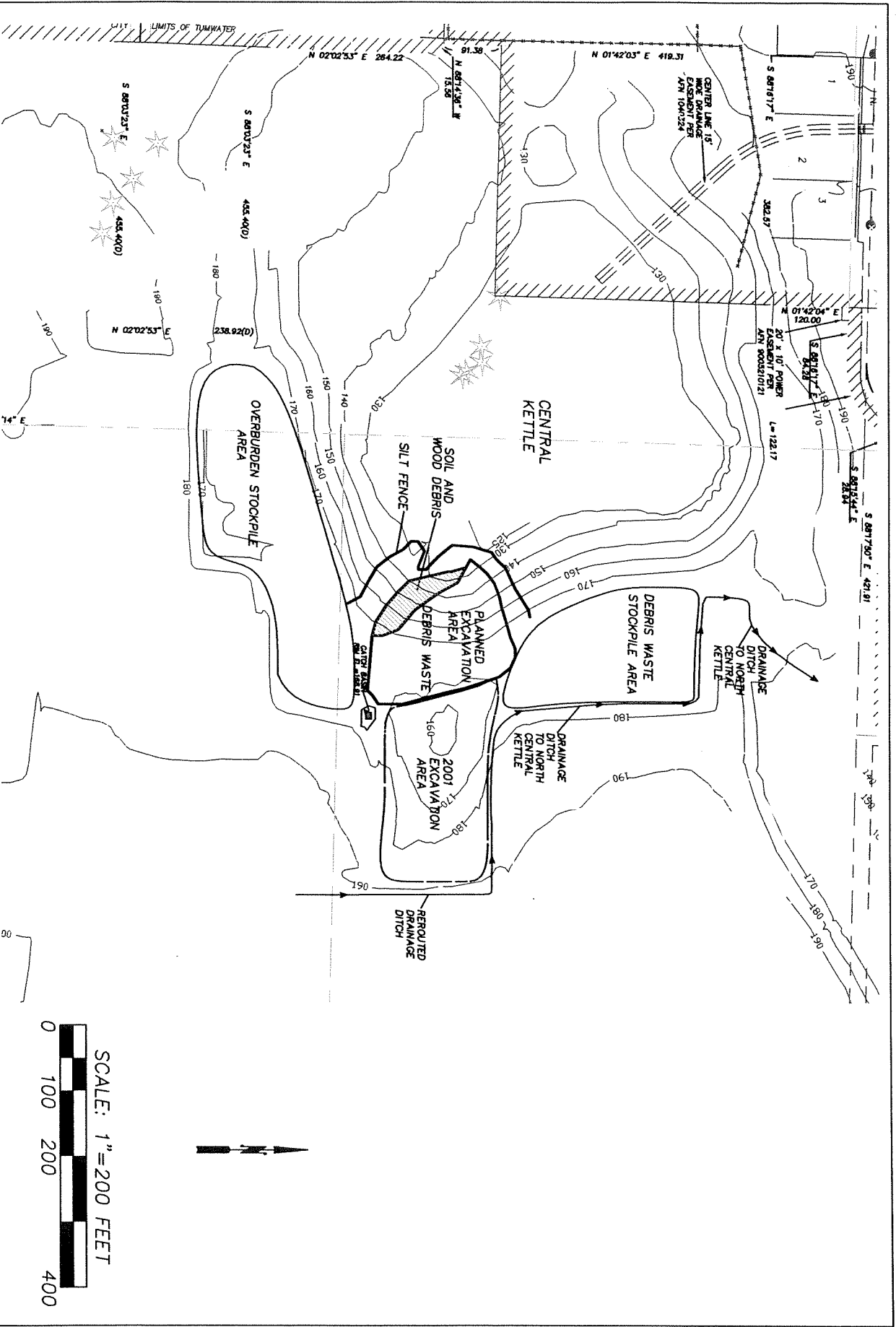
THAT PORTION OF GOVERNMENT LOT 3, SECTION 36, TOWNSHIP 18 NORTH, RANGE 1 WEST, W.M., THURSTON COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:

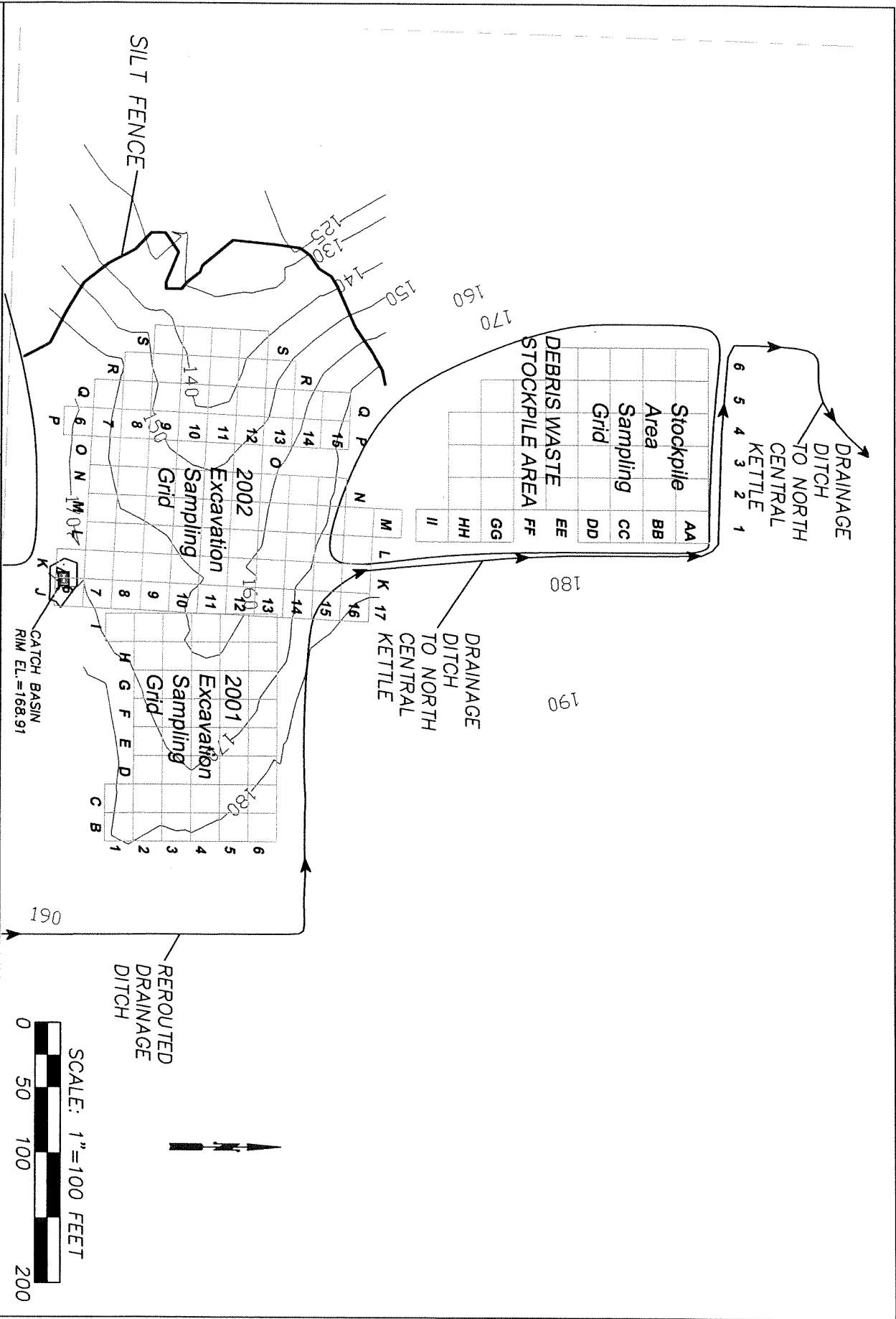
BEGINNING AT THE NORTHWEST CORNER OF SAID GOVERNMENT LOT 3; THENCE SOUTH 1°37'40" EAST 713.56 FEET ALONG THE WEST LINE OF SAID SECTION 36; THENCE SOUTH 85°59'20" EAST 295.90 FEET TO THE POINT OF BEGINNING; THENCE CONTINUING SOUTH 85°59'20" EAST 161.51 FEET; THENCE NORTH 88°25'25" EAST 196.41 FEET; THENCE NORTH 02°30'33" EAST 26.00 FEET; THENCE NORTH 40°15'40" EAST 45.16 FEET; THENCE NORTH 02°30'33" EAST 169.15 FEET; THENCE NORTH 81°33'25" WEST 413.98 FEET; THENCE SOUTH 73°53'46" WEST 174.27 TO THE TOE OF A BANK; THENCE ALONG SAID TOE OF BANK 169 FEET MORE OR LESS TO A POINT THAT BEARS NORTH 50°18'08" WEST 118.34 FEET FROM THE POINT OF BEGINNING; THENCE SOUTH 50°18'08" EAST 118.34 FEET TO THE POINT OF BEGINNING AND THE END OF THIS DESCRIPTION, CONTAINING 121,347 SQUARE FEET MORE OR LESS

