BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

KRAMER TREE SPECIALISTS, INC., Petitioner,	)	
vs.	)	PCB 2012-51 (Land Permit Appeal)
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, Respondent.	)	

NOTICE OF ELECTRONIC FILING

TO: Greg Richardson
Deputy General Counsel
IEPA
1021 North Grand Ave. East
P.O. Box 19276
Springfield, Illinois 62794-9276

Christopher J. Grant
Assistant Atty General
69 W. Washington Street
Suite 1800
Chicago, IL 60602

PLEASE TAKE NOTICE that on the 30th day of April, 2013 on behalf of Kramer Tree Specialists, Inc., a **Petition For Adjusted Standard** was electronically filed with the Office of the Clerk of the Illinois Pollution Control Board.

KRAMER TREE SPECIALISTS, INC.

Bruce White

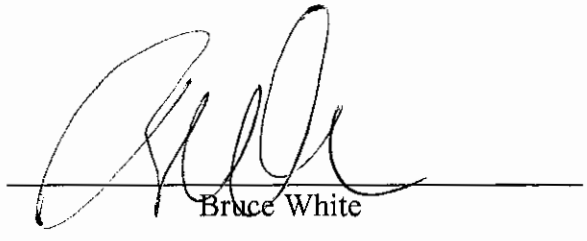
Bruce White
Barnes & Thornburg LLP
One North Wacker Drive
Suite 4400
Chicago, Illinois 60606
(312)214-4584
(312)759-5646 (fax)

CERTIFICATE OF SERVICE

I, on oath state that I have served the attached **Petition for Adjusted Standard** electronically on this 30th day of April, 2013 to:

Greg Richardson
Deputy General Counsel
Illinois Environmental Protection Agency
1021 North Grand Ave. East
P.O. Box 19276
Springfield, Illinois 62794-9276

Christopher J. Grant
Assistant Atty General
69 W. Washington Street
Suite 1800
Chicago, IL 60602



Bruce White

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

KRAMER TREE SPECIALISTS, INC.,	)	
	)	
Petitioner,	)	
	)	
vs.	)	PCB 12-51
	)	(Land Permit Appeal)
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,	)	
	)	
Respondent.	)	

PETITION FOR ADJUSTED STANDARD

NOW COMES Petitioner Kramer Tree Specialists, Inc. ("Kramer") by its attorneys, pursuant to Section 28.1 of the Illinois Environmental Protection Act ("Act") 415 ILCS 5/28.1 and 35 Ill. Adm. Code Part 104, and petitions the Illinois Pollution Control Board ("Board") to grant it an adjusted standard from certain of the requirements of 35 Ill. Adm. Code 830.205(a)(1)(A), 830.206(f), (k), (l) and (n). 830.503, 830.504 and 830.507; for its leaf mulch production facility located at 300 Charles Court, West Chicago, Illinois 60185.

INTRODUCTION

Petitioner Kramer owns and operates a ten acre tree care facility at 300 Charles Court in West Chicago, DuPage County, Illinois. As part of that operation, Kramer produces and sells leaf mulch. The general term "leaf mulch" as defined by Kramer means a blend of virgin leaves, or a blend of leaves and sized woody material, both excluding grass or other foreign materials. These mulch products do not meet the general use compost standards as set forth in Section 830.503 of the Illinois Administrative Code ("Ill. Adm. Code"). Therefore, issuance of an Adjusted Standard from certain aspects of those regulations which promote composting is essential to Kramer's continuing its leaf mulch operations.

Kramer produces two types of mulch which include leaves; a leaf mulch and a special blend. The Kramer product identified as leaf mulch blend is made up entirely of

ground virgin leaves ground to one inch minus in size to produce a uniform look. The Kramer special blend mulch includes both ground virgin leaves (from 7 to 10% leaves) and sized wood materials ranging from fine to about 1.5 inches from all tree parts (approximately 90 to 93% sized wood materials). The special blend mulch is processed so that an equivalent number of particles of the varying sizes described are present in each batch. The leaves in these product mulches serve to maintain the consistent texture and color quality of the mulch products which are sold to retail, commercial, and municipal customers year round.

The production of leaf mulch by Kramer takes place as a cycle lasting no more than one year. Kramer collects leaves for its West Chicago facility from about the third week in October to the end of November, generally October 22 to November 30 each year. These leaves will have been made into leaf mulch products and sold to customers no later than mid-October of the next year so that a clean concrete pad is available for receipt of leaves as each fall season begins. By the end of May of each year approximately 60% of the leaves received will have been sold as mulch; by the end of July, that percentage will reach about 80%. Under no circumstances does Kramer store leaves at its facility from year-to-year.

The actual production of special blend mulch usually begins on or about January 30 each year, with the start of production of leaf mulch blend following in March.[1] Then, in April/May of each year, when the market demand for mulch begins, the mulch products are ready for sale. Leaf mulch production continues through the spring and summer until about October 1st each year. Kramer times the production of its leaf mulches so that product is available to meet customer needs; mulch is not produced prematurely so that leaf decay does not occur. Kramer's goal is to control handling and storage of leaves to minimize the opportunity for deterioration.

Currently, Kramer has contracts with several municipalities to collect approximately 15,000 cubic yards of leaves to be managed through leaf mulch production at its West Chicago facility. These leaves are all picked up by Kramer's own personnel.

---

[1] During the winter months, tree feed stock are received at the Kramer facility without leaves. Therefore, clean leaves managed at the facility are added to this material to produce the special blend mulch products sold by Petitioner.

Kramer does not accept leaf deliveries from other entities and so is able to police the quality of the leaves brought to the Kramer facility. The leaves and product mulch handled by Petitioner are managed on a five and a half acre reinforced concrete pad constructed to control precipitation run-on and run-off. Leaves are initially placed, then more tightly stacked, on the highest part of the concrete pad so that any water contained within the stacks will drain away from the leaves through clean wood chip solids filters and towards the collection points for the pad. The leaf stacks are shifted as little as possible so that the oxygen content within the pile, and consequently potential leaf decay, is minimized. Stacked leaves are processed through grinding, and for certain products are then mixed with chipped tree limbs, trunks and/or shredded wood waste prior to sale for use as mulch. All of these operations take place on the reinforced concrete pad.

Production involves the removal of leaves from the stacks for grinding to produce pieces that are one inch minus in size. Leaf mulch particle size is one inch or less. Sometimes leaves are ground twice to produce a desired product for the leaf mulch requirements of specific customers. For the special blend, leaves are removed from the stacks, mixed with wood from trees in about a 7-10% to 90-93% split of leaves to wood, and ground to half an inch to one inch in size. Occasionally foreign organic material is vacuumed up with the collected leaves. If such material is found within the leaf stack, it is transported to an appropriate offsite compost facility.

The leaf mulch blend is sold within two to four weeks of the time the grinding process is completed. Since leaves are only received at the facility in the fall, or as part of tree removals, the leaf stacks are maintained so that leaves are available to produce mulches through the planting season. However, leaves from one year are removed by October 15th of the year following their receipt; leaves are not and will not be stored at the facility from year to year.

In 2012, Kramer sold approximately 73,938 cubic yards of all its leaf mulches. The greatest volume of leaf mulch sold was to commercial green industry customers such as landscape contractors and landscape industry suppliers. In addition, a significant volume of the leaf mulches is sold to municipalities and park districts. These leaf mulch sales totaled over $1.3 million dollars in gross sales in 2012. All of the leaves brought to

the Kramer property are transported there for processing into mulch for sale; none are managed to produce compost or to be disposed of as waste.

STANDARDS FROM WHICH THE ADJUSTED STANDARD IS SOUGHT

In accordance with 35 Ill. Adm. Code 104.406(a), this constitutes Petitioner's statement describing the standards from which this adjusted standard is sought through this Petition. As a general matter, the 35 Ill. Adm. Code 830 composting regulations are designed to promote the creation of compost from landscape wastes in an environmentally protective manner. In contrast, Kramer's leaf mulch operations are designed and operated to achieve the opposite, *i.e.* to prevent or at least minimize the creation of compost. This clear divergence of goals means that Kramer cannot both comply with the 35 Ill. Adm. Code 830 compost standards and operate its leaf mulch business.

The purpose of this Petition for Adjusted Standard is to resolve this dichotomy between the general regulatory requirements and Kramer's business needs, while maintaining the environmentally protective features of each. The specific 35 Ill. Adm. Code 830 provisions from which this adjusted standard is sought are presented on Exhibit A hereto. In lieu of each of these regulatory regulations which explicitly promote composting of landscape wastes, Kramer proposes to adhere to the following standards, while otherwise complying with 35 Ill. Adm. Code 830.

Kramer Operational Criteria

Should the requested adjusted standard be approved, Kramer's leaf mulch operations would meet or exceed the following conditions:

1) All virgin leaves accepted by Kramer for processing into its leaf mulch products shall be collected and delivered to the Kramer facility by Kramer personnel. No other sources of leaves will be accepted at the Kramer facility or incorporated into Kramer's leaf mulch operations.

2) Leaves shall be placed only on the approximately 5.5 acres reinforced concrete pad (minimum thickness eight inches) at the Kramer facility. No leaves, wood or mulch will be stored on the bare ground.

3) The concrete pad shall be maintained in good condition and so that any run-off from the leaves or mulch products are controlled through engineered drainage flows and retention ponds.

4) Leaves are received at the Kramer facility during the fall season (approximately October through November) each year and removed from the Kramer facility in the form of mulch products, by October 15th of the following year. Leaves are not stored at the Kramer facility from leaf collection cycle to leaf collection cycle.

5) Leaves are placed in stacks when received at the Kramer facility and managed with the goal of preventing composting. Such management includes a minimum of handling so that oxygen and moisture conditions within leaf stacks remain consistent with the Kramer goal of minimizing the development of compost.

6) Leaf stacks are no more than twenty-five (25) feet in height with an outward slope of one vertical to one horizontal. Stacks are separated by about ten to twelve feet to facilitate management. Kramer currently is under contract with several municipalities to collect approximately 15,000 cubic yards of leaves for management at its West Chicago facility as described in this Petition. The reinforced concrete pad has been designed and constructed to provide capacity to properly manage more than 30,000 cubic yards of leaves should future business development reach that level. Should business growth occur, the additional leaves would be managed using the same protective procedures as are now in use at the facility.

7) The leaf stacks are located on the highest part of the concrete pad to facilitate drainage of any water contained in the stacks away from the leaves. That water is filtered through clean wood chips. The filtered water then flows to designated collection points. These collection points are engineered and will be maintained so that collected water flows to one of two retention ponds on the facility.

8) Leaves are made into Kramer mulch products by grinding with a grinder. Leaves may be ground once or twice depending on the mulch product being made. Production of leaf mulch begins in late winter/early spring and continues through September to meet demand.

9) Finished leaf mulch products are placed in curing piles of about twenty-five feet in height by twenty-five feet wide by seventy-five feet long. A pile of this size holds about 3000 cubic yards of mulch. Leaves may be made into mulch products approximately two to four weeks before being sold.

10) Kramer minimizes the potential for emissions from its mulching operations through the use of a fine spray mister over the grinding area. Paving of the roadways and the concrete pad within the facility also reduce the potential for dust emissions. Control of the potential for dust emission and leaf blowing is also maintained through the four foot high concrete walls which border the operational area at the Kramer facility.

11) The moisture content and temperature within the leaf stacks are monitored on a weekly basis. If a temperature of greater than 70 degrees centigrade is found, that leaf stack may be shifted to allow internal materials to cool.

12) Kramer shall test its leaf mulch products for moisture content.[2] The moisture content goal will be no more than 40% by weight and each 2000 cubic yards

---

[2] With respect to the testing methods that Petitioner proposes as an adjusted standard for this regulatory standard, the following provisions would apply:

A. Calculate the % moisture for Leaf Mulch.
   a. Weigh a small container
   b. Weigh 10 g of the material into the container
   c. Dry sample for 24 hours – over a heated floor or within a 105-110 degree Convectional Oven.
   d. Reweigh the sample, subtract the weight of the container, and determine the moisture content using the following equation:

B. $M_n = ((W_w - W_d / W_w) \times 100$

In which:

M_n = moisture content (%) of material in

W_w = wet weight of the sample, and

W_d = weight of the sample after drying.

of leaf mulch blend or special blend will be sampled for moisture.. Records of this testing will be maintained at the Kramer facility.

13) Financial Assurance – Kramer provided a Financial Assurance Plan consistent with 35 IAC Sections 830.601, 830.602, 830.603, 830.604, 830.605 and 830.606 as Section 13.0 Subpart F of its attached permit application. As demonstrated in that Plan, closure of the leaf mulch operation would have a net positive value; Kramer would earn more through the sale of leaf mulch relating to closing that operation then it would cost to close the leaf mulch facility components. Given the positive income flow attendant on closure of the leaf mulch operation, Kramer is not currently required to fund a financial assurance mechanism for its leaf mulch facility.

A more detailed description of each aspect of these conditions as applied to the Kramer leaf mulch operation is included in Kramer's original Permit Application, attached hereto as Exhibit B.[3]

Operations such as Kramer's leaf mulch production were simply not considered when the 35 Ill. Adm. Code 830 compost facility regulations were drafted or adopted. However, the proposed combination of the generally applicable 35 Ill. Adm. Code 830 provisions and the site-specific conditions described herein would meet both the Illinois Pollution Control Board/IEPA and Kramer shared goals of an environmentally sound leaf mulch production operation. Following approval of this Petition for Adjusted Standards, Kramer will re-apply to IEPA for a permit that would incorporate the 35 Ill. Adm. Code 830 standards, as modified by the Adjusted Standard sought through this Petition and operate in accordance therewith.

C. Suppose, for example, that you weight 10 g of leaf mulch (W_w) into a 4 g container and that after drying the container plus leaf mulch weighs 6.3g. Subtracting out the 4-g. container weight leaves 2.3 g as the dry weight (W_d) of your sample. Percent moisture would be:

$M_n = ((W_w - W_d/W_w) \times 100$

$= (10 - 2.3)/10) \times 100$

$= 77\%$ for the Leaf Mulch

[3] An updated Permit Application would be submitted to the IEPA for consideration once this Petition for Adjusted Standard is resolved.

Section 104.406(b) Statement

The regulations from which adjusted standards are sought were promulgated to implement, in part, the State programs under Sections 5, 21, 22.33, 22.34, 22.35 and 39 of the Illinois Environmental Protection Act (415 ILCS 5/5, 21, 22,.33, 22.34, 22.35, 27 and 39) as authorized by Section 2 of that Act (415 ILCS 5/2).

Section 104.406(c) Statement

There are no levels of justification for these adjusted standards for which this Petition is filed specified in the 35 Ill. Adm. Code 830 provisions.

Section 104.406(d) Statement

The Kramer facility, located at 300 Charles Court in West Chicago, Illinois is a ten acre parcel of which approximately five and a half acres are used for the leaf mulching operations underlying this Petition for an Adjusted Standard.[4] This West Chicago facility was opened in March 2008 though Kramer Tree Specialists, Inc. has been in operation since 1974. Kramer's mulch production has been ongoing for about twenty-five (25) years with the production of mulches containing leaves beginning in 2008. Currently seventy-nine (79) employees work at the Kramer West Chicago location with eight of them involved in the mulch production aspects of the operations.

The mulching operations consist of the transport of the collected fallen leaves and trees from municipal, commercial and residential properties to the Kramer facility for the production of two types of mulch. These mulch products are ultimately sold to commercial and municipal customers. One type of mulch is called leaf mulch blend and is comprised of 100% ground virgin leaves. The other type is called special blend and consists of leaves (7 to 10%) and wood from trees (90 to 93%) ground together. For both types of mulches, the color, sizing of the leaves and moisture content of the end product are critical to the marketability of the mulch. A copy of the Kramer Permit Application is attached to this Petition to provide more detailed information about the location, design and operating procedures for the West Chicago facility (*See* Exhibit B).

---

[4] Kramer uses the concrete pad for the operations to produce its non-leaf mulch product as well. That mulch is not comprised of recycled landscape materials and therefore is not subject to this Petition for adjusted standards.

As noted above, leaves are brought to the property by Kramer personnel. Upon arrival at the Kramer site, each load of leaves is reviewed by a Site Yard Manager to make sure that acceptable leaves, as opposed to other wastes, are being delivered. If a delivered load is found to contain a significant amount of unusable, non-organic material inappropriate for use as mulch, the load may be rejected at the staging area by the Site Yard Manager. In the event that incidental non-usable materials are received, they are removed and placed in a dumpster positioned at the receiving area for that purpose. Those collected materials are then properly disposed of offsite.

Accepted leaf loads are placed on the concrete pad in piles of no more than twenty-five feet in height with an outward slope one vertical to one horizontal (1V:1H), or less depending on the stability of the pile. The length of the piles varies depending on orientation and room on the pad. Ten (10) to twelve (12) feet are maintained between piles to facilitate management and inspection of the piled leaves. Piles are oriented so that the face exposed to the predominant wind direction is minimized thereby decreasing the potential for wind blown movement. The four foot concrete wall around the facility operational area also serves to prevent wind blown movement.

The concrete pad itself is reinforced concrete in a continuous slab with a minimum thickness of eight inches. The leaves are piled on the high areas of the pads so that any water will drain away from the pile. The pad is constructed so that both precipitation run-on and run-off are controlled by sloping the pad to allow flow to designated collection points. Attachment 2 of the Permit Application (Exhibit B) included with this Petition contains figures showing more details as to the location and nature of the pad construction and drainage features.

There are two storm water retention ponds at the facility to manage precipitation falling on the concrete pad; .96 acres of the pad drain to one pond and 4.59 acres of the pad drain to the other. The adequacy of the ponds and drainage systems was evaluated by Christopher B. Burke Engineering, Ltd., an independent consulting firm (*See* Attachment 8 to the Permit Application attached to this Petition as Exhibit B). Precipitation which comes into contact with the leaves is managed through a filter berm composed of finely ground white wood material to filter out solids, and then collected

and properly disposed of offsite, or treated as necessary prior to discharge in accordance with 35 Ill. Adm. Code Subtitle C. The filter berm is two to four feet in width and about one foot high. The used filter medium is recycled into the special blend mulch or disposed of at a permitted offsite composting facility.

The stacking of the leaves also takes place within this concrete staging area. During leaf mulch production, the stacked leaves are processed through a grinder or other similar machine to reduce leaf size. Currently, the Kramer facility manages approximately 15,000 cubic yards of leaves, although as noted above, additional capacity exists should an increased volume of leaves be collected under future contracts. That approximately 15,000 cubic yard volume of leaves currently handled at the West Chicago facility will reduce to about 10,000 cubic yards once leaf mulch processing has been completed. This volume reduction is due to the drying and grinding process associated with mulch production.

Once the leaves are processed into mulch, the finished products are stored in a curing pile area on the concrete pad. A curing pile is approximately twenty-five feet tall by seventy-five feet wide and seventy-five feet long and holds about 3,000 cubic yards of leaf mulch ready for sale. Finished product mulch is marketed to commercial landscapers and municipalities generally within two to four weeks of being made into leaf mulch.

In order to keep the leaves from decomposing and becoming anaerobic, each load is stacked so as to maximize density. This approach also serves to reduce any potential for odors that might otherwise result from collected leaves. The piles are maintained to reduce moisture and oxygen infiltration as well. The temperature within each pile is monitored on a weekly basis. If an elevated internal temperature of greater than 70 degrees centigrade is found, piles may be moved to allow internal materials to cool. Finally, piles are excavated during the cooler part of the day to the extent possible as another means of controlling heat..

The Kramer leaf operations do not result in emissions, discharges or releases. As noted above, storm water is managed through storm water piping, retention ponds and the concrete pad design. In addition, a Debris Turbulent Air Blower (Buffalo Turbine Model # CKB4SM) is used to produce a fine mist over the grinding area to control any

particulate emissions that might otherwise result from that aspect of the mulch production operations. Dust is also controlled through the paving of roads and the concrete pad. The operation is designed and managed so that it does not result in releases.

Section 104.406(e) Statement

The general standards from which this adjusted standard is sought are not compatible with the Kramer operations or resulting leaf mulch products. For example, 35 Ill. Adm. Code 830.205(a)(1) speaks in terms of processing landscape waste into windrows, piles or other contained compositing systems to provide proper conditions for composting. (emphasis added) While Kramer does place the received leaves into stacks when they are received, such stacks are not designed or managed to promote composting. To the contrary, part of Kramer's operational goal in processing the leaves into mulch is to ***minimize composting***. Therefore, this general standard can not be implemented at the Kramer facility if leaf mulch products are to be produced.

In place of the general compost-oriented plans, Kramer has developed plans for its leaf management to minimize compost development and produce mulch. Details as to the size of the piles; monitoring; temperature, moisture and oxygen controls; and quality control for mulch products have all been included in Kramer's operating plan which is attached to this Petition as part of the Permit Application. (Exhibit B) Kramer is not seeking adjusted standards for subparts of 35 Ill. Adm. Code 830.206 not specifically addressed herein above, but instead is committed to complying with those existing regulations.

35 Ill. Adm. Code 830.503, 830.504 and 830.507 each speak in terms of the nature and testing of "General Use Compost". Kramer does not produce compost through its operations and therefore these provisions do not fit Kramer's operations or products. However, Kramer does meet the intent, if not the specific language, of each of these provisions, through quality control of the mulch produced at its West Chicago location. That mulch is free of materials that would "pose a definite hazard to human health due to physical characteristics, such as glass or metal." as provided in the 35 Ill. Adm. Code 830.503 "General Use Compost" standard. In addition, the product mulch does not contain man-made materials larger than four millimeters in size exceeding 1%

of the end product mulch on a dry weight basis. (*See* 35 Ill. Adm. Code 830.503) Therefore, Petitioner has proposed that standards equivalent to those promulgated for general use compost, but designed for the particular nature of leaf mulch production, be applied to its operations as shown in Exhibit A hereto.

With respect to the general regulatory testing requirements of 35 Ill. Adm. Code 830.504 and 830.507, there is no standard testing method for leaf-based mulch. Therefore, while the collection of representative samples as provided in 35 Ill. Adm. Code 830.507 is feasible, the prescribed 830 Appendix B Test Methods do not apply to mulch. The leaf mulch produced must satisfactorily meet customer needs. Kramer has proposed a moisture and temperature monitoring approach and criteria for acceptable leaf mulch product instead.

Section 104.406(g) Statement

Petitioner does not believe that any qualitative or quantitative difference between the impacts to the environment of its operations under the general regulations or the requested adjusted standard would exist. The adjusted standard requested herein is basically a recognition that Petitioner does not operate a classic mature composting facility as contemplated under the regulations. Petitioner seeks to minimize actual composting, while the regulations are designed to promote it. Should the adjusted standard sought through this Petition be granted, Kramer will operate its facility in an environmentally protective manner, minimizing odors, discharges, emissions or releases to achieve the same overall protective goals, as required under the regulations. Only those aspects of the regulations which seek to facilitate composting or to test general use compost would be effected by granting this Petition.

Section 104.406(h)

Granting of this adjusted standard is justified because the Kramer operation is an environmentally beneficial process which should be encouraged. The general composting regulations are not entirely congruous with Kramer's leaf mulch operations. Adjusting those general standards as requested herein, will not detract from the environmental benefit, but will instead allow this beneficial mulching operation to continue in an environmentally sound, permitted, and compliant manner.

Section 104.406(i) Statement

The adjusted standard requested herein may be granted consistent with Federal law. The aspects of the leaf mulching operation of interest here are not regulated by Federal law and therefore there are no relevant Federal regulatory or statutory authorities which must be complied with in proceeding with this adjusted standard action.

Section 104.406(j) Statement

Petitioner hereby requests a hearing on this Petition for An Adjusted Standard in accordance with Board rules.

Section 104.406(k) Statement

Attached to this Petition for An Adjusted Standard as Exhibit B is a copy of the May 2011 Application for a Leaf Mulch Production Facility filed with the IEPA. That document provides detailed information as to the operations including protective measures undertaken to produce the leaf mulch products. The IEPA letter of August 18, 2011 denying that permit is attached as Exhibit C.

Section 104.406(l)

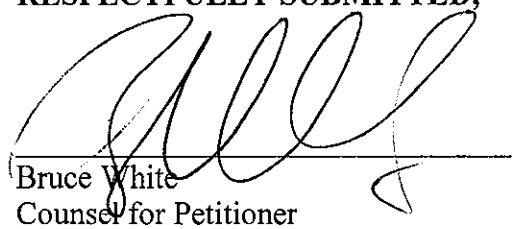
No other additional information is required under the regulations of general applicability from which this adjusted standard is sought.

CONCLUSION

The fundamental reason underlying this Petition for An Adjusted Standard is simply that the 35 Ill. Adm. Code 830 standards were developed to govern facilities which compost landscape waste. Kramer is not such a facility; rather it is a recycler of leaves into mulch that works to prevent composting. To require Kramer to comply with the general composting regulations would be akin to fitting a square peg into a round hole. Given the discrepancy in operational goals between Kramer and the general requirements, it is unavoidable that certain aspects of the existing regulations do not neatly apply to the Kramer operations. It is only those few defined points of departure for which adjusted standards are sought hereunder.

WHEREFORE, this Petition for An Adjusted Standard should be granted.

RESPECTFULLY SUBMITTED,



Bruce White
Counsel for Petitioner

Dated: April 30, 2013

Bruce White
Barnes & Thornburg LLP
One North Wacker Drive
Suite 4400
Chicago, Illinois 60606
(312)214-4584
(312)759-5646 (fax)

CHDS01 BMAGEL 816482v1

Exhibit A

EXHIBIT A

This Exhibit to the Petition for Adjusted Standard contains the regulatory provisions of general applicability from which the Adjusted Standard is sought. As stated in the Petition, it is only from those aspects of these regulations which are emphasized through bolding in this Exhibit that an Adjusted Standard is requested. The language showing the changes is included below the existing regulation with changes shown in italics. Petitioner Kramer would comply with the remaining subparts of these adjusted regulatory provisions, as well as the other applicable regulations within 35 Ill. Adm. Code 830 as provided in an IEPA issued permit which would include, *inter alia*, the conditions listed in the Petition for Adjusted Standard.

Section 830.205 Additional Operating Standards for Permitted Landscape Waste Compost Facilities

All permitted landscape waste compost facilities must comply with the following operating standards, in addition to those set forth in Sections 830.202 and 830.204:

a) Composting Process

1) All permitted landscape waste compost facilities must meet the following composting process standards:

A) Landscape waste must be processed within 24 hours after receipt at the facility into windrows, other piles or a contained composting system **providing proper conditions for composting**. Incoming leaves, and brush or woody landscape waste, may be stored in designated areas for use as a carbon source and bulking agent, if so provided as a permit condition, rather than being processed in windrows or other piles.

B) Unless the facility is designed for anaerobic composting, the operator shall take measures to adjust the oxygen level, as necessary, to promote aerobic composting. Aeration intensity must be altered to suit the varying oxygen requirements that different landscape wastes may have.

C) The operator shall take measures to maintain the moisture in level of the composting material within a range of 40% to 60% on a dry weight basis.

Effective Date: Adopted at 18 Ill. Reg. 17017 effective December 15, 1994 amended in R 97-29 at 22 Ill. Reg. 21052, effective November 23, 1998.

Proposed Adjusted Standard: All permitted landscape waste compost *or leaf mulch production* facilities must comply with the following operating standards, in addition to those set forth in Sections 830.202 and 830.204:

a) Composting Process *or Leaf Mulch Production*

1) All permitted landscape waste compost facilities *or leaf mulch production facilities* must meet the following composting process standards:

A) Landscape waste must be processed within 24 hours after receipt at the facility into windrows, other piles or a contained composting system **providing proper conditions for composting.** Incoming leaves, and brush or woody landscape waste, may be stored in designated areas for use as *leaf mulch ingredients or products,* a carbon source and bulking agent, if so provided as a permit condition, rather than being processed in windrows or other piles

B) Unless the facility is designed for anaerobic composting production, the operator shall take measures to adjust the oxygen level, as necessary, to promote aerobic composting. Aeration intensity must be altered to suit the varying oxygen requirements that different landscape wastes may have.

C) *Unless the facility is designed and operated for leaf mulch production,* the operator shall take measures to maintain the moisture in level of the composting material within a range of 40% to 60% on a dry weight basis.

Should the requested adjusted standard as to this regulatory section be granted, the italicized language would be added as shown above. In addition the other subsections within 35 Ill. Adm. Code 830.205(a) would remain unchanged. This would enable Petitioner to operate its leaf mulch production facility while complying with the majority of the regulation. The original regulatory language applies specifically to those facilities seeking to facilitate composting. As noted previously, Petitioner's facility is designed

and operated to avoid composting and therefore requiring compliance with these provisions as written would be literally counter-productive as to Petitioner.

Section 830.206 Operating Plan for Permitted Landscape Waste Compost Facilities

All activities at a permitted facility **associated with composting** must be conducted in accordance with an operating plan containing, at a minimum, the following information:

f) Management procedures that will be used **in composting**, which must include:

1) A description of any treatment the wastes will receive prior to windrowing (e.g., chipping, shredding) and the maximum length of time required to process each day's receipt of waste into windrows;
2) The specifications to which the windrows will be constructed (width, height, and length) and calculation of the capacity of the facility;
3) A list of additives, including the type, amount and origin, that will be used to adjust moisture, temperature, oxygen transfer, pH, carbon to nitrogen ratio, or biological characteristics of the composting material, and rates and methods of application of such additives; and
4) An estimate of the length of time necessary to complete the composting process.

g) Methods to minimize odors. In addition to the requirements specified in 830.202(e), the operating plan must include:

1) A management plan for bad loads;
2) A demonstration that the processing and management of anticipated quantities of landscape waste can be accomplished during all weather conditions;
3) Procedures for receiving and recording odor complaints, investigating immediately in response to any odor complaints to determine the cause of odor emissions, and remedying promptly any odor problem at the facility;
4) Additional odor-minimizing measures, which may include the following:

A) Avoidance of anaerobic conditions in the **composting material;**
B) Use of mixing for **favorable composting conditions**;
C) Formation of windrows or other piles into a size and shape favorable to minimizing odors; and

D) Use of end-product compost as cover to act as a filter **during early stages of composting.**

h) Methods to control storm water and landscape waste leachate, in accordance with Section 830.204;

i) Methods to control noise, vectors and litter, in accordance with Section 830.205;

j) Methods to control dust emissions, in accordance with Section 830.205(f), which must include:

1) Consideration of the following factors prior to turning or moving the composting material:

A) Time of day;
B) Wind direction;
C) Percent moisture;
D) Estimated emission potential; and
E) Degree of maturity; and

2) Maintenance of roads, wetting of roads, use of dust control agents, or any combination of these methods;

k) Methods for monitoring temperature, oxygen level and moisture level of the **composting** material, in accordance with Section 830.205(m);

l) Methods for adjusting temperature, oxygen level and moisture level of the **composting** material, in accordance with Section 830.205(a);

m) Recordkeeping and reporting procedures required pursuant to Section 830.211; and

n) Methods to obtain **composite** samples and test end-product **compost** to demonstrate compliance with Subpart E of this Part.

Effective Date: Adopted at 18 Ill. Reg. 17017 effective December 15, 1994 amended in R 97-29 at 22 Ill. Reg. 21052, effective November 23, 1998.

Proposed Adjusted Standard:

f) Management procedures that will be used in *leaf mulching or* composting, which must include:

1) A description of any treatment the wastes will receive prior to windrowing ***or piling*** (e.g., chipping, shredding) and the maximum length of time required to process each day's receipt of waste into **windrows** *or leaf mulch pile(s or stack(s))*;

2) The specifications to which the **windrows** *or leaf piles* will be constructed (width, height, and length) and calculation of the capacity of the facility;

3) A list of additives, including the type, amount and origin, that will be used to adjust moisture, temperature, oxygen transfer, pH, carbon to nitrogen ratio, or biological characteristics of the composting ***or*** *leaf mulching* material, and rates and methods of application of such additives; and

4) An estimate of the length of time necessary to complete the composting *or* *leaf mulch production* process.

j) Methods to control dust emissions, in accordance with Section 830.205(f), which must include:

1) Consideration of the following factors prior to turning or moving the composting *or stored leaf* material:

A) Time of day;
B) Wind direction;
C) Percent moisture;
D) Estimated emission potential; and
E) Degree of maturity; and

2) Maintenance of roads, wetting of roads, use of dust control agents, or any combination of these methods;

Should the requested adjusted standard be granted with respect to 35 Ill. Adm. Code 830.206, the italicized language would be added to the regulatory subsections as shown. The title of the Section would also be changed to note its new applicability to leaf mulch production facilities as well as landscape waste composting locations. For purposes of this adjusted standard, a leaf pile or stack would mean that accumulation of leaves or tree wood maintained on the concrete pad to store the virgin leaf and tree wood materials prior to grinding for production of leaf mulch products. All of the remaining provisions of 35 Ill. Adm. Code 830.206 would remain applicable and effective as originally promulgated. The goal of these regulatory modifications is to allow Petitioner to operate in an environmentally sound manner while recognizing that it is recycling as opposed to composting leaves.

Section 830.503 Performance Standards for General Use Compost

General-use **compost:**

a) Must be free of any materials which pose a definite hazard to human health due to physical characteristics, such as glass or metal shards;

b) Must not contain man-made materials larger than four millimeters in size exceeding 1% of the end-product **compost**, on a dry weight basis;
c) Must have a pH between 6.5 and 8.5;
d) Must have reached stability, as demonstrated by one of the methods prescribed in Section 830.Appendix B;
e) Must not exceed, on a dry weight basis, the inorganic concentrations set forth in Section 830.Table A; and
f) Must not contain fecal coliform populations that exceed 1000 MPN per gram of total solids (dry weight basis), or Salmonella species populations that exceed 3 MPN per 4 grams of total solids (dry weight basis).

Effective Date: Adopted at 18 Ill. Reg. 17017 effective December 15, 1994 amended in R 97-29 at 22 Ill. Reg. 21052, effective November 23, 1998.

Proposed Adjusted Standard*: Section 830.503 Performance Standards for General Use Compost *and Leaf Mulch

A. General-use compost:

a) Must be free of any materials which pose a definite hazard to human health due to physical characteristics, such as glass or metal shards;
b) Must not contain man-made materials larger than four millimeters in size exceeding 1% of the end-product compost, on a dry weight basis;
c) Must have a pH between 6.5 and 8.5;
d) Must have reached stability, as demonstrated by one of the methods prescribed in Section 830.Appendix B;
e) Must not exceed, on a dry weight basis, the inorganic concentrations set forth in Section 830.Table A; and
f) Must not contain fecal coliform populations that exceed 1000 MPN per gram of total solids (dry weight basis), or Salmonella species populations that exceed 3 MPN per 4 grams of total solids (dry weight basis).

B. Leaf Mulch:
a) Must be free of any materials which pose a definite hazard to human health due to physical characteristics, such as glass or metal shards;
b) Must not contain man-made materials larger than four millimeters in size exceeding 1% of the end-product compost, on a dry weight basis;
c) Must have a pH between 6.5 and 8.5;
d) Must not exceed, on a dry weight basis, the inorganic concentrations set forth in Section 830.Table A; and
e) Must not contain fecal coliform populations that exceed 1000 MPN per gram of total solids (dry weight basis), or Salmonella species populations that exceed 3 MPN per 4 grams of total solids (dry weight basis).

If the adjusted standard sought through this Petition for this provision is granted, a new subsection with specified standards analogous to those for general use compost would be

added for leaf mulch. Only the specification on stability as demonstrated through compost testing methods contained in the general composting regulation would be removed for leaf mulch as by its own terms it applies to compost as opposed to leaf mulch. Petitioner does not produce mature compost as previously reviewed.

Section 830.504 Testing Requirements for End-Product **Compost** Derived from Landscape Waste

a) Operators shall perform testing to demonstrate compliance with the standards set forth in subsections (b) - (e) of Section 830.503. Such testing must be done in accordance with the methods set forth in Section 830.Appendix B, except that an alternative method or methods may be used to demonstrate compliance with any of these standards, if approved in writing by the Agency.

b) Operators of facilities which are authorized to use an additive pursuant to Section 830.205(a)(1)(G) which may cause an exceedence of Section 830.503(f) shall test for pathogens using the method set forth in Section 830.Appendix B, except that an alternative method or methods may be used to demonstrate compliance with any of these standards, if approved in writing by the Agency.

c) For any facility not required to have a permit, no testing need be done to demonstrate compliance with the inorganics standards set forth in Section 830.Table A for general use compost derived from landscape waste.

d) End-product **compost** derived from landscape waste must be tested for the parameters set forth in Section 830.503 at a frequency of:
   1) Once every 5,000 cubic yards of end-product **compost** transported off-site; or
   2) Once per year, if less than 5,000 cubic yards of end-product **compost** are transported off-site per year.

Effective Date: Adopted at 18 Ill. Reg. 17017 effective December 15, 1994 amended in R 97-29 at 22 Ill. Reg. 21052, effective November 23, 1998.

***Proposed Adjusted Standard*:** With this Petition, Kramer seeks a variance or in the alternative, an adjusted standard, from this regulatory provision in its entirety. Petitioner does not produce mature compost of any kind. Instead, through its operational activities, Petitioner seeks to prevent the development of such compost so that it can address its customers' needs for quality mulch produced from landscape materials and leaves. Therefore, this provision which speaks in terms of general use compost is simply inapplicable to the reality of Petitioner's operations. Petitioner hereby requests a ruling

from the Board that 830.501 is consequently not applicable to Kramer's West Chicago leaf mulch operations.

Petitioner does test its leaf mulch blend and special blend mulch for moisture content and suggests that this testing program form the basis for an adjusted standard from this regulatory Section. The moisture content goal for leaf mulch would be 40% by weight. Testing would be performed for each 2000 cubic yards of leaf mulch blend or special blend mulch produced be volume. Petitioner would maintain records of its moisture content testing at the West Chicago facility.

Section 830.507 Sampling Methods

Sample collection, preservation, and analysis must be done in a manner which assures valid and representative results. A composite sample must be prepared by one of the following methods:

a) Twelve grab samples, each 550 milliliters in size, must be taken from the end-product **compost** at the facility, in the following manner:

1) Four grab samples from points both equidistant throughout the length and at the center of the windrow or other pile, at a depth not less than one meter from the surface of the windrow or other pile;
2) Four grab samples from points both equidistant throughout the length and one quarter the width of the windrow or other pile, at a depth not less than half the distance between the surface and the bottom of the windrow or other pile; and
3) Four grab samples from points both equidistant throughout the length and one eighth the width of the windrow or other pile, at a depth not less than half the distance between the surface and the bottom of the windrow or other pile.
4) The twelve grab samples must be thoroughly mixed to form a homogenous composite sample. Analyses must be of a representative subsample. The sample holding times, sample container types and minimum collection volumes listed in Section 830.Table B shall apply; or

b) Sampling methods set forth in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846), incorporated by reference at 35 Ill. Adm. Code 830.103.

Effective Date: Adopted at 18 Ill. Reg. 17017 effective December 15, 1994 amended in R 97-29 at 22 Ill. Reg. 21052, effective November 23, 1998.

Proposed Adjusted Standard: With this Petition, Kramer seeks a variance or in the alternative, an adjusted standard from this regulatory provision in its entirety. Petitioner does not produce compost of any kind. Instead, through its operational activities, Petitioner seeks to prevent the development of compost so that it can address its customers' needs for quality mulch produced from landscape materials and leaves. Therefore, this provision is simply inapplicable to the reality of Petitioner's operations. Therefore, with this filing, Petitioner requests a ruling from the Board that 830.501 is not applicable to Kramer's West Chicago leaf mulch operations.

With respect to the testing methods that Petitioner proposes as an adjusted standard for this regulatory standard, the following provisions would apply:

A. Calculate the % moisture for Leaf Mulch.

   a. Weigh a small container

   b. Weigh 10 g of the material into the container

   c. Dry sample for 24 hours – over a heated floor or within a 105-110 degree Convectional Oven.

   d. Reweigh the sample, subtract the weight of the container, and determine the moisture content using the following equation:

B. $M_n = ((W_w - W_d / W_w) \times 100$

   In which:

   M_n = moisture content (%) of material in

   W_w = wet weight of the sample, and

   W_d = weight of the sample after drying.

C. Suppose, for example, that you weight 10 g of leaf mulch (W_w) into a 4 g container and that after drying the container plus leaf mulch weighs 6.3g. Subtracting out the 4-g. container weight leaves 2.3 g as the dry weight (W_d) of your sample. Percent moisture would be:

   $M_n = ((W_w - W_d / W_w) \times 100$

   $=((10 - 2.3)/10) \times 100$

   = 77% for the Leaf Mulch

Exhibit B

PERMIT APPLICATION FOR A

LEAF MULCH PRODUCTION FACILITY

Submitted to:

Illinois Environmental Protection Agency
Division of Land Pollution Control
Permit Section, Bureau of Land
1021 North Grand Avenue East
Springfield, IL 62794-9276

On behalf of:

Kramer Tree Specialists, Inc.
300 Charles Court
West Chicago, Illinois 60185
May 2011

Submitted by:

JPL Environmental Engineering
1122 North Clark Street, #3803
Chicago, IL 60610

Distribution:
3 Original – Illinois Environmental Protection Agency
1 Copy – Kramer Tree Specialists, Inc.
1 Copy - JPL Environmental Engineering

Illinois Environmental Protection Agency

Bureau of Land • 1021 N. Grand Avenue E. • Box 19276 • Springfield • Illinois • 62794-9276

General Application for Permit
(LPC - PA1)

This form must be used for any application for permit, except for landscape waste composting or hazardous waste management facilities regulated in accordance with RCRA, Subtitle C from the Bureau of Land. One original, and two copies, or three if applicable, of all permit application forms must be submitted. Attach the original and appropriate number of copies of any necessary plans, specifications, reports, etc. to fully support and describe the activities and modifications being proposed. Attach sufficient information to demonstrate the compliance with all regulatory requirements. Incomplete applications will be rejected.

Niote: Permit applications which are hand-deliverd to the Bureau of Land, Permit Section must be delivered to the above address between 8:30 am and 5:00 pm, Monday through Friday (excluding State holidays).

NOTE: Please complete this form online, save a copy locally, print and submit it to the Permit Section #33, at the above address.

I. Site Identification:

Site Name: Kramer Tree Specialists, Inc. IEPA ID Number: _____

Street Address: 300 Charles Court P.O. Box: _____

City: West Chicago State: IL Zip Code: 60185 County: DuPage

Existing DE/OP Permit Numbers (if applicable): N/A

2. Owner/Operator Identification:

	Owner		Operator
Name:	Kramer Land Development LLC	Name:	Kramer Tree Specialists, Inc.
Street Address:	300 Charles Court	Street Address:	300 Charles Court
PO Box:		PO Box:	
City:	West Chicago State: IL	City:	West Chicago State: IL
Zip Code:	60185 Phone: 630-293-5444	Zip Code:	60185 Phone: 630-293-5444
Contact:	Joseph Kramer	Contact:	Joseph Kramer
Email Address:	joe@kramertree.com	Email Address:	rthomas@kramertree.com

TYPE OF SUBMISSION/REVIEW PERIOD:		TYPE OF FACILITY:		TYPE OF WASTE:	
New Landfill/180 days (35 IAC Part 813)	☐	Landfill	☐	General Municipal Refuse	☐
Landfill Expansion/180 days (35 IAC Part 813)	☐	Land Treatment	☐	Hazardous	☐
Sig. Mod. to Operate/90 days (35 IAC Part 813)	☐	Transfer Station	☐	Special (Non-Hazardous)	☐
Other Sig. Mod./90 days (35 IAC Part 813)	☐	Treatment Facility	☐	Chemical Only (exec. putrescible)	☐
Renewal of Landfill/90 days (35 IAC Part 813)	☐	Storage	☐	Inert Only (exec. chem. & putrescible)	☐
Developmental/90 days (35 IAC Part 807)	☑	Incinerator	☐	Used Oil	☐
Operating/45 days (35 IAC Part 807)	☐	Composting	☐	Potentially Infectious Medical Waste	☐
Supplemental/90 days (35 IAC Part 807)	☐	Recycling/Reclamation	☐	Landscape/Yard Waste	☑
Permit Transfer/90 days (35 IAC Part 807)	☐	Other (Specify)	☑	Other (Specify)	☐
Renewal of Experimental Permit (35 IAC Part 807)	☐	Leaf Mulch			

3. Description of this Permit Request:

Application to accept landscape waste consisting of leaves in order to stack, store and process them into leaf mulch on 5.5 acres out of a 10 acre parcel located at the owner's existing tree care facility. Leaf mulch will be produced on an existing concrete pad that is also used for production of wood mulch.

4. Completeness Requirements

The following items must be checked Yes, No or N/A. Each item will be reviewed for completeness by the log clerk. Blank items will result in rejection of the application. Please refer to the instructions for further guidance.

Have all required public notice letters been mailed in accordance with the LPC-PA16 instructions? ☑ Yes ☐ No ☐ N/A

(If so, provide a list of those recipients of the required public notice letters for Illinois EPA retention. Such retention shall not imply any Illinois EPA review and/or confirmation of the list.)

Public Notice Recipients

Name: Thomas Johnson Title: State Senator
Street Address: 1725 S Naperville Road, Suite 200 P.O. Box:
City: Wheaton State: IL Zip Code: 60089 Phone: 630-682-8100

Name: Mike Fortner Title: State Representative
Street Address: 135 Fremont Street P.O. Box:
City: West Chicago State: Il Zip Code: 60185 Phone: 630-293-9344

Name: Dan Cronin Title: DuPage County Board Chairman
Street Address: 421 N. County Farm Road P.O. Box:
City: Wheaton State: IL Zip Code: 60187 Phone: 630-407-6060

Name: Gary King Title: County Clerk
Street Address: 421 N. County Farm Road P.O. Box:
City: Wheaton State: IL Zip Code: 60187 Phone: 630-407-5500

Name: Robert Berlin Title: States Attorney
Street Address: 503 N. County Farm Road P.O. Box:
City: Wheaton State: IL Zip Code: 60187 Phone: 630-407-8000

Name: Nancy Smith Title: Clerk
Street Address: West Chicago City Hall, 475 Main Street P.O. Box:
City: West Chicago State: IL Zip Code: 60185 Phone: 630-203-2200

Name: Heidi Wetzel Title: Clerk
Street Address: 100 North Island P.O. Box:
City: Batavia State: IL Zip Code: 60510-1930 Phone:

Name: Anne Mareachen Title: Clerk
Street Address: 27 W 465 Jewell Road P.O. Box:
City: Winfield State: IL Zip Code: 60190 Phone: 630-933-7100

Name: Emily Larson Title: Clerk
Street Address: City Hall, 28W701 Stafford Pl P.O. Box:
City: Warrenville State: IL Zip Code: 60555 Phone: 630-393-9427

Name: Beth Melody Title: Clerk
Street Address: 500 N. Gary Avenue P.O. Box:
City: Carol Stream State: IL Zip Code: 60188 Phone: 630-871-6250

Name: Nancy Garrison Title: Clerk
Street Address: 2 East Main Street P.O. Box:
City: St. Charles State: IL Zip Code: 60174 Phone: 630-377-4444

Name: Patti Engston Title: Clerk
Street Address: 5N430 Railroad Street P.O. Box:
City: Wayne State: IL Zip Code: 60184 Phone: 630-584-3090

2. a. Is the Siting Certification Form (LPC-PA8) completed and enclosed? ☐ Yes ☐ No ☑ N/A
   b. Is siting approval currently under litigation? ☐ Yes ☐ No ☑ N/A

3. a. Is a closure, and if necessary a post-closure plan covering these activities being submitted, or ☑ Yes ☐ No ☐ N/A
   b. has one already been approved? If yes, provide the permit number: _____

4. a. For waste disposal sites, only: Has any employee, owner, operator, officer or director of the owner or operator had a prior conduct certification denied, canceled or revoked? ☐ Yes ☐ No ☑ N/A
   b. Have you included a demonstration of how you comply or intend to comply with 35 Ill. Adm. Code 745? ☐ Yes ☐ No ☑ N/A

5. a. Is land ownership held in beneficial trust? ☐ Yes ☑ No ☐ N/A
   b. If yes, is a beneficial trust certification form (LPC-PA9) completed and enclosed? ☐ Yes ☐ No ☐ N/A

6. a. Does the application contain information or proposals regarding the hydrogeology; groundwater monitoring, modeling or classification; a groundwater impact assessment; or vadose zone monitoring for which you are requesting approval? ☐ Yes ☑ No ☐ N/A
   b. If yes, have you submitted a third copy of the application (4 total) and supporting documents? ☐ Yes ☐ No ☐ N/A

5. Signatures:

Original signatures are required. Signature stamps or applications transmitted electronically or by FAX are not acceptable.

l applications shall be signed by the person designated below as a duly authorized representative of the owner an/or operator.

