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May 18, 2001

HAI #99-331.01
Phase 1
File 13.2

Via UPS Overnight
Mr. Kim Ford, P.E.
Solid Waste Section
Florida Department of Environmental Protection
Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

Subject: **Request for Additional Information, dated May 2, 2001**
Sid Larkin & Son, Inc.
Enterprise Class III Landfill, Pasco County
Pending Permit Numbers 177982-001-SC and 177982-002-SO

Dear Mr. Ford:

On behalf of Sid Larkin & Son, Inc. (SLS), Hartman & Associates, Inc. (HAI) is submitting for your review, responses to the comments of your request for additional information, dated May 2, 2001, and our meeting on May 10, 2001 for the above referenced facility. Your comments are stated first with our responses following.

Comments from Kim Ford:

Comment 1. **62-701.900(1) – Application Form Part T.** Revision and replacement of page 36 of the application form is requested to show Sid Larkin & Son, Inc. as the applicant. This page should be fully executed by the applicant and engineer, and again provided to the Department.

Response: A fully executed revised application page 36 as requested is attached.

Comment 2. **62-701.320(7)(f)(5).** Boundary survey (to match legal descriptions). The boundary survey and its legal description do not match the legal descriptions previously provided as part of the deeds. Also, the legal description shown on the boundary survey appears to contain incorrect information.

Response: The deeds previously provided contain the legal descriptions for multiple parcels, but did not include the entire property boundary proposed for the landfill. Two individual areas were not included in the deeds. These two areas, however, are represented by legal descriptions on two property tax notices sent to Sid Larkin & Son, Inc., as the owner, by the Pasco County Property Appraiser. All properties included in the proposed landfill boundary are accounted for and are highlighted in yellow on the attached documents. A boundary survey is also attached, including a corrected legal description, to match those on the deeds and tax notices.

Comment 3. **62-701.330(4)(d). (1.)** Grades to drain each intermediately covered lift to prevent ponding of stormwater over filled portions of the site are requested for Sequences 1 and 2. These grades may be shown on the Figures 3-24 through 3-27. Details to show the design and location of the Cell 1 temporary access road from the scale to the initial working face. All figures and cross-sections related to the sequence of filling for Sequences 1 and 2 should be included as part of the operation plan.

Response: Figures 3-24 through 3-27 have been revised to show grading of the lifts to prevent ponding of stormwater over the filled portions of the cells. Additionally, these figures have been added to the Operations Plan as Appendix G. Please see the attached figures.

A cross-section of the access road through the cells is located on Figure 11, General Notes and Cross Sections. Crushed concrete, rock, or roofing materials will be used to supplement the earth road as needed to prevent erosion. The access road will branch off of the perimeter road, just north of Pond 2 and will enter Cell 1 near the southeast corner of the temporary pond. The perimeter road and initial temporary access road have been added to Figure 3-17 to show this location. Additionally, the final grade contours have been removed to make the drawing more legible. Please see the attached revised figure.

Comment 4. **62-701.400(10), .410(1) and .510.** A response to resolve each of Mr. John Morris's comments and concerns expressed in his May 1, 2001 memorandum, attached. You may call Mr. Morris to discuss items in his memorandum at (813) 744-6100, extension 336.

Response: Our responses to each of Mr. Morris's comments of his May 1, 2001 memorandum follow.

Comment 5. **62-701.500(2) (c).** List of agreements, and related letters of acceptance, for disposal of unacceptable wastes and recyclable materials.

Response: Please see the attached letters from IPC/Magnum and American Compliance Technologies, Inc. for the disposal of non-hazardous waste items (such as used oil, filters, and anti-freeze) and hazardous wastes.

Sid Larkin & Son, Inc. will dispose of Class I waste at the Pasco County Municipal Solid Waste Resource Recovery Facility. Please see the attached letter.

The recipients of recyclable materials have not been determined yet. If there appears to be no market for these materials, they will be disposed in the landfill.

Comment 6. **62-701.630.** Proof of financial assurance is required prior to operation.

Response: Proof of financial assurance will be provided to the Department prior to operation of the landfill.

Comment: **Part B – Disposal Facility General Information**
1. B.21., B.22., B.24., and B.25. It is indicated that it is believed no significant threat will result from the exemption of the proposed landfill from the requirements for liners and leachate collection. Please note that the Department's publication entitled *Florida Class III Lined Landfill Leachate Data Summary Report*, dated May 18, 2000 provides analytical results that indicate selected parameters in leachate from Class III landfills exceed ground water standards (attached). Please provide a demonstration that indicates ground water quality in the uppermost aquifer will not exceed ground water standards and criteria at the zone of discharge from the disposal cells. (Submittal 1)

Response: We acknowledge that there is some evidence that Class III Landfill leachate can slightly exceed a few groundwater quality standards based on the attached report. However, this report admits that these leachate concentrations are "conservative estimates" and not representative of actual concentrations, which are expected to be much lower since all non-detectable analysis results were deleted from the data. So these data are the "worst case", just below the waste on a liner, which affords no opportunity for treatment, mixing or dispersion of the leachate into the soil and groundwater within the 100-foot zone of discharge per 62-520.200 (23) FAC and 62-520, FAC.

Even the current rule 62-701.340(3)(d) states that Class III landfills are "not expected to produce leachate which poses a threat to public health or the environment". The raw leachate data from the West Pasco-2 Class III Landfill from the attached report bears this out, where no FDEP standards or guidance concentrations were exceeded; with the exception of mercury, a low mobility metal, on two occasions. The general lack of corrective actions at Class III landfills in Florida also supports the rule statement.

The Department shall exempt a Class III Landfill from liner and leachate controls based on site specific operational controls to insure that only approved wastes are disposed and hydrogeological/geotechnical investigation results showing that the discharge will be impeded by natural soils and that no open sink holes, or that other direct connections to groundwater, do not exist.

The following site-specific conditions demonstrate that the proposed Class III Landfill qualifies for the liner and leachate control exemption.

1. Unauthorized waste control: The facility's Operation Plan provides for a higher level of waste control by: 1) video camera over trucks at the scalehouse; 2) a trained spotter at the scalehouse; 3) one random load check per day; 4) a trained spotter at the working face; and 5) a trained operator on site at all times. Most of the contaminants exceeding standards in the attached leachate report probably came from unauthorized household and construction site hazardous wastes disposed at these landfills. In addition, much of the expected waste stream to the landfill will come from Material Recovery Facility reject wastes, which receive another level of sorting and screening for unauthorized wastes. As recognized by the rule, good waste quality control can mitigate harmful leachate production.

2. Hydrogeology: The facility's hydrogeological and geotechnical investigation results have encountered stable soils beneath the landfill and a consistent sandy clay confining layer ($1x10^{-6}$ cm/sec to $1x10^{-9}$ cm/sec permeability) across the site at the base of the uppermost aquifer. Our groundwater flow calculations estimate that it will take a minimum of 60 years for the landfill discharge to travel through the clay vertically and 8 years to travel horizontally to the detection monitor wells, and another 16 years to travel off site. These long time frames will allow the clayey soils within the zone of discharge to treat, mix and attenuate any leachate from the landfill.

The Cedar Trail Class III landfill in Bartow, Florida, has a similar clay layer and has not experienced any significant groundwater exceedances.

3. Stormwater Controls: The facility's Operation Plan and cell design includes interceptor swales, weekly and intermediate cover with clayey soils, cover slopes for positive drainage, and the use of a waste Compactor, to minimize stormwater contact and infiltration into the wastes, and thus minimize leachate production.

4. Groundwater Monitoring System: The facility's proposed groundwater monitoring system is designed to allow predictions of the movement and composition of any discharge from the landfill and compliance with state groundwater quality standards at the boundary of the zone of discharge (ZOD). The proposed 15 shallow and 5 deep (Floridan) detection monitor wells will be no more than 50 feet from the landfill and sampled quarterly per Pasco County permit and semi-annually per FDEP permit for common leachate constituents. The corrective action process would immediately be initiated if exceedances are detected at the detection wells.

5. Cell Certification: The facility's Operations Plan requires a certification of the existence of a sandy clay confining layer over the limestone aquifer underlying each cell prior to waste disposal in that cell. This requirement will insure that there is no unimpeded discharge to groundwater and that the clay layer is not breached.

Therefore, based on this demonstration of site specific conditions, we believe that reasonable assurances have been provided and again request that the Department allow an exemption from a liner and leachate controls for the subject landfill.

Although we are confident that the facility will not violate groundwater standards, at the Department's request, to further support our demonstration we are in the process of conducting contaminant transport calculations and a preliminary model to evaluate the possibility of exceedances at the boundary of the ZOD based on the "worst case" scenario Class III Landfill leachate concentrations from the attached report. Our results of the calculations are planned to be submitted to the Department by May 23, 2001.

Comments from John Morris:

Comment: 2. G.9.d. – Gas Monitoring Program (Rule 62-701.400(10)(c), F.A.C.)

a. The revisions to Section 3.10.1.2 of the Engineering Report and Section 10.1.1 of the Operations Plan to indicate that the valves will be maintained in the closed position between gas monitoring events are noted. The revision to the Gas Monitoring Survey Form (Operations Plan, Appendix D) to include pre-purse and post-purge gas measurements is noted, however the heading information (date, instrument, and sampler) has been deleted from the form. Please submit a modified form that includes the heading block. (Submittal 1)

Response: The Gas Monitoring Survey Form has been revised to include the heading information. Please see the attached form.

Comment: **Part H – Hydrogeological Investigation Requirements (Rule 62-701.410, F.A.C.)** 3. H.1.b. – Rate and Direction of Ground Water Flow (Rule 62-701.410(1)(a)(1), F.A.C.).

a. The revisions to Section 5.2.2 of the Hydrogeological Investigation to reflect the supplemental site investigation completed during February and March 2001 are noted. Please provide the basis for the statement that the ground water contours presented on Figures 9, 10 and 11 represent wet season water levels. It is unclear if the results of the four water level measurement events conducted at the subject property are intended to represent seasonal fluctuations at the facility. (Submittal 2)

Response: Our statement was that the "inferred" water table contours on these maps were added to represent wet season conditions, and not that the maps in total were representative of wet conditions. The "inferred", or dashed contours, refer to those that are not based on actual water level measurements. With over one year of water level measurements, we believe that these maps are representative of seasonal fluctuations. To be more conservative, our seasonal high water table estimate was based on historical measurements at the adjacent East Pasco Landfill.

Comment b: Please respond to the following comments provided regarding the response:

i. Based on the modification to Figure 5 of the Hydrogeologic Investigation it appears that P-5 is open to clayey sand, sand and limestone deposits. Please indicate the basis for the response that P-5 is a surficial aquifer piezometer. (Submittal 2)

Response: Piezometer P-5 is completed at the base of the surficial aquifer. Its' screened interval is 15 feet and it measures water levels from the top of the screen at 23 feet below grade to a depth of 38 feet (70 ft to 55 ft NGVD). Although P-5 is completed 3 feet into the silty, weathered limestone, its' water levels have ranged from 61.3 feet to 58.65 feet NGVD, within the clayey sand at the base of the surficial.

Comment ii. The boring log for P-10 was not included in Appendix 5-A (Universal Engineering Sciences – Driller's Logs). Please provide a copy of this log to demonstrate what zone is being monitored at this location. It is noted that nearby boring L-17 did not encounter limestone to a depth of 69 feet below grade (about 66 feet elevation). (Submittal 2)

Response: UES's drillers well log for P-10 is attached in Appendix 5-A. As shown, the piezometer was completed to a 75 ft. depth with 10 feet of screen into the weathered limestone. The screen is also below the 55 ft NGVD elevation, below the onsite potentiometric surface of the Floridan aquifer.

Comment iii. Figure 6.2 appears to indicate the elevation of the screened interval at P-10 ranges from about 54 to 64 feet, while the well completion log appears to indicate the elevation of the screened interval at this location ranges from about 60 to 70 feet. Please review and revise as appropriate. (Submittal 2)

Response: Figure 6.2 cross-section and the well completion log for piezometer P-10 are consistent. The figure shows P-10 with a screened interval from 54 to 64 ft NGVD; while the well log shows a screened interval from 65 ft to 75 ft below grade (at 129 ft NGVD) or a screen from 54 to 64 feet NGVD.

Comment iv. The boring log for P-11 was not included in Appendix 5-A (Universal Engineering Sciences – Driller's Logs). Please provide a copy of this log to demonstrate what zone is being monitored at this location. (Submittal 2)

Response: UES's driller well log for P-11 is attached in Appendix 5-A. The log shows that the well was installed to a depth of 63 ft with 10 feet into a sandy, silty clay, with limestone and not limestone, with a screen from 88 ft to 98 ft NGVD. Because of the anomalous water level readings at P-11, 99.27 on 4/1/01 and 98.03 ft NGVD on 5/7/01, we believe that the well is not completed into the Floridan limestone as proposed, but into the continuing layer containing perched water within the surficial aquifer. The well was pumped at a rate of 2 gpm on 5/7/01 to confirm saturation. P-11 is not critical to our estimate of Floridan or surficial groundwater

flow at this time. Therefore, we plan to continue to monitor water levels in P-11 to evaluate seasonal variations in this perched unit.

Comment v. Figure 6.2 appears to indicate the elevation of the screened interval at P-11 ranges from about 70 to 80 feet, while the well completion log appears to indicate the elevation of the screened interval at this location ranges from about 88 to 98 feet. Please review and revise as appropriate (Submittal 2)

Response: Figure 6.2 has been revised to more accurately depict the screened interval of P-11, see attached.

Comment vi. The boring log provided for P-12 included in Appendix 5-A (Universal Engineering Services – Driller's Logs) appears to indicate the screened interval was placed in deposits described as "clay silt with limerock". Please indicate the basis for the response that P-12 is a Floridan aquifer piezometer. Please add P-12 to Figure 6. (Submittal 2)

Response: UES's Driller has a tendency to log weathered limestone as "clay silt with limestone," see attached revised log from UES, as they have confirmed that well P-12 is completed into limestone.

Comment vii. The boring log provided for P-1A included in Appendix 5-A (Universal Engineering Services – Driller's Logs) appears to indicate the screened interval was placed in deposits described as "clayey silt with limerock". Please indicate the basis for the response that P-1A is a Floridan aquifer piezometer. (Submittal 2)

Response: See response to Comment 3.b.vi. above.

viii. The revision to Section 5.2.4 of the Hydrogeologic Investigation did not provide a discussion of the anomalous water elevation reported for P-11 during the March 26, 2001 measurement (Table 5-1). Please provide supplemental water level measurements to determine the actual water elevation at this location relative to the other Floridan aquifer piezometers. (Submittal 2)

Response: See response to Comment 3.b.iv. above. Supplemental water level maps for the surficial and Floridan aquifers for May 7, 2001 are attached as Figures 11.2 and 14.2, respectively. Again, P-11 represents a localized perched water situation.

Comment d: The revisions of slug test analyses for P-2 (slug out), P-3 (slug out), P-3a (slug in), and P-7 (slug out) are noted. Please respond to the following comments provided regarding the slug tests:

i. It is noted that the plot of residual head values for the slug in test at P-3 includes a variable time scale. Please review and revise as appropriate. (Submittal 1 and 2)

Response: The plot of the residual head values for the slug in test at P-3 does not include a variable time scale. The appearance of a variable time scale is a graphical representation problem with the program used to plot the data. The program only prints integers for the axis labels which creates a labeling problem when the intervals involve fractions of a minute. The axis label format can not be modified in the program. This in no way affects the accuracy of the slug test analysis.

Comment ii. It is indicated that the match line for P-7 (slug in) was not modified because the initial water table drop was most likely the result of water infiltrated into the sand pack. It is noted that the initial changes during a slug in test should be a water level rise not a drop. While the slope of the line is consistent with the plotted residual head values, the y-intercept should be modified similarly to how the match line was changed for P-3 (slug in). Please review and revise as appropriate. (Submittal 1 and 2)

Response: It is true that the initial change in a slug in test is a water level rise. However, the test results are based on the drop in water level after the initial rise. Our statement about the initial water level drop was referring to the drop in water level observed after the initial rise. The placement of the match line along the y-intercept is irrelevant because the hydraulic conductivity calculations are based on the slope of the line not the intercepts. Moving the match line to line up with the data will not change the calculated hydraulic conductivity value.

Comment e: The response presented in Submittal 1 regarding the slug out test at P-5 indicated erroneous data was recorded so the test was not analyzed. However the results of the slug out test at P-5 are included in Appendix 5-C of Submittal 2. Please clarify the results of the slug out test at this location, and revise Section 5.2.2 and Table 5-2 of the Hydrogeological Investigation as appropriate.

Response: The slug out test at P-5 should not have been included in the previous submittal and has been removed from any hydraulic conductivity estimations for the site. This test was not used for permeability calculations for Section 5.2.2 and Table 5.

Comment f: The responses provided regarding the results of the slug tests are noted. Please address the following comments:

i. Please note that it is not considered appropriate to use a geometric mean to reduce the variability in hydraulic conductivity values that appear to be representative of the surficial aquifer at the site. At a minimum the use of an average (arithmetic mean) of the hydraulic conductivity values appears more appropriate. (Submittal 1)

Response: It can be appropriate to use the geometric mean to reduce the variability of hydraulic conductivity values from an aquifer if they vary by an order of magnitude or more, see enclosed reference by R. W. Cleary. Since only one value varies by an order of magnitude, we will use the arithmetic mean to average hydraulic conductivity values.

Comment ii. The range and averages of hydraulic conductivity values reported for the surficial aquifer piezometers provided in Submittal 1 and in the revisions to Section 5.2.2 and Table 5-2 of the Hydrogeological Investigation provided in Submittal 2 appear to be inconsistent with the slug test results. The slug test results provided in the initial submittal, and in the March 20 and April 2, 2001 submittals are summarized on the attached table. Please review Section 5.2.2 of the Hydrogeological Investigation and revise as appropriate, including any revisions based on Comment No. 3.d.i. and 3.d.ii, above, as appropriate. (Submittals 1 and 2)

Response: Section 5.2.2 and Table 5-2 of the Hydrogeological Investigation have been revised to reflect the slug test results provided in Submittal 1 (March 20, 2001). No revisions based on Comments No. 3.d.i. or 3.d.ii. were required.

Comment j: The ground water flow velocity calculations presented in Section 5.2.2 of the Hydrogeologic Investigation must be consistent with any revisions that are appropriate based on Comment Nos. 3.a. through 3.i., above. The evaluation of this section of the Hydrogeological Investigation will be completed when a revised version is submitted. (Submittal 2)

Response: Acknowledged. The requested revisions did not significantly revise our groundwater flow velocity calculations.

Comment 5. H.1.e. – Site Stratigraphy (Rule 62-701.410(1)(a)4., F.A.C.).

a. The response that boring logs for L-12 through L-17 was presented in Appendix 5-A of the Hydrogeological Investigation appears to be inconsistent with the information provided in the Department's copy. The description of lithology encountered at auger borings L-12 through L-17 was limited to cross Sections A-A' and B-B' (no figure numbers provided). The supplemental soil profiles included in Appendix 5-A in Submittal 2 are noted. Please indicate if individual boring logs were prepared for locations L-12 through L-17 and provide copies if available. (Submittals 1 and 2)

Response: No individual boring logs were prepared for preliminary borings L-12 through L-17. These logs were prepared by Mr. Dennis Price, P.G.