Soil Excavated to Stockpile #6

2001 Excavation Area

Test Pit Explorations





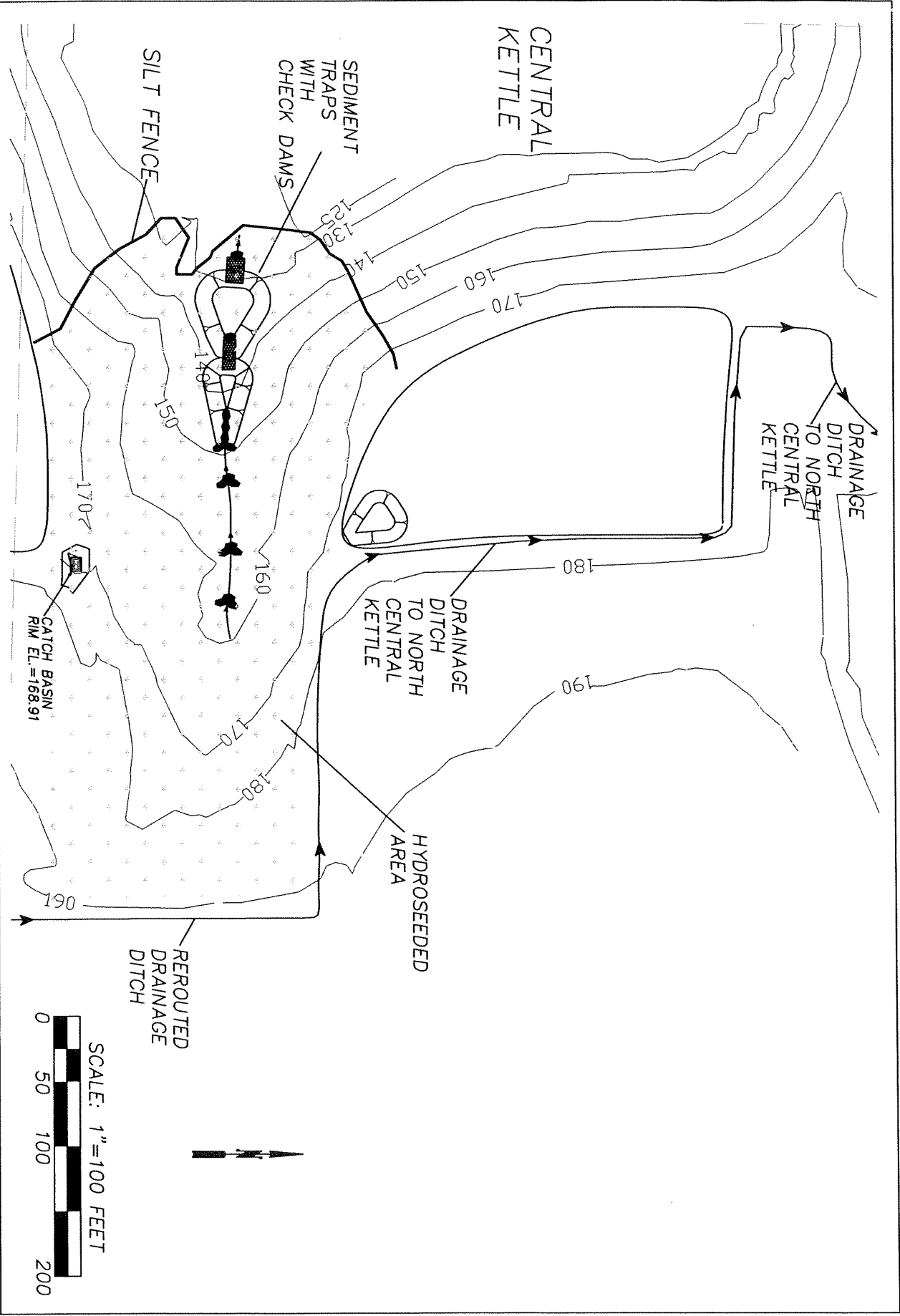
PACRIM GEOTECHNICAL INC.
 GEOTECHNICAL ENGINEERING AND APPLIED EARTH SCIENCES

Biggs Nursery, Inc.
 Debris Disposal Site
 Olympia, WA

Post Excavation Sampling Grids

Project No.: 116-001

Figure 6



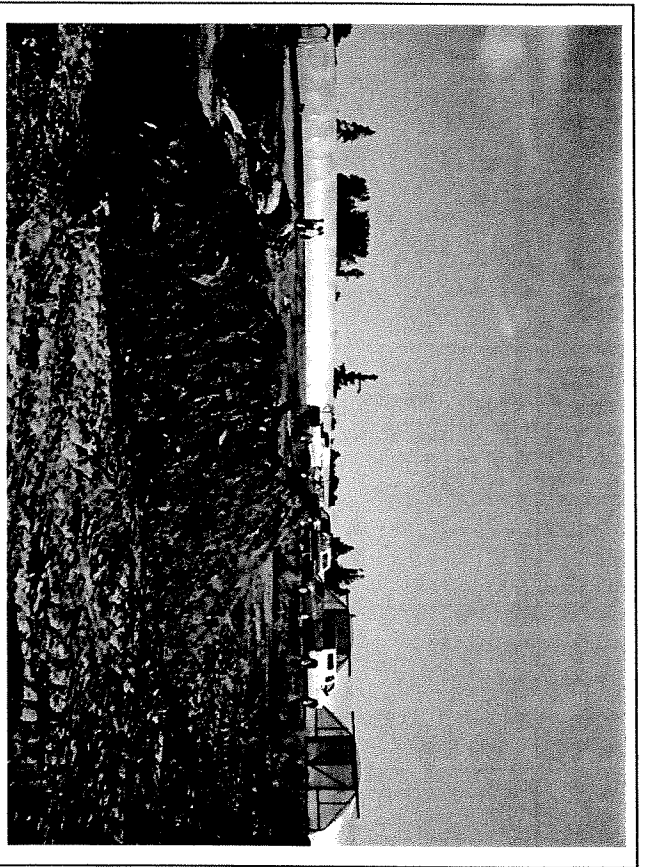
PACRIM GEOTECHNICAL INC.