Corporation - By a principal executive officer of the level of vice-president or above.
Partnership or Sole Proprietorship - By a general partner or the proprietor, respectively.
Government - By either a principal executive officer or a ranking elected official.

A person is a duly authorized representative of the owner and operator only if:

1. They meet the criteria above or the authorization has been granted in writing by a person described above; and
2. Is submitted with this application (a copy of a previously submitted authorization can be used).

I hereby affirm that all information contained in this application is true and accurate to the best of my knowledge and belief. I do herein swear that I am a duly authorized representative of the owner/operator and I am authorized to sign this permit application form.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Joseph Kramer — Owner Signature: — 5-18-11 — Date:

Joseph Kramer — Printed Name: — President — Title:

Notary: Subscribed and Sworn before me this 18 day of May 2011.

My commission expires on: 9/5/14

Lucindia C Peters

Signature & Stamp/Seal of Notary Public

Joseph Kramer — Operator Signature: — 5-18-11 — Date:

OFFICIAL SEAL
LUCINDIA C PETERS
NOTARY PUBLIC - STATE OF ILLINOIS
MY COMMISSION EXPIRES:09/05/14

Joseph Kramer — Printed Name: — President — Title:

Notary: Subscribed and Sworn before me this 18 day of May 2011.

My commission expires on: 9/5/14

Lucindia C Peters

Signature & Stamp/Seal of Notary Public

OFFICIAL SEAL
LUCINDIA C PETERS
NOTARY PUBLIC - STATE OF ILLINOIS
MY COMMISSION EXPIRES:09/05/14

Engineer's Name: John P Lardner — Engineer's Title: Senior Project Engineer

Company: JPL Environmental Engineering — Registration Number: 062038498

Street Address: 1122 North Clark Street, #3803 — PO Box:

City: Chicago — State: IL — Zip Code: 60610-7899 — Phone: 630-862-4287

Email Address: jlardnerpe@aol.com — License Expiration Date: 11/30/2011

Signature: John P Lardner — Date: 5/18/2011 — Professional Engineer's Seal:

JOHN P. LARDNER
062-038498
REGISTERED
PROFESSIONAL
ENGINEER
OF
ILLINOIS

Illinois Environmental Protection Agency

Bureau of Land • 1021 N. Grand Avenue E. • P.O. Box 19276 • Springfield • Illinois • 62794-9276

Application for Permit Relating to a Composting Facility for Landscape Waste (LPC-PA12)

1. Site Identification:

A. IEPA ID Number: N/A

Facility Name: Kramer Tree Specialists Leaf Mulch Facility County: DuPage

Street Address: 300 Charles Court P.O. Box: _____

City or Township: West Chicago State: IL Zip Code: 60185

B. Legal description of the site and legal description of the facility boundary, if different than the property boundary. You may provide additional information, if necessary, by clicking on the button below.

5.5 acres within a10 acre parcel described as a resubdivision of Lot 2 in North Industrial Park, in the Northeast Quarter of Section 8, Township 39 North, Range 9 East of the third principal meridian, according to the plan thereof recorded September 19,20005 , as document R2005-206729, in DuPage County, Illinois.

Latitude:	41 (Deg)	52 (Min)	56 (Sec)	Longitude:	88 (Deg)	13 (Min)	36 (Sec)

2. Facility Description:

Facility Type: New Facility

Existing BOL Permit Number: N/A

If a renewal, also list the Permit Modification Numbers: _____ _____ _____

3. Brief Narrative of the Proposed Activities Related to the Composting Operation:

Kramer Tree Specialists seeks a permit to collect,store and process leaves in order to produce leaf mulch on 5.5 acres of concrete surface that currently serves as their mulch yard. The leaves will be stacked in piles up to 25 feet in height

4. Applicant Identification:

Are the property owner and operator the same entity? (•) Yes ( ) No

Property Owner		Operator, if different	
Name:	Kramer Land Development LLC	Name:	Kramer Tree Specialists, Inc.
Street Address:	300 Charles Court	Street Address:	300 Charles Court
PO Box:		PO Box:	
City:	West Chicago State: IL	City:	West Chicago State: IL
Zip Code:	60185 Phone: 630-293-5444	Zip Code:	60185 Phone: 630-293-5444
Contact:	Joseph Kramer	Contact:	Joseph Kramer
Email Address:	joe@kramertree.com	Email Address:	rthomas@kramertree.com

Mail Agency correspondence to: Operator

Other:
Name:
Street Address:
PO Box:
City: State:
Zip Code: Phone:
Contact:
Email Address:

5. Proof of Land Ownership and Certification:

Operated by:

- [x] Illinois Corporation
- [ ] Individual
- [ ] Partnership
- [ ] Trust
- [ ] Government
- [ ] Other:

- [ ] Presently owned by Operator
- [x] To be Leased by Applicant for 5 years
  - Years of Lease Remaining 2 years
  - Beginning Date of Lease: 3/2008
  - Ending Date of Lease: 3/2013

6. Location Information:

Attach a copy of the United States Geological Survey (USGS) quadrangle map (7.5 minute quadrangle, if published) and a topographic map of the area which contains the comosting facility. Also provide a legal description of the site including the size in acres, present zoning classification and restrictions (if any).

Quadrangle Map provided: West Chicago (Name:) Jan 1, 1998 (Date:)

Other maps:

7. Site Plan Map:

Provide a copy of the plan map or plan sheets showing the boundaries of the facility, contours of the land relief and the location of all structures, utilities and improvements pertinent to the facility operation. Refer to item 7 of the instructions for information to be included on maps or plan sheets.

8. Detailed Description of the Facility:

A written description of the facility, including the design and operating procedures that will be used at the facility to comply with the requirements of 35 IAC, Parts 830 and 831 must be provided. In the spaces provided below, indicate the page number or ion within the application where this information can be found (See number 8 in the instructions).

The following information must accompany the application. In the space provided, identify the page number or location in the supporting documentation where this information can be found.

Page number or location of information:

P. 8 Section 3.	A.	Stormwater and landscape waste leachate controls as required pursuant to 35 IAC 830.204.
P. 15 Section 5	B.	An estimate of the maximum annual volume and peak daily volume of landscape waste the facility will be able to process and place into windrows or piles under proper conditions for composting within the time limits required by 35 IAC 830.203(a)(4) or 35 IAC 830.205.
Attachment 3	C.	Proof that the facility includes a setback of at least 200' from the nearest potable water supply well.
Attachment 4	D.	Proof that the facility is located outside the boundary of the 10-year floodplain or the site will be floodproofed.
Attachment 5	E.	Proof that the facility is located so as to minimize incompatibility with the character of the surrounding area, including at least 660' from the nearest residence (other than a residence located on the same property as the facility) and health facilities pursuant to 35 IAC 830.203(a)(3)(A-C).
Page 6	F.	Proof that the design of the facility will prevent any compost material from being placed within 5 feet of the water table, will adequately control runoff from the site and will collect and manage any leachate that is generated on the site in accordance with 35 IAC 830.203(a)(5).
Attachment 7	G.	All authorizations, permits and approvals required from each Bureau of the Agency have been applied for or obtained.
Page 15. Section 15	H.	An operating plan satisfying the applicable requirements set forth in 35 IAC 830.206, a commitment to those applicable requirements and information to demonstrate how they will be achieved at the proposed facility.
Page 14 Section 4	I.	An early detection or groundwater monitoring system design in accordance with 35 IAC 830, Appendix A, if an early detection and groundwater monitoring program is required pursuant to 35 IAC 830.205(b)(1)(A)(iii) or 35 IAC 830.205(b)(2)(A)(iii).
Page 24. Section 6	J.	A salvaging plan if applicable, including markets, maximum storage volumes, storage times and nuisance controls.
Section 11. Att. 9	K.	A contingency plan satisfying the requirements set forth in 35 IAC 830.212.
Page 24. Section 8	L.	A load checking plan for inspection, removal of non-compostable waste from incoming loads or rejection of contaminated loads.
Page 15	M.	Specification of the operating hours of the facility.
Pages 1. 15	N.	The types of landscape waste that are proposed to be received by the facility.
Section 4. p10	O.	Descriptions of the storage areas, including their capacities, that will be used to stage the waste before processing and placement into windrows or piles, to store bulking agents or additives and to store end-product compost.
Section 9. Att. 9	P.	Description of personnel training procedures satisfying the requirements of 35 IAC 830.210.
Page 22	Q.	Description of compost sampling and testing procedures to demonstrate compliance with 35 IAC 830.507 and 35 IAC 830.504 for the compost quality standards set forth in 35 IAC 830.503.

9. Record Keeping:

Specify the location where the facility permit, design plans, operating plan, contingency plan, closure plan, reports and monitoring records will be kept so as to be available during inspection of the facility pursuant to 35 IAC 830.211. Describe the type of information that will be included in these records.

ation:

...cords and plans will be kept at the Kramer Tree Specialists, Inc. office at 300 Charles Court (see Drawing 1).

10. Closure Plan:

Provide a closure plan which contains a description of closure plans and methods to demonstrate compliance with all closure requirements in 35 IAC, Part 830. The closure plan must contain the itemized steps which will be taken to close the facility including a time line and cost estimate for labor equipment, reporting and certification of completion of closure.

Location:

Page 30,Section 12

11. Financial Assurance:

Provide a financial assurance plan containing a written cost estimate and identifying the financial mechanism chosen to cover the cost of closure. An operator of a new facility choosing to use a cash reserve account to cover the cost of closure shall fully fund the account within one year after initial receipt of waste.

Location:

Page 32, Section 13

12. Reporting:

Describe the procedures that will be used to collect information and file an annual report with the Illinois EPA by April 1st of each year. The annual report must include information on the amount of material in tons received for composting, the amount and type of material marketed, the amount of material remaining on site and a certification of compliance with the financial assurance requirements of 35 IAC, Subpart F.

Location:

See Section 2, Page 5.

13. Public Notification:

A. Are a copy of the Notice of Application for Permit to Manage Waste (LPC-PA16) and a list of persons to whom it was sent, along with copies of the mailing receipt included with this application?

☑ Yes ☐ No

B. If this is for a new facility or an expansion, has a copy of the newspaper notice, the name and telephone number of the newspaper used, and the dates of publication been included? This information may be submitted up to 30 day s after the date the application is filed with the Agency.

☑ Yes ☐ No

C. If this is for a new facility or expansion, has a copy of the "Notice of Application for Permit to Manage Waste form (LPC-PA16) been sent to owners of all real property within 250' in each direction of the lot line of the subject property, and a copy of the mailing receipts been included?

☑ Yes ☐ No

14. Required Signatures:

I hereby affirm that all information contained in this application is true and accurate to the best of my knowledge and belief. I do [illegible]in swear that I am a duly authorized representative of the owner/operator and I am authorized to sign this permit application [illegible].

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Joseph Kramer — Owner Signature: — Date: 5-18-11

Joseph Kramer J — Printed Name: — President — Title:

Notary: Subscribed and Sworn before me this 18th day of May 2011.

My commission expires on: 9/5/14

Lucindia C. Peters

Signature & Stamp/Seal of Notary Public

Joseph Kramer — Operator Signature — Date: 5-18-11

Joseph Kramer — Printed Name — President — Title

OFFICIAL SEAL
LUCINDIA C PETERS
NOTARY PUBLIC - STATE OF ILLINOIS
MY COMMISSION EXPIRES:09/05/14

Notary: Subscribed and Sworn before me this 18th day of May 2011.

My commission expires on: 9/5/14

OFFICIAL SEAL
LUCINDIA C PETERS
NOTARY PUBLIC - STATE OF ILLINOIS
MY COMMISSION EXPIRES:09/05/14

Lucindia C. Peters

Signature & Stamp/Seal of Notary Public

Engineer's Name: John P Lardner — Engineer's Title: Senior Project Engineer

Company: JPL Environmental Engineering — Registration Number: 062038498

Street Address: 1122 North Clark Street #3803 — PO Box:

City: Chicago — State: IL — Zip Code: 60610-7899 — Phone: 630-362-4287

Email Address: jlardnerpe@aol.com — License Expiration Date: 11-30-2011

Expires 11/30/2011

Preparer's Signature: John P. Lardner — Date: 5/18/2011

Professional Engineer's Seal:

JOHN P. LARDNER
62-038498
REGISTERED
PROFESSIONAL
ENGINEER
OF
ILLINOIS

[illegible] information submitted as part of the Application is available to the public except when specifically designated by the Applicant to be treated confidentially as a trade secret or secret process in accordance with Section 7(a) of the Act, applicable rules and regulations of the Illinois Pollution Control Board and applicable Illinois EPA rules and guidelines.

From: legals <legals@dailyherald.com>
To: John Lardner <jlardnerpe@aol.com>
Subject: RE: Legal Notice for Publication
Date: Thu, May 19, 2011 9:30 am

---

will do - Kathleen

-----Original Message-----
From: John Lardner [mailto:jlardnerpe@aol.com]
Sent: Thursday, May 19, 2011 9:20 AM
To: legals
Subject: RE: Legal Notice for Publication

The schedule is good. Please proceed.
John Lardner

From: legals
Sent: Thursday, May 19, 2011 8:10 AM
To: John Lardner
Subject: RE: Legal Notice for Publication

John - I will publish 5/ 21, 28 & 6/4 and send the invoice and certificate to your attention - thanks, Kathleen

-----Original Message-----
From: John Lardner [mailto:jlardnerpe@aol.com]
Sent: Wednesday, May 18, 2011 4:35 PM
To: legals
Subject: Legal Notice for Publication

We would like to have the attached notice published in the legal notice section of the Daily Herald newspaper, with circulation to the City of West Chicago. Publish once a week for three suceessive weeks, with proof of publication provided. Please advise on the cost for this service. Please direct response and billing to:

Mr. John P Lardner, PE
JPL Environmental Engineering
1122 North Clark Street, #3803
Chicago, IL 60610-7899
630-362-4287 (cell)

Thank-you,

John Lardner

Kramer Tree Specialists, Inc. located at 300 Charles Court in West Chicago, Illinois in DuPage County is applying to the Illinois Environmental Protection Agency (IEPA) for a permit to operate a leaf mulch production facility. The permit seeks to create a leaf mulch production area on 5.5 acres within 10 acres of property owned by the operator and currently used for their tree care business and production of wood mulch. The entrance to the facility is from Charles Court via Washington Street. The facility will accept landscape waste consisting of brush, branches and leaves. The facility received a special use from the City of West Chicago on December 6, 2006 to construct an outside storage yard for processing and storage of mulch and landscape waste materials within an M zoning area subject to conditions in Ordinance No. 06-O-0102 . Questions regarding the application can be directed to Kramer Tree Specialists, Inc. at 630-293-5444.Comments can be directed to the IEPA in writing to the address below, or by phone, by June 27, 2011.

Illinois Environmental Protection Agency
Permit Section, Division of Land Pollution Control
1021 North Grand Avenue East, P.O. Box 19276
Springfield, Il 62974-9276
(217) 524-3300

Illinois Environmental Protection Agency

Bureau of Land • 1021 N. Grand Avenue E. • Box 19276 • Springfield • Illinois • 62794-9276

Notice of Application for Permit to Manage Waste (LPC-PA16)

Date: May 23, 2011

To Elected Officials and Concerned Citizens:

The purpose of this notice is to inform you that a permit application has been submitted to the Illinois EPA, Bureau of Land, for a solid waste project described below. You are not obligated to respond to this notice, however, if you have any comments, please submit them in writing to the Bureau of Land, Attn: Permit Section, at the above address, or contact the Permit Section at 218/524-3300 within 21 days.

NOTE: Please complete this form online, save a copy locally, print and submit it to the Permit Section #33, at the above.

The permit application, which is identified below, is for a project described at the bottom of this page.

Site Identification:

Site Name: Kramer Tree Specialists, Inc. Leaf Mulch Production Facility IEPA ID Number: (New)

Street Address: 300 Charles Court P.O. Box:

City: West Chicago State: IL Zip Code: 60185 County: DuPage

TYPE OF PERMIT SUBMISSIONS:		TYPE OF FACILITY:		TYPE OF WASTE:	
New Landfill	☐	Landfill	☐	General Municipal Refuse	☐
Landfill Expansion	☐	Land Treatment	☐	Hazardous	☐
First Significant Modification	☐	Transfer Station	☐	Special (Non-Hazardous)	☐
Significant Modification to Operate	☐	Treatment Facility	☐	Chemical Only (exec. putrescible)	☐
Other Significant Modification	☐	Storage	☐	Inert Only (exec. chem. & putrescible)	☐
Renewal of Landfill	☐	Incinerator	☐	Used Oil	☐
Development	☑	Composting	☐	Solvents	☐
Operating	☐	Recycling/Reclamation	☐	Landscape/Yard Waste	☑
Supplemental	☐	Other	☑	Other (Specify)	☐
Transfer	☐	Leaf Mulch			
Name Change	☐				
Generic	☐				

Description of Project:

Application to accept lanscape waste consisting of leaves in order to stack, store and process them into leaf mulch on 5.5 acres out of a 10 acre parcel located on the owner's existing tree care facility. Leaf mulch will be ~~reduced on an existing concrete pad that is also used for production of wood mulch at the facility.~~

State Senator Thomas Johnson
1725 S Naperville Road, Suite 200
Wheaton, IL 60089

State Representative Mike Fortner
135 Fremont Street
West Chicago, IL 60185

County Board Chairman Dan Cronin
Jack T. Knuepfer Admin. Bldg.
421 N. County Farm Road
Wheaton, IL 60187

County Clerk Gary King
Jack T. Knuepfer Admin. Bldg.
421 N. County Farm Road
Wheaton, IL 60187

States Attorney Robert Berlin
503 N. County Farm Road
Wheaton, IL 60187

Dona L. Smith, Township Supervisor
130 Arbor Avenue
West Chicago, IL 60185

City Clerk Nancy Smith
West Chicago City Hall
475 Main Street
West Chicago, IL 60185

NIP Lot 2A LLC
2775 Norton Creek Drive
West Chicago, IL 60185

Motion Industries
333 Charles Court, Suite 109
West Chicago, IL 60185

Tornado Innovation's Cleaning Systems
333 Charles Court, Suite 109
West Chicago, IL 60185

Prairie Materials
7601 W. 79th Street
Bridgeview, IL 60455

Union Pacific Railroad
500 Madison Avenue
Chicago, IL 60661

R. J. Lipscomb Engineering
1215 Washington Street
West Chicago, IL 60185

R.C. Coil Spring Mfg. Co.
C/o Lee Development/West Chicago
0s 020 Quail Run Court
Winfield, IL 60190

Brent Manning, Executive Director
Forest Preserve District of DuPage County
3S 580 Naperville Road
Wheaton, IL 60189-8761

City Clerk Heidi Wetzel
100 North Island Ave
Batavia, IL 60510-1930

Village Clerk Anne Mareachen
27 W 465 Jewell Road
Winfield, IL 60190

City Clerk Emily Larson
City Hall
28W701 Stafford Pl
Warrenville, IL 60555

Village Clerk Beth Melody
500 N. Gary Avenue
Carol Stream, IL 60188

City Clerk Nancy Garrison
2 East Main Street
St. Charles, IL 60174

Patti Engston, Village Clerk
5N430 Railroad Street
Wayne, IL 60184

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

BRIDGEVIEW IL 60455 OFFICIAL USE

Postage	$ $0.44	0101
Certified Fee	$2.85	14 Postmark Here
Return Receipt Fee (Endorsement Required)	$2.30	
Restricted Delivery Fee (Endorsement Required)	$0.00	
Total Postage & Fees	$ $5.59	05/20/2011

7010 1670 0000 9716 0799

Sent To: Prairie Materials
Street, Apt. No.; or PO Box No.: 7601 W. 79th Street
City, State, ZIP+4: Bridgeview, IL 60455

PS Form 3800, August 2006 See Reverse for Instructions

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

WEST CHICAGO IL 60185 OFFICIAL USE

Postage	$ $0.44	0101
Certified Fee	$2.85	14 Postmark Here
Return Receipt Fee (Endorsement Required)	$2.30	
Restricted Delivery Fee (Endorsement Required)	$0.00	
Total Postage & Fees	$ $5.59	05/20/2011

7010 1670 0000 9716 0775

Sent To: Motion Industries
Street, Apt. No.; or PO Box No.: 333 Charles Court, Suite 109
City, State, ZIP+4: West Chicago, IL 60185

PS Form 3800, August 2006 See Reverse for Instructions

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

CHICAGO IL 60661 OFFICIAL USE

Postage	$ $0.44	0101
Certified Fee	$2.85	14 Postmark Here
Return Receipt Fee (Endorsement Required)	$2.30	
Restricted Delivery Fee (Endorsement Required)	$0.00	
Total Postage & Fees	$ $5.59	05/20/2011

7010 1670 0000 9716 0720

Sent To: Union Pacific Railroad
Street, Apt. No.; or PO Box No.: 500 Madison Avenue
City, State, ZIP+4: Chicago, IL 60661

PS Form 3800, August 2006 See Reverse for Instructions

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

WEST CHICAGO IL 60185 OFFICIAL USE

Postage	$ $0.44	0101
Certified Fee	$2.85	14 Postmark Here
Return Receipt Fee (Endorsement Required)	$2.30	
Restricted Delivery Fee (Endorsement Required)	$0.00	
Total Postage & Fees	$ $5.59	05/20/2011

7010 1670 0000 9716 0782

Sent To: Tornado Innovations Cleaning Systems
Street, Apt. No.; or PO Box No.: 333 Charles Court, Suite 109
City, State, ZIP+4: West Chicago, IL 60185

PS Form 3800, August 2006 See Reverse for Instructions

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

WHEATON IL 60189 OFFICIAL USE

Postage	$ $0.44	0101
Certified Fee	$2.85	14 Postmark Here
Return Receipt Fee (Endorsement Required)	$2.30	
Restricted Delivery Fee (Endorsement Required)	$0.00	
Total Postage & Fees	$ $5.59	05/20/2011

7008 1300 0000 2284 2966

Sent To: Brent Manning, Executive Director
Street, Apt. No.; PO Box No.: Forest Preserve Dist. of DuPage Co. 3S 580 Naperville Road
City, State, ZIP+4: Wheaton, IL 60189-8761

PS Form 3800, August 2006 See Reverse for Instructions

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

WINFIELD IL 60190 OFFICIAL USE

Postage	$ $0.44	0101
Certified Fee	$2.85	14 Postmark Here
Return Receipt Fee (Endorsement Required)	$2.30	
Restricted Delivery Fee (Endorsement Required)	$0.00	
Total Postage & Fees	$ $5.59	05/20/2011

7008 1300 0000 2284 2959

Sent To: R. C. Coil Mfg c/o Lee Development
Street, Apt. No.; or PO Box No.: OS 020 Quail Run Court
City, State, ZIP+4: Winfield, IL 60190

PS Form 3800, August 2006 See Reverse for Instructions

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

OFFICIAL USE

BATAVIA IL 60510

Postage	$ $0.44	0101
Certified Fee	$2.85	14 Postmark Here
Return Receipt Fee (Endorsement Required)	$2.30	
Restricted Delivery Fee (Endorsement Required)	$0.00	
Total Postage & Fees	$ $5.59	05/20/2011

7008 1300 0000 2 2973

Sent To: City Clerk Heidi Wetzel
Street, Apt. No.; or PO Box No.: 100 North Island Ave.
City, State, ZIP+4: Batavia, IL 60510-1930

PS Form 3800, August 2006 — See Reverse for Instructions

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

OFFICIAL USE

WEST CHICAGO IL 60185

Postage	$ $0.44	0101
Certified Fee	$2.85	14 Postmark Here
Return Receipt Fee (Endorsement Required)	$2.30	
Restricted Delivery Fee (Endorsement Required)	$0.00	
Total Postage & Fees	$ $5.59	05/20/2011

7011 0470 0000 1955 9193

Sent To: R.J. Lipscomb Engineering
Street, Apt. No.; or PO Box No.: 1215 Washington Street
City, State, ZIP+4: West Chicago, IL 60185

PS Form 3800, August 2006 — See Reverse for Instructions

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

OFFICIAL USE

WEST CHICAGO IL 60185

Postage	$ $0.44	0101
Certified Fee	$2.85	14 Postmark Here
Return Receipt Fee (Endorsement Required)	$2.30	
Restricted Delivery Fee (Endorsement Required)	$0.00	
Total Postage & Fees	$ $5.59	05/20/2011

7010 1670 0000 9716 0751

Sent To: City Clerk Nancy Smith
Street, Apt. No.; or PO Box No.: City Hall, 475 Main Street
City, State, ZIP+4: West Chicago, IL 60185

PS Form 3800, August 2006 — See Reverse for Instructions

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

OFFICIAL USE

WEST CHICAGO IL 60185

Postage	$ $0.44	0101
Certified Fee	$2.85	14 Postmark Here
Return Receipt Fee (Endorsement Required)	$2.30	
Restricted Delivery Fee (Endorsement Required)	$0.00	
Total Postage & Fees	$ $5.59	05/20/2011

7010 1670 0000 9716 0713

Sent To: Dona Smith, Township Supervisor
Street, Apt. No.; or PO Box No.: 130 Arbor Avenue
City, State, ZIP+4: West Chicago, IL 60185

PS Form 3800, August 2006 — See Reverse for Instructions

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

OFFICIAL USE

WHEATON IL 60187

Postage	$ $0.44	0101
Certified Fee	$2.85	14 Postmark Here
Return Receipt Fee (Endorsement Required)	$2.30	
Restricted Delivery Fee (Endorsement Required)	$0.00	
Total Postage & Fees	$ $5.59	05/20/2011

7011 0470 0000 1955 9209

Sent To: States Attorney Robert Berlin
Street, Apt. No.; or PO Box No.: 503 N. County Farm Road
City, State, ZIP+4: Wheaton, IL 60187

Form 3800, August 2006 — See Reverse for Instructions

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

OFFICIAL USE

WHEATON IL 60187

Postage	$ $0.44	0101
Certified Fee	$2.85	14 Postmark Here
Return Receipt Fee (Endorsement Required)	$2.30	
Restricted Delivery Fee (Endorsement Required)	$0.00	
Total Postage & Fees	$ $5.59	05/20/2011

7011 0470 0000 1955 9186

Sent To: County Clerk Gary King
Street, Apt. No.; or PO Box No.: 421 N. County Farm Road
City, State, ZIP+4: Wheaton, IL 60187

PS Form 3800, August 2006 — See Reverse for Instructions

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

OFFICIAL USE

SAINT CHARLES IL 60174

Postage	$ $0.44	0101
Certified Fee	$2.85	14 Postmark Here
Return Receipt Fee (Endorsement Required)	$2.30	
Restricted Delivery Fee (Endorsement Required)	$0.00	
Total Postage & Fees	$ $5.59	05/20/2011

7008 1300 0000 2284 2997

Sent To: City Clerk Nancy Garrison
Street, Apt. No.; or PO Box No.: 2 East Main Street
City, State, ZIP+4: St. Charles, IL 60174

PS Form 3800, August 2006 — See Reverse for Instructions

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

OFFICIAL USE

WAYNE IL 60184

Postage	$ $0.44	0101
Certified Fee	$2.85	14 Postmark Here
Return Receipt Fee (Endorsement Required)	$2.30	
Restricted Delivery Fee (Endorsement Required)	$0.00	
Total Postage & Fees	$ $5.59	05/20/2011

7008 1300 0000 2284 3017

Sent To: Village Clerk, Patti Engston
Street, Apt. No.; or PO Box No.: 5 N 430 Railroad Street
City, State, ZIP+4: Wayne, IL 60184

PS Form 3800, August 2006 — See Reverse for Instructions

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

OFFICIAL USE

WEST CHICAGO IL 60185

Postage	$ $0.44	0101
Certified Fee	$2.85	14 Postmark Here
Return Receipt Fee (Endorsement Required)	$2.30	
Restricted Delivery Fee (Endorsement Required)	$0.00	
Total Postage & Fees	$ $5.59	05/20/2011

7010 1670 0000 9716 0768

Sent To: NIP LOT 2A LLC
Street, Apt. No.; or PO Box No.: 2775 Norton Creek Drive
City, State, ZIP+4: West Chicago, IL 60185

PS Form 3800, August 2006 — See Reverse for Instructions

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

OFFICIAL USE

CAROL STREAM IL 60188

Postage	$ $0.44	0101
Certified Fee	$2.85	14 Postmark Here
Return Receipt Fee (Endorsement Required)	$2.30	
Restricted Delivery Fee (Endorsement Required)	$0.00	
Total Postage & Fees	$ $5.59	05/20/2011

7008 1300 0000 2284 3000

Sent To: Village Clerk Beth Melody
Street, Apt. No.; or PO Box No.: 500 N. Gary Avenue
City, State, ZIP+4: Carol Stream, IL 60188

PS Form 3800, August 2006 — See Reverse for Instructions

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

OFFICIAL USE

WINFIELD IL 60190

Postage	$ $0.44	0101
Certified Fee	$2.85	14 Postmark Here
Return Receipt Fee (Endorsement Required)	$2.30	
Restricted Delivery Fee (Endorsement Required)	$0.00	
Total Postage & Fees	$ $5.59	05/20/2011

7008 1300 0000 2284 2980

Sent To: Village Clerk Anne Marcachen
Street, Apt. No.; or PO Box No.: 27 W 465 Jewell Road
City, State, ZIP+4: Winfield, IL 60190

PS Form 3800, August 2006 — See Reverse for Instructions

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

OFFICIAL USE

WARRENVILLE IL 60555

Postage	$ $0.44	0101
Certified Fee	$2.85	14 Postmark Here
Return Receipt Fee (Endorsement Required)	$2.30	
Restricted Delivery Fee (Endorsement Required)	$0.00	
Total Postage & Fees	$ $5.59	05/20/2011

7008 1300 0000 2284 3024

Sent To: City Clerk Emily Larson
Street, Apt. No.; or PO Box No.: 28 W 701 Stafford Pl
City, State, ZIP+4: Warrenville, IL 60555

PS Form 3800, August 2006 — See Reverse for Instructions

7011 0470 0000 1955 5737

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

OFFICIAL USE

BUFFALO GROVE IL 60089

Postage	$ $0.44	0101
Certified Fee	$2.85	14 Postmark Here
Return Receipt Fee (Endorsement Required)	$2.30	
Restricted Delivery Fee (Endorsement Required)	$0.00	
Total Postage & Fees	$ $5.59	05/20/2011

Sent To: State Senator Thomas Johnson
Street, Apt. No.; or PO Box No.: 1725 S. Naperville Road, Suite 200
City, State, ZIP+4: Wheaton, IL 60089

PS Form 3800, August 2006 — See Reverse for Instructions

7011 0470 0000 1955 9162

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

OFFICIAL USE

WEST CHICAGO IL 60185

Postage	$ $0.44	0101
Certified Fee	$2.85	14 Postmark Here
Return Receipt Fee (Endorsement Required)	$2.30	
Restricted Delivery Fee (Endorsement Required)	$0.00	
Total Postage & Fees	$ $5.59	05/20/2011

Sent To: State Representative Mike Fortner
Street, Apt. No.; or PO Box No.: 135 Fremont Street
City, State, ZIP+4: West Chicago, IL 60185

PS Form 3800, August 2006 — See Reverse for Instructions

7011 0470 0000 1955 9179

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

OFFICIAL USE

WHEATON IL 60187

Postage	$ $0.44	0101
Certified Fee	$2.85	14 Postmark Here
Return Receipt Fee (Endorsement Required)	$2.30	
Restricted Delivery Fee (Endorsement Required)	$0.00	
Total Postage & Fees	$ $5.59	05/20/2011

Sent To: County Board Chairman Dan Cronin
Street, Apt. No.; or PO Box No.: 421 N. County Farm Road
City, State, ZIP+4: Wheaton, IL 60187

PS Form 3800, August 2006 — See Reverse for Instructions

PERMIT APPLICATION FOR A LANDSCAPE WASTE LEAF MULCH PRODUCTION FACILITY

KRAMER TREE SPECIALISTS, INC.
WEST CHICAGO, ILLINOIS
[PROJECT NO. 2011-003]
MAY 2011

For Submission to:
Illinois Environmental Protection Agency
Division of Land Pollution Control
Bureau of Land – Permit Section
Springfield, Illinois

Prepared for:
Kramer Tree Specialists, Inc.
300 Charles Court
West Chicago, Illinois 60185

Prepared by:
JPL Environmental Engineering
1122 North Clark Street
Chicago, Illinois 60610-7899

KRAMER TREE SPECIALISTS

PERMIT APPLICATION FOR A LANDSCAPE WASTE LEAF MULCH PRODUCTION FACILITY

TABLE OF CONTENTS

1.0 INTRODUCTION

A landscape waste leaf mulch production facility (LMPF) is proposed within the boundary of property owned by Kramer Land Development and leased to Kramer Tree Specialists, Inc. (KTS). The purpose of the facility is to collect, store and process leaves, brush and branches, generated from internal and external sources, for the production of leaf mulch. The leaf mulch is then marketed for sale to private contractors and municipalities. The application was the result of consultations with the Illinois Environmental Protection Agency (Agency) whereby the Agency stated the requirement for a permit under Section 830 Standards for Compost Facilities, or a permit under Section 807 Solid Waste, in order to collect, store and process leaves, and produce a mulch product from them.

The property controlled by the owners includes 10 (ten) acres within West Chicago, Illinois, DuPage County. The new LMPF will be located as illustrated on drawing **Sheet 2** in **Attachment 2**. It will encompass approximately 5.5 acres within the overall property controlled by the owner. The application contained herein is a demonstration that the facility meets the standards of 35 IAC Part 830 subject to; the minimum performance standards in Subpart B, Section 830.202, the location standards in Section 830.203, the additional operating standards and requirements in Sections 830.204 through 830.213; and the financial assurance requirements of Subpart F. The application follows the sequence of sections in the regulations and includes information attachments as necessary to support the demonstrations. The end-product quality standards of Subpart E do not apply to this application because only leaf mulch is produced and there will be no finished compost produced.

2.0 PERFORMANCE STANDARDS (830.202) AND LOCATION STANDARDS (830.203)

Performance Standards

Separate plans have been prepared in later parts of this application that demonstrate that the applicant will comply with the requirements of 35 IAC Part 830, Subpart B, Section 830.202.

The operator will post a permanent sign at the entrance along Charles Court at the entrance, and the text will specify in letters not less than three inches high, the following information:

1) The name and mailing address of the operation which is Kramer Tree Specialists, 300 Charles Court, West Chicago, Illinois.

2) The operating hours which will be from Monday through Saturday from 5:30 am to 6:00 pm.

3) The materials which can be accepted shall include only organic landscape waste limited to brush, branches and leaves.

4) The statement "COMPLAINTS CONCERNING THIS FACILITY CAN BE MADE TO THE FOLLOWING PERSONS", which will be followed by the name and phone number of the operator, and the name and telephone number of the Bureau of Land, Illinois Environmental Protection Agency, Springfield, Illinois.

The operator will submit a written annual statement to the Agency, on a form provided by the Agency, on or before April 1 of each year that includes:

A) An estimate of the amount of leaf material in tons or cubic yards, received for production of leaf mulch in the previous calendar year;

B) An estimate of the amount and disposition of leaf mulch material in the previous calendar year;

C) A Facility Financial Assurance Plan Compliance Certification.

Location Standards

1. The proposed LMPF is more than 200 feet from the nearest potable water supply well, which is located east of the property as shown in the Potable Water Well Location Map (Illinois Geological Survey) included in **Attachment 3**. Other nearby potable water well locations, and their well location diagrams, are also included in the attachment.

2. A copy of the current Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) is included in **Attachment 4**. The LMPF location is not within the 10-year or 100-yr floodplains.

3. An aerial photograph of the site, showing the proposed LMPF and the nearest residences, is included in **Attachment 5**. The site is more than 1/8th mile from the nearest residence. The nearest residence is located approximately 2500 feet east of the facility boundary as illustrated on the map in **Attachment 5** and on **Figure 1** in **Attachment 2.** There are no facilities that meet the description of 830.203, 3(A), (B) and (C) within 1/8th mile of the site.

4. A map of areas within ½ mile of the facility boundary is also included on **Figure 2** in **Attachment 2**. The map illustrates the types of land use immediately adjacent to the facility and the zoning classification of properties. The property for the proposed LMPF is zoned Manufacturing and has been granted a Special Use, by ordinance, to construct an outside storage yard for the processing and storage of mulch and landscape waste materials. A copy of Ordinance No. 06-O-0102 from the City of West Chicago is included in **Attachment 6**.

5. The site is not located within ¼ mile of the nearest residence as shown on the aerial map in **Attachment 5**. The site is therefore not subject to Section 830.203(4).

6. The location used for storage and production of leaf mulch is entirely situated upon a concrete surface. At no time is the material in contact with the ground surface. Therefore, piezometers were not installed to determine the water table distance from the concrete pad surface as required by Section 830.203 (5).

7. There is no Wild and Scenic River located near the site, therefore, the proposed site will meet the requirements under the Wild and Scenic Rivers Act as per Section 830.203(6).

8. The LMPF will not restrict the flow of the 100-year flood because the proposed facility is located outside the limits of the 100-year floodplain (Section 830.203(7)).

9. The Illinois Department of Natural Resources (IDNR) EcoCAT database was consulted. A determination of endangered species or critical habitat was performed using the EcoCAT database. Results of the database search are included in

Attachment 7. The IDNR concluded that adverse effects are unlikely. The proposed LMPF pad and adjacent office building have been constructed, therefore the Illinois Historic Preservation Agency was not consulted to assess whether or not the facility is located in an area where it may pose a threat of harm or destruction to features such as a historic or archaeological site, natural landmark or natural area as described in Section 830.203 (8)

10. **Figure 1** of **Attachment 1** contains a USGS site location map outlining the facility permit area and all adjacent property extending ½ mile beyond the property boundary.

3.0 STORM WATER CONTROLS (830.204)

The LMPF pad has been designed and constructed such that run-on will be diverted around the perimeter. Precipitation falling directly on to the pad is the only runoff that will be generated from the active leaf mulch production area. Surface water runoff from the facility, resulting from precipitation less than or equal to the 10- year, 24 hour precipitation event, will be controlled so as not to cause or contribute to a violation of the Act. The City of West Chicago (City) requirements are equal to, or more stringent than, these requirements and require storm water detention for runoff from a 100 year, 24 hour precipitation event. The City also requires storm sewer collection and discharge pipe structures to be designed to control a 10-year, 24-hour storm. The storm water detention basins that serve the proposed leaf mulch production area are Ponds 3 and 6 on the site drawings, **Sheets 1 and 2** in **Attachment 2**. The entire concrete pad is approximately 5.55 acres, with 0.96 acres of the pad draining toward Pond 3, and 4.59 acres draining to Pond 6. These basins and the incoming storm sewer pipes were constructed to meet the City ordinance requirements. Detailed analyses and design calculations are included in **Attachment 8.** The storm water detention pond calculations were performed by SPACECO, Inc. for the site developer, Lee Development Corporation. The storm sewer calculations were prepared by Peter F. Olson (now AMENT, Inc.) for the site construction contractor, Triad Construction Services, Inc.

a. Storm water or other water which comes into contact with the interior piles of landscape waste that is received, stored, processed or mulched, or which mixes with landscape waste leachate, will be considered landscape waste leachate and will be re-circulated into the pile, collected and properly disposed of off-site, or treated as necessary prior to discharge off-site to meet applicable standards of 35 Ill. Adm. Code Subtitle C.

Surface water runoff from the concrete pad is collected at each of the drainage inlets shown on **Sheets 1 and 2.** Shallow runoff diversion barriers, such as sand bags or filter socks, will be placed at the toe of the leaf mulch piles in order to collect any leachate draining from within the pile. During heavy precipitation events, surface water runoff will flow directly to the storm drain inlets. For less intense precipitation events, most will be absorbed by the stored and processed leaves. A small portable collection pump will be operated by Kramer Tree Specialists to collect leachate that accumulates from within the leaf storage and mulch piles. It will then be re-circulated

into the pile, or discharged to a waste water treatment facility. Except during large precipitation events, surface water runoff that comes in contact with leaf mulch will not be allowed to leave the Kramer Tree Specialists property without treatment. In general, the stored and processed leaf piles will be stacked as steep as possible to maximize runoff and prevent moisture infiltration.

b. Ponding of landscape waste leachate within the leaf mulch production area will be prevented by positioning orderly and well-maintained runoff collection barriers and removing the accumulated water in a timely manner. The pad was constructed with sloping surfaces to each of the catch basins to maintain effective removal of storm water during heavy precipitation events. Each catch basin is served by a reinforced concrete drainage pipe to convey storm water into the detention ponds.

c. The concrete surface used for leaf mulch production is a non-porous material that will dry quickly after surface water runoff is collected, and then discharged from it.

4.0 OPERATING STANDARDS (830.205)

The proposed LMPF will comply with the following operating standards in addition to those set forth in Sections 830.202 and 830.204:

a. Leaf Mulch Process

1. The LMPF will meet the following leaf mulch process standards:

A. Landscape waste approved for storage and processing at the site will be stored within 24 hours after receipt at the facility by stacking into piles.

B. The operator shall take measures to maintain the pile density in order to inhibit aerobic decomposition.

C. The operator shall take measures to minimize moisture infiltration by keeping the outward slope as steep as possible while maintaining stability of the pile.

D. Landscape waste entering the site will be delivered to the designated leaf mulch production area of the concrete pad. The staging area is illustrated on **Sheet 1** in **Attachment 2**. The size of the staging areas may vary depending on the volume of leaves accepted at the facility. In general, the leaf piles will be no more than twenty-five (25) feet in height with an outward slope of less than 1 vertical to 1 horizontal (1V:1H) or less depending on the stability of the stored and processed leaves. During removal of the processed leaves after storage in the piles, site operators will follow Standard Operating Procedures (SOP's) established by Kramer Tree Specialists.

E. Decomposing material will not be mixed with end-product leaf mulch ready to be sold or offered for use. Chipped tree limbs and trunks, and shredded wood waste, may be added to the processed leaves in order to create another mulch product for sale.

F. Sufficient equipment and personnel will be available at the site to stack and store incoming volumes of landscape leaf waste within the required

timeframe stipulated in Section 830.205. Personnel associated with the mulch yard at KTS are available during the operating hours of the LMPF.

G. Written authorization from the Agency will be obtained prior to use of any additives. Additives to the processed leave are not planned for the production of leaf mulch.

2. Each affected portion of the pile will be turned if temperatures in the pile exceed 180 degrees Fahrenheit, indicating that degradation is taking place. The piles of stored and processed leaves will be maintained to prevent infiltration of moisture and air that can sustain degradation of the leaves.

3. The LMPF is not being operated as a contained leaf mulch production facility. Therefore, no mechanisms to control moisture, air flow and air emissions pertaining to the operation of a contained facility will be constructed.

4. The mulch production process involves storing the leaves and processing them in their original condition when they are needed for seasonal use in landscaping. Therefore, applicable thermal processing to reduce pathogens is unnecessary.

b. Processing and Storage Surface

1. Open Processes

A. Leaf Mulch Production areas:

i. The proposed leaf mulch production area will be constructed on a continuous slab surface of reinforced concrete with a minimum thickness of approximately eight (8) inches.

ii. The proposed leaf mulch production area design will manage run-on and run-off water from the landscape waste in accordance with 830.204. All-weather hard surface access roads into the site have been constructed to allow the site to operate during changing weather conditions.

iii. Early detection and groundwater monitoring, pursuant to 830.205(b)(1)(A) or 830.205(b)(2)(A), will not be required because no portion of the leaf mulch production will be located on bare ground.

B. The leaf stacking and storage area, and leaf mulch storage surface, will be constructed and maintained such that:

i. As shown on **Sheet 1** in **Attachment 2,** run-on waters are diverted away from the leaf mulch production facility as a result of the grading performed during construction of the concrete pad;

ii. Runoff waters and landscape waste leachate will be managed in accordance with Section 830.204; and

iii. The facility will operate during all weather conditions.

C. As shown on **Sheet 2** in **Attachment 2**, all surfaces of the proposed leaf mulch production area will be located on a concrete pad with slopes to prevent ponding of surface water runoff.

c. All utilities necessary for the safe operation of the LMPF already exist at the adjacent KTS shop facility, and are available for use.

d. The owner will maintain and operate all systems, related appurtenances and structures for the proposed facility as described in Section V: Operating Plan.

e. Open burning will not be allowed at the Kramer Tree Specialists LMPF.

f. Dust will be minimized by keeping the access roads and travel paths between piles free of mud and debris, and by watering access roads as needed. Dust emissions from leaf mulch production operations will be controlled by spraying with irrigation water and orienting the piles to minimize wind exposure.

g Noise levels in the proposed leaf mulch production area will be kept as low as reasonably achievable using methods presented herein. Noise will be controlled through the use of mufflers on all vehicles to be used at the LMPF. Maintenance of vehicles will insure that excessive noise is kept to a minimum. Provided that

equipment is kept in good repair, the active work areas will have adequate separation distance from nearby noise receptors.

h. Vectors will be controlled, so as not to cause or contribute to a violation of the Environmental Protection Act. Problems associated with rodents will be corrected using a licensed extermination contractor who will visit the site and provide traps and other measures for controlling rodents. Insect populations will be corrected by eliminating the source of their propagation and by selective use of pesticides or fly strips. Mosquitoes will be kept to a minimum by preventing standing water to accumulate.

i. On-site fire protection measures will include maintaining firefighting equipment and telephone access to the West Chicago Fire Protection District (District). The District maintains a fire station less than two miles from the proposed LMPF. Fire extinguishers will be provided at the on-site equipment maintenance building. Fire contingency measures are detailed within the Site Safety Contingency Plan in **Attachment 9**.

j. The LMPF will be patrolled daily for the retrieval of litter that may result from stacking, grinding and leaf mulch production activities Retrieved litter shall be placed in a secure container at the equipment maintenance and office building for later disposal. Any litter that may escape the facility boundaries will be collected and disposed of properly by laborers employed in the operation of the mulch yard.

k. Management procedures for the collection, containment and disposal of wastes that are received and deemed unsuitable for mulch production are detailed in Section V: Operating Plan (f) of this application.

l. The existing hard surface access roads will be used to prevent mud tracking from the proposed facility. Mud tracked along the entrance roads will be cleaned by Kramer Tree Service.

m. Monitoring:

Monitoring procedures are described in detail in Section V: Operating Plan (k).

1. For each of the piles located on the Kramer Tree Specialists LWCF property:

A. The temperature of each pile of stored and processed leaf material will be monitored on a minimum weekly basis.

B. The piles will be maintained to limit oxygen infiltration that will initiate the degradation of the processed leaves. Therefore the oxygen level of each pile of stored and processed leaf material will not be monitored.