Comment b: As discussed during the February 7, 2001 meeting and a presented in the response, it is the Department's understanding that personnel from Hartman & Associates, Inc. (HAI), were present during installation of all soil borings and that lithologic descriptions were prepared from the direct observation and testing of the samples retrieved from each boring location. It is further indicated in the response that the HAI boring logs (B-1 through B-10) were based on the interpretation of a professional geologist. Please indicate the name of the professional geologist(s) who prepared or supervised the preparation of these boring logs.

Response: Ms. Valerie Collins Davis, P.G., and Mr. Neil Klaproth, P.G., observed the drilling and prepared boring logs B-1 through B-10 in the field. Mr. William Bulmer, P.G. conducted further sample characterization in HAI's laboratory. All geological work was supervised by Mr. James Golden, P.G., see attached licenses.

Comment c: The response that revised geological cross sections (Figures 5, 6, 6.1 and 6.2) have been provided to distinguish between the clayey sand and sandy clay/clay sediments and that a consistent sandy clay layer underlies the site is noted. Please respond to the comments provided regarding the revised cross sections:

i. Figure 5 – Please describe the different lithologies reported at adjacent borings L-13 and DCL01-9. (Submittal 2)

Response: Borings L-13 and DCL01-9, are not adjacent and are estimated to be separated by at least 50 feet. These borings have similar lithologies, except for the thickness of the "orangish" to "reddish" sandy clay layers encountered. At L-13, there was 20

feet of sand, then 20 feet of sandy clay starting at an elevation of 85 ft NGVD. At DCL01-9, there was 20 feet of sand, then 4.5 feet of pale orange sandy clay at an elevation of 80 ft NGVD, underlain by 10 feet of fine sand, with 1 foot of sandy clay at 65 ft NGVD. As noted, both borings have in common the upper layer of 20 feet of sand and the orangish/reddish sandy clay layer at 80 to 85 ft NGVD.

Comment ii. Figure 5 – Boring log B-7 indicates that clayey sand and slightly clayey sand directly overlie the uppermost limestone deposits. This boring log further indicates that slightly sandy clay is present at least 12 feet above the top of the limestone at B-7. Please discuss the continuity of the sandy clay/clay layer at boring B-7 and adjacent borings DCL01-9/L-13. (Submittal 2).

Response: Our boring logs show that the orangish-reddish sandy clay/clay is continuous from borings B-7, DCL01-9 and L-13. At B-7 a 5 ft tan to orange clay layer was encountered at about 73 ft NGVD and grades into sandy clay to a depth of about 64 ft NGVD. Following the rising topography, the orangish sandy clay layer is encountered at DCL01-9 at 80 ft NGVD and again at 85 ft NGVD at L-13. Figure 5 has been revised to more accurately depict this continuous clay unit.

Comment iii. Figure 5 – Please describe the basis for indicating sandy clay/clay deposits are present below the limestone that was encountered at the bottom of boring DCL01-11. (Submittal 2)

Response: In our Figure 5 of submittal 2 we had interpolated between borings B-7 and B-9, where competent limestone was encountered by HAI Geologists. After considering that borings B-1 and DCL01-1 also found limestone above an elevation of 70 ft NGVD, we have revised Figure 5 with limestone below boring DCL01-11.

Comment iv. Figure 6 – Land surface elevation at boring B-2 is indicated to be about 130 feet, while the boring log and Figure 6.1 appear to indicate the land surface elevation at this location is about 136 feet. Please review and revise as appropriate. (Submittal 2)

Response: Revised Figure 6 is attached.

Comment v: Figure 6 – Boring log B-8 indicates that clayey sand directly overlies the uppermost limestone deposits, and that sandy clay/clay sediments were not encountered. Please discuss the apparent discontinuity of the sandy clay/clay layer in the vicinity of this boring. (Submittal 2)

Response: A close read of boring log for B-8 indicates that clayey sand to a sandy clay was logged at a 30 to 35 foot depth, or from 53 to 63 ft NGVD. A laboratory test sample was collected from 60 ft NGVD at boring B-8, resulting in a confining layer K value of $1.3x10^{-6}$ cm/sec, see Table 5-2. In addition, a grain size analysis of sample No. 6 at 63 to 61 ft NGVD characterized the sample as a sandy clay with 57% pass 200, see Table 5-3. Therefore, the sandy clay layer is continuous at B-8 and Figure 6 has been revised to more accurately depict this, see attached.

Comment vi: Figure 6.1 – Please describe the basis for indicating limestone deposits are present below the sandy clay and clay that were encountered at the bottom of boring B-15. (Submittal 2)

Response: Our basis was a geologist's interpolation of the limestone contact between borings B-3 and B-2, with allowance for the depression at B-15. Also, the overlying sandy clay has typically been about 20 feet thick over the limestone. The figure has been revised to show a dashed line to indicate our interpolation.

Comment vii: Figure 6.1 – Boring log DCL01-1 indicates that the occurrence of sandy silt/clay sediments were limited to the sample collected from 38.5 to 40.5 feet below land surface while the cross section appears to indicate a thickness of about 15 feet of sandy clay/clay sediments overlying the uppermost limestone deposits. Please review and revise as appropriate. (Submittal 2)

Response: Figure 6.1 has been revised to depict a 5-foot sandy clay layer from 84 ft to 79 ft NGVD.

Comment viii: Figure 6.1 – Please discuss what steps will be implemented in the vicinity of boring DCL01-1 to ensure the sandy clay/clay layer will not be breached during excavation to the design depth. It appears that the base of the excavation will be within about five feet of the uppermost limestone deposits at this location. (Submittal 2)

Response: The following procedures will be implemented to ensure that the sandy clay layer at DCL01-1 (Cell 6/Cell 3) will not be breached:

1. Implement new cell certification procedures in Section 3.15 of the Engineering Report and Operations Plan.
2. Set a surveyed benchmark near each new cell during mining operations to be used by Operator to shoot periodic grades to ensure that excavation does not go below the design base elevation of 82 ft NGVD.

Comment ix: Figure 6.2 – Please revise this cross section as appropriate to address review comments Nos. 3.b.ii. through 3.b.v., above (Submittal 2)

Response: Figure 6.2 has been revised to depict the revisions addressed by these comments, see attached.

Comment: **Part L – Water Quality and Leachate Monitoring (Rule 62-701.510, F.A.C.)**
8. L.1.c. – Ground Water Monitoring (Rule 62-701.510(3), F.A.C.).
   a. Please revise Section 5.3.2 of the Hydrogeological Investigation to indicate when proposed wells MW-1A and MW-14 will be installed. (Submittal 2)

Response: Monitor Well MW-14 will be installed prior to landfillling in Cell 8. Monitor Well MW-1A will be installed prior to landfilling in Cell 8, to replace MW-1. The timing of these proposed well installations may change based on the results of the first biannual report.

Comment d: Ground water elevations included in Appendix D of the Hydrogeological Investigation were summarized for the surficial aquifer monitor well at the East Pasco Landfill located closest to the proposed Enterprise Class III facility. At well SW-9A the highest ground water elevation (73.85 feet) was recorded in April 1993 and the lowest ground water elevation (65.55 feet) was recorded in May 1994, for a range of 8.3 feet. This seasonal fluctuation is less than the 10 to 15 feet indicated in the response, and does not justify the proposed 20 foot screened interval for the surficial aquifer monitor wells. Please indicate if the statement in Section 5.3.2.2 of the Hydrogeological Investigation that mentions "soil information on-site" refers to the ground water elevations from the East Pasco Landfill. Please review and revise as appropriate. (Submittal 2)

Response: Our statement in Section 5.3.2.2 was meant to refer to historical groundwater elevations from the East Pasco landfill, see revised text. Our evaluation was based on monitor well SW-10, southwestern corner near the Larkin site. SW-10 had a high water level of 81.74 ft in 4/93 and a low of about 64.5 ft in 5/94, indicating a 15 foot fluctuation range. We believe that this justifies a 20 foot screened interval for the surficial wells. As discussed at the May 10, 2001 meeting, the surficial monitor wells will not breach the sandy clay to clay layer at the base of the surficial aquifer.

Comment e: Please indicate if ground water elevations in the Floridan aquifer peizometers occurred above the top of the limestone deposits at each location. If ground water occurs below the top of the limestone deposits construction of the Floridan aquifer monitor wells with more than 10 feet of screen may be appropriate. Ground water elevations included in Appendix 5-D of the Hydrogeological Investigation were summarized for the Floridan aquifer monitor well at the East Pasco Landfill located closest to the proposed Enterprise Class III facility. At well FW-5 the highest ground water elevation (68.20 feet) was recorded in February 1999 and the lowest ground water elevation (63.30 feet) was recorded in May 1994, for a range of 4.9 feet. Please review and revise as appropriate. (Submittal 2)

Response: At Floridan piezometers P-1A, P-8, P-9 and P-10, on the western side of the landfill, water levels were from 7 to 50 ft below the top of the limestone. On the eastern side, P-3B and P-12 had water levels above the top of the limestone. Both P-1 (MW-1B) and P-12 (MW-7B) were installed with 10-foot screens at the Department's request; therefore, these wells should be acceptable. However, the design of proposed wells MW-2B and MW-12B have been revised to have 15-foot screens to allow for periodic non-artesian conditions, see revised text and Figure 17 attached.

Comment 9. L.I.f. – Routine Sampling Frequency (Rule 62-701.510(6), F.A.C.).

a. The revision to Section 5.4.2 of the Hydrogeological Investigation does not account for the staggered schedule of monitor well installation as indicated in Section 5.3.1 of the Hydrogeological Investigation. Please review and revise as appropriate. (Submittal 2)

Response: Section 5.4.2 has been revised to account for the staggered schedule of well installation in Section 5.3.1, see attached text. Section 5.3.3 has been revised to specify those piezometers to be abandoned prior to landfill operation.

We trust that these revisions will satisfy the Department's comments and concerns and will allow for the approval of the applicable construction and operation permits for the facility. For your convenience, clean copies of the Engineering Report and Operations Plan and a complete set of plans will be submitted upon your notification that our application is complete.

Please call us if you have any questions or comments regarding this submittal, so that an additional request for information will not be required.

Very truly yours,

Hartman &Associates, Inc.

5/18/01

Jennifer L. Deal, E.I.
Engineer III

James E. Golden, P.G.
Senior Hydrogeologist/Associate

JEG/sas/99-331.01/Ph 1/corresp/Ford-3.jeg

Attachments

Addressee (3)

cc: Robert Butera, P.E., FDEP Tampa
Jon Larkin, SLS
John Morris, P.G., FDEP Tampa

ATTACHMENTS

SECTION 5

from 0 to 100 feet with an average thickness of about 25 feet. Borings performed on the proposed site indicate that the surficial aquifer thickness varies from 15 to 40 feet in the area of the proposed landfill.

Throughout most of Pasco County the surficial aquifer system is incapable of yielding sufficient quantities of water to be of potable or economic importance. This system is used primarily for lawn irrigation.

The water in the surficial aquifer system is generally of good quality with the exception of some areas with higher than recommended iron concentrations along the Withlacoochee River. Because this system is under unconfined conditions and receives recharge water directly from the surface.

Groundwater movement in the surficial aquifer system generally follows local and regional topographic features such as drainage swales, creeks, rivers, lakes, and wetlands. In the vicinity of the proposed landfill, the groundwater movement follows the topographic contours and is generally east toward the Withlacoochee River. The surficial aquifer at the adjacent Pasco County landfill generally flows to the north-northwest toward the slough to the west, see Appendix D.

Surficial aquifer water levels were measured on five events and, water table elevation contour maps depicting flow across the site were generated. Table 1 presents water level measurements and Figures 9, 10, 11, 11.1 and 11.2 show the estimated surficial aquifer groundwater flow direction for March 28, May 2, October 26, 2000, March 26, 2001 and May 7, 2001. The groundwater flow maps show a flow trend generally from west to east across the site. Currently, the surficial aquifer is dry above an elevation of about 130 feet NGVD on site. Our inferred (or dashed) water table contours on Figures 9, 10 and 11 represent extrapolated surficial aquifer water table conditions during wet periods.

Table 5-2 shows a summary of laboratory and field permeability test values from the site's sediments and at various depths within the aquifer. The average (arithmetic mean) horizontal hydraulic conductivity (K_H) value for the slug tests for the surficial aquifer is 2.99 ft/day. The K_H values from the slug tests were fairly consistent and ranged from 2.49 to 6.19 ft/day. The slug test K_H at piezometer P-3A was not included since it is screened in the confining layer. The vertical hydraulic conductivity (K_V) value at boring location B-5 (temporary pond location) for the unsaturated surficial sands was measured in the laboratory at 8.5 ft/day. The laboratory K_V

values for the confining unit within the surficial aquifer ranged from 2.15 x 10^{-5} to 7.60 x 10^{-3} ft/day. The geometric mean of these laboratory permeability K_V values is 1.5 x 10^{-4} ft/day, or 5.3 x 10^{-8} cm/sec, indicative of a confining layer. Appendix 5-B presents geotechnical laboratory reports, while calculations for the slug tests are located in Appendix 5-C.

The SHWT at the site was estimated to have an average elevation of +75 to 80 feet NGVD. Historical data from the nearby East Pasco Class I Landfill shows water table fluctuations as great as 10 to 15 feet between drought and wet years, see Appendix 5-D. Therefore, we estimate a typical seasonal water table fluctuation at the site of 5 to 10 feet, and a 10 to 15 feet of fluctuation between drought and wet years. An estimated SHWT contour map is depicted on Figure 12.

Due to the lack of the surficial aquifer groundwater elevations from the western edge of the site to the center, the eastern property map, Figure 11.1, was used for the purposes of calculating the hydraulic gradient and the average linear horizontal groundwater flow velocity, in the surficial aquifer across the site. The groundwater velocity was then calculated herein based on the average hydraulic conductivity value and the average hydraulic gradient across the site using the modified Darcian equation:

$$V_H = \frac{K_H i_H}{n_e}$$

where: V_H = *average horizontal groundwater velocity (ft/day);*
K_H = *average horizontal hydraulic conductivity (2.99 ft/day);*
i_H = *average horizontal gradient eastern (0.0017 ft/ft); and*
n_e = *effective porosity (25% - 45% range for sandy soils)*

The resultant V_H value for the surficial aquifer in the eastern portion of the property is:

$$V_H = \frac{2.99 \text{ ft/day } (0.0017)}{0.25} = 0.02 \text{ ft/day or } 7.3 \text{ ft/year}$$

$$V_H = \frac{2.99 \text{ ft/day } (0.0017)}{0.45} = 0.011 \text{ ft/day or } 4.1 \text{ ft/year}$$

Therefore, the estimated average surficial aquifer horizontal flow rate (arithmetric mean) across the site is approximately 5.7 ft/year. This rate will allow shallow monitoring wells to detect any groundwater quality standard exceedances through the proposed semi-annual sampling schedule.

intervals of 500 feet and the background wells by no more than 1500 feet within the landfill's setback area. Our proposed detection well phasing schedule follows:

1. Initial: background wells – MW-1, MW-1B
2. Cells 1 & 2 detection wells – MW 5-A, MW 5-B, MW-6, MW-7A, MW-7B, MW-8, MW-9, and MW-10
3. Prior to Landfilling in Cell 3: MW-11, MW-12A, MW-12B
4. Prior to Landfilling in Cell 5: MW-3 and MW-4
5. Prior to Landfilling in Cell 8: MW-14 and MW – 1A
6. Prior to Landfilling in Cell 9: MW-13
7. Prior to Landfilling in Cell 11: MW-2A and MW-2B

Background monitor well MW-1 is proposed to be abandoned prior to landfilling Cell 8. MW-1A would replace MW-1 upgradient during wet periods as the landfill moves to the west. Well MW-14 would be used to replace MW-1, if needed during dry periods. Surficial monitor well MW-13 also would be installed as the landfill moves west and the aquifer enters a wet season.

Although our geotechnical investigation revealed a 15 to 30 ft thick clay confining layer that consistently separates the base of the proposed landfill and surficial aquifer from the upper Floridan aquifer, Floridan aquifer wells are proposed as a prudent measure and to comply with Pasco County's monitoring requirements.

The landfill's Pasco County permit condition No. 29 requires two (2) upgradient (one shallow and one deep) monitoring wells and two downgradient (one shallow and one deep) prior to excavation. To comply with this condition, background monitor wells MW-1 (shallow) and MW-1B (deep), and well clusters MW-5A, MW-5B and MW-7A, MW-7B is proposed. As discussed in Section 5.2.4, the Floridan aquifer generally flows to the north-east and east across the site.

5.3.2 Monitoring Well Design and Installation

The proposed monitor wells will be installed by a Florida licensed water well contractor utilizing a 6-inch I.D. hollow stem auger. Prior to start of the day's activities and in between each monitor well installation, all drilling equipment will be steam cleaned and rinsed with potable water. Well construction details are based on field conditions encountered at the site during the geotechnical investigation conducted in March, 2000. Actual monitor well construction details will depend on field conditions encountered at the time of installation. Design details of proposed downgradient

grain analysis made the use of a 30-65 sand pack and 0.006" slot screen necessary to prevent the passage of very fine grained material into the proposed monitoring wells. The screen and filter pack recommendations for each detection well are also summarized in Table 4.

5.3.2.2 Monitoring Well Installation

The proposed monitor wells will be constructed of 2-inch diameter Schedule 40 PVC consisting of threaded and coupled flush joints. A sump a minimum of 2 ft in length and 2-inches in diameter will be connected to the bottom of the screen to accumulate sediment. No solvents or glues will be used during construction.

HAI proposes to use 20-foot, by 2-inch diameter, PVC Schedule 40 screens for the new surficial aquifer wells at the water table. This screen length was chosen to provide some interception of saturated aquifer thickness in the wells during drought conditions. However, the total depth of the surficial monitor wells will not breach the confining layer. This length should be sufficient as water level information from the adjacent East Pasco Co Landfill indicates the water table fluctuates as much as 10 to 15 feet between seasonal high and low levels. The filter pack previously designed will be installed to 2 ft above the screened interval and have a minimum 2-inch annular space. A 3-foot 60/45 fine sand seal will be placed above the filter pack to effectively seal any surface flow into the screened area. Cement grout containing 2 to 4 percent bentonite will occupy the remaining annular space to ground surface. The annular space between the drilled hole and the monitoring well casing shall be backfilled with 2 to 4 percent bentonite, cement grout from the top of the 60/45 fine sand seal to ground surface. The tremie pipe method will be used to grout the well annulus.

An aluminum locking protective casing and concrete pad will be installed around each proposed monitor wells. The protective casing shall be a minimum of six inches in diameter, five feet in length, and extend above the top of the monitor well cap two inches. The dimensions of the concrete pad poured around the protective casing, at ground surface, will be 2 ft by 2 ft by 6 in thick. The surficial aquifer monitor wells will be developed by a 2-inch stainless steel submersible pump until turbidity values are below 20 NTUs, and other field parameters are stabilized.

5.3.2.3 Floridan Monitoring Well Installation

The Floridan aquifer wells MW-1B, MW-2B, MW-5B, MW-7B, and MW-12B will be constructed to prohibit the interconnection between the surficial and Floridan aquifer waters. The wells will have a 2-inch diameter, schedule 40 PVC flush-threaded casing with a 10 to 15-foot, 2-inch diameter, 0.01 inch slotted well screen. A neat cement grout mixture, with up to 6 percent bentonite content, will be used to fill the 2-inch annulus. A bentonite or fine sand seal will be placed above the open hole in the Floridan to prevent cement contamination. The wells will be finished with a 2 x 2 foot concrete pad and a 6-inch lockable galvanized steel well protector.

