Board of Zoning Adjustment Staff Report

March 20, 2017



Case No: 17CUP1004

Project Name: Landfill CUP Modification

Location: 2673 Outer Loop

Owners: Waste Management of Kentucky
Applicant: Waste Management of Kentucky

Representative(s): T. Gregory Ehrhard

Project Area/Size: 782.6 acres
Existing Zoning District: M-3, Industrial

Existing Form District: SW, Suburban Workplace

Jurisdiction: Louisville Metro

Council District: 13 – Vicki Aubrey Welch

Case Manager: Jon E. Crumbie, Planning & Design Coordinator

REQUEST

• Modified Conditional Use Permit to allow the construction of a building that will house facilities to convert landfill gas from waste disposal operations into Hi Btu gas for injection into an existing pipeline.

CASE SUMMARY/BACKGROUND

The disposal of municipal solid waste at the landfill results in the generation of landfill gas that is currently destructed by flares. The Conditional Use permit was modified in September, 1989 to allow the installation of equipment for the collection and filtering of the gas, and the transmission of the filtered product to the General Electric plant for consumption. The new modification will divert the collected gas to the new building for conversion to natural-gas-pipeline quality gas that will be sold to a transmission level pipeline owner through a connection to an already existing onsite transmission line. The gas will thus be beneficially reused instead of flared off. The connector pipeline from the new building to the existing onsite gas transmission line will be underground. The off gases from the various treatment processes will be destructed in a thermal oxidizer on site.

LAND USE/ZONING DISTRICT/FORM DISTRICT TABLE

	Land Use	Zoning	Form District
Subject Property			
Existing	Landfill/Solid Waste Management Facility	M-3	Suburban Workplace
Proposed	Landfill/Solid Waste Management Facility	M-3	SW
Surrounding Properties			
North	Recycling, auto salvaging, Northern Ditch, Railroad, Ford plant	M-3, EZ-1	SW
South	LG&E substation, Hunt Transportation, R/V Sales, Outer Loop, Louisville Renaissance, Landscaping Operation	M-3, EZ-1	SW
East	I-65		
West	Grade Lane, CSX Transportation, Farm Supplies, Recycling Operations	EZ-1	SW

SITE CONTEXT

The landfill has the existing infrastructure and will be able to locate the building on the 782 acre site and still be buffered. Wetlands are located at the front of the property along Outer Loop and along most of the property along Interstate 65. Similar industrial uses such as recycling are found along Grade Lane to the west and north along Walters Lane. Further north is the Ford Motor Company plant.

PREVIOUS AND ASSOCIATED CASES ON SITE

16CUP1003 Landfill Conditional Use Permit modification to allow an existing maintenance building to be torn down and moved to a different location to allow for the next phase of waste stockpiling. Staff approved in February 2016.

16DEVPLAN1026 Landfill Conditional Use Permit modification to allow an existing maintenance building to be torn down and moved to a different location to allow for the next phase of waste stockpiling. Staff approved in February 2016.

15CUP1001 Landfill conditional Use Permit modifications to allow a Solid Waste Management Facility #2, construction/demolition debris facility with grinding of asphalt shingles and to allow a Solid Waste management Facility #4, outdoor recycling facility (metals, cardboard, wood, ect.) in a M-3 zoning district. This request was approved by BOZA on April 6, 2015.

14CUP1049 The Board approved in Business Session, the Modified Conditional Use Permit to add 20 compressed natural gas time fill refueling stations, add equipment to the existing equipment compound and to delineate 27 existing parking stalls as future refueling stations. This request was approved by BOZA on February 2, 2015.