2. The Kramer Tree Specialists LMPF will not be operated as an in-vessel continuous feed system. Therefore, Section 830.205, Part m, subpart 2, does not apply.

3. Early detection and groundwater monitoring, pursuant to 830.205(b)(1)(A) or 830.205(b)(2)(A), will not be required as a result of establishing a working pad surface constructed entirely of concrete.

5.0 OPERATING PLAN (830.206)

The following Operating Plan defines the methods that will be used by Kramer Tree Specialists to manage landscape waste received at its facilities in compliance with 35 IAC 830, 831, and 832. By following this Plan, KTS ensures both compliance with the aforementioned regulations and a consistent high quality end product. This Plan is also intended as a guideline for current personnel and as a training document for new employees.

This facility's operating hours are:
Monday through Friday: 5:30 am to 6:00 pm
Saturday: 5:30 am to 6:00pm

a. The facility will be operated, maintained, and controlled by the director of operation, yard manager, and the equipment operators and laborers employed at Kramer Tree Specialists. The mulch yard manager is Tim Peters and the operations director is Rick Thomas.

b. A description of the anticipated quantity and variation, throughout the year, of landscape waste to be received is as follows:

This facility can accept a maximum volume of 30,000 cubic yards of leaf landscape waste per year for production of leaf mulch, utilizing the area illustrated on **Sheet 1** in **Appendix 2**. The concrete mulch processing pad area consists of approximately 5.5 acres. The active leaf mulch production period for the leaf piles is approximately ten (10) months (October through July). The space allocated for storage of leaves is 5.5 acres, of which some will be used for the production of leaf mulch and the remainder for wood mulch. Therefore, the average throughput of leaves for this facility is 30,000 cubic yards, which produces approximately 20,000 cubic yards of leaf mulch after processing.

During the life of the proposed LMPF, the capacity will range up to the maximum amount presented in this section, with the variation a result of the actual acreage utilized for leaves and leaf mulch storage in the operations, and seasonal fluctuation in leaf landscape waste generated The seasonal quantities of the landscape leaf waste accepted for mulch production will vary throughout the fall.

The outcome of seasonal quantity of leaf landscape waste will be determined by the landscape maintenance and construction companies and municipalities that use the site.

c. The Methods for measuring incoming waste are as follows:

Daily Records will be kept by the Site Yard Manager, using a site ticketing program and database to track the volume of incoming leaf landscape waste that is received and the volume of sold finished leaf mulch. Daily Records will be kept as a backup to the site program and as a readily accessible account of the status of the facility. Methods for measuring incoming landscape waste are described in further detail in Section 10 Recordkeeping and Reporting.

d. Methods to control the types of waste received, in accordance with Section 830.209, and methods for removing, recovering and disposing of non-mulching materials, in accordance with Sections 830.205(k), 830.207 and 830.209, are as follows:

This facility will only accept leaf waste within the definition of landscape waste as described in Section 830.102. A Site Yard Monitor will inspect incoming loads arriving at the staging area. Loads will be inspected for extraneous unwanted materials inconsistent with leaf landscape waste and those with malodors. The Site Yard Manager will be responsible for entering load information onto a form that will be later entered into the database. The load form will contain information on the volume of leaves, and if applicable. the customer information. The Site Yard Monitor will be trained in the management of unacceptable loads and will follow the Operating Plan in the event that an unacceptable load is presented. Once the load information is collected. the vehicle will be instructed to unload.

e. Methods to control traffic and to expedite unloading in accordance with Section 830.205(a)(1)(D) are as follows:

All vehicles entering the facility must do so through the main entrance gate off Charles Court which is locked at all times. After checking-in at the ticket office, they will be allowed to proceed through the gate and into the staging area. The entry gates to the KTS property will also be locked during non-operating hours.

The Site Yard Monitor will make every effort to ensure that trucks entering and leaving the facility are instructed to proceed to and from the staging area in a safe and organized fashion. Traffic may be controlled by the use of road signs, pavement markings and traffic cones to indicate areas of caution, direction to the staging area, exits and speed limits. All site personnel will be instructed to ensure that vehicles entering and exiting the facility are doing so in a safe and organized manner. Inappropriate speeds and maneuvers will be documented and frequent occurrences may be grounds for excluding a customer from the facility.

f. Management procedures that will be used in leaf mulch production will include:

1. Landscape leaf waste entering the site will be delivered to the designated staging areas on the concrete pad and then stacked into piles within 24 hours after receipt.

   The staging area is located within the property leased by the operator that encompasses the proposed mulch yard area. The current staging area is illustrated on **Sheet 1** in **Attachment 2**. A Site Yard Monitor trained to inspect incoming leaf landscape waste will staff the staging area. The staging area will be used for depositing of leaf landscape waste prior to pile formation. If the load is discovered to contain a large amount of unusable, non-organic material incapable of being used for mulch, the load may be rejected at the staging area and removed by the driver of the vehicle. Plastic bags, whether degradable or not, are to be removed by the individual delivering the load and will be discouraged from being accepted. In the event that incidental materials are inadvertently received, these materials are to be removed and disposed of off-site. Roll-off boxes will be provided on the property for this purpose.

   Stacking of leaf landscape waste will take place in the staging area to; reduce the amount of non-organic material that is not capable of being used for mulch; reject unsuitable materials in order to make the end product more attractive and marketable; speed up the delivery process; and provide quality control of materials placed into piles. Each load will be segregated and then stacked based on the volume content.

Processing for size reduction of incoming leaves for leaf mulch production will be performed using a portable horizontal grinder such as a Vermeer HG-6000, or other similar machine. Size reduction will enhance the storage of the processed leaves as leaf mulch.

2. Leaf landscape waste processed in the staging areas of the proposed leaf mulch production facility will be stacked into piles approximately twenty-five (25) feet in height. The length of the piles will vary according to their location within the leaf mulch production area. Sufficient space, approximately ten (10) feet to twelve (12) feet, will be maintained between piles for unobstructed maneuvering of vehicles and equipment. The pile heights will be constructed based on climate conditions and to a size that increases compaction of the processed material. Piles will be oriented so as to minimize the exposed face in the predominant wind direction in order to minimize wind born movement and will be approximately 120 feet wide. A front end loader with bucket attachment or a conveyor stacker will place leaf landscape waste into piles of various lengths depending on orientation on the pad. The front end loader will be used to turn the piles if temperatures rise to 180 degrees Fahrenheit and the material degradation process has initiated.

   The existing LMPF facility has a capacity to store approximately 30,000 cubic yards of incoming leaf landscape waste per year. This volume of leaves will produce approximately 20,000 cubic yards of leaf mulch.

   A finished product storage area has also been delineated on plan **Sheet 1** in order to illustrate their current location. The curing area consists of a pile approximately 25 feet tall by 75 feet wide by 75 feet long, to hold approximately 3,000 cubic yards of processed leaves as leaf mulch. As the leaves are processed to create mulch, and stacked into a finished mulch pile, they will be used immediately (within 5 to 7 days) by the operator. A minimal end product storage area is shown because the finished mulch is used immediately for sale to commercial landscape companies and municipalities.

   Signs mounted on a wood post and anchored in a concrete 5 gallon container will be placed at the locations of the leaf storage pile and the finished leaf mulch

storage pile. These signs will be moved as necessary to identify the leaf mulch production areas within the footprint of the 5.5 acre concrete pad.

3. Written authorization from the Agency will be obtained prior to use of any additive, other than water.

4. The proposed LMPF facility will have an initial capacity to handle approximately 30,000 cubic yards of landscape waste per year assuming an initial working area of 5.5 acres and that one (1), 300-day leaf collection, storage and processing cycle can be completed from October to July of the following year.

g. The methods to minimize odors in addition to the requirements specified in 830.202(e) include:

1. A management plan for bad loads:

In the event a load arrives at the gate emitting objectionable odors, the Site Yard Monitor will reject the load if he/she determines that the load cannot be managed with prompt processing into a pile due to the quantity or the quality of the material in question, wind direction and speed, and the extent of the odors.

If a vehicle arrives at the staging area and objectionable odors are detected as the load dumps, the Site Yard Monitor will reject the load.

A record of rejected loads will be kept with the Site Yard Manager and customers who repeatedly deliver bad loads will be warned and possibly banned from the facility.

2. Operation during all weather conditions:

In order to keep leaf piles from decomposing and becoming anaerobic, operations need to be completed during all types of weather conditions. To accomplish this, personnel will be supplied with rain gear and equipment will be properly enclosed to protect operators from the elements. The facility will be appropriately staffed throughout the leaf generating months of the year to accommodate the incoming raw landscape leaf waste material. Personnel requirements at the facility will vary with the season. Additional operators will be

added during peak seasons. A designated area near the staging area will be reserved for placement of leaf landscape waste during wet weather if the material cannot be immediately stacked.

3. Odor complaint procedures:

   The LWCF will have a permanent sign that will instruct the public to direct their complaints to both the operator and the IEPA. KTS employees receiving an odor complaint should follow the following procedures:

   a. Record and report to IEPA, within 24 hours after receiving the odor complaint, the following information, if it is volunteered upon request: (1) the date and time received; (2) the name of complainant; (3) the address and phone number of complainant; and (4) the name of the employee receiving the complaint.

   b. Record and report to IEPA within seven days: the date, time and nature of any action taken in response to an odor complaint.

   c. An example of this form is included in **Attachment 10**.

4. Additional odor-minimizing measures:

   Anaerobic conditions occur when the decomposition process has begun and oxygen is depleted from the pile. This results in the demise of aerobic bacteria that use oxygen in the degradation process. When these bacteria are removed from the process, anaerobic bacteria begin to flourish. Anaerobic bacteria produce ammonia and methane gases from carbon and nitrogen sources contained in the raw material.

   The best method for preventing a leaf pile from becoming anaerobic is to ensure that only leaves are added and that they are stacked to maximize density. The piles must be maintained to reduce moisture and oxygen infiltration. Green materials, such as grass clippings, have a high nitrogen ratio that contributes to the formation of ammonia. Materials like this need to be avoided in the stacked leaf material. To maintain the integrity of the mixture, site personnel will monitor the temperature of each pile on a regular basis as defined in the Operating Plan.

Monitoring data assists in determining if temperatures pose a risk of a fire hazard. If high temperatures are noted, the location will be isolated, excavated and allowed to cool. The goal is to minimize heat generation during the stacked leaf storage period.

Pile dimensions at the Kramer Tree Specialists LWCF are designed to be compatible with their standard operating equipment, and will normally range less than 25 feet in height.

Despite careful monitoring of temperature, piles may emit odors if being excavated to reduce high temperatures. Operators should use the following methods in this situation.

a. Estimate the odor potential of each pile based on heat content and age of the pile. Be prepared with odor neutralizing agents such as approved chemicals or use the material immediately as mulch.

b. Use available on-line weather data sites to determine the direction and wind speed. Excavate piles when wind speeds are higher and wind direction is away from sensitive and more populated areas.

c. Excavate piles during cooler parts of the day. Early morning and late afternoon are usually coolest.

h. Methods to control storm water and landscape waste leachate in accordance with section 830.205 are demonstrated in Section 3: Storm Water Controls of this application.

i. Methods to control noise, vectors and litter, in accordance with section 830.205 are demonstrated in Section 4: Operating Standards (g,h,j) of this application.

j. Methods to control dust emissions in accordance with Section 830.205 (f) are demonstrated in Section 4: Operating Standards (f) and Section 11: Contingency Plan (a)(6) of this application.

k. Methods for monitoring temperature, oxygen level and moisture level of the leaf landscape waste material in accordance with Section 830.205 (a) are as follows:

Only temperature will be monitored because the processed leaf storage piles will be maintained to minimize oxygen and moisture content, and these parameters are not important to the quality of processed leaf material when used for mulch production.

A pile monitoring program is essential to maintain optimum temperature and density that will produce a high quality product and prevent the formation of decomposed leaves. The program for the KTS site will require that temperatures be measured on a weekly basis, using an appropriate probe. on all formed piles

A Recordkeeping Plan will be maintained as a guide for managing the piles. Temperature probes will be inserted into the pile at a depth of three to four feet, and the readings will be confirmed every 75 feet along the length of the pile. These measurements will used to indicate times when maintenance, such as cooling of the pile, is required. When the temperature in the pile is greater than 60°C, conditions warrant action.

Monitoring of this parameter plays an important role in producing leaf mulch. Methods for adjusting temperature of the stored material, in accordance with Section 830.205 (a), are to cool the pile. This can be accomplished by excavating the pile or adding water.

l. Recordkeeping and reporting procedures pursuant to Section 830.211 are demonstrated within Section 10: Recordkeeping of this application.

m. Methods to obtain composite samples and test end-product:

1. **Determination of Finished Product**

   A leaf mulch pile is maintained to preserve the processed leaves in their original state prior to sale as a mulch product. The material is used when seasonal demand warrants excavation of the stored leaves for use in the mulch production process.

2. **Classification of Compost (830.502):**

   The stored processed leaves and final mulch products do not have classification or testing methods associated with their production, sale and end use. Kramer

Tree Specialists requests that the testing requirement of Section 830.502 be waived for the production and sale of blended leaf mulch.

3. **Performance Standards for General Use Compost (830.503)**
   Kramer Tree Service will not produce compost at the Mulch Yard. The following standards will be applied to the blended leaf mulch product that is produced for sale:

   General Use Mulch:

   a. Must be free of any materials which pose a definite hazard to human health due to physical characteristics, such as glass or metal shards.

   b. Must not contain man-made materials larger than four millimeters in size exceeding 1% of the end product mulch on a dry weight basis.

4. **Testing Requirements for End Product Compost Derived from Landscape Waste (830.504)**
   Standards do not exist for blended mulch produced with processed leaves. Kramer Tree Specialists requests that the testing requirement of Section 830.504 be waived for the production and sale of blended leaf mulch.

5. **Sampling Methods (830.507)**
   Kramer Tree Specialists requests that the sampling methods requirements of Section 830.507 be waived for the production and sale of blended leaf mulch.

6. **Plans for Use of Finished General Use Compost**

   Blended leaf mulch will be offered to wholesale markets by Kramer Tree Specialist, such as landscape contractors and to municipalities, for general use in mulching applications. Kramer Tree Service already has a market base for which to utilize the end product.

7. **Off-Specification Compost (830.508)**
   All of the blended leaf mulch product will be offered for sale. In the event that blended leaf mulch does not meet customer specifications, it will be screened

and reprocessed, or disposed of at a facility permitted to use it for production of compost.

6.0 SALVAGING (830.207)

Salvaging will not be allowed at the Kramer Tree Specialists LWCF.

7.0 ACCESS CONTROL (830.208)

All vehicles entering the facility will do so through a secured main entrance gate off of Charles Court and will proceed to the staging area. The entry gates to the LWCF will be locked during non-operating hours. The gates are shown on **Drawing 1** in **Attachment 2** and are also secured during times of operation. The Site Yard Monitor will make every effort to ensure trucks entering and leaving the facility are instructed to proceed to and from the staging area in a safe and organized fashion. Traffic may be controlled by the use of road signs, pavement markings and traffic cones to indicate areas of caution, direction to the staging area, exits and speed limits.

The concrete road surface will reduce the potential for mud to be tracked onto the public roadways. Should mud accumulate on the roadways belonging to the public or the facility, it will be removed by KTS equipment.

Access routes that are not gate-restricted into the facility from Charles Court, are restricted by a six (6) feet high chain link fence and a four (4) feet tall concrete jersey block wall. Access from the adjacent properties is restricted using in-place vegetated buffers on the north, south, east and west.

8.0 LOAD CHECKING (830.209)

a. A Site Monitor will inspect incoming loads arriving at the staging area, located within the mulch yard. Loads will be inspected for extraneous unwanted materials inconsistent with landscape waste and undesirable malodors. The Site Yard Monitor will be responsible for entering load information into the database and printing a load ticket. The load ticket will contain information on the volume of material, the type of material and customer information.

b. The Site Yard Monitor will be trained in the management of unacceptable loads and will follow the LMPF Operations Contingency Plan and Odor Minimization Plan in the event that an unacceptable load is presented. Once the load information is collected, the vehicle will be instructed to unload at the staging area.

9.0 PERSONNEL TRAINING (830.210)

The operator of the LMPF will provide training to all personnel prior to initial operation of the facility. In addition, annual personnel training will be provided which will include, at a minimum, a thorough explanation of the operating procedures for both normal and emergency situations. KTS maintains a Standard Operating Procedure for an annual Spring orientation meeting for employees of the mulch yard. This procedure in included as **Attachment 9, Appendix E**.

a. New employees shall be trained, prior to participating in operations at the facility, in facility operations, maintenance procedures and safety and emergency procedures relevant to their employment.

c. The operator will have personnel sign an acknowledgement stating that they have received the training required pursuant to this section.

d. The facility operating plan required pursuant to Section 830.206 will be made available and explained to all employees.

Samples of Standard Operating Procedures for training of KTS personnel are included in **Attachment 9**.

10.0 RECORDKEEPING (830.211)

The following methods outline the procedures used to comply with 35 IAC 830.211, which requires all facilities to develop recordkeeping procedures for operations. This regulation also requires that each facility keep copies of facility permits, operating plans and required reports on-site for inspections.

a. Copies of permits, reports and inspections will also be kept at the Kramer Tree Specialists main office located at:

300 Charles Court
West Chicago, Illinois 60185

b. The operator will record the following information:

1. Quantity of each load of leaf landscape waste received and quantity of end product removed:

   The volume of all loads received will be entered into the company's computer database and a hard copy record will be printed. Additionally, the Site Yard Monitor may track incoming volumes on a spreadsheet or other digital format..

2. Dates of Excavation or Watering of a Pile:

   Attachment 11 contains the pile cooling form.

3. Pile Monitoring Data:

   Attachment 11 contains the form used to track temperature monitoring data.

4. Conditions evaluated:

   Conditions evaluated relevant to the items in Section 830.206 will be documented and summarized in a daily report prepared by the operator.

5. Odor Complaint Records:

   Attachment 10 contains the Odor Complaint Reporting Form.

6. Record Of Any Event That Results In Implementation Of Contingency Plan:

   Attachment 11 contains the form for reporting the activation of the Contingency Plan for emergency situations.

7. Sampling and Testing Records and Results

   There is no existing sampling and testing requirement for processed leaf mulch, therefore records and results are not applicable to the proposed leaf collection, processing, storage and mulch production facility.

8. The daily quantity of each type of end-product removed from the facility:

   All of the produced mulch that is removed from the facility will be tracked and reported according to amount removed and date removed. **Attachment 13** contains the form for reporting amount of mulch removed from the facility.

9. Training Records:

   Records will be kept for each employee of Kramer Tree Service who is trained in Facility Operations and the record will be updated on a yearly basis.

Maintenance of Records:

All records shall be kept for a minimum of three years and will be available during normal business hours for inspection and photocopying by the Agency. Additionally, records must be sent to the Agency on request.

11.0 CONTINGENCY PLAN (831.07)

a. A contingency plan has been established that addresses the contingencies set forth in Section 830.202(c) and the following additional contingencies:

   1. Equipment Breakdowns:

   Kramer Tree Service maintains a fully operational tree care business on property where the LMPF is planned. Some of the equipment used for the facility is also used in this business. Duplicate equipment and qualified repair technicians are available at the site to deal with breakdown of equipment. Careful records are maintained on each piece of equipment to ensure that it stays in service. In the

event of equipment failure that impairs the ability of the site to function, additional equipment will be supplied through a rental.

2. Odors

When a complaint is logged, the cause of the odor will be determined and remedied by implementing procedures outlined in Section 4: Operating Standards (g).

3. Unacceptable Waste Delivered to the Facility

Unacceptable waste will be rejected, prior to unloading, by the Site Yard Monitor. If municipal solid waste or other unacceptable landscape waste is dumped at the facility, it will be promptly removed from the facility and disposed of off-site at a permitted disposal facility. The closest facility is the DuKane Transfer Station operated by Groot Industries.

Often, small non-mulching materials are inadvertently accepted as "incidental" to the load (rocks, plastic bags, etc.). These materials are removed during the grinding and screening process and disposed of properly.

4. Groundwater Contamination

A reinforced concrete pad will be maintained at all times between the water table and the processed leaf storage piles. Groundwater contamination from the LMPF is highly unlikely.

5. Accidental Release of Special Waste

Should processed leaf materials become contaminated by antifreeze, diesel fuel or hydraulic oil from trucks and heavy equipment, the suspect material will undergo Special Waste Testing and Approval protocols as necessary by an IEPA approved sanitary landfill capable of accepting Special Waste. Once the waste is approved, it will be transported by a licensed special waste hauler and disposed of properly. The nearest facility is the DeKalb Landfill operated by Waste Management.

6. Fires, Dust, Noise, Vectors, Power Outages and Unusual Traffic Conditions

Fires can occur within piles when temperatures rise above the combustion temperature of the materials. This is unlikely in a properly maintained leaf storage pile where temperatures average 40° C. The **Site Contingency Plan** in **Attachment 9**, list some procedures to be implemented in case of a fire or other emergency. Water is available from hydrants located at the mulch yard and hoses are kept in the equipment maintenance building on the property.

Dust problems will be remedied by watering access roads as needed. When excavating dry processed leaf piles, water should be used to suppress dust.

Noise is controlled through the use of mufflers on all vehicles. Maintenance of vehicles insures that excessive noise is keep to a minimum. The location of the site in a predominately industrial and manufacturing area and the distance from Roosevelt Road should mitigate noise issues from potential receptors.

In the event of a power outage, the Site Yard Monitor will revert to the use of hand recorded sheets to register the receipt of loads. The receiving hours for the site are such that daylight will be adequate for this task. All vehicles are equipped with lights to allow safe operation. Workers on the site receive and send communications by cell phone and/or two way radios. A power outage should not affect communications.

Rodent problems will be remedied by contracting with an extermination contractor who will visit the site and provide traps for rodents. Insect populations will be controlled using good housekeeping measures and selective use of pesticides. Mosquitoes will be kept to a minimum by preventing standing water to accumulate.

Traffic on Charles Court is light near the facility, and if adverse weather conditions or accidents occur, the facility will suspend deliveries until the episode is over. Alternatively, in the case of adverse weather, steps will be taken to slow traffic into and out of the facility to avoid accidents. Such steps might include the removal of snow, directing traffic manually in the appropriate safety clothing, and temporary repairs to roads. In the case of an accident, traffic will be re-routed or slowed to allow emergency personnel to gain access to the situation.

b. The facility contingency plan will be available on-site and implemented as necessary.

12.0 CLOSURE PLAN (830.213)

a. The following written closure plan has been developed and contains the following:

1. Premature closing of the facility:

Should the Facility be closed prematurely, the following steps would be followed:

A. Kramer Tree Service shall immediately post signs in letters not less than three inches high:

"This facility is closed for all leaf processing and storage activities and receipt of leaf waste materials. No dumping allowed. Violators will be prosecuted."

B. Written notification will be sent to large customers notifying them of the premature closure of the site and directing them to possible alternative permitted landscape waste transfer or composting sites.

C. Any processed leaf material will be prepared as mulch and sold or allowed for pick-up before the 180-day clock expires.

D. Any waste material or contaminated mulch would be disposed of properly.

2. Routine final closure of the facility:

A. The operator of the facility will maintain a copy of the closure plan at the facility. This will be available in the facility main office. Kramer Tree Service will initiate implementation of the closure plan within 30 days following the beginning of closure.

B. Upon the decision to close the Leaf Mulch Production Facility, a thirty-day (30) notice will be sent to the Agency

C. Commensurate with the notification to the State, all large-scale customers who disposed of leaf landscape waste will be notified that the facility no longer is accepting landscape waste.

D. Thirty days after the initiation of closure, signage with three inch text will be posted at all access gates to the facility and will read:

"This facility is closed for all leaf processing and storage activities and receipt of all leaf landscape waste materials. No dumping allowed. Violators will be prosecuted."

E. Finished processed leaf storage and blended mulch piles will be managed as described in the Premature Closure Plan.

F. Existing Financial Assurance shall be maintained until a Certificate of Closure is approved by the Agency.

G. An affidavit on an Agency supplied form will be submitted upon completion of closure.

H. On or before April 1 of the year following closure, a Modified Annual Report will be filed with the Agency covering the period of time since the last Annual Report was submitted (April 1 of the previous year). The final report will verify that closure has been completed.

3. Steps to be taken to prevent damage to the environment during temporary suspension:

In the event that there is suspension of activities, the leaf landscape waste can be re-routed to another permitted landscape waste transfer facility located in West Chicago, the DuPage Yard Waste Transfer Station.

4. A revised closure plan will be developed and submitted to the Agency if a modification of the operation of the facility is proposed that would affect the cost of closure of the facility or any portion thereof. This would include; a temporary suspension of leaf landscape waste acceptance at the facility; or an increase of the design capacity to process leaf landscape waste.

13.0 SUBPART F: FINANCIAL ASSURANCE PLAN (830.601, 830.602, 830.603, 830.604, 830.605, 830.606)

a. Written Cost Estimate

For the purposes of preparing this written cost estimate, the following is assumed:

1. The rate of leaf landscape waste that enters the facility is based on the maximum volume of leaf landscape waste permitted, which is 30,000 cubic yards.

2. The maximum volume of landscape waste on site is equal to the annual maximum, 30,000 cubic yards. This is the total volume of processed leaf material that will require removal, during a 180 day closure period,

3. The volume available for blending into mulch, can consume the leaf storage pile at closure (20,000 cubic yards after consolidation) under worst case scenario conditions. The worst case scenario is described as follows:

    a. In late December, all leaves have been collected, processed and are waiting to be utilized for sale as mulch.
    b. One equipment operators will work at the facility during 60 working days within the required 90 day closure period, in order to complete the mulch production and then loading it into tucks for removal. Estimated removal rate of 2,000 cubic yards per day.

c. The mulch material will be sold at a bulk rate in order to serve as an incentive to facilitate its removal.

d. The estimated quantity of raw material accumulated at the site for the 90 days prior to closure is 30,000 cubic yards as described in 2) and 3) above. The quantity available for sale as mulch is 20,000 cubic yards.

e. Closure Costs are limited to the 60 days of operation required to process and load the material. Any remaining processed leaf material not blended into mulch will be delivered to the West DuPage Landscape Waste Transfer Station less than one-quarter mile away located on Washington Street. The amount of material is estimated to be less than 75 cubic yards and the tipping fees are estimated at $15.00 per cubic yard.

f. The itemized cost of closure is as follows:

Item	Unit Cost	Total Cost
11 days of Operation: Labor and Equipment loading @$120.00 hour	$960.00 per day	$10,560
30,000 cubic yards of leaves processed	$1.50 per cubic yard	$45,000
Closure Certification and Annual Report	12 hours @$80 per hour consultant fee	$ 900
Removal of Unsuitable Material for Disposal @ 75 cubic yards	$15.00 cubic yards	$1,125
Bulk Mulch Revenue for 20,000 cubic yards	$4.00 per cubic yard	**($80,000)**
	Total:	**$(22,415)**

b. Financial Assurance Mechanism

Kramer Tree Service will not be required to fund the cost of closure for this facility due to the net positive outcome for closure of the LMPF.

The operator will submit to the Agency a Facility Financial Assurance Plan Compliance Certification with the information required by Ill. Adm.Code 830.606, a), b) c), d) and e).

1

ATTACHMENT 1: USGS WEST CHICAGO 7.5 MINUTE QUADRANGLE MAP

2

ATTACHMENT 2:

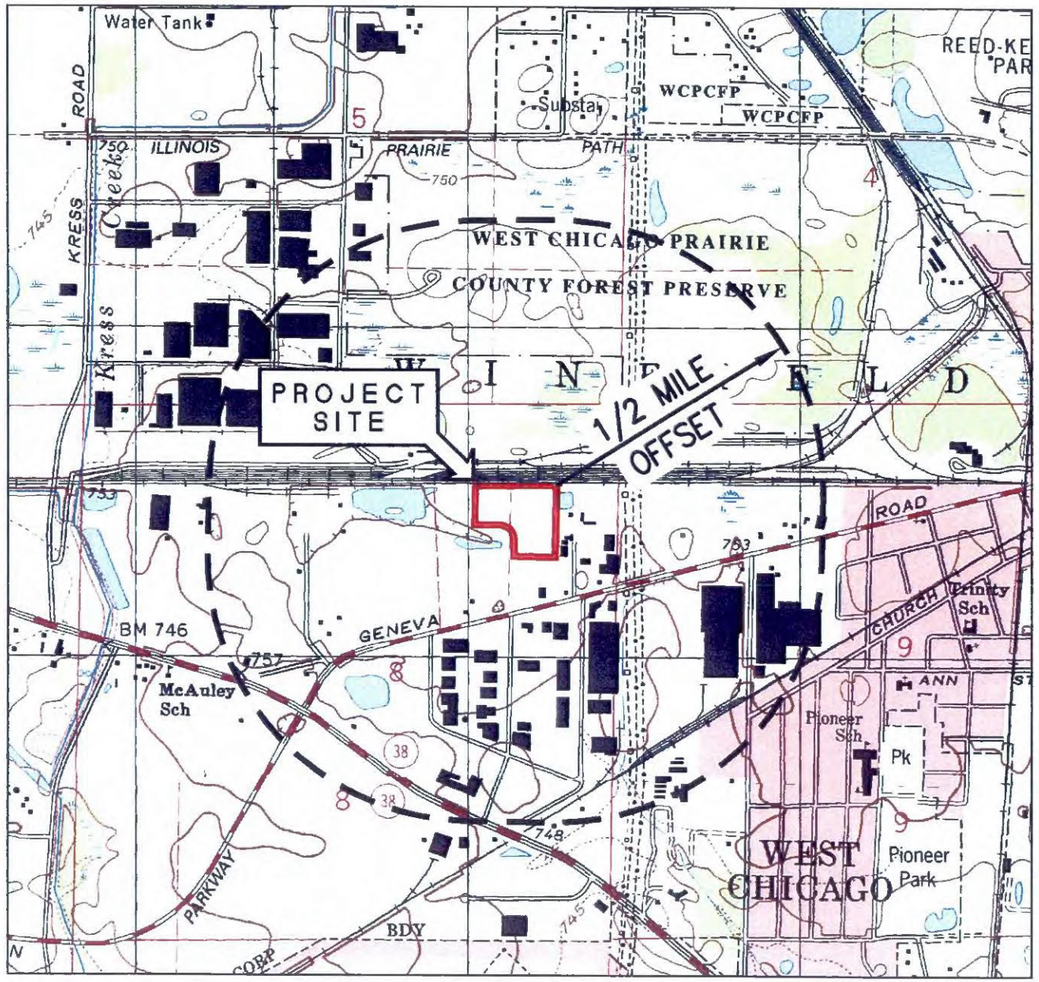
FIGURE 1: USGS SITE LOCATION MAP

FIGURE 2: LAND USE/SITE ZONING MAP

SHEET 1: EXISTING CONDITIONS SITE PLAN

SHEET 2: PERMIT SITE PLAN

KRAMER TREE SPECIALISTS, INC.
LEAF MULCH PRODUCTION FACILITY
WEST CHICAGO, ILLINOIS



SITE LOCATION MAP

SCALE: 1"=1500'

N

DRAWING INDEX

DRAWING	TITLE
FIGURE 1	USGS SITE MAP
FIGURE 2	MAP WITH ZONING BOUNDARIES
DRAWING 1	EXISTING CONDITIONS PLAN
DRAWING 2	PERMITTED SITE PLAN

PREPARED BY:
ANDREWS ENGINEERING, INC.
1701 Quincy Avenue, Suite 20, Naperville, Illinois 60540
Tel (630) 544-3332 Fax (630) 544-3368

FOR
JPL ENVIRONMENTAL ENGINEERING

NO	DATE	REVISION DESCRIPTION	MSK	JPL	JPL
1	4/13/11	ISSUED FOR COMMENT	CAD	CHK'D	APP'D

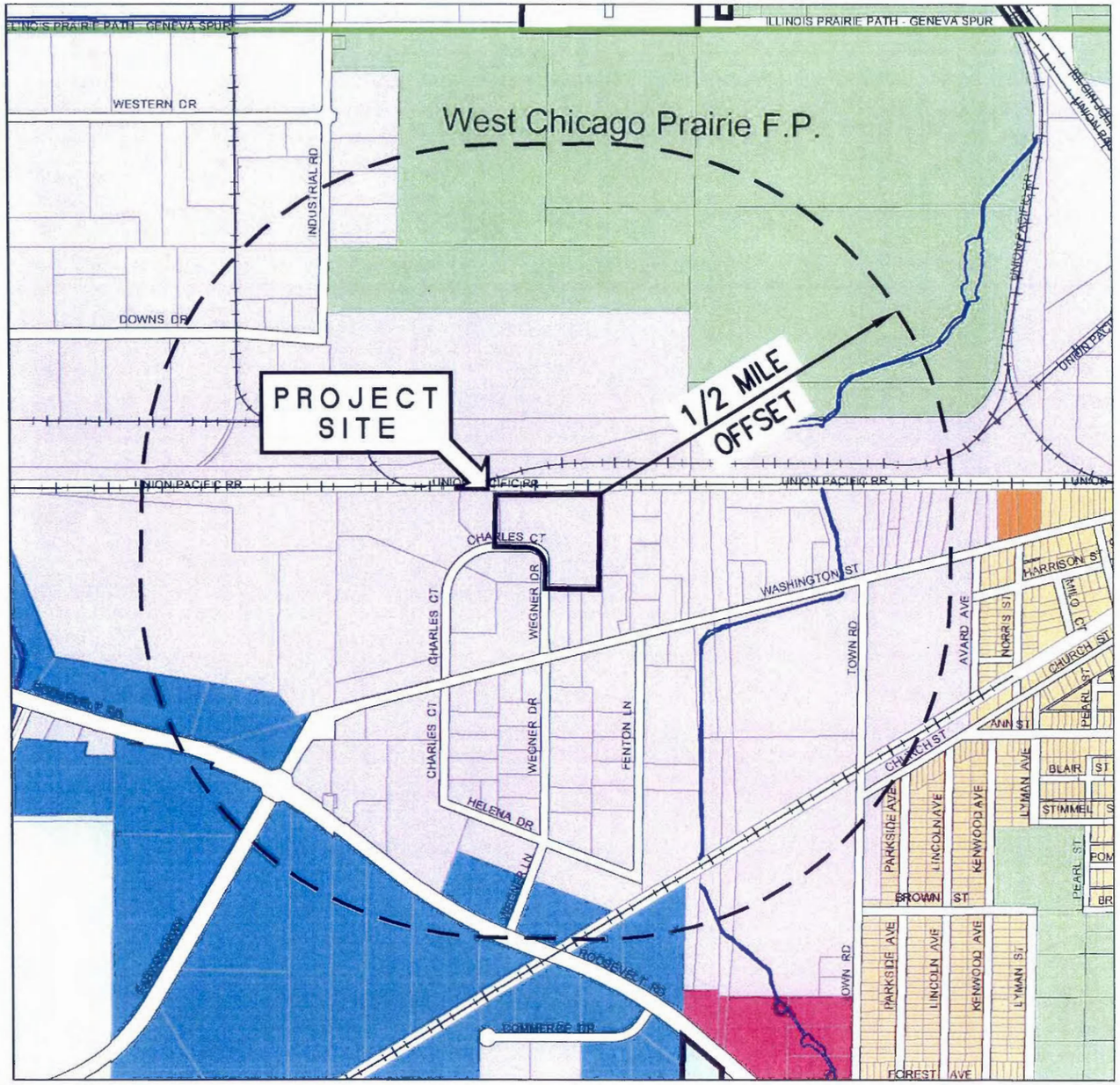
PROJECT
KRAMER TREE SPECIALISTS, INC.
LEAF MULCH FACILITY
WEST CHICAGO, ILLINOIS

TITLE
USGS SITE MAP

PROJECT No.		2011-709
REV. 1	SCALE	AS SHOWN
DESIGN	JPL	4/13/11
CADD	MSK	4/13/11
CHECK	JPL	4/13/11

FIGURE 1

File: J:\2011-709_Kramer Tree Service\Drawing\Current Set\Figure 1 - USGS Site Map.dwg Layout: Layout1 User: mkargt May 18, 2011 - 10:51am



CITY OF WEST CHICAGO
2010 ZONING MAP

MAP PREPARED BY: WC GIS-ADMINISTRATIVE SERVICES DEPT.
MAP PREPARED: MARCH, 2004
MAP UPDATED: JANUARY, 2007, JUNE, 2008, OCT 2009, FEB 2010

PARCELS SHOWN ARE MAINTAINED BY THE CITY OF WEST CHICAGO
Q:\ARCMAPDOCUMENTS\ZONING-ESIZE_2010.MXD
ZONING INFO- BASEMAP_FINAL.MDB\PARCELS

THE ZONING DISTRICTS ARE DETERMINED BY
THE WEST CHICAGO COMMUNITY DEVELOPMENT
DEPARTMENT

FOR FURTHER INFORMATION REGARDING
THIS MAP PLEASE CONTACT THE CITY OF WEST CHICAGO
475 MAIN STREET, WEST CHICAGO, IL 60185
PHONE: (630) 293-2240

ZONING DISTRICTS

- ILLINOIS PRAIRIE PATH
- ER-1 ESTATE RESIDENCE DISTRICT
- ER-2 ESTATE RESIDENCE DISTRICT
- R-1 SINGLE FAMILY RESIDENCE DISTRICT
- R-2 SINGLE FAMILY RESIDENCE DISTRICT
- R-3 SINGLE FAMILY RESIDENCE DISTRICT
- R-4 SINGLE FAMILY RESIDENECE DISTRICT
- R-5 SINGLE FAMILY RESIDENCE DISTRICT
- R-6 MULTIPLE FAMILY RESIDENTIAL DISTRICT
- A AIRPORT
- B-1 CENTRAL BUSINESS DISTRICT
- B-2 GENERAL BUSINESS DISTRICT
- B-3 REGIONAL SHOPPING DISTRICT
- M MANUFACTURING DISTRICT
- ORI OFFICE/RESEARCH/LIGHT INDUSTRIAL DISTRICT

N

1000 0 1000 2000

SCALE: IN FEET

GRAPHIC SCALE

File: J:\2011-709_Kramer Tree Service\Drawing\Current Set\Figure 2 - Zoning Map.dwg Layout: Layout1 User: mkarpf May 19, 2011 - 10:52am

PREPARED BY:
ANDREWS ENGINEERING, INC.
FOR
JPL ENVIRONMENTAL ENGINEERING

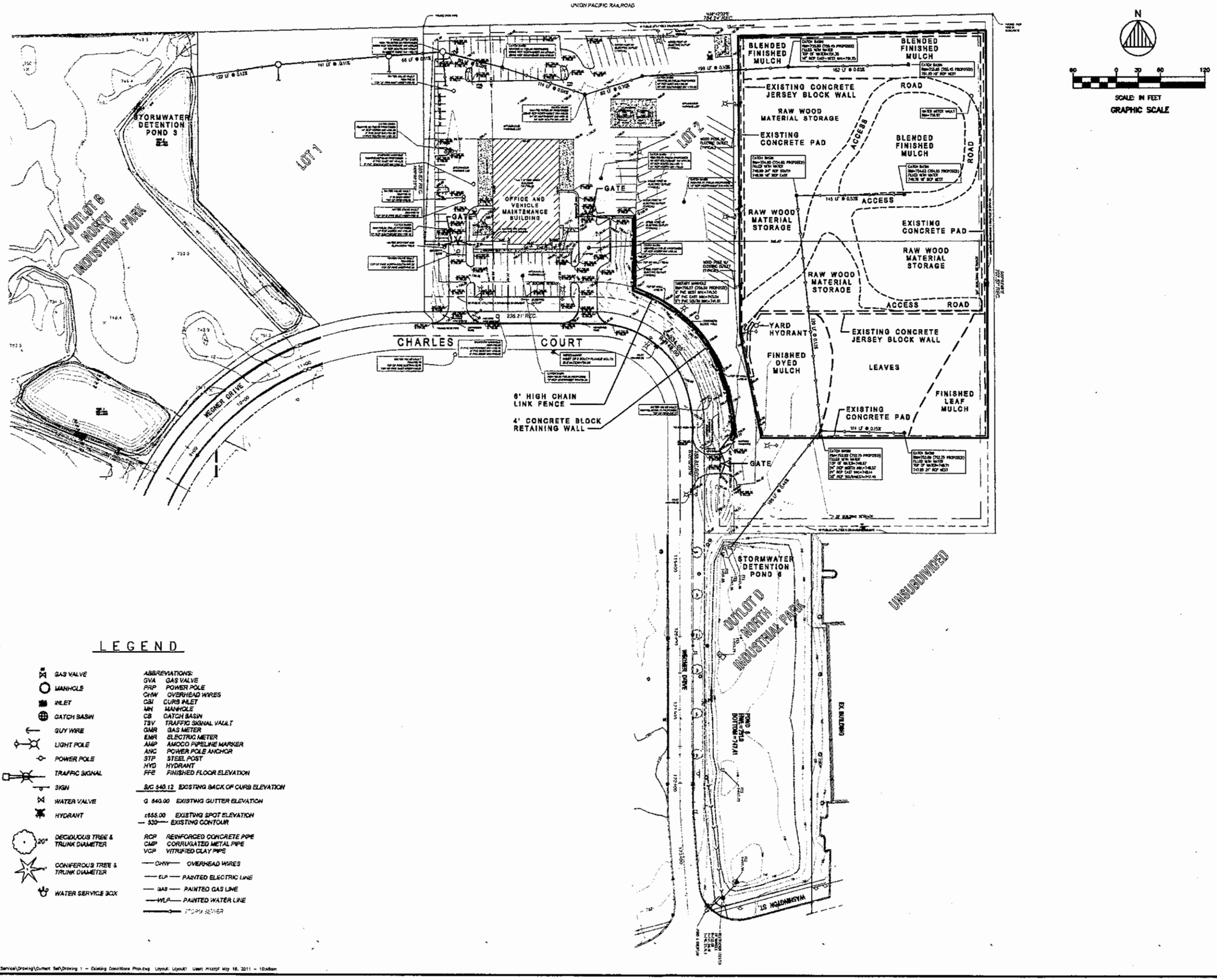
REV	DATE	DES	ISSUED FOR COMMENT	MSK	CHK'D	KWK'D
1	4/13/11	JPL	REVISION DESCRIPTION	CAD	JPL	JPL

PROJECT
KRAMER TREE SPECIALISTS, INC.
LEAF MULCH FACILITY
WEST CHICAGO, ILLINOIS

TITLE
MAP WITH
ZONING BOUNDARIES

PROJECT No.		2011-709
REV: 1	SCALE:	AS SHOWN
DESIGN	JPL	4/13/11
CADD	MSK	4/13/11
CHECK	JPL	4/13/11

FIGURE 2



LEGEND

- GAS VALVE
- MANHOLE
- INLET
- CATCH BASIN
- GUY WIRE
- LIGHT POLE
- POWER POLE
- TRAFFIC SIGNAL
- SIGN
- WATER VALVE
- HYDRANT
- 20" DECIDUOUS TREE & TRUNK DIAMETER
- CONIFEROUS TREE & TRUNK DIAMETER
- WATER SERVICE BOX

ABBREVIATIONS:
GVA GAS VALVE
PRP POWER POLE
OHW OVERHEAD WIRES
CSI CURB INLET
MH MANHOLE
CB CATCH BASIN
TSV TRAFFIC SIGNAL VAULT
GMR GAS METER
EMR ELECTRIC METER
AMP AMOCO PIPELINE MARKER
ANC POWER POLE ANCHOR
STP STEEL POST
HYD HYDRANT
FFE FINISHED FLOOR ELEVATION

B/C 640.12 EXISTING BACK OF CURB ELEVATION
G 640.00 EXISTING GUTTER ELEVATION
x655.00 EXISTING SPOT ELEVATION
530 EXISTING CONTOUR
RCP REINFORCED CONCRETE PIPE
CMP CORRUGATED METAL PIPE
VCP VITRIFIED CLAY PIPE
OHW OVERHEAD WIRES
E/P PAINTED ELECTRIC LINE
GAS PAINTED GAS LINE
W/L PAINTED WATER LINE
STORM SEWER

PREPARED BY:
ANDREWS ENGINEERING, INC.
1776 Quincy Avenue, Suite 25, Naperville, Illinois 60540
tel (630) 544-3321 fax (630) 544-3388

FOR
JPL ENVIRONMENTAL ENGINEERING

REV	DATE	DES	ISSUED FOR COMMENT / REVISION DESCRIPTION	MSK	CHK'D	RVW'D
1	4/13/11	JPL		JPL	JPL	JPL

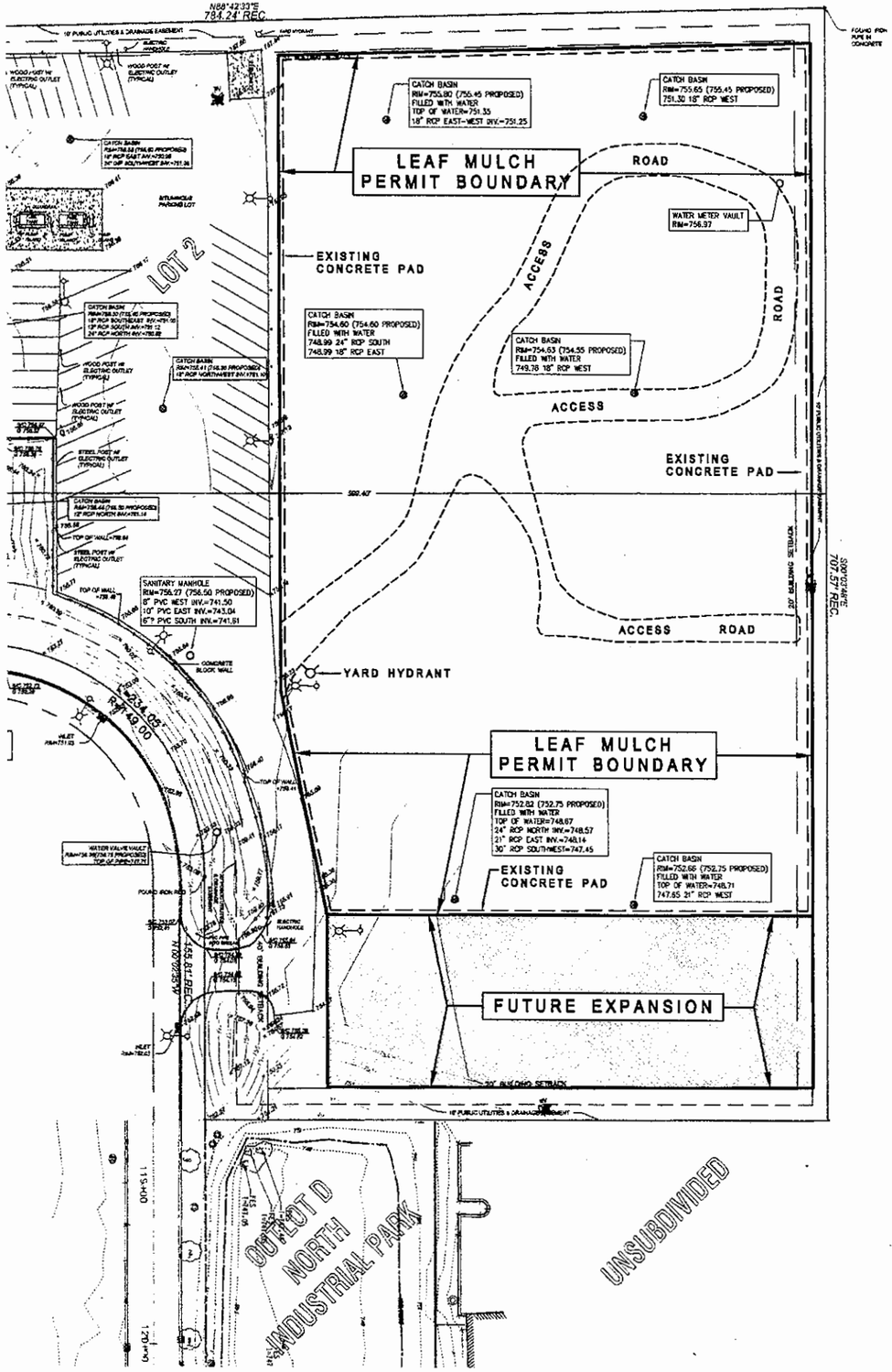
PROJECT
KRAMER TREE SPECIALISTS, INC.
LEAF MULCH FACILITY
WEST CHICAGO, ILLILNOIS