Upon completion, the top of casing elevation will be surveyed and tied into the other existing piezometers and monitoring wells elevation survey on the site. Development of the wells will consist of air-lifting and pumping with a small submersible pump until the water is clear (below 20 NTUs). See Figure 17 for proposed well design details. Permanent Floridan monitor wells MW-1B (P-1A) and MW-7B (P-12) were installed in March, 2001 as part of the hydrogeologic investigation. The wells were completed as proposed on Figure 17, see Appendix 5-A for driller's logs. Well completion reports for these wells will be submitted in the next 30 days.

All proposed monitor wells will have an identification number clearly and permanently marked on the outside of each protective casing. The elevation of each of the monitor well's measuring point (top of casing) and concrete pad will be surveyed to 0.01 ft NGVD.

5.3.3 Monitoring Well and Piezometer Abandonment

Any monitor wells and piezometers, which require abandonment due to damage or landfill expansion will be plugged with cement grout in accordance with Department requirements upon notification in writing. Specifically, piezometers P-3, P-3A, P-3B, P-5, P-9 and P-13 will be properly abandoned prior to landfill operation. The remaining piezometers will be used to augment ongoing water level measurements on the site.

5.4 SAMPLING AND ANALYSIS PLAN

5.4.1 Quality Assurance

A site specific quality assurance plan is not required for a solid waste facility compliance sampling per rule FAC 62-160.300(7). Therefore, all monitor well sampling and laboratory analyses will be conducted pursuant to FDEP standard procedures.

Within 90 days of the effective date of this permit, the owner will submit to Pasco County and the FDEP, documents certifying that the organization(s) and laboratory(s) performing the sampling and analysis have an FDEP approved Comprehensive Quality Assurance Plan (CompQAP) in which they are approved for the sampling and analysis intended to be used for the compliance actions at the site. The documentation shall, at a minimum contain the Title Page and Table of Contents of the approved CompQAP meeting the requirements of Rule 62-160, F.A.C. If the organization(s) or laboratory(s) performing the sampling and analysis change at any time during the compliance actions, documentation of their FDEP Approved CompQAP will be required. If at any time sampling and analysis are to be conducted which are not in the approved CompQAP, documentation of amendments and approvals pursuant to Rule 62-160.210, F.A.C. shall be required. HAI's letter of approved CompQAP No. 950504 is presented in Appendix 5-G.

5.4.2 Background Water Quality

Background groundwater quality will be determined by an analysis of one water sample taken from each of the proposed initial phase monitor wells per Section 5.3.1. The results of this initial sampling event will be submitted to the FDEP and Pasco County to support the permit application prior to the receipt of any solid wastes. The initial background sampling event will be for the parameters listed below.

Background Water Quality Parameters	
Field parameters	Laboratory parameters
Static water level in wells before purging	Total ammonia – N
Specific conductance	Bicarbonate
ph	Chlorides
Dissolved oxygen	Iron
Turbidity	Mercury
Temperature	Nitrate
Colors and sheens (by observation)	Sodium
	Total dissolved solids (TDS)
	Those parameters listed in 40 CFR Part 258 Appendix I and 40 CFR Part 258 Appendix II.

Background water quality sampling and analysis to meet Pasco County conditions will also be conducted on wells MW-1 and MW-1B.

TABLE 5-2

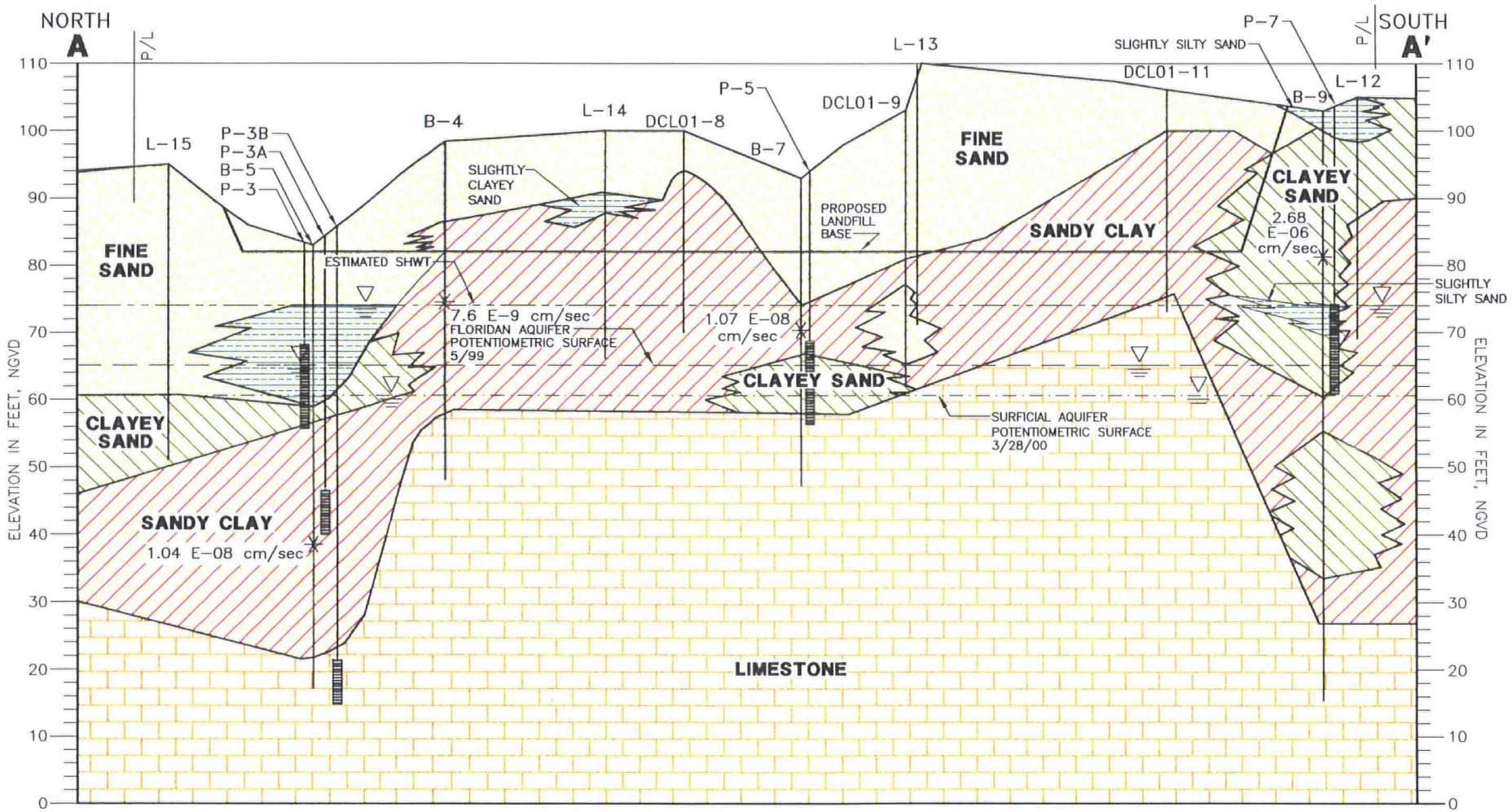
LABORATORY AND FIELD PERMEABILITY TEST VALUES
PROPOSED ENTERPRISE RECYCLING AND DISPOSAL FACILITY
DADE CITY, FLORIDA

Boring/Piezometer	Field Slug Test Horizontal Hydraulic Conductivity (ft/day)	(cm/sec)	Test Interval (ft NGVD)	Laboratory Permeability Test Vertical Hydraulic Conductivity (ft/day)	(cm/sec)
P-2 (B-3)	2.49*	8.77E-04	55-70	—	—
P-3 (B-5)	6.19*	2.18E-03	50-65	—	—
P-3A (B-5)	0.30*	1.05E-04	33-38	—	—
P-5 (B-7)	1.12	3.95E-04	55-70	—	—
P-7 (B-9)	2.64*	9.30E-04	58-73	—	—
P-8 (B-10)	2.61	9.19E-04	58-73	—	—
B-2	—	—	92	7.01E-05	2.47E-08
B-3	—	—	71	1.87E-04	6.60E-08
B-4	—	—	73	2.15E-05	7.58E-09
P-3B (B-5)@Pond	—	—	64	8.50	2.99E-03
B-5	—	—	38	2.94E-05	1.04E-08
B-6	—	—	66	4.20E-04	1.48E-07
B-6	—	—	61	1.45E-04	5.11E-08
B-7	—	—	70	3.02E-05	1.07E-08
B-8	—	—	68	3.70E-03	1.31E-08
B-9	—	—	81	7.60E-03	2.68E-06
B-10	—	—	81	2.94E-05	1.04E-08
B-15	—	—	-36	8.43E-04	2.97E-07
B-16	—	—	8	1.29E-03	4.55E-07

*Recalculated 3/01

P-5 Slug-in test only

FIGURES



✳ LABORATORY VERTICAL PERMEABILITY VALUES.

CLAYEY SAND

SANDY CLAY TO CLAY

LIMESTONE

FINE TO VF SAND

SILTY SAND

B-4 BORING

P-3 PIEZOMETER

0 87.5 175 350

APPROX. HORIZONTAL SCALE, FEET

99-331.01/PHASE5/33101121/5/8/01

FIGURE 5

HARTMAN & ASSOCIATES, INC.

engineers, hydrogeologists, surveyors & management consultants

201 EAST PINE STREET – SUITE 1000 – ORLANDO, FL 32801
TELEPHONE (407) 839-3955 – FAX (407) 839-3790

GEOLOGIC CROSS SECTION A - A'
PROPOSED ENTERPRISE RECYCLING AND DISPOSAL FACILITY
DADE CITY, FLORIDA

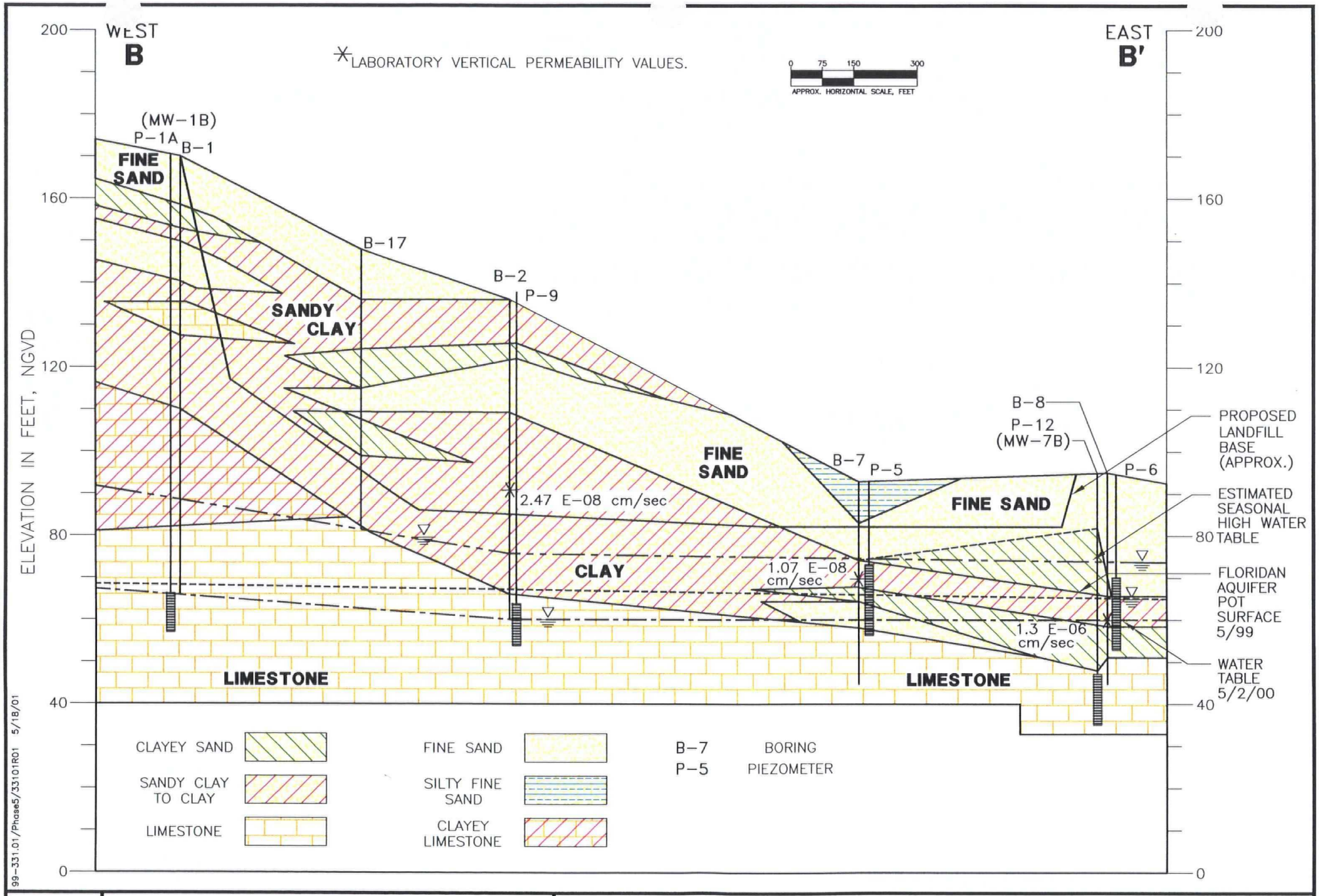
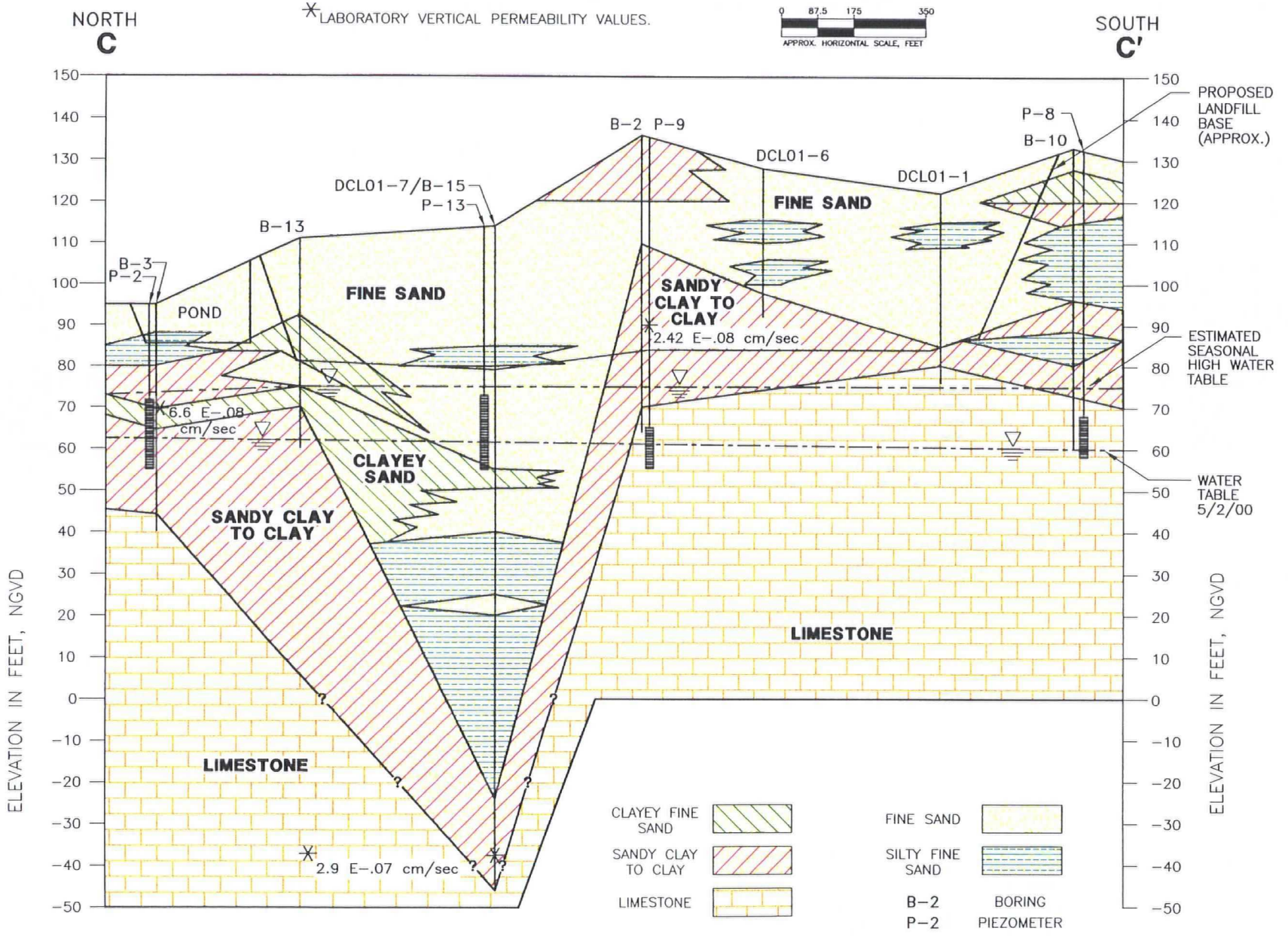


FIGURE 6

HARTMAN & ASSOCIATES, INC.
engineers, hydrogeologists, surveyors & management consultants
201 EAST PINE STREET – SUITE 1000 – ORLANDO, FL 32801
TELEPHONE (407) 839-3955 – FAX (407) 839-3790

GEOLOGIC CROSS SECTION B - B'
PROPOSED ENTERPRISE RECYCLING AND DISPOSAL FACILITY
DADE CITY, FLORIDA

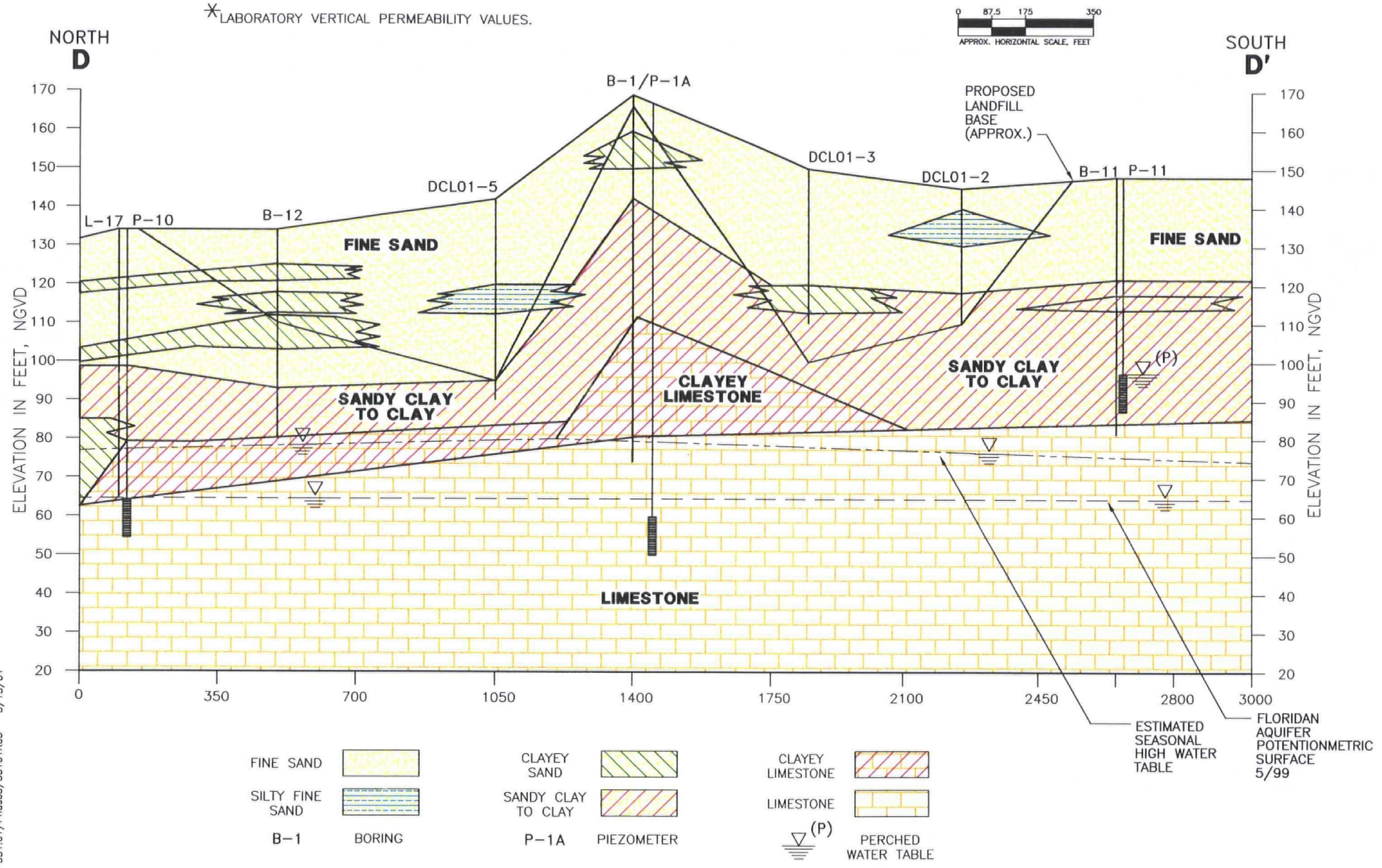


99-331.01/Phase5/33101R02 5/8/01

FIGURE 6.1

HARTMAN & ASSOCIATES, INC.
engineers, hydrogeologists, surveyors & management consultants
201 EAST PINE STREET – SUITE 1000 – ORLANDO, FL 32801
TELEPHONE (407) 839-3955 – FAX (407) 839-3790