- **B-16307-11** The Board approved the Modified Conditional Use Permit to allow a proposed compressed natural gas time fill refueling station. This request was approved by BOZA on October 6, 2011.
- **9-39-97CLW** Change in zoning from C-2 Commercial, EZ-1, Enterprise Zone and M-2 Industrial to M-3 Industrial and a related Conditional Use Permit for a landfill and a Landscape Waiver for the required landscape material on property located at 2673 Outer Loop, 782.6 acres. This request was approved by the Planning Commission on August 7, 1997.
- **B-9-94** An application for a Conditional Use Permit to allow a borrow pit operation. This request was approved by BOZA on February 21, 1994.
- **B-176-89** An application for a Conditional Use Permit for a borrow pit. This request was approved by BOZA on October 2, 1989.
- **B-28-85** An application for a Conditional Use Permit for the consolidation and expansion of an existing sanitary landfill. This request was approved by BOZA on April 1, 1985.
- **B-83-74** An application for a Conditional Use Permit for a borrow pit and earth excavation operation. This request was approved by BOZA on October 14, 1974.

INTERESTED PARTY COMMENTS

Staff has not received any interested party comments.

APPLICABLE PLANS AND POLICIES

Cornerstone 2020 Land Development Code

STANDARD OF REVIEW AND STAFF ANALYSIS FOR CONDITIONAL USE PERMITS

1. Are the proposals consistent with the applicable policies of the Comprehensive Plan?

STAFF: Yes, the proposals meet all applicable policies of the Comprehensive Plan.

2. Are the proposals compatible with surrounding land uses and the general character of the area including such factors as height, bulk, scale, intensity, traffic, noise, odor, drainage, dust, lighting, appearance, etc?

STAFF: Yes, surrounding land uses include recycling, auto salvaging, the Ford Plant, and LG&E substation, a landscaping operation and CSX Transportation.

3. Are necessary public facilities (both on-site and off-site), such as transportation, sanitation, water, sewer, drainage, emergency services, education, recreation, etc. adequate to serve the proposed uses?

STAFF: Yes, the proposed uses of Hi Btu facility will become part of the overall operation of the existing landfill, which has the necessary public facilities.

4. Do the proposals comply with the following specific standards required to obtain the conditional use permit requested?

Yes, the proposal meets the specific standards that are already in effect under the existing Conditional Use Permit for the landfill.

4.2.22 Earth Excavation, Filling, and Refuse Disposal Operations, Major

Excavation, Filling, and Refuse Disposal Operations, Major may be allowed in R-R, R-1, M-2 and M-3 Districts upon the granting of a Conditional Use Permit and compliance with the listed requirements.

- A. Defined Any operation which involves a change in the existing ground surface, except (1) grading and shaping of land around a building or structure and except (2) minor earth excavations not constituting a quarry, borrow pit, or commercial operation and/or filling of land with non-combustible, inorganic materials (See Section 04-02-21) shall be subject to the following regulations. Such uses include but are not limited to the following:
- 1. Extraction and development of earth products, mineral and other natural resources, including sand, gravel pits, quarries, and borrow pits.
- 2. Landfills for non-combustible materials.
- 3. Incinerators, public/private.
- 4. Any other landfills (except for hazardous material).
- 5. Commercial composting.
- B. Other Standards The proposed operation shall meet all requirements of the adopted Environmental Performance Standards.
- C. Neighborhood Protection The operation shall be conducted in such a manner as to offer protection to the neighborhood against possible detrimental effects, taking into consideration the physical relationship to surrounding properties and access to the site including any nearby local (residential) streets
- D. Information to be Filed:
- 1. Drawings A plan drawn at a scale of not less than 100 feet to the inch showing the following:
- a. Boundaries The exact boundaries of the site and access to public ways.
- b. Use of Land Present and proposed use of land, the arrangement, fully dimensioned, of all existing and proposed buildings, structures, roads, drives, parking areas, loading spaces, water, sewer, power, and other utility lines, sanitary facilities, surface drainage, landscaping, fencing, and all other features and facilities to be installed or used in connection with the proposed operation.
- c. Contours Show by contours of not less than 2 foot intervals (except on extremely steep slopes):
- i. The present surface of the site and the surrounding properties within 50 feet from its boundaries by the use of dashed contours.
- ii. The ultimate depth elevations of the area to be excavated or filled by the use of dot and dash contours.
- iii. The ultimate finished surface of the site after all excavation and filling operations are completed by the use of solid line contours.
- iv. If the ultimate finished surface elevation is exactly the same as the ultimate depth elevation, solid line contours alone may be used, but must be so labeled in the plan legend.
- d. Excavation Methods Cross sections at critical points to illustrate the methods to be employed in the process of excavation and fill.
- e. Sequence of Operations Locations where excavation and filling operations will commence and the procedural sequence of operations.