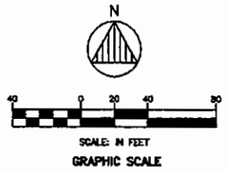
TITLE
EXISTING CONDITIONS

PROJECT No.		2011-709
REV. 1	SCALE	AS SHOWN
DESIGN	JPL	4/13/11
CADD	MSK	4/13/11
CHECK	JPL	4/13/11

DRAWING 1

File: J:\2011-709_Kramer Tree Service\Drawing\Current Set\Drawing 1 - Existing Conditions Proj.dwg Layout: Layout1 User: mkopt May 18, 2011 - 10:58am





LEGEND

GAS VALVE	
MANHOLE	
INLET	
CATCH BASIN	
GUY WIRE	
LIGHT POLE	
POWER POLE	
TRAFFIC SIGNAL	
SIGN	
WATER VALVE	
HYDRANT	
20' DECIDUOUS TREE & TRUNK DIAMETER	
CONIFEROUS TREE & TRUNK DIAMETER	
WATER SERVICE BOX	

ABBREVIATIONS:

GVA	GAS VALVE
PWP	POWER POLE
OHW	OVERHEAD WIRES
CBI	CURB INLET
MH	MANHOLE
CB	CATCH BASIN
TSV	TRAFFIC SIGNAL VAULT
GMR	GAS METER
EMR	ELECTRIC METER
AMP	AMOCO PIPELINE MARKER
ANC	POWER POLE ANCHOR
STP	STEEL POST
HYD	HYDRANT
FFE	FINISHED FLOOR ELEVATION
B/C 640.12	EXISTING BACK OF CURB ELEVATION
G 640.00	EXISTING GUTTER ELEVATION
x655.00	EXISTING SPOT ELEVATION
630	EXISTING CONTOUR
RCP	REINFORCED CONCRETE PIPE
CMP	CORRUGATED METAL PIPE
VCP	VITRIFIED CLAY PIPE
OHW	OVERHEAD WIRES
ELP	PAINTED ELECTRIC LINE
GAS	PAINTED GAS LINE
WLP	PAINTED WATER LINE

PREPARED BY:
ANDREWS ENGINEERING, INC.
1709 Spring Avenue, Suite 105, Naperville, Illinois 60540
Tel (630) 544-3338 Fax (630) 544-3339

FOR
JPL ENVIRONMENTAL ENGINEERING

REV	DATE	DES	ISSUED FOR COMMENT	MSK	JPL	JPL
			REVISION DESCRIPTION	CAD	CHK'D	INIT'D
1	4/13/11	JPL				

PROJECT
KRAMER TREE SPECIALISTS, INC.
LEAF MULCH FACILITY
WEST CHICAGO, ILLINOIS

TITLE
PERMITTED SITE PLAN

PROJECT No.		2011-709
REV. 1	SCALE	AS SHOWN
DESIGN	JPL	4/13/11
CADD	MSK	4/13/11
CHECK	JPL	4/13/11

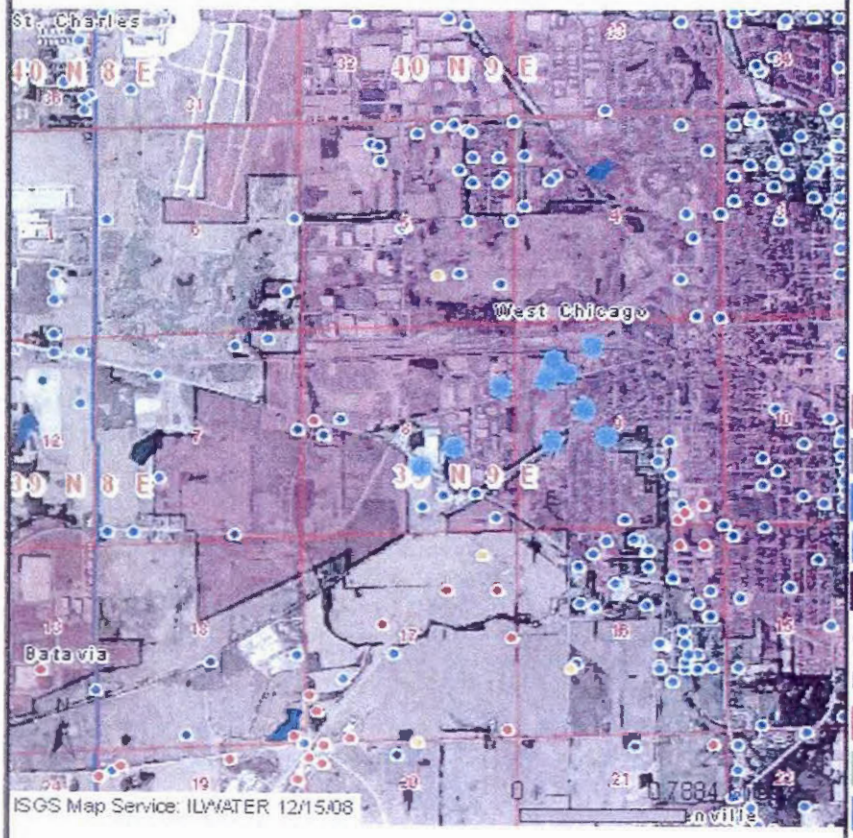
DRAWING 2

File: J:\2011-709_Kramer Tree Service\Drawing\Current Set\Drawing 2 - Permitted Site Plan.dwg Layout: Layout1 User: mkopf May 16, 2011 - 10:49am

3

ATTACHMENT 3: POTABLE WATER WELL LOCATION MAP AND INFORMATION LOGS

ArcIMS HTML Viewer Map



Legend

Water and Related Wells

Well Status

- Water
- Dry
- Engineering
- Stratigraphic
- Observation
- Mineral Test
- Outcrop
- Mine-related
- Hazardous Waste or Leaking Tank

- Sections
- Townships
- Counties
- Lakes
- Municipalities

CUA 2005 UTM 16 (east)

RGB

- Red: Band_1
- Green: Band_2
- Blue: Band_3

DOO 2005 UTM 16 (east)

Value

High : 255

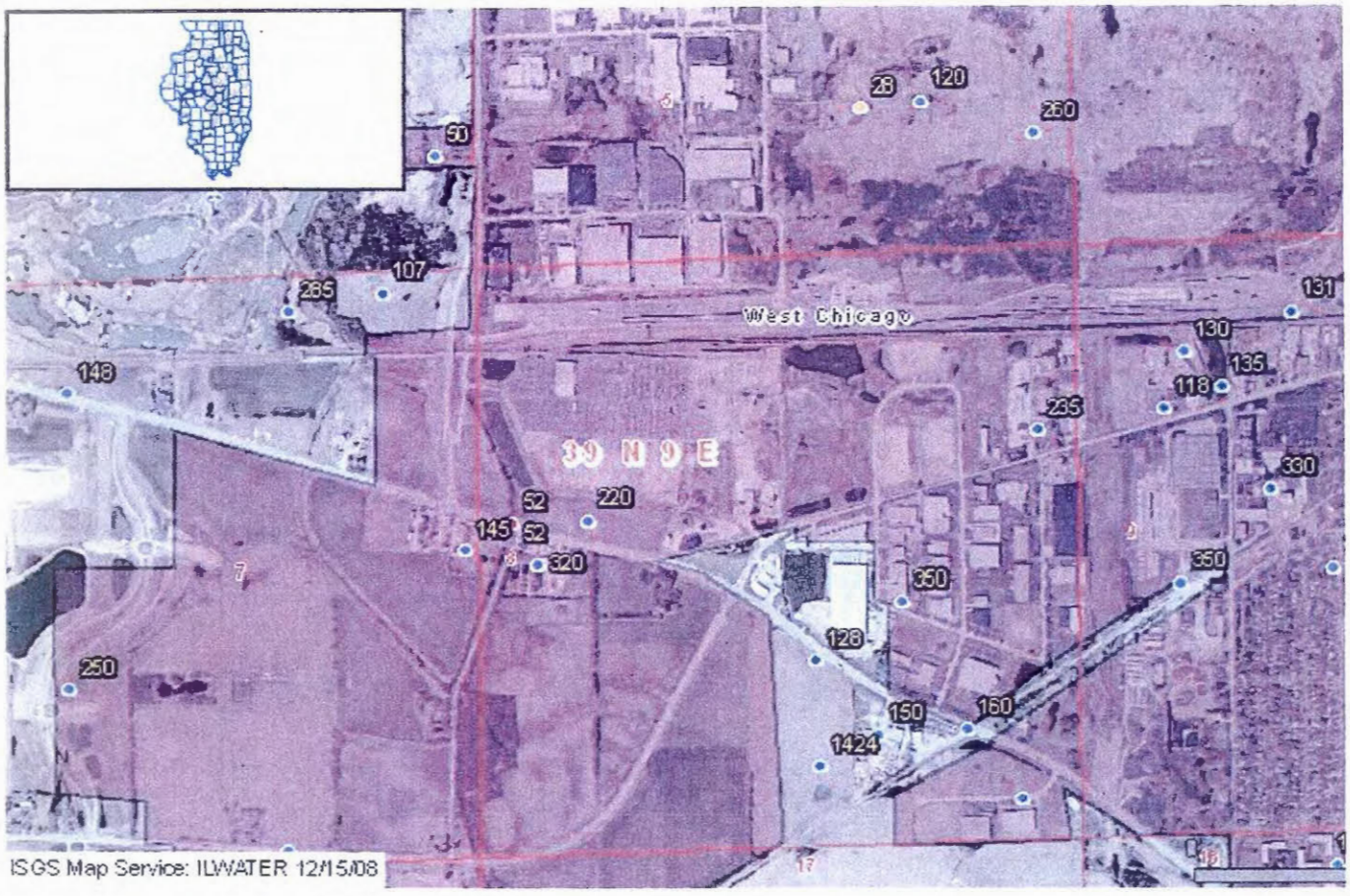
Low : 0

DOO 2005 UTM 15 (west)

Value

High : 254

Low : 0


West Chicago
39 N 9 E
ISGS Map Service: ILWATER 12/15/08

ILLINOIS STATE GEOLOGICAL SURVEY

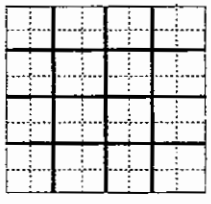
Municipal Water Supply	Top	Bottom
.ay & boulders	0	10
clay	10	13
clay & boulders	13	92
white lime	92	103
gray lime	103	107
porous white lime	107	123
hard white lime	123	199
gray lime	199	210
white lime	210	255
gray lime	255	345
shale	345	350
Total Depth		350

Casing: 14" BLACK STEEL CEMENTED from -1' to 93'
Water from Silurian limestone at 0' to 0'.

Location source: Location from the driller

Permit Date: **Permit #:**

COMPANY Wehling, Richard H.
FARM West Chicago, City of #8
DATE DRILLED October 31, 1988 **NO.**
ELEVATION 750GL **COUNTY NO.** 29697
LOCATION 2150'N 1550'W SE/c
LATITUDE 41.876562 **LONGITUDE** -88.229671
COUNTY DuPage **API** 120432969700 **8 - 39N - 9E**

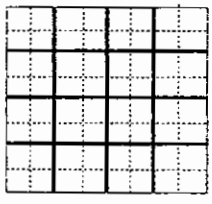


ILLINOIS STATE GEOLOGICAL SURVEY

Water Well	Top	Bottom
Total Depth		128
Driller's Log filed		

Permit Date: Permit #:

COMPANY Liberg, Patrick A.
FARM Schoppe Rodger
DATE DRILLED May 1, 1969 NO.
ELEVATION 0 COUNTY NO. 01205
LOCATION SW NW SE
LATITUDE 41.875144 LONGITUDE -88.232482
COUNTY DuPage API 120430120500 8 - 39N - 9E



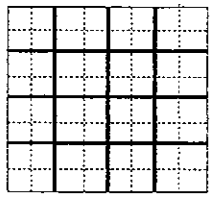
ILLINOIS STATE GEOLOGICAL SURVEY

	Top	Bottom
Total Depth		350

Driller's Log filed
Sample set # 31318 (0' - 355') Received: July 11, 1958

Permit Date: **Permit #:**

COMPANY Neely, Larry C.
FARM Ball Geo Inc
DATE DRILLED June 1, 1958 **NO.**
ELEVATION 0 **COUNTY NO.** 00088
LOCATION 415'N line, 385'E line of NW SW
LATITUDE 41.876907 **LONGITUDE** -88.220537
COUNTY DuPage **API** 120430008800 **9 - 39N - 9E**

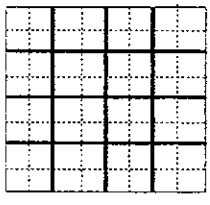


ILLINOIS STATE GEOLOGICAL SURVEY

Water Well	Top	Bottom
'otal Depth		75
Driller's Log filed		

Permit Date: Permit #:

COMPANY Neely, Larry C.
FARM Fairbank A F
DATE DRILLED January 1, 1957 **NO.** 1
ELEVATION 753GL **COUNTY NO.** 00077
LOCATION NE NE SW
LATITUDE 41.877209 **LONGITUDE** -88.215486
COUNTY DuPage **API** 120430007700 **9 - 39N - 9E**

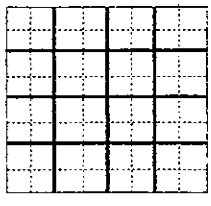


ILLINOIS STATE GEOLOGICAL SURVEY

Water Well	Top	Bottom
otal Depth		130
Driller's Log filed		

Permit Date: Permit #:

COMPANY Diebold Chester C
FARM Lussenhop Adolph
DATE DRILLED November 1, 1940 NO.
ELEVATION 0 COUNTY NO. 01746
LOCATION SE NW NW
LATITUDE 41.882605 LONGITUDE -88.220326
COUNTY DuPage API 120430174600 9 - 39N - 9E

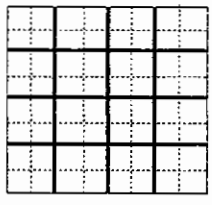


ILLINOIS STATE GEOLOGICAL SURVEY

Water Well	Top	Bottom
ɔtal Depth		131
Driller's Log filed		

Permit Date: Permit #:

COMPANY Neely&Schimelpfening
FARM Lockert Jake
DATE DRILLED January 1, 1941 NO.
ELEVATION 0 COUNTY NO. 01745
LOCATION NE NW
LATITUDE 41.883559 LONGITUDE -88.216705
COUNTY DuPage API 120430174500 9 - 39N - 9E



ILLINOIS STATE GEOLOGICAL SURVEY

Water Well	Top	Bottom
otal Depth		330
Driller's Log filed		

Permit Date: Permit #:

COMPANY Neely Cliff L

FARM Molded Products Corp

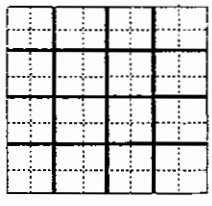
DATE DRILLED January 1, 1954 **NO.** 1

ELEVATION 690GL **COUNTY NO.** 00068

LOCATION 2250'N line, 1750'W line of section

LATITUDE 41.879171 **LONGITUDE** -88.2175

COUNTY DuPage **API** 120430006800 **9 - 39N - 9E**



ILLINOIS STATE GEOLOGICAL SURVEY

Water Well	Top	Bottom
otal Depth		118

Driller's Log filed

Sample set # 17688 (84' - 118') Received: January 5, 1948

Permit Date: Permit #:

COMPANY Diebold Chester C

FARM Schlick Clarence

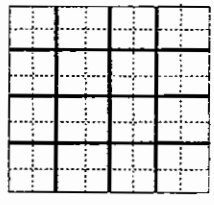
DATE DRILLED January 1, 1947 **NO.**

ELEVATION 758GL **COUNTY NO.** 01747

LOCATION 1500'N line, 800'W line of section

LATITUDE 41.881195 **LONGITUDE** -88.221002

COUNTY DuPage **API** 120430174700 **9 - 39N - 9E**



ILLINOIS STATE GEOLOGICAL SURVEY

Irrigation Well	Top	Bottom
lay	0	70
fine sand & gravel	70	80
limestone	80	235
Total Depth		235

Casing: 6" STEEL A53 BLACK from -1' to 81'
Grout: BENTONITE from 0 to 80.
Water from limestone at 80' to 235'.
Static level 80' below casing top which is 1' above GL
Pumping level 85' when pumping at 50 gpm for 2 hours

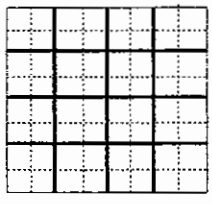
Additional location info: Lot: 1 Subdivision: Ifkovits Ass't Plat

Address of well: same as above

Location source: Location from permit

Permit Date: October 27, 1997 **Permit #:**

COMPANY Kerry, Charles M.
FARM We Go Greenhouse
DATE DRILLED November 6, 1997 **NO.**
ELEVATION 0 **COUNTY NO.** 30638
LOCATION NE SE NE
LATITUDE 41.880715 **LONGITUDE** -88.225168
COUNTY DuPage **API** 120433063800 **8 - 39N - 9E**



ILLINOIS STATE GEOLOGICAL SURVEY

Private Water Well	Top	Bottom
op soil	0	3
clay	3	10
sand gravel	10	35
clay	35	80
sand gravel	80	95
clay	95	125
sand gravel	125	129
rock	129	135
Total Depth		135

Casing: 5" BLACK 200# from 0' to 129'
Grout: CUTTINGS from 0 to 129.
Size hole below casing: 4.75"

Water from rock at 129' to 135'.
Static level 50' below casing top which is 1' above GL
Pumping level 65' when pumping at 14 gpm for 3 hours

Permanent pump installed at 80' on December 1, 1987, with a capacity of 14 gpm

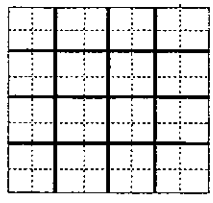
Additional location info: Lot: #9 Subdivision: Friends

Address of well: 28 W. 625 Berkshire Rd.
W. Chicago

Location source: Location from permit

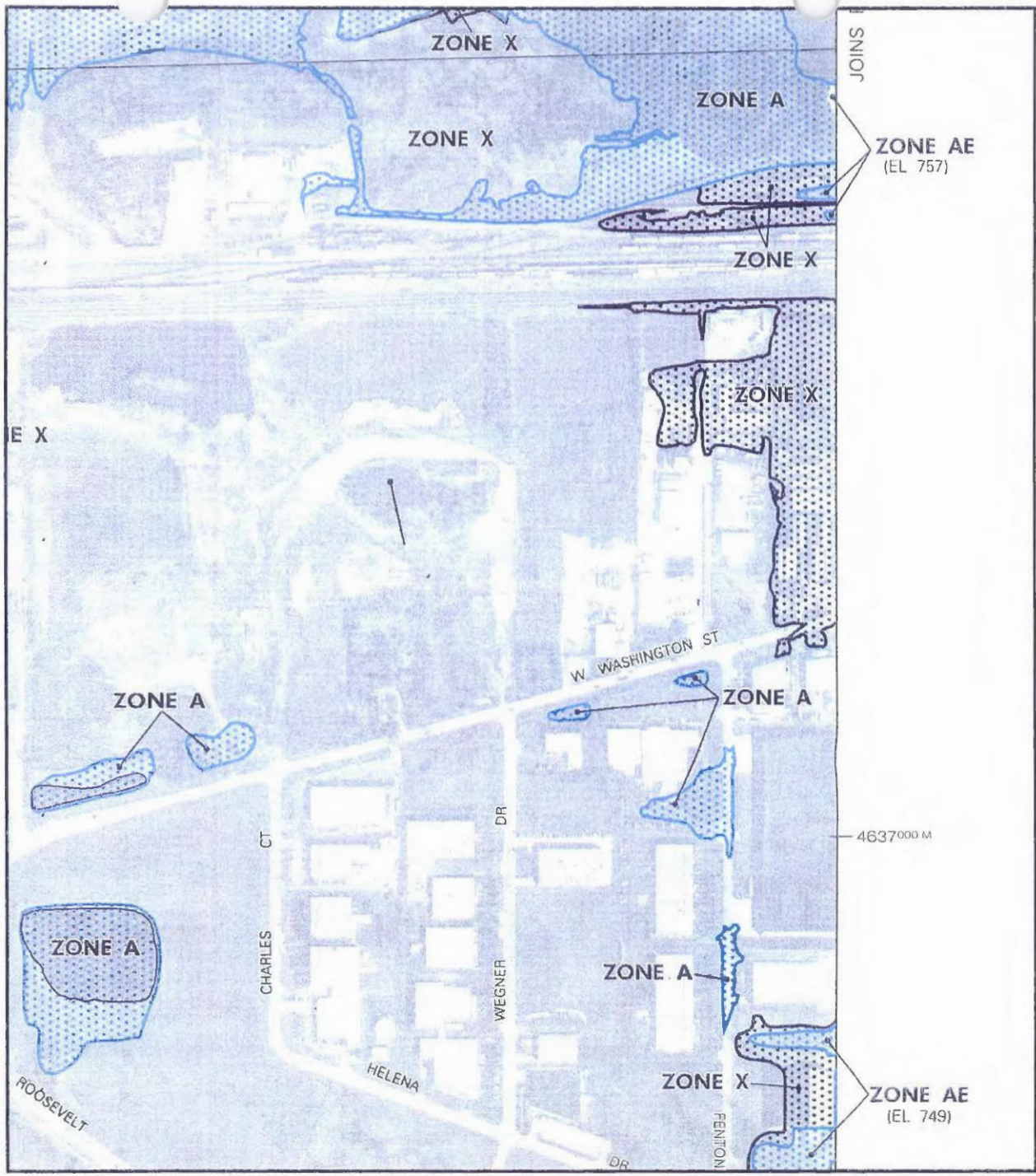
Permit Date: October 22, 1987 **Permit #:** 130509

COMPANY Knierim, Phil
FARM Elliot Concrete
DATE DRILLED December 1, 1987 **NO.**
ELEVATION 0 **COUNTY NO.** 27991
LOCATION NW
LATITUDE 41.88171 **LONGITUDE** -88.219119
COUNTY DuPage **API** 120432799100 **9 - 39N - 9E**



4

ATTACHMENT 4: FLOOD INSURANCE RATE MAP



National Flood Insurance Program at 1-800-638-6

MAP SCALE 1" = 500'

250 0 500 1000 FEET

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0401H

FIRM

FLOOD INSURANCE RATE MAP

DuPAGE COUNTY,
ILLINOIS
AND INCORPORATED AREAS

PANEL 0401 OF 1006

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
DuPAGE COUNTY	170197	0401	H
WEST CHICAGO, CITY OF	170215	0401	H

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

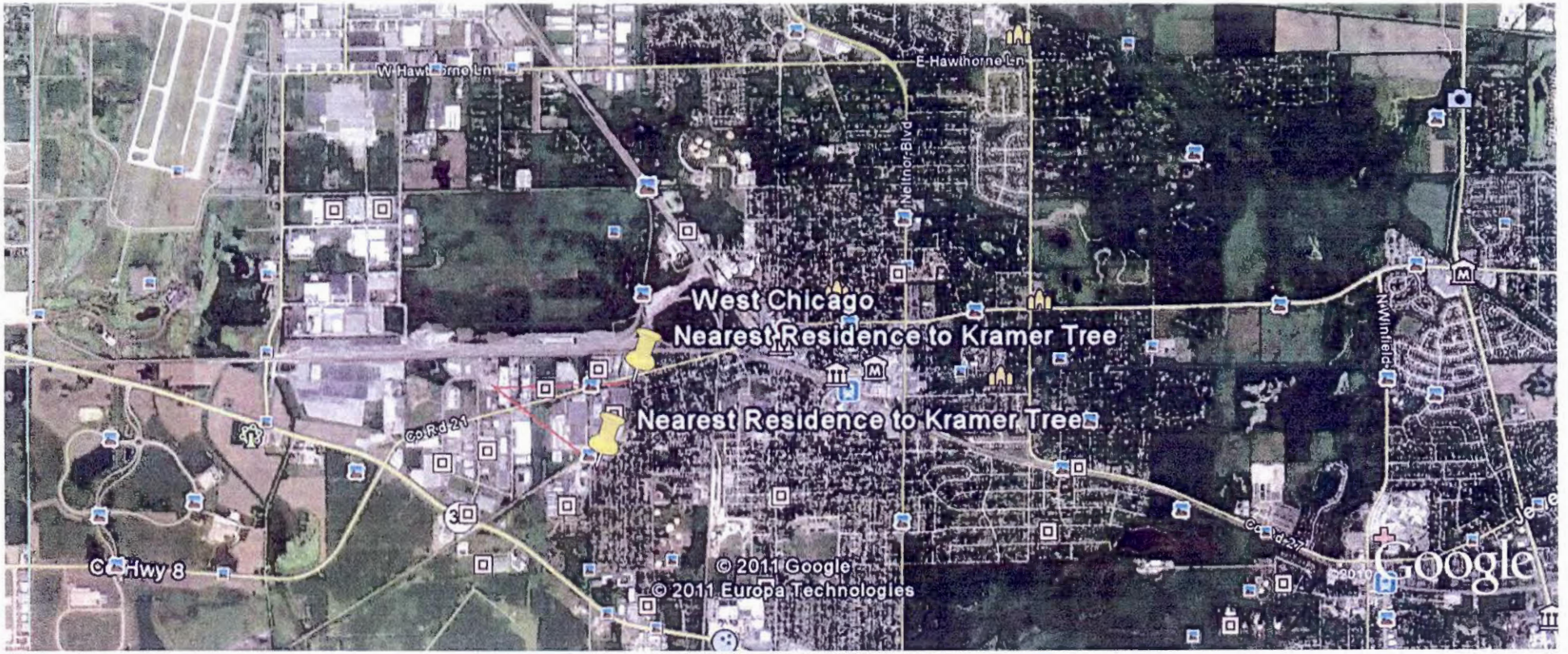
MAP NUMBER
17043C0401H

EFFECTIVE DATE
DECEMBER 16, 2004

Federal Emergency Management Agency

5

ATTACHMENT 5: AERIAL MAP OF CLOSEST RESIDENCE



West Chicago Illinois

IMAGE DATE 6/30/2010
SCALE 1" ≈ 4,000 FT.

Google Earth:Directions

4/25/2011

6

ATTACHMENT 6: ORDINANCE NO. 06-O-0102

Special Use Permit - Outside Storage from City of West Chicago

ORDINANCE NO. 06-O-0102

AN ORDINANCE GRANTING SPECIAL USES TO CONSTRUCT AN OUTSIDE STORAGE YARD AND TO LANDBANK REQUIRED OFF-STREET PARKING 300 CHARLES COURT – KRAMER TREE SPECIALISTS

WHEREAS, on or about November 9, 2006, Joe Kramer of Kramer Tree Specialists, (the "APPLICANT"), filed an application for special use permits to construct an outside storage yard and to landbank nine (9) required off-street parking spaces, with respect to the property legally described on Exhibit "A" attached hereto and incorporated herein (the "SUBJECT REALTY"); and,

WHEREAS, Notice of Public Hearing on said application was published in the Daily Herald on or about November 20, 2006, all as required by the ordinances of the City of West Chicago and the statutes of the State of Illinois; and,

WHEREAS, a Public Hearing was conducted by the Plan Commission/Zoning Board of Appeals of the City of West Chicago, commencing on December 5, 2006, pursuant to said Notice; and,

WHEREAS, at the Public Hearing, the APPLICANT provided testimony in support of its application, and all interested parties had an opportunity to be heard; and,

WHEREAS, the corporate authorities of the City of West Chicago have received the recommendation of the Plan Commission/Zoning Board of Appeals which contains specific findings of fact, pursuant to Recommendation No. 1053, a copy of which is attached hereto as Exhibit "B" which is, by this reference, incorporated herein.

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of West Chicago, Du Page County, Illinois, in regular session assembled, as follows:

Section 1. That a special use permit in conformance with Section 5.5, Section 11.2-4 (T) of the Zoning Ordinance is hereby granted for the SUBJECT REALTY, to construct an outside storage yard for the processing and storage of mulch and landscape waste materials.

Section 2. That a special use permit in conformance with Sections 5.5 and 13.3(B) of the Zoning Ordinance is hereby granted for the SUBJECT REALTY, to landbank nine (9) required off-street parking spaces.

Section 3. That the special use permits are hereby granted subject to compliance with the following conditions:

1. The site shall be developed in conformance with the Site Plan A1.0 prepared by Triad Construction Services, consisting of one sheet, dated July 25, 2006, and having a final revision date of _____, attached hereto and incorporated herein as Exhibit "C".
2. The landscaping shall be installed in conformance with the Landscape Plans L1.0 through L1.3 prepared by Planning Resources, Inc., consisting of one sheet each, dated _____, attached hereto and incorporated herein as Exhibit "C".
3. The applicant shall install the nine (9) landbanked parking spaces in conformance with the Site Plan A1.0 prepared by Triad Construction Services, dated July 25, 2006, and having a final revision date of _____, and attached hereto and incorporated herein as Exhibit "C". The landbanked parking spaces shall be installed if the City, at any time, determines that there is inadequate parking provided on the subject property.
4. The applicant shall submit engineering plans addressing the parking lot expansion design and storm water management needs in accordance with current City standards prior to the parking lot expansion installation.
5. The applicant shall be permitted to develop the overall site in multiple phases with the restriction that no unpaved or undeveloped portion of the site be utilized for any business operations until that portion of the site is improved according the approved site development plans.
6. The applicant shall be permitted to install evergreen trees less than the minimum height of six (6') feet along the perimeter of the storage yard fence with the condition that said trees obtain the required 100% screening requirement within five (5) years of the issuance of the initial occupancy permit for the subject property. Any trees that do not comply with the screening requirement at the five (5) year deadline shall be replaced, additional landscaping shall be added, or other screening measures, as approved by the City, shall be utilized in order to obtain the required screening.
7. The storage or parking of any non-business related equipment, vehicles, or materials shall be prohibited at all times on the subject property.
8. At no time shall the height of any business related materials stored on the subject property exceed twenty-five (25) feet in height.

Section 3. That all ordinances and resolutions, or parts thereof, in conflict with the provisions of this Ordinance are, to the extent of such conflict, hereby repealed.

Section 4. That this Ordinance shall be in full force and effect from and after its passage, approval and publication in pamphlet form as provided by law.

PASSED this 18th day of December 2006.

Alderman L. Chassee	Yea	Alderman J. Beifuss	Absent
Alderman H.R. Monroe	Yea	Alderman G. Kauth	Yea
Alderman R. Radkiewicz	Absent	Alderman R. Pineda	Yea
Alderman S. Dimas	Yea	Alderman G. Bunch	Yea
Alderman M. Kwasman	Yea	Alderman N. Connelly	Yea
Alderman R. Stout	Yea	Alderman N. Dzierzanowski	Yea
Alderman M. Fuesting	Yea	Alderman A. Murphy	Yea

APPROVED as to form: _____
City Attorney

APPROVED this 18th day of December 2006.

_____
Acting Mayor, Michael B. Kwasman

ATTEST:

_____
City Clerk, Nancy M. Smith

PUBLISHED: _____

EXHIBIT "A"

LEGAL DESCRIPTION FOR ORDINANCE NO. 06-O-0102

Lot 2 of North Industrial Park Second Resubdivision, being a Resubdivision of Lot 2 in North Industrial Park, in the Northeast Quarter of Section 8, Township 39 North, Range 9 East of the Third Principal Meridian, according to the plat recorded September 19, 2005, as Document R2005-206729, in DuPage County, Illinois.

P.I.N. 04-08-201-027

EXHIBIT "B"

RECOMMENDATION #1070
ORDINANCE 06-O-0102

TO: The Honorable Mayor and City Council

SUBJECT: PC 06-50: Special Uses for an outside storage yard and to landbank nine (9) required off-street parking spaces
300 Charles Court – Kramer Tree Specialists

DATE: December 6, 2006

DECISION: The motion to approve the requests passed (4-0) with staff's recommendation # 7 from the staff report PC 06-50 amended to read as follows: "At no time shall the height of any business related materials stored on the subject property exceed twenty-five (25) feet in height".

RECOMMENDATION
After review of the requested special uses, the Plan Commission/Zoning Board of Appeals (PC/ZBA) recommended approval according to the following findings of fact:

(1) Are necessary for the public convenience at that location or, the case of existing nonconforming uses, a special use permit will make the use more compatible with its surroundings:

(This standard should be interpreted as indicating whether or not the proposed use is good for the public at that particular physical location, and not whether or not the use itself is *needed* there).

The proposed special uses are designed to facilitate the relocation of a legal non-conforming industrially based use from a residential area to a more suitable industrial area of the City.

(2) Is so designed, located and proposed to be operated that the public health, safety and welfare will be protected:

The proposed use of the outside storage yard in conjunction with the contractor's office operations is designed to protect the public's health, safety and welfare by relocating a use currently operating in a residential area to an industrial area that is better suited for this type of business operations and landbanking of the nine (9) parking spaces is designed to improve the aesthetics of the site by limiting the amount of hard surface on-site until such time that it is deemed necessary.

(3) Will not cause substantial injury to the value of other property in the neighborhood in which it is located:

The proposed use should not have a negative impact on the surrounding neighborhood in which it is located given that the site is located within an existing industrial park and surrounded by similar industrial uses.

(4) *The proposed special use is designated by this code as a listed special use in the zoning district in which the property in question is located:*

The proposed outdoor storage yard and landbanking of required off-street parking spaces are indeed listed as a special uses, per the M, Manufacturing District regulations established in Section 11.2-4 (T) and the off-street parking regulations established in Section 13.3 (B) of the Zoning Code.

Respectfully submitted,

John Warbiany
Chairman

VOTE:

For	Against	Abstain	Absent
J. Warbiany			V. Barber
J. Banas			S. Jarolin
B. Lemon			
J. Hale			

EXHIBIT "C"

ORDINANCE 06-O-0102

Insert Site Plan A1.0 and Landscape Plans L1.0, L1.1, L1.2, L1.3 here

7

ATTACHMENT 7 - ILLINOIS DEPARMENT OF NATURAL RESOURCES DETERMINATION LETTER

EcoCAT REPORT

Illinois Department of
Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
http://dnr.state.il.us

Pat Quinn, Governor
Marc Miller, Director

May 05, 2011

John Lardner
JPL Environmental Engineering
1122 North Clark Street
#3803
Chicago, IL 60610 7899

Re: Kraner Tree Specialists LMPF
Project Number(s): 1112268 [2011-003]
County: DuPage

Dear Applicant:

This letter is in reference to the project you recently submitted for consultation. The natural resource review provided by EcoCAT identified protected resources that may be in the vicinity of the proposed action. The Department has evaluated this information and concluded that adverse effects are unlikely. Therefore, consultation under 17 Ill. Adm. Code Part 1075 is terminated.

This consultation is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database at the time of the project submittal, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, you must comply with the applicable statutes and regulations. Also, note that termination does not imply IDNR's authorization or endorsement of the proposed action.

Please contact me if you have questions regarding this review.

Tracy Evans
Division of Ecosystems and Environment
217-785-5500

EcoCAT
Ecological Compliance Assessment Tool

Applicant:	JPL Environmental Engineering	*IDNR Project #:*	1112268
Contact:	John Lardner	Alternate #:	2011-003
Address:	1122 North Clark Street #3803 Chicago, IL 60610	Date:	05/04/2011

Project: Kraner Tree Specialists LMPF
Address: 300 Charles Court, West Chicago

Description: Leaf mulch production at existing landscape equipment yard

Natural Resource Review Results

Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)
The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

West Chicago Prairie INAI Site
Truitt-Hoff Nature Preserve
Blanding'S Turtle *(Emydoidea blandingii)*
Tube Beard Tongue *(Penstemon tubaeflorus)*

An IDNR staff member will evaluate this information and contact you within 30 days to request additional information or to terminate consultation if adverse effects are unlikely.

Location
The applicant is responsible for the accuracy of the location submitted for the project.

County: DuPage
Township, Range, Section:
39N, 9E, 9

IL Department of Natural Resources Contact
Tracy Evans
217-785-5500
Division of Ecosystems & Environment

Local or State Government Jurisdiction
IL Environmental Protection Agency
Permit Section
Illinois EPA
1021 North Grand Avenue
Springfield, Illinois 62794-9276

IDNR Project Number: 1112268

Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

Terms of Use

By using this website, you acknowledge that you have read and agree to these terms. These terms may be revised by IDNR as necessary. If you continue to use the EcoCAT application after we post changes to these terms, it will mean that you accept such changes. If at any time you do not accept the Terms of Use, you may not continue to use the website.

1. The IDNR EcoCAT website was developed so that units of local government, state agencies and the public could request information or begin natural resource consultations on-line for the Illinois Endangered Species Protection Act, Illinois Natural Areas Preservation Act, and Illinois Interagency Wetland Policy Act. EcoCAT uses databases, Geographic Information System mapping, and a set of programmed decision rules to determine if proposed actions are in the vicinity of protected natural resources. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.

2. Unauthorized attempts to upload, download, or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.

3. IDNR reserves the right to enhance, modify, alter, or suspend the website at any time without notice, or to terminate or restrict access.

Security

EcoCAT operates on a state of Illinois computer system. We may use software to monitor traffic and to identify unauthorized attempts to upload, download, or change information, to cause harm or otherwise to damage this site. Unauthorized attempts to upload, download, or change information on this server is strictly prohibited by law. Unauthorized use, tampering with or modification of this system, including supporting hardware or software, may subject the violator to criminal and civil penalties. In the event of unauthorized intrusion, all relevant information regarding possible violation of law may be provided to law enforcement officials.

Privacy

EcoCAT generates a public record subject to disclosure under the Freedom of Information Act. Otherwise, IDNR uses the information submitted to EcoCAT solely for internal tracking purposes.

EcoCAT
Ecological Compliance Assessment Tool

Applicant:	JPL Environmental Engineering	*IDNR Project #:*	1112268
Contact:	John Lardner	Alternate #:	2011-003
Address:	1122 North Clark Street #3803 Chicago, IL 60610	Date:	05/04/2011

Project: Kraner Tree Specialists LMPF
Address: 300 Charles Court, West Chicago

Description: Leaf mulch production at existing landscape equipment yard

Natural Resource Review Results

Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)
The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

West Chicago Prairie INAI Site
Truitt-Hoff Nature Preserve
Blanding'S Turtle *(Emydoidea blandingii)*
Tube Beard Tongue *(Penstemon tubaeflorus)*

An IDNR staff member will evaluate this information and contact you within 30 days to request additional information or to terminate consultation if adverse effects are unlikely.

Location
The applicant is responsible for the accuracy of the location submitted for the project.

County: DuPage
Township, Range, Section:
39N, 9E, 9

IL Department of Natural Resources Contact
Tracy Evans
217-785-5500
Division of Ecosystems & Environment

Local or State Government Jurisdiction
IL Environmental Protection Agency
Permit Section
Illinois EPA
1021 North Grand Avenue
Springfield, Illinois 62794-9276

IDNR Project Number: 1112268

Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

Terms of Use

By using this website, you acknowledge that you have read and agree to these terms. These terms may be revised by IDNR as necessary. If you continue to use the EcoCAT application after we post changes to these terms, it will mean that you accept such changes. If at any time you do not accept the Terms of Use, you may not continue to use the website.

1. The IDNR EcoCAT website was developed so that units of local government, state agencies and the public could request information or begin natural resource consultations on-line for the Illinois Endangered Species Protection Act, Illinois Natural Areas Preservation Act, and Illinois Interagency Wetland Policy Act. EcoCAT uses databases, Geographic Information System mapping, and a set of programmed decision rules to determine if proposed actions are in the vicinity of protected natural resources. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.

2. Unauthorized attempts to upload, download, or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.

3. IDNR reserves the right to enhance, modify, alter, or suspend the website at any time without notice, or to terminate or restrict access.

Security

EcoCAT operates on a state of Illinois computer system. We may use software to monitor traffic and to identify unauthorized attempts to upload, download, or change information, to cause harm or otherwise to damage this site. Unauthorized attempts to upload, download, or change information on this server is strictly prohibited by law. Unauthorized use, tampering with or modification of this system, including supporting hardware or software, may subject the violator to criminal and civil penalties. In the event of unauthorized intrusion, all relevant information regarding possible violation of law may be provided to law enforcement officials.

Privacy

EcoCAT generates a public record subject to disclosure under the Freedom of Information Act. Otherwise, IDNR uses the information submitted to EcoCAT solely for internal tracking purposes.

8

ATTACHMENT 8: STORM WATER CALCULATIONS

PETER F. OLESEN AND ASSOCIATES

SPACECO

PETER F. OLESEN AND ASSOCIATES, INC.

CONSULTING ENGINEERS

May 21, 2009

Ms. Joanne Kalchbrenner
Community Development Director
City of West Chicago

West Chicago, IL

Re: Kramer Tree Services

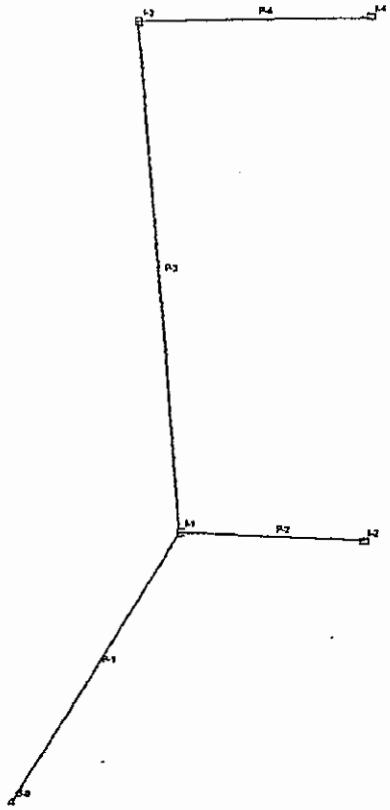
Dear Ms. Kalchbrenner,

As requested by Pavia Marting during their review of the as-built survey that was submitted for the Kramer Tree project, we have performed an analysis of the ability of the as constructed storm sewer to convey a 10-year storm. Based on this analysis, the storm sewer system is capable of conveying the 10-year storm. Output of the Storm Cad analysis is attached.

If you should have any questions or comments, please contact me at (847) 253-1515.