GEOLOGIC CROSS SECTION C - C'
PROPOSED ENTERPRISE RECYCLING AND DISPOSAL FACILITY
DADE CITY, FLORIDA

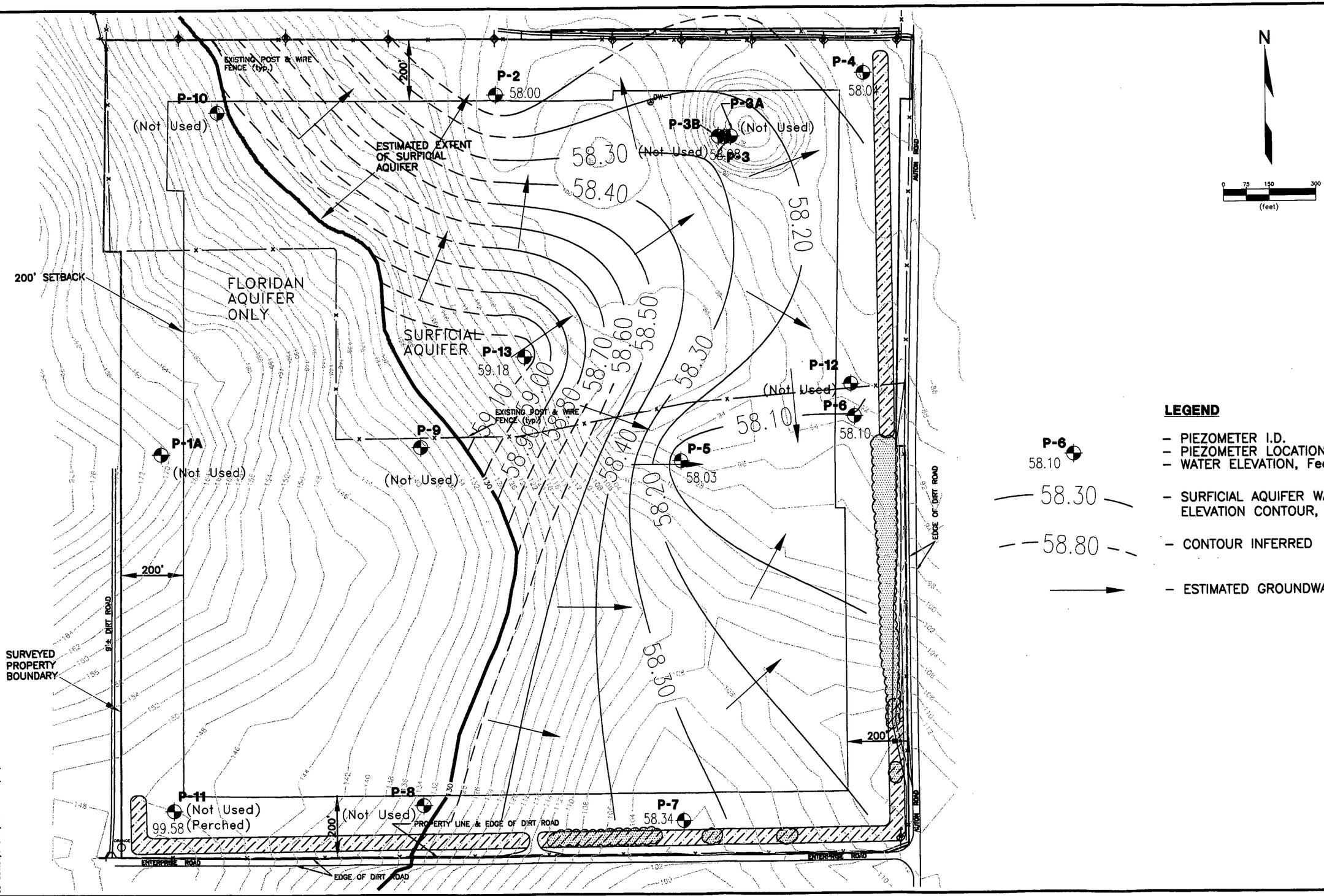


99-331.01/Phase5/33101R03 5/15/01

FIGURE 6.2

HARTMAN & ASSOCIATES, INC.
engineers, hydrogeologists, surveyors & management consultants
201 EAST PINE STREET – SUITE 1000 – ORLANDO, FL 32801
TELEPHONE (407) 839-3955 – FAX (407) 839-3790

GEOLOGIC CROSS SECTION D - D'
PROPOSED ENTERPRISE RECYCLING AND DISPOSAL FACILITY
DADE CITY, FLORIDA

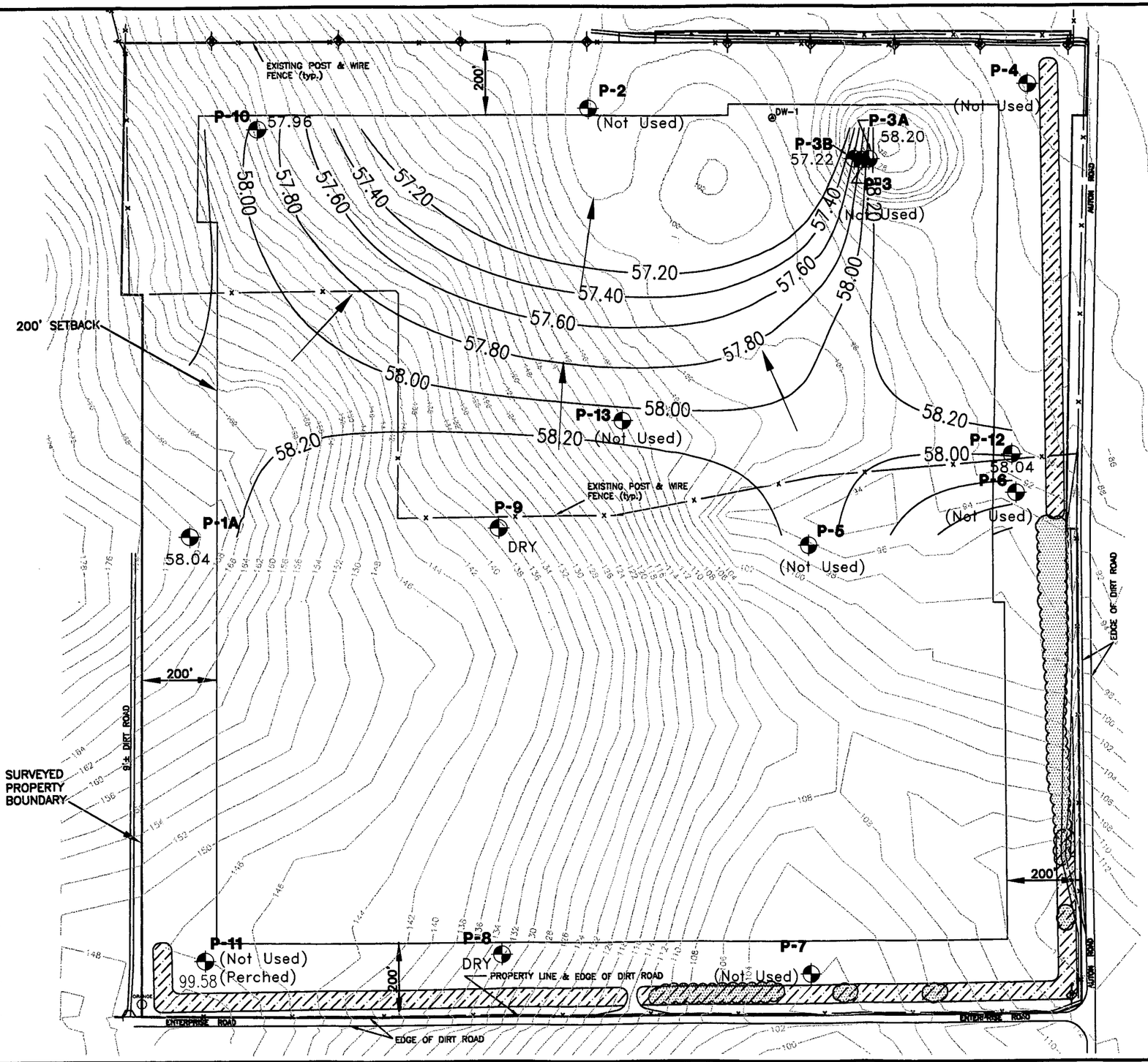


99-331.01/Phase5/3310INO8 5/15/01

HARTMAN & ASSOCIATES, INC.
engineers, hydrogeologists, surveyors & management consultants
201 EAST PINE STREET – SUITE 1000 – ORLANDO, FL 32801
TELEPHONE (407) 839-3955 – FAX (407) 839-3790

SURFICIAL WATER TABLE ELEVATION MAP, 5/8/01
PROPOSED ENTERPRISE RECYCLING AND DISPOSAL FACILITY
DADE CITY, FLORIDA

FIGURE 11.2



LEGEND

P-12 – PIEZOMETER I.D.
– PIEZOMETER LOCATION
– WATER ELEVATION, Feet NGVD

58.00 – FLORIDAN AQUIFER POTENTIOMETRIC SURFACE ELEVATION CONTOUR, 5/8/01, (ft. NGVD)

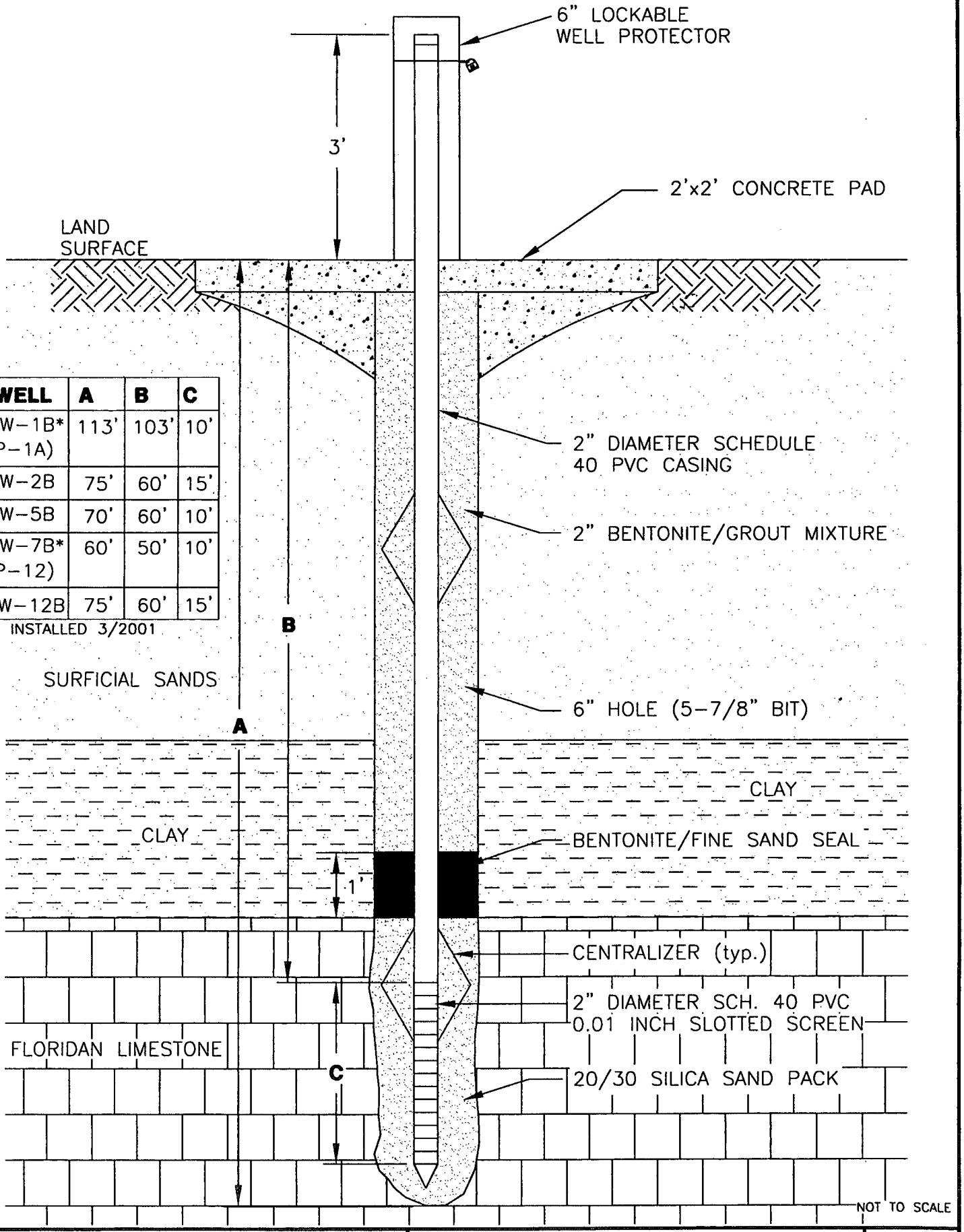
– ESTIMATED GROUNDWATER FLOW DIRECTION

99-331.01/Phase5/3310IN10 5/15/01

HARTMAN & ASSOCIATES, INC.
engineers, hydrogeologists, surveyors & management consultants
201 EAST PINE STREET – SUITE 1000 – ORLANDO, FL 32801
TELEPHONE (407) 839-3955 – FAX (407) 839-3790

FLORIDAN AQUIFER POTENTIOMETRIC SURFACE ELEVATION MAP, 5/8/01
PROPOSED ENTERPRISE RECYCLING AND DISPOSAL FACILITY
DADE CITY, FLORIDA

FIGURE 14.2



WELL	A	B	C
MW-1B* (P-1A)	113'	103'	10'
MW-2B	75'	60'	15'
MW-5B	70'	60'	10'
MW-7B* (P-12)	60'	50'	10'
MW-12B	75'	60'	15'

INSTALLED 3/2001

R:\...DWG\1999\99\331.01\PHASES\33101N04 5\10\01

HARTMAN & ASSOCIATES, INC.
engineers, hydrogeologists, surveyors & management consultants
201 EAST PINE STREET - SUITE 1000 - ORLANDO, FL 32801
TELEPHONE (407) 839-3955 - FAX (407) 839-3790

FLORIDAN MONITOR WELL DESIGN
PROPOSED ENTERPRISE RECYCLING AND DISPOSAL FACILITY
DADE CITY, FLORIDA

FIGURE 17

APPENDIX 5-A

SOIL BORING LOG - 18" DRIVE

UNIVERSAL ENGINEERING SCIENCES, INC.
5804 Breckenridge Parkway, Suite E
Tampa, Florida 33610
Phn: (813) 740-8506 Fax: (813) 740-8706

File No: _____ Sheet #: ONE of 3
Boring #: D-10B Total Depth: _____
Date Started: 5/10/01 Date Finished: 5/10
Driller: UP Rig: CME 45
Boring Type: Auger Elevation: _____
Casing Length: _____ Type: _____
Water Table Depth: 1st _____ Date: _____
Water Table Depth: 2nd _____ Date: _____

Project Name: Dade City Landfill
Client Name: _____
Boring Location: _____
Remarks: _____

Depth (ft.)	Blows per 6" Increment	N value (bpf)	Sample No.	Soil Description
0				Brn SA w/ ROOTS
				5.0'
5				LT Brn SILTY SAND (H.P. Type)
				11.0'
10				Yell Brn Clayey SAND w/ PODS
				17.5'
15				Yell Brn SILTY SAND
20				
25				
30				

SOIL BORING LOG - 18" DRIVE

UNIVERSAL ENGINEERING SCIENCES, INC.
5804 Breckenridge Parkway, Suite E
Tampa, Florida 33610
Phn: (813) 740-8506 Fax: (813) 740-8706

File No:_____ Sheet #: 2 of 3
Boring #: P-10 B Total Depth: 65'
Date Started: 5/10 Date Finished: 5/10
Driller: LP Rig: Cme 45
Boring Type: Auger Elevation:_____
Casing Length: 1 Type:_____
Water Table Depth: 1st_____ Date:_____
Water Table Depth: 2nd_____ Date:_____

Project Name: DADE City LANDFILL
Client Name:_____
Boring Location:_____
Remarks:_____

Depth (ft.)	Blows per 6" Increment	N value (bpf)	Sample No.	Soil Description
				— 32.5' LT BRN yell BR CLAYSAND SAND clay
35				— 37.5'
40				LT GREY wl yell BR SANDY clay wl TRACES of Limerock
45				
50				— 49.0' ~~VERY LT BRN CLAYEY SAND w/ LIMEROCK~~ LIMESTONE
55				55.0' E.O.B.
60				

SOIL BORING LOG - 18" DRIVE

UNIVERSAL ENGINEERING SCIENCES, INC.
5804 Breckenridge Parkway, Suite E
Tampa, Florida 33610
Phn: (813) 740-8506 Fax: (813) 740-8706

File No: _____ Sheet #: ONE of 3
Boring #: P-11 B Total Depth: 65'
Date Started: 5/10 Date Finished: 5/10
Driller: UP Rig: CME 95
Boring Type: AUGER Elevation: _____
Casing Length: _____ Type: _____
Water Table Depth: 1st _____ Date: _____
Water Table Depth: 2nd _____ Date: _____

Project Name: DADE City Landfill
Client Name: _____
Boring Location: S'S OF P11
Remarks: _____

Depth (ft.)	Blows per 6" Increment	N value (bpf)	Sample No.	Soil Description
				(SEE TH-1 LOG FOR TOP 40')
5				
10				
15				
20				
25				
30				