- f. Surface Drainage Methods to be employed for the management of quantity and quality of surface drainage during and after completion of operations.
- g. Volumes The volumes of materials to be excavated and filled for each location on the site where operations are to take place.
- h. Off-Site Improvements Improvements such as new roads and pavement to be installed off the site to enable the operation to be carried out.
- i. Adjoining Property Owners The plan shall show the names and addresses of the owners of the site and all adjoining properties, the name and address of the engineer who prepared the plan, scale, north point, the geographical relationship of the site to existing public ways and major or minor arterials as designated in the Comprehensive Plan for all of Jefferson County, Kentucky.

E. General Standards:

- 1. No excavation nor filling shall be made within 50 feet of any boundary of the site.
- 2. Side slopes of excavation and fills in earth, sand or gravel shall not exceed one foot vertical to two feet horizontal and shall be blended into undisturbed existing surfaces.
- 3. A continuous fence a minimum of 6 feet high shall be placed along the boundaries of excavated areas and provided with gates of the same construction as the fence which shall remain locked at all times when active operations are not taking place and shall be properly maintained until all operations are completed.
- 4. Additional landscaping is required in the buffer areas between excavation and fill areas and buildings and structures.
- 5. Provisions shall be made for the disposal of surface water falling on or crossing the site at all times during and after completion of the operations. The operations shall not obstruct the normal flow of any public drain, or abrogate the riparian rights of any other party to a stream or drain. No operation shall begin until construction approval has been approved from the agency responsible for surface water drainage.
- 6. The depth of excavation and the materials to be used for fill shall not have any adverse effect on the supply, quality, or purity of ground water or wells. In no case shall an excavation be carried to a depth below an elevation of 410 feet above mean sea level.
- 7. A layer of clean earth at least two feet thick shall be deposited and thoroughly compacted over all fill to bring the surface to the finished surface grade as shown on the topographic plan filed with the application.
- 8. The finished surface of the site shall bear the proper relationship to that of adjoining properties.
- 9. The installation of roads, parking areas, buildings, structures, and operational facilities and equipment shall be located on the site so that adjoining properties will not be adversely affected.
- 10. Excavation and fill materials shall be moved off and onto the site in vehicles approved by the appropriate Director of Works.
- 11. All filling operations and final approval shall be in strict conformity with the regulations of the Louisville and Jefferson County Board of Health; Air Pollution Control District; Kentucky Department for Environmental Protection and the appropriate Director of Works. Letters or Certificates of Approval of the plans by the above agencies indicating prior review shall be filed prior to the issuance of any Conditional Use Permit. Uses shall not begin until final approval has been obtained and filed in the Board of Zoning Adjustment docket file.
- 12. The operation shall be conducted so as not to create a nuisance or cause undue noise, vibration, dust, odor, or light to adjacent properties. The premises shall be kept in a neat and clean condition at all times. No loose paper or debris shall be allowed on the site except on areas where active filling operations are taking place. Dusty conditions shall be corrected by sprinkling with water or by the use of calcium chloride or other

method that meets current state standards. No fires shall be permitted. Any smoldering flame or spontaneous combustion shall be immediately extinguished.