 GEOTECHNICAL ENGINEERING AND APPLIED EARTH SCIENCES

Briggs Nursery, Inc.
 Debris Disposal Site
 Olympia, WA

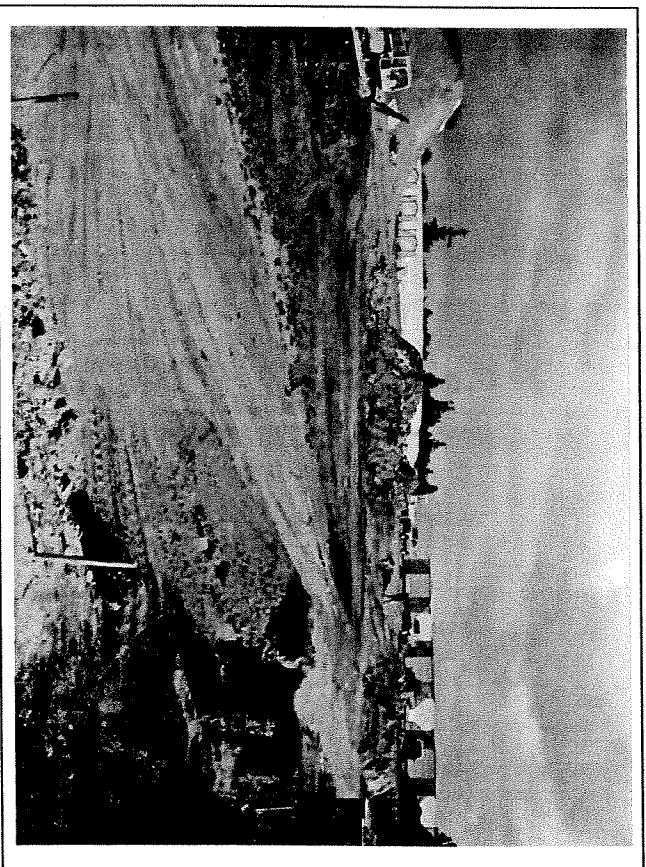
Project No.: 116-001

Post Excavation Project Area

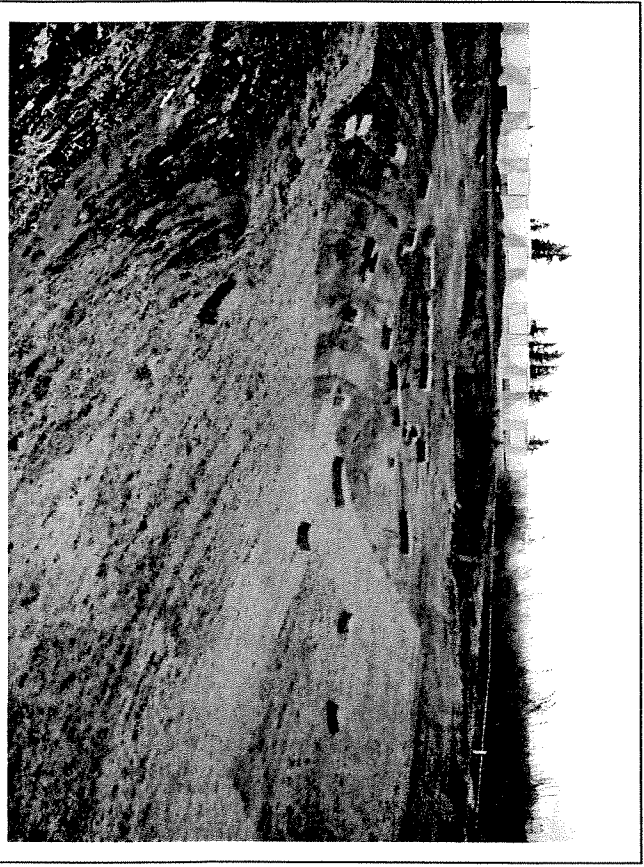
Figure 7



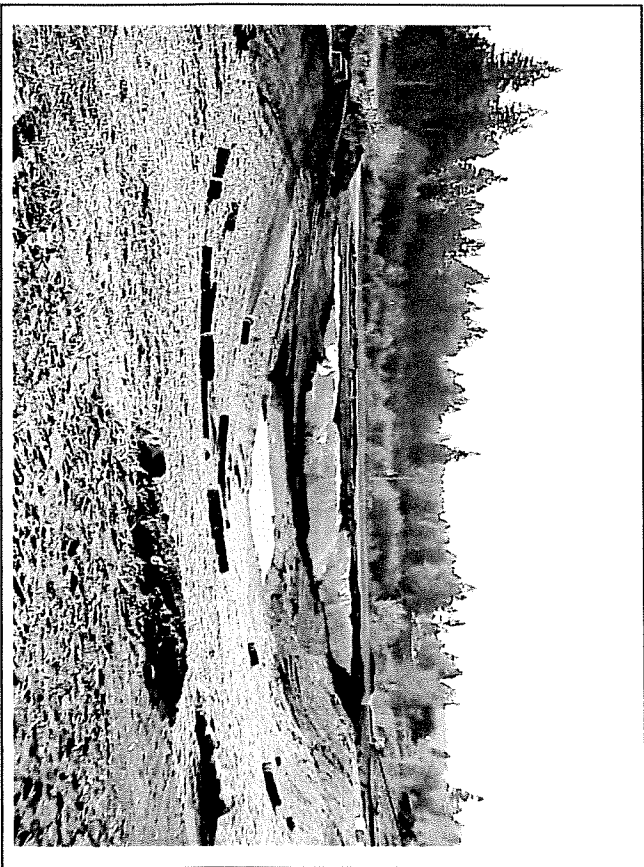
9/23/01: Excavation begins in the eastern corner; small debris piles visible