SOIL BORING LOG - 18" DRIVE

UNIVERSAL ENGINEERING SCIENCES, INC.
5804 Breckenridge Parkway, Suite E
Tampa, Florida 33610
Phn: (813) 740-8506 Fax: (813) 740-8706

File No: _____ Sheet #: 2 of 3
Boring #: P-11 B Total Depth: 65'
Date Started: 5/10/01 Date Finished: 5/10/01
Driller: Terrace Rig: CME 45
Boring Type: Auger Elevation: _____
Casing Length: _____ Type: _____
Water Table Depth: 1st _____ Date: _____
Water Table Depth: 2nd _____ Date: _____

Project Name: Dade City Landfill
Client Name: _____
Boring Location: _____
Remarks: _____

Depth (ft.)	Blows per 6" Increment	N value (bpf)	Sample No.	Soil Description
35				
40				
45				Yell brn SANDY CL w/ TRACES OF limerock
				—47.0'
50				Yell brn clayey silty sand w/ PHOS.
				— 54.0'
55				LT BRN & yell brn sandy CL w/ clayey sand w/ limerock
60				

SOIL BORING LOG - 18" DRIVE

UNIVERSAL ENGINEERING SCIENCES, INC.
5804 Breckenridge Parkway, Suite E
Tampa, Florida 33610
Phn: (813) 740-8506 Fax: (813) 740-8706

File No: _____ Sheet #: 3 of 3
Boring #: P11B Total Depth: 65'
Date Started: 5/10/01 Date Finished: 5/10/01
Driller: LP. Rig: CME 45
Boring Type: Auger Elevation: _____
Casing Length: _____ Type: _____
Water Table Depth: 1st _____ Date: _____
Water Table Depth: 2nd _____ Date: _____

Project Name: Dade City Landfill
Client Name: _____
Boring Location: _____
Remarks: _____

Depth (ft.)	Blows per 6" Increment	N value (bpf)	Sample No.	Soil Description
				63'
65				LT BR Sandy Limestone
				65.0' EOB
70				
75				
0				
5				
0				

SOIL BORING LOG - 18" DRIVE

UNIVERSAL ENGINEERING SCIENCES, INC.
5804 Breckenridge Parkway, Suite E
Tampa, Florida 33610
Phn: (813) 740-8506 Fax: (813) 740-8706

File No:_____ Sheet #: ONE of 2
Boring #: MW P-12 Total Depth: 60'
Date Started: 3-8-01 Date Finished: 3-9-01
Driller: LPLINCE Rig: CME 45
Boring Type: WASH Elevation:_____
Casing Length: None Type:_____
Water Table Depth: 1st 53± Date:_____
Water Table Depth: 2nd_____ Date:_____

Project Name: Dade City Land Fill
Client Name:_____
Boring Location: Staked by CLIENT
Remarks: installed MW @ 60' 10' SCREEN

Depth (ft.)	Blows per 6" Increment	N value (bpf)	Sample No.	Soil Description
0				Grey SAND
				-3.0'
				YELL BR SAND
5				
				-8.0'
				~~YELL BR CLAY SAND/SANDY CL~~ LIMESTONE
10				
15				
20				
25				
30				

SOIL BORING LOG - 18' DRIVE

UNIVERSAL ENGINEERING SCIENCES, INC.
5804 Breckenridge Parkway, Suite E
Tampa, Florida 33610
Phn: (813) 740-8506 Fax: (813) 740-8706

File No:_____ Sheet #: 2 of 2
Boring #: MW P-12 Total Depth: 60'
Date Started: 3-8-01 Date Finished: 3-9-01
Driller: LP Rig: CME 45
Boring Type: WASH Elevation:_____
Casing Length:_____ Type:_____
Water Table Depth: 1st_____ Date:_____
Water Table Depth: 2nd_____ Date:_____

Project Name: DADE City Land Fill
Client Name:_____
Boring Location:_____
Remarks:_____

Depth (ft.)	Blows per 6" Increment	N value (bpf)	Sample No.	Soil Description
35				35.0' ±
				LT Grey CLAY SA/SANDY CL.
40				
				42.0' - 48.0' LOSS H_2O
45				
50				LT BR CLAY SILT w/LIMEROCK
				SCREEN
55				
60				LOG 60.0'

SOIL BORING LOG - 18" DRIVE

UNIVERSAL ENGINEERING SCIENCES, INC.
5804 Breckenridge Parkway, Suite E
Tampa, Florida 33610
Phn: (813) 740-8506 Fax: (813) 740-8706

File No: _____ Sheet #: ONE of 4
Boring #: MW-D1A Total Depth: 115'
Date Started: 3-9-01 Date Finished: 3-11-01
Driller: Ulrich Rig: CME-45
Boring Type: HSA Elevation: _____
Casing Length: _____ Type: _____
Water Table Depth: 1st _____ Date: _____
Water Table Depth: 2nd _____ Date: _____

Project Name: Dade City Landfill
Client Name: _____
Boring Location: Located by Client
Remarks: Install MW @ 113' w/10' screen

Depth (ft.)	Blows per 6" Increment	N value (bpf)	Sample No.	Soil Description
0				Grey SAND
				-3.0'
				Yell bn SAND
5				
				-8.0'
				Yell bn Clay SAND / SAND
				CLAYS
10				
15				
20				
25				
30				

SOIL BORING LOG - 18" DRIVE

UNIVERSAL ENGINEERING SCIENCES, INC.
5804 Breckenridge Parkway, Suite E
Tampa, Florida 33610
Phn: (813) 740-8506 Fax: (813) 740-8706

File No: _____ Sheet #: 2 of 4
Boring #: MW PIA Total Depth: 115'
Date Started: 3-9-01 Date Finished: 3-11-01
Driller: LPRINCE Rig: CME 45
Boring Type: WOSH Elevation: _____
Casing Length: _____ Type: _____
Water Table Depth: 1st _____ Date: _____
Water Table Depth: 2nd _____ Date: _____

Project Name: DADE City LANDFILL
Client Name: _____
Boring Location: LOCATED BY CLIENT
Remarks: _____

Depth (ft.)	Blows per 6" Increment	N value (bpf)	Sample No.	Soil Description
35				
40				
45				45.0'
50				LT BE CLAYEY SAND / SA CLAYS
55				
60				

SOIL BORING LOG - 18" DRIVE

UNIVERSAL ENGINEERING SCIENCES, INC.
5804 Breckenridge Parkway, Suite E
Tampa, Florida 33610
Phn: (813) 740-8506 Fax: (813) 740-8706

File No:_____ Sheet #: 3 of 4
Boring #: MW-P1A Total Depth: 115'
Date Started: 3-8-01 Date Finished: 3-11-01
Driller: L Pence Rig:_____
Boring Type:_____ Elevation:_____
Casing Length:_____ Type:_____
Water Table Depth:1st_____ Date:_____
Water Table Depth:2nd_____ Date:_____

Project Name: Dade City Land Fill
Client Name:_____
Boring Location: Located By Client
Remarks:_____

Depth (ft.)	Blows per 6" Increment	N value (bpf)	Sample No.	Soil Description
65				65.0'
				~~LT BL clAyey SLST wT LIMEROCK~~ LIMESTONE
70				
75				
80				
85				
90				

SOIL BORING LOG - 18" DRIVE

UNIVERSAL ENGINEERING SCIENCES, INC.
5804 Breckenridge Parkway, Suite E
Tampa, Florida 33610
Phn: (813) 740-8506 Fax: (813) 740-8706

File No: _____ Sheet #: 4 of 4
Boring #: MW PIA Total Depth: 115'
Date Started: 3-8-01 Date Finished: 3-11-01
Driller: Ulmer Rig: CME 75
Boring Type: WASH Elevation: _____
Casing Length: _____ Type: _____
Water Table Depth: 1st _____ Date: _____
Water Table Depth: 2nd _____ Date: _____

Project Name: Dade City LANDFILL
Client Name: _____
Boring Location: Located by Client
Remarks: _____

Depth (ft.)	Blows per 6" Increment	N value (bpf)	Sample No.	Soil Description
95				95.0' (LOSS H2O)
				SCREEN
100				
115				115.0
0				
5				
0				

PROFESSIONAL LICENSES

AC# 0016630

STATE OF FLORIDA

DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
BOARD OF PROFESSIONAL GEOLOGISTS

SEQ# 01032300361

DATE	BATCH NUMBER	LICENSE NBR
03/23/2001	00024530	PG -0002138

The PROFESSIONAL GEOLOGIST
Named below IS LICENSED
Under the provisions of Chapter 492 FS.
Expiration date: JUL 31, 2002

DAVIS, VALERIE COLLINS
HARTMAN & ASSOCIATES INC
201 E PINE ST STE 1000
ORLANDO FL 32801

JEB BUSH
GOVERNOR

DISPLAY AS REQUIRED BY LAW

KIM BINKLEY-SEYER
SECRETARY

AC# 5857126

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
BOARD OF PROFESSIONAL GEOLOGISTS

DATE	BATCH NUMBER	LICENSE NBR
04/24/2000	99902024	PG -0002093

The PROFESSIONAL GEOLOGIST
Named below IS LICENSED
Under the provisions of Chapter 492 FS.
Expiration date: JUL 31, 2002

BULMER, WILLIAM H
11351 LAST CHANCE RD
CLERMONT FL 34711

JEB BUSH
GOVERNOR

DISPLAY AS REQUIRED BY LAW

CYNTHIA A. HENDERSON
SECRETARY

AC# 5904913

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
BOARD OF PROFESSIONAL GEOLOGISTS

DATE	BATCH NUMBER	LICENSE NBR
07/07/2000	00900073	PG -0000945

The PROFESSIONAL GEOLOGIST
Named below IS LICENSED
Under the provisions of Chapter 492 FS.
Expiration date: JUL 31, 2002

GOLDEN, JAMES EDWARD
1022 FEATHERSTONE CIRCLE
OCOEE FL 34761

JEB BUSH
GOVERNOR

DISPLAY AS REQUIRED BY LAW

CYNTHIA A. HENDERSON
SECRETARY

APPLICATION PAGE

T. **CERTIFICATION BY APPLICANT AND ENGINEER OR PUBLIC OFFICER**

A. Applicant

The undersigned applicant or authorized representative of Sid Larkin and Son, Inc. is aware that statements made in this form and attached information are an application for a Class III Landfill Permit from the Florida Department of Environmental Regulation and certifies that the information in this application is true, correct and complete to the beat of his knowledge and belief. Further, the undersigned agrees to comply with the provisions of Chapter 403, Florida Statutes, and all rules and regulations of the Department. It is understood that the Permit is not transferable, and the Department will be notified prior to the sale or legal transfer of the permitted facility.

Signature of Applicant or Agent

Jon Larkin, Owner
Name and Title

Date: 4-15-01

Attach letter of authorization if agent is not a governmental official, owner, or corporate officer.

B. Professional Engineer Registered in Florida or Public Officer as required in Sections 403.707 and 403.707(5), Florida Statutes.

This is to certify that the engineering features of this solid waste management facility have been designed/examined by me and found to conform to engineering principles applicable to such facilities. In my professional judgement, this facility, when properly maintained and operated, will comply with all applicable statutes of the State of Florida and rules of the Department. It is agreed that the undersigned will provide the applicant with a set of instructions of proper maintenance and operation of the facility.

Signature

201 E. Pine St. Suite 1000
Mailing Address

Roderick K. Cashe, P.E.
Name and Title (please type)

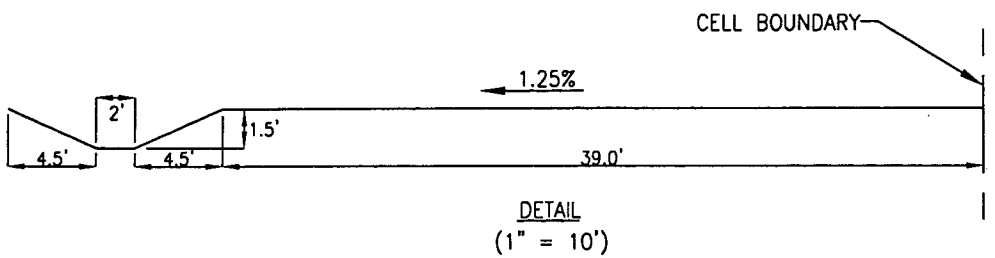
Orlando, FL 32801
City, State, Zip Code

45169
Florida Registration Number
(please affix seal)

(407) 839-3955
Telephone Number

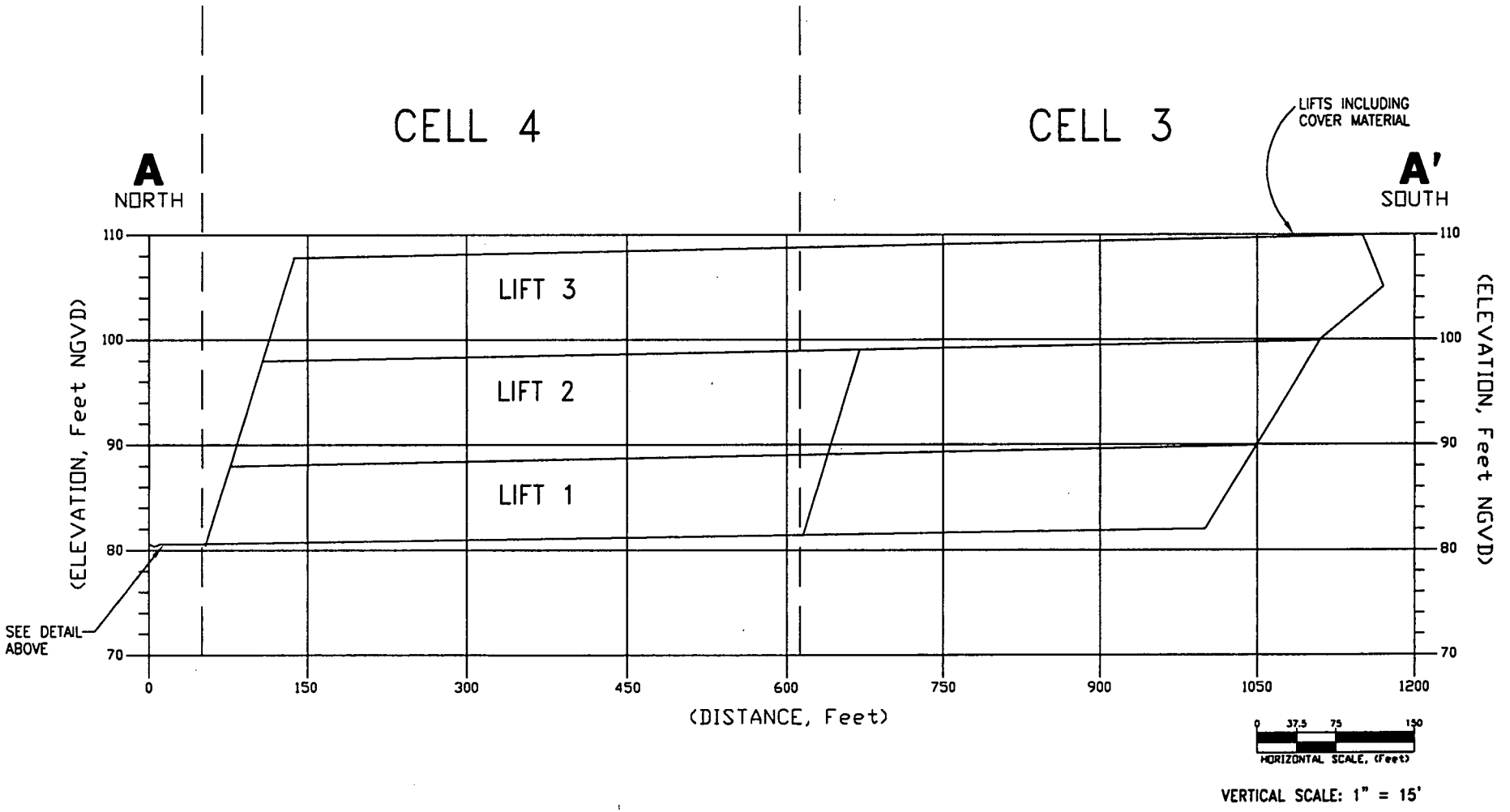
Date: 5/17/01

APPENDIX G



DETAIL
(1" = 10')

Note:
1. Lifts will be graded slightly to promote stormwater runoff to the swale.
2. Lift grading shown is approximate.



VERTICAL SCALE: 1" = 15'

N:\CAD\DWG\1999\99-331.01\PHASE1\3310138

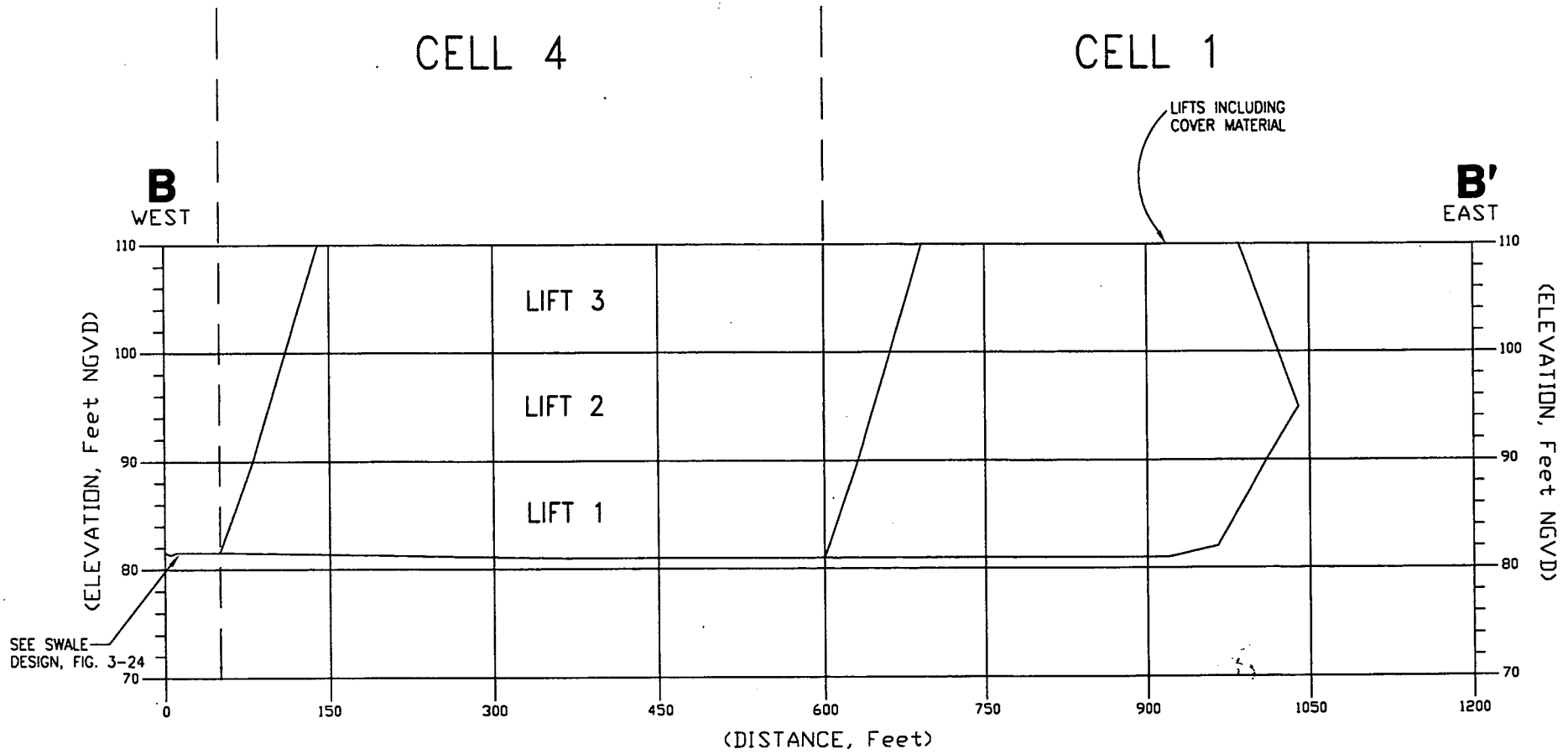
FIGURE 3-24

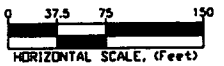
HARTMAN & ASSOCIATES, INC.
engineers, hydrogeologists, surveyors & management consultants
201 EAST PINE STREET - SUITE 1000 - ORLANDO, FL 32801
TELEPHONE (407) 839-3955 - FAX (407) 839-3790