- 13. In no event will the premises be used for salvage operations of any kind. No separation or picking of waste materials will be permitted. All unacceptable fill materials as noted elsewhere in this section shall be removed from the premises immediately after delivery.
- 14. Except for protective fences, no building or structure erected in connection with the operation shall be located in any required yard or closer than 30 feet from any property line.
- 15. A specific written or site plan for vehicle cleaning facilities to prevent the tracking of mud, dirt or other debris onto any public roadway shall be reviewed and approved by the appropriate Director of Works before public hearing.
- 16. No materials defined as hazardous by these regulations, by the Kentucky Cabinet for Natural Resources and Environmental Protection or Federal Environmental Protection Agency will be allowed as fill.
- F. Standards for Specific Operations:
- 1. In addition to the general standards listed above, the following additional standards shall apply to:
- a. Land-fills for non-combustible material:
- i. Fill material shall be limited to inorganic materials and other substances not subject to decomposition, combustion, or the production of odors.
- ii. Materials shall be spread and thoroughly compacted as they are deposited.
- b. Incinerators, public and private:
- i. No incinerator building or structure shall be located closer than 200 feet from any site boundary line, and no other building or structure used in connection with the operation shall be located closer than 30 feet from any site boundary line.
- ii. The entire site shall be enclosed with fencing and gates as required by this Section.
- iii. All materials delivered to the site which are organic or of organic origin or other combustible materials such as paper, cardboard, rubber, plastic, wood fiber, sawdust, floor sweepings, plaster board, framing, lumber, laths, tree stumps, trunks, branches, foliage, furniture, rags, garbage, and industrial wastes and including metal and glass containers shall be burned in the incinerator.
- iv. All residue resulting from the burning operations and other fill materials which are inorganic or substances which are not subject to decomposition, combustion, or the production of odors shall be disposed of properly.
- v. All materials which are to be burned shall be placed on or in a concrete slab or hopper enclosed by a building, masonry walls, or chain link type fencing at least 6 feet high provided with doors or gates which shall be securely locked when the incinerator is not in operation. The materials shall be transferred from the slab or hopper into the incinerator and shall be burned as soon as practicable. The slab or hopper shall be kept clear of all materials when not in active use.
- vi. There shall be no separation or picking of materials or storage for salvage thereof on the site (scavenging).
- vii. All deliveries of materials to the site, shall be done between the hours of 7:00 A.M. and 6:00 P.M. on weekdays only, except otherwise necessitated by extraordinary circumstances.
- viii. A watchman shall be stationed at the site at all times for whom a suitable shelter or living quarters shall be provided.
- ix. Sanitary toilet facilities shall be provided on the site in accordance with the requirements of the Department of Health.
- c. Any other landfills (except hazardous materials):
- i. No building or structure, except fencing, used in connection with the operation shall be located closer than 30 feet to any site boundary line.
- ii. All plans shall show all pipelines used for gas collection, migration, etc. as well as the location of vents, flares, etc.
- iii. The entire site shall be enclosed with fencing and gates as required by this Section.
- iv. All materials delivered to the site which are organic in origin and all paper, cardboard, plastic, metal and glass containers, wood fiber, sawdust, floor sweepings, plaster board, framing lumber, laths, tree stumps, trunks, branches, foliage, furniture, rags, garbage, and industrial wastes shall be deposited and thoroughly

compacted in layers not to exceed two feet in depth. Rubber tires, dead animals, and by-product wastes of a gaseous, liquid, or semi-liquid nature such as tar, paints, solvents, sludge, rubber, and plastics and other flame or fume producers may be permitted as fill material after the Kentucky Natural Resources and Environmental Protection Cabinet issues permission, unless specifically prohibited by the Board of Zoning Adjustment. Each day's deposit, after compaction, shall be covered with a layer of earth at least 6 inches in thickness after compaction. The face of the fill as well as the horizontal surface shall be covered with a layer of earth to prevent any movement of fill by wind or water erosion. Alternative methods may be allowed if approved by the Kentucky Natural Resources and Environmental Protection Cabinet and the Board.