Respectfully,

Mark S. Olesen, P.E.
Executive Vice President

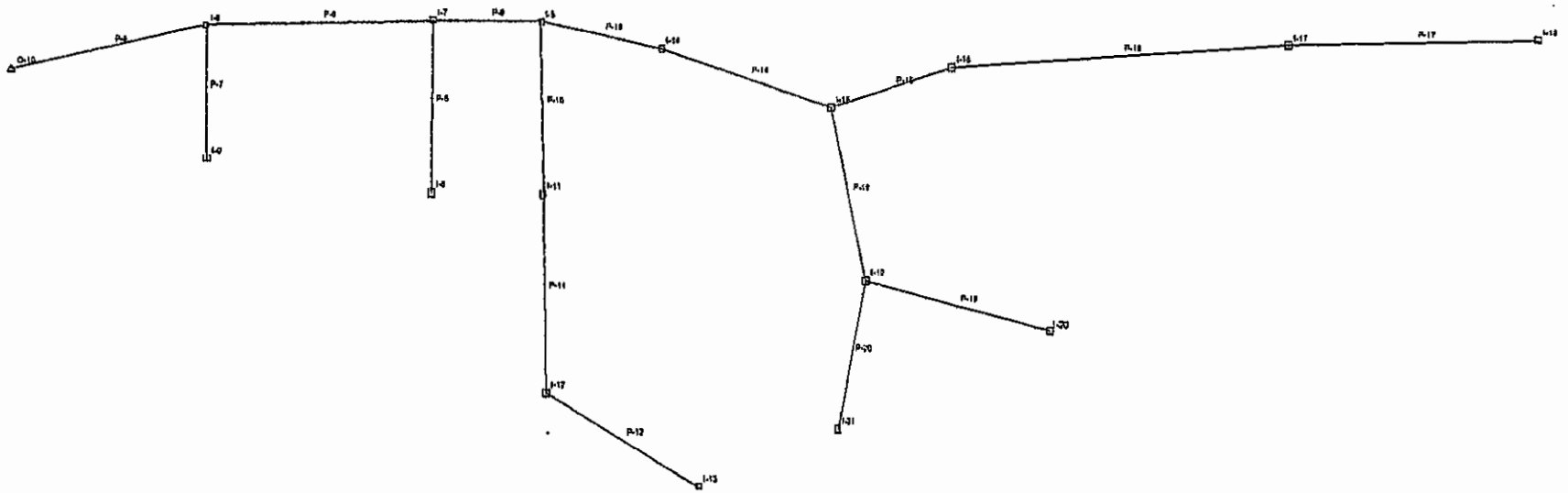


Pipe Report

Pipe	Upstream Node	Downstream Node	Inlet Area (acres)	Inlet C Coefficient	Inlet CA (acres)	Total CA (acres)	System Intensity (in/hr)	Discharge (cfs)	Length (ft)	Constructed Slope (ft/ft)	Section Size	Roughness	Capacity (cfs)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)
P-4	I-4	I-3	1.23	0.94	1.16	1.16	6.84	7.98	145.00	0.005310	18 inch	0.013	7.65	749.76	748.99
P-2	I-2	I-1	1.42	0.91	1.29	1.29	6.86	8.89	114.00	0.001491	21 inch	0.013	6.12	748.31	748.14
P-3	I-3	I-1	1.00	0.98	0.98	2.14	6.78	14.61	320.00	0.001312	24 inch	0.013	8.20	748.99	748.57
P-1	I-1	O-0	0.94	0.95	0.89	4.32	6.66	29.00	198.00	0.004495	30 inch	0.013	27.50	747.45	746.56

Node Report

Node	Inlet Area (acres)	Inlet C Coefficient	Inlet CA (acres)	External CA (acres)	Total CA (acres)	Inlet TC (min)	External TC (min)	Upstream Flow Time (min)	System Flow Time (min)	System Intensity (in/hr)	Total Watershed (CIA) (cfs)	Additional Flow (cfs)	Carryover (cfs)	Known Flow (cfs)	Total Upstream Added (cfs)	Discharge (cfs)
I-4	1.23	0.94	1.16	0.00	1.16	1.98	0.00	0.00	1.98	6.84	7.98	0.00	0.00	0.00	0.00	7.98
I-2	1.42	0.91	1.29	0.00	1.29	1.84	0.00	0.00	1.84	6.86	8.89	0.00	0.00	0.00	0.00	8.89
I-3	1.00	0.98	0.98	0.00	2.14	1.98	0.00	2.51	2.51	6.78	14.61	0.00	0.00	0.00	0.00	14.61
I-1	0.94	0.95	0.89	0.00	4.32	1.87	0.00	3.49	3.49	6.66	29.00	0.00	0.00	0.00	0.00	29.00
O-0	N/A	N/A	N/A	N/A	4.32	N/A	0.00	3.96	3.96	6.60	28.75	N/A	N/A	N/A	0.00	N/A



Pipe Report

Pipe	Upstream Node	Downstream Node	Inlet Area (acres)	Inlet C Coefficien	Inlet CA (acres)	Total CA (acres)	System Intensity (in/hr)	Discharge (cfs)	Length (ft)	Constructed Slope (ft/ft)	Section Size	Roughness	Capacity (cfs)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)
P-17	I-18	I-17	0.52	0.83	0.43	0.43	6.94	3.03	154.00	0.002208	18 inch	0.013	4.94	751.59	751.25
P-16	I-17	I-16	0.44	0.90	0.39	0.83	6.76	5.64	212.00	0.001274	18 inch	0.013	3.75	751.25	750.98
P-19	I-20	I-19	0.86	0.89	0.76	0.76	6.90	5.31	118.00	0.000424	18 inch	0.013	2.16	751.10	751.05
P-20	I-21	I-19	0.22	0.69	0.15	0.15	6.98	1.07	92.00	0.000435	12 inch	0.013	0.83	751.16	751.12
P-12	I-13	I-12	0.31	0.81	0.25	0.25	6.96	1.76	112.00	0.003214	12 inch	0.013	2.25	751.80	751.44
P-15	I-16	I-15	0.58	0.89	0.52	1.34	6.63	8.97	82.00	0.006951	24 inch	0.012	20.43	751.05	750.48
P-18	I-19	I-15	0.27	0.94	0.25	1.17	6.82	8.03	110.00	0.000727	24 inch	0.013	6.10	750.82	750.74
P-11	I-12	I-11	0.19	0.70	0.13	0.38	6.86	2.65	103.00	0.001845	12 inch	0.013	1.71	751.54	751.35
P-14	I-15	I-14	0.25	0.87	0.22	2.73	6.57	18.10	111.00	0.000360	29x45 inc	0.013	13.99	750.88	750.84
P-10	I-11	I-5	0.49	0.94	0.46	0.84	6.79	5.77	129.00	0.003411	18 inch	0.013	6.13	751.35	750.91
P-13	I-14	I-5	0.62	0.88	0.54	3.28	6.51	21.49	77.00	0.000909	29x45 inc	0.013	22.22	750.91	750.84
P-9	I-5	I-7	0.00	0.00	0.00	4.12	6.48	26.89	66.00	0.001061	38x60 inc	0.013	50.28	750.38	750.31
P-5	I-6	I-7	0.17	0.98	0.17	0.17	6.86	1.15	106.00	0.006509	12 inch	0.013	3.20	751.00	750.31
P-6	I-7	I-8	0.18	0.86	0.16	4.44	6.44	28.83	141.00	0.001064	38x60 inc	0.013	50.36	750.31	750.16
P-7	I-9	I-8	0.32	0.98	0.31	0.31	6.88	2.18	83.00	0.010120	12 inch	0.013	4.00	751.00	750.16
P-8	I-8	O-10	0.23	0.89	0.20	4.96	6.37	31.85	122.00	0.001311	38x60 inc	0.013	55.91	750.16	750.00

Node Report

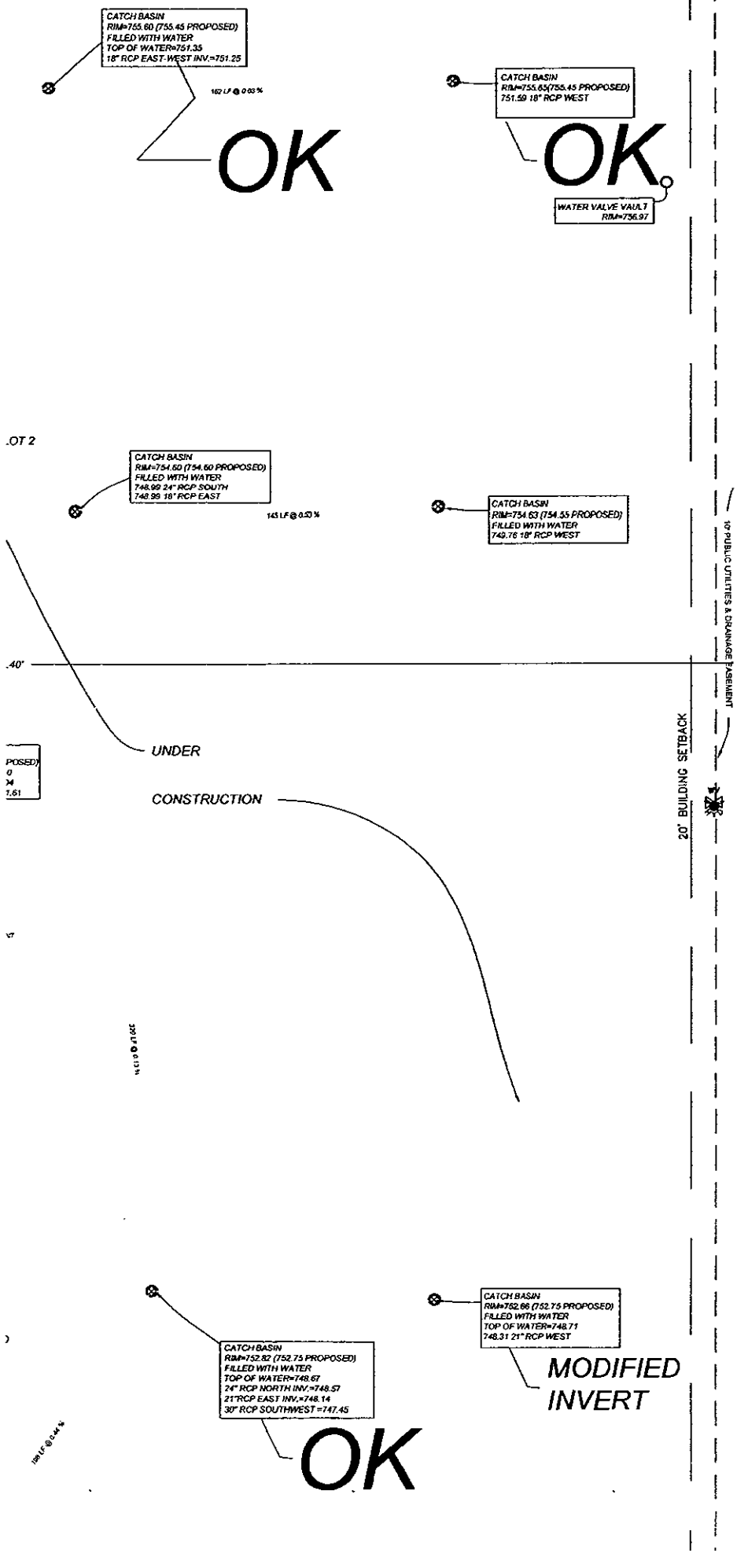
Node	Inlet Area (acres)	Inlet C Coefficient	Inlet CA (acres)	External CA (acres)	Total CA (acres)	Inlet TC (min)	External TC (min)	Upstream Flow Time (min)	System Flow Time (min)	System Intensity (in/hr)	Total Watershed (CIA) (cfs)	Additional Flow (cfs)	Carryover (cfs)	Known Flow (cfs)	Total Upstream Added (cfs)	Discharge (cfs)
I-18	0.52	0.83	0.43	0.00	0.43	1.19	0.00	0.00	1.19	6.94	3.03	0.00	0.00	0.00	0.00	3.03
I-17	0.44	0.90	0.39	0.00	0.83	1.54	0.00	2.68	2.68	6.76	5.64	0.00	0.00	0.00	0.00	5.64
I-20	0.86	0.89	0.76	0.00	0.76	1.54	0.00	0.00	1.54	6.90	5.31	0.00	0.00	0.00	0.00	5.31
I-21	0.22	0.69	0.15	0.00	0.15	0.80	0.00	0.00	0.80	6.98	1.07	0.00	0.00	0.00	0.00	1.07
I-13	0.31	0.81	0.25	0.00	0.25	0.96	0.00	0.00	0.96	6.96	1.76	0.00	0.00	0.00	0.00	1.76
I-16	0.58	0.89	0.52	0.00	1.34	1.17	0.00	3.79	3.79	6.63	8.97	0.00	0.00	0.00	0.00	8.97
I-19	0.27	0.94	0.25	0.00	1.17	1.33	0.00	2.20	2.20	6.82	8.03	0.00	0.00	0.00	0.00	8.03
I-12	0.19	0.70	0.13	0.00	0.38	1.39	0.00	1.86	1.86	6.86	2.65	0.00	0.00	0.00	0.00	2.65
I-15	0.25	0.87	0.22	0.00	2.73	1.17	0.00	4.22	4.22	6.57	18.10	0.00	0.00	0.00	0.00	18.10
I-11	0.49	0.94	0.46	0.00	0.84	2.13	0.00	2.41	2.41	6.79	5.77	0.00	0.00	0.00	0.00	5.77
I-14	0.62	0.88	0.54	0.00	3.28	1.48	0.00	4.76	4.76	6.51	21.49	0.00	0.00	0.00	0.00	21.49
I-5	0.00	0.00	0.00	0.00	4.12	0.00	0.00	5.03	5.03	6.48	26.89	0.00	0.00	0.00	0.00	26.89
I-6	0.17	0.98	0.17	0.00	0.17	1.80	0.00	0.00	1.80	6.86	1.15	0.00	0.00	0.00	0.00	1.15
I-7	0.18	0.86	0.16	0.00	4.44	0.67	0.00	5.32	5.32	6.44	28.83	0.00	0.00	0.00	0.00	28.83
I-9	0.32	0.98	0.31	0.00	0.31	1.66	0.00	0.00	1.66	6.88	2.18	0.00	0.00	0.00	0.00	2.18
I-8	0.23	0.89	0.20	0.00	4.96	1.12	0.00	5.89	5.89	6.37	31.85	0.00	0.00	0.00	0.00	31.85
O-10	N/A	N/A	N/A	N/A	4.96	N/A	0.00	6.28	6.28	6.33	31.61	N/A	N/A	N/A	0.00	N/A

Pipe Report

Pipe	Upstream Node	Downstream Node	Inlet Area (acres)	Inlet C Coefficien	Inlet CA (acres)	Total CA (acres)	System Intensity (in/hr)	Discharge (cfs)	Length (ft)	Constructed Slope (ft/ft)	Section Size	Roughness	Capacity (cfs)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)
P-17	I-18	I-17	0.52	0.83	0.43	0.43	6.94	3.03	162.00	0.000309	18 inch	0.013	1.85	751.30	751.25
P-20	I-21	I-19	0.22	0.69	0.15	0.15	6.98	1.07	92.00	0.000435	12 inch	0.013	0.83	751.16	751.12
P-19	I-20	I-19	0.86	0.89	0.76	0.76	6.90	5.31	122.00	0.000410	18 inch	0.013	2.13	751.10	751.05
P-16	I-17	I-16	0.44	0.90	0.39	0.83	6.75	5.63	199.00	0.001357	18 inch	0.013	3.87	751.25	750.98
P-18	I-19	I-15	0.27	0.94	0.25	1.17	6.81	8.03	115.00	0.000696	24 inch	0.013	5.97	750.82	750.74
P-15	I-16	I-15	0.58	0.89	0.52	1.34	6.62	8.97	82.00	0.006951	24 inch	0.012	20.43	751.05	750.48
P-12	I-13	I-12	0.31	0.81	0.25	0.25	6.96	1.76	115.00	0.003130	12 inch	0.013	2.22	751.80	751.44
P-14	I-15	I-14	0.25	0.87	0.22	2.73	6.57	18.09	114.00	0.000351	29x45 inc	0.013	13.80	750.88	750.84
P-11	I-12	I-11	0.19	0.70	0.13	0.38	6.85	2.65	106.00	0.001792	12 inch	0.013	1.68	751.54	751.35
P-13	I-14	I-5	0.62	0.88	0.54	3.28	6.50	21.47	80.00	0.000875	29x45 inc	0.013	21.80	750.91	750.84
P-10	I-11	I-5	0.49	0.94	0.46	0.84	6.79	5.77	128.00	0.003438	18 inch	0.013	6.16	751.35	750.91
P-5	I-6	I-7	0.17	0.98	0.17	0.17	6.86	1.15	106.00	0.006509	12 inch	0.013	3.20	751.00	750.31
P-9	I-5	I-7	0.00	0.00	0.00	4.12	6.47	26.87	66.00	0.001061	38x60 inc	0.013	50.28	750.38	750.31
P-6	I-7	I-8	0.18	0.86	0.16	4.44	6.44	28.81	141.00	0.001064	38x60 inc	0.013	50.36	750.31	750.16
P-7	I-9	I-8	0.32	0.98	0.31	0.31	6.88	2.18	83.00	0.010120	12 inch	0.013	4.00	751.00	750.16
P-8	I-8	O-10	0.23	0.89	0.20	4.96	6.37	31.82	122.00	0.001311	38x60 inc	0.013	55.91	750.16	750.00

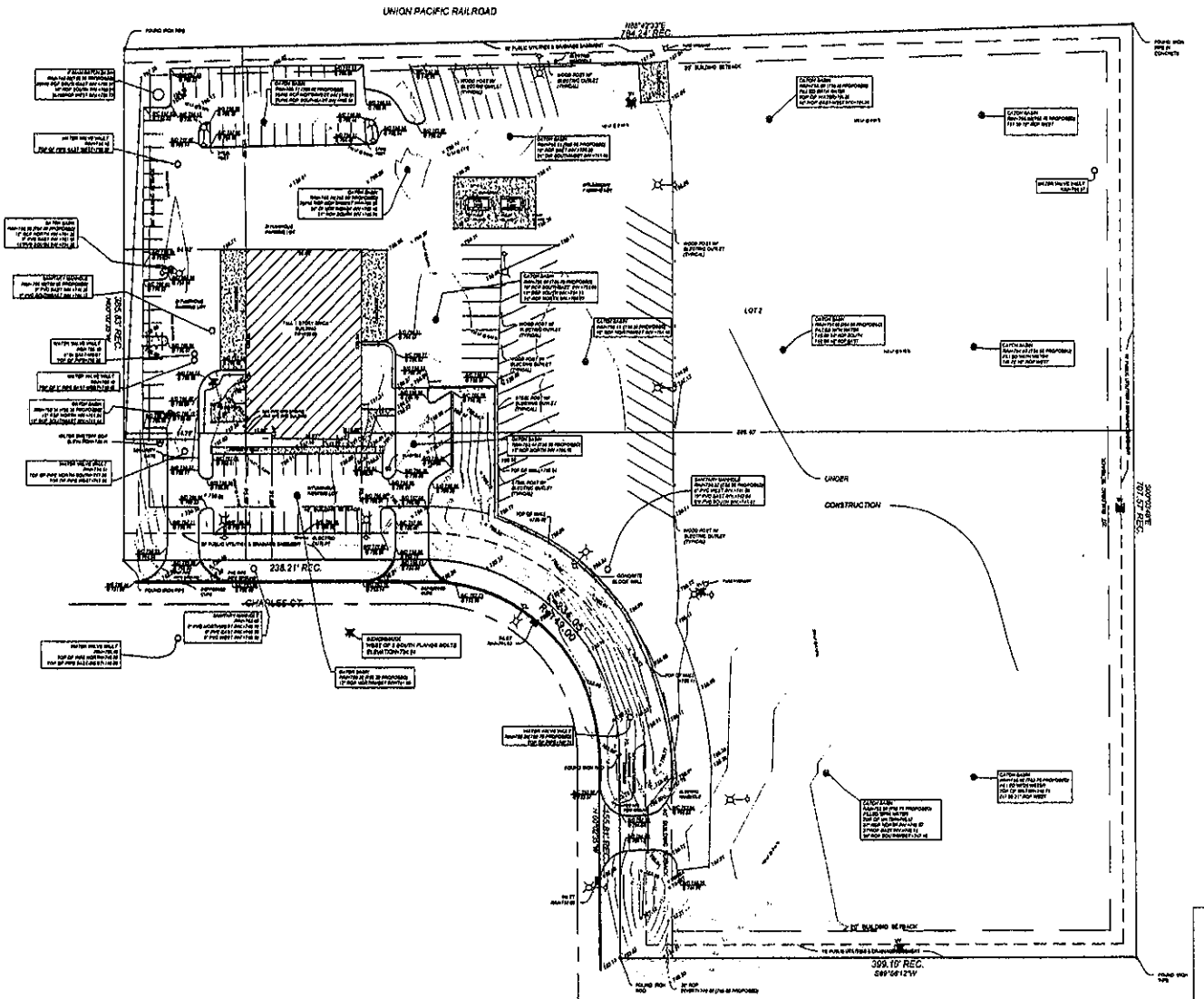
Node Report

Node	Inlet Area (acres)	Inlet C Coefficient	Inlet CA (acres)	External CA (acres)	Total CA (acres)	Inlet TC (min)	External TC (min)	Upstream Flow Time (min)	System Flow Time (min)	System Intensity (in/hr)	Total Watershed (CIA) (cfs)	Additional Flow (cfs)	Carryover (cfs)	Known Flow (cfs)	Total Upstream Added (cfs)	Discharge (cfs)
I-18	0.52	0.83	0.43	0.00	0.43	1.19	0.00	0.00	1.19	6.94	3.03	0.00	0.00	0.00	0.00	3.03
I-21	0.22	0.69	0.15	0.00	0.15	0.80	0.00	0.00	0.80	6.98	1.07	0.00	0.00	0.00	0.00	1.07
I-20	0.86	0.89	0.76	0.00	0.76	1.54	0.00	0.00	1.54	6.90	5.31	0.00	0.00	0.00	0.00	5.31
I-17	0.44	0.90	0.39	0.00	0.83	1.54	0.00	2.76	2.76	6.75	5.63	0.00	0.00	0.00	0.00	5.63
I-19	0.27	0.94	0.25	0.00	1.17	1.33	0.00	2.22	2.22	6.81	8.03	0.00	0.00	0.00	0.00	8.03
I-16	0.58	0.89	0.52	0.00	1.34	1.17	0.00	3.80	3.80	6.62	8.97	0.00	0.00	0.00	0.00	8.97
I-13	0.31	0.81	0.25	0.00	0.25	0.96	0.00	0.00	0.96	6.96	1.76	0.00	0.00	0.00	0.00	1.76
I-15	0.25	0.87	0.22	0.00	2.73	1.17	0.00	4.23	4.23	6.57	18.09	0.00	0.00	0.00	0.00	18.09
I-12	0.19	0.70	0.13	0.00	0.38	1.39	0.00	1.89	1.89	6.85	2.65	0.00	0.00	0.00	0.00	2.65
I-14	0.62	0.88	0.54	0.00	3.28	1.48	0.00	4.80	4.80	6.50	21.47	0.00	0.00	0.00	0.00	21.47
I-11	0.49	0.94	0.46	0.00	0.84	2.13	0.00	2.46	2.46	6.79	5.77	0.00	0.00	0.00	0.00	5.77
I-6	0.17	0.98	0.17	0.00	0.17	1.80	0.00	0.00	1.80	6.86	1.15	0.00	0.00	0.00	0.00	1.15
I-5	0.00	0.00	0.00	0.00	4.12	0.00	0.00	5.07	5.07	6.47	26.87	0.00	0.00	0.00	0.00	26.87
I-7	0.18	0.86	0.16	0.00	4.44	0.67	0.00	5.36	5.36	6.44	28.81	0.00	0.00	0.00	0.00	28.81
I-9	0.32	0.98	0.31	0.00	0.31	1.66	0.00	0.00	1.66	6.88	2.18	0.00	0.00	0.00	0.00	2.18
I-8	0.23	0.89	0.20	0.00	4.96	1.12	0.00	5.94	5.94	6.37	31.82	0.00	0.00	0.00	0.00	31.82
O-10	N/A	N/A	N/A	N/A	4.96	N/A	0.00	6.33	6.33	6.32	31.59	N/A	N/A	N/A	0.00	N/A


CATCH BASIN
RIM=755.60 (755.45 PROPOSED)
FILLED WITH WATER
TOP OF WATER=751.35
18" RCP EAST-WEST INV.=751.25
162 LF @ 0.63 %
OK
CATCH BASIN
RIM=755.65(755.45 PROPOSED)
751.59 18" RCP WEST
OK
WATER VALVE VAULT
RIM=756.97
.OT 2
CATCH BASIN
RIM=754.60 (754.60 PROPOSED)
FILLED WITH WATER
748.99 24" RCP SOUTH
748.99 18" RCP EAST
143 LF @ 0.53 %
CATCH BASIN
RIM=754.63 (754.35 PROPOSED)
FILLED WITH WATER
749.76 18" RCP WEST
10' PUBLIC UTILITIES & DRAINAGE EASEMENT
20' BUILDING SETBACK
UNDER
CONSTRUCTION
CATCH BASIN
RIM=752.82 (752.75 PROPOSED)
FILLED WITH WATER
TOP OF WATER=748.67
24" RCP NORTH INV.=748.57
21"RCP EAST INV.=748.14
30" RCP SOUTHWEST=747.45
OK
CATCH BASIN
RIM=752.86 (752.75 PROPOSED)
FILLED WITH WATER
TOP OF WATER=748.71
748.31 21" RCP WEST
MODIFIED
INVERT

AS-BUILT

SCALE: 1" = 40'



LEGAL DESCRIPTION:

LOT 2, IN NORTH INDUSTRIAL PARK SECOND RESUBDIVISION, BEING A RESUBDIVISION OF LOT 2 IN NORTH INDUSTRIAL PARK, IN THE NORTHEAST 1/4 OF SECTION 8, TOWNSHIP 39 NORTH, RANGE 9 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED SEPTEMBER 19, 2003, AS DOCUMENT R2003-308726, IN DUPAGE COUNTY, ILLINOIS.

AREA=455,800 SQUARE FEET OR 10.00 ACRES, MORE OR LESS

Compare all dimensions before building and report any discrepancies at once. Refer to deed or title policy for building lines and easements.

B&G SURVEY COMPANY, INC.

ILLINOIS & INDIANA PROFESSIONAL LAND SURVEYORS
ILLINOIS PROFESSIONAL DESIGN FIRM #184.004961
2551 BERNICE ROAD
LANSING, ILLINOIS 60438
708-474-5360 PHONE
708-474-5363 fax
bandgsurvey@comcast.net

LOCATION: 300 CHARLES CT. WEST CHICAGO, IL	DRAWN BY: GMW	CHECKED BY: KMW
	DATE: 9/22/08	
ORDERED BY: TRIAD CONSTRUCTION SERVICES	FIELD WORK BY: KEJV	
	FIELD DATE: 9/17/08	
JOB NO. 1074076	BK. 180, P. 9	SHEET 1 of 1

DATED THIS 26TH DAY OF SEPTEMBER A.D. 2008.

KEVIN M. WESTERKAMP
2043
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 2043
EXPIRATION DATE: 11/30/2008

MEMORANDUM

August 6, 2010

TO: Sarah Cooper, PE

FROM: Gerald L Robinson, PE, CFM

SUBJECT: Summary of the 'As-Built' Conditions Detention Ponds for the North Industrial Park (CBBEL Project Number 99-48A)

The purpose of this memorandum is to summarize the results of the 'as-built' survey completed by SPACECO, Inc for the drainage divide determination located within the North Industrial Park as illustrated on the attached exhibit DDE. The North Industrial Park is located north of Washington Street between Charles Court and Wegner Drive. The individual elevation-storage computations and outlet structures are presented for each of the 6 ponds that were excavated as part of the construction of the industrial park and are shown on the previously supplied and accepted record drawings dated June 15, 2009.

There are 3 different points where stormwater is discharged from the North Industrial Park:

- Discharge Point 1 drains a large wetland area located in the northwest corner of the project. The flow from this wetland is discharged to the north along the railroad located along the northern boundary of the site. This discharge point drains Detention Ponds 1-3, which were all excavated adjacent to the wetland area and are controlled by the single discharge pipe out of the wetland area.

- Discharge Point 2 drains the eastern portion of the North Industrial Park and outlets into the City of West Chicago storm sewer system located within the Washington Street Right-of-Way. Ponds 4 and 6 are tributary to this discharge point.

- The third discharge point is located in the southwestern corner of the North Industrial Park and is also tributary to the Washington Street storm sewer system. Pond 5 (east and west) is located within this discharge point.

The revised drainage divides were input to the record drawing TR-20 hydrologic models. A comparison of the original calculations for the North Industrial Park and the 'as-built' volumes is presented in Table 1 and the TR-20 hydrologic input/output is included in Tab 1.

CHRISTOPHER B. BURKE ENGINEERING, LTD.
9575 W Higgins Road, Suite 600 Rosemont, Illinois 60018-4920 Tel (847) 823-0500 Fax (847) 823-0520

MEMORANDUM

Table 1

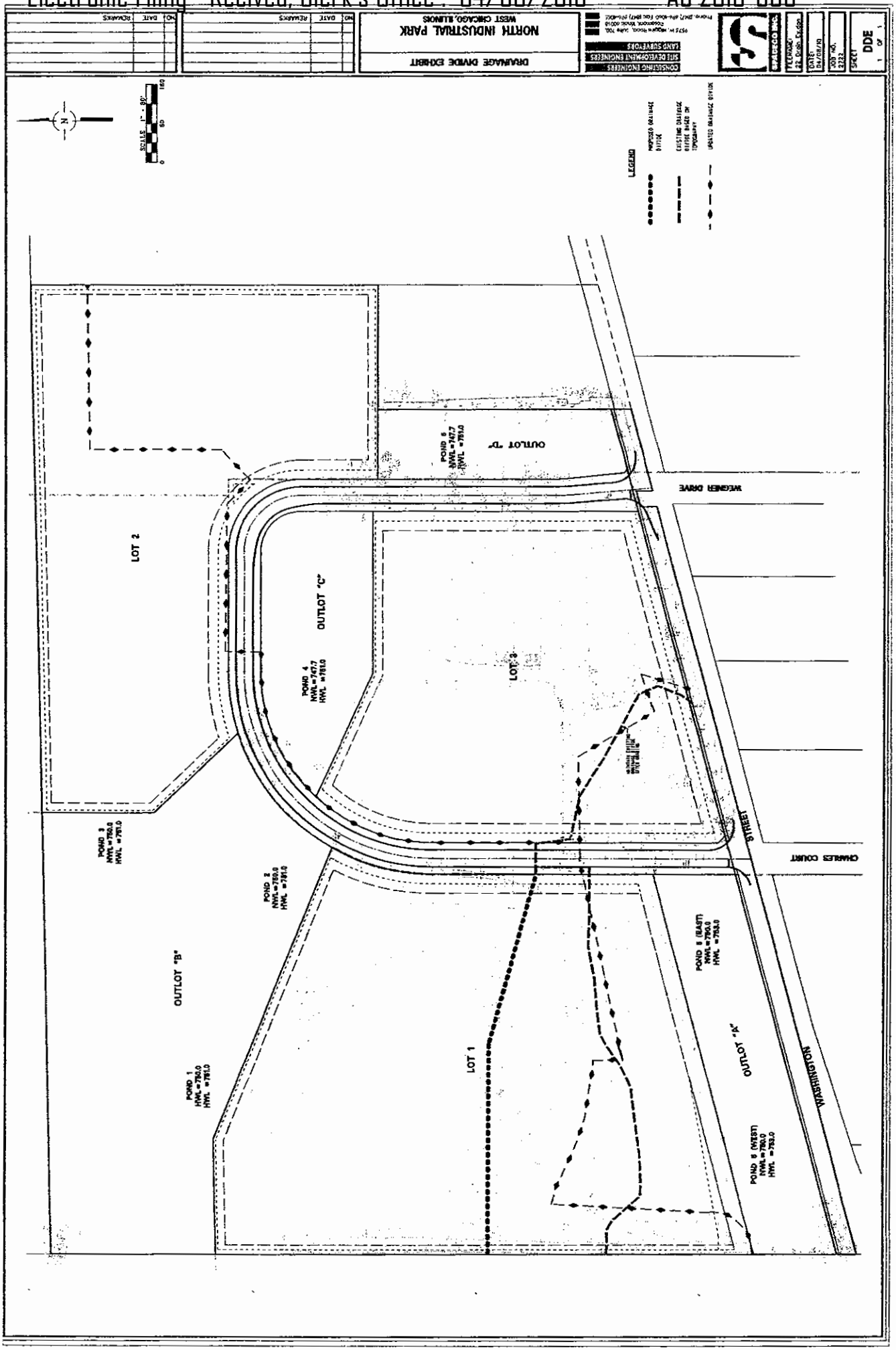
Comparison of Allowable Release Rate and Revised Drainage Divide Release Rates for the North Industrial Park

Outlet Number	Allowable 100-year recurrence interval Discharge (cfs)	Allowable High Water Elevation (Ft)	Actual Discharge (cfs)	Actual High Water Elevation (Ft)
1 (Ponds 1-3 and existing wetland storage)	3.84	751.0	3.76	751.0
2 (Ponds 4 and 6)	3.16	751.0	2.62	750.5
3 (Pond 5 east and west)	2.00	753.0	1.39	751.4
Total	9.00	N/A	7.77	N/A

As shown in Table 1, the existing drainage divides shown on the SPACECO plan labeled DDE do not need to be changed at this point. As the remainder of the industrial park develops, the ultimate drainage divides prepared by CBBEL as part of the Kramer stormwater management permit will need to be completed.

n:\westchicago\9948a\admin\m9948a_080610.doc

CHRISTOPHER B. BURKE ENGINEERING, LTD.
9575 W Higgins Road, Suite 600 Rosemont, Illinois 60018-4920 Tel (847) 823-0500 Fax (847) 823-0520



1

```
*******************80-80 LIST OF INPUT DATA FOR TR-20 HYDROLOGY*****************

   3 TR-20 FRACRUN                                          NOPLOTS
  .TLE     NORTH INDUSTRIAL PARK, WEST CHICAGO, ILLINOIS abuilt2.t20
 TITLE     CBBEL PROJECT NO: 99-48A, MDC 5/26/2010 PHASE 2 DIVIDES
  5 RAINFL 6              .05                                      HUFF 1ST
  8          0.           .16          .33          .43          .52         QUARTILE
  8          .60          .66          .71          .75          .79         MEDIAN -
  8          .82          .84          .86          .88          .90         POINT
  8          .92          .94          .96          .97          .98         PAGE 14
  8          1.0          1.0          1.0          1.0          1.0         CIRC 173
  9 ENDTBL
  5 RAINFL 7              .05                                      HUFF 2ND
  8          0.           .03          .08          .12          .16         QUARTILE
  8          .22          .29          .39          .51          .62         MEDIAN -
  8          .70          .76          .81          .85          .88         POINT
  8          .91          .93          .95          .97          .98         PAGE 14
  8          1.0          1.0          1.0          1.0          1.0         CIRC 173
  9 ENDTBL
  5 RAINFL 8              .05                                      HUFF 3RD
  8          0.           .03          .06          .09          .12         QUARTILE
  8          .15          .19          .23          .27          .32         MEDIAN -
  8          .38          .45          .57          .70          .79         POINT
  8          .85          .89          .92          .95          .97         PAGE 14
  8          1.0          1.0          1.0          1.0          1.0         CIRC 173
  9 ENDTBL
  5 RAINFL 9              .05                                      HUFF 4TH
  8          0.           .02          .05          .08          .10         QUARTILE
  8          .13          .16          .19          .22          .25         MEDIAN -
  8          .28          .32          .35          .39          .45         POINT
  8          .51          .59          .72          .84          .92         PAGE 14
  8          1.0          1.0          1.0          1.0          1.0         CIRC 173
  9 ENDTBL
  3 STRUCT      10
  8                      748.370      0.000        0.000
  8                      749.300      0.001        0.100
  8                      749.500      1.130        1.090
  8                      750.000      2.310        3.560
  8                      750.500      3.090        7.140
  8                      751.000      3.730        10.72
  8                      751.050      3.790        11.07
  9 ENDTBL
  6 RUNOFF 1   1       1 0.04919      84.          0.50         1 1 1 0 1 1
  6 RESVOR 2    10 1   2 748.37                                 1 1 1 0 1 1
    ENDATA
  7 INCREM 6              0.50
  7 COMPUT 7   1       10 0.00         2.03         24.          8 2  24   1 6 MO
    ENDCMP 1


*********************80-80 LIST OF INPUT DATA (CONTINUED)*********************

  7 COMPUT 7   1       10 0.00         2.51         24.          8 2  24   2 1 YR
    ENDCMP 1
  7 COMPUT 7   1       10 0.00         3.04         24.          8 2  24   3 2 YR
    ENDCMP 1
  7 COMPUT 7   1       10 0.00         3.80         24.          8 2  24   4 5 YR
    ENDCMP 1
  7 COMPUT 7   1       10 0.00         4.47         24.          8 2  24   5 10YR
    ENDCMP 1
  7 COMPUT 7   1       10 0.00         7.58         24.          8 2  24  99 100YR
    ENDCMP 1
    ENDJOB 2
0*******************************END OF 80-80 LIST*******************************


 EXECUTIVE CONTROL OPERATION INCREM                                                RECORD ID
+                                  MAIN TIME INCREMENT =    .50 HOURS


 EXECUTIVE CONTROL OPERATION COMPUT                                                RECORD ID 6 MO
+                                  FROM XSECTION   1
+                                                  TO STRUCTURE 10
        STARTING TIME =    .00    RAIN DEPTH =  2.03    RAIN DURATION= 24.00    RAIN TABLE NO.= 8    ANT. MOIST. COND= 2
        ALTERNATE NO.=24          STORM NO.= 1    MAIN TIME INCREMENT =    .50 HOURS


 OPERATION RUNOFF   CROSS SECTION   1

 *** WARNING-MAIN TIME INCREMENT MAY BE TOO LARGE.
         COMPUTED PEAK(      1.23) AT              EXCEEDS MAX. ADJACENT HYDROGRAPH COORDINATE BY   8 %.
+                                 XSECTION   1

           PEAK TIME(HRS)              PEAK DISCHARGE(CFS)           PEAK ELEVATION(FEET)
              15.43                          3.83                        (RUNOFF)
              23.77                          1.23                        (RUNOFF)

 TIME(HRS)          FIRST HYDROGRAPH POINT =    .00 HOURS      TIME INCREMENT =   .50 HOURS      DRAINAGE AREA =    .05 SQ.MI.
    5.00     DISCHG          .00        .00        .00        .00        .00        .01        .07        .14        .21        .27
   10.00     DISCHG          .39        .50        .61        .80        .92       1.16       1.32       1.85       2.70       3.04
   15.00     DISCHG         3.53       3.82       3.30       2.95       2.84       2.14       2.09       1.59       1.44       1.31
   20.00     DISCHG         1.11       1.10       1.10       1.11        .90        .76        .81       1.10       1.14        .29
   25.00     DISCHG          .02        .00
```

--- HYDROGRAPH FOR XSECTION 1, ALTERNATE 24, STORM 1, ADDED TO OUTPUT HYDROGRAPH FILE ---

OPERATION RESVOR STRUCTURE 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
20.00	1.16	749.51

\+ * * FIRST POINT OF FLAT PEAK

TIME(HRS)		FIRST HYDROGRAPH POINT = .00 HOURS			TIME INCREMENT = .50 HOURS				DRAINAGE AREA =		.05 SQ.MI.
10.00	DISCHG	.00	.00	.00	.01	.05	.09	.15	.21	.31	.43
10.00	ELEV	748.37	748.37	748.37	749.30	749.31	749.32	749.33	749.34	749.35	749.38
15.00	DISCHG	.56	.70	.83	.94	1.03	1.10	1.14	1.15	1.16	1.16
15.00	ELEV	749.40	749.42	749.45	749.47	749.48	749.49	749.50	749.51	749.51	749.51
20.00	DISCHG	1.16	1.16	1.16	1.16	1.16	1.15	1.14	1.14	1.14	1.13
20.00	ELEV	749.51	749.51	749.51	749.51	749.51	749.51	749.51	749.50	749.50	749.50
25.00	DISCHG	1.08	1.03	.99	.94	.90	.86	.82	.78	.74	.71
25.00	ELEV	749.49	749.48	749.47	749.47	749.46	749.45	749.44	749.44	749.43	749.43
30.00	DISCHG	.68	.65	.62	.59	.56	.53	.51	.49	.46	.44
30.00	ELEV	749.42	749.41	749.41	749.40	749.40	749.39	749.39	749.39	749.38	749.38
35.00	DISCHG	.42	.40	.38	.37	.35	.33	.32	.30	.29	.28
35.00	ELEV	749.37	749.37	749.37	749.36	749.36	749.36	749.36	749.35	749.35	749.35
40.00	DISCHG	.26	.25	.24	.23	.22	.21	.20	.19	.18	.17
40.00	ELEV	749.35	749.34	749.34	749.34	749.34	749.34	749.34	749.33	749.33	749.33

1

TR20 XEQ 06-16-10 17:56 NORTH INDUSTRIAL PARK, WEST CHICAGO, ILLINOIS abuilt2.t20 JOB 1 PASS 1
REV PC 09/83(.2) CBBEL PROJECT NO: 99-48A, MDC 5/26/2010 PHASE 2 DIVIDES PAGE 1

45.00	DISCHG	.16	.16	.15	.14	.14	.13	.12	.12	.11	.11
45.00	ELEV	749.33	749.33	749.33	749.33	749.32	749.32	749.32	749.32	749.32	749.32
50.00	DISCHG	.10	.10	.09	.09	.09	.08	.08	.07	.07	.07
50.00	ELEV	749.32	749.32	749.32	749.32	749.31	749.31	749.31	749.31	749.31	749.31
55.00	DISCHG	.06	.06	.06	.06	.05	.05	.05	.05	.04	.04
55.00	ELEV	749.31	749.31	749.31	749.31	749.31	749.31	749.31	749.31	749.31	749.31
60.00	DISCHG	.04	.04	.04	.03	.03	.03	.03	.03	.03	.03
60.00	ELEV	749.31	749.31	749.31	749.31	749.31	749.31	749.31	749.30	749.30	749.30
65.00	DISCHG	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02
65.00	ELEV	749.30	749.30	749.30	749.30	749.30	749.30	749.30	749.30	749.30	749.30
70.00	DISCHG	.02	.01	.01	.01	.01	.01	.01	.01	.01	.01
70.00	ELEV	749.30	749.30	749.30	749.30	749.30	749.30	749.30	749.30	749.30	749.30
75.00	DISCHG	.01	.01								
75.00	ELEV	749.30	749.30								

--- HYDROGRAPH FOR STRUCTURE 10, ALTERNATE 24, STORM 1, ADDED TO OUTPUT HYDROGRAPH FILE ---

EXECUTIVE CONTROL OPERATION ENDCMP RECORD ID

COMPUTATIONS COMPLETED FOR PASS 1

EXECUTIVE CONTROL OPERATION COMPUT RECORD ID 1 YR

\+ FROM XSECTION 1

\+ TO STRUCTURE 10

STARTING TIME = .00 RAIN DEPTH = 2.51 RAIN DURATION= 24.00 RAIN TABLE NO.= 8 ANT. MOIST. COND= 2
ALTERNATE NO.=24 STORM NO.= 2 MAIN TIME INCREMENT = .50 HOURS

OPERATION RUNOFF CROSS SECTION 1

*** WARNING-MAIN TIME INCREMENT MAY BE TOO LARGE.
COMPUTED PEAK(1.66) AT EXCEEDS MAX. ADJACENT HYDROGRAPH COORDINATE BY 8 %.

\+ XSECTION 1

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
15.40	5.48	(RUNOFF)
23.77	1.66	(RUNOFF)

TIME(HRS)		FIRST HYDROGRAPH POINT = .00 HOURS			TIME INCREMENT = .50 HOURS				DRAINAGE AREA =		.05 SQ.MI.
5.00	DISCHG	.00	.00	.00	.03	.12	.23	.33	.42	.51	.59
10.00	DISCHG	.77	.94	1.09	1.38	1.53	1.87	2.08	2.85	4.06	4.48
15.00	DISCHG	5.11	5.45	4.66	4.13	3.95	2.96	2.88	2.18	1.97	1.78
20.00	DISCHG	1.51	1.50	1.50	1.51	1.22	1.03	1.10	1.49	1.54	.39
25.00	DISCHG	.03	.00								

--- HYDROGRAPH FOR XSECTION 1, ALTERNATE 24, STORM 2, ADDED TO OUTPUT HYDROGRAPH FILE ---

OPERATION RESVOR STRUCTURE 10

1

TR20 XEQ 06-16-10 17:56 NORTH INDUSTRIAL PARK, WEST CHICAGO, ILLINOIS abuilt2.t20 JOB 1 PASS 2
REV PC 09/83(.2) CBBEL PROJECT NO: 99-48A, MDC 5/26/2010 PHASE 2 DIVIDES PAGE 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
23.82	1.44	749.63
21.50	1.45	749.64

TIME(HRS) FIRST HYDROGRAPH POINT = .00 HOURS TIME INCREMENT = .50 HOURS DRAINAGE AREA = .05 SQ.MI.

10.00	DISCHG	.01	.05	.09	.15	.21	.27	.35	.45	.59	.76
10.00	ELEV	749.30	749.31	749.32	749.33	749.34	749.35	749.36	749.38	749.40	749.43
15.00	DISCHG	.94	1.14	1.21	1.27	1.33	1.37	1.40	1.42	1.44	1.44
15.00	ELEV	749.47	749.50	749.53	749.56	749.58	749.60	749.61	749.62	749.63	749.63
20.00	DISCHG	1.45	1.45	1.45	1.45	1.45	1.44	1.44	1.43	1.43	1.43
20.00	ELEV	749.63	749.64	749.64	749.64	749.64	749.63	749.63	749.63	749.63	749.63
25.00	DISCHG	1.40	1.37	1.35	1.32	1.30	1.27	1.25	1.22	1.20	1.17
25.00	ELEV	749.62	749.60	749.59	749.58	749.57	749.56	749.55	749.54	749.53	749.52
30.00	DISCHG	1.15	1.13	1.07	1.02	.98	.93	.89	.85	.81	.77
30.00	ELEV	749.51	749.50	749.49	749.48	749.47	749.46	749.46	749.45	749.44	749.44
35.00	DISCHG	.74	.70	.67	.64	.61	.58	.56	.53	.51	.48
35.00	ELEV	749.43	749.42	749.42	749.41	749.41	749.40	749.40	749.39	749.39	749.39
40.00	DISCHG	.46	.44	.42	.40	.38	.36	.35	.33	.32	.30
40.00	ELEV	749.38	749.38	749.37	749.37	749.37	749.36	749.36	749.36	749.36	749.35
45.00	DISCHG	.29	.27	.26	.25	.24	.23	.22	.21	.20	.19
45.00	ELEV	749.35	749.35	749.35	749.34	749.34	749.34	749.34	749.34	749.33	749.33
50.00	DISCHG	.18	.17	.16	.16	.15	.14	.14	.13	.12	.12
50.00	ELEV	749.33	749.33	749.33	749.33	749.33	749.32	749.32	749.32	749.32	749.32
55.00	DISCHG	.11	.11	.10	.10	.09	.09	.08	.08	.08	.07
55.00	ELEV	749.32	749.32	749.32	749.32	749.32	749.32	749.31	749.31	749.31	749.31
60.00	DISCHG	.07	.07	.06	.06	.06	.06	.05	.05	.05	.05
60.00	ELEV	749.31	749.31	749.31	749.31	749.31	749.31	749.31	749.31	749.31	749.31
65.00	DISCHG	.04	.04	.04	.04	.04	.03	.03	.03	.03	.03
65.00	ELEV	749.31	749.31	749.31	749.31	749.31	749.31	749.31	749.31	749.31	749.30
70.00	DISCHG	.03	.03	.02	.02	.02	.02	.02	.02	.02	.02
70.00	ELEV	749.30	749.30	749.30	749.30	749.30	749.30	749.30	749.30	749.30	749.30
75.00	DISCHG	.02	.02	.02	.01	.01	.01	.01	.01	.01	.01
75.00	ELEV	749.30	749.30	749.30	749.30	749.30	749.30	749.30	749.30	749.30	749.30
80.00	DISCHG	.01	.01	.01	.01						
80.00	ELEV	749.30	749.30	749.30	749.30						

--- HYDROGRAPH FOR STRUCTURE 10, ALTERNATE 24, STORM 2, ADDED TO OUTPUT HYDROGRAPH FILE ---

EXECUTIVE CONTROL OPERATION ENDCMP RECORD ID
+ COMPUTATIONS COMPLETED FOR PASS 2

EXECUTIVE CONTROL OPERATION COMPUT RECORD ID 2 YR
+ FROM XSECTION 1
+ TO STRUCTURE 10
STARTING TIME = .00 RAIN DEPTH = 3.04 RAIN DURATION= 24.00 RAIN TABLE NO.= 8 ANT. MOIST. COND= 2
ALTERNATE NO.=24 STORM NO.= 3 MAIN TIME INCREMENT = .50 HOURS
1

OPERATION RUNOFF CROSS SECTION 1

*** WARNING-MAIN TIME INCREMENT MAY BE TOO LARGE.
COMPUTED PEAK(2.14) AT EXCEEDS MAX. ADJACENT HYDROGRAPH COORDINATE BY 8 %.
+ XSECTION 1

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
15.38	7.36	(RUNOFF)
23.77	2.14	(RUNOFF)

TIME(HRS) FIRST HYDROGRAPH POINT = .00 HOURS TIME INCREMENT = .50 HOURS DRAINAGE AREA = .05 SQ.MI.

5.00	DISCHG	.00	.03	.11	.26	.41	.55	.67	.79	.90	1.00
10.00	DISCHG	1.26	1.49	1.69	2.08	2.27	2.72	2.99	4.03	5.66	6.16
15.00	DISCHG	6.93	7.32	6.20	5.46	5.20	3.88	3.77	2.84	2.57	2.32
20.00	DISCHG	1.96	1.94	1.95	1.95	1.58	1.33	1.42	1.92	1.98	.50
25.00	DISCHG	.04	.00								

--- HYDROGRAPH FOR XSECTION 1, ALTERNATE 24, STORM 3, ADDED TO OUTPUT HYDROGRAPH FILE ---

OPERATION RESVOR STRUCTURE 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
23.86	1.79	749.78
21.50	1.81	749.79

TIME(HRS) FIRST HYDROGRAPH POINT = .00 HOURS TIME INCREMENT = .50 HOURS DRAINAGE AREA = .05 SQ.MI.

5.00	DISCHG	.00	.00	.00	.00	.00	.00	.00	.00	.04	.08
5.00	ELEV	748.37	748.37	748.37	748.37	748.37	748.37	748.37	748.37	749.31	749.31
10.00	DISCHG	.13	.19	.25	.33	.41	.51	.62	.75	.94	1.15
10.00	ELEV	749.32	749.33	749.34	749.36	749.37	749.39	749.41	749.43	749.47	749.51
15.00	DISCHG	1.25	1.37	1.47	1.56	1.63	1.69	1.73	1.76	1.78	1.79
15.00	ELEV	749.55	749.60	749.64	749.68	749.71	749.74	749.75	749.77	749.77	749.78
20.00	DISCHG	1.80	1.80	1.80	1.81	1.81	1.80	1.79	1.79	1.79	1.78
20.00	ELEV	749.78	749.78	749.79	749.79	749.79	749.78	749.78	749.78	749.78	749.78
25.00	DISCHG	1.75	1.72	1.68	1.65	1.62	1.59	1.56	1.53	1.50	1.47
25.00	ELEV	749.76	749.75	749.73	749.72	749.71	749.69	749.68	749.67	749.66	749.64
30.00	DISCHG	1.44	1.41	1.38	1.36	1.33	1.30	1.28	1.25	1.23	1.20
30.00	ELEV	749.63	749.62	749.61	749.60	749.58	749.57	749.56	749.55	749.54	749.53
35.00	DISCHG	1.18	1.16	1.13	1.09	1.04	.99	.95	.90	.86	.82
35.00	ELEV	749.52	749.51	749.50	749.49	749.48	749.48	749.47	749.46	749.45	749.45
40.00	DISCHG	.78	.75	.71	.68	.65	.62	.59	.56	.54	.51
40.00	ELEV	749.44	749.43	749.43	749.42	749.41	749.41	749.40	749.40	749.39	749.39
45.00	DISCHG	.49	.47	.44	.42	.40	.39	.37	.35	.34	.32

45.00	ELEV	749.39	749.38	749.38	749.37	749.37	749.37	749.37	749.36	749.36	749.36
50.00	DISCHG	.30	.29	.28	.26	.25	.24	.23	.22	.21	.20
50.00	ELEV	749.35	749.35	749.35	749.35	749.34	749.34	749.34	749.34	749.34	749.34
55.00	DISCHG	.19	.18	.17	.17	.16	.15	.14	.14	.13	.12

1

TR20 XEQ 06-16-10 17:56 NORTH INDUSTRIAL PARK, WEST CHICAGO, ILLINOIS abuilt2.t20 JOB 1 PASS 3
REV PC 09/83(.2) CBBEL PROJECT NO: 99-48A, MDC 5/26/2010 PHASE 2 DIVIDES PAGE 4

55.00	ELEV	749.33	749.33	749.33	749.33	749.33	749.33	749.33	749.32	749.32	749.32
60.00	DISCHG	.12	.11	.11	.10	.10	.09	.09	.09	.08	.08
60.00	ELEV	749.32	749.32	749.32	749.32	749.32	749.32	749.32	749.31	749.31	749.31
65.00	DISCHG	.07	.07	.07	.06	.06	.06	.06	.05	.05	.05
65.00	ELEV	749.31	749.31	749.31	749.31	749.31	749.31	749.31	749.31	749.31	749.31
70.00	DISCHG	.05	.04	.04	.04	.04	.04	.03	.03	.03	.03
70.00	ELEV	749.31	749.31	749.31	749.31	749.31	749.31	749.31	749.31	749.31	749.31
75.00	DISCHG	.03	.03	.03	.03	.02	.02	.02	.02	.02	.02
75.00	ELEV	749.30	749.30	749.30	749.30	749.30	749.30	749.30	749.30	749.30	749.30
80.00	DISCHG	.02	.02	.02	.02	.01	.01	.01	.01	.01	.01
80.00	ELEV	749.30	749.30	749.30	749.30	749.30	749.30	749.30	749.30	749.30	749.30
85.00	DISCHG	.01	.01	.01	.01	.01					
85.00	ELEV	749.30	749.30	749.30	749.30	749.30					

--- HYDROGRAPH FOR STRUCTURE 10, ALTERNATE 24, STORM 3, ADDED TO OUTPUT HYDROGRAPH FILE ---

EXECUTIVE CONTROL OPERATION ENDCMP RECORD ID
+ COMPUTATIONS COMPLETED FOR PASS 3

EXECUTIVE CONTROL OPERATION COMPUT RECORD ID 5 YR
+ FROM XSECTION 1
+ TO STRUCTURE 10
STARTING TIME = .00 RAIN DEPTH = 3.80 RAIN DURATION= 24.00 RAIN TABLE NO.= 8 ANT. MOIST. COND= 2
ALTERNATE NO.=24 STORM NO.= 4 MAIN TIME INCREMENT = .50 HOURS

OPERATION RUNOFF CROSS SECTION 1

*** WARNING-MAIN TIME INCREMENT MAY BE TOO LARGE.
COMPUTED PEAK(2.83) AT EXCEEDS MAX. ADJACENT HYDROGRAPH COORDINATE BY 8 %.
+ XSECTION 1

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
15.36	10.14	(RUNOFF)
23.77	2.83	(RUNOFF)

TIME(HRS)		FIRST HYDROGRAPH POINT = .00 HOURS				TIME INCREMENT = .50 HOURS			DRAINAGE AREA =		.05 SQ.MI.
.00	DISCHG	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04
5.00	DISCHG	.17	.30	.43	.70	.92	1.09	1.25	1.40	1.53	1.66
10.00	DISCHG	2.05	2.37	2.62	3.18	3.41	4.03	4.37	5.81	8.06	8.65
15.00	DISCHG	9.62	10.05	8.45	7.39	7.00	5.22	5.04	3.80	3.43	3.09
20.00	DISCHG	2.61	2.58	2.58	2.59	2.09	1.77	1.88	2.53	2.62	.66
25.00	DISCHG	.05	.00								

--- HYDROGRAPH FOR XSECTION 1, ALTERNATE 24, STORM 4, ADDED TO OUTPUT HYDROGRAPH FILE ---

OPERATION RESVOR STRUCTURE 10
1

TR20 XEQ 06-16-10 17:56 NORTH INDUSTRIAL PARK, WEST CHICAGO, ILLINOIS abuilt2.t20 JOB 1 PASS 4
REV PC 09/83(.2) CBBEL PROJECT NO: 99-48A, MDC 5/26/2010 PHASE 2 DIVIDES PAGE 5

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
23.89	2.32	750.01
22.00	2.33	750.01

TIME(HRS)		FIRST HYDROGRAPH POINT = .00 HOURS				TIME INCREMENT = .50 HOURS			DRAINAGE AREA =		.05 SQ.MI.
5.00	DISCHG	.00	.00	.00	.00	.00	.03	.09	.14	.20	.27
5.00	ELEV	748.37	748.37	748.37	748.37	748.37	749.31	749.31	749.33	749.34	749.35
10.00	DISCHG	.34	.43	.52	.63	.75	.89	1.04	1.17	1.28	1.42
10.00	ELEV	749.36	749.38	749.39	749.41	749.43	749.46	749.48	749.52	749.57	749.62
15.00	DISCHG	1.57	1.73	1.88	2.00	2.10	2.18	2.24	2.28	2.31	2.32
15.00	ELEV	749.69	749.76	749.82	749.87	749.91	749.94	749.97	749.99	750.00	750.00
20.00	DISCHG	2.32	2.32	2.33	2.33	2.33	2.33	2.32	2.32	2.32	2.32
20.00	ELEV	750.01	750.01	750.01	750.01	750.01	750.01	750.01	750.01	750.01	750.00
25.00	DISCHG	2.28	2.24	2.20	2.15	2.11	2.07	2.03	1.99	1.95	1.91
25.00	ELEV	749.99	749.97	749.95	749.93	749.92	749.90	749.88	749.86	749.85	749.83
30.00	DISCHG	1.88	1.84	1.80	1.77	1.73	1.70	1.67	1.63	1.60	1.57
30.00	ELEV	749.82	749.80	749.79	749.77	749.76	749.74	749.73	749.71	749.70	749.69
35.00	DISCHG	1.54	1.51	1.48	1.45	1.42	1.39	1.37	1.34	1.31	1.29
35.00	ELEV	749.67	749.66	749.65	749.64	749.62	749.61	749.60	749.59	749.58	749.57
40.00	DISCHG	1.26	1.24	1.21	1.19	1.17	1.15	1.11	1.06	1.01	.97
40.00	ELEV	749.56	749.55	749.54	749.53	749.52	749.51	749.50	749.49	749.48	749.47
45.00	DISCHG	.92	.88	.84	.80	.76	.73	.69	.66	.63	.60
45.00	ELEV	749.46	749.46	749.45	749.44	749.43	749.43	749.42	749.42	749.41	749.41
50.00	DISCHG	.58	.55	.52	.50	.48	.45	.43	.41	.39	.38
50.00	ELEV	749.40	749.40	749.39	749.39	749.38	749.38	749.38	749.37	749.37	749.37
55.00	DISCHG	.36	.34	.33	.31	.30	.28	.27	.26	.25	.23

55.00	ELEV	749.36	749.36	749.36	749.36	749.35	749.35	749.35	749.35	749.34	749.34
60.00	DISCHG	.22	.21	.20	.19	.19	.18	.17	.16	.15	.15
60.00	ELEV	749.34	749.34	749.34	749.33	749.33	749.33	749.33	749.33	749.33	749.33
65.00	DISCHG	.14	.13	.13	.12	.12	.11	.11	.10	.10	.09
65.00	ELEV	749.32	749.32	749.32	749.32	749.32	749.32	749.32	749.32	749.32	749.32
70.00	DISCHG	.09	.08	.08	.08	.07	.07	.07	.06	.06	.06
70.00	ELEV	749.32	749.31	749.31	749.31	749.31	749.31	749.31	749.31	749.31	749.31
75.00	DISCHG	.05	.05	.05	.05	.05	.04	.04	.04	.04	.04
75.00	ELEV	749.31	749.31	749.31	749.31	749.31	749.31	749.31	749.31	749.31	749.31
80.00	DISCHG	.03	.03	.03	.03	.03	.03	.03	.02	.02	.02
80.00	ELEV	749.31	749.31	749.31	749.31	749.30	749.30	749.30	749.30	749.30	749.30
85.00	DISCHG	.02	.02	.02	.02	.02	.02	.02	.02	.01	.01
85.00	ELEV	749.30	749.30	749.30	749.30	749.30	749.30	749.30	749.30	749.30	749.30
90.00	DISCHG	.01	.01	.01	.01	.01	.01	.01	.01		
90.00	ELEV	749.30	749.30	749.30	749.30	749.30	749.30	749.30	749.30		

--- HYDROGRAPH FOR STRUCTURE 10, ALTERNATE 24, STORM 4, ADDED TO OUTPUT HYDROGRAPH FILE ---

EXECUTIVE CONTROL OPERATION ENDCMP RECORD ID
+ COMPUTATIONS COMPLETED FOR PASS 4

1

TR20 XEQ 06-16-10 17:56 NORTH INDUSTRIAL PARK, WEST CHICAGO, ILLINOIS abuilt2.t20 JOB 1 PASS 5
REV PC 09/83(.2) CBBEL PROJECT NO: 99-48A, MDC 5/26/2010 PHASE 2 DIVIDES PAGE 6

EXECUTIVE CONTROL OPERATION COMPUT RECORD ID 10YR
+ FROM XSECTION 1
+ TO STRUCTURE 10
STARTING TIME = .00 RAIN DEPTH = 4.47 RAIN DURATION= 24.00 RAIN TABLE NO.= 8 ANT. MOIST. COND= 2
ALTERNATE NO.=24 STORM NO.= 5 MAIN TIME INCREMENT = .50 HOURS

OPERATION RUNOFF CROSS SECTION 1

*** WARNING-MAIN TIME INCREMENT MAY BE TOO LARGE.
COMPUTED PEAK(3.44) AT EXCEEDS MAX. ADJACENT HYDROGRAPH COORDINATE BY 8 %.
+ XSECTION 1

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
15.34	12.60	(RUNOFF)
21.26	3.22	(RUNOFF)
23.77	3.44	(RUNOFF)

TIME(HRS) FIRST HYDROGRAPH POINT = .00 HOURS TIME INCREMENT = .50 HOURS DRAINAGE AREA = .05 SQ.MI.

.00	DISCHG	.00	.00	.00	.00	.00	.00	.00	.09	.27
5.00	DISCHG	.45	.61	.76	1.15	1.43	1.64	1.83	2.00	2.15	2.30
10.00	DISCHG	2.80	3.20	3.50	4.21	4.46	5.24	5.63	7.43	10.22	10.88
15.00	DISCHG	12.01	12.48	10.44	9.11	8.60	6.39	6.17	4.64	4.18	3.77
20.00	DISCHG	3.18	3.14	3.14	3.15	2.54	2.15	2.28	3.08	3.17	.80
25.00	DISCHG	.06	.00								

--- HYDROGRAPH FOR XSECTION 1, ALTERNATE 24, STORM 5, ADDED TO OUTPUT HYDROGRAPH FILE ---

OPERATION RESVOR STRUCTURE 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
23.99	2.58	750.17

TIME(HRS) FIRST HYDROGRAPH POINT = .00 HOURS TIME INCREMENT = .50 HOURS DRAINAGE AREA = .05 SQ.MI.

5.00	DISCHG	.00	.00	.00	.02	.08	.14	.22	.29	.38	.46
5.00	ELEV	748.37	748.37	748.37	749.30	749.31	749.33	749.34	749.35	749.37	749.38
10.00	DISCHG	.56	.67	.79	.93	1.09	1.19	1.27	1.37	1.52	1.69
10.00	ELEV	749.40	749.42	749.44	749.47	749.49	749.52	749.56	749.60	749.66	749.74
15.00	DISCHG	1.89	2.09	2.27	2.36	2.42	2.46	2.50	2.52	2.54	2.55
15.00	ELEV	749.82	749.91	749.98	750.03	750.07	750.10	750.12	750.14	750.15	750.16
20.00	DISCHG	2.56	2.57	2.57	2.58	2.58	2.58	2.57	2.58	2.58	2.57
20.00	ELEV	750.16	750.16	750.17	750.17	750.17	750.17	750.17	750.17	750.17	750.17
25.00	DISCHG	2.56	2.53	2.51	2.49	2.47	2.44	2.42	2.40	2.38	2.36
25.00	ELEV	750.16	750.14	750.13	750.11	750.10	750.09	750.07	750.06	750.04	750.03
30.00	DISCHG	2.34	2.31	2.28	2.23	2.19	2.14	2.10	2.06	2.02	1.98
30.00	ELEV	750.02	750.00	749.99	749.97	749.95	749.93	749.91	749.89	749.88	749.86
35.00	DISCHG	1.94	1.90	1.87	1.83	1.80	1.76	1.73	1.69	1.66	1.63
35.00	ELEV	749.84	749.83	749.81	749.80	749.78	749.77	749.75	749.74	749.72	749.71
40.00	DISCHG	1.59	1.56	1.53	1.50	1.47	1.44	1.42	1.39	1.36	1.34

1

TR20 XEQ 06-16-10 17:56 NORTH INDUSTRIAL PARK, WEST CHICAGO, ILLINOIS abuilt2.t20 JOB 1 PASS 5
REV PC 09/83(.2) CBBEL PROJECT NO: 99-48A, MDC 5/26/2010 PHASE 2 DIVIDES PAGE 7

40.00	ELEV	749.70	749.68	749.67	749.66	749.65	749.63	749.62	749.61	749.60	749.59
45.00	DISCHG	1.31	1.28	1.26	1.23	1.21	1.19	1.16	1.14	1.10	1.05
45.00	ELEV	749.58	749.57	749.55	749.54	749.53	749.52	749.51	749.50	749.49	749.49
50.00	DISCHG	1.00	.96	.91	.87	.83	.79	.76	.72	.69	.66
50.00	ELEV	749.48	749.47	749.46	749.45	749.45	749.44	749.43	749.43	749.42	749.42
55.00	DISCHG	.63	.60	.57	.54	.52	.49	.47	.45	.43	.41
55.00	ELEV	749.41	749.41	749.40	749.40	749.39	749.39	749.38	749.38	749.38	749.37
60.00	DISCHG	.39	.37	.36	.34	.32	.31	.29	.28	.27	.26

60.00	ELEV	749.37	749.37	749.36	749.36	749.36	749.35	749.35	749.35	749.35	749.35
65.00	DISCHG	.24	.23	.22	.21	.20	.19	.18	.18	.17	.16
65.00	ELEV	749.34	749.34	749.34	749.34	749.34	749.33	749.33	749.33	749.33	749.33
70.00	DISCHG	.15	.15	.14	.13	.13	.12	.11	.11	.10	.10
70.00	ELEV	749.33	749.33	749.32	749.32	749.32	749.32	749.32	749.32	749.32	749.32
75.00	DISCHG	.09	.09	.09	.08	.08	.08	.07	.07	.07	.06
75.00	ELEV	749.32	749.32	749.32	749.31	749.31	749.31	749.31	749.31	749.31	749.31
80.00	DISCHG	.06	.06	.05	.05	.05	.05	.04	.04	.04	.04
80.00	ELEV	749.31	749.31	749.31	749.31	749.31	749.31	749.31	749.31	749.31	749.31
85.00	DISCHG	.04	.04	.03	.03	.03	.03	.03	.03	.03	.02
85.00	ELEV	749.31	749.31	749.31	749.31	749.31	749.30	749.30	749.30	749.30	749.30
90.00	DISCHG	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02
90.00	ELEV	749.30	749.30	749.30	749.30	749.30	749.30	749.30	749.30	749.30	749.30
95.00	DISCHG	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
95.00	ELEV	749.30	749.30	749.30	749.30	749.30	749.30	749.30	749.30	749.30	749.30

--- HYDROGRAPH FOR STRUCTURE 10, ALTERNATE 24, STORM 5, ADDED TO OUTPUT HYDROGRAPH FILE ---

EXECUTIVE CONTROL OPERATION ENDCMP RECORD ID
+ COMPUTATIONS COMPLETED FOR PASS 5

EXECUTIVE CONTROL OPERATION COMPUT RECORD ID 100YR
+ FROM XSECTION 1
+ TO STRUCTURE 10
STARTING TIME = .00 RAIN DEPTH = 7.58 RAIN DURATION= 24.00 RAIN TABLE NO.= 8 ANT. MOIST. COND= 2
ALTERNATE NO.=24 STORM NO.=99 MAIN TIME INCREMENT = .50 HOURS

OPERAIION RUNOFF CROSS SECTION 1

*** WARNING-MAIN TIME INCREMENT MAY BE TOO LARGE.
COMPUTED PEAK(6.20) AT EXCEEDS MAX. ADJACENT HYDROGRAPH COORDINATE BY 8 %.
+ XSECTION 1

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
15.31	24.06	(RUNOFF)
21.25	5.86	(RUNOFF)
23.77	6.20	(RUNOFF)

TIME(HRS) FIRST HYDROGRAPH POINT = .00 HOURS TIME INCREMENT = .50 HOURS DRAINAGE AREA = .05 SQ.MI.

.00	DISCHG	.00	.00	.00	.00	.00	.17	.65	1.11	1.53	1.89

1

5.00	DISCHG	2.21	2.49	2.75	3.75	4.32	4.64	4.92	5.16	5.37	5.56
10.00	DISCHG	6.59	7.35	7.86	9.24	9.60	11.05	11.66	15.12	20.38	21.31
15.00	DISCHG	23.16	23.73	19.64	16.99	15.94	11.80	11.35	8.51	7.65	6.88
20.00	DISCHG	5.80	5.71	5.71	5.72	4.60	3.88	4.13	5.56	5.73	1.45
25.00	DISCHG	.12	.00								

--- HYDROGRAPH FOR XSECTION 1, ALTERNATE 24, STORM 99, ADDED TO OUTPUT HYDROGRAPH FILE ---

OPERATION RESVOR STRUCTURE 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
24.21	3.76	751.02

TIME(HRS) FIRST HYDROGRAPH POINT = .00 HOURS TIME INCREMENT = .50 HOURS DRAINAGE AREA = .05 SQ.MI.

.00	DISCHG	.00	.00	.00	.00	.00	.00	.00	.00	.01	.09
.00	ELEV	748.37	748.37	748.37	748.37	748.37	748.37	748.37	748.37	749.30	749.32
5.00	DISCHG	.18	.28	.39	.52	.68	.86	1.04	1.17	1.25	1.33
5.00	ELEV	749.33	749.35	749.37	749.39	749.42	749.45	749.48	749.52	749.55	749.59
10.00	DISCHG	1.42	1.53	1.65	1.79	1.94	2.10	2.28	2.40	2.53	2.70
10.00	ELEV	749.62	749.67	749.72	749.78	749.84	749.91	749.99	750.06	750.14	750.25
15.00	DISCHG	2.87	3.06	3.20	3.31	3.41	3.49	3.54	3.59	3.62	3.65
15.00	ELEV	750.36	750.48	750.59	750.67	750.75	750.81	750.86	750.89	750.92	750.94
20.00	OISCHG	3.67	3.69	3.70	3.72	3.73	3.73	3.73	3.74	3.75	3.75
20.00	ELEV	750.95	750.97	750.98	750.99	751.00	751.00	751.00	751.01	751.02	751.02
25.00	DISCHG	3.73	3.70	3.68	3.65	3.62	3.60	3.57	3.54	3.52	3.49
25.00	ELEV	751.00	750.98	750.96	750.94	750.92	750.90	750.88	750.85	750.83	750.81
30.00	DISCHG	3.47	3.44	3.42	3.39	3.37	3.34	3.32	3.29	3.27	3.24
30.00	ELEV	750.79	750.77	750.75	750.73	750.72	750.70	750.68	750.66	750.64	750.62
35.00	DISCHG	3.22	3.20	3.17	3.15	3.13	3.10	3.08	3.05	3.02	3.00
35.00	ELEV	750.60	750.58	750.56	750.55	750.53	750.51	750.49	750.47	750.46	750.44
40.00	DISCHG	2.97	2.94	2.92	2.89	2.86	2.84	2.81	2.79	2.76	2.74
40.00	ELEV	750.42	750.41	750.39	750.37	750.36	750.34	750.32	750.31	750.29	750.27
45.00	DISCHG	2.71	2.69	2.67	2.64	2.62	2.59	2.57	2.55	2.52	2.50
45.00	ELEV	750.26	750.24	750.23	750.21	750.20	750.18	750.17	750.15	750.14	750.12
50.00	DISCHG	2.48	2.46	2.44	2.41	2.39	2.37	2.35	2.33	2.30	2.26
50.00	ELEV	750.11	750.09	750.08	750.07	750.05	750.04	750.03	750.01	750.00	749.98
55.00	DISCHG	2.22	2.17	2.13	2.09	2.05	2.01	1.97	1.93	1.89	1.85
55.00	ELEV	749.96	749.94	749.92	749.91	749.89	749.87	749.86	749.84	749.82	749.81
60.00	DISCHG	1.82	1.78	1.75	1.71	1.68	1.65	1.62	1.58	1.55	1.52
60.00	ELEV	749.79	749.78	749.76	749.75	749.73	749.72	749.71	749.69	749.68	749.67
65.00	DISCHG	1.49	1.46	1.43	1.41	1.38	1.35	1.33	1.30	1.27	1.25
65.00	ELEV	749.65	749.64	749.63	749.62	749.61	749.59	749.58	749.57	749.56	749.55
70.00	DISCHG	1.23	1.20	1.18	1.15	1.13	1.08	1.03	.99	.94	.90
70.00	ELEV	749.54	749.53	749.52	749.51	749.50	749.49	749.48	749.47	749.47	749.46
75.00	DISCHG	.86	.82	.78	.74	.71	.68	.64	.62	.59	.56

75.00	ELEV	749.45	749.44	749.44	749.43	749.43	749.42	749.41	749.41	749.40	749.40
80.00	DISCHG	.53	.51	.49	.46	.44	.42	.40	.38	.37	.35
80.00	ELEV	749.39	749.39	749.39	749.38	749.38	749.37	749.37	749.37	749.36	749.36

1

85.00	DISCHG	.33	.32	.30	.29	.28	.26	.25	.24	.23	.22
85.00	ELEV	749.36	749.36	749.35	749.35	749.35	749.35	749.34	749.34	749.34	749.34
90.00	DISCHG	.21	.20	.19	.18	.17	.16	.16	.15	.14	.14
90.00	ELEV	749.34	749.33	749.33	749.33	749.33	749.33	749.33	749.33	749.33	749.32
95.00	DISCHG	.13	.12	.12	.11	.11	.10	.10	.09	.09	.08
95.00	ELEV	749.32	749.32	749.32	749.32	749.32	749.32	749.32	749.32	749.32	749.31
100.00	DISCHG	.08	.08	.07	.07	.07	.06	.06	.06	.06	.05
100.00	ELEV	749.31	749.31	749.31	749.31	749.31	749.31	749.31	749.31	749.31	749.31
105.00	DISCHG	.05	.05	.05	.04	.04	.04	.04	.04	.03	.03
105.00	ELEV	749.31	749.31	749.31	749.31	749.31	749.31	749.31	749.31	749.31	749.31
110.00	DISCHG	.03	.03	.03	.03	.03	.02	.02	.02	.02	.02
110.00	ELEV	749.31	749.31	749.30	749.30	749.30	749.30	749.30	749.30	749.30	749.30
115.00	DISCHG	.02	.02	.02	.02	.02	.02	.01	.01	.01	.01
115.00	ELEV	749.30	749.30	749.30	749.30	749.30	749.30	749.30	749.30	749.30	749.30
120.00	DISCHG	.01	.01	.01	.01	.01	.01	.01			
120.00	ELEV	749.30	749.30	749.30	749.30	749.30	749.30	749.30			

--- HYDROGRAPH FOR STRUCTURE 10, ALTERNATE 24, STORM 99, ADDED TO OUTPUT HYDROGRAPH FILE ---

EXECUTIVE CONTROL OPERATION ENDCMP RECORD ID
+ COMPUTATIONS COMPLETED FOR PASS 6

EXECUTIVE CONTROL OPERATION ENDJOB RECORD ID
1

SUMMARY TABLE 1 - SELECTED RESULTS OF STANDARD AND EXECUTIVE CONTROL INSTRUCTIONS IN THE ORDER PERFORMED
(A STAR(*) AFTER THE PEAK DISCHARGE TIME AND RATE (CFS) VALUES INDICATES A FLAT TOP HYDROGRAPH
A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

XSECTION/ STRUCTURE ID	STANDARD CONTROL OPERATION	DRAINAGE AREA (SQ MI)	RAIN TABLE #	ANTEC MOIST COND	MAIN TIME INCREM (HR)	PRECIPITATION BEGIN (HR)	PRECIPITATION AMOUNT (IN)	PRECIPITATION DURATION (HR)	RUNOFF AMOUNT (IN)	PEAK DISCHARGE ELEVATION (FT)	PEAK DISCHARGE TIME (HR)	PEAK DISCHARGE RATE (CFS)	PEAK DISCHARGE RATE (CSM)
ALTERNATE 24 STORM 1													
+													
XSECTION 1	RUNOFF	.05	8	2	.50	.0	2.03	24.00	.76	---	15.43	3.83	77.9
STRUCTURE 10	RESVOR	.05	8	2	.50	.0	2.03	24.00	.72	749.51	20.00*	1.16*	23.6
ALTERNATE 24 STORM 2													
+													
XSECTION 1	RUNOFF	.05	8	2	.50	.0	2.51	24.00	1.12	---	15.40	5.48	111.3
STRUCTURE 10	RESVOR	.05	8	2	.50	.0	2.51	24.00	1.08	749.64	21.50	1.45	29.5
ALTERNATE 24 STORM 3													
+													
XSECTION 1	RUNOFF	.05	8	2	.50	.0	3.04	24.00	1.54	---	15.38	7.36	149.7
STRUCTURE 10	RESVOR	.05	8	2	.50	.0	3.04	24.00	1.50	749.79	21.50	1.81	36.7
ALTERNATE 24 STORM 4													
+													
XSECTION 1	RUNOFF	.05	8	2	.50	.0	3.80	24.00	2.18	---	15.36	10.14	206.0
STRUCTURE 10	RESVOR	.05	8	2	.50	.0	3.80	24.00	2.15	750.01	22.00	2.33	47.3
ALTERNATE 24 STORM 5													
+													
XSECTION 1	RUNOFF	.05	8	2	.50	.0	4.47	24.00	2.78	---	15.34	12.60	256.2
STRUCTURE 10	RESVOR	.05	8	2	.50	.0	4.47	24.00	2.74	750.17	23.99	2.58	52.4
ALTERNATE 24 STORM 99													
+													
XSECTION 1	RUNOFF	.05	8	2	.50	.0	7.58	24.00	5.67	---	15.31	24.06	489.1
STRUCTURE 10	RESVOR	.05	8	2	.50	.0	7.58	24.00	5.64	751.02	24.21	3.76	76.3

1

SUMMARY TABLE 3 - DISCHARGE (CFS) AT XSECTIONS AND STRUCTURES FOR ALL STORMS AND ALTERNATES

XSECTION/ STRUCTURE	DRAINAGE AREA	STORM NUMBERS.....

ID	(SQ MI)	1	2	3	4	5	99
0 STRUCTURE 10	.05						
+ ALTERNATE 24		1.16	1.45	1.81	2.33	2.58	3.76
'SECTION 1	.05						
ALTERNATE 24		3.83	5.48	7.36	10.14	12.60	24.06

1END OF 1 JOBS IN THIS RUN

1

```
*******************80-80 LIST OF INPUT DATA FOR TR-20 HYDROLOGY*******************

  JB TR-20 FRACRUN                                          NOPLOTS
 TITLE     NORTH INDUSTRIAL PARK, WEST CHICAGO, ILLINOIS ACCEPTED abuilt22.t20
 TITLE     CBBEL PROJECT NO: 99-48A, MDC 5/26/2010 KRAMER PHASE 2 DIVIDES
  5 RAINFL 6              .05                                        HUFF 1ST
  8          0.           .16          .33          .43          .52 QUARTILE
  8          .60          .66          .71          .75          .79 MEDIAN -
  8          .82          .84          .86          .88          .90 POINT
  8          .92          .94          .96          .97          .98 PAGE 14
  8          1.0          1.0          1.0          1.0          1.0 CIRC 173
  9 ENDTBL
  5 RAINFL 7              .05                                        HUFF 2ND
  8          0.           .03          .08          .12          .16 QUARTILE
  8          .22          .29          .39          .51          .62 MEDIAN -
  8          .70          .76          .81          .85          .88 POINT
  8          .91          .93          .95          .97          .98 PAGE 14
  8          1.0          1.0          1.0          1.0          1.0 CIRC 173
  9 ENDTBL
  5 RAINFL 8              .05                                        HUFF 3RD
  8          0.           .03          .06          .09          .12 QUARTILE
  8          .15          .19          .23          .27          .32 MEDIAN -
  8          .38          .45          .57          .70          .79 POINT
  8          .85          .89          .92          .95          .97 PAGE 14
  8          1.0          1.0          1.0          1.0          1.0 CIRC 173
  9 ENDTBL
  5 RAINFL 9              .05                                        HUFF 4TH
  8          0.           .02          .05          .08          .10 QUARTILE
  8          .13          .16          .19          .22          .25 MEDIAN -
  8          .28          .32          .35          .39          .45 POINT
  8          .51          .59          .72          .84          .92 PAGE 14
  8          1.0          1.0          1.0          1.0          1.0 CIRC 173
  9 ENDTBL
  3 STRUCT      10
  8                      747.410      0.000        0.000
  8                      748.000      1.21         0.50
  8                      749.000      1.91         2.45
  8                      750.000      2.42         5.21
  8                      751.000      2.83         8.61
  9 ENDTBL
  3 STRUCT      20
  8                      749.88       0.00         0.00
  8                      750.000      0.67         0.10
  8                      751.000      1.24         1.59
  8                      752.000      1.62         3.37
  8                      753.000      1.92         5.40
  9 ENDTBL
  6 RUNOFF 1   1       1 0.03094      88.          0.50        1 1 1 0 1 1



*********************80-80 LIST OF INPUT DATA (CONTINUED)*********************

  6 RESVOR 2    10 1    2 747.41                               1 1 1 0 1 1
  6 RUNOFF 1   2        1 0.01363      82.          0.50        1 1 1 0 1 1
  6 RESVOR 2    20 1    2 749.88                               1 1 1 0 1 1
    ENDATA
  7 INCREM 6              0.25
  7 COMPUT 7   1       20 0.00         7.58         24.         8 2  24  99 100YR
    ENDCMP 1
    ENDJOB 2
0*******************************END OF 80-80 LIST*******************************


 EXECUTIVE CONTROL OPERATION INCREM                                                RECORD ID
+                                MAIN TIME INCREMENT =   .25 HOURS


 EXECUTIVE CONTROL OPERATION COMPUT                                                RECORD ID 100YR
+                                FROM XSECTION   1
+                                                TO STRUCTURE 20
        STARTING TIME =   .00    RAIN DEPTH =  7.58    RAIN DURATION= 24.00    RAIN TABLE NO.= 8    ANT. MOIST. COND= 2
        ALTERNATE NO.=24         STORM NO.=99    MAIN TIME INCREMENT =   .25 HOURS


 OPERATION RUNOFF   CROSS SECTION   1

           PEAK TIME(HRS)              PEAK DISCHARGE(CFS)          PEAK ELEVATION(FEET)
              15.43                        15.53                        (RUNOFF)
              21.38                         3.69                        (RUNOFF)
              23.88                         3.79                        (RUNOFF)

 TIME(HRS)        FIRST HYDROGRAPH POINT =   .00 HOURS      TIME INCREMENT =   .25 HOURS      DRAINAGE AREA =    .03 SQ.MI.
    .00    DISCHG         .00        .00        .00        .00        .00        .00        .00        .04        .20        .40
   2.50    DISCHG         .61        .80        .97       1.13       1.28       1.42       1.54       1.66       1.76       1.86
   5.00    DISCHG        1.95       2.04       2.12       2.19       2.26       2.54       3.00       3.24       3.37       3.46
   7.50    DISCHG        3.55       3.62       3.69       3.75       3.81       3.86       3.91       3.96       4.01       4.14
  10.00    DISCHG        4.70       5.05       5.19       5.26       5.49       6.09       6.39       6.52       6.59       6.94
  12.50    DISCHG        7.53       7.78       7.88       8.01      10.15      12.69      13.58      13.90      14.10      14.72
  15.00    DISCHG       15.22      15.42      15.52      15.17      12.79      11.42      11.03      10.93      10.33       8.46
  17.50    DISCHG        7.63       7.39       7.33       6.67       5.49       5.06       4.93       4.88       4.43       3.91
  20.00    DISCHG        3.74       3.69       3.68       3.67       3.67       3.67       3.68       3.57       2.96       2.60
  22.50    DISCHG        2.50       2.47       2.65       3.29       3.57       3.65       3.68       2.71        .93        .27
  25.00    DISCHG         .08        .02        .00
```

--- HYDROGRAPH FOR XSECTION 1, ALTERNATE 24, STORM 99, ADDED TO OUTPUT HYDROGRAPH FILE ---

OPERATION RESVOR STRUCTURE 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
24.23	2.62	750.49

TIME(HRS)		FIRST HYDROGRAPH POINT = .00 HOURS				TIME INCREMENT = .25 HOURS			DRAINAGE AREA =		.03 SQ.MI.
.00	DISCHG	.00	.00	.00	.00	.00	.00	.00	.00	.01	.02
.00	ELEV	747.41	747.41	747.41	747.41	747.41	747.41	747.41	747.41	747.41	747.42
2.50	DISCHG	.04	.08	.12	.16	.21	.27	.33	.39	.45	.52
2.50	ELEV	747.43	747.45	747.47	747.49	747.51	747.54	747.57	747.60	747.63	747.66
5.00	DISCHG	.59	.66	.73	.80	.87	.94	1.03	1.13	1.21	1.23
5.00	ELEV	747.70	747.73	747.76	747.80	747.83	747.87	747.91	747.96	748.01	748.03
7.50	DISCHG	1.25	1.26	1.28	1.30	1.32	1.34	1.36	1.38	1.39	1.41
7.50	ELEV	748.05	748.08	748.10	748.13	748.15	748.18	748.21	748.24	748.26	748.29
10.00	DISCHG	1.44	1.46	1.49	1.52	1.54	1.58	1.61	1.65	1.68	1.72
10.00	ELEV	748.32	748.36	748.40	748.44	748.48	748.52	748.57	748.62	748.68	748.73

1

12.50	DISCHG	1.76	1.80	1.85	1.89	1.93	1.97	2.01	2.05	2.10	2.15
12.50	ELEV	748.79	748.85	748.91	748.98	749.04	749.11	749.19	749.28	749.37	749.46
15.00	DISCHG	2.19	2.24	2.29	2.34	2.39	2.42	2.45	2.47	2.49	2.50
15.00	ELEV	749.56	749.65	749.75	749.85	749.94	750.01	750.06	750.11	750.16	750.21
17.50	DISCHG	2.52	2.53	2.54	2.55	2.56	2.57	2.58	2.58	2.59	2.59
17.50	ELEV	750.24	750.27	750.30	750.33	750.35	750.36	750.38	750.39	750.41	750.41
20.00	DISCHG	2.59	2.60	2.60	2.60	2.60	2.61	2.61	2.61	2.61	2.61
20.00	ELEV	750.42	750.43	750.44	750.44	750.45	750.46	750.46	750.47	750.47	750.47
22.50	DISCHG	2.61	2.61	2.61	2.61	2.62	2.62	2.62	2.62	2.62	2.62
22.50	ELEV	750.47	750.47	750.47	750.47	750.48	750.48	750.49	750.49	750.49	750.48
25.00	DISCHG	2.61	2.60	2.60	2.59	2.58	2.58	2.57	2.56	2.56	2.55
25.00	ELEV	750.46	750.45	750.43	750.41	750.40	750.38	750.37	750.35	750.34	750.32
27.50	DISCHG	2.55	2.54	2.53	2.53	2.52	2.51	2.51	2.50	2.50	2.49
27.50	ELEV	750.31	750.29	750.27	750.26	750.24	750.23	750.21	750.20	750.18	750.17
30.00	DISCHG	2.48	2.48	2.47	2.46	2.46	2.45	2.45	2.44	2.43	2.43
30.00	ELEV	750.15	750.14	750.12	750.11	750.09	750.08	750.06	750.05	750.03	750.02
32.50	DISCHG	2.42	2.41	2.40	2.39	2.39	2.38	2.37	2.36	2.35	2.34
32.50	ELEV	750.00	749.99	749.97	749.95	749.93	749.92	749.90	749.88	749.86	749.84
35.00	DISCHG	2.33	2.32	2.31	2.31	2.30	2.29	2.28	2.27	2.26	2.25
35.00	ELEV	749.83	749.81	749.79	749.77	749.76	749.74	749.72	749.71	749.69	749.67
37.50	DISCHG	2.24	2.24	2.23	2.22	2.21	2.20	2.19	2.19	2.18	2.17
37.50	ELEV	749.66	749.64	749.62	749.61	749.59	749.57	749.56	749.54	749.52	749.51
40.00	DISCHG	2.16	2.15	2.14	2.14	2.13	2.12	2.11	2.10	2.10	2.09
40.00	ELEV	749.49	749.47	749.46	749.44	749.43	749.41	749.39	749.38	749.36	749.35
42.50	DISCHG	2.08	2.07	2.06	2.06	2.05	2.04	2.03	2.02	2.02	2.01
42.50	ELEV	749.33	749.32	749.30	749.29	749.27	749.26	749.24	749.22	749.21	749.19
45.00	DISCHG	2.00	1.99	1.99	1.98	1.97	1.96	1.96	1.95	1.94	1.93
45.00	ELEV	749.18	749.16	749.15	749.13	749.12	749.11	749.09	749.08	749.06	749.05
47.50	DISCHG	1.93	1.92	1.91	1.90	1.89	1.87	1.86	1.84	1.83	1.82
47.50	ELEV	749.03	749.02	749.00	748.99	748.97	748.95	748.93	748.91	748.89	748.87
50.00	DISCHG	1.80	1.79	1.78	1.76	1.75	1.74	1.72	1.71	1.70	1.69
50.00	ELEV	748.85	748.83	748.81	748.79	748.77	748.75	748.74	748.72	748.70	748.68
52.50	DISCHG	1.67	1.66	1.65	1.64	1.63	1.61	1.60	1.59	1.58	1.57
52.50	ELEV	748.66	748.65	748.63	748.61	748.59	748.58	748.56	748.54	748.53	748.51
55.00	DISCHG	1.55	1.54	1.53	1.52	1.51	1.50	1.49	1.48	1.47	1.45
55.00	ELEV	748.49	748.48	748.46	748.44	748.43	748.41	748.40	748.38	748.36	748.35
57.50	DISCHG	1.44	1.43	1.42	1.41	1.40	1.39	1.38	1.37	1.36	1.35
57.50	ELEV	748.33	748.32	748.30	748.29	748.27	748.26	748.24	748.23	748.22	748.20
60.00	DISCHG	1.34	1.33	1.32	1.31	1.30	1.29	1.28	1.27	1.26	1.25
60.00	ELEV	748.19	748.17	748.16	748.14	748.13	748.12	748.10	748.09	748.08	748.06
62.50	DISCHG	1.24	1.24	1.23	1.22	1.20	1.14	1.08	1.03	.98	.93
62.50	ELEV	748.05	748.04	748.02	748.01	747.99	747.97	747.94	747.91	747.89	747.87
65.00	DISCHG	.89	.84	.80	.76	.73	.69	.66	.63	.60	.57
65.00	ELEV	747.84	747.82	747.80	747.78	747.76	747.75	747.73	747.72	747.70	747.69
67.50	DISCHG	.54	.51	.49	.46	.44	.42	.40	.38	.36	.34
67.50	ELEV	747.67	747.66	747.65	747.64	747.62	747.61	747.60	747.60	747.59	747.58
70.00	DISCHG	.33	.31	.30	.28	.27	.25	.24	.23	.22	.21
70.00	ELEV	747.57	747.56	747.55	747.55	747.54	747.53	747.53	747.52	747.52	747.51
72.50	DISCHG	.20	.19	.18	.17	.16	.15	.15	.14	.13	.13

1

72.50	ELEV	747.51	747.50	747.50	747.49	747.49	747.49	747.48	747.48	747.47	747.47

--- HYDROGRAPH FOR STRUCTURE 10, ALTERNATE 24, STORM 99, ADDED TO OUTPUT HYDROGRAPH FILE ---

OPERATION RUNOFF CROSS SECTION 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
15.46	6.43	(RUNOFF)
23.88	1.62	(RUNOFF)

TIME(HRS)		FIRST HYDROGRAPH POINT = .00 HOURS				TIME INCREMENT = .25 HOURS			DRAINAGE AREA =		.01 SQ.MI.
2.50	DISCHG	.00	.03	.08	.14	.20	.26	.32	.37	.41	.46
5.00	DISCHG	.50	.54	.58	.62	.65	.75	.91	1.00	1.06	1.11

7.50	DISCHG	1.16	1.20	1.24	1.27	1.31	1.34	1.37	1.40	1.43	1.49
10.00	DISCHG	1.70	1.84	1.91	1.95	2.05	2.29	2.42	2.49	2.53	2.68
12.50	DISCHG	2.92	3.04	3.10	3.16	4.03	5.07	5.46	5.62	5.73	6.02
15.00	DISCHG	6.25	6.36	6.42	6.30	5.33	4.77	4.62	4.59	4.34	3.56
17.50	DISCHG	3.21	3.12	3.09	2.82	2.32	2.14	2.09	2.07	1.88	1.66
20.00	DISCHG	1.59	1.57	1.56	1.56	1.56	1.56	1.56	1.52	1.26	1.11
22.50	DISCHG	1.06	1.05	1.13	1.40	1.52	1.56	1.57	1.16	.40	.11
25.00	DISCHG	.03	.01	.00							

--- HYDROGRAPH FOR XSECTION 2, ALTERNATE 24, STORM 99, ADDED TO OUTPUT HYDROGRAPH FILE ---

OPERATION RESVOR STRUCTURE 20

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)	
24.00	1.39	751.40	
21.75	1.39	751.41	* FIRST POINT OF FLAT PEAK

TIME(HRS) FIRST HYDROGRAPH POINT = .00 HOURS TIME INCREMENT = .25 HOURS DRAINAGE AREA = .01 SQ.MI.