NORTH-SOUTH CROSS-SECTION SEQUENCE 1
PROPOSED ENTERPRISE RECYCLING AND DISPOSAL FACILITY
DADE CITY, FLORIDA

Notes:
1. Lifts will be graded slightly to promote stormwater runoff towards the north, the direction of the swale and temporary stormwater pond

2. Grading in the north-south direction is not shown on the east-west cross-section





VERTICAL SCALE: 1" = 15'

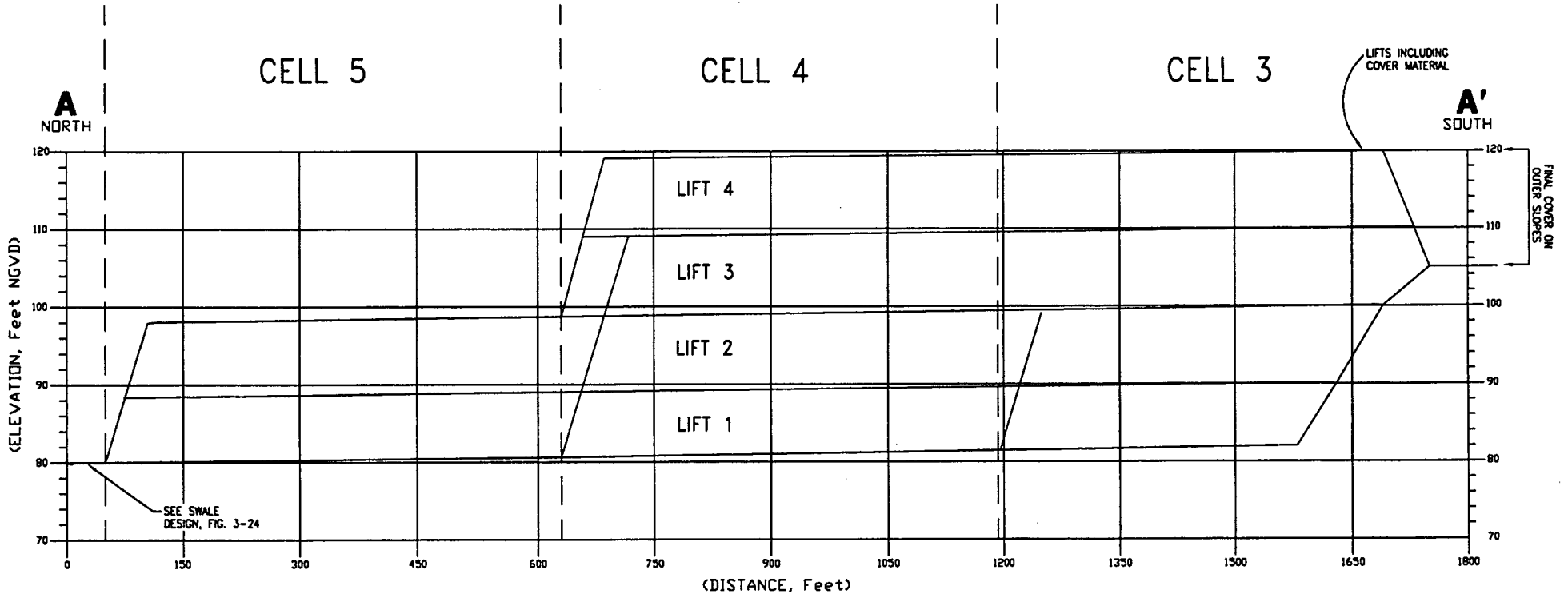
N:\CAD\DWG\1999\99-331.01\PHASE1\3310139

FIGURE 3-25

HARTMAN & ASSOCIATES, INC.
engineers, hydrogeologists, surveyors & management consultants
201 EAST PINE STREET - SUITE 1000 - ORLANDO, FL 32801
TELEPHONE (407) 839-3955 - FAX (407) 839-3790

WEST-EAST CROSS-SECTION SEQUENCE 1
PROPOSED ENTERPRISE RECYCLING AND DISPOSAL FACILITY
DADE CITY, FLORIDA

Note:
1. Lifts will be graded slightly to promote stormwater runoff to the swale.
2. Lift grading shown is approximate.



0 50 100 200
HORIZONTAL SCALE, (Feet)

VERTICAL SCALE: 1" = 20'

N:\CAD\DWG\1999\99-331.01\PHASE1\3310140

FIGURE 3-26

HARTMAN & ASSOCIATES, INC.
engineers, hydrogeologists, surveyors & management consultants
201 EAST PINE STREET - SUITE 1000 - ORLANDO, FL 32801
TELEPHONE (407) 839-3955 - FAX (407) 839-3790

NORTH-SOUTH CROSS-SECTION SEQUENCE 2
PROPOSED ENTERPRISE RECYCLING AND DISPOSAL FACILITY
DADE CITY, FLORIDA

Notes:
1. Lifts will be graded slightly to promote stormwater runoff towards the north, the direction of the swale and temporary stormwater pond

2. Grading in the north-south direction is not shown on the east-west cross-section

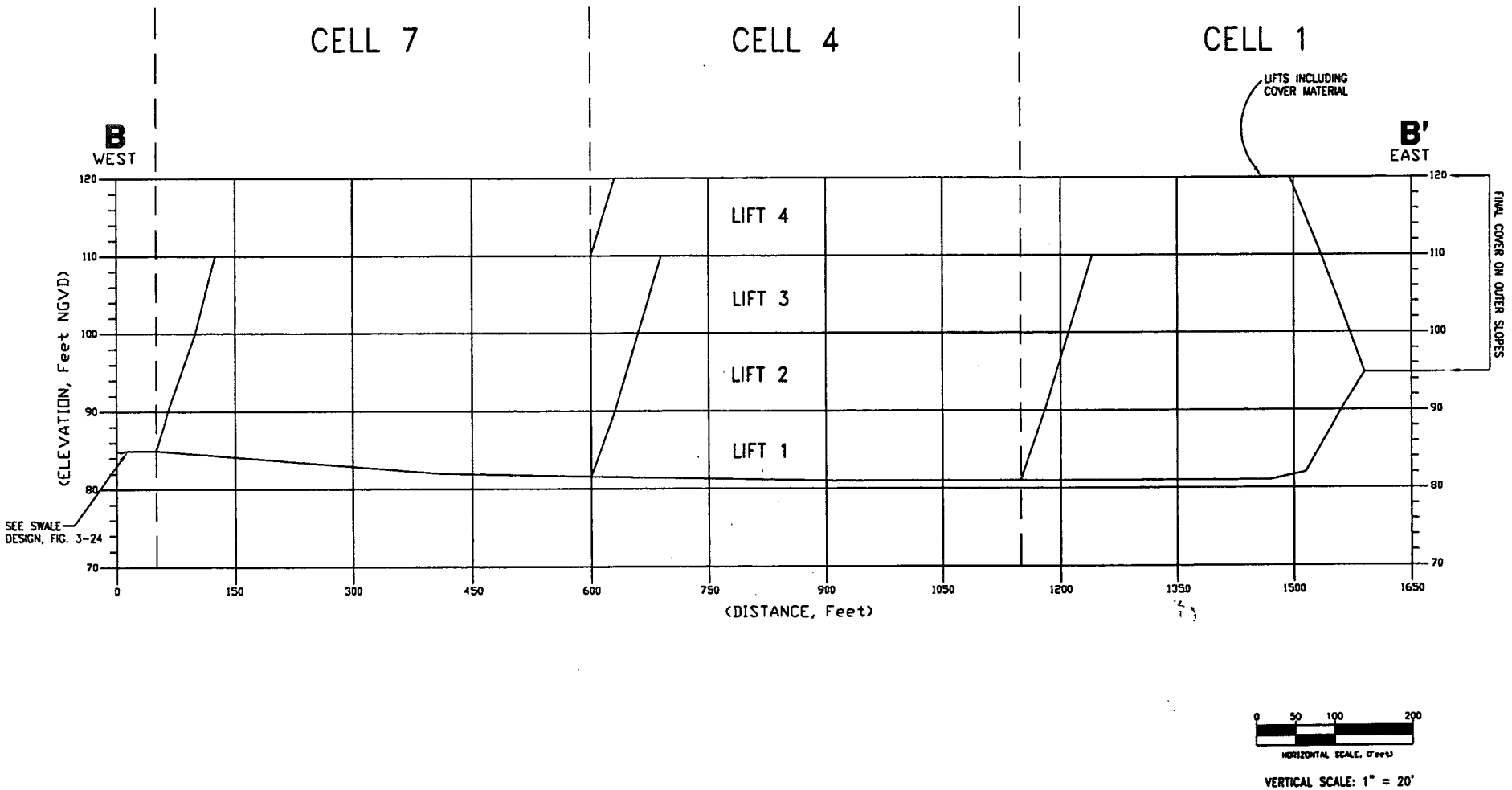


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FIGURE 3-27

HARTMAN & ASSOCIATES, INC.
engineers, hydrogeologists, surveyors & management consultants
201 EAST PINE STREET - SUITE 1000 - ORLANDO, FL 32801
TELEPHONE (407) 839-3955 - FAX (407) 839-3790

WEST-EAST CROSS-SECTION SEQUENCE 2
PROPOSED ENTERPRISE RECYCLING AND DISPOSAL FACILITY
DADE CITY, FLORIDA

AGREEMENTS

A·C·T *Environmental • Consulting • Emergency Response • Contracting • Health & Safety*

May 10, 2001

Mr. Jon Larkin
SID LARKIN & SON, INC.
P.O. Box 1747
Dade City, FL 33526

RE: PROPOSED ENTERPRISE RECYCLING & DISPOSAL FACILITY.

Dear Mr. Larkin:

American Compliance Technologies, Inc. (**ACT**) is available and prepared to arrange hazardous waste transportation and disposal as well as provide 24-hour environmental emergency response services for the proposed Enterprise Recycling & Disposal Facility.

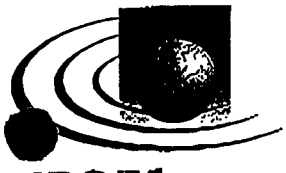
ACT prides itself on its environmental professionals who are able to provide clients with safe and efficient environmental emergency response, as well as correct waste management, including detailed documentation from point of generation and/or containerization to final disposition, providing virtual cradle-to-grave tracking of all waste streams. One telephone call, 24-hours a day, will begin **ACT's** response and mobilization of necessary personnel and resources including vacuum truck, heavy equipment, absorbents, decontamination materials, etc.

ACT field and technical professionals are 40-hour OSHA health and safety trained, medically monitored, and experienced in a wide variety of emergency response projects managing non-hazardous and hazardous materials and wastes, including confined space entry and Levels A-D personal protection. Additionally, **ACT** is a Florida Department of Environmental Protection Division of Law Enforcement, Bureau of Emergency Response-approved Discharge Cleanup Organization at the First Responder Level. **ACT** is insured and capable of acquiring bonding, and is a State of Florida Certified Pollutant Storage Systems Specialty Contractor with license number PCC 048392.

Should you have any questions or require assistance at any time in the future, please contact our Disposal Department during business hours at (863) 533-2000 X232 or (800) 226-0911 for environmental emergencies 24-hours a day.

Sincerely,

Ann A. Wortman, Disposal Manager
AMERICAN COMPLIANCE TECHNOLOGIES, INC.



IPC/Magnum
an EarthLiquids Company

PROFESSIONAL SERVICE AGREEMENT

105 S. Alexander Street
Plant City, FL 33566
(800)282-9585
(813)754-1504
(813)754-3789 Fax

May 17, 2001

Six Larkin & Service
P O Box 1747
Dade City, Florida 33526

Jon Larkin
Fax: 407-839-2066

Facility Landsite: Proposed Enterprise Recycle & Disposal

Dear Mr. Larkin:

IPC/Magnum an EarthLiquids Company is pleased to have this opportunity to provide a quote for your facility on the following services. Combined with our **10 million-dollar total liability insurance coverage** and the financial strength of a publicly traded company **NASDAQ** symbol **ECCO**, we can provide service with limited liability to your organization.

SCOPE OF WORK

IPC/Magnum proposes to remove and properly dispose/recycle of all your waste materials as directed by your firm at the address stated above. All rates based upon standard working hours 8 AM to 5 PM Monday through Friday.

PRICING

Service Charge	Per Month *(unlimited pick ups)*	$ 25.00
Used Oil Recycling *(routed pickup in tank)*	In Tank	No Charge
Oily Water/Antifreeze	Per Gallon	$ 0.50
Used Oil Filters	Per Drum *(55-gallon)*	$ 35.00
Absorbent Set Up	1 clean & 1 empty	$100.00
Absorbent Rotation	1 clean & 1 dirty	$150.00
Absorbent Pick Up	1 dirty & leave 1 empty	$100.00
Absorbent Pads *(oil)*	Per Bag *(100)*	$ 60.00
Oil Booms	Per Bag 5"x10' *(4 per bag)*	$ 87.75
Absorbent Pad and Boom Removal	Per Drum *(55-gal)*	$ 85.00
Fuel Tank Removal *(automotive)*	Per Tank	$ 25.00
Vacuum Truck *(portal to portal)*	Per Hour	$ 80.00
Oily Sludge	Per Gallon	$ 2.00
Decon Vac Truck		$125.00

Analytical Test required on antifreeze and solids prior to pickup

PAYMENT TERMS ARE NET 30 DAYS

I hereby authorize the services listed above to be performed and I authorize payment to IPC/Magnum for these services. I acknowledge that I have read and understand the above terms and conditions.
This agreement shall run for 12 consecutive months from date signed.

CLIENT

BY:_____ TITLE:_____ DATE:_____

IPC/MAGNUM

BY: mike anderson/drs TITLE: Account Manager DATE: 5/17/01
Mike Anderson/drs

PASCO COUNTY, FLORIDA

DADE CITY (352) 521-4274
LAND O' LAKES (813) 996-7341
NEW PORT RICHEY (727) 847-8145
FAX (727) 847-8083

UTILITIES SERVICES BRANCH
PUB. WKS./UTILITIES BLDG., S-213
7530 LITTLE ROAD
NEW PORT RICHEY, FL 34654-5598

May 18, 2001

Mr. Jon Larkin
Sid Larkin & Son, Inc.
Post Office Box 1747
Dade City, FL 33526

RE: Proposed Enterprise Recycling and Disposal Facility
Class III Landfill, Pasco County, Florida

Dear Mr. Larkin:

In response to your request, this letter is to inform you that any Class I solid waste received at the above landfill may be hauled to the County's Municipal Solid Waste Resource Recovery Facility on Hays Road in Northwest Pasco County. This facility is permitted to accept Class I solid waste and charges a tipping fee of $49.30. If the waste is classified as a "special waste," an additional fee will be charged based upon the type of waste.

Sincerely,

Douglas S. Bramlett
Assistant County Administrator
(Utilities Services)

DSB/ltr/s051801

LEGAL DESCRIPTIONS AND BOUNDARY SURVEY

FORM 223 FLORIDA - WARRANTY DEED (To Corporation)

2305R

This Indenture

Made this 31st day of January A. D. 1972

Between

SID LARKIN and MARGARET P. LARKIN, his wife

of the County of Pasco and State of Florida parties of the first part, and SID LARKIN and SON, INC., mailing address: 203 Southview Avenue, Dade City, Florida, 33525 a corporation existing under the laws of the State of Florida having its principal place of business in the County of Pasco and State of Florida party of the second part,

Witnesseth, that the said parties of the first part, for and in consideration of the sum of ----------TEN AND NO/100---------- Dollars, to them in hand paid, the receipt whereof is hereby acknowledged, have granted, bargained, sold, aliened, remised, released, enfeoffed, conveyed and confirmed and by these presents do grant, bargain, sell, alien, remise, release, enfeoff, convey and confirm unto the said party of the second part and its successors and assigns forever, all that certain parcel of land lying and being in the County of Pasco and State of Florida, more particularly described as follows:

SEE ATTACHED EXHIBIT "A" BY REFERENCE MADE A PART HEREOF.

(Part of this conveyance is subject to a mortgage as recorded in O.R. Book 552, Page 92 and recorded 7-13-71.)

295001

STATE OF FLORIDA DOCUMENTARY STAMP TAX DEPT. OF REVENUE FEB-672 PB 10523 300.00

198711 PASCO COUNTY

FILED FOR RECORD
Stanley C. Barnes
CLK CIR CT PASCO COUNTY, FLA
FEB 4 4 53 PM '72

THIS INSTRUMENT PREPARED BY:
JON LARKIN
P. O. BOX 576 - DADE CITY, FLA.

STATE OF FLORIDA DOCUMENTARY STAMP TAX DEPT. OF REVENUE FEB-672 PB 10523 900.00

STATE OF FLORIDA STAMP TAX 900.00

Together with all the tenements, hereditaments and appurtenances, with every privilege, right, title, interest and estate, dower and right of dower, reversion, remainder and easement thereto belonging or in anywise appertaining:

To Have and to Hold the same in fee simple forever.

And the said parties of the first part do covenant with the said party of the second part that they lawfully seized of the said premises, that they are free of all incumbrance, and that they have good right and lawful authority to sell the same, and that said part of the first part doth hereby fully warrant the title to said land, and will defend the same against the lawful claims of all persons whomsoever.

In Witness Whereof, the said parties of the first part have hereunto set their hands and seals the day and year above written.