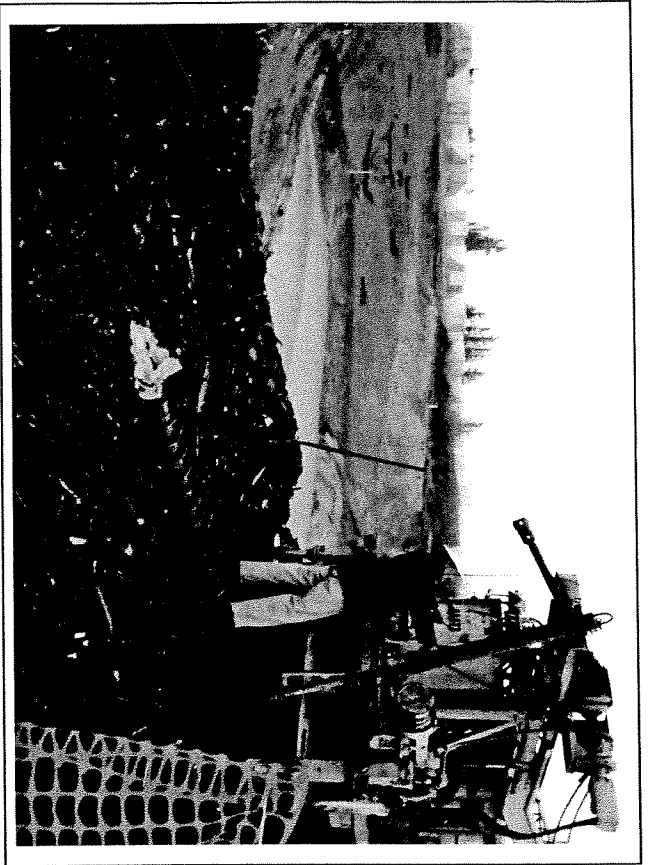
10/13/01: Looking east toward parking area; debris piles visible



10/25/01: Eastern portion of excavation pit after seed/straw application



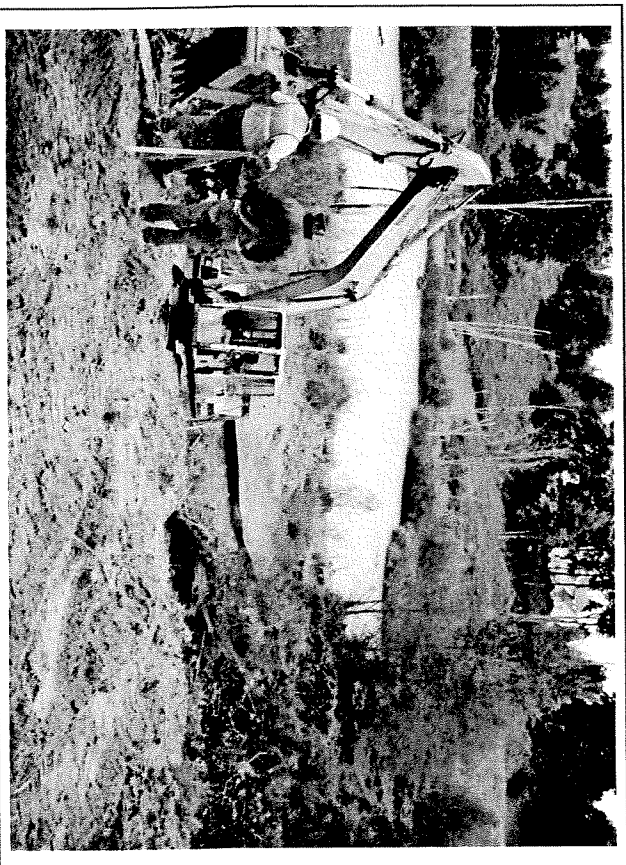
11/10/01: Pit from SE corner, shows NW section covered with plastic for winter



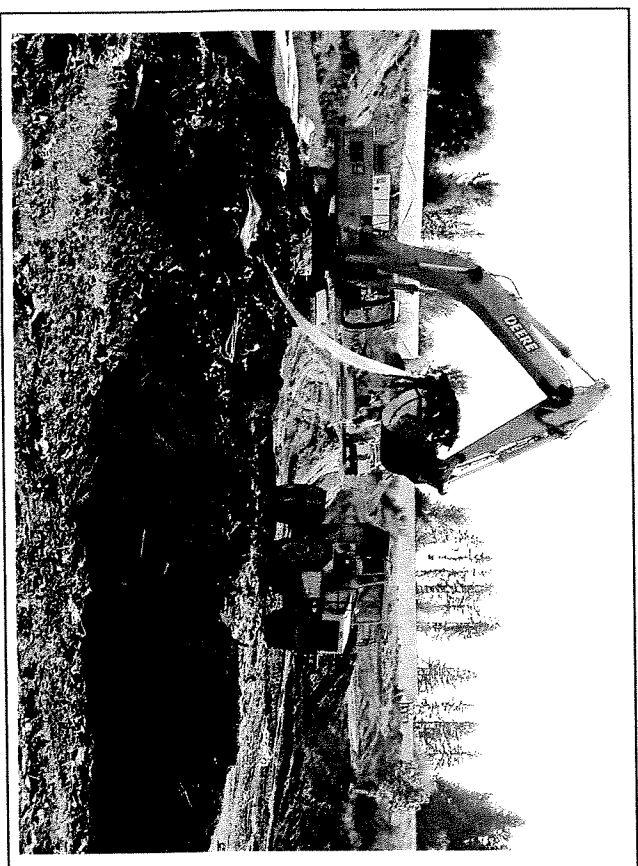
4/9/02: Exploratory borings along the NW corner of the excavation pit



