

Mecklenburg Co.

14

60131992



United States
Department of
Agriculture

Soil
Conservation
Service



September 21, 1992

Re: N. Mecklenburg County Landfill
Application to DEHNR for Approval of C & D Landfill

Mr. Ellis Clayton
Environmental Engineer
Solid Waste Section
DEHNR
PO Box 27687
Raleigh, NC 27611-7687

Dear Mr. Clayton:

Two soil types are shown for the area of the C & D Landfill. They are Enon sandy loam and Wilkes loam.

The Enon soil is rated as having severe limitations for landfills due to being too clayey and also a poor daily cover for a landfill.

The Wilkes soil is rated as having severe limitations for landfills because of the shallow depth to rock. It is rated as a poor daily cover for a landfill due to the thin layer of soil above rock.

I recommend a fescue and sericea lespedeza seed mixture for stabilizing the site. Lespedeza is slow to establish and the fescue will provide a cover until the lespedeza gets established. Weeping love grass and sericea lespedeza would be another seed mixture, depending on time of seeding. See attached seeding recommendations for seed, lime, fertilizer rates and seeding dates.

Sincerely,

Bruce T. Wilson
District Conservationist

Attachment

cc. Frank B. Hicks



The Soil Conservation Service
is an agency of the
Department of Agriculture

PERMANENT VEGETATIVE ESTABLISHMENT ON EROSION AREAS

1. Site Preparation - Grading of the area to be seeded should be done in such a way as to leave the soil in the best possible condition. This includes leaving as much topsoil as possible or replacing, where feasible, to improve the condition.

Where possible, grade and shape slopes to 3:1 ratio slope (3 foot horizontal to 1 foot vertical) or flatter to permit the use of conventional equipment for seedbed preparation. No seedbed preparation may be necessary on sites where seeding is done immediately after grading is done. The excavation work should be completed during the optimum seeding dates for the desired seeding mixtures.

2. Lime and Fertilizer - Where possible conduct soil test for lime and fertilizer recommendations. In the absence of a soil test report, apply 2 tons per acre of finely ground dolomitic limestone (92 lbs per 1,000 square feet) and 500 to 800 lbs of 20% superphosphate or equivalent per acre (12 to 18 lbs per 1,000 square feet). Additional amounts and analysis of fertilizers to use at seeding are:

A. Grasses alone - 1,000 lbs per acre of 10-10-10 fertilizer or equivalent (23 lbs per 1,000 square feet).

B. Grasses and *legumes or legumes alone - 800 to 1,000 lbs per acre of 5-10-10 fertilizer or equivalent (18-23 lbs per 1,000 square feet).

C. Normally an additional application of 30 to 50 lbs per acre of nitrogen is needed within 3 to 9 months to help establish grass plantings. Application should be timed to the growing cycle of the species being established.

3. Seedbed Preparation - Work lime and fertilizer into the soil, using a disk, rake, or similar equipment. Sow seed uniformly across the area. Cover seed to a depth of approximately $\frac{1}{2}$ to 1 inch, depending on the size of the seed.

4. Mulching - Dry, unchopped, unweathered small grain straw or hay free of seeds of competing plants - spread at the rate of 1.5 tons per acre. Apply mulch uniformly so that approximately 25% of the ground is visible. Other mulch materials may be used.

5. Mulch Anchoring - Anchor mulch immediately after placement to minimize loss by wind and water. Size of an area, type of site, and cost should be used to determine an anchoring method. Emulsified asphalt tack at the rate of 225 gallons per acre is often used due to the ease of application over large areas, cost, etc.

* Footnote - legumes are nitrogen-fixing plants such as clover, sericea lespedeza, and crownvetch.

6. Seeding Mixtures for Mecklenburg County

Note: Attention should be given to Recommended Planting Dates and the site in selecting seed mixtures.

<u>Seeding Mixtures</u>	<u>Planting Rates Per Acre</u>	<u>Recommended Planting Dates</u>	<u>Notes</u>
Common Bermudagrass (hulled)	12 lbs	Apr 15-June 30	Likes south slopes, well drained, sunny sites, stands foot traffic.
Common Bermudagrass (unhulled)	20 lbs	Feb - March	
Crownvetch (seed) and Tall Fescue	15 lbs 20 lbs	Aug 29-Sept 20 or Feb. 20-Apr 15	Avoid wet sites. Mow only to control brush. Fescue may be used to increase land cover during establishment of crownvetch.
Weeping lovegrass	3 lbs	Apr 15-June 15	Gives quick summer cover - well adapted to droughty sites. Best in mixtures with sericea lespedeza - tends to become clumpy with age.
Sericea lespedeza (scarified)	50 lbs	Mar 15-June	Avoid wet sites - will persist and furnish cover on eroded, draughty sites and subsoil material.
Sericea lespedeza (unscarified)	60 lbs	Sept 15-Feb	Tolerates low level of management. May be seeded alone or overseeded on fescue, lovegrass, small grain, and other compatible plants during the fall and winter months. "Appalow" best cultivar (shorter growing)
Sericea lespedeza (scarified and Weeping lovegrass (hulled)	50 lbs 3 lbs	Mar 15-June	Love grass provides quick protective cover.
Sericea lespedeza (scarified) and Common Bermudagrass	50 lbs 8 lbs	Mar 15-June	Bermudagrass gives quick land cover and heals in open areas. Bermudagrass usually disappears where sericea establishes a canopy.
Sericea lespedeza (scarified) Tall Fescue	50 lbs 30 lbs	Mar-Apr	Scarified sericea may be spring seeded on Fescue seeded the previous fall.

<u>Seeding Mixtures</u>	<u>Planting Rates Per Acre</u>	<u>Recommended Planting Dates</u>	<u>Notes</u>
Sericea lespedeza (unscarified)	60 lbs	Aug 15-Oct	If sericea seed is unavail- able at planting time it may be overseeded on Fescue later in the winter.
Tall Fescue	30 lbs		
Tall Fescue	80 lbs	Aug 15-Oct Feb 15-Apr 15 Note: Fall plantings are more success- ful	Not well suited to infer- tile, droughty, sandy soils. Requires good maintenance.
Tall Fescue and Red Fescue	30 lbs 20 lbs	Aug 20-Oct 10 Feb 15-Apr 15 Note: Fall plantings are normally more successful	Red fescue in this mix- ture has a tendency to fill in voids because it is shade tolerant.
Tall Fescue and Browntop millet or Sorghum-Sudan Hybrids	60 lbs 35 lbs 30 ^{or} lbs	July 15-Aug	Keep annuals cut back to 10-12 inches. Mulching is needed.
Tall Fescue and Rye	60 lbs 30 lbs	Nov-Jan	Use only when necessary to complete a job. Mulching will be necessary to provide erosion control. Keep annuals cut back to 10-12 inches.

7. Maintenance - Most important controllable factor in retaining an effective vegetative cover.

- A. Control competition - control by mowing or herbicides
- B. Irrigation - if soil moisture is deficient, supply new plantings with adequate water (3 to 4 inches penetration) for plant growth at 10 day intervals. Most important on late seedings or abnormally dry, hot seasons.
- C. Reseed bare areas at recommended planting dates.
- D. Lime and Fertilizer - apply according to soil test reports, in the absence of such a report apply as follows:

Lime - Apply 1 to 2 tons per acre of dolomitic limestone (43 to 92 lbs per 1,000 square feet) during late fall or winter every 4 to 5 years.

Fertilizer - Fertilize annually.

-Pure stands of tall fescue and mixtures of tall fescue and red fescue - Apply 400 to 500 lbs per acre (9 to 12 lbs per 1,000 square feet) of 10-10-10 fertilizer or equivalent in early fall. Additional fertilization with nitrogen or a complete fertilizer is usually needed in early spring. Do not use nitrogen on fescue from mid-April to mid-summer.

- Pure stands of Bermudagrass and lovegrass - Apply 400 to 500 lbs per acre (9 to 12 lbs per 1,000 square feet) of 10-10-10 fertilizer or equivalent when the plants start to green up in the spring. Topdress with 60 lbs of nitrogen per acre (1 lb per 1,000 square feet) during the growing season.
- Pure stands of sericea lespedeza and crownvetch - Fertilize in early spring with 400 to 500 lbs per acre of 0-10-20 (9 to 12 lbs per 1,000 square feet).
- Mixtures of sericea lespedeza, fescue, lovegrass, or Bermudagrass - Fertilize in late winter or early spring with 400 to 500 lbs per acre (9 to 12 lbs per 1,000 square feet) of 5-10-10 or equivalent. In fescue-sericea lespedeza mixtures, apply in the fall if sericea lespedeza is developing better than fescue.



FRANK B. HICKS ASSOCIATES, INC.

CONSULTING ENGINEERS - SURVEYORS - PLANNERS

1817 Wedgedale Drive, Charlotte, N. C. 28210

Telephone: (704) 527-1586

FAX: (704) 553-1643

September 1, 1992



Mr. Bill Mills
Permits and Engineering Div.
Division of Environmental Engineering
P. O. Box 29535
Raleigh, N. C. 27626-0535

Re: N. Mecklenburg Landfill
application for a permit
as a Construction and Demolition Landfill

Dear Mr. Mills:

N. Mecklenburg Landfill has made application to the Solid Waste Section for a permit to accept "Inert Debris" and "Construction and Demolition Debris" as defined in the Solid Waste manual on Landfills. This landfill has operated legally under a Mecklenburg County Environmental Protection Dept. since 1988 and was in operation several years before that date.

The initial landfill area will be 10 acres of which no more than 25% can be open at any time. The landfill will not accept garbage, barrels, toxic waste, etc. but only those as defined under the above classifications.

Mr. Ellis Cayton of Solid Waste Section (phone (919) 733-0692 Raleigh) requested that I contact your department to assess the impact of the new EPA Stormwater "ordinance" on this project.

Please send me the available information on this program and comments on whether this landfill will fall under the new ordinance.

Many thanks,

FRANK B. HICKS ASSOCIATES, INC.

Frank B. Hicks, Jr., P.E.

FBH/b

CC: Mr. Ellis Cayton

N. Mecklenburg Landfill



FRANK B. HICKS ASSOCIATES, INC.

CONSULTING ENGINEERS - SURVEYORS - PLANNERS

1817 Wedgedale Drive, Charlotte, N. C. 28210

Telephone: (704) 527-1586

FAX: (704) 553-1643



August 28, 1992

N. C. Department of Environment, Health and Natural Resources
Division of Solid Waste Management
P. O. BOX 27687
Raleigh, N. C. 27611-7687

Attn: Mr. Ellis Cayton

Re: N. MECKLENBURG LANDFILL

Gentlemen:

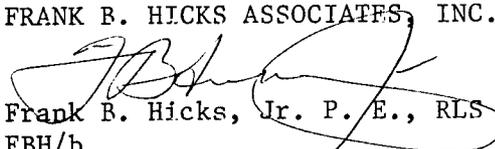
We are enclosing the following in response to Mr. Cayton's letter of August 13, 1992 in triplicate:

1. Addenda to the May 29, 1992 Study.
2. Exhibit I. Sedimentation Control, erosion and stormwater control computations.
3. Exhibit II. Letters of response regarding landfill application from State, County, Town of Huntersville, and Owners. (8 items.)
4. Landfill Zoning note for photograph which you already have. (please stick on photo. Thanks.)
5. Three sets of revised drawings to reflect "Site Area Method of filling."

If additional information is desired, please contact us.

Many thanks,

FRANK B. HICKS ASSOCIATES, INC.


Frank B. Hicks, Jr. P. E., RLS
FBH/b

CC: N. Mecklenburg Landfill

"AERIAL PHOTO DOES NOT SHOW PRESENT ZONING."

PLEASE ATTACH THE STICK ON ATTACHED BELOW TO THE PHOTOGRAPH.

MANY THANKS.