Signed, Sealed and Delivered in Our Presence:

Jon Larkin
Margaret P. Fuller
(Witnesses)

S. Larkin (L.S.)
Sid Larkin
Margaret P. Larkin (L.S.)

DOCUMENTARY SUR TAX FLORIDA FEB-672 PB 10523 330.00

OFFICIAL RECORDS BOOK 584 PAGE 238

State of Florida

County of PASCO

I Hereby Certify That on this 31st day of January A. D. 1972, before me personally appeared SID LARKIN and MARGARET P. LARKIN, his wife

to me known to be the persons described in and who executed the foregoing conveyance to SID LARKIN AND SON, INC.

and severally acknowledged the execution thereof to be their free act and deed for the uses and purposes therein mentioned;

Witness my signature and official seal at Dade City and State of Florida, this day and year last aforesaid. (Seal)

9.21-75

Notary Public, State of Florida at Large
My Commission Expires Sept. 21, 1973
My Commission Expires

Notary Public

Warranty Deed

TO CORPORATION

TO

Date

ABSTRACT OF DESCRIPTION

BOOK 584 PAGE 239

(2)

EXHIBIT "A"

PARCEL 1: All that part of the South 3/4 of the East 3/4, lying West of the Seaboard Coast Line Railroad and South of the Centerline of a Canal, said Centerline being described as follows: Commence at the NW corner of the SE¼ of the NW¼, thence run South along the West boundary of said SE¼ of NW¼, 68.62 feet to the Centerline of the Southeast Connection, thence East along said Centerline of Southeast Connection, 1051.16 feet to the Centerline of State Road No. 35A, thence S. 30°55' 20" E., along said Centerline of SR #35A, 282.72 feet, thence S. 83°31'00" W., to the Westerly boundary of the R/W of SR 35A, for a Point of Beginning; thence run S. 83°31'00" W., along the Centerline of said Canal, 1400.0 feet, more or less, to the Point of Ending at Drainage Ditch, Less road right of way; That portion of the SW¼ of the NW¼ lying Northeast of Drainage Ditch and South of above described Centerline of Canal; That part of the NW¼ of the SW¼ lying East of Blocks H and I of Shadowlawn , as per plat thereof recorded in Plat Book 2,page 66, Public Records of Pasco County, Florida; The East 400.0 feet of the North 230.0 feet of the SW¼ of the SW¼; The East 281.65 feet of the South 664.90 feet of the SW¼ of the SW¼; That part of the South 1/2 of the SE¼ of the SE¼ lying East of the Seaboard Coast Line Railroad; The East 1/4 of the North 1/2 of the SE¼ or the SE¼, except the West 190.0 feet of the South 417.33 feet thereof; The East 663.44 feet of Lot 17, Block 3, Except the North 40.0 feet of the South 935.0 feet West of Centerline of Graded Road, and Except: Commence at the NE corner of the SE¼ of Section 35, for a Point of Beginning; thence run S. 0°00'30" W., along the East line of said Section 35, 413.24 feet, thence S. 87°42'15" W., 113.70 feet, thence N. 2°17'45" W., 417.90 feet, thence N. 89°53'45" E., 130.31 feet to the Point of Beginning; Lot 6, Block 4, and the North 65.0 feet of Lot 2, Block 4, said lots and blocks being as shown on the plat of CARVER HEIGHTS SUBDIVISION, as recorded in Plat Book 4, page 53 of the Public Records of Pasco County, Florida.
ALL BEING IN SECTION 35, TOWNSHIP 24 SOUTH, RANGE 21 EAST.

PARCEL 2: The SW¼ of the SE¼ of the SW¼; the North 1/2 of the NE¼ of the SW¼ and the West 1/2 of the SW¼, Except:Commence at the NW corner of the SW¼, for Point of Beginning; thence run S. 0°00'30" W., along the West line of said Section 36, 413.24 feet, thence N 87°42'15" E., 233.30 feet, thence N. 2°17'45" W., 404.61 feet, thence S. 89°53'45" W., 216.69 feet to the Point of Beginning.
ALL BEING IN Section 36, Township 24 South, Range 21 East.

PARCEL 3: The North 3/4 of the West 1/2 lying East of the Seaboard Coast Line Railroad; The SW 1/4 of the NE 1/4; The North 1/2 of the SE 1/4; The SE 1/4 of the SE 1/4 and the East 1/2 of the SW 1/4 of the SE 1/4, all being in Section 1, Township 25 South, Range 21 East, Pasco County, Florida.

PARCEL 4: The East 3/4 of the North 1/4, Except Road and Railroad, and Except: Commence at the intersection of the Westerly R/W line of State Road #35A with the Northerly R/W line of the Seaboard Coast Line Railroad, thence run West along said Northerly R/W, 896.54 feet for a Point of Beginning; continue West along said R/W, 1000.00 feet, thence North 400.0 feet, thence East 1000.0 feet, thence South 400.0 feet to the Point of Beginning; and the NE 1/2 of the East 281.62 feet of the North 534 feet of the NW 1/4 of the NW 1/4; all being in Section 2, Township 25 South, Range 21 East, Pasco County. Florida.

PARCEL 5: All that part of Section 12, lying East of the Seaboard Coast Line Railroad R/W, Except the R/W of Enterprise Road, and Except: Commence at the Quarter-section corner on the East boundary of said Section 12, (con't.)

PARCEL 5 (con't.): thence run West on Quarter-section line, 1128.6? feet for a Point of Beginning; thence run N. 25° 53' 30" W., 657.84 feet, thence West 694.08 feet to the Eas'erly R/W line of said Railroad, thence S. 25° 53' 30" E., along said R/W, 1043.50 feet, thence East 694.08 feet, thence N. 25° 53' 30" W., 385.66 feet to the Point of Beginning; all being in Section 12, Township 25 South, Range 21 East, Pasco County, Florida.

PARCEL 6: The SW 1/4 of the SW 1/4 of Section 5, all being in Secti n 5, Township 25 South, Range 22 East.

PARCEL 7: All that part of the South 3/4 lying East of County Road as now established, and the SW 1/4 of the SW 1/4, all being in Section 6, Township 25 South, Range 22 East, Pasco County, Florida.

PARCEL 8: All of Se 7, Except the NE 1/4 of the NW 1/4 and Except the West 1/2 of the NE ..4 of the NE 1/4, and Except Church property, all being in Section 7, Township 25 South, Range 22 East, Pasco County, Florida.

PARCEL 9: All of the West 1/2 of Section 8 lying West of a County Road as now established but not dedicated; and that part of the SE 1/4 of the NE 1/4 That lies East of said County Road, and Except the NE 1/4 of the NW 1/4 of said Section 8. All being in Section 8, Township 25 South, Range 22 East, Pasco County, Florida.

STATE OF FLORIDA
COUNTY OF PASCO
THIS IS TO CERTIFY THAT THE FOREGOING IS A TRUE AND CORRECT COPY OF THE DOCUMENT ON FILE OR OF PUBLIC RECORD IN THIS OFFICE. WITNESS MY HAND AND OFFICIAL SEAL THIS 27 DAY OF
Sept. , 99
JED PITTMAN, CLERK OF CIRCUIT COURT
BY Kristen Beach D.C.

(4)

4.11R
.305
.155X
4.85

4.85

346054

QUIT-CLAIM DEED — RAMCO FORM 6

This Quit-Claim Deed, Executed this 18 day of Sept. , A. D. 1972, by

SID LARKIN and MARGARET P. LARKIN, his wife

first party, to

SID LARKIN AND SON, INC., a Florida Corporation

whose postoffice address is 915 South 8th Street, Dade City, Florida 33525

second party:

(Wherever used herein the terms "first party" and "second party" shall include singular and plural, heirs, legal representatives, and assigns of individuals, and the successors and assigns of corporations, wherever the context so admits or requires.)

Witnesseth, That the said first party, for and in consideration of the sum of $ 1.00 in hand paid by the said second party, the receipt whereof is hereby acknowledged, does hereby remise, release and quit-claim unto the said second party forever, all the right, title, interest, claim and demand which the said first party has in and to the following described lot, piece or parcel of land, situate, lying and being in the County of Pasco State of Florida, to-wit:

S½ of NW¼ and E½ of SW¼ of Section 5, Township 25 South, Range 22 East.

(The sole purpose of this deed is to correct description contained in deed from Sid Larkin and Margaret P. Larkin, his wife, to Sid Larkin and Son, Inc., dated January 31, 1972, recorded in OR Book 584 at page 238, Public Records of Pasco County, Florida.)

325783

This instrument prepared by:
E. B. Larkin, Attorney at Law
208 S. 7th Street
Dade City, Florida 33525

FILED FOR RECORD
CLERK CIRCUIT COURT, FLA
Nov 27 4 54 PM '72

DOCUMENTARY SURTAX
FLORIDA
DEPT OF REVENUE
NOV 27 '72
PD. INC 23
≡00.55

STATE OF FLORIDA
DOCUMENTARY STAMP TAX
DEPT. OF REVENUE
NOV. '72
PD. 17529
≡00.30

To Have and to Hold the same together with all and singular the appurtenances thereunto belonging or in anywise appertaining, and all the estate, right, title, interest, lien, equity and claim whatsoever of the said first party, either in law or equity, to the only proper use, benefit and behoof of the said second party forever.

In Witness Whereof, The said first party has signed and sealed these presents the day and year first above written.

Signed, sealed and delivered in presence of:

Sid Larkin (L.S.)

Margaret P. Larkin (L.S.)

STATE OF FLORIDA,
COUNTY OF PASCO

I HEREBY CERTIFY that on this day, before me, an officer duly authorized in the State aforesaid and in the County aforesaid to take acknowledgments, personally appeared

SID LARKIN and MARGARET P. LARKIN, his wife

to me known to be the persons described in and who executed the foregoing instrument and they acknowledged before me that they executed the same.

WITNESS my hand and official seal in the County and State last aforesaid this 18 day of Sept. A. D. 1972.

Notary Public, State of Florida at Large
My Commission Expires Sept. 21, 1973.
Bonded By American Fire & Casualty Co.

NOTARY PUBLIC STATE OF FLORIDA

This Instrument prepared by:
Address

9-21-73

RECORDED 642 PAGE 405

5

NOTICE OF PROPOSED PROPERTY TAXES AND PROPOSED OR ADOPTED NON-AD VALOREM ASSESSMENTS

DO NOT PAY - THIS IS NOT A BILL

1999 PROPOSED AD VALOREM TAXES

ACCOUNT NUMBER:

PARCEL IDENTIFICATION: REAL-ESTATE 8-17-1999
08 25 22 0000 00100 0000

The taxing authorities which levy property taxes against your property will soon hold PUBLIC HEARINGS to adopt budgets and tax rates for the next year. The purpose of these PUBLIC HEARINGS is to receive opinions from the general public and to answer questions on the proposed tax change and budget PRIOR TO TAKING FINAL ACTION. Each taxing authority may AMEND OR ALTER its proposals at the hearing.

TAXING AUTHORITY	YOUR PROPERTY TAXES LAST YEAR	YOUR TAXES THIS YEAR IF PROPOSED BUDGET CHANGE IS MADE	A PUBLIC HEARING ON THE PROPOSED TAXES AND BUDGET WILL BE HELD:	YOUR TAXES THIS YEAR IF NO BUDGET CHANGE IS MADE
COUNTY	2,181.25	2,851.74	9/14/99 6:30PM BOARD ROOM HISTORIC COURTHOUSE, DADE CITY 727-847-8129	2,493.83
PUBLIC SCHOOLS BY STATE LAW BY LOCAL BOARD	 1,718.71 734.54	 1,960.17 881.98	 SET BY STATE LAW 9/7/99 6:00 PM SCHOOL BD RM,7205 LO'LKS BLVD,LO'LAKES 813-996-3600	 1,964.96 839.80
MS FIRE	354.49	425.65	COUNTY MUNICIPAL FIRE DISTRICT SAME TIME AND LOCATION AS COUNTY	403.92
WATER MANAGEMENT DISTRICT	112.31	134.85	9/14/99 5:01 PM TAMPA SERV OFFICE 7601 HWY 301 TPA, FL 352-796-7211	130.38
VOTER APPROVED DEBT PAYMENTS	232.60	260.44	SCHOOL BOND ISSUE SAME TIME/LOCATION AS SCHOOL	260.44
TOTAL AD VALOREM PROPERTY TAXES	5,333.90	6,514.83		6,093.33
	COLUMN 1	COLUMN 2	For details on independent special districts and voter-approved debt contact the Tax Collector at: (813) 929-6020; (352) 521-4360; (727) 847-8165	COLUMN 3
	SEE REVERSE SIDE FOR EXPLANATION			SEE REVERSE SIDE FOR EXPLANATION

	YOUR PROPERTY VALUE AS OF JANUARY 1	
	LAST YEAR	THIS YEAR
MARKET VALUE:	723,272	755,545
ASSESSED VALUE:	266,136	319,558
EXEMPTIONS:	0	0
TAXABLE VALUE:	266,136	319,558

Mike Wells

Pasco County Property Appraiser

If you feel your market value is inaccurate, or does not reflect fair market value, contact our office at: PO Box 401, Dade City, FL 33526-0401, or call (352) 521-4433; (813) 929-1280; (727) 847-8151.

If the Property Appraiser's Office is unable to resolve the matter as to market value, you may file a petition for adjustment with the Value Adjustment Board. Petition forms are available in our office and must be filed on or before: 9/13/1999

ADOPTED AND/OR PROPOSED NON-AD VALOREM ASSESSMENTS

LEVYING AUTHORITY	Purpose of Assessment and/or Meeting Times	UNITS	RATE	ASSESSMENT
SOLID WASTE	9/8/99 9:30AM 7530 LITTLE ROAD NPR 6:30 PM 37918 MERIDIAN AVE DC, SOLID WASTE QUESTIONS ONLY: 727-847-8123, 813-996-7341 EXT 8123, 352-521-4274 EXT 8123	2	54.00	108.00
			TOTAL	108.00

*Your final tax bill may contain non-ad valorem assessments which may not be reflected on this notice, such as assessments for roads, fire, garbage disposal, lighting, drainage, water, sewer, or other governmental services and facilities which may be levied by your county, city, or any special district.

SID LARKIN & SON INC
37749 SOUTHVIEW AVE
DADE CITY FL 33525-4763

ROLL=R

TAX DISTRICT: LAST-YEAR 21MF THIS-YEAR 21MF

LEGAL DESCRIPTION:
WEST 1/2 OF SECTION 8 EXC THAT PART OF COUNTY MAINTAINEI ENTERPRISE RD LYING IN SECTIOI 8 & EXC COM AT SE COR OF NW1/4

PC474

002627

6

NOTICE OF PROPOSED PROPERTY TAXES AND PROPOSED OR ADOPTED NON-AD VALOREM ASSESSMENTS

DO NOT PAY FROM THIS NOTICE. THIS IS NOT A BILL.

1999 PROPOSED AD VALOREM TAXES

ACCOUNT NUMBER:

PARCEL IDENTIFICATION: REAL-ESTATE 8-17-1999
05 25 22 0000 00500 0030

The taxing authorities which levy property taxes against your property will soon hold PUBLIC HEARINGS to adopt budgets and tax rates for the next year. The purpose of these PUBLIC HEARINGS is to receive opinions from the general public and to answer questions on the proposed tax change and budget PRIOR TO TAKING FINAL ACTION. Each taxing authority may AMEND OR ALTER its proposals at the hearing.

TAXING AUTHORITY	YOUR PROPERTY TAXES LAST YEAR	YOUR TAXES THIS YEAR IF PROPOSED BUDGET CHANGE IS MADE	A PUBLIC HEARING ON THE PROPOSED TAXES AND BUDGET WILL BE HELD:	YOUR TAXES THIS YEAR IF NO BUDGET CHANGE IS MADE
COUNTY	357.12	410.66	9/14/99 6:30PM BOARD ROOM HISTORIC COURTHOUSE, DADE CITY 727-847-8129	359.12
PUBLIC SCHOOLS				
BY STATE LAW	281.39	282.27	SET BY STATE LAW	282.96
BY LOCAL BOARD	120.26	127.01	9/7/99 6:00 PM SCHOOL BD RM,7205 LO'LKS BLVD,LO'LAKES 813-996-3600	120.93
MS FIRE	58.04	61.29	COUNTY MUNICIPAL FIRE DISTRICT SAME TIME AND LOCATION AS COUNTY	58.17
WATER MANAGEMENT DISTRICT	18.39	19.42	9/14/99 5:01 PM TAMPA SERV OFFICE 7601 HWY 301 TPA, FL 352-796-7211	18.77
VOTER APPROVED DEBT PAYMENTS	38.08	37.51	SCHOOL BOND ISSUE SAME TIME/LOCATION AS SCHOOL	37.51
TOTAL AD VALOREM PROPERTY TAXES	873.28	938.16		877.46
	COLUMN 1	COLUMN 2	For details on independent special districts and voter-approved debt contact the Tax Collector at: (813) 929-6020; (352) 521-4360; (727) 847-8165	COLUMN 3
	SEE REVERSE SIDE FOR EXPLANATION			SEE REVERSE SIDE FOR EXPLANATION

	YOUR PROPERTY VALUE AS OF JANUARY 1	
	LAST YEAR	THIS YEAR
MARKET VALUE:	187,708	190,828
ASSESSED VALUE:	43,573	46,017
EXEMPTIONS:	0	0
TAXABLE VALUE:	43,573	46,017

Mike Wells

Pasco County Property Appraiser

If you feel your market value is inaccurate, or does not reflect fair market value, contact our office at: PO Box 401, Dade City, FL 33526-0401, or call (352) 521-4433; (813) 929-1280; (727) 847-8151.

If the Property Appraiser's Office is unable to resolve the matter as to market value, you may file a petition for adjustment with the Value Adjustment Board. Petition forms are available in our office and must be filed on or before: 9/13/1999

ADOPTED AND/OR PROPOSED NON-AD VALOREM ASSESSMENTS

LEVYING AUTHORITY	Purpose of Assessment and/or Meeting Times	UNITS	RATE	ASSESSMENT
			TOTAL	

*Your final tax bill may contain non-ad valorem assessments which may not be reflected on this notice, such as assessments for roads, fire, garbage disposal, lighting, drainage, water, sewer, or other governmental services and facilities which may be levied by your county, city, or any special district.