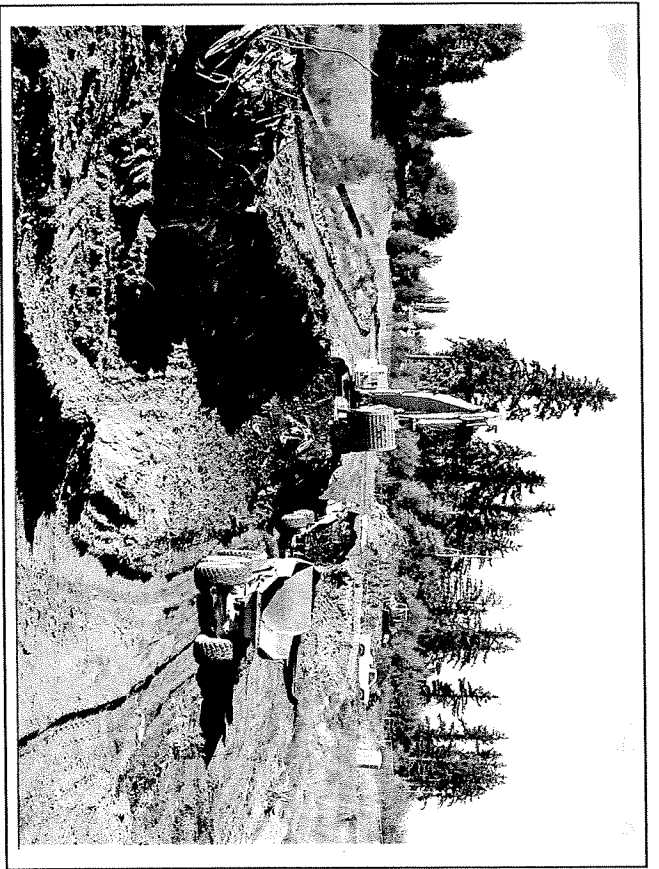
8/15/02: Silt fence in place before test pit activity begins



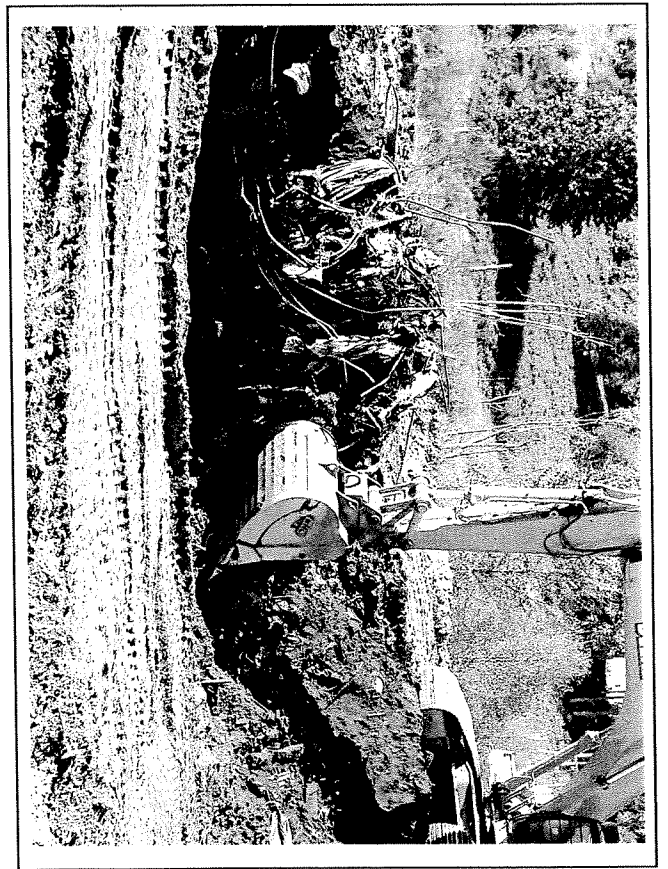
8/16/02: Digging test pit on hillside; Central Kettle visible



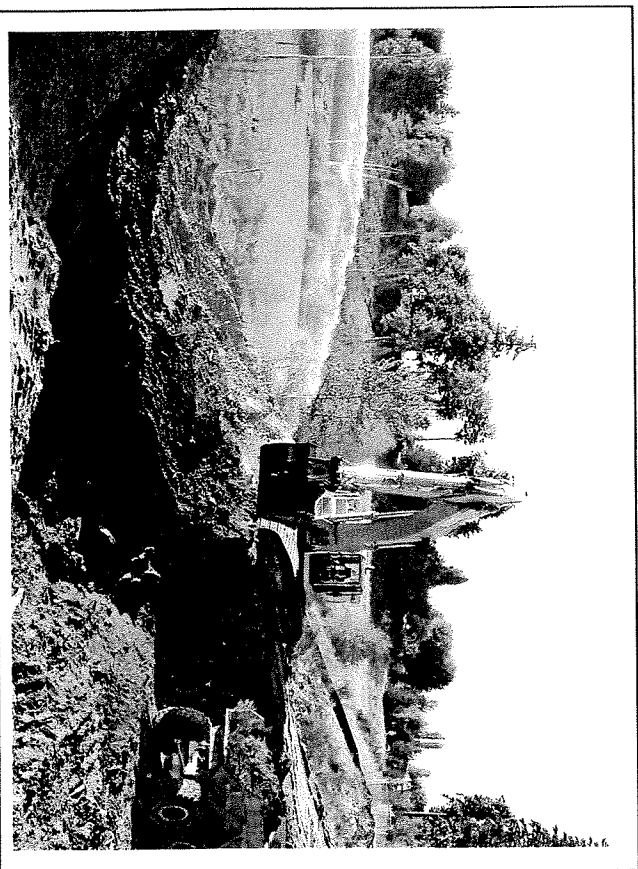
9/24/02: Excavation in process near southwest corner; loading debris (plastic)