2.50	DISCHG	.00	.00	.01	.02	.04	.07	.10	.13	.16	.20
2.50	ELEV	749.88	749.88	749.88	749.88	749.89	749.89	749.90	749.90	749.91	749.92
5.00	DISCHG	.23	.27	.31	.35	.38	.43	.48	.54	.60	.67
5.00	ELEV	749.92	749.93	749.94	749.94	749.95	749.96	749.97	749.98	749.99	750.00
7.50	DISCHG	.67	.68	.68	.69	.69	.70	.70	.71	.71	.72
7.50	ELEV	750.01	750.01	750.02	750.03	750.04	750.05	750.05	750.06	750.07	750.08
10.00	DISCHG	.72	.73	.74	.75	.76	.77	.78	.80	.81	.83
10.00	ELEV	750.10	750.11	750.13	750.14	750.16	750.18	750.20	750.22	750.25	750.27
12.50	DISCHG	.84	.86	.88	.89	.91	.94	.98	1.01	1.05	1.09
12.50	ELEV	750.30	750.33	750.36	750.39	750.43	750.48	750.54	750.60	750.67	750.73
15.00	DISCHG	1.13	1.17	1.21	1.25	1.27	1.28	1.30	1.31	1.33	1.34
15.00	ELEV	750.80	750.87	750.95	751.01	751.07	751.11	751.15	751.19	751.23	751.26
17.50	DISCHG	1.35	1.35	1.36	1.37	1.37	1.38	1.38	1.38	1.39	1.39
17.50	ELEV	751.28	751.30	751.32	751.34	751.35	751.36	751.37	751.38	751.39	751.39
20.00	DISCHG	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39
20.00	ELEV	751.39	751.40	751.40	751.40	751.40	751.40	751.41	751.41	751.41	751.41

1

TR20 XEQ 05-27-10 09:32 NORTH INDUSTRIAL PARK, WEST CHICAGO, ILLINOIS ACCEPTED abuilt22.t20 JOB 1 PASS 1
REV PC 09/83(.2) CBBEL PROJECT NO: 99-48A, MDC 5/26/2010 KRAMER PHASE 2 DIVIDES PAGE 3

22.50	DISCHG	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.38
22.50	ELEV	751.40	751.40	751.39	751.39	751.39	751.40	751.40	751.40	751.39	751.38
25.00	DISCHG	1.38	1.37	1.37	1.36	1.35	1.35	1.34	1.34	1.33	1.32
25.00	ELEV	751.36	751.35	751.33	751.31	751.30	751.28	751.27	751.25	751.24	751.22
27.50	DISCHG	1.32	1.31	1.31	1.30	1.29	1.29	1.28	1.28	1.27	1.27
27.50	ELEV	751.21	751.19	751.17	751.16	751.14	751.13	751.11	751.10	751.09	751.07
30.00	DISCHG	1.26	1.26	1.25	1.24	1.24	1.23	1.22	1.21	1.20	1.19
30.00	ELEV	751.06	751.04	751.03	751.01	751.00	750.98	750.96	750.95	750.93	750.91
32.50	DISCHG	1.18	1.17	1.16	1.15	1.14	1.14	1.13	1.12	1.11	1.10
32.50	ELEV	750.90	750.88	750.86	750.85	750.83	750.82	750.80	750.79	750.77	750.75
35.00	DISCHG	1.09	1.08	1.07	1.07	1.06	1.05	1.04	1.03	1.02	1.02
35.00	ELEV	750.74	750.72	750.71	750.69	750.68	750.66	750.65	750.64	750.62	750.61
37.50	DISCHG	1.01	1.00	.99	.98	.98	.97	.96	.95	.95	.94
37.50	ELEV	750.59	750.58	750.57	750.55	750.54	750.53	750.51	750.50	750.49	750.47
40.00	DISCHG	.93	.92	.92	.91	.90	.90	.89	.88	.87	.87
40.00	ELEV	750.46	750.45	750.43	750.42	750.41	750.40	750.38	750.37	750.36	750.35
42.50	DISCHG	.86	.85	.85	.84	.83	.83	.82	.81	.81	.80
42.50	ELEV	750.33	750.32	750.31	750.30	750.29	750.28	750.27	750.25	750.24	750.23
45.00	DISCHG	.80	.79	.78	.78	.77	.76	.76	.75	.75	.74
45.00	ELEV	750.22	750.21	750.20	750.19	750.18	750.17	750.16	750.15	750.13	750.12
47.50	DISCHG	.74	.73	.72	.72	.71	.71	.70	.70	.69	.68
47.50	ELEV	750.11	750.10	750.09	750.08	750.07	750.06	750.05	750.04	750.04	750.03
50.00	DISCHG	.68	.67	.65	.56	.49	.43	.37	.32	.28	.24
50.00	ELEV	750.02	750.01	750.00	749.98	749.97	749.96	749.95	749.94	749.93	749.92
52.50	DISCHG	.21	.19	.16	.14	.12	.11	.09	.08	.07	.06
52.50	ELEV	749.92	749.91	749.91	749.91	749.90	749.90	749.90	749.89	749.89	749.89
55.00	DISCHG	.05	.05	.04	.04	.03	.03	.02	.02	.02	.02
55.00	ELEV	749.89	749.89	749.89	749.89	749.89	749.88	749.88	749.88	749.88	749.88
57.50	DISCHG	.01	.01	.01	.01	.01					
57.50	ELEV	749.88	749.88	749.88	749.88	749.88					

--- HYDROGRAPH FOR STRUCTURE 20, ALTERNATE 24, STORM 99, ADDED TO OUTPUT HYDROGRAPH FILE ---

EXECUTIVE CONTROL OPERATION ENDCMP RECORD ID

COMPUTATIONS COMPLETED FOR PASS 1

EXECUTIVE CONTROL OPERATION ENDJOB RECORD ID

1

TR20 XEQ 05-27-10 09:32 NORTH INDUSTRIAL PARK, WEST CHICAGO, ILLINOIS ACCEPTED abuilt22.t20 JOB 1 SUMMARY
REV PC 09/83(.2) CBBEL PROJECT NO: 99-48A, MDC 5/26/2010 KRAMER PHASE 2 DIVIDES PAGE 4

SUMMARY TABLE 1 - SELECTED RESULTS OF STANDARD AND EXECUTIVE CONTROL INSTRUCTIONS IN THE ORDER PERFORMED
(A STAR(*) AFTER THE PEAK DISCHARGE TIME AND RATE (CFS) VALUES INDICATES A FLAT TOP HYDROGRAPH
A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

SECTION/ STANDARD RAIN ANTEC MAIN PRECIPITATION PEAK DISCHARGE

STRUCTURE ID	CONTROL OPERATION	DRAINAGE AREA (SQ MI)	TABLE #	MOIST COND	TIME INCREM (HR)	BEGIN (HR)	AMOUNT (IN)	DURATION (HR)	RUNOFF AMOUNT (IN)	ELEVATION (FT)	TIME (HR)	RATE (CFS)	RATE (CSM)
ALTERNATE 24 STORM 99													
XSECTION 1	RUNOFF	.03	8	2	.25	.0	7.58	24.00	6.16	---	15.43	15.53	502.1
STRUCTURE 10	RESVOR	.03	8	2	.25	.0	7.58	24.00	6.12	750.49	24.23	2.62	84.8
XSECTION 2	RUNOFF	.01	8	2	.25	.0	7.58	24.00	5.46	---	15.46	6.43	471.5
STRUCTURE 20	RESVOR	.01	8	2	.25	.0	7.58	24.00	5.46	751.41	21.75	1.39	102.3

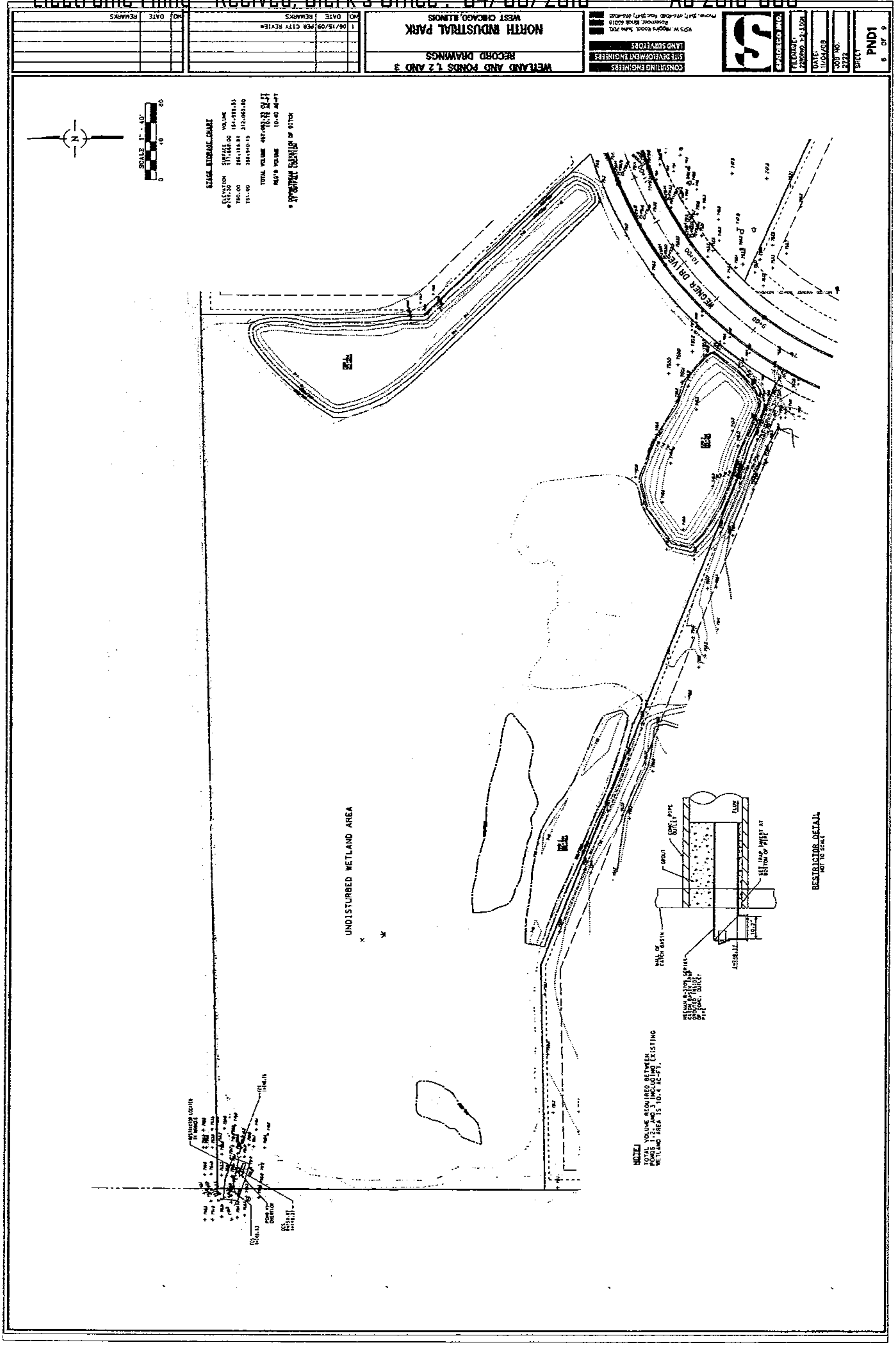
1

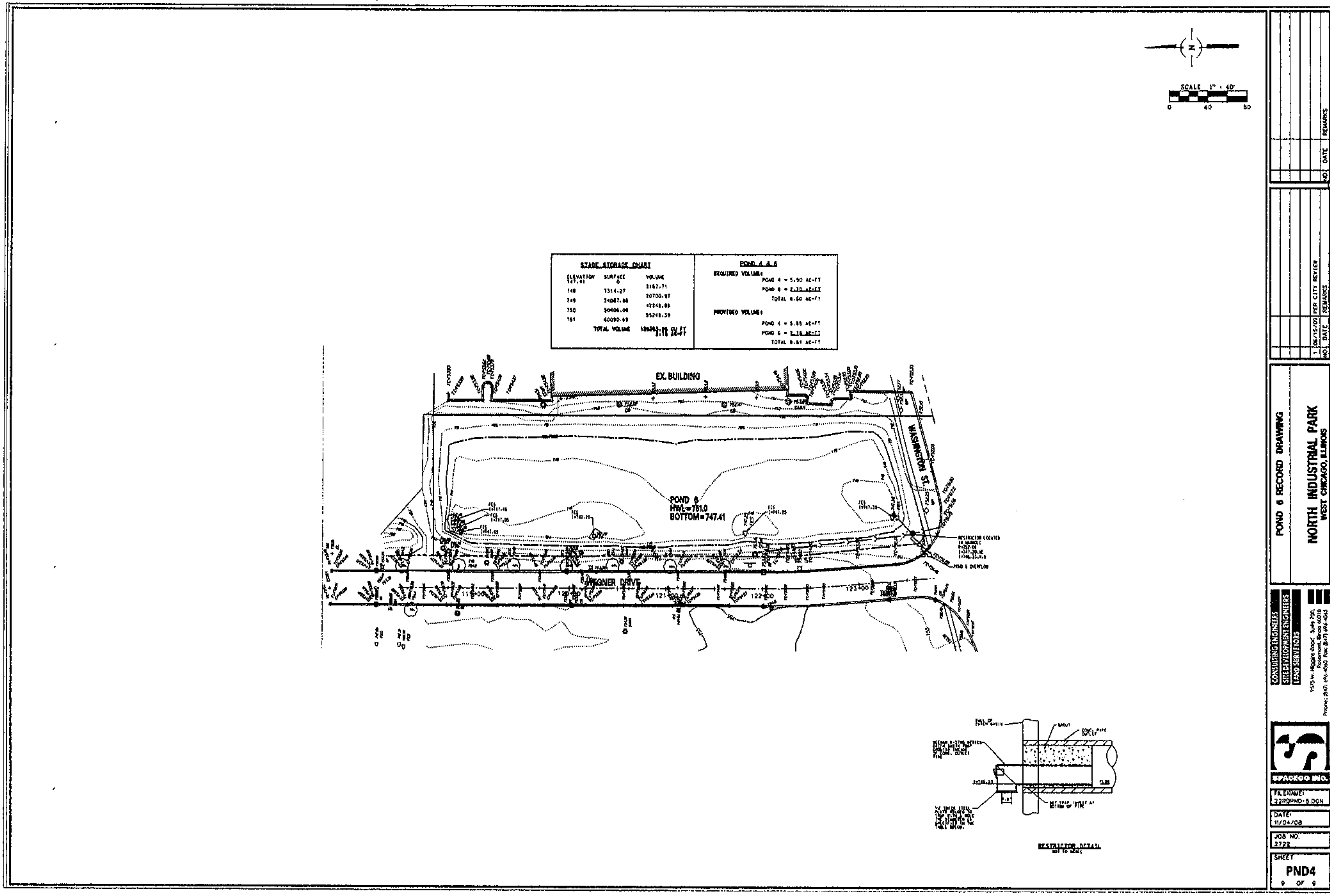
TR20 XEQ 05-27-10 09:32 NORTH INDUSTRIAL PARK, WEST CHICAGO, ILLINOIS ACCEPTED abuilt22.t20 JOB 1 SUMMARY
REV PC 09/83(.2) CBBEL PROJECT NO: 99-48A, MDC 5/26/2010 KRAMER PHASE 2 DIVIDES PAGE 5

SUMMARY TABLE 3 - DISCHARGE (CFS) AT XSECTIONS AND STRUCTURES FOR ALL STORMS AND ALTERNATES

XSECTION/ STRUCTURE ID	DRAINAGE AREA (SQ MI)	STORM NUMBERS..... 99
0 STRUCTURE 20	.01	
+ ALTERNATE 24		1.39
0 STRUCTURE 10	.03	
+ ALTERNATE 24		2.62
0 XSECTION 1	.03	
+ ALTERNATE 24		15.53
0 XSECTION 2	.01	
+ ALTERNATE 24		6.43

1END OF 1 JOBS IN THIS RUN





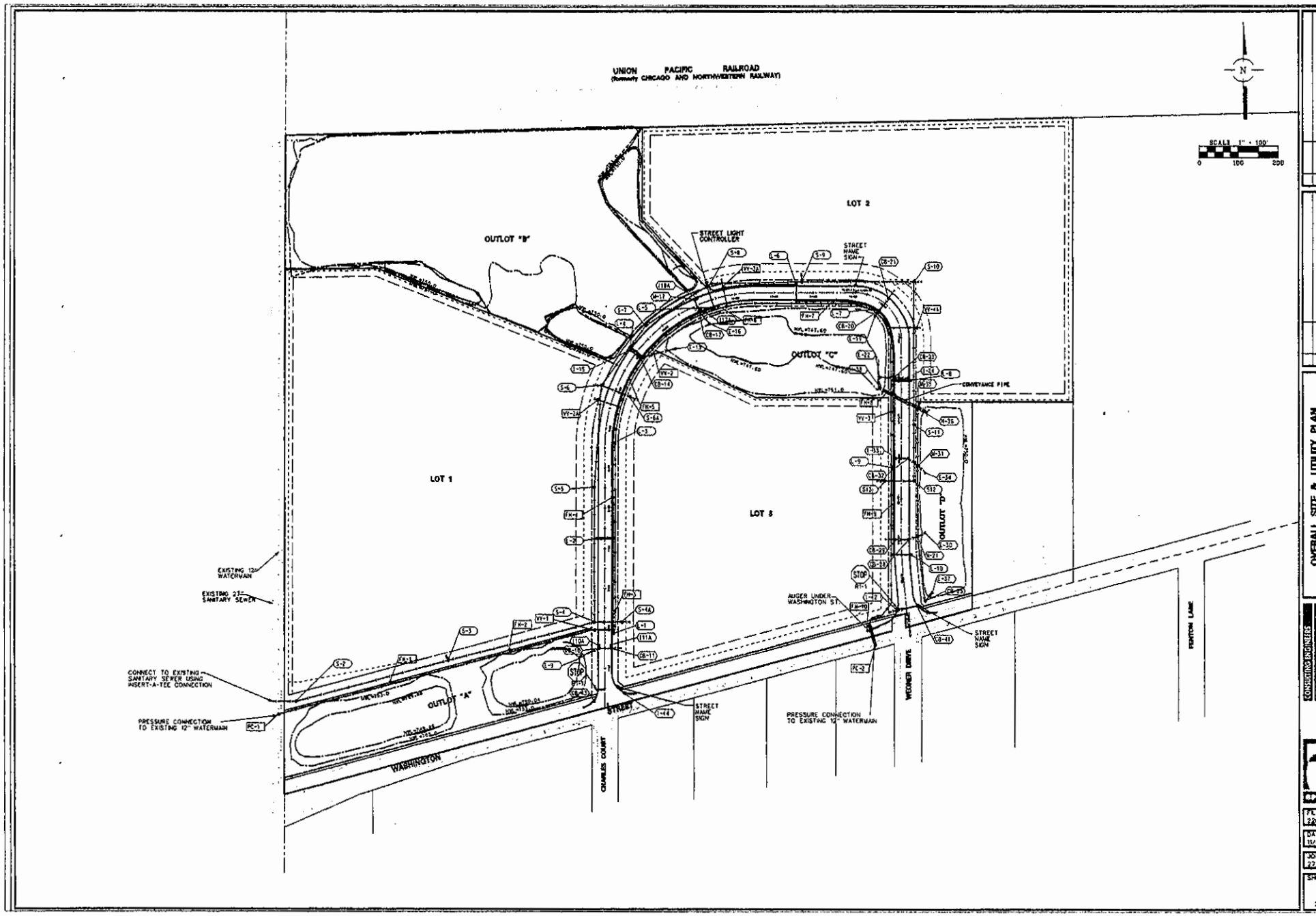
STAGE STORAGE CHART

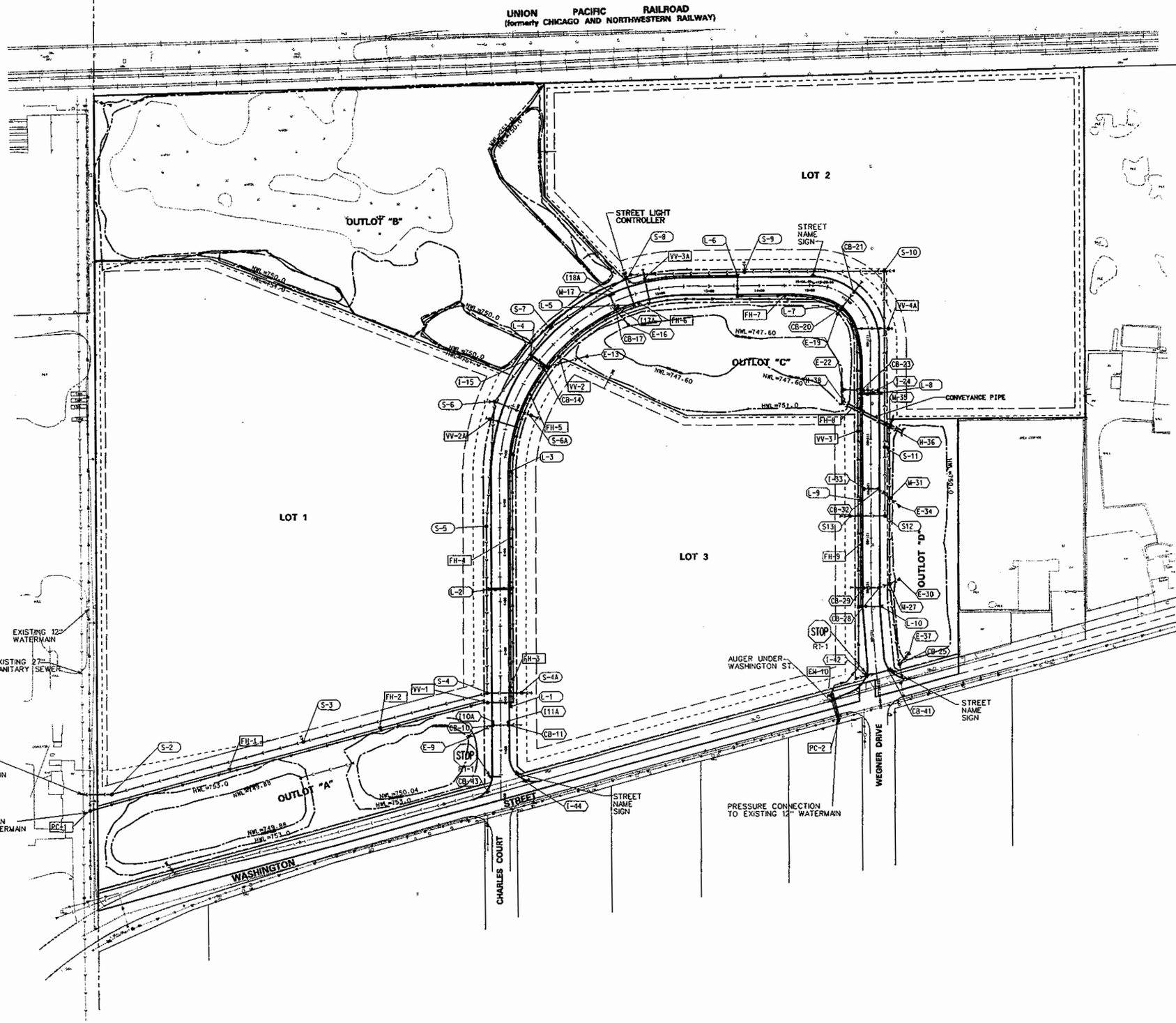
ELEVATION	SURFACE	VOLUME
747.41	0	
		2162.71
748	7314.27	
		20700.97
749	34087.86	
		42248.86
750	50406.08	
		55243.39
751	60090.69	
	TOTAL VOLUME	120355.[illegible] CU FT / 2.76 AC-FT

POND 4 & 6

REQUIRED VOLUME:
POND 4 = 5.90 AC-FT
POND 6 = 2.70 AC-FT
TOTAL 8.60 AC-FT

PROVIDED VOLUME:
POND 4 = 5.85 AC-FT
POND 6 = 2.76 AC-FT
TOTAL 8.61 AC-FT





NO.	DATE	REMARKS

NO.	DATE	REMARKS

OVERALL SITE & UTILITY PLAN

NORTH INDUSTRIAL PARK
WEST CHICAGO, ILLINOIS

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS
9575 W. Higgins Road, Suite 700,
Rosemont, Illinois 60018
Phone: (847) 696-4560 Fax: (847) 696-4065

SPACECO INC.

FILENAME: 22RDOUT.DGN

DATE: 11/04/08

JOB NO. 2722

SHEET OV1
2 OF 9

N

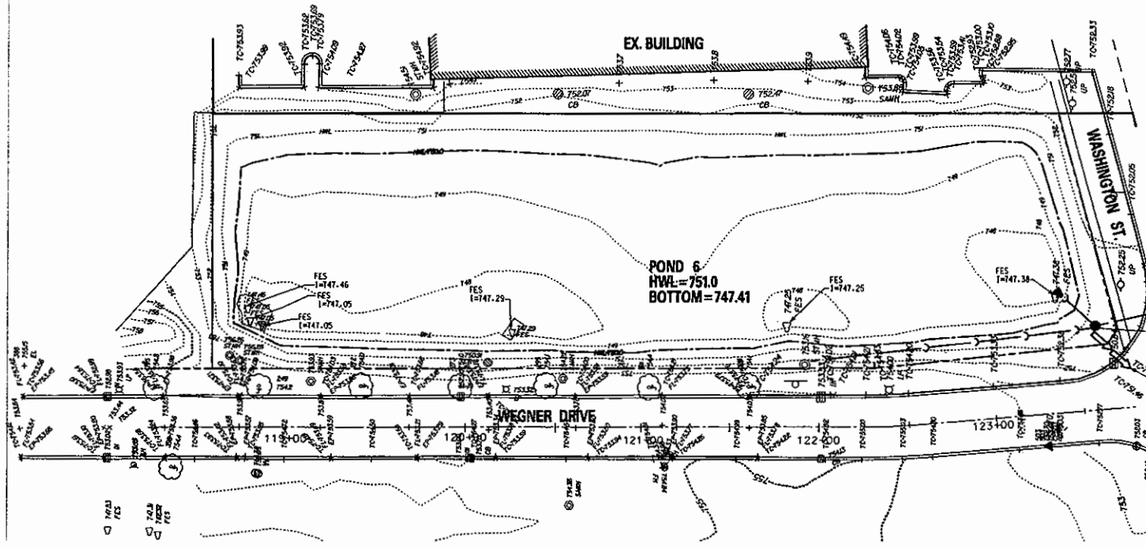
SCALE 1" = 40'
0 40 80

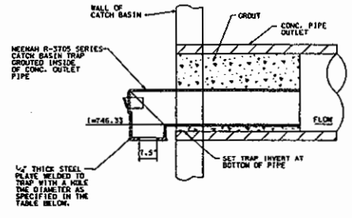
STAGE STORAGE CHART		
ELEVATION 747.41	SURFACE D	VOLUME
		2157.71
748	7314.27	20700.97
749	34087.66	42246.88
750	50406.09	55248.39
751	60090.69	
TOTAL VOLUME		120353.95 CU FT 2.76 AC-FT

POND 4 & 6

REQUIRED VOLUME:
POND 4 = 5.90 AC-FT
POND 6 = 2.70 AC-FT
TOTAL 8.60 AC-FT

PROVIDED VOLUME:
POND 4 = 5.85 AC-FT
POND 6 = 2.76 AC-FT
TOTAL 8.61 AC-FT





RESTRICTOR DETAIL
NOT TO SCALE

NO.	DATE	REMARKS

NO.	DATE	REMARKS
1	06/15/09	PER CITY REVIEW

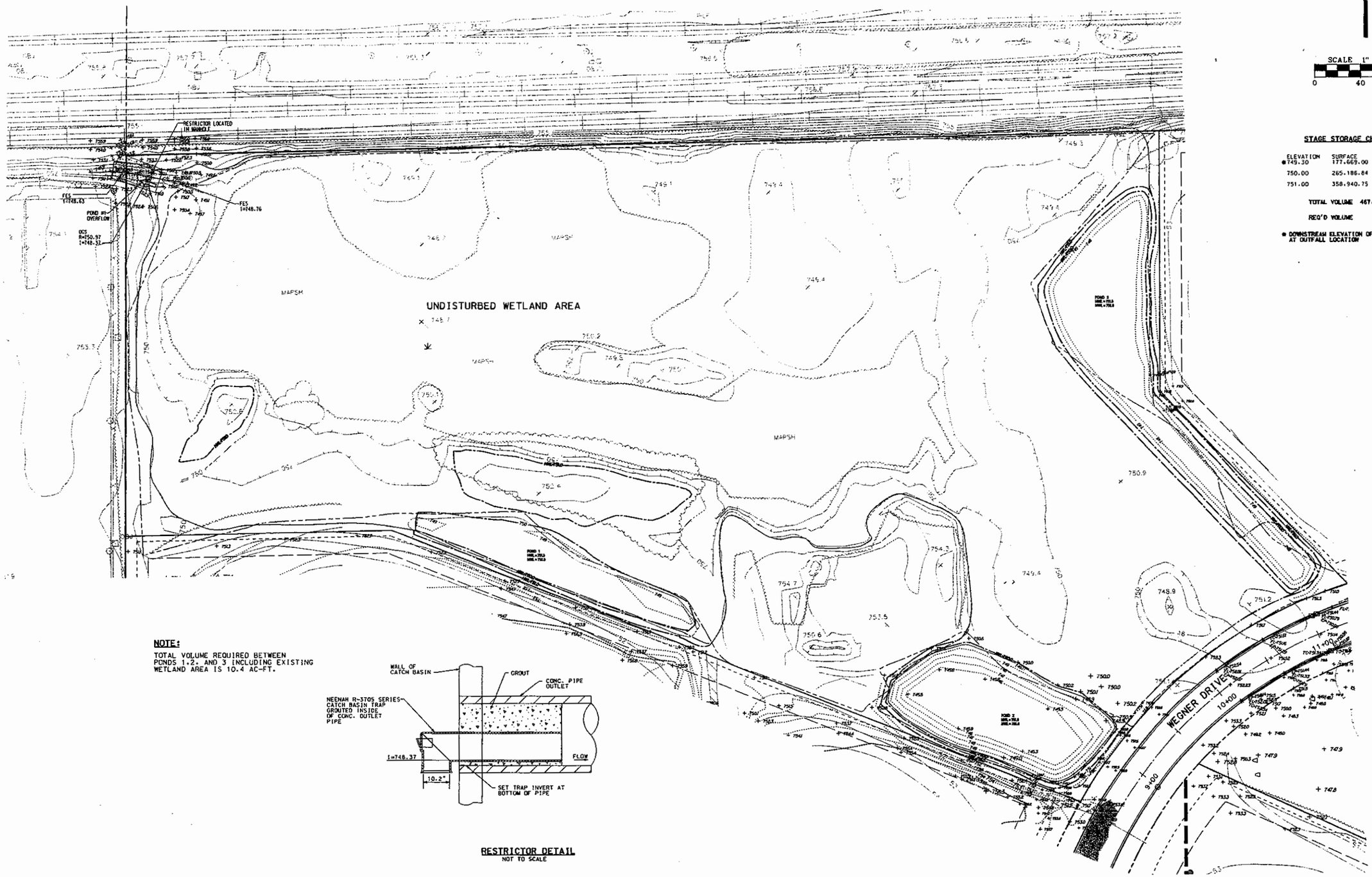
POND 6 RECORD DRAWING

NORTH INDUSTRIAL PARK
WEST CHICAGO, ILLINOIS

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS
9575 W. Higgins Road, Suite 700,
Rosemont, Illinois 60018
Phone: (847) 696-4090 Fax: (847) 696-4065

SPACECO INC.

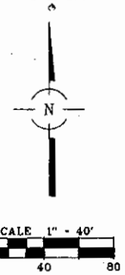
FILENAME: 22RDPND-6.DGN
DATE: 11/04/08
JOB NO. 2722
SHEET PND4
9 OF 9



NOTE:

TOTAL VOLUME REQUIRED BETWEEN PONDS 1,2, AND 3 INCLUDING EXISTING WETLAND AREA IS 10.4 AC-FT.

RESTRICTOR DETAIL
NOT TO SCALE



SCALE 1" = 40'
0 40 80

STAGE STORAGE CHART

ELEVATION	SURFACE	VOLUME
*749.30	177,669.00	154,999.53
750.00	265,186.84	312,063.80
751.00	358,940.75	

TOTAL VOLUME 467,063.33 CU FT 10.72 AC-FT
REQ'D VOLUME 10.40 AC-FT

* DOWNSTREAM ELEVATION OF DITCH AT OUTFALL LOCATION

NO.	DATE	REMARKS
1	06/15/09	PER CITY REVIEW

NO.	DATE	REMARKS

WETLAND AND PONDS 1,2 AND 3
RECORD DRAWINGS

NORTH INDUSTRIAL PARK
WEST CHICAGO, ILLINOIS

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS
9575 W. Higgins Road, Suite 700
Rosemont, Illinois 60018
Phone: (847) 696-4060 Fax: (847) 696-4065

SPACECO INC.

FILENAME: 22ROPND 1-2-3.DGN
DATE: 11/04/08
JOB NO. 2722
SHEET PND1
6 OF 9

9

ATTACHMENT 9: SITE SAFETY CONTINGENCY PLAN

CONTINGENCY PLAN (831.07)

This purpose of this contingency plan is to summarize and compile procedures to be employed in the event of a fire or unplanned release of non-hazardous material that could be a threat to human health and the environment.

The plan also includes steps taken during a medical emergency and responses to miscellaneous circumstances that create nuisance conditions at the site requiring a remedy.

Health and Safety

In order to maintain the health and safety of employees, the following measures are planned:

a. Provide areas where employees can wash their hands and use hand sanitizers during the work day.
b. Make available as needed the use of safety equipment such as gloves, hearing protection, safety glasses, masks, hard hats and safety vests.
c. Implement the in the Mulch Yard as outlined in **Appendix A** to the Contingency Plan

Medical Emergencies:

a. Medical first aid equipment will be kept at the equipment maintenance building.
b. In the event of an injury the injured person shall not be moved unless there is an immediate danger.
c. Call for emergency medical help if necessary.
d. In case of chemical or dust exposure, rinse the effected skin or eyes with running water for at least 10 minutes.
e. Keep the victim calm until emergency medical help arrives.

Miscellaneous Conditions:

a. This contingency plan has been established to addresses the contingencies set forth in Section 830.202(c):

    1. Equipment Breakdowns:

    Kramer Tree Specialists, Inc. maintains a fully operational tree care and mulch production business on property where the leaf mulch production facility is planned. Some equipment used for the leaf mulch production facility is also used in the tree care business and associated wood mulch production. Qualified repair

technicians are available from the manufacturer to deal with breakdown of equipment. Records are maintained on each piece of equipment to ensure it stays in service. In the event of equipment failure that impairs the ability of the site to function, additional equipment will be supplied through a rental.

2. Odors

When a complaint is logged, the cause of the odor will be determined and remedied by implementing procedures outlined in Section 4: Operating Standards (g). Odor is typically the result of anaerobic conditions, which rarely occurs during storage and excavation of the processed leaf piles. Use thermometers and correlate data with odor events to identify odor producing conditions before they cause a problem. Correcting the situation involves several options. These include; maintaining pile density on the outer slope surface, excavating the pile to increase air flow; and placing a blanket of high-carbon mulch material over the pile to absorb odors. Avoid excavating piles during still, humid weather conditions and have odor neutralizing agents available that can be sprayed on the piles. Also, maintain proper drainage on the mulch production pad by keeping drain inlets clear and remove loose organic material between piles.

3. Unacceptable Waste Delivered to the Facility

Unacceptable waste will be rejected, prior to unloading, if visibly noticeable, by the Site Yard Manager. If municipal solid waste or other non-mulching waste is dumped at the facility, it will be promptly removed and placed in a refuse container. The closest disposal facility is the DuKane Transfer Station on Powis Road operated by the Groot Industries

.

Often, small non-mulching materials are inadvertently accepted as "incidental" to the load (rocks, plastic bags, etc.). These materials will be removed during the unloading and stacking of leaves, and disposed of properly.

4. Groundwater Contamination

A continuous reinforced concrete mulch storage pad surface will be maintained at all times between it and the water table. Groundwater contamination from the leaf mulch production facility located on this pad is highly unlikely. Maintaining the concrete pad to allow drainage between the piles is the best method to prevent overflow on to bare ground and create the possibility of infiltration to the ground water table.

5. Accidental Release of Special Waste

Should stored materials become contaminated by antifreeze, diesel fuel or hydraulic oil from trucks and heavy equipment, the suspect material will undergo Special Waste Testing and Approval protocols as necessary by an IEPA approved sanitary landfill capable of accepting Special Waste. Once the waste is approved, it will be transported by a licensed special waste hauler and disposed of properly. The nearest facility is the DeKalb Landfill.

For small spills of 10 gallons or less, facility staff will clean the spill using absorbent materials that will be disposed of properly. During the clean up, fire extinguishers will be close by to prevent material ignition. For larger spills the Site Yard Manager will assess the threat to human health and the environment, and call for assistance from outside local contractors to contain the release.

Based on the characteristics of the released material, the Site Yard Manager will designate proper personal protective equipment to be worn. This includes gloves, hard hat and eye protection. The equipment will be cleaned after the incident.

6. Fires, Dust, Noise, Vectors, Power Outages and Unusual Traffic Conditions

Fires

Fires can occur within piles when temperatures rise above the combustion temperature of the materials. This is unlikely in properly maintained piles where temperatures average is less than 60° C. Maintain all leaf storage piles to the proper maximum height to prevent overheating. Maintain adequate pile spacing for equipment mobilization

and access to burning material. Some procedures to be implemented in case of a fire or other emergency include:

A. Depending on the magnitude of the fire incident and the amount and characteristics of the material, the following procedures are recommended:

1. The easiest means of controlling fires is to keep them from occurring. This includes constant evaluation of temperature measurements to identify abnormal high temperatures; making careful observations to identify excess steam, smoke and isolating smoldering conditions. Kramer Tree Specialists has a SOP for fire prevention and these are included in **Appendix B.**

   In the event of a small contained fire that can be controlled by facility personnel, it will be extinguished using on-site fire extinguishers (located at the maintenance building and on each facility vehicle), with clean dirt to smother the fire, or with water following the Standard Operating Procedures for fire suppression located in **Appendix C**. Other methods include isolating and spreading the burning material to create a fire break in the affected pile..

2. If site personnel are unable to extinguish the fire, they will notify all personnel to leave the area and contact the West Chicago Fire Department. The Department phone number will be posted at the maintenance building.

3. The route of egress from the site is from the yard access road to Charles Court.

Water is available from a hydrant located at the concrete pad in the mulch yard and located on the property controlled by the operator.

Dust

Dust problems will be remedied by watering access roads as needed. When grinding and blending, adequate moisture to the feedstock will be maintained to prevent excess dust.

Noise

Noise is controlled through the use of mufflers on all vehicles. Maintenance of vehicles insures that excessive noise is kept to a minimum. The location of the site is in a predominately industrial area, where plant equipment is operated, such that the noise created by the mulch yard machinery should not be bothersome.

Power Outage

In the event of a power outage, the Site Yard Manager will keep the hand tickets until he is able to register the receipt of loads. The receiving hours for the site are such that daylight will be adequate for this task.

Workers on the site receive and send communications by cell phone and/or two way radios. A power outage should not affect communications.

Vectors

Rodent problems will be remedied by contracting with an extermination contractor who will visit the site and provide traps for rodents as needed. Insect populations will be controlled using good housekeeping measures and selective use of pesticides. Mosquitoes will be kept to a minimum by preventing standing water to accumulate.

Traffic

Traffic on Charles Court is very light near the facility, and if adverse weather conditions or accidents occur, the facility will close temporarily until the episode is over. Alternatively, in the case of adverse weather,

steps will be taken to slow traffic into and out of the facility to avoid accidents. Such steps might include the removal of snow, directing traffic manually in the appropriate safety clothing, and temporary repairs to roads. In the case of an accident, traffic will be re-routed or slowed to allow emergency personnel to gain access to the situation.

Traffic in the mulch yard is controlled using an SOP for driving within the yard. This SOP is included in **Appendix D** to the Operating Plan.

b. The facility contingency plan will be available on-site and implemented as necessary. In addition, Kramer Tree Specialists holds an annual mulch production orientation meeting during the Spring of each year to review operating procedures and safety in the mulch yard. This SOP is included in **Appendix E** to the Operating Plan

Emergency Contacts:

Site Yard Manager (Primary Emergency Coordinator):

Tim Peters, 630-440-3912 cell; 640-231-1512 home

Operations Director (Secondary Emergency Coordinator):

Rick Thomas, 630-229-9142 cell; 630-466-1483 home

West Chicago Fire Protection District: 506 Lyman Street, West Chicago, Illinois (630) 520-0124

West Chicago Police Department: Emergencies call 911 or for non-emergencies call (630) 293-222

Central DuPage Hospital: 25 North Winfield Road, Winfield, Illinois (630)933-2600

Illinois State Emergency Services and Disaster Agency: (217) 782-2860

Illinois EPA Response Center: (217)782-3637

National Emergency Response Center: (800) 424-8802

APPENDIX A - Proximity Devise Protection/ Warning System Standard Operating Procedure

KRAMER TREE SPECIALISTS
STANDARD OPERATING PROCEDURES

Department: All Departments
Procedure: Proximity Devise Protection / Warning System
Date: July 15, 2010

S.O.P. Objectives:

To develop, update, and implement standard procedures for specific department tasks and/or functions, in order to assure consistent and accurate compliance, as well as accountability awareness for these tasks and/or functions.

Proximity Devise Protection / Warning Procedure

Proximity Devise Definition: A devise that is attached to a persons Hard Hat that provides audio and visual warnings that are initiated from sending units mounted in yard tractors. The audio warning signals are a series of short beeps and/or a continuous beep depending on the distance you are from the tractors. The visual warnings are seen in conjunction with the audio warnings and consist of a red flashing light that appears during the duration of the warnings. Each proximity devise operates on battery power and must be charged for at least eight hours approximately every three (3) days. The proximity devises are required on all personnel working in the yard and/or visitors visiting the yard. The Mulch Yard proximity devises will be mounted on hard hats for user-friendly application.

Proximity Devise Purpose: To avoid bodily injury or harm to individuals working in the yard and to immediately identify and notify yard tractor drivers and yard ground workers that they are in proximity of each other and that the potential exists for physical injury.

Notification: Upon notification or after being alerted by the proximity devise the ground personnel should develop a serious sense of urgency and begin to visually seek out the nearby tractor. Upon notification or after being alerted by proximity devise the tractor driver should immediately stop the motion of the tractor and visually seek out the nearby personnel. The proximity devises initial warning will beep short quick beeps when the proximity distance is at 16 to 25 feet away. The proximity devises Danger Warning a continuously beep when the proximity distance is within 15 feet or less of and ground personnel.

General Information: The proximity devises shall be managed, monitored, and maintained by the Mulch Division Manager. Any and all personnel will be responsible for notifying the Mulch Manager in the event that you will have non-Kramer personnel visiting the yard and assuring that any visitors are fitted with the proximity devises.

KRAMER TREE SPECIALISTS
STANDARD OPERATING PROCEDURES

Proximity Devise Protection / Warning System Procedure Acknowledgment

I _____ (Print) acknowledge that on this _____ day of _____ In the Year of _____. I was presented the Standard Operating Procedure training for the Proximity Devise Protection / Warning System Procedure Process.

_____	_____
Employee Name (Please Print]	*Supervisor Name (Please Print)*
_____	_____
Employee Signature	*Supervisor Signature*

APPENDIX B – Fire Prevention Standard Operating Procedure

KRAMER TREE SPECIALISTS
STANDARD OPERATING PROCEDURES

Department: Mulch Department
Procedure: Mulch Yard Fire Prevention
Date: January 5, 2011

S.O.P. Objectives:

To develop, update, and implement standard procedures for specific department tasks and/or functions, in order to assure consistent and accurate compliance, as well as accountability awareness for these tasks and/or functions.

Mulch Yard Fire Prevention Procedure

Fire Prevention Definition:
The specific steps to be taken to prevent fire from occurring in the mulch yard.

Tools and Equipment:

A. Fire Hoses:
- Used to carry water to the fire location and for applying water to the fire area.
- Hoses are stored on a pallet to be ready for use during fire suppression.

B. Water Supply Hydrants:
- Used for delivery of water to the site or pile of material.

General Procedural Information:
- Clean all equipment on a daily basis to prevent wood build-up on equipment. It may be necessary to clean during the workday.
- Orient equipment when possible to keep the equipment up-wind not down-wind from dust.
- Suppress particle dust with water (if necessary).
- Park Machinery away from piles of material.

Fire Suppression Procedure Acknowledgment

I _____ (Print) acknowledge that on this _____ day of _____ In the Year of _____. I was presented the Standard Operating Procedure training for the Mulch Yard Fire Prevention Procedure Process.

_____	_____
Employee Name (Please Print]	***Supervisor Name (Please Print)***
_____	_____
Employee Signature	***Supervisor Signature***

APPENDIX C – Fire Suppression Standard Operating Procedure

KRAMER TREE SPECIALISTS
STANDARD OPERATING PROCEDURES

Important Note: **Once you start the process of opening a pile you need to commit to moving the whole pile.**

Mulch Staff
Emergency Phone List

POSITION	NAME	PHONE NUMBER	
Manager:	Tim Peters	Cell:	630-440-3912
		Home:	630-231-1512
	Matt	Cell:	630-696-5102
		Personal:	630-439-6867
	Luis V.	Cell:	630-440-3915
		Personal:	847-293-5026
	Onecimo	Cell:	630-440-3918

Other Kramer Tree Management
Emergency Phone List

POSITION	NAME	PHONE NUMBER	
Director of Operations:	Rick Thomas	Cell:	630-229-9142
		Home:	630-466-1483
Director of Sales:	Jeff Kramer	Cell:	630-440-3905
President:	Joe Kramer	Cell:	630-440-3910

Fire Suppression Procedure Acknowledgment

I_____(Print) acknowledge that on this _____ day of _____ In the Year of _____. I was presented the Standard Operating Procedure training for the Fire Suppression Procedure Process.

_____ _____

Employee Name (Please Print] *Supervisor Name (Please Print)*

_____ _____

Employee Signature *Supervisor Signature*

KRAMER TREE SPECIALISTS
STANDARD OPERATING PROCEDURES

Department: Mulch Department
Procedure: Fire Suppression Procedure
Date: January 5, 2011

S.O.P. Objectives:

To develop, update, and implement standard procedures for specific department tasks and/or functions, in order to assure consistent and accurate compliance, as well as accountability awareness for these tasks and/or functions.

Fire Suppression Procedure

Fire Suppression Definition: Fire Suppression consists of utilizing manpower and machinery to move material for the purpose of cooling or extinguishing fire with water within organic material such as mulch until the threat of fire is abated.

Tools and Equipment:

A. Wheel Loader & Excavator:
Used to pull the piled material apart and spread it to allow for cooling and applying water to the material. (Keys in the mulch operation)
Safety – Insure that all applicable safety procedures are followed.

B. Water Supply / Hoses / Hydrants:
Used for delivery of water to the site or pile of material.
Hoses are stored on a pallet to be ready for use during fire suppression.

C. Personnel:

Manager – A Managers duty is to develop fire suppression strategic plans and to communicate the plans to the team members, assuring that all understand the objectives of the plan.

Production Staff – The Mulch manager will work with the Production Manager to appropriate assistance as needed from the production staff.

Safety – Insure that all applicable safety procedures are followed.

Notification – **Highest Ranking Personnel** – Once a fire has been detected the Mulch Manager shall be responsible for coordinating fire suppression steps. In the event that the Mulch Manager is not readily unavailable the highest ranking person on scene is responsible for implementing the Fire Suppression Procedures.

KRAMER TREE SPECIALISTS
STANDARD OPERATING PROCEDURES

General Procedural Information: Once a fire has been reported the most important thing to do is stop the spread by following the systematic steps of the Fire Suppression Procedures. In most cases the mulch or material piles will need to be reduced in height in order to cool down the material.

Important Note:

If at any time you feel that you, or any other individuals, or property is in Danger and that these individuals or property cannot be protected with our fire suppression procedures
***** Do Not Hesitate to call 911 – for Assistance *****

Step#1: Get the hose pallet out and run a 2" inch (White) hose no closer than 20' feet or farther than 50' feet from the fire. Try to keep the kinks out.

Step #2: Connect the (White) hose to the hydrant – connect the (black) hose with a red nozzle to the (White) hose and begin to apply water to the fire.

Step #3: Acquire more help to assist you with the suppression of the fire. Additional assistance will allow for the pile to be broken down, cooled, and extinguished.

Step #4: If the Mulch Manager is not on site or has not yet been notified continue effort to attempt to reach the Mulch Manager or any of the mulch personnel to assist you. If you are unable to reach any mulch personnel call the production manager / personnel to ascertain another two (2) to three (3) individuals.

Note: Absolutely No Equipment or Personnel shall work at or near a fire without an immediate readily available water source hooked up and available for use.

Step #5: After you have water on the fire move any equipment that is close to the location out of the vicinity to a safe location.

Step #6: It may be necessary to move additional trucks in order to ascertain enough room to spread the mulch or material out and begin the cooling down process. The mulch or material will need to be spread out with pile heights reduced in order to begin the cooling down process or to dissipate the heat.

Step #7: Apply as much water as is required to put out the fire.

Important Note: **Applying to much water will have a reverse effect on the pile as water build heat.**

Step #8: As the heat dissipates – Begin to restack the mulch only to a height of ten (10') feet to twelve (12') feet in – NO MORE!! Monitor and track the heat in the piles after restacking (Post Fire) so that you know that the Fire Suppression Plan was effective and the risk of continued fire is eliminated.

KRAMER TREE SPECIALISTS, INC. LEAF MULCH PRODUCTION FACILITY
FIRE SUPPRESSION – PILE EXCAVATION DATES LOG

EXCAVATION DATES	EXCAVATION GRID LOCATION

FIRE SUPRESSION GRID
W
S
N
A
B
C
D
E
F
G
H
I
J
K
L
1
2
3
4
5
6
Imagery Date: 6/30/2010
41°52'55.23" N 88°13'39.8
© 2011 Europa Technologies
© 2011 Google

APPENDIX D – Driver / Yard Rules Standard Operating Procedures

KRAMER TREE SPECIALISTS
STANDARD OPERATING PROCEDURES

Department: All Departments
Procedure: Driver / Yard Rules
Date: October 29, 2010

S.O.P. Objectives:

To develop, update, and implement standard procedures for specific department tasks and/or functions, in order to assure consistent and accurate compliance, as well as accountability awareness for these tasks and/or functions.

Driver / Yard Rules - Procedure

Yard Speed: Any and all vehicles and equipment must travel at 5mph or less when driving in the yard. All Managers are empowered to assure compliance of this rule and will incorporate Progressive Discipline Procedures to enforce this rule.

Ground Material / Obstacles: To avoid bodily injury or harm to individuals working in the yard and/or damage to equipment / vehicles working in the yard it is absolutely forbidden to drive over material on the ground. If at any time when maneuvering through the yard there is a potential for hitting or running over material – move it and/or get it moved. All Managers are empowered to assure compliance of this rule and will incorporate Progressive Discipline Procedures to enforce this rule.

Dumping: Make sure that when dumping material in the yard, that you are dumping in the proper location. If you are not absolutely sure of the correct dump location ASK BEFORE DUMPING!!

Secure Yard Locations: Do not enter into or dump in coned off areas unless directed to do so by a management member.

Proximity Devises: Yard Tractor Operators, Yard Personnel, and Operators are equipped with proximity devises that indicate locations of workers and equipment operating within the yard. All personnel equipped with these devises are expected to adhere to the established standard operating procedures for these devises. The proximity devises shall be managed, monitored, and maintained by the Mulch Division Manager. Any and all personnel will be responsible for notifying the Mulch Manager in the event that you will have non-Kramer personnel visiting the yard and assuring that any visitors are fitted with the proximity devises.

KRAMER TREE SPECIALISTS
STANDARD OPERATING PROCEDURES

Driver Yard Rules Procedure Acknowledgment

I _____ (Print) acknowledge that on this _____ day of _____ In the Year of _____. I was presented the Standard Operating Procedure training for the Mulch Yard Rules Procedure Process.