N. MECKLENBURG LANDFILL PROPERTY IS ZONED R-2, SINGLE FAMILY RESIDENTIAL BY THE TOWN OF HUNTERSVILLE. THE LAND WAS APPROVED FOR ZONING COMPLIANCE IN 1988 BY MECKLENBURG COUNTY AND IS APPROVED TO CONTINUE AS A NON-CONFORMING USE UNTIL 1996. THE LANDFILL PLANS TO FILE FOR "REZONING" UNDER THE PRESENT TOWN ORDINANCES.



FRANK B. HICKS ASSOCIATES, INC.

CONSULTING ENGINEERS - SURVEYORS - PLANNERS

1817 Wedgedale Drive, Charlotte, N. C. 28210

Telephone: (704) 527-1586

FAX: (704) 553-1643

August 27, 1992

Memo to: Mr. Larry Griffin

Re: Revised data to be sent to State
on N. Mecklenburg Landfill.

Attached are the three pages of information that answers the various questions
in the last letter from Ellis Cayton, Solid Waste Section

You already have a set of revised plans. Note that on sheet #3

I have added two plan views he required showing the "bottom of the
excavation" on the right and Final fill elevations on the left.

You are not stuck with these in that I doubt you can excavate this
deep in the hardpan decayed rock.

One sheet shows notes he requested to be added to sheet #3.

Call me if you have any comments/changes. The plans will be mailed
late today or tomorrow.

Thanks

Frank

r. 03

APPLICATION FOR APPROVAL FOR
A DEMOLITION LANDFILL FOR
N. MECKLENBURG LANDFILL
ADDENDA TO MAY 29, 1992 STUDY

Referring to Mr. Ellis Cayton's letter of August 13, 1992, and responding to "Site Plan Application" comments in the order of the comments:

1. Attached is the May 14, 1992 letter from Ms. Ann W. Kelley of Natural Heritage Program that was submitted May 29. Also attached are several other letters from "Cultural Resources, two from "Fish and Wildlife" and Mecklenburg County Permit to operate a landfill from 1988 to present.
2. We are enclosing a "stick-on" describing zoning and would appreciate your adding this to the photograph. This reflects Town of Huntersville "Zoning letter" attached.
3. See Letter from Mecklenburg County Environmental Health Dept., Mr. Ray Tilley regarding lack of intakes in a two mile radius of this site.
4. See working drawings. All sheets have been revised to show use of Area Fill Method. Much of the detailed information is shown on sheet #3.
5. See Letter from Town of Huntersville concerning zoning coverage. The Town just recently acquired perimeter zoning authority.
6. We assume the Hydrogeologist's Study will have been reviewed by now.

APPLICATION FOR APPROVAL FOR
A DEMOLITION LANDFILL FOR
N. MECKLENBURG LANDFILL

ADDENDA TO MAY 29, 1992 STUDY. (Continued)

Referring to Mr. Ellis Cayton's letter of August 13, 1992, and responding in the section referring to "Construction Plan Application" comments:

1. At least a 50 foot wide buffer will be furnished. Mecklenburg County Ordinance under which this landfill has operated since 1988.
2. This Geological Study has been on file with your office since June 18, 1992. We would hope that a review had begun by now.
3. Revised drawings are submitted, attached, showing the application of the "Area Fill Method" coordinated with the mining operation.
4. Section 0.0504 (2)(h) (v, vii, ix, and x) in that order:
 - 2h. The Owners deed to the property was submitted earlier and is again included.
 - 2ii. Mr. Larry Griffin and Mr. O. L. Parker, the Owners listed the deed will be the operators. See attached letter from Owners submitted earlier.
 - 2v. After buildout of a majority of the landfill some portion may be used for landfill or cattle farming, however, ultimate buildout will probably determine final usage after closure.
 - 2vii. Calculation for erosion and sedimentation control are on the drawings, included as a separate submittal and an approval letter for the "sediment" control plan as submitted to your office earlier. See attached calculations.
 - 2x. Section 0.0503 (2) responses are as follows:
 - 2(a)(i) Since this landfill will not accept "garbage" but is limited to "inert debris" and "construction and demolition debris" and since gases will be vented thru the sides of the fill slopes, gases in the site structures should be well below lower explosion limits and less than 25% of gases generated in the site structures. Gases at the property boundary should be minimal.
 - 2(b) Site access is limited by a manned office at the entrance off Holbrooks Rd. and a fence and locked gate at unmanned times.
 - 2(c)(1) Since disposal materials do not contain "garbage", contaminated leachate should not be a problem, however, the Owners are aware of NPDES requirements that contaminated leachate or water cannot be discharged to the adjacent streams.
 - 2(c)(ii) A Plan for controlling "siltation and erosion" approved for the project. Copies of the approving letter is on file with your office. Dredging is not a part of this landfill operation and will not be used.

APPLICATION FOR APPROVAL FOR
A DEMOLITION LANDFILL FOR
N. MECKLENBURG LANDFILL

ADDENDA TO MAY 29, 1992 STUDY (Continued)

0.0503 Continued.

2(c)(iii) The Owners are aware that no silt or polluted water may be discharged from the site to adjacent waters.

2(d)(i) Liner is not required for this waste.

2(d)(ii) The deepest point in the existing mined area and lowest point in the area to be landfilled is elev. 994. at test well No. TW2 where the groundwater elevation was at elev. 678.13 (see Geological Study on file. fig. 4 and table 1 and 5.

2(e) Open burning is not part of this landfill operation and will not be used.

2(f) A 75 ft buffer is a requirement of the Mecklenburg County Ordinance under which the landfill currently operates. The 75 ft. wide buffer will be retained.

2(g) a letter of approval of the erosion control plan and grassing is on file with your office.

GENERAL NOTES ON LANDFILL OPERATION:

1. BEGIN FILL AT AREAS DESIGNATED THUSLY  IN S. W. CORNERS OF SITE. (SEE PLAN THIS SHEET)
2. PLACE DEBRI SUCH THAT IT CAN BE COVERED AT LEAST WEEKLY.
3. AS SIDE SLOPES ARE COMPLETED, COVER WITH MINIMUM OF 2 FEET OF SOIL AND GRASS WITH LESPEDEZA. SIDE SLOPES SHOULD NOT EXCEED A 2:1 SLOPE. DESIGN SHOWN IS FOR 3:1 WHICH IS EASIER TO MAINTAIN
4. APPROXIMATE "TOP OF COMPLETED LANDFILL" AND "FINISH GRADE" ELEVATIONS ARE SHOWN ON EACH CROSS SECTION. ALSO THE APPROXIMATE BOTTOM OF MINING ELEVATIONS ARE SHOWN ON "PROPOSED EXCAVATION CONTOUR PLAN", THIS SHEET.
5. CLEAN OUT SEDIMENT BASIN AFTER EACH RAIN OR AS NEEDED.
5. AT FINAL CLOSURE OF THIS LANDFILL AREA:
 - A
6. AT FINAL CLOSURE OF THIS LANDFILL AREA:
 - A. ESTABLISH GOOD STAND OF LESPEDEZA OR FESCUE GRASS ON ALL AREAS OF THE LANDFILL, INCLUDING AREAS FINISHED EARLIER.
 - B. PHASE OUT AND GRASS SEDIMENT BASINS ONLY WHEN NOT MORE SILT IS COLLECTED IN BASIN AND AFTER GRASS IS ESTABLISHED ON ALL OTHER AREAS OF THE LANDFILL.
 - C. FINAL COVERAGES ON ALL SLOPES AND TOP IS A MINIMUM OF 2 FEET OF SOIL COVER.

*To be added to drawings
Sheet #3*

4

TOWN OF HUNTERSVILLE

PO. BOX 664

PHONE 875-6541

HUNTERSVILLE, NORTH CAROLINA 28078



August 26, 1992

To: The North Carolina Department of Environment, Health,
and Natural Resources

Re: North Mecklenburg Demolition Landfill: Status of Zoning Compliance

The North Mecklenburg Demolition Landfill (Mecklenburg County tax parcel 019-191-08) lies within the extraterritorial zoning jurisdiction of the Town of Huntersville and is zoned R-2, single family residential. For purposes of zoning administration, the subject property is a 70 acre demolition landfill, which may receive stumps, limbs, leaves, uncontaminated earth, and also concrete, brick, wood, and other uncontaminated construction debris.

The landfill was approved for zoning compliance in 1998 under the prior jurisdiction of Mecklenburg County, and is permitted to continue within the present jurisdiction of the Town of Huntersville as a non-conforming use, grandfathered for continued operation as both a demolition and C&D landfill until June 1, 1996.

Under the zoning regulations of both Mecklenburg County and the Town of Huntersville, there is no distinction between a demolition landfill limited to the burial of natural debris, and a C & D landfill, which may also receive clean construction debris. We acknowledge that a permit is being sought to allow receipt of construction debris, however the proposed change does not constitute a "zoning change of use" according to the operative zoning ordinances.

To continue operation after June 1, 1996, the North Mecklenburg Demolition Landfill must be brought into compliance with the Zoning Ordinance of the Town of Huntersville by petition and approval of a change in zoning from the current R-3 district to a general business or industrial district.

If you need additional information on the zoning status of the North Mecklenburg Demolition Landfill, please let me know.

Very truly yours,

Ann Hammond
Town Planner



8/23/91
mf

North Carolina Wildlife Resources Commission

512 N. Salisbury Street, Raleigh, North Carolina 27604-1188, 919-733-3391
Charles R. Fullwood, Executive Director

MEMORANDUM

TO: Beth Studenberg, Assistant Mining Specialist
Land Quality Section, DEHNR

FROM: Richard B. Hamilton *Richard B. Hamilton*
Assistant Director

DATE: August 23, 1991

SUBJECT: Mining Permit Application, Larry Griffin and O.L. Parker, North
Mecklenburg Landfill Mine, Mecklenburg County.

The subject document has been reviewed by professional biologists on the Wildlife Resources Commission staff and a field investigation was conducted on 16 August 1991. Our comments are provided in accordance with certain provisions of the Mining Act of 1971 (as amended, 1982) (G.S. 74-46 through 74-68 15 NCAC 5).

The applicant(s) are requesting a permit to mine dirt in an area adjacent to the North Mecklenburg Landfill, a privately-owned demolition landfill. As indicated in your cover letter dated August 7, 1991 it is unclear exactly how many acres are to be permitted. The request is apparently for 2 acres in the area designated as "Landfill Area No. 2". ~~Observations made at the site visit, and discussions with an employee at the landfill office, revealed that mining has been occurring on roughly 2 acres of this site for the past 3 years. There is also a small area being mined on the Landfill Area No. 1 site.~~

Two sediment traps were observed during the site visit, one on either side of Cane Creek, but only a portion of the mine runoff flows into a trap. A significant amount of runoff flows directly into Cane Creek, a tributary of the South Prong of Clarks Creek. These check dams are poorly vegetated, and therefore eroded. There are some brushpiles in highly eroded areas but they do not appear to be effective. No other erosion/sediment control measures were noted on the mine site.

This agency recommends denial of a mining permit at this time for the following reasons:

1. The application is unclear as to the size and location of the area to be mined. It was impossible to provide a comprehensive review of this project without this information.

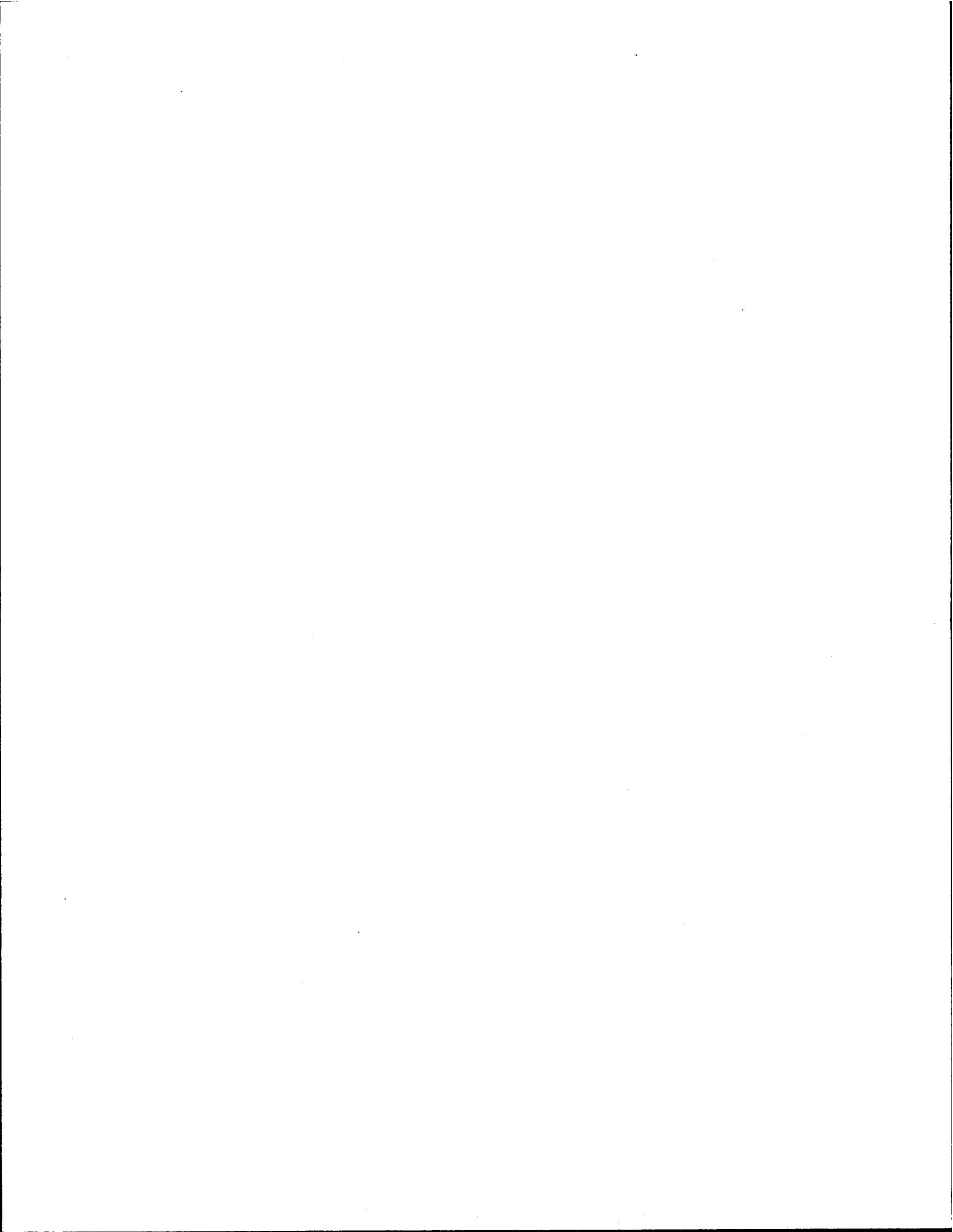
2. While mining has already been taking place on the site, erosion and sedimentation control measures appear to have been virtually ineffective. We recommend that future permit issuance be made conditional upon the applicants' implementing such measures. These measures should, at a minimum, prevent direct runoff from both the landfill and the mine site into Cane Creek. We also recommend that a minimum 50' wide vegetation buffer be established and maintained along both sides of the creek.

The reclamation/revegetation specifications appear to be well done and were much improved by the suggestions of Mr. Bruce Wilson with the U.S. Soil Conservation Service. Every effort should be made to require strict adherence by the applicants to these specifications.

Thank you for the opportunity to comment on this project; we look forward to receiving additional information.

RBH/sp

cc: The Honorable Robert C. Hayes
Ken Knight, District 6 Wildlife Biologist
Stephen Pozzanghera, Habitat Conservation Biologist





MECKLENBURG COUNTY
Department of Environmental Protection

August 18, 1992

Mr. Ellis Cayton, P.E.
State of North Carolina
Department of Environment, Health
and Natural Resources
Division of Solid Waste Management
PO Box 27687
Raleigh, North Carolina 27611-7687

RE: North Mecklenburg Landfill
Holbrooks Road
Huntersville, NC

Copy: Mr. Frank Hicks, P.E.
Frank Hicks Associates, Inc.

Dear Mr. Cayton:

This letter is in response to a request of review from Mr. Frank Hicks, P.E. of Charlotte. His request was for my determination of any public community water supply systems within two miles of the above reference location. The request was also for any large well drillings within the area.

Our Departmental files does not indicate the presence of any such wells within the area. I have been assigned to this program for seventeen years and I do not know of any type of such wells.

This area is populated by private homes with private wells and Charlotte-Mecklenburg Utility connections.

If I may be of any additional service, please telephone me at (704) 336-5500 during normal working hours.

Thank you.

Sincerely,

Ray L. Tilley, R.S.

Ray L. Tilley, R.S.
Public Water Supply Section

RLT/sce

1200 BLYTHE BOULEVARD
CHARLOTTE, N. C. 28203



PERMIT NO. 60-AL
DATE ISSUED 11-03-88

SOLID WASTE PERMIT

O. L. Parker and Larry A. Griffin, Sr. are hereby issued a permit to operate a Demolition Landfill located at 15300 Holbrooks Road in accordance with Article 9, Chapter 130A, of the General Statutes of North Carolina and all rules promulgated thereunder and subject to the conditions set forth in this permit. The facility is located on the below described property.

BEGINNING at a new iron pin (#5 rebar with aluminum cap) located at the intersection of the southerly right of way for Holbrooks Road and the northeasterly corner of the property owned by Dilbert L. Blackman and wife, Sarah H., now or formerly (see Deed Book 3592 at Page 60 of Mecklenburg Public Registry); thence S 73-46-10 E 861.60 feet along Holbrooks Road to a point in Holbrooks Road, said point being located S 10-21-17 W 7.38 feet from the center line of Holbrooks Road and in the northwesterly corner of the real property owned by Kenneth E. Edwards and wife, Jo H., now or formerly (see Deed Book 4003 at Page 301 of the Mecklenburg Public Registry); thence S 10-21-17 W 1,372.8 feet to a railroad iron in the common property line with the lands of James Larry Ketner, now or formerly, (see Deed Book 4462 at Page 626 of the Mecklenburg Public Registry); thence S 31-12-13 E 444.91 feet to an iron pipe in the common property line with the lands of John F. Locklear and wife Barbara Ann (see book 3692 at Page 521 and Book 2546 at Page 60 of the Mecklenburg Public

John C. Gibson
John C. Gibson

Solid & Hazardous Waste Management Section
Department of Environmental Protection

DEP (DHS 2871 Revised 11/84)
Solid & Hazardous Waste Management Section

ON "EXCAVATED CONTOUR" MAP. SHT ②

TOTAL ARE (OF 10 AC) USABLE FOR
LANDFILLING = 8.6 AC = AREA #1-SHT. ②

ALLOWABLE ACTIVE AREA UNDER ZONING
ORDINANCE = 8.6 AC X 25% = 2.15 AC.
USE 2.0 AC. = AREA #2-SHT. ②

$$Q = A C i$$

$$Q = 2.0 (0.50) (6.3) = 6.3 \text{ CFS.}$$

FROM "NC. SED. + EROSION CONT. MGT. DESIGN MANUAL"
SEDIMENT BASIN SURFACE AREA (6.61.3) =

$$A = 0.01 q = 0.01 \times 6.30 \text{ CFS} = 0.063 \text{ ACRES}$$

$$= 2744 \text{ SF}$$

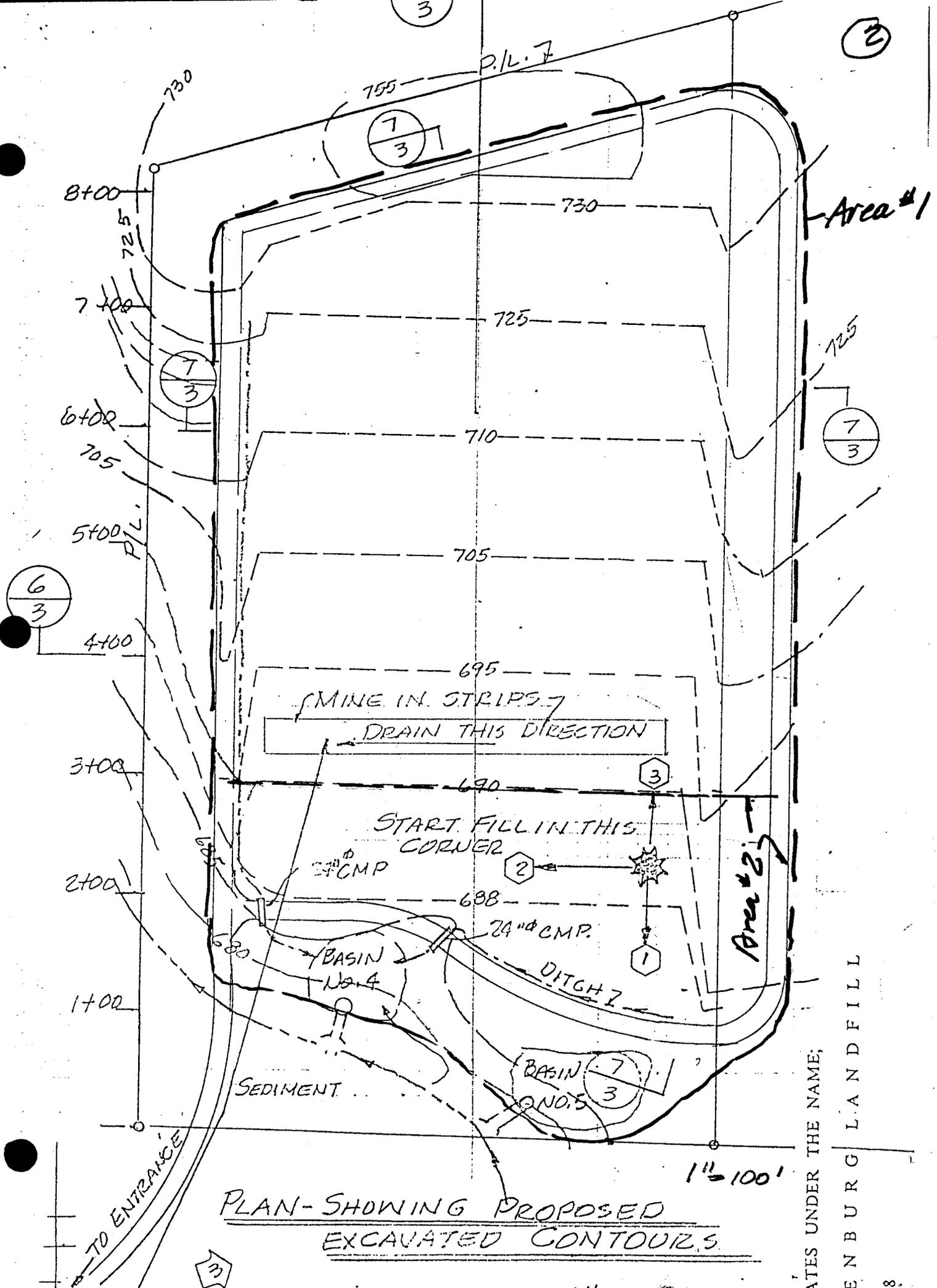
$$= \boxed{53' \times 53' \text{ OR } 40' \times 69' \text{ OR } 30' \times 92'}$$

STORAGE VOLUME REQ'D (FOR 2.0 AC)

$$= 1800 \text{ CF/AC} \times 2 \text{ AC.} = 3600 \text{ CF}$$

$$\text{DEPTH} = \frac{3600 \text{ CF}}{2744 \text{ SF}} = 1.31 \text{ FT OF STORAGE}$$

MAKE BASIN 3 FT. DEEP.



ATES UNDER THE NAME;

ENBURG LANDFILL

3

ON "FINISH GRADE" PLAN - (SHT. 4)

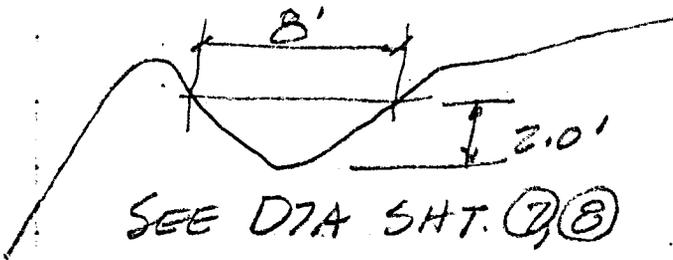
CHECK DRAINAGE SWALE #1, SECT. (B/3)

$$\text{AREA} = \frac{200 \times 350}{43,560} = 1.61 \text{ AC.}$$

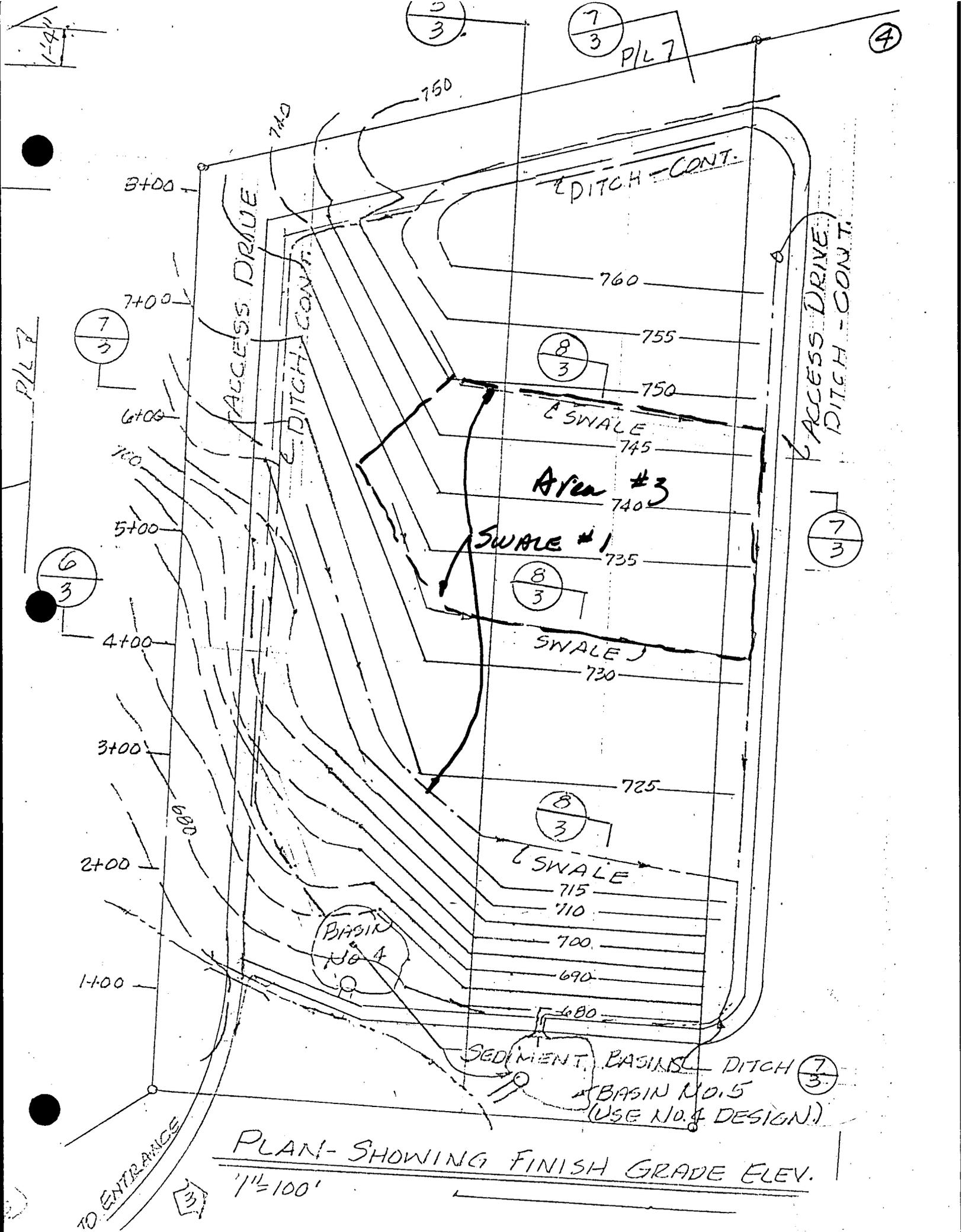
$$Q = A C V$$

$$Q = 1.61 (0.150) (6.3) = 5.1 \text{ CFS MAX.}$$

$$\text{SLOPE} = \frac{2.0'}{300'} = 0.67$$



$$Q_{\text{ALLOW}} = 27 \text{ CFS} > 5.1 \text{ CFS}$$



PLAN - SHOWING FINISH GRADE ELEV.
 1/4" = 100'

(5)

CHECK DITCH SIZE: SEE SECT. (7/3)

AREA #3 TOTAL AREA = 8.6 AC.

ASSUME 1/2 TO EA. DITCH - N. & S. SIDE.

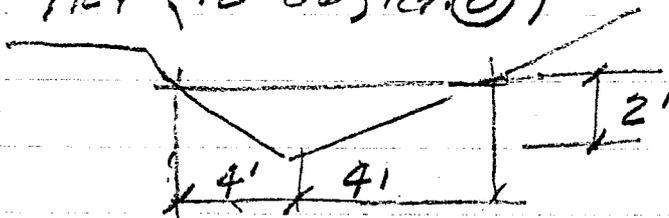
$$Q = 4.3 (0.5) (6.3) = 13.5 \text{ CFS}$$

$$\text{SLOPE} = \frac{40}{630} = 6.4\% \text{ MAX.}$$

$$= \frac{5'}{200'} = 2.5\% \text{ MIN} \leftarrow \text{USE}$$

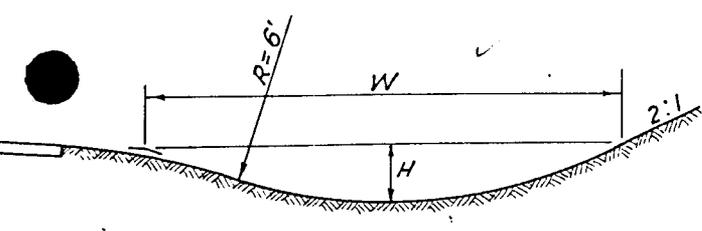
Q ALLOWABLE - SEE SHT. (6) + (7).

TRY (18-06, Pg. (8)) D-7A

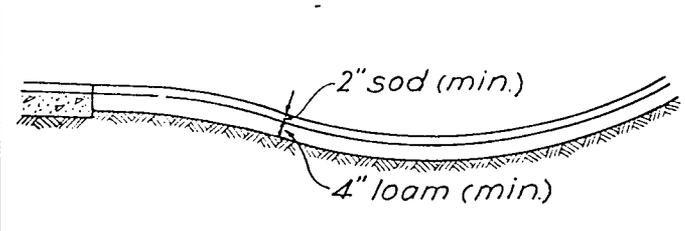


$$\boxed{D7A @ 2.5\% = Q = 14 \text{ CFS} \rangle 13.5 \text{ Req'd.}}$$

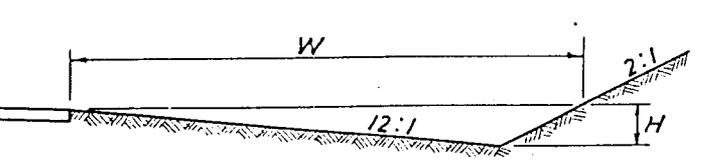
DRAINAGE-DITCHES-COMMON SECTIONS-I



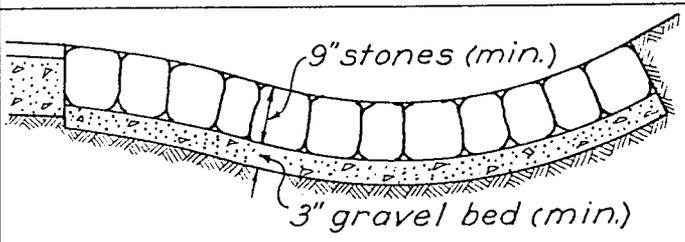
D-1 SEGMENTAL



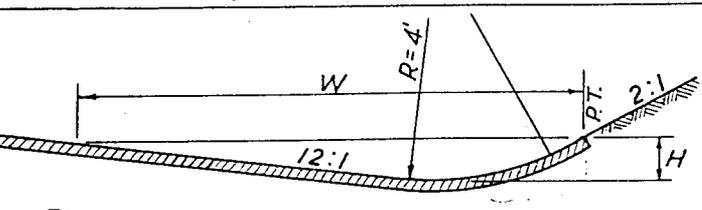
SODDED GUTTER



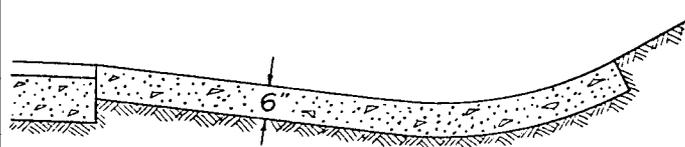
D-1A TRIANGULAR
Unequal side slopes



COBBLED GUTTER

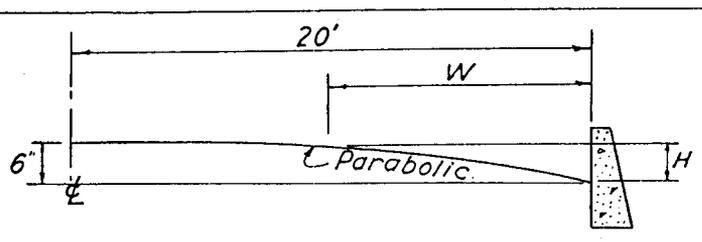


D-1B BITUMINOUS GUTTER



Base required same as for concrete pavement.

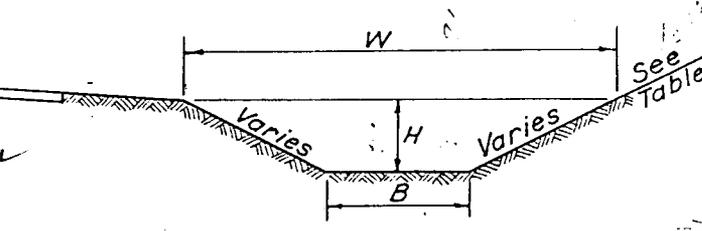
CONCRETE GUTTER



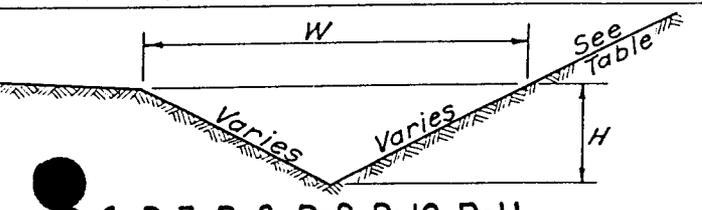
D-1C CURBED CROWNED STREET

TABLE A - PROPERTIES OF DITCHES.

NO.	DIMENSIONS			HYDRAULICS				
	SIDE SLOPES	B	H	W	a	p	R	R ^{2/3}
D-1	—	—	6 1/2"	5'-0"	1.84	5.16	0.356	0.502
D-1A	12:1 & 2:1	—	6"	7'-0"	1.75	7.14	0.245	0.392
D-1B	12:1 & 2:1	—	5 1/2"	7'-0"	1.64	7.08	0.232	0.377
D-1C	1/2 to 1:0	—	4.5"	10'-0"	1.68	10.38	0.162	0.297
D-2A	1 1/2:1	2'-0"	1'-0"	5'-0"	3.50	5.61	0.624	0.730
B	2:1	2'-0"	1'-0"	6'-0"	4.00	6.47	0.618	0.726
C	3:1	2'-0"	1'-0"	8'-0"	5.00	8.32	0.601	0.712
D-3A	1 1/2:1	3'-0"	1'-6"	7'-6"	7.88	8.41	0.937	0.958
B	2:1	3'-0"	1'-6"	9'-0"	9.00	9.71	0.927	0.951
C	3:1	3'-0"	1'-6"	12'-0"	11.25	12.49	0.901	0.933
D-4A	1 1/2:1	3'-0"	2'-0"	9'-0"	12.00	10.21	1.175	1.114
B	2:1	3'-0"	2'-0"	11'-0"	14.00	11.94	1.173	1.112
C	3:1	3'-0"	2'-0"	15'-0"	18.00	15.65	1.150	1.097
D-5A	1 1/2:1	4'-0"	3'-0"	13'-0"	25.50	14.82	1.721	1.436
B	2:1	4'-0"	3'-0"	16'-0"	30.00	17.42	1.722	1.437
C	3:1	4'-0"	3'-0"	22'-0"	39.00	22.97	1.698	1.423
D-6A	2:1	—	1'-0"	4'-0"	2.00	4.47	0.447	0.584
B	3:1	—	1'-0"	6'-0"	3.00	6.32	0.475	0.609
D-7A	2:1	—	2'-0"	8'-0"	8.00	8.94	0.895	0.929
B	3:1	—	2'-0"	12'-0"	12.00	12.65	0.949	0.965
D-8A	2:1	—	3'-0"	12'-0"	18.00	13.42	1.341	1.216
B	3:1	—	3'-0"	18'-0"	27.00	18.97	1.423	1.265
D-9	7:1	—	1'-0"	14'-0"	7.00	14.14	0.495	0.626
D-10	7:1	—	2'-0"	28'-0"	28.00	28.28	0.990	0.993
D-11	7:1	—	3'-0"	42'-0"	63.00	42.43	1.485	1.302



D-2, D-3, D-4, D-5 TRAPEZOIDAL



D-6, D-7, D-8, D-9, D-10, D-11
ISOSCELES TRIANGULAR
D-9, D-10 and D-11-Airport ditches

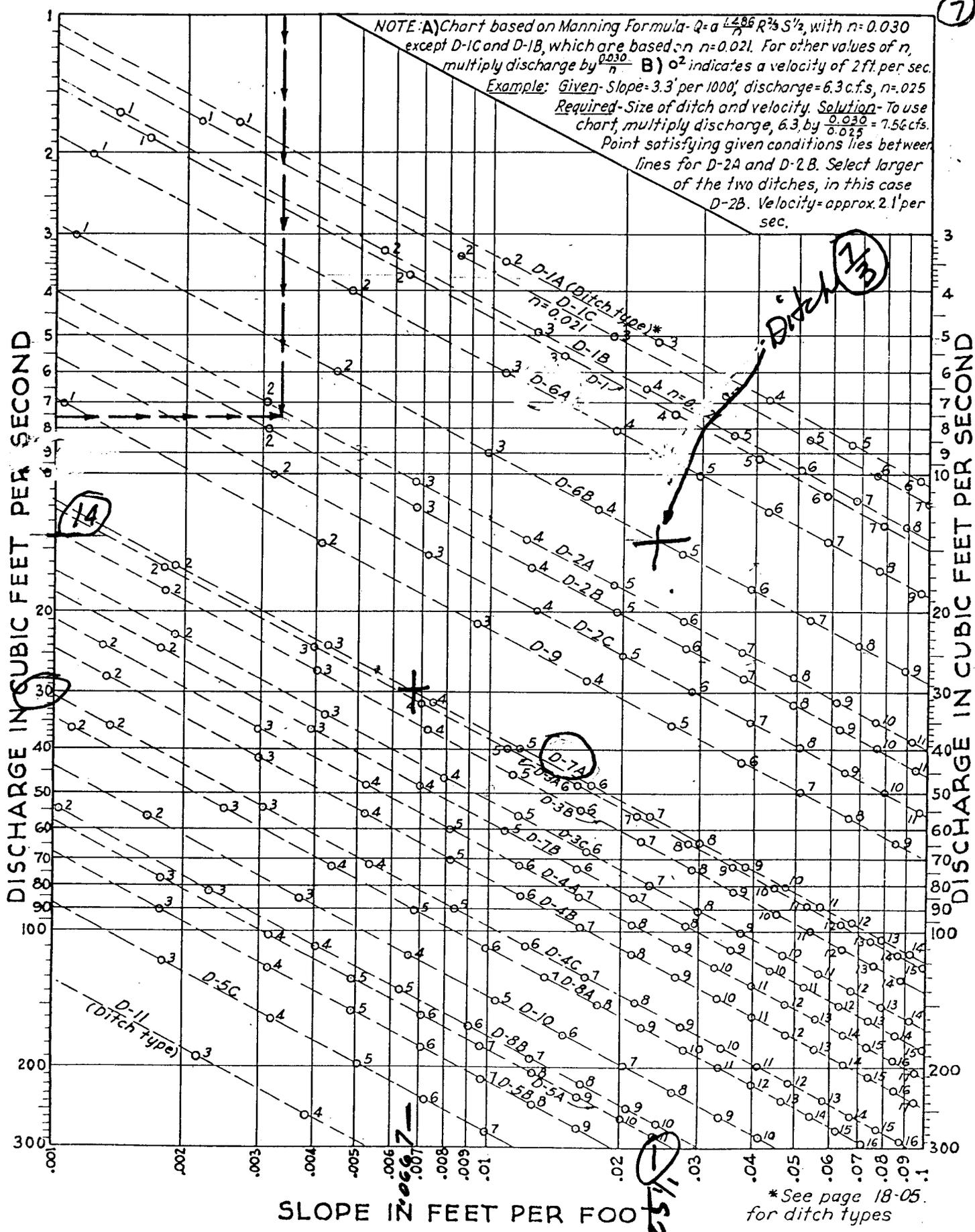
18-06

DRAINAGE-DITCHES - COMMON SECTIONS - 2

7

NOTE: A) Chart based on Manning Formula $Q = a \frac{4.486 R^{2/3} S^{1/2}}{n}$, with $n = 0.030$ except D-1C and D-1B, which are based on $n = 0.021$. For other values of n , multiply discharge by $\frac{0.030}{n}$. B) \circ^2 indicates a velocity of 2 ft. per sec.

Example: Given - Slope = 3.3' per 1000', discharge = 6.3 c.f.s., $n = 0.025$
 Required - Size of ditch and velocity. Solution - To use chart, multiply discharge, 6.3, by $\frac{0.030}{0.025} = 7.56$ c.f.s. Point satisfying given conditions lies between lines for D-2A and D-2B. Select larger of the two ditches, in this case D-2B. Velocity = approx. 2.1' per sec.



* See page 18-05 for ditch types

APPLICATION FOR APPROVAL FOR
A DEMOLITION LANDFILL FOR
N. MECKLENBURG LANDFILL
ADDENDA TO MAY 29, 1992 STUDY

EXHIBIT I - COMPUTATION FOR
SILTATION, EROSION AND STORMWATER
CONTROL.

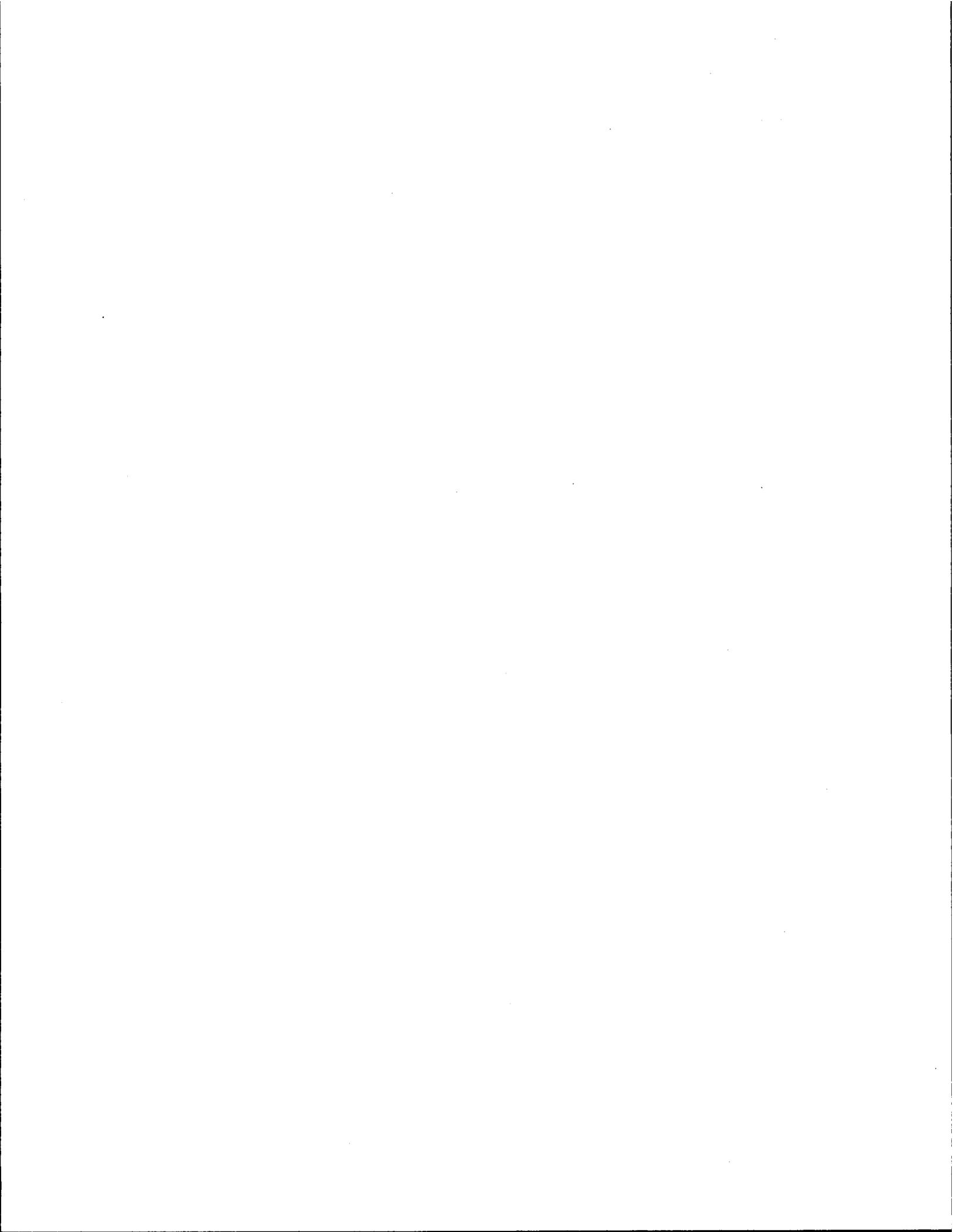
9

THE ATTACHED ARE COMPUTATIONS FOR:

SEDIMENTATION AND EROSION CONTROL.

DITCH AND SWALE SIZING.

PIPE SIZES UNDER ACCESS DRIVES - 24-INCH. PIPES.





State of North Carolina
Department of Environment, Health, and Natural Resources
Division of Solid Waste Management
P.O. Box 27687 · Raleigh, North Carolina 27611-7687

James G. Martin, Governor
William W. Cobey, Jr., Secretary

William L. Meyer
Director

August 13, 1992

Mr. Frank B. Hicks, P.E.
1817 Wedgedale Dr.
Charlotte, N.C. 28210

Re: Third Completeness Review - North Mecklenburg Landfill Application

Dear Mr. Hicks:

The Solid Waste Section has conducted a third completeness review of the site plan application for the referenced project, submitted by Mr. Frank Hicks, P.E. in behalf of North Mecklenburg Landfill Inc. The application also contains information addressing the construction plan application. Although site plan approval has not been granted by the Section, the Section reviewed the construction plan application in order to expedite the approval process.

In accordance with the N.C. Solid Waste Management Rules, the following comments must be addressed to continue the site plan application review process.

SITE PLAN APPLICATION

1. Section 0.0503 (1)(b) (iv) still needs to be addressed. This requirement concerns state parks and recreation areas. The Section needs written documentation indicating that the proposed project does not adversely impact the areas described in the rule. The appropriate state agency in relation to state parks, recreation and scenic areas, and other lands in state nature or historic preserves is:

The N. C. Department of Environment, Health, and
Natural Resources
Division of Parks and Recreation
N.C. Natural Heritage Program
(919) 733 - 7795

2. Land use and zoning has not been incorporated on the aerial photograph as required by Section 0.0504 (1) (a) (ii). Please revise the aerial photograph to show the property's correct land use and zoning.
3. Section 0.0504 (1) (b) (iii) has not been addressed which concerns showing water intakes on a map at a scale of at least 1 inch = 1000 feet. Please revise the application by indicating whether or not water intakes are present within a two (2) mile radius of the site. Water intakes are defined for the purposes of this rule as major intakes for city, subdivision, or industrial water systems, not singular residential wells.
4. Section 0.0504 (1) (d) requires a conceptual design plan presenting special engineering features or considerations which must be included or maintained in site construction, operation, maintenance or closure. The current conceptual design plan describes a trench system when in actuality the site has already been mined extensively. The site's present condition would appear to lend itself to the area fill method. Please revise the conceptual design plan to better describe operations which are likely to take place at the site.

As the comments addressing the construction plan application indicate, the construction plan application will require design revisions to address several parts of Section 0.0504 (2).

5. Section 0.0504 (1) (e) still needs to be addressed. This section requires both local government approval and local zoning approval. Enclosed with these comments is a copy of Section 0.0504 (1) (e) and a model resolution. Should a resolution be provided instead of minutes from a meeting, the resolution should closely follow the model's language. The zoning letter should closely follow the language in Section 0.0504 (1) (e).

The zoning letter should acknowledge that wastes types accepted at this landfill are changing from being limited to stumps, limbs, leaves, concrete, brick, wood, and uncontaminated earth to now include solid waste resulting from construction, remodeling, repair, or demolition operations on pavement, buildings, or other structures. Local government approval also needs to acknowledge that a change in waste type will occur.

6. Section 0.0504 (1) (c) has not yet been reviewed by the Solid Waste Section Hydrogeologist. Review by the Section's Hydrogeologist may require additional revisions prior to the Section granting site plan approval.

The above comments address the site plan application only. In no way do they restrict the Section's right to request additional information during the review process. Once the information necessary to address the site plan application is complete, the Section will review the information in order to make a determination to grant site plan approval.

Following site plan approval, the Section will finalize the construction plan application review. Should the construction plan application meet all applicable North Carolina Solid Waste Management Rules pertaining to design and construction plans, then the Section will issue a Permit To Construct. Since the Section does not require a liner system for this project, construction actually coincides with initial operations. Therefore, the Section shall issue a Permit To Operate concurrent with the Permit To Construct. Three conditions which must be met before the Section will issue a Permit To Operate which are: 1) Sedimentation and Erosion Control Approval must be obtained; 2) the Section Hydrogeologist must approve the ground and surface water monitoring plan; and 3) a Permit To Construct must have been issued by the Section to the applicant.

In order to expedite the review process, the Section has already initialized review of the construction plan application submitted along with the site plan application. The following comments are necessary to complete the construction plan application. Final review of the construction plan application will not begin until site plan approval is issued.

CONSTRUCTION PLAN APPLICATION

1. Section 0.0503 (2) (f) requires a minimum 50 foot buffer between property lines and disposal areas and between streams and rivers and disposal areas. The Section requests that additional buffer distance between disposal areas and 1) property lines and 2) streams be provided in order to provide an adequate monitoring area.
2. Section 0.0504 (2)(a)(iii & vi) may require additional information per review by the Section's Hydrogeologist.
3. Sections 0.0504 (2)(b through g) needs to be changed to reflect actual conditions at the site, i.e. there is not going to be a trench method thus show how the landfill will be built and meet each of the requirements.
4. Sections 0.0504 (2)(h) (v, viii, ix, and x) need to be addressed.

As you can recognize, there is an extensive amount of additional information required to complete both the site plan and construction plan applications. To help you expedite completion of the application process, the Section can be available to provide guidance. If you would like to schedule a meeting to discuss the application, please contact me at (919) 733-0692.

Respectfully,

Ellis Cayton

Ellis Cayton, P.E.
Solid Waste Section

enclosure

cc: Larry Griffin
Ron Gilkerson
John Gibson
Julian Foscue
Rick Doby

- (ii) Potential or existing sources of ground-water and surface water pollution;
- (iii) Water intakes;
- (iv) Airport and runways; and
- (v) Subdivisions.
- (c) A geological and hydrological study of the site which provides:
 - (i) Soil borings for which the numbers and depths have been confirmed by the Division and lab testing of selected soil samples that provide:
 - (A) standard penetration - resistance;
 - (B) particle size analysis;
 - (C) soil classification - USCS;
 - (D) geologic considerations (slopes, solution features, etc.);
 - (E) undisturbed representative geologic samples of the unconfined or confined or semiconfined hydrological units within a depth of 50 feet that provide the following information for each major lithologic units:
 - (I) saturated hydraulic conductivity (or by in-situ);
 - (II) volume percent water; and
 - (III) porosity;
 - (F) remolded sample of cover soils that provide:
 - (I) saturated hydraulic conductivity,
 - (II) total porosity,
 - (III) atterberg limits;
 - (G) stratigraphic cross-sections identifying hydrogeological units including lithology;
 - (H) tabulation of water table elevations at time of boring, 24 hours, and seven days (The number of cased borings to provide this information shall be confirmed by the Division.); and
 - (I) boring logs;
 - (ii) A boundary plat locating soil borings with accurate horizontal and vertical control which are tied to a permanent onsite bench mark;
 - (iii) A potentiometric map of the surficial aquifer based on stabilized water table elevations; and
 - (iv) A report summarizing the geological and hydrological evaluation.
- (d) ~~A conceptual design plan presenting special engineering features or considerations which must be included or maintained in site construction, operation, maintenance and closure.~~
- (e) Local government approvals:
 - (i) If the site is located within an incorporated city or town, or within the extra-territorial jurisdiction of an incorporated city or town, the approval of the governing board of the city or town shall be required. Otherwise, the approval of the Board of Commissioners of the county in which the site is located shall be required. Approval may be in the form of either a resolution or a vote on a motion. A copy of the resolution, or the minutes of the meeting where the vote was taken, shall be forwarded to the Division.
 - (ii) A letter from the unit of government having zoning jurisdiction over the site which states that the proposal meets all of the requirements of the local zoning ordinance, or that the site is not zoned.
- (f) A discussion of compliance with siting standards in Rule .0503(1) of this Subchapter.
- (g) A report indicating the following:
 - (i) population and area to be served;
 - (ii) type, quantity and source of waste;
 - (iii) the equipment that will be used for operating the site;
 - (iv) a proposed groundwater monitoring plan including well location and schematics showing proposed screened interval, depth and construction; and
 - (v) a more detailed geologic report may be required depending on specifics of the site. This report may be based on physical evidence, initially, or due to information obtained from the site plan application.
- (h) Any other information pertinent to the suitability of the proposed site.
- (2) The following information shall be is required for reviewing a construction plan application for a proposed sanitary landfill:
 - (a) A map showing existing features to include:
 - (i) existing topography of the site on a scale of at least 1 inch equals 200 feet with five foot contours;
 - (ii) bench marks;



Frank B. Hicks Associates, Inc.
 Consulting Engineers • Surveyors • Planners
 1817 Wedgedale Dr. • Charlotte, NC • 28210
 Telephone: (704) 527-1586 • Fax: (704) 553-1643



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Date: JULY 16, 1992

To: MR. ELLIS CAYTON, SOLID WASTE SECTION, DEHNR, P. O. BOX 27687, RALEIGH, N. C.

From: FRANK B. HICKS, JR. FRANK B. HICKS ASSOCIATES, INC.

RE: N. MECKLENBURG LANDFILL

Memo/Enclosures: ORIGINAL OF "APPROVAL- NO OBJECTIONS" FROM N. C. WILDLIFE COMM.

PLEASE CALL ME A STATUS OF REVIEW REPORT ON THE SUBMITTAL FOR APPROVAL
FOR THIS LANDFILL.

FORWARDED WITHOUT COVER LETTER

- As you requested
- With thanks
- Please telephone me about this
- May be of interest to you
- For your files
- Please let me have your comments
- For your signature
- Need not be returned
- Please return
- As discussed
- Other : CC (FAX) TO N. MECKLENBURG LANDFILL



FRANK B. HICKS ASSOCIATES, INC.

CONSULTING ENGINEERS - SURVEYORS - PLANNERS

1817 Wedgedale Drive, Charlotte, N. C. 28210

Telephone: (704) 527-1586

FAX: (704) 553-1643

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June 22, 1992

Mr. Ellis Cayton
Environmental Engineer
Solid Waste Section
Dept. of Environment, Health and Natural Resources
Division of Solid Waste Management
P. O. Box 27687
Raleigh N. C. 27611-7687



Re: N. Mecklenburg Landfill
Mecklenburg County
Huntersville, N. C.
Rev. application for a Construction and Demolition Landfill

Dear Mr. Cayton:

We are enclosing the following information as requested for the above landfill application for approval:

1. Study
2. Responses from Parks and Recreation Comm., State Heritage Program, and Fish and Wildlife Commission
3. Earthwork computations showing available cover materials at site.
4. Exhibits as follows:
 - Exhibit A - Topographic survey showing changes in site from mining.
 - B - Aerial Photographs of area around landfill.
 - C - Roads Map, Mecklenburg Co., showing development in area of Lanfill
 - D - Earthwork calculations.
 - E - Report on Hydorlogical Assment, submitted 6-19-92.
 - F - Revised drawing sheets 1 thru 8.

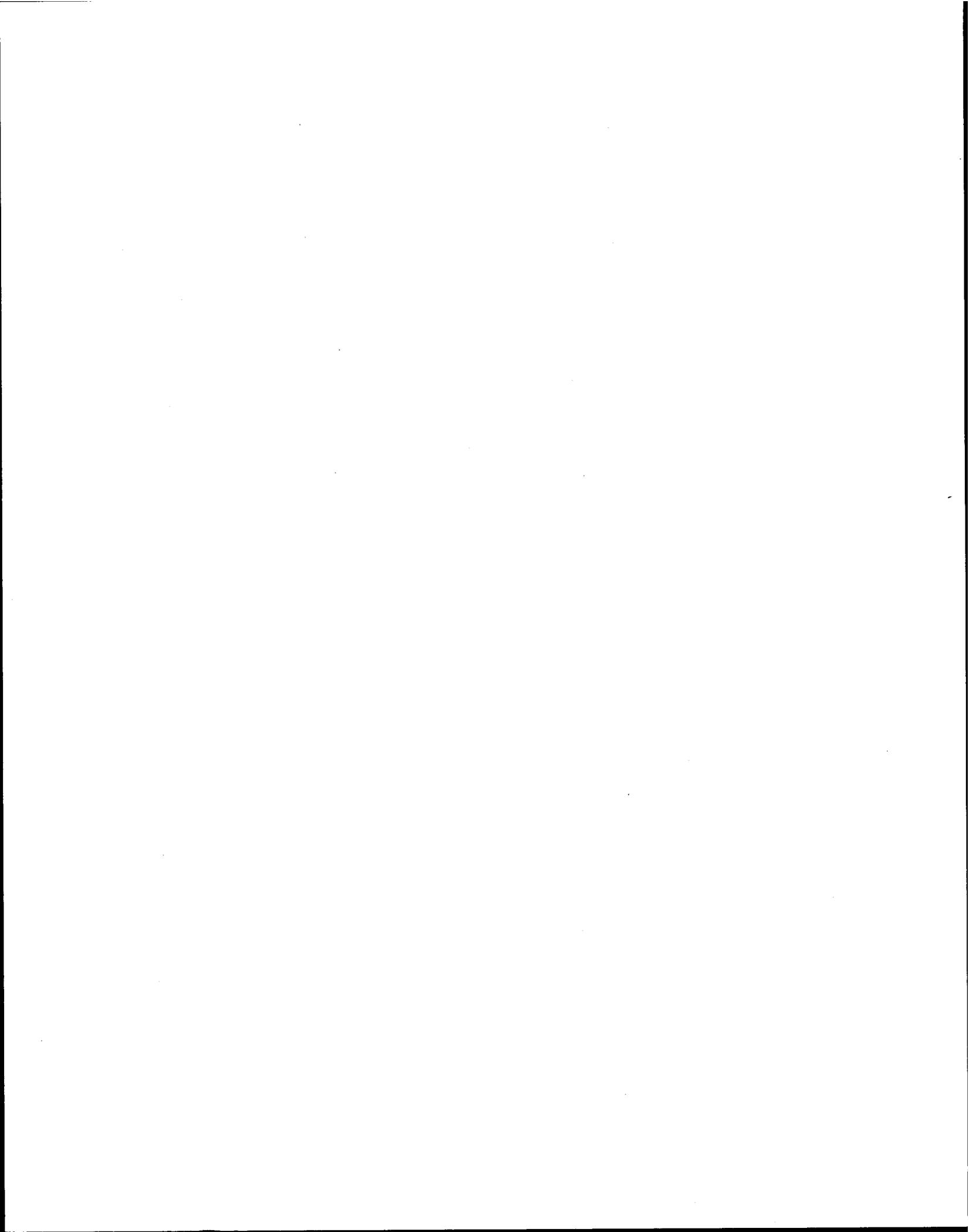
If additional information is desired, please contact us at the above phone.

Very truly yours,

FRANK B. HICKS ASSOCIATES, INC.

Frank B. Hicks, Jr., P. E.
FBH/b

Enclosures (as above)
CC: Mr. Larry Griffin, N. Mecklenburg Landfill



APPLICATION FOR
DEMOLITION LANDFILL

FOR

NORTH MECKLENBURG LANDFILL

HUNTERSVILLE, N. C.

MAY 29, 1992

GENERAL:

North Mecklenburg Lanfill, an existing operating landfill, has operated under a Mecklenburg County permit since 1988. All landfill operations have been concentrated in Area No. 1 (See draw. No. 1 of Plans).

This application is for approval to operate under NCAC 13B "Solid Waste Management Rules", Section .0504, State of North Carolina.

The responses in this report are in the order of information requested in Section .0504, and numbered in the same order. Some information has already been filed under earlier submittals and will be referred to as "already on file".

- (1)(a) Aerial Photography: Copies of Mecklenburg County Aerial maps for this Area are attached. (Exh. B)
- (i) Entire property is shown, both first phase 1 existing operating landfill and area on which State approval is requested.
 - (ii) This lanfill has operated under a Mecklenburg County permit since 1988. Copy of permit "already on file".
 - (iii) Location of all homes, etc. are located on attached Photographs and on topography "already on file". (Exh. B)
 - (iv) Location of all wells, watercourses, etc. are shown on topography map "already on file" and on photography within 1/4 mile of property. (Exh. B)
 - (v) Flood plain is shown on topography map and is shown on photography. (Exh. B)

APPLICATION FOR APPROVAL FOR
A DEMOLITION LANDFILL FOR
NORTH MECKLENBURG LANDFILL

Page 2 of 4.

- 1(b)Map- The only official map of development in area is the Mecklenburg County Contract Map, attached, which shows the development of roads and subdivisions in the area. The only "subdivision" development is with individual wells and septic tanks and that is only sparcely in adjacent areas. See Attached Map. (Exh. C)
- (i) There are no significant ground water users in the two mile radius. Huntersville is on Charlotte-Mecklenburg County Water System.
- (ii) Since area is residential/rural there are no significant poluters in the two mile radius. Polution, if any, is from farms and probably soil erossion.
- (iv) Airports. Bradford Airport, a private landing strip, is within the two mile radius. However, Airports are not a restriction for C & D Lanfill under the requirements.
- (v) Subdivisions - The County Contract (Roads) map shows the subdivions including those that are part of Huntersville water and sewer system. (Exh. C)
- 1(c)(i thru iv.) See attached report from Ecological Service, Inc. and Law Engr. Test. Co. covering this requested information. (Exh. E)
- 1(d) Detailed Construction Drawing "already on file". (Exh. F)
- 1(e) Local government approval. A copy of the Mecklenburg County permit to operate dated 1988 is "already on file".
- 1(f) Siting standards. See attached Jan. 13, 1992 submital.
- 1(g)(i) The landfill will serve contractors wishing to dispose of Inert debris and construction or demolition debris from the Mecklenburg County and adjacent areas.
- 1(g)(ii) Types of waste to be buried.
Inert debris - solid waste which consists soley of material that is virtually inert, such as brick, concrete, rock and clean soil and,
Construction and Demolition debris - solid waste resulting from construction, remodeling, repaid or demolation operations on pavement, buildings or other structures.

APPLICATION FOR APPROVAL FOR
A DEMOLITION LANDFILL FOR
NORTH MECKLENBURG LANDFILL

Page 3 of 4.

- 1(g)(iii) Equipment used for landfill operation - dozer, pans, backhoes, etc.
- (iv) The attached topographic survey of area mined shows the location of existing monitoring wells. See "Topographic Map" by Spratt and Brooks, Surveyors, Exhibit A.
- 2(a) Map Items (i thru vii) is enclosed and revised to show requested data.
- 2(b)(i thru vi) Site Plan at scale of 1"=200', attached and construction drawings, already on file, furnish this information.
- 2(c)(i) Liner not required for this type landfill.
- (ii) Final contours in cross-sections shown on working drawings. (Ex. A)
- (iii) No drop structures proposed. Drainage is to perimeter ditches along lower sides.
- 2(d) Erosion Control Plan has been approved by Soil Conservation Service and copy of letter is "already on file".
- 2(e)(i thru v) Detailed Construction Drawings "already on file" covering these items.
- 2(f)(i thru iii) Shown on Construction Drawings.
- (iv and v) Shown on Site Plan - 1"= 200'.
- 2(g) See Construction Drawings "already on file".
- 2(h)(i) Copy of deed already on file.
- (ii) Names of operating personell and owners already on file.
- (iii) Projected use of land after completion of landfill is recreation, farming, etc.
- (iv) Projected lifetime of project - 10 to 25 years.
- (v) Description of systematic usage of area.- probably as a landfill until completed as a landfill, then as farming or recreation areas.
- (vi) Earthwork calculations, see attached "Earthwork calculation for determining adequate cover". (See Exh. D)
- (vii) Seeding specifications approved/furnished by Soil Conversation Service "already on file".
- (ix) Letter approving erosion control "already on file".
- (x) See attached earlier submittal covering sect. .0503.

A DEMOLITION LANDFILL FOR
NORTH MECKLENBURG LANDFILL

2(h)(iii) Additional Information and Exhibits:

1. Scales - Owner will install truck scales.
2. Siting (0503 par. 1) See attached siting comment letter from the following agencies:
 - a. Parks and recreation Division.
 - b. State Heritage Program.
 - c. Wildlife Resources Commission. (The attached comments were made when Owner applied for a Mining Permit. We twice requested Wildlife for additional comments. We assume they do not want to change/add to the attached letter.)
3. Since mining is also part of this project and extensive soil has been removed in the area and since there is no garbage waste in this demolition type waste, the Owner desires to deviate from the "cell type" bury and fill the mined areas in layers with cover added at least weekly.

2(i) Exhibits included and referenced in this report.

- A. "Topographic Map" for N. Mecklenburg Landfill by Spratt and Brooks, Surveyors showing existing mined areas in the landfill. (3 copies)
- B. Aerial Photograph from Mecklenburg County Engineering Dept. showing land development around N. Mecklenburg Landfill. (one copy)
- C. Mecklenburg County "Contract (Roads) Map, 36" x 60". Also included are three copies of a smaller area map taken from this map of the adjacent area to N. Mecklenburg Landfill. (Included for file purposes).
- D. Earthwork Calculations for available cover material and mining material on the 10 acre landfill and adjacent property owner by Owner. (3 copies)
- E. "Report on Hydrological Assment", by ESI, Inc., delivered and discussed with the Geologist for your department on June 19, 1992.
- F. Revisions to Drawings - Copies of Drawings Sheet 1 thru 8 have had extensive revisions and are included . (3 sets bound)

EXHIBIT "D"

N. MECKLENBURG COUNTY LANDFILL

EARTHWORK COMPUTATIONS TO DETERMINE AVAILABLE COVER MATERIALS

The following computations are based on Spratt and Brooks Topographic Survey which reflects the mining operations thru May 27, 1992. These computations do not include the materials already removed from the mining area of the landfill.

Also, The Owner has over 22 acres of adjacent land from which cover is available if there is insufficient materials left on site.

Cover will be installed weekly at a minimum and Owner will be able to monitor amount of materials remaining as bury progresses.

Total cover available in 10.0 acre landfill site as of May 27, 1992 = 231,740 c.y.
Total cover for 2 feet deep cover over all 10 acres = 32,267 c.y.
Cover available from adjacent 22+ acres assuming same depth of cover = 509,800 c.y.

CREEK

CELLS 1 & 2 ARE TO BE DIVIDED AND BUILT IN FIRST PHASE

SILT FENCE

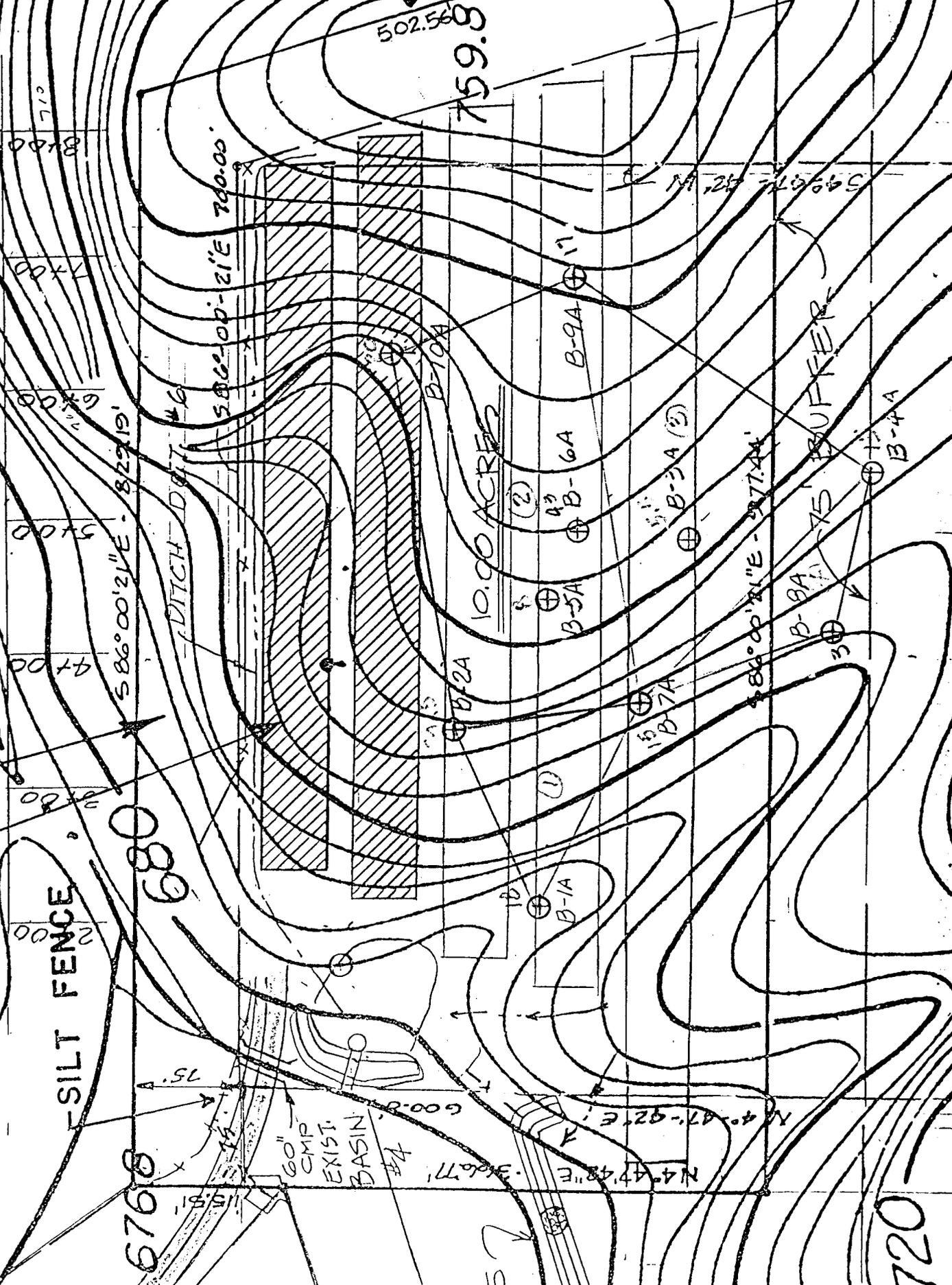
DITCH DIRT #6

PROP L.M.

10.00 ACRES

15' BUFFER

CROSS-SECTION AS SHOWN



DEPTH OF BORINGS - (COVER MAT'L. AVAILABLE):

SOIL BORING NO.	ORIG. GROUND TOP EL.	MINING GROUND ELEV.	REFUSAL ELEV. OF AUGER
-----------------------	----------------------------	---------------------------	------------------------------

B1A	687.	689.2	671
-----	------	-------	-----

B2A	717	691.53	684.
-----	-----	--------	------

B3A	723	693.5	588
-----	-----	-------	-----

B4A	717	710.5	695
-----	-----	-------	-----

B5A	723	695	687.
-----	-----	-----	------

B6A	730	730	587
-----	-----	-----	-----

B7A	707	707	593
-----	-----	-----	-----

B8A	705	705	702
-----	-----	-----	-----

B9A	743	743	726.
-----	-----	-----	------

B10A.	725	725	661
-------	-----	-----	-----

USE AREAS DEFINED BY BORINGS:

SECTION	AREA. (SF)	AV. HEIGHT.	VOL (CF)
① Δ	$150 \times 135 / 2 = 10,125 \text{ SF}$	$\frac{18 + 7.5 + 15}{3} = 13.5 \text{ ft}$	136,688
② □	$307.5 \times 141 = 43,358 \text{ SF}$	$\frac{7.5 + 20 + 17 + 15}{4} = 14.9 \text{ ft}$	646,034
③ Δ	$247 \times \frac{263}{2} = 32,480 \text{ SF}$	$\frac{15 + 15 + 17}{3} = 15.67 \text{ ft}$	508,962
④ Δ	$65 \times 250 = 16,250 \text{ SF}$	$\frac{15 + 15 + 3}{3} = 11 \text{ ft}$	178,750

290
325
615

102,213 SF
= 2.35 ACRES
1,472,384
= 54,460 CY

(1). COVER AVAILABLE (IN 10 ACRES):

CUBIC YARDS / ACRES = $\frac{54,460}{2.35} = 23,174 \text{ CY/AC.}$

FOR 10 AC SITE $23,174 \times 10 = 231,740 \text{ CY}$

FOR 3' AV. COVER, $\frac{2.0 \times 10.0 \times 43,560 \text{ SF}}{10 \text{ AC.} \times 27} = 32,367 \text{ CY.}$

(2). OWNER HAS ADJACENT 22 AC. FOR COVER OR (ASSUME SAME DEPTH AVAILABLE)

∴ $22 \text{ AC.} \times 23,174 \text{ CY/AC.} = 509,828 \text{ CY.}$

OF ADDITIONAL COVER AVAILABLE

APPLICATION FOR APPROVAL FOR
A DEMOLITION LANDFILL FOR
N. MECKLENBURG LANDFILL

ADDENDA TO MAY 29, 1992 STUDY. (Continued)

Referring to Mr. Ellis Cayton's letter of August 13, 1992, and responding in the section referring to "Construction Plan Application" comments:

1. At least a 50 foot wide buffer will be furnished. Mecklenburg County Ordinance under which this landfill has operated since 1988.
2. This Geological Study has been on file with your office since June 18, 1992. We would hope that a review had begun by now.
3. Revised drawings are submitted, attached, showing the application of the "Area Fill Method" coordinated with the mining operation.
4. Section 0.0504 (2)(h) (v, vii, ix, and x) in that order:
 - 2h. The Owners deed to the property was submitted earlier and is again included.
 - 2ii. Mr. Larry Griffin and Mr. O. L. Parker, the Owners listed the deed will be the operators. See attached letter from Owners submitted earlier.
 - 2v. After buildout of a majority of the landfill some portion may be used for landfill or cattle farming, however, ultimate buildout will probably determine final usage after closure.
 - 2vii. Calculation for erosion and sedimentation control are on the drawings, included as a separate submittal and an approval letter for the "sediment" control plan as submitted to your office earlier. See attached calculations.
 - 2x. Section 0.0503 (2) responses are as follows:
 - 2(a)(i) Since this landfill will not accept "garbage" but is limited to "inert debris" and "construction and demolition debris" and since gases will be vented thru the sides of the fill slopes, gases in the site structures should be well below lower explosion limits and less than 25% of gases generated in the site structures. Gases at the property boundary should be minimal.
 - 2(b) Site access is limited by a manned office at the entrance off Holbrooks Rd. and a fence and locked gate at unmanned times.
 - 2(c)(i) Since disposal materials do not contain "garbage", contaminated leachate should not be a problem, however, the Owners are aware of NPDES requirements that contaminated leachate or water cannot be discharged to the adjacent streams.
 - 2(c)(ii) A Plan for controlling "siltation and erosion" approved for the project. Copies of the approving letter is on file with your office. Dredging is not a part of this landfill operation and will not be used.

APPLICATION FOR APPROVAL FOR
A DEMOLITION LANDFILL FOR
N. MECKLENBURG LANDFILL

ADDENDA TO MAY 29, 1992 STUDY (Continued)

0.0503 Continued.

- 2(c)(iii) The Owners are aware that no silt or polluted water may be discharged from the site to adjacent waters.
- 2(d)(i) Liner is not required for this waste.
- 2(d)(ii) The deepest point in the existing mined area and lowest point in the area to be landfilled is elev. 994. at test well No. TW2 where the groundwater elevation was at elev. 678.13 (see Geological Study on file. fig. 4 and table 1 and 5.
- 2(e) Open burning is not part of this landfill operation and will not be used.
- 2(f) A 75 ft. buffer is a requirement of the Mecklenburg County Ordinance under which the landfill currently operates. The 75 ft. wide buffer will be retained.
- 2(g) a letter of approval of the erosion control plan and grassing is on file with your office.

10

APPLICATION FOR APPROVAL FOR
A DEMOLITION LANDFILL FOR
N. MECKLENBURG LANDFILL
ADDENDA TO MAY 29, 1992 STUDY

Referring to Mr. Ellis Cayton's letter of August 13, 1992, and responding to "Site Plan Application" comments in the order of the comments:

1. Attached is the May 14, 1992 letter from Ms. Ann W. Kelley of Natural Heritage Program that was submitted May 29. Also attached are several other letters from "Cultural Resources, two from "Fish and Wildlife" and Mecklenburg County Permit to operate a landfill from 1988 to present.
2. We are enclosing a "stick-on" describing zoning and would appreciate your adding this to the photograph. This reflects Town of Huntersville "Zoning letter" attached.
3. See Letter from Mecklenburg County Environmental Health Dept., Mr. Ray Tilley regarding lack of intakes in a two mile radius of this site.
4. See working drawings. All sheets have been revised to show use of Area Fill Method. Much of the detailed information is shown on sheet #3.
5. See Letter from Town of Huntersville concerning zoning coverage. The Town just recently acquired perimeter zoning authority.
6. We assume the Hydrogeologist's Study will have been reviewed by now.

APPLICATION FOR APPROVAL FOR
A DEMOLITION LANDFILL FOR
N. MECKLENBURG LANDFILL
ADDENDA TO MAY 29, 1992 STUDY

EXHIBIT II. - LETTERS OF RESPONSE
REGARDING LANDFILL APPLICATION

8

THE FOLLOWING ARE RESPONSES FROM VARIOUS STATE, COUNTY AND CITY
AGENCIES TO OUR REQUEST FOR COMMENTS:

1. N. MECKLENBURG LANDFILL - LIST OF OFFICERS OF CORPORATION.
2. TOWN OF HUNTERSVILLE - STATUS OF ZONING COMPLIANCE.
3. N. C. NATURAL HERITAGE PROGRAM.
4. N. C. DEPT OF ARCHIVES AND HISTORY, HISTORIC PRESEVERATION.
5. N. C. WILDLIFE RESOURCES COMMISSION. (FOR MINING PERMIT APPLICATION)
6. N. C. WILDLIFE RESOURCES COMMISSION. ("NO OBJECTION FROM
HABITAT CONSERVATION PROGRAM IN RESPONSE TO LANDFILL STAGE
REQUEST FOR COMMENTS.)
7. MECKLENBURG COUNTY, DEPT. OF ENVIRONMENTAL PROTECTION RESPONSE
TO REQUEST FOR DETERMINATION OF ANY PUBLIC COMMUNITY WATER
SYSTEMS IN A TWO MILE RADIUS OF LANDFILL SITE.
8. MECKLENBURG COUNTY - COPY OF PERMIT 60-AL, DATED 11-03-88
SOLID WASTE PERMIT. FOR N. MECKLENBURG LANDFILL.

To Dennis Stewart



Frank B. Hicks Associates, Inc.

Consulting Engineers • Surveyors • Planners
1817 Wedgedale Dr. • Charlotte, NC • 28210
Telephone: (704) 527-1586 • Fax: (704) 553-1643



MAY 27, 1992

Date: _____

To: N. C. WILDLIFE RESOURCES COMMISSION

512 N. SALISBURY STREET, RALIEGH, N. C.

From: F. B. HICKS, JR. *[Signature]*

RE: N. MECKLENBURG LANDFILL, APPLICATION FOR SOLID WASTE SECTION APPROVAL TO OPERATE.

Memo/Enclosures: ON MARCH 31, 1992, WE REQUESTED COMMENTS FROM YOUR OFFICE FOR THE ABOVE APPLICATION. SEE ATTACHED COPY OF LETTER.

IF ADDITIONAL INFORMATION IS DESIRED PLEASE CONTACT US AT THE ABOVE ADDRESS.
MANY THANKS.

FORWARDED WITHOUT COVER LETTER