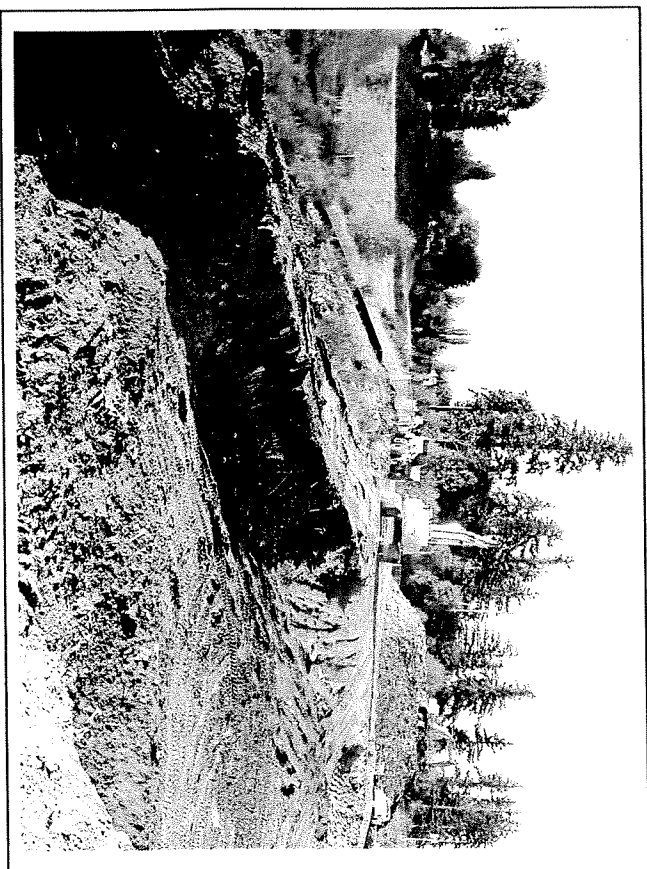
9/25/02: Excavation in process; looking north toward Waste Debris Area



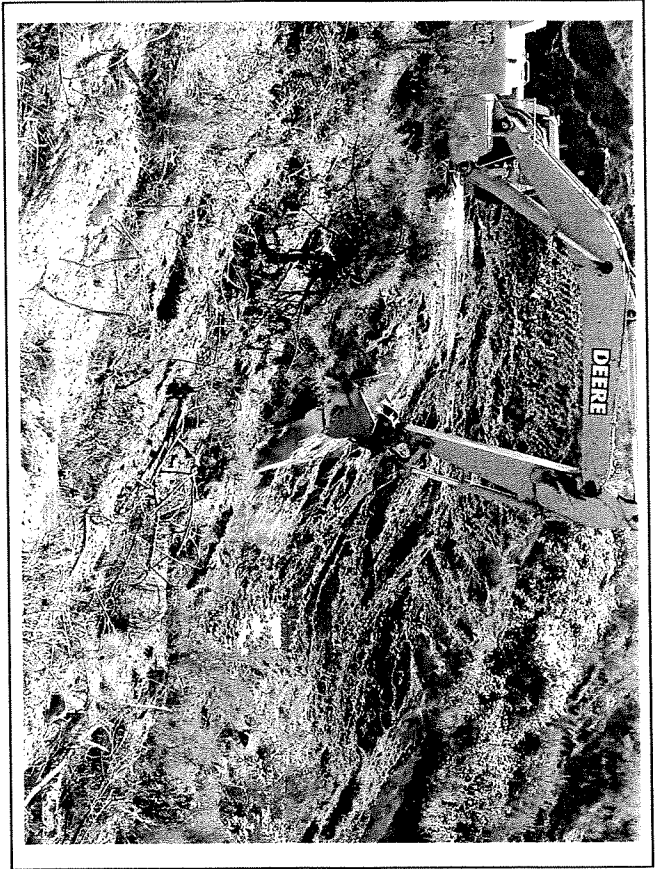
9/25/02: Thick debris along N-S access road, near TP-2



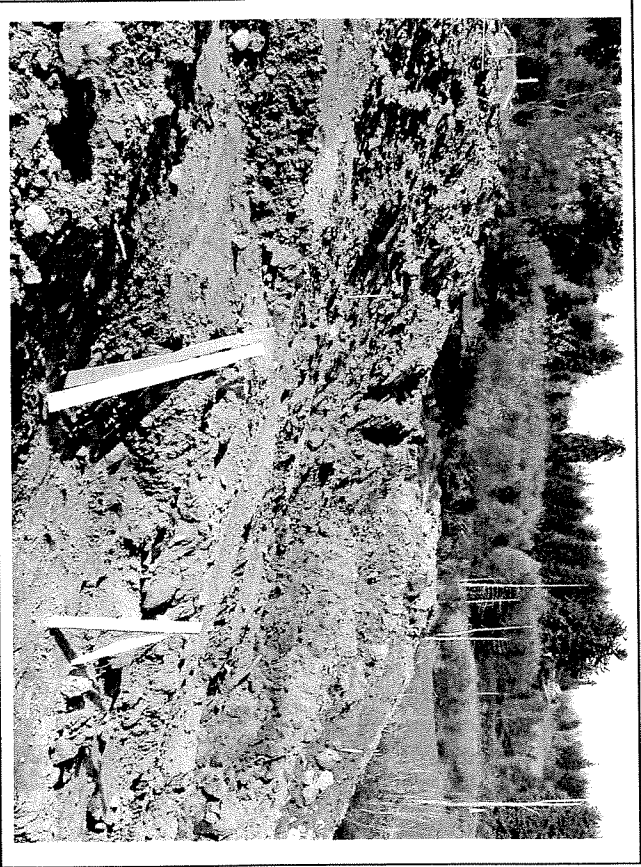
9/26/02: Dust control during excavation of hillside, near TP-2 area



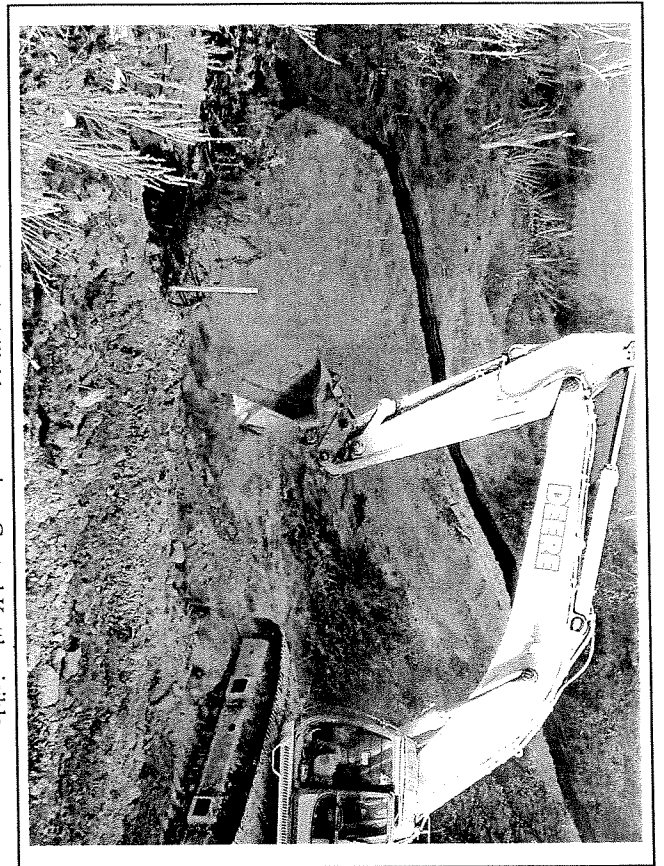
9/26/02: Line of excavation, looking north toward Waste Debris Area



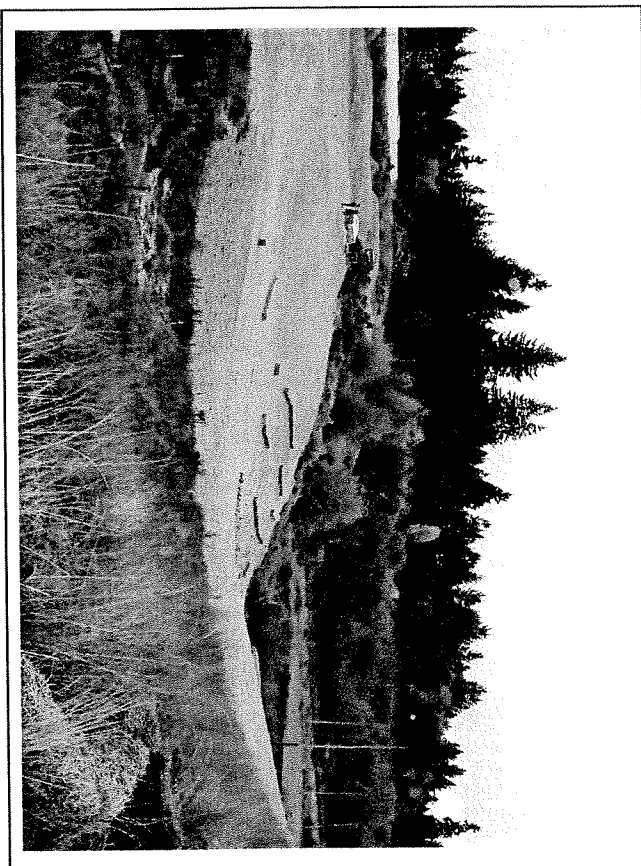
9/27/02: Clearing overburden material from hillside during excavation process



10/2/02: Grid sampling visible along southern portion of excavation area



9/30/02: Extent of main hillside excavation; Central Kettle visible



10/24/02: Excavation pit after hydro-seed and straw application; Central Kettle visible