- v. There shall be no separation or picking of materials or storage for the salvage thereof (scavenging) on the site. All unacceptable fill materials as noted above shall be removed from the premises immediately after delivery.
- vi. Water lines shall be installed, connected to a public water supply, or to some other source, which by use of pumps will provide water in sufficient quantity to combat fires or settle dust.
- vii. Sanitary toilet facilities shall be installed in accordance with the requirements of the Department of Health. viii. No fires shall be permitted. Any smoldering flame or spontaneous combustion in the fill shall be immediately extinguished.
- ix. A watchman shall be stationed at the site at all times for whom a suitable shelter or living quarters and sanitary facilities shall be provided on the site.
- x. The premises shall be kept neat and clean at all times, no loose paper or debris shall be allowed on the site except on areas where active filling operations are taking place. Dusty conditions shall be corrected by sprinkling with water or by the use of calcium chloride or some other method that meets current state standards.
- xi. All deliveries of materials to the site, filling, spreading, compacting, and grading shall be done between the hours of 7:00 A.M. and 6:00 P.M. on weekdays only.
- xii. Filling operations shall begin immediately upon the issuance of a permit. All areas shall be refilled to finish grades as shown on the topographic map filed with the application within a period of five years after commencement of operations. The Board may extend such time limit after a public hearing, but in any event all excavations on the site shall be refilled to finish grade within 10 years after commencement of operations. xiii. No filling activities shall occur within 200 feet of a residential structure existing at the time of issuance of the Conditional Use Permit.
- d. Borrow pits and Earth Excavations:
- i. No building or structure, except fencing, used in connection with the operation shall be located closer than 30 feet from any site boundary line.
- ii. Areas where excavations have been made and are taking place shall be enclosed with fencing as required above.
- iii. Sanitary toilet facilities shall be installed in accordance with the requirements of the Department of Health.
- iv. A watchman shall be stationed at the site at all times when active operations are taking place for whom a suitable shelter or living quarters and sanitary facilities shall be provided on the site.
- v. No excavation, screening, stockpiling, filling or hauling shall be done except between the hours of 7:00 A.M. and 6:00 P.M. on weekdays.
- vi. Re-filling operations as required shall begin immediately on areas when excavations have been made to the ultimate depth and such areas shall be refilled to finish grade as shown on the topographic map filed with the application within a period of five years after commencement of excavation operations. The Board may extend such time limit after a hearing, but in any event all excavations on the site shall be refilled to finish grade within 10 years after commencement of operations.

G Guarantee: To insure the strict compliance with all of the above conditions and requirements, the applicant shall deposit with the Board a bond through a an instrument satisfactory to the Board. The amount of the instrument shall be 150% of the estimate for remediation obtained from a qualified engineer licensed in the Commonwealth of Kentucky. 4.2.23 Earth Excavations/Fill, Minor Earth Excavations/Fill, Minor not constituting a quarry, borrow pit or commercial operation and

TECHNICAL REVIEW

The applicant is still in the process of finalizing plans with MSD.

STAFF CONCLUSIONS

Based upon the information in the staff report and submitted by the applicant, BOZA must determine if the proposal meets the standards for granting the modified CUP as established in the Land Development Code.