_____	_____
Employee Name (Please Print]	*Supervisor Name (Please Print)*
_____	_____
Employee Signature	*Supervisor Signature*

APPENDIX E – Annual Spring Mulch Production Orientation Standard Operating Procedure

KRAMER TREE SPECIALISTS
STANDARD OPERATING PROCEDURES

Department: Mulch Department
Procedure: Annual Spring Mulch Production Orientation
Date: January 5, 2011

S.O.P. Objectives:

To develop, update, and implement standard procedures for specific department tasks and/or functions, in order to assure consistent and accurate compliance, as well as accountability awareness for these tasks and/or functions.

Annual Spring Mulch Production Orientation Procedure

Annual Spring Orientation Definition: A meeting involving current and new department employees that is held during the month of February each year. The purpose of this orientation is to review the company strategic goals, discuss and develop department goals and objectives for the year, review the department standard operating procedures, and review the general policies and guidelines of the company and the department.

Tools and Resources:

A. Annual Spring Mulch Production Orientation Agenda:
Utilized to prepare and organize for the presentation of the Orientation Meeting. This agenda will identify topics to be discussed and specific resources required such as handouts etc.

B. Standard Operating Procedures (Handouts):
Utilized as a reference to for reviewing specific Standard Operating Procedures and also as a Sign-off form for verification that the procedure was reviewed with each individual and that each individual fully understood the procedure.

C. Personnel and Responsibilities:

Manager – A Managers duty is to organize and facilitate the Orientation Meeting. Assuring that that Agenda is developed and that all hand-outs and references are available. The Manager will also determine who will participate in the presentation and facilitation of the meeting.

Production Staff – The Mulch Production Staff is responsible for participating in discussions related to the topics covered and to assure that they fully comprehend the information being discussed.

KRAMER TREE SPECIALISTS
STANDARD OPERATING PROCEDURES

General Procedural Information:

Orientation Topics of Discussion:

The following topics shall be distributed and discussed during the Orientation Meeting. Be sure to highlight any changes of past procedures or policies for returning employees.

1. Company Goals: Review the company strategic goals for the fiscal year.
    a. How will our department goals relate to the company goals?
    b. How will our department goals help to accomplish the company goals?
    c. Discuss and develop department goals that relate to company goals.
    d. Develop and distribute department action plans for our strategic department goals.

2. Department Organizational Structure: Discuss supervisor structure.
    a. Supervisor responsibilities – review Job description – (Handout)
    b. Expectations

3. Job Descriptions: Distribute and review department job descriptions and responsibilities.
    a. Mulch Department Manager – (Handout)
    b. Mulch Foreman – (Handout)
    c. Mulch Driver – (Handout)
    d. Yard Pickers – (Handout)
    e. Mulch Yard Operators – (Handout)

4. Yard Policies / Procedures / Guidelines: Review the yard policies and procedures.
    a. Yard Driving - standard operating procedures – (Handout)
    b. Mulch Material Temperature Check – standard operating procedures – (Handout)
    c. Fire Prevention - standard operating procedures – (Handout)
    d. Fire Suppression - standard operating procedures – (Handout)
    e. Yard Organization / Traffic Flow - standard operating procedures – (Handout)
    f. Incident Reporting / Investigation – standard operating procedures – (Handout)
    g. Debris Picking – standard operating procedures – (Handout)
    h. Proximity Devise – standard operating procedures – (Handout)
    i. Employee Handbook – Distribution – (Handout)
    j. Pre – Post Vehicle Inspection (VCR) – standard operating procedures – (Handout)
        - Provide Training – Demonstrating the process for all drivers.

10

ATTACHMENT 10: ODOR COMPLAINT FORM

KRAMER TREE SPECIALISTS INC. LEAF MULCH PRODUCTION FACILITY
ODOR COMPLAINT LOG

DATE OF COMPLAINT _____
TIME OF COMPLAINT _____

WIND DIRECTION: _____
WEATHER CONDITIONS: _____

COMPLAINANT'S NAME: _____
COMPLAINANT'S PHONE #: _____
COMPLAINANT'S EMAIL ADDRESS: _____

PERSON FILLING OUT COMPLAINT LOG: _____

DESCRIPTION OF COMPLAINT:

_____
_____
_____
_____
_____
_____
_____
_____

DESCRIPTION OF SITE ACTIVITIES DURING THE TIME SPECIFIED IN THE COMPLAINT:

_____
_____
_____
_____
_____
_____
_____
_____

ACTIONS TAKEN:

_____
_____
_____
_____
_____
_____
_____
_____

11

ATTACHMENT 11: PILE TEMPERATURE MONITORING FORM
PILE EXCAVATION COOLING FORM
CONTINGENCY IMPLEMENTATION FORM

FIRE SUPRESSION GRID
W
S
N
E
A
B
C
D
E
F
G
H
I
J
K
L
1
2
3
4
5
6
© 2011 Europa Technologies
© 2011 Google
Image Date: 6/30/2010 199341'52'55.23" N 88°13
Google

FIRE SUPRESSION GRID
W
N
S
E
A
B
C
D
E
F
G
H
I
J
K
L
1
2
3
4
5
6
Date: 6/30/2010
© 2011 Europa Technologies
© 2011 Google

FIRE SUPRESSION GRID
W
S
N
E
A
B
C
D
E
F
G
H
I
J
K
L
1
2
3
4
5
6
© 2011 Europa Technologies
Image Date: 6/30/2010
199341°52'55.23" N 88°13
Google

FIRE SUPRESSION GRID
A
B
C
D
E
F
G
H
I
J
K
L
1
2
3
4
5
6
W
N
S
E
© 2011 Europa Technologies
Image Date: 6/30/2010
Google

Yard Material Temperature Readings

NOTE* Supply completed form to Mulch Manager

Name: ______________

Date: ______________

Material Type:

Mark North Arrow

Temp	Temp	Temp	Temp
Temp	Temp	Temp	Temp

Material Type:

Mark North Arrow

Temp	Temp	Temp	Temp
Temp	Temp	Temp	Temp

Material Type:

Mark North Arrow

Temp	Temp	Temp	Temp
Temp	Temp	Temp	Temp

Material Type:

Mark North Arrow

Temp	Temp	Temp	Temp
Temp	Temp	Temp	Temp

KIS

KRAMER TREE SPECIALISTS, INC. LEAF MULCH PRODUCTION FACILITY
FIRE SUPPRESSION – PILE EXCAVATION DATES LOG

EXCAVATION DATES	EXCAVATION GRID LOCATION

KRAMER TREE SPECIALISTS, INC. LEAF MULCH PRODUCTION FACILITY
FIRE SUPPRESSION – PILE EXCAVATION DATES LOG

EXCAVATION DATES	EXCAVATION GRID LOCATION

KRAMER TREE SPECIALISTS, INC. LEAF MULCH PRODUCTION FACILITY
FIRE SUPPRESSION – PILE EXCAVATION DATES LOG

EXCAVATION DATES	EXCAVATION GRID LOCATION

KRAMER TREE SPECIALISTS, INC. LEAF MULCH PRODUCTION FACILITY
FIRE SUPPRESSION – PILE EXCAVATION DATES LOG

EXCAVATION DATES	EXCAVATION GRID LOCATION

KRAMER TREE SPECIALISTS, INC. LEAF MULCH PRODUCTION FACILITY
FIRE SUPPRESSION – PILE EXCAVATION DATES LOG

EXCAVATION DATES	EXCAVATION GRID LOCATION

KRAMER TREE SPECIALISTS, INC. LEAF MULCH PRODUCTION FACILITY
FIRE SUPPRESSION – PILE EXCAVATION DATES LOG

EXCAVATION DATES	EXCAVATION GRID LOCATION

KRAMER TREE SPECIALISTS, INC. LEAF MULCH PRODUCTION FACILITY
FIRE SUPPRESSION – PILE EXCAVATION DATES LOG

EXCAVATION DATES	EXCAVATION GRID LOCATION

KRAMER TREE SERVICE INC. LEAF MULCH PRODUCTION FACILITY
PILE EXCAVATION DATES LOG

EXCAVATION DATE

KRAMER TREE SPECIALISTS INC. LEAF MULCH PRODUCTION FACILITY
CONTINGENCY PLAN ACTIVATION

DATE: _____

REASON FOR CONTINGENCY PLAN ACTIVATION:

_____ EQUIPMENT FAILURE
_____ ODOR
_____ UNACCEPTABLE WASETE DELIVERY
_____ SPECIAL WASTE RELEASE
_____ FIRES, NOISE, DUST, POWER OUTAGE
_____ NOISE COMPLAINT
_____ DUST
_____ POWER OUTAGE
_____ OTHER DESCRIBE _____
_____
_____

EMERGENCY COORDINATORS NAME: _____
PERSON FILLING OUT CONTINGENCY PLAN ACTIVATION SHEET: _____

COMMENTS:

_____
_____
_____
_____
_____
_____

12

ATTACHMENT 12: MULCH PRODUCT RECORD FORM

KRAMER TREE SPECIALISTS
STANDARD OPERATING PROCEDURES

Department: All Departments
Procedure: Leaf Material / Landscape Material Tracking
Document Designation: KTS-MUL-108
Date: July 15, 2011

S.O.P. Objectives:

To develop, update, and implement standard procedures for specific department tasks and/or functions, in order to assure consistent and accurate compliance, as well as accountability awareness for these tasks and/or functions.

Leaf Material / Landscape Material Tracking Procedure

Leaf Material Definition: Leaves that are collected and brought to the facility by Kramer Tree Specialists crews and leaves that are accepted at the gate from outside vendors / customers etc.

Landscape Material Definition: Landscape materials consisting of woody branches, brush, trunks, etc. that are collected and brought to the facility by Kramer Tree Specialists crews and landscape materials that are accepted at the gate from outside vendors / customers etc.

Mulch Material Estimator Tracker System Definition: A tracking spreadsheet that is maintained on our computer software data base system for the purpose of logging and tracking mulch, wood materials, leaves, and acceptable landscape materials received into the Kramer Tree Specialists, Inc. yard for the processing mulch products.

General Information: Any and all Leaf Material and Landscape Material coming into the Kramer Tree Specialists facility yard must be tracked in accordance with IEPA regulations. This would include Gate Acceptance of leaves or landscape materials and any Kramer Tree Service or Leaf Collection Service materials brought into the Kramer Tree facility yard.

Mulch Material Estimator Tracker System: The Mulch Material Estimator tracker system can be found in the (Q) docs shared drive within the Mulch Sales Folder. This tracking form will be utilized as the tool to track the total amount of leaves and landscape materials accepted at the Kramer Tree facility yard on a weekly, monthly, and annual basis... The Mulch Material Estimator Tracker System was designed to keep a running Year to Date (Y.T.D.) total of mulch sold and leaves / landscape materials received into the facility yard.

Gate Material Acceptance Procedure: Fran, Betsy, or Bunny shall be the designated Gate-Keepers responsible for receiving, monitoring, tracking, and logging materials coming into the facility yard from clients via gate sales. All Gate Invoice Tickets shall be documented with the type of material received and the approximate cubic yards of material accepted. At the end of each day the gate accepted material quantities shall be totaled by type and then input into the Mulch Material Estimator Tracker spreadsheet.

KRAMER TREE SPECIALISTS
STANDARD OPERATING PROCEDURES

Kramer Tree & Leaf Collection Material Acceptance Procedure: All Kramer Tree Specialists Drivers hauling leaves, landscape Materials, brush, or Tree Service Materials into the Kramer Tree Facility Yard shall log on their load tickets the type of materials hauled and quantities hauled for each load that is hauled back to the Kramer Tree Specialists facility yard. At the end of each day load tickets will be forwarded to the Mulch Manager and/or assigned Gate-Keeper to be totaled and documented in the appropriate location on the Mulch Material Estimator tracking form. All materials shall be tracked by week and logged into the Mulch Materials Estimator Spreadsheet for record keeping purposes. The Mulch Material Estimator tracking process shall maintain a Y.T.D. total of materials received into the Kramer Tree Facility.

Procedure Acknowledgment

Reference Document: KTS-MUL-108

I hereby acknowledge that on ____ / __ / ____ *(Date)* I have read, fully understand, and will comply with the above procedure information. I understand this procedure is mandatory and must be adhered to by all Kramer Tree Specialists, Inc.

Employee Name (Please Print]	*Supervisor Name (Please Print)*
Employee Signature	*Supervisor Signature*

KRAMER TREE SPECIALISTS
STANDARD OPERATING PROCEDURES

Revision Tracking

Rev 1	XX/XX/XXXX
Writer	TBD
Approver(s)	TBD
Reason For Change	TBD

Rev 2	XX/XX/XXXX
Writer	TBD
Approver(s)	TBD
Reason For Change	TBD

Rev 3	XX/XX/XXXX
Writer	TBD
Approver(s)	TBD
Reason For Change	TBD

Rev 4	XX/XX/XXXX
Writer	TBD
Approver(s)	TBD
Reason For Change	TBD

Rev 5	XX/XX/XXXX
Writer	TBD
Approver(s)	TBD
Reason For Change	TBD

Rev 6	XX/XX/XXXX
Writer	TBD
Approver(s)	TBD
Reason For Change	TBD

WEEK OF:	07/04/11	07/11/11	07/18/11	07/25/11	08/01/11	
MULCH / MATERIAL ESTIMATOR	WEEKLY MATERIAL INVENTORY	WEEKLY MATERIAL INVENTORY	WEEKLY MATERIAL INVENTORY	WEEKLY MATERIAL INVENTORY	WEEKLY MATERIAL INVENTORY	Y.T.D. MATERIAL INVENTORY
EXSISTING USABLE MATERIAL						
HOVING						
IST GRIND						
TOTAL EXSISTING MATERIAL	39,653	38,947	36,811	36,313	36,333	
WEEKLY INCOMING MATERIAL						YTD
LOGS	50	50	0	100	50	1,180
(GATE) LOGS						0
MUNICIPAL BRUSH	200	200	200	200	200	5,300
(GATE) BRUSH						0
LANDSCAPE BRUSH	500	500	750	750	750	9,750
HOVING	120	0	120	120	160	18,900
LEAVES						0
(GATE) LEAVES						0
TOTAL INCOMING MATERIAL	870	750	1,070	1,170	1,160	35,130
CURRENT OUTGOING MATERIAL	1,576	2,886	1,568	1,150	1,098	58,403
WEEKLY VARIANCE	(706)	(2,136)	(498)	20	62	(23,273)

Daily Incoming Yardage

Driver______________________________ Week of\or Date_____________________

Location	Truck	Yards	Type	Pup

2011 MULCH SALES TRACKER

JUNE 2011

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	TOTALS WEEK #1	TOTALS Y.T.D.	2008 TOTALS	2009 TOTALS	2010 TOTALS
PRODUCT TYPE	29	30	31	1	2	3	4					
SPECIAL BLEND		C	921.0	387.5	305.5	372.5	142.0	2,128.5	27,147.0		l.f.	
LEAF MULCH		L		40.0	60.0			100.0	1,204.5		460.0	
MULCH FINES		O						0.0	0.0			
RED DYED		S	9.0	50.0	5.0	61.0	46.0	171.0	1,630.0			
BROWN DYED		E	25.0	61.0	94.5	208.0	174.5	563.0	6,234.0			
BLOND MULCH		D		1.5		15.0	45.0	61.5	288.5			
LEAVES								0.0	0.0			
LANDSCAPE MATERAL								0.0	0.0			
DAILY MULCH SALES	0.0	0.0	955.0	540.0	465.0	656.5	407.5	3,024.0	36,504.0	2,013.0	2,774.0	2,675.5
DAILY LEAVE SALES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
DAILY LANDSCAPE SALES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	TOTALS WEEK #2	TOTALS Y.T.D.	2008 TOTALS	2009 TOTALS	2010 TOTALS
PRODUCT TYPE	5	6	7	8	9	10	11					
SPECIAL BLEND		644.0	464.0	405.0	323.0	657.0	375.0	2,868.0	30,015.0		l.f.	
LEAF MULCH					8.0			8.0	1,212.5		290.0	
MULCH FINES								0.0	0.0			
RED DYED		8.5		61.5	36.0	1.0	1.0	108.0	1,738.0			
BROWN DYED		15.0	105.0	112.0		17.0	108.0	357.0	6,591.0			
BLOND MULCH		1.5		8.0			12.0	21.5	310.0			
LEAVES								0.0	0.0			
LANDSCAPE MATERAL								0.0	0.0			
DAILY MULCH SALES	0.0	669.0	569.0	586.5	367.0	675.0	496.0	3,362.5	39,866.5	2,180.5	2,570.0	2,970.5
DAILY LEAVE SALES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
DAILY LANDSCAPE SALES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	TOTALS WEEK #3	TOTALS Y.T.D.	2008 TOTALS	2009 TOTALS	2010 TOTALS
PRODUCT TYPE	12	13	14	15	16	17	18					
SPECIAL BLEND		569.0	627.0	656.0	466.0	416.5	391.0	3,125.5	33,140.5		l.f.	
LEAF MULCH						34.0		34.0	1,246.5		140.0	
MULCH FINES								0.0	0.0			
RED DYED		15.0	90.0		4.0	28.0		137.0	1,875.0			
BROWN DYED		122.5	22.0	2.0	151.0		178.5	476.0	7,067.0			
BLOND MULCH			72.0		2.0		2.0	76.0	386.0			
LEAVES								0.0	0.0			
LANDSCAPE MATERAL								0.0	0.0			
DAILY MULCH SALES	0.0	706.5	811.0	658.0	623.0	478.5	571.5	3,848.5	43,715.0	1,955.5	2,574.0	3,238.5
DAILY LEAVE SALES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
DAILY LANDSCAPE SALES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	TOTALS WEEK #4	TOTALS Y.T.D.	2008 TOTALS	2009 TOTALS	2010 TOTALS
PRODUCT TYPE	19	20	21	22	23	24	25					
SPECIAL BLEND		817.0	623.0	719.0	407.5	323.0	400.0	3,289.5	36,430.0			
LEAF MULCH								0.0	1,246.5			
MULCH FINES								0.0	0.0			
RED DYED		33.0	5.0	2.0	3.0	51.5		94.5	1,969.5			
BROWN DYED			82.0	85.0	190.0	75.0	43.0	475.0	7,542.0			
BLOND MULCH								0.0	386.0			
LEAVES								0.0	0.0			
LANDSCAPE MATERAL								0.0	0.0			
DAILY MULCH SALES	0.0	850.0	710.0	806.0	600.5	449.5	443.0	3,859.0	47,574.0	2,157.5	1,474.0	2,062.0
DAILY LEAVE SALES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
DAILY LANDSCAPE SALES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	TOTALS WEEK #5	TOTALS Y.T.D.	2008 TOTALS	2009 TOTALS	2010 TOTALS
PRODUCT TYPE	26	27	28	29	30	1	2					
SPECIAL BLEND		428.0	306.5	397.0	438.0	291.0	147.0	2,007.5	38,437.5		M.F.	
LEAF MULCH			21.5					21.5	1,268.0		190.0	
MULCH FINES								0.0	0.0			
RED DYED			25.0	50.0	1.0	195.0	13.0	284.0	2,253.5			
BROWN DYED		81.0	85.0	75.0	85.0	22.5	1.5	350.0	7,892.0			
BLOND MULCH				60.0	3.5	1.0	1.0	65.5	451.5			
LEAVES								0.0	0.0			
LANDSCAPE MATERAL								0.0	0.0			
DAILY MULCH SALES	0.0	509.0	438.0	582.0	527.5	509.5	162.5	2,728.5	50,302.5	1,419.0	1,203.0	2,629.0
DAILY LEAVE SALES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
DAILY LANDSCAPE SALES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			

MULCH DAILY MTD TOTAL	0.0	2,734.5	3,483.0	3,172.5	2,583.0	2,769.0	2,080.5	16,822.5 MONTH TOTAL
LEAVES DAILY MTD TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 MONTH TOTAL
LANDSCAPE DAILY MTD TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 MONTH TOTAL

YEAR TO DATE DAILY TOTAL SALES	SUNDAY YTD	MONDAY YTD	TUESDAY YTD	WEDNESDAY YTD	THURSDAY YTD	FRIDAY YTD	SATURDAY YTD	TOTALS YTD
ALL MULCH SALES	0.0	8,293.0	9,908.5	8,537.0	9,011.0	8,894.0	5,659.0	50,302.5

2011 MULCH SALES TRACKER

MAY 2011

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	TOTALS WEEK #1	TOTALS Y.T.D.	2008 TOTALS	2009 TOTALS	2010 TOTALS
MULCH TYPE	1	2	3	4	5	6	7					
SPECIAL BLEND		294.0	449.0	561.0	1,041.0	894.0	408.0	3,647.0	13,291.0			
LEAF MULCH			2.0		2.0		160.0	164.0	918.0			
MULCH FINES								0.0	0.0			
RED DYED		13.0	116.5	25.0	12.0	4.0	16.5	187.0	856.5			
BROWN DYED		32.0	16.0	18.0	119.0	75.0		260.0	3,042.5			
BLOND MULCH		16.0	7.0		4.0	16.0	13.0	56.0	171.0			
ALL MULCH	0.0	355.0	590.5	604.0	1,178.0	989.0	597.5	4,314.0	18,279.0			

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	TOTALS WEEK #2	TOTALS Y.T.D.	2008 TOTALS	2009 TOTALS	2010 TOTALS
MULCH TYPE	8	9	10	11	12	13	14					
SPECIAL BLEND								0.0	13,291.0		l.f	
LEAF MULCH								0.0	918.0		615.0	
MULCH FINES								0.0	0.0			
RED DYED								0.0	856.5		m.f.	
BROWN DYED								0.0	3,042.5		175.0	
BLOND MULCH								0.0	171.0			
ALL MULCH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18,279.0	2,691.5	3,613.0	4,201.0

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	TOTALS WEEK #3	TOTALS Y.T.D.	2008 TOTALS	2009 TOTALS	2010 TOTALS
MULCH TYPE	15	16	17	18	19	20	21					
SPECIAL BLEND								0.0	13,291.0		l.f.	
LEAF MULCH								0.0	918.0		570.0	
MULCH FINES								0.0	0.0			
RED DYED								0.0	856.5		m.f.	
BROWN DYED								0.0	3,042.5		374.0	
BLOND MULCH								0.0	171.0			
ALL MULCH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18,279.0	2,664.5	1,869.0	3,885.0

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	TOTALS WEEK #4	TOTALS Y.T.D.	2008 TOTALS	2009 TOTALS	2010 TOTALS
MULCH TYPE	22	23	24	25	26	27	28					
SPECIAL BLEND								0.0	13,291.0		l.f.	
LEAF MULCH								0.0	918.0		83.0	
MULCH FINES								0.0	0.0			
RED DYED								0.0	856.5		m.f.	
BROWN DYED								0.0	3,042.5		268.0	
BLOND MULCH								0.0	171.0	2,780.5	2,179.5	5,627.5
ALL MULCH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18,279.0			

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	TOTALS WEEK #5	TOTALS Y.T.D.	2008 TOTALS	2009 TOTALS	2010 TOTALS
MULCH TYPE												
SPECIAL BLEND								0.0	13,291.0		l.f.	
LEAF MULCH								0.0	918.0		280.0	
MULCH FINES								0.0	0.0			
RED DYED								0.0	856.5		m.f.	
BROWN DYED								0.0	3,042.5		70.0	
BLOND MULCH								0.0	171.0			
ALL MULCH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18,279.0	1,643.5	2,653.5	4,953.5

DAILY TOTAL	0.0	355.0	590.5	604.0	1,178.0	989.0	597.5	4,314.0 MONTH TOTAL

YEAR TO DATE TOTALS	SUNDAY YTD	MONDAY YTD	TUESDAY YTD	WEDNESDAY YTD	THURSDAY YTD	FRIDAY YTD	SATURDAY YTD	TOTALS YTD
	0.0	2,571.5	3,195.0	3,083.0	4,229.5	3,704.5	1,495.5	18,279.0

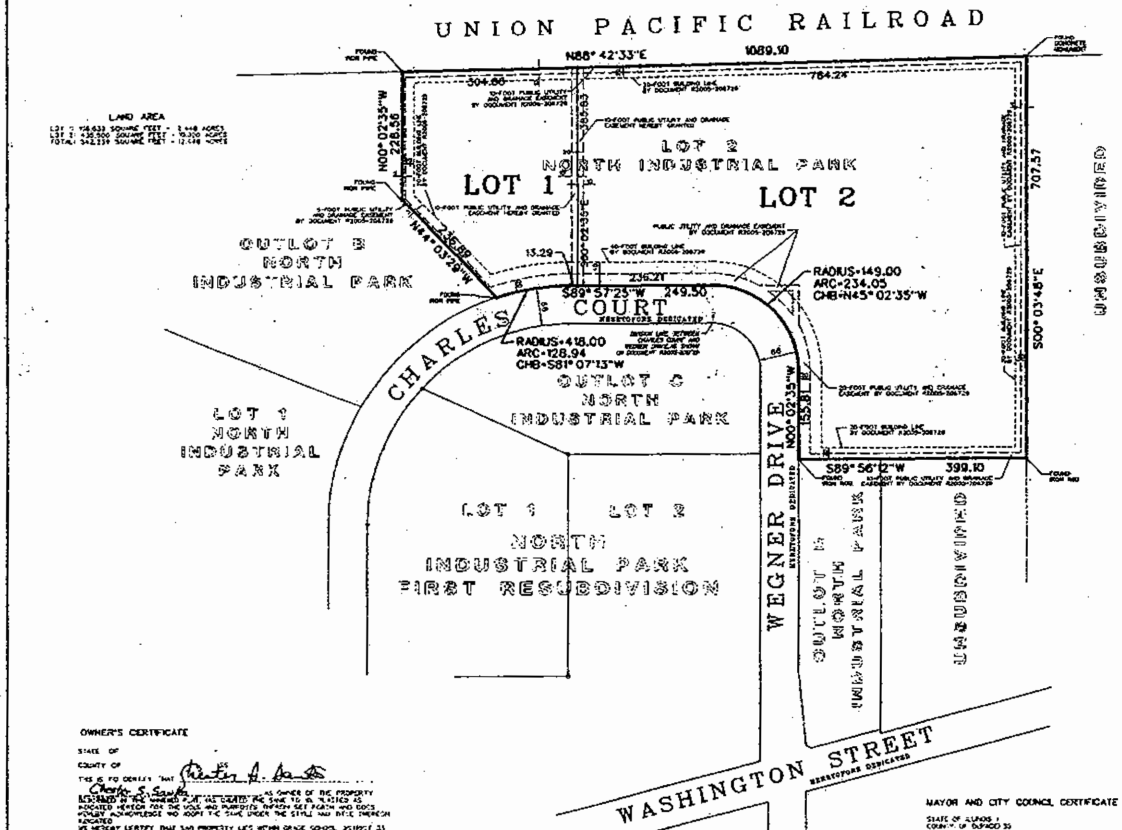
13

ATTACHMENT 13: PLAT OF SURVEY & LEGAL DESCRIPTION

NORTH INDUSTRIAL PARK SECOND RESUBDIVISION

A RESUBDIVISION OF LOT 2 IN NORTH INDUSTRIAL PARK, IN THE NORTHEAST QUARTER OF SECTION 8, TOWNSHIP 39 NORTH, RANGE 9 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED SEPTEMBER 19, 2005, AS DOCUMENT R2005-206729, IN DuPAGE COUNTY, ILLINOIS.

PLAT
R2007-123803
JUL. 03. 2007
3:46 PM



LAND AREA

OWNER'S CERTIFICATE

STATE OF
COUNTY OF

THIS IS TO CERTIFY THAT Chester S. Sawko, AS OWNER OF THE PROPERTY DESCRIBED IN THE ANNEXED PLAT, HAS CAUSED THE SAME TO BE PLATTED AS INDICATED HEREON FOR THE USES AND PURPOSES THEREIN SET FORTH AND DOES HEREBY ACKNOWLEDGE AND ADOPT THE SAME UNDER THE STYLE AND TITLE THEREON INDICATED.

WE HEREBY CERTIFY THAT SAID PROPERTY LIES WITHIN GRADE SCHOOL DISTRICT 33 AND HIGH SCHOOL DISTRICT 94.

DATED AT Glendale Hts ILLINOIS, THIS 2nd DAY OF March A.D. 2007

BY: Chester S. Sawko
TITLE: President

ATTEST: Gregory E. Denbat
TITLE: Treasurer / Custodian

NOTARY'S CERTIFICATE

STATE OF Illinois
COUNTY OF Kane

I, Gregory E. Denbat, A NOTARY PUBLIC IN AND FOR SAID COUNTY IN THE STATE AFORESAID, DO HEREBY CERTIFY THAT Chester S. Sawko PERSONALLY KNOWN TO ME TO BE THE SAME PERSONS WHOSE NAMES ARE SUBSCRIBED TO THE FOREGOING INSTRUMENT AS SUCH ... APPEARED BEFORE ME THIS DAY IN PERSON AND ACKNOWLEDGED THAT THEY SIGNED AND DELIVERED THE SAID INSTRUMENT AS THEIR OWN FREE AND VOLUNTARY ACT AND AS THE FREE AND VOLUNTARY ACT OF SAID CORPORATION, FOR THE USES AND PURPOSES THEREIN SET FORTH ...

GIVEN UNDER MY HAND AND NOTARIAL SEAL AT Glendale Hts ILLINOIS, THIS 2nd DAY OF March A.D. 2007

NOTARY PUBLIC

1-6-08
MY COMMISSION EXPIRES

SURFACE WATER STATEMENT

STATE OF ILLINOIS
COUNTY OF DUPAGE

TO THE BEST OF OUR KNOWLEDGE AND BELIEF, THE DRAINAGE OF THE SURFACE WATERS WILL NOT BE CHANGED BY THE CONSTRUCTION OF SUCH SUBDIVISION OR ANY PART THEREOF ...

DATED THIS DAY OF February 2007

ENGINEER — OWNER OR ATTORNEY

PUBLIC UTILITY AND DRAINAGE EASEMENT PROVISIONS

EASEMENTS ARE RESERVED FOR AND GRANTED TO THE CITY OF WEST CHICAGO, DUPAGE COUNTY, ILLINOIS, AND TO THOSE PUBLIC UTILITY COMPANIES OPERATING UNDER FRANCHISE FROM THE CITY OF WEST CHICAGO ...

COUNTY CLERK'S CERTIFICATE

STATE OF ILLINOIS
COUNTY OF DUPAGE

I, Gary A. King, COUNTY CLERK OF DUPAGE COUNTY, ILLINOIS, DO HEREBY CERTIFY THAT THERE ARE NO DELINQUENT GENERAL TAXES, NO UNPAID CURRENT GENERAL TAXES, NO UNPAID FORFEITED TAXES, AND NO REDEEMABLE TAX SALES AGAINST ANY OF THE LAND INCLUDED IN THE ANNEXED PLAT ...

GIVEN UNDER MY HAND AND SEAL OF THE COUNTY CLERK AT Wheaton, DUPAGE COUNTY, ILLINOIS THIS 3rd DAY OF July A.D. 2007

COUNTY CLERK

CITY COLLECTOR CERTIFICATE

STATE OF ILLINOIS
COUNTY OF DUPAGE

DATED AT WEST CHICAGO, DUPAGE COUNTY, ILLINOIS THIS 29th DAY OF May 2007

CITY COLLECTOR

CITY ENGINEER CERTIFICATE

STATE OF ILLINOIS
COUNTY OF DUPAGE

DATED AT WEST CHICAGO, DUPAGE COUNTY, ILLINOIS, THIS 21st DAY OF June A.D. 2007

CITY ENGINEER

COUNTY RECORDER'S CERTIFICATE

STATE OF ILLINOIS
COUNTY OF DUPAGE

THIS INSTRUMENT NO. R2007-123803 WAS FILED FOR RECORD IN THE RECORDER'S OFFICE OF DUPAGE COUNTY, ILLINOIS AFORESAID, ON THE 3rd DAY OF July A.D. 2007 AT 3:46 O'CLOCK P.M.

Fred Buchholz
RECORDER OF DEEDS

Submitted by:
City of West Chicago
475 Main Street
West Chicago, IL 60185

MAYOR AND CITY COUNCIL CERTIFICATE

STATE OF ILLINOIS
COUNTY OF DUPAGE

MAYOR AND CITY COUNCIL OF THE CITY OF WEST CHICAGO, COUNTY OF DUPAGE, STATE OF ILLINOIS, HEREBY CERTIFY THAT THE SAID COUNCIL HAS DULY APPROVED THE FINAL PLAT OF SUBDIVISION ATTACHED HERETO ... AUTHENTICATED AS PASSED THIS 18th DAY OF December 2006

MAYOR

CITY CLERK

PLAN COMMISSION CERTIFICATE

STATE OF ILLINOIS
COUNTY OF DUPAGE

I, John Wachyna, CHAIRMAN OF THE PLAN COMMISSION OF THE CITY OF WEST CHICAGO, COUNTY OF DUPAGE, STATE OF ILLINOIS, HEREBY CERTIFY THAT THE SAID COMMISSION HAS DULY RECOMMENDED APPROVAL OF THE FINAL PLAT OF SUBDIVISION ATTACHED HERETO ON THE 14th DAY OF November 2006.

CHAIRMAN

SURVEYOR'S CERTIFICATE

STATE OF ILLINOIS
COUNTY OF DUPAGE

THIS IS TO CERTIFY THAT WEBSTER, McGRATH AND AHLBERG, LTD. HAVE SURVEYED AND SUBDIVIDED THE FOLLOWING DESCRIBED PROPERTY:

LOT 2 IN NORTH INDUSTRIAL PARK ...

WEBSTER, McGRATH AND AHLBERG, LTD.

ILLINOIS LAND SURVEYOR NO.
LICENSE EXPIRES NOVEMBER 30, 2008
207 SOUTH NAPERVILLE ROAD
WHEATON, ILLINOIS 60187
(630) 668-7603

Rev	Date	Description	By
1	11-7-06	PER NOVEMBER 9, 2006, CITY REVIEW	NPK

PLAT OF SUBDIVISION

LEE DEVELOPMENT & GALLAGHER REALTY, INC.
0S020 QUAIL RUN COURT
WINFIELD, ILLINOIS 60190
630-965-0550

LOT 2 IN
NORTH INDUSTRIAL PARK
WEST CHICAGO, ILLINOIS

WEBSTER, McGRATH & AHLBERG LTD.
Consulting Engineers
Land Surveying And Civil Engineering Since 1908
207 South Naperville Rd.
Wheaton, Illinois 60187

JOB # 44437	DATE: 10-18-06	SCALE: 1" = 100'
SURV: GD/GLA	DRAWN: NPK	DESIGN:
FILE # 0-31612-2		SHEET # 1 OF 1

14

ATTACHMENT 14: OWNERSHIP DOCUMENTATION

QUIT CLAIM DEED

Prepared by:

Victor J. Sawko
465 W. Dominion Dr. #909
Wood Dale, IL. 60191

TICOR TITLE

FRED BUCHOLZ
DUPAGE COUNTY RECORDER
AUG.01,2007 RHSP 3:10 PM
DEED 04-08-201-027
002 PAGES R2007-143691

THE GRANTOR, **R.C. Coil Spring Manufacturing Co. Inc.**, an Illinois Corporation, of the City of Glendale Heights, County of DuPage, State of Illinois, for and in consideration of Ten .....($10.00) DOLLARS and other good and valuable considerations in hand paid ***CONVEYS*** and ***QUIT CLAIMS*** to **Kramer Land Development, LLC**, 701 Church, West Chicago, Illinois, the following described Real Estate situated in the County of DuPage, in the State of Illinois to wit:

Lot 2 in North Industrial Park Second Resubdivision, being a resubdivision of North Industrial Park Subdivision, being part of the Northeast ¼ of Section 8, Township 39 North, Range 9, East of the Third Principal Meridian, according to the Plat of said resubdivision recorded July 3, 2007 as Document No. R2007-123803, In DuPage County, Illinois.

Permanent Index Number: 04-08-201-027 (Affects this land and other property)
Property Address: Vacant North side of Charles Court, West Chicago, Illinois 60185

Subject to: North Industrial Park Declaration of Protective Covenants, Conditions, Restrictions and Easements dated the 6th day of January, 2006, and recorded in DuPage County on January 13, 2006, as Document No. R2006-009089; The grantee by accepting this deed agrees to be bound by the provisions thereof.

Dated this 30th day of July, 2007.

R.C. Coil Spring Manufacturing Co. Inc.

By: Chester S. Sawko
Chester S. Sawko, President

CITY OF WEST CHICAGO
DEED CERTIFICATION

Date 7-27-07
Initials

$ 10.00

Cert. No. 11194

STATE OF ILLINOIS)
) SS.
COUNTY OF DUPAGE)

I, the undersigned, a Notary Public in and for said County, in the State aforesaid, **DO HEREBY** Certify That Chester S. Sawko, President of **R.C. Coil Spring Manufacturing Co. Inc.,** is personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person, and acknowledged that he signed, sealed and delivered the instrument as his free and voluntary act, for the uses and purposes therein set forth.

Given under my hand and official seal, this 30th day of July, 2007.

Notary Public

My commission expires on January 27, 2011.

OFFICIAL SEAL
VICTOR J. SAWKO
Notary Public - State of Illinois
My Commission Expires Jan 27, 2011

Mail Tax Bills & Deed to:

Kramerland Development, LLC
701 Church St.
West Chicago, IL 60185

Mail Deed to:

Robert A McNees
195 Hiawatha Dr
Carol Stream, IL 60188

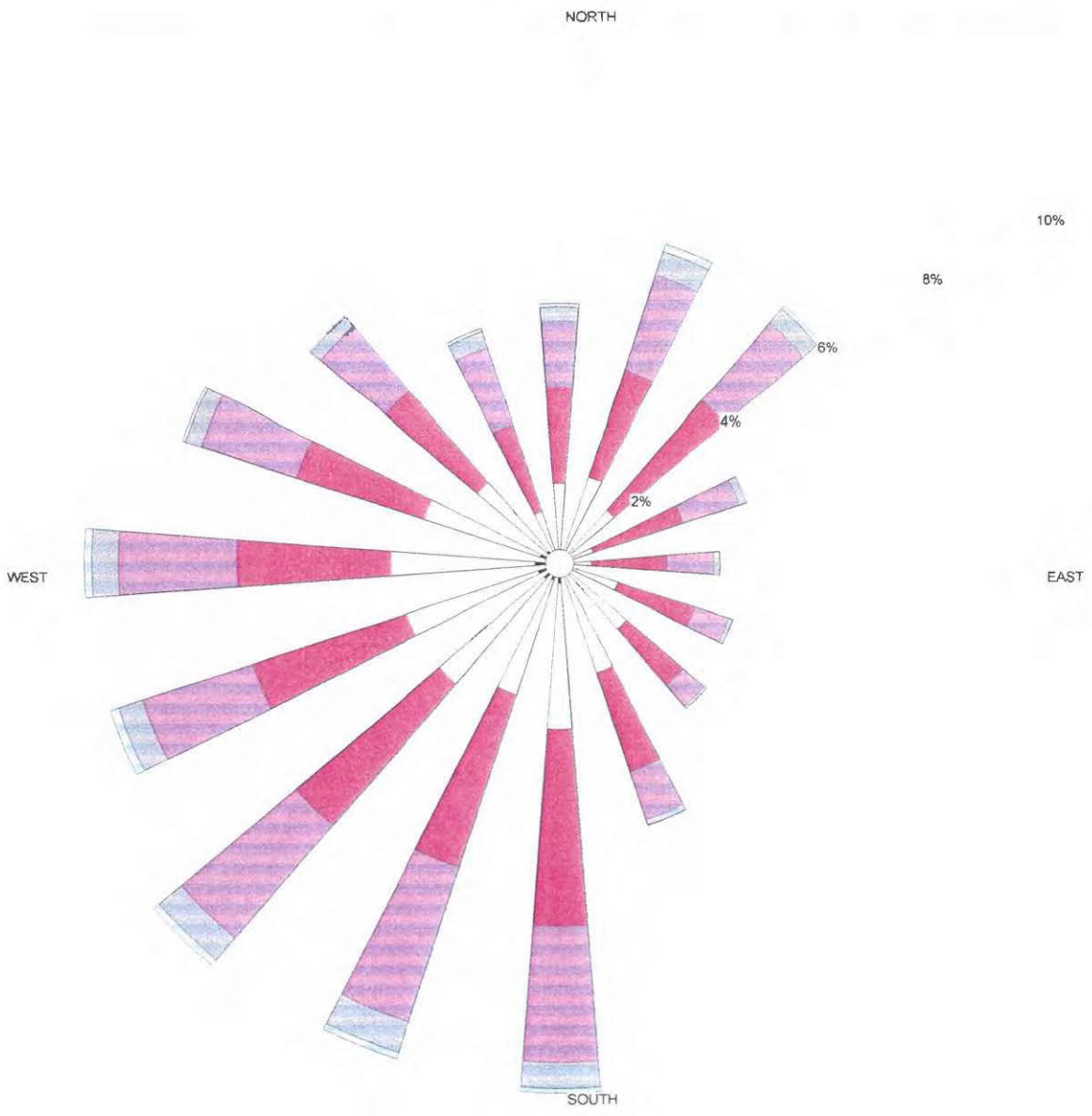
STATE OF ILLINOIS
AUG.-1.07
DUPAGE COUNTY
STATE TAX
COUNTY TAX
0000030568
REAL ESTATE TRANSFER TAX
0251625
FP326689

2,516.25

15

WIND ROSE PLOT

Station #94846 - CHICAGO/O'HARE INT'L ARPT, IL



Wind Speed (Knots)

- > 21
- 17 - 21
- 11 - 16
- 7 - 10
- 4 - 6
- 1 - 3

MODELER	DATE	COMPANY NAME
	10/7/2004	Illinois State Climatologist Office
DISPLAY	**UNIT**	**COMMENTS**
Wind Speed	Knots	1961-1990 Annual Average
AVG. WIND SPEED	**CALM WINDS**	
9.25 Knots	3.10%	
ORIENTATION	**PLOT YEAR-DATE-TIME**	**PROJECT/PLOT NO.**
Direction (blowing from)	Jan 1 - Dec 31 Midnight - 11 PM	

WRPLOT View 3.5 by Lakes Environmental Software - www.lakes-environmental.com

ATTACHMENT 15: WIND ROSE

Station ID: 94846 RUN ID: CHICAGO/O'HARE INT'L ARPT

Year: 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 198

Date Range: Jan 1 - Dec 31

Time Range: Midnight - 11 PM

Frequency Distribution

(Count)

Wind Direction (Blowing From) / Wind Speed (Knots)

	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	> 21	Total
N	430	2884	3932	2653	614	157	10670
NNE	365	3392	4626	4042	1017	321	13763
NE	211	2676	5925	4180	743	161	13896
ENE	109	1321	3835	2353	278	66	7962
E	115	1174	3047	1880	241	24	6481
ESE	223	2237	3291	1425	155	14	7345
SE	410	3132	3048	1112	100	6	7808
SSE	536	4157	4274	2089	220	22	11298
S	817	5934	8121	5583	1071	200	21726
SSW	720	4908	7497	6650	1339	267	21381
SW	834	5622	7702	6110	1161	272	21701
WSW	914	5647	6590	4651	1038	359	19199
W	991	5888	6245	4782	1095	307	19308
WNW	832	4951	5477	4066	687	122	16135
NW	670	3731	4972	3447	505	61	13386
NNW	309	1947	3771	3313	687	130	10157
Total	8486	59601	82353	58336	10951	2489	

Frequency of Calm Winds : 7104

Average Wind Speed : 9.25 Knots

Station ID: 94846 RUN ID: CHICAGO/O'HARE INT'L ARPT

Year: 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 198

Date Range: Jan 1 - Dec 31

Time Range: Midnight - 11 PM

Frequency Distribution

(Normalized)

Wind Direction (Blowing From) / Wind Speed (Knots)

	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	> 21	Total
N	0.001875	0.012576	0.017146	0.011569	0.002677	0.000685	0.046529
NNE	0.001592	0.014792	0.020173	0.017626	0.004435	0.001400	0.060017
NE	0.000920	0.011669	0.025837	0.018228	0.003240	0.000702	0.060597
ENE	0.000475	0.005761	0.016723	0.010261	0.001212	0.000288	0.034720
E	0.000501	0.005119	0.013287	0.008198	0.001051	0.000105	0.028262
ESE	0.000972	0.009755	0.014351	0.006214	0.000676	0.000061	0.032029
SE	0.001788	0.013658	0.013291	0.004849	0.000436	0.000026	0.034048
SSE	0.002337	0.018128	0.018638	0.009110	0.000959	0.000096	0.049267
S	0.003563	0.025877	0.035413	0.024346	0.004670	0.000872	0.094741
SSW	0.003140	0.021402	0.032692	0.028999	0.005839	0.001164	0.093237
SW	0.003637	0.024516	0.033586	0.026644	0.005063	0.001186	0.094632
WSW	0.003986	0.024625	0.028737	0.020282	0.004526	0.001565	0.083721
W	0.004321	0.025676	0.027233	0.020853	0.004775	0.001339	0.084197
WNW	0.003628	0.021590	0.023884	0.017731	0.002996	0.000532	0.070360
NW	0.002922	0.016270	0.021681	0.015031	0.002202	0.000266	0.058373
NNW	0.001347	0.008490	0.016444	0.014447	0.002996	0.000567	0.044292
Total	0.037005	0.259903	0.359118	0.254387	0.047754	0.010854	

Frequency of Calm Winds : 3.10%

Average Wind Speed : 9.25 Knots

Exhibit C

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 • (217) 782-2829
James R. Thompson Center, 100 West Randolph, Suite 11-300, Chicago, IL 60601 • (312) 814-6026

PAT QUINN, GOVERNOR

217/524-3300

August 18, 2011

Certified Mail
7009 3410 0002 3750 4047

Kramer Tree Specialists, Inc.
300 Charles Court
West Chicago, Illinois 60185

Re: 0430905909 – DuPage County
Kramer Tree Specialists, Inc.
Log No. 2011-205
03T Compost
Permit Denial

Dear Mr. Kramer:

This will acknowledge receipt of your Application for Permit to develop and operate a landscape waste compost facility, dated May 18, 2011 and received by the Illinois EPA on May 24, 2011.

Your permit application to develop and operate a landscape waste compost facility is denied.

You have failed to provide proof that granting this permit would not result in violations of the Illinois Environmental Protection Act (Act). Section 39(a) of the Act [415 ILCS 5/39(a)] requires the Illinois EPA to provide the applicant with specific reasons for the denial of permit. The following reason(s) are given:

1. The size of the storage piles and the operating plan associated with the leaf mulch does not provide proper conditions for composting, pursuant to 35 IAC 830.205(a)(1)(A) and 35 IAC 830.206.

2. The compost generated at the proposed facility will not meet the standards for general use compost, pursuant to 35 IAC 830.503.

3. The facility cannot perform testing of the leaf mulch in accordance with 35 IAC 830.504

4. Samples from the leaf mulch cannot properly be taken in accordance with 35 IAC 830.507.

Within 35 days after the date of mailing of the Illinois EPA's final decision, the applicant may petition for a hearing before the Illinois Pollution Control Board to contest the decision of the Illinois EPA, however, the 35-day period for petitioning for a hearing may be extended for a

period of time not to exceed 90 days by written notice provided to the Board from the applicant and the Illinois EPA within the 35-day initial appeal period.

Should you wish to reapply or have any questions regarding this application, please contact Derek Rompot at 217/524-3262.

Sincerely,

Stephen F. Nightingale, P.E.
Manager, Permit Section
Bureau of Land

SFN:DCR:bjh\111353s.doc

cc: John Lardner, P.E., JPL Environmental Engineering