SID LARKIN & SON INC
37749 SOUTHVIEW AVE
DADE CITY FL 33525-4763

ROLL=R

TAX DISTRICT: LAST-YEAR 21MF THIS-YEAR 21MF

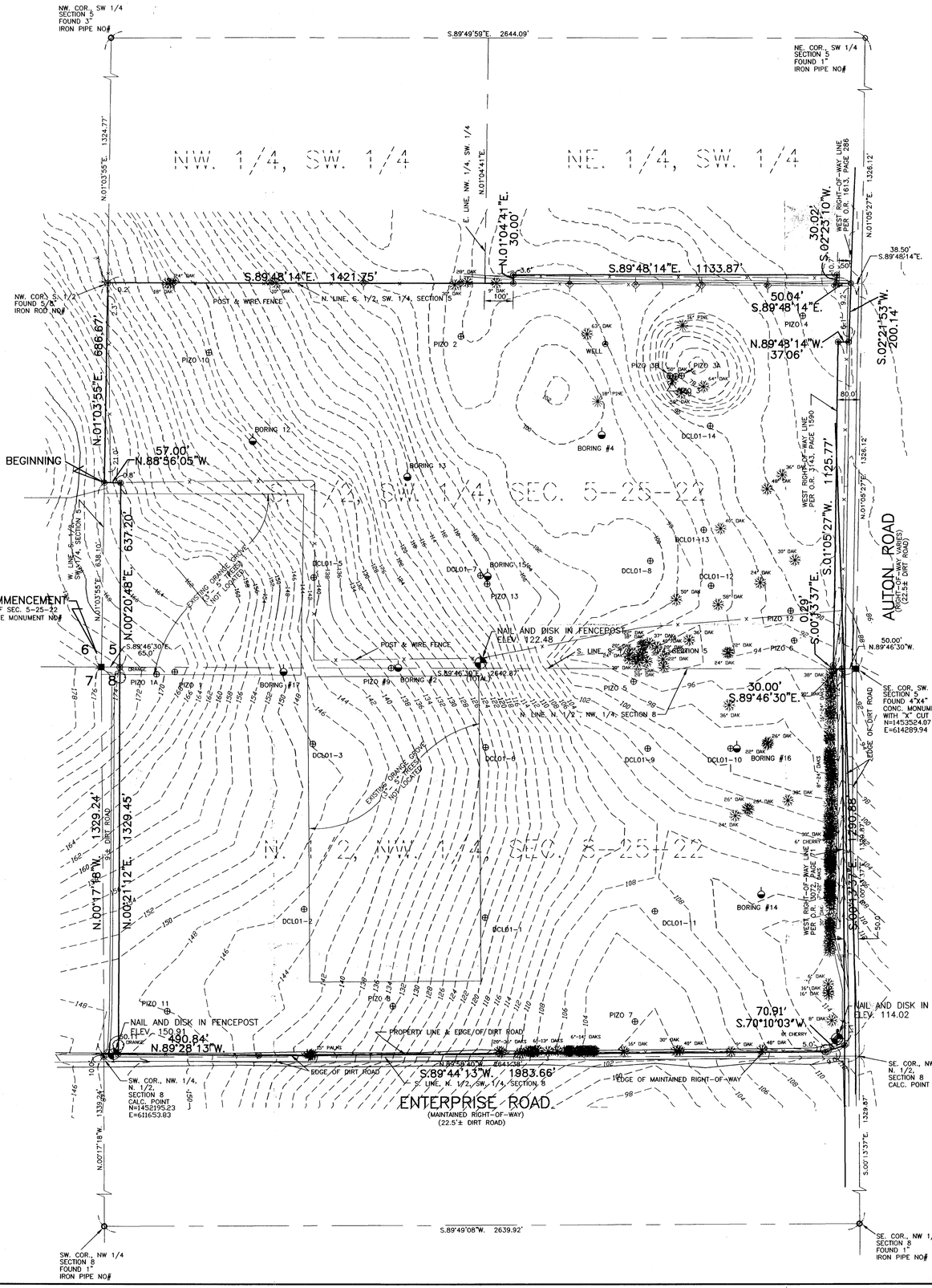
LEGAL DESCRIPTION:
SW1/4 OF SW1/4 & SE1/4 OF SW1/4 LESS RD R/W & SOUTH 30.00 FT OF NE1/4 OF SW1/4 WEST OF COUNTY RD LESS EAST

PC474

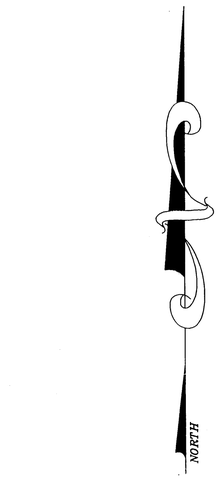
002620

7

1572185 (1)



PIZO #	NORTHING	EASTING	TOP OF PIZO	GROUND
PIZO 1	1453517.8	611903.4	171.73	169.6
PIZO 1A	1453509.9	611839.9	174.48	171.57 (CONC.)
PIZO 2	1454672.8	612910.0	96.83	95.6
PIZO 3	1454533.6	613660.7	78.94	77.8
PIZO 3A	1454535.2	613666.3	78.40	77.7
PIZO 3B	1454535.5	613650.1	79.65	78.5
PIZO 4	1454738.3	614108.6	84.55	83.3
PIZO 5	1453482.0	613510.9	94.56	93.3
PIZO 6	1453624.7	614073.9	94.16	92.9
PIZO 7	1452317.4	613512.3	102.81	101.1
PIZO 8	1452370.4	612666.9	133.94	132.7
PIZO 9	1453531.2	612664.6	140.73	137.3
PIZO 10	1454619.2	612024.7	132.60	129.5
PIZO 11	1452354.2	611874.8	150.76	147.7
PIZO 12	1453729.5	614062.7	93.24	90.67 (CONC.)
PIZO 13	1453832.2	612995.4	112.91	109.8
DCL01-1	1452672.5	612989.3		123.5
DCL01-2	1452703.0	612355.3		145.2
DCL01-3	1453271.0	612387.8		147.7
DCL01-4	——	——	——	——
DCL01-5	1453845.4	612392.2		139.9
DCL01-6	1453258.6	612993.2		127.9
DCL01-7	1453848.8	612988.1		109.0
DCL01-8	1453900.4	613570.2		99.6
DCL01-9	1453453.3	613559.3		102.8
DCL01-10	1453252.9	613848.3		98.9
DCL01-11	1452693.5	613582.3		106.1
DCL01-12	1453815.4	613781.8		94.7
DCL01-13	1454007.9	613756.9		93.6
DCL01-14	1454364.8	613780.7		87.7
BORING-2	1453531.8	612671.3		136.9
BORING-4	1454335.3	613401.4		98.1
BORING-12	1454316.8	612177.0		132.1
BORING-13	1454190.8	612722.2		113.6
BORING-14	1452751.5	613953.7		110.6
BORING-15	1453843.4	612996.6		109.4
BORING-16	1453253.3	613852.1		98.9
BORING-17	1453517.6	612286.3		147.4
WELL	1454646.7	613414.1		



MERIDIAN CONVERGENCE -00°03'49.42" (CENTER OF PROJECT)

GRAPHIC SCALE

200 0 100 200 400 800

(IN FEET)
1 inch = 200 ft.

DESCRIPTION:

A PORTION OF LAND LYING IN THE SOUTH 1/2 OF THE SOUTHWEST 1/4 AND THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 5 AND A PORTION OF LAND LYING IN THE NORTH 1/2 OF THE NORTHWEST 1/4 OF SECTION 8, ALL IN TOWNSHIP 25 SOUTH, RANGE 22 EAST, PASCO COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWEST CORNER OF SECTION OF 5, TOWNSHIP 25 SOUTH, RANGE 22 EAST; THENCE RUN N.01°03'55"E ALONG THE WEST LINE OF THE SOUTH 1/2 OF THE SOUTHWEST 1/4 OF SAID SECTION 5 FOR A DISTANCE OF 638.10 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE N.01°03'55"E., ALONG SAID WEST LINE FOR A DISTANCE OF 686.67 FEET TO THE NORTHWEST CORNER OF THE SOUTH 1/2 OF THE SOUTHWEST 1/4 OF SAID SECTION 5; THENCE RUN S.89°48'14"E., ALONG THE NORTH LINE OF SAID SOUTH 1/2 FOR A DISTANCE OF 1421.75 FEET TO A POINT LYING 100.00 EAST OF AND PARALLEL TO THE EAST LINE OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SAID SECTION 5; THENCE RUN N.01°04'41"E., PARALLEL TO SAID EAST LINE FOR A DISTANCE OF 30.00 FEET; THENCE RUN S.89°48'14"E., PARALLEL TO AFORESAID NORTH LINE OF THE SOUTH 1/2 FOR A DISTANCE OF 1133.87 FEET TO A POINT ON A LINE LYING 50.0 WEST OF AND PARALLEL TO THE WEST RIGHT-OF-WAY LINE OF AUTON ROAD AS DESCRIBED IN THE OFFICIAL RECORDS BOOK 1613, PAGE 286; THENCE RUN S.02°23'10"W., ALONG SAID LINE FOR A DISTANCE OF 30.02 FEET TO A POINT ON AFORESAID NORTH LINE OF THE SOUTH 1/2; THENCE RUN S.89°48'14"E., ALONG SAID NORTH LINE A DISTANCE OF 50.04 FEET TO A POINT ON THE AFORESAID WEST RIGHT-OF-WAY LINE OF AUTON ROAD; THENCE RUN S.02°21'53"W., ALONG SAID WEST RIGHT-OF-WAY LINE FOR A DISTANCE OF 200.14 FEET; THENCE RUN N.89°48'14"W., FOR A DISTANCE OF 37.06 FEET TO A POINT ON THE WEST RIGHT-OF-WAY LINE OF AUTON ROAD AS DESCRIBED IN THE OFFICIAL RECORDS BOOK 3143, PAGE 1590; THENCE RUN S.01°05'27"W., ALONG SAID WEST RIGHT-OF-WAY LINE FOR A DISTANCE OF 1125.77 FEET; THENCE RUN S.00°13'37"E., A DISTANCE OF 0.29 FEET TO A POINT ON THE NORTH LINE OF THE NORTH 1/2 OF THE NORTHWEST 1/4 OF SECTION 8, TOWNSHIP 25 SOUTH, RANGE 22 EAST; THENCE RUN S.89°46'30"E., ALONG SAID LINE FOR A DISTANCE OF 30.00 FEET TO A POINT ON THE WEST RIGHT-OF-WAY LINE OF AUTON ROAD AS DESCRIBED IN THE OFFICIAL RECORDS BOOK 3072, PAGE 71; THENCE RUN S.00°13'37"E., ALONG SAID WEST RIGHT-OF-WAY LINE FOR A DISTANCE OF 1290.88 FEET TO A POINT ON THE NORTH LINE OF THE MAINTAINED RIGHT-OF-WAY OF ENTERPRISE ROAD (NOT DEDICATED); THENCE RUN ALONG SAID MAINTAINED RIGHT-OF-WAY LINE THE FOLLOWING COURSES AND DISTANCES: S.70°10'03"W., FOR A DISTANCE OF 70.91 FEET; THENCE RUN S.89°44'13"W., FOR A DISTANCE OF 1983.66 FEET; THENCE RUN N.89°28'13"W., FOR A DISTANCE OF 490.84 FEET TO A POINT LYING 50.11 FEET EAST OF THE WEST LINE OF AFORESAID NORTH 1/2 OF THE NORTHWEST 1/4; THENCE RUN N.00°21'12"E., FOR A DISTANCE OF 1329.45 FEET TO A POINT ON AFOREMENTIONED NORTH LINE OF THE NORTH 1/2 OF THE NORTHWEST 1/4 OF SECTION 8, SAID POINT BEING S.89°46'30"E AND A DISTANCE OF 65.00 FEET FROM AFOREMENTIONED SOUTHWEST CORNER OF SECTION 5; THENCE RUN N.00°20'48"E., FOR A DISTANCE OF 637.20 FEET; THENCE RUN N.88°56'05"W., FOR A DISTANCE OF 57.00 FEET TO THE POINT OF BEGINNING.

PARCEL CONTAINS 155.1142 ACRES, MORE OR LESS.

NOTES:

1.) THE BEARINGS & COORDINATES SHOWN HEREON ARE BASED ON FLORIDA STATE PLANE GRID, WEST ZONE, NORTH AMERICAN DATUM 1983 COORDINATE SYSTEM.

2.) WELL ELEVATIONS SHOWN HEREON ARE BASED PASCO COUNTY DATUM (NAVD 29).

3.) DIMENSIONS OF DESCRIPTION AND SURVEY WERE ADJUSTED FROM STATE PLANE GRID, HAVING A PROJECT SCALE FACTOR OF 0.999943315.

4.) THERE MAY BE EASEMENTS AND RESTRICTIONS OF RECORDS AND/OR PRIVATE AGREEMENTS NOT FURNISHED TO THIS SURVEYOR THAT MAY AFFECT PROPERTY RIGHTS AND/OR LAND USE RIGHTS OF THE LANDS SHOWN HEREON.

5.) NO UNDERGROUND INSTALLATIONS, FOUNDATION FOOTINGS OR IMPROVEMENTS HAVE BEEN LOCATED EXCEPT AS NOTED.

6.) THIS SURVEY WAS PERFORMED IN ACCORDANCE WITH THE MINIMUM TECHNICAL STANDARDS FOR SURVEYS AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS, CHAPTER 61-G17, FLORIDA ADMINISTRATIVE CODE.

7.) TOPO OF THE NORTH 1140' WAS PROVIDED BY SOUTH WEST FLORIDA WATER MANAGEMENT DISTRICT AND WAS NOT FIELD VERIFIED.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAY 21 2001
SOUTHWEST DISTRICT TAMPA

BOUNDARY AND TOPOGRAPHIC SURVEY OF THE PASCO COUNTY LAND FILL FOR SID LARKIN & SON, INC.

HARTMAN & ASSOCIATES, INC.
engineers, hydrogeologists, surveyors & management consultants
201 EAST PINE STREET — SUITE 1000 — ORLANDO, FL. 32801
TELEPHONE (407) 839-3955 — FAX (407) 839-3760
LICENSED BUSINESS NO. #3814

REVISIONS

Rev.	CORRECTED TYPO. ERROR	Date: 5/11/01
Rev.	ADDED PIZO	Date: 3/27/2001
Rev.	ADDED TREES, GROVES	Date: 6/5/2000
Rev.	ADDED PIZO	Date: 3/31/2000

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

Job No:	99-33100
Cadd File:	33100Z02
Field Date:	11/1/99
Drawn By:	LEJ
Field By:	DCR
Field Bk/Pg:	

LAWRENCE E. JOHNSON
STATE OF FLORIDA
Professional Surveyor and Mapper
Florida Registration No. 5643

N:\SURVEY\DWG\1999\99-331.001\33100z02.dwg Wed May 16 09:20:13 2001 TECHNICIAN "SMF"

OPERATIONS PLAN

OPERATIONS PLAN
ENTERPRISE RECYCLING AND DISPOSAL FACILITY
CLASS III LANDFILL APPLICATION

TABLE OF CONTENTS
(Continued)

TABLE OF CONTENTS
(Continued)

LIST OF APPENDICES

21.0 FINAL GRADE PLAN

Final grade plan of the facility is shown on the plans (Figure 3-10 (C-5)) and in the cross-sections (Figures 3-8 (C-3) and 3-9 (C-4)). The mixed areas will be brought to the proposed Landfills bottom grade prior to accepting any waste material. The finished elevation after all fill material has been placed and final cover provided is designed to reclaim excavated areas back to the grade which existed prior to the site being opened as a mine with allowance for positive drainage.

22.0 CLOSURE AND LONG TERM CARE

The site's Reclamation and Closure Plan details the procedures to properly close and maintain the landfill during the 30-year post-closure period. A Closure Report will be prepared for the landfill that details the site-specific limitations for land use based on geotechnical stability (settlement), potential gas migration, and site access. Long-term maintenance of erosion controls, stormwater controls and monitoring devices is discussed in the Closure Plan, Section 7.

23.0 CERTIFICATION

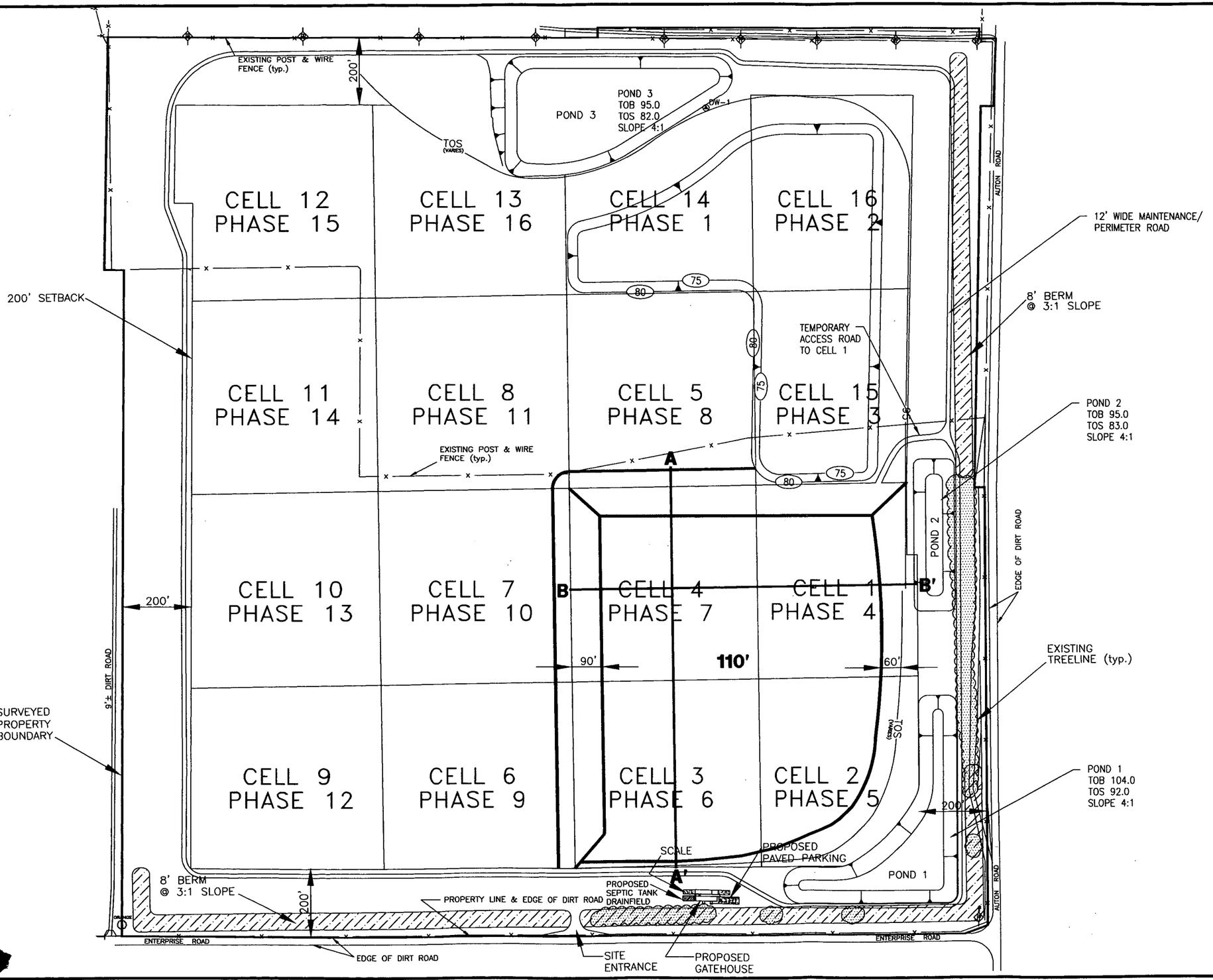
Laboratory testing and observation of cell floor conditions during cell construction completion shall consist of the following:

- Percent fines of the cell floor in accordance with ASTM-D1140 will be determined at a minimum frequency of three tests per cell.
- Hydraulic conductivity testing of Shelby tube or drive cylinder samples of the compacted cell floor material will be performed at a minimum frequency of one test per cell, or one test per differing lithology encountered.
- Observance for unstable areas such as limestone, sink holes and soft ground will be performed for each cell.

If the test data from a well floor section does not meet the requirements of the anticipated conditions of the hydrologeological and geotechnical reports, additional random samples may be tested from that cell section. If the additional testing demonstrates that the hydraulic conductivity

meets the requirements, the cell will be considered acceptable. If not, that cell will be reworked or reconstructed so that it will meet these requirements.

Upon completion of construction of the proposed disposal facility, the Engineer of Record shall certify to the FDEP on form 62-701.900(2) that the approved construction is complete and in accordance with the submitted plans. The operator will provide the completed form to the FDEP and arrange for an inspection prior to acceptance of Class III wastes into the proposed disposal area



LEGEND

- —CELL SEQUENCE LINE
- CELL 16 PHASE 1 —RECLAMATION/LANDFILL CELL —MINE EXCAVATION PHASE IDENTIFICATION NUMBER
- 110' —SEQUENCE ELEVATION, (ft. NGVD)
- B——B' LINE OF CROSS SECTION

NOTES:
1. Landfill base is 80–117 feet NGVD.
2. All working face slopes are 3H:1V.
3. Outer slopes are as indicated on the Final Grade Plan.
4. Elevations shown include cover material.

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CELL SEQUENCING PLAN - SEQUENCE 1
PROPOSED ENTERPRISE RECYCLING AND DISPOSAL FACILITY
DADE CITY, FLORIDA

FIGURE 3-17

GAS MONITORING
SURVEY FORM

ENTERPRISE CLASS III LANDFILL
GAS MONITORING SURVEY FORM

Date: _____
Instrument: _____
Sampler: _____

GAS PROBE NO.	TIME OF READING	AIR TEMP °F	METHANE LEVEL Pre-Purge Measurement		METHANE LEVEL Post-Purge Measurement	
			% by Vol.	% by LEL	% by Vol.	% by LEL
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						