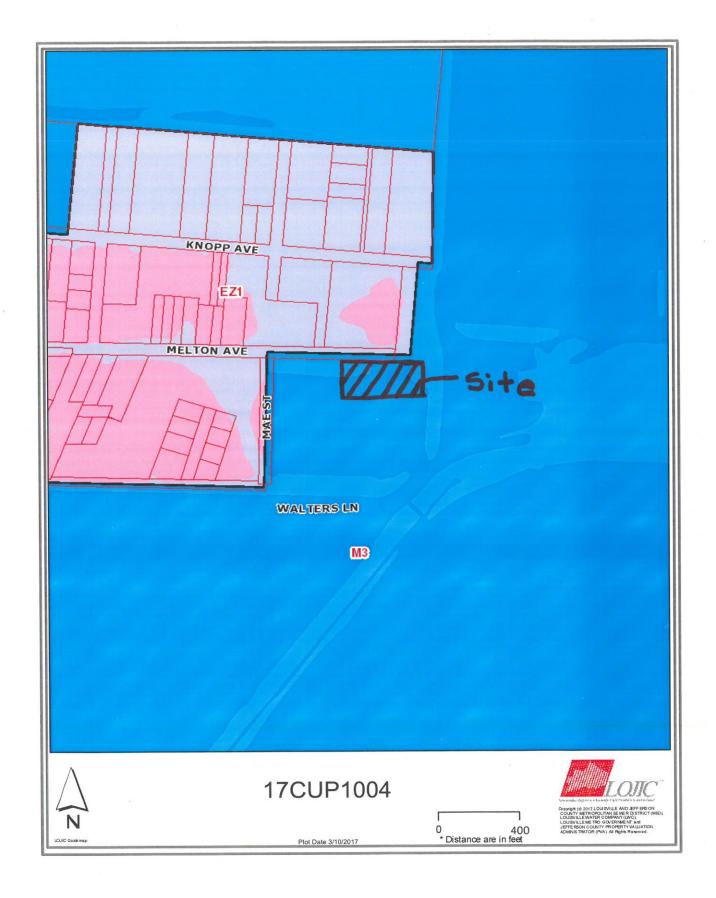
REQUIRED ACTIONS

APPROVE or DENY the modified Conditional Use Permit

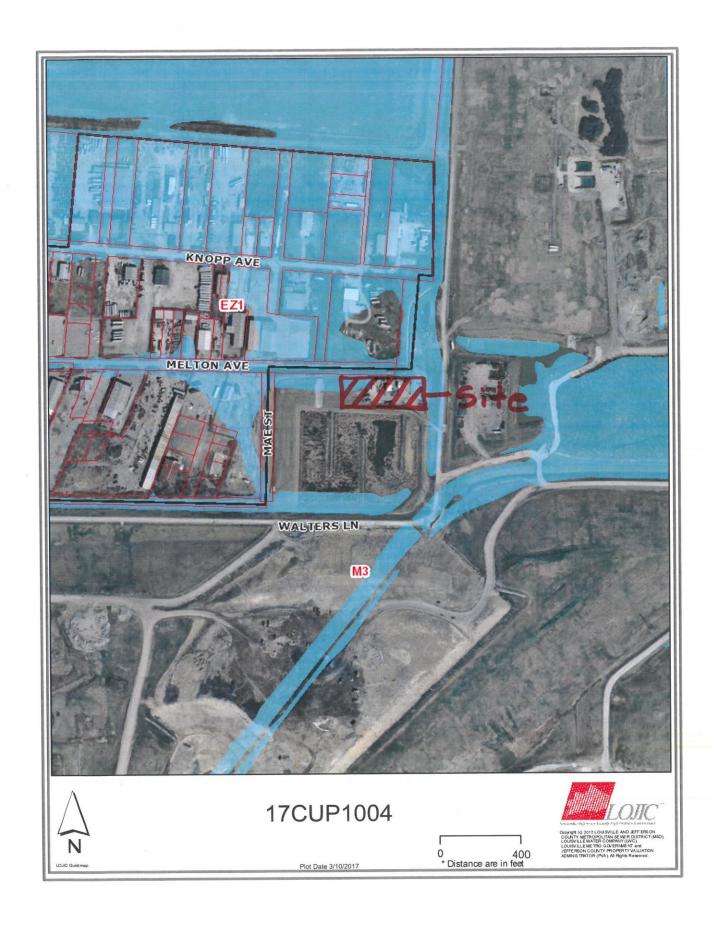
ATTACHMENTS

- 1. Zoning Map
- 2. Aerial Photograph
- 3. Conditions of Approval from prior cases

1. Zoning Map



2. <u>Aerial Photograph</u>



3. Conditions of Approval for a Borrow Pit and Earth Excavation (B-83-74)

- 1. An hourly inspection is to be made by a patrol during the hours the operation is closed.
- 2. Saturday hours of 7 a.m. to 5 p.m.
- 3. No fencing be required along the portion of the site abutting the Southern Ditch.
- 4. That the Water Management Section of the Jefferson County Department of Public Works be advised of the sale of fill material exceeding 100 cubic yards to an individual buyer and the buyer's stated usage for this material.
- 5. Compliance with all regulations of all agencies having jurisdiction over said use.

Conditions of Approval for Consolidation and Expansion of Landfill (B-28-85)

The Board does hereby WAIVE Section IV, D., 27., Items b.; b., (3); c., (1); d., (1), ©, xi.; and item d., reviewed at 5 year intervals, however, no public hearing shall be required on the occasion of each 5 year review unless requested by the Zoning Enforcement Officer.

- 1. The landfill shall be operated in strict compliance with all applicable listed requirements of section IV, D., 27 of the Zoning district Regulations, unless a specific waiver of the requirement has been granted by the Board of Zoning Adjustment.
- 2. The landfill shall be operated in strict compliance with the approved site development plan and the Environmental Impact Report and Operating Plan submitted by the applicant. The November, 1984, Environmental Impact Report and Operating Plan shall be considered a part of the approved site development plan.
- 3. The landfill shall be operated in strict compliance with all applicable Federal, State, and local regulations applicable to any portion of the operation.
- 4. All drainage improvements and the operation of the landfill shall be in conformance with all conditions of approval by the Jefferson County Public Works and Transportation Cabinet Water Management Engineering Section and the Louisville District Army Corps of Engineers.
- 5a. SCA Services shall maintain all perimeter ditches and sedimentation basins. This maintenance shall be performed annually or within 30 days of written notice from the Jefferson County Department of Public Works and Transportation.
- b. SCA Services shall provide construction plans for and construct a five foot wide flat bottom ditch in the 60' right-of-way north of the Grade Lane tract at such time as the right-of-way is converted to provide use for drainage purposes. Additionally SCA Services shall remove overfill from adjoining tracts where permission of effected property owners is obtainable.
- c. SCA Services provide construction plans and construct a perimeter ditch parallel with the south property line of the Grade Lane tract. This perimeter ditch shall be installed only if the Grade Lane tract

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is creating a drainage problem for the adjacent property to the south. The construction of this ditch shall be completed within ninety days of written notice from the Jefferson County Department of Public works and Transportation.

6. No fill materials shall be accepted which are classified as hazardous or toxic waste.

Conditions of Approval for a Borrow Pit (B-176-89)

- The filling operation shall be conducted in strict compliance with the listed requirements of Section, D.,
 And the approved site plan. No deviation from the excavation and refilling plan submitted shall be allowed without prior review and approval by the Board.
- 2. The name, address, and telephone number of the person, company, corporation or other party responsible for the operation of the filing of the site shall be submitted to the staff of the board prior to the commencement of the filing operation and no later than 30 days from the Board's final action on this case.
- 3. All filling will be conducted in compliance with any requirements of the Metropolitan Sewer District.
- 4. The refilling operation shall be completed within 5 years of this approval by the Board.
- 5. The applicant shall deposit with the Board a guarantee in the amount of \$250,000.00 to insure strict compliance with all conditions and requirements of the Conditional Use Permit.
- 6. A 6 foot chain link fence shall be installed around the borrow area as shown on the site plan prior to any excavation occurring on the site.
- 7. A truck wash shall be installed before the refilling operation begins.
- 8. Construction approval shall be obtained from the Metropolitan Sewer District prior to excavation and refilling.
- 9. The types of refill material shall be limited to soil, rock, concrete, asphalt, and sand.

Conditions of Approval for a Borrow Pit (B-9-94)

- 1. The site shall be developed in strict compliance with the approved development plan. No further development shall occur on the site without prior review and approval by the Board.
- 2. The site shall be landscaped in accordance with the requirements of Article 12 of the Zoning district Regulations by June 1, 1994 or the approval of the proposed landfill conditional use permit, whichever comes first.
- 3. Prior to the use of the facility as a borrow pit, a bond of \$64,000 shall be filed with the Board of Zoning Adjustment.
- 4. The hours of operation of this facility shall be from 10:00 A.M. to 9:00 P.M. Monday through Saturday through September 30, 1994.

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- 5. Prior to issuance of a permit for this site, the applicant shall provide written documentation from the U.S. Army Corps of Engineers and the Kentucky Division of Water that this project has received necessary approval from those two agencies.
- 6. The Conditional Use Permit shall be "exercised" as described in KRS.237 within one year of the Board's vote on this case. If the Conditional Use Permit is not so exercised, the site shall not be used for a borrow pit without further review and approval by the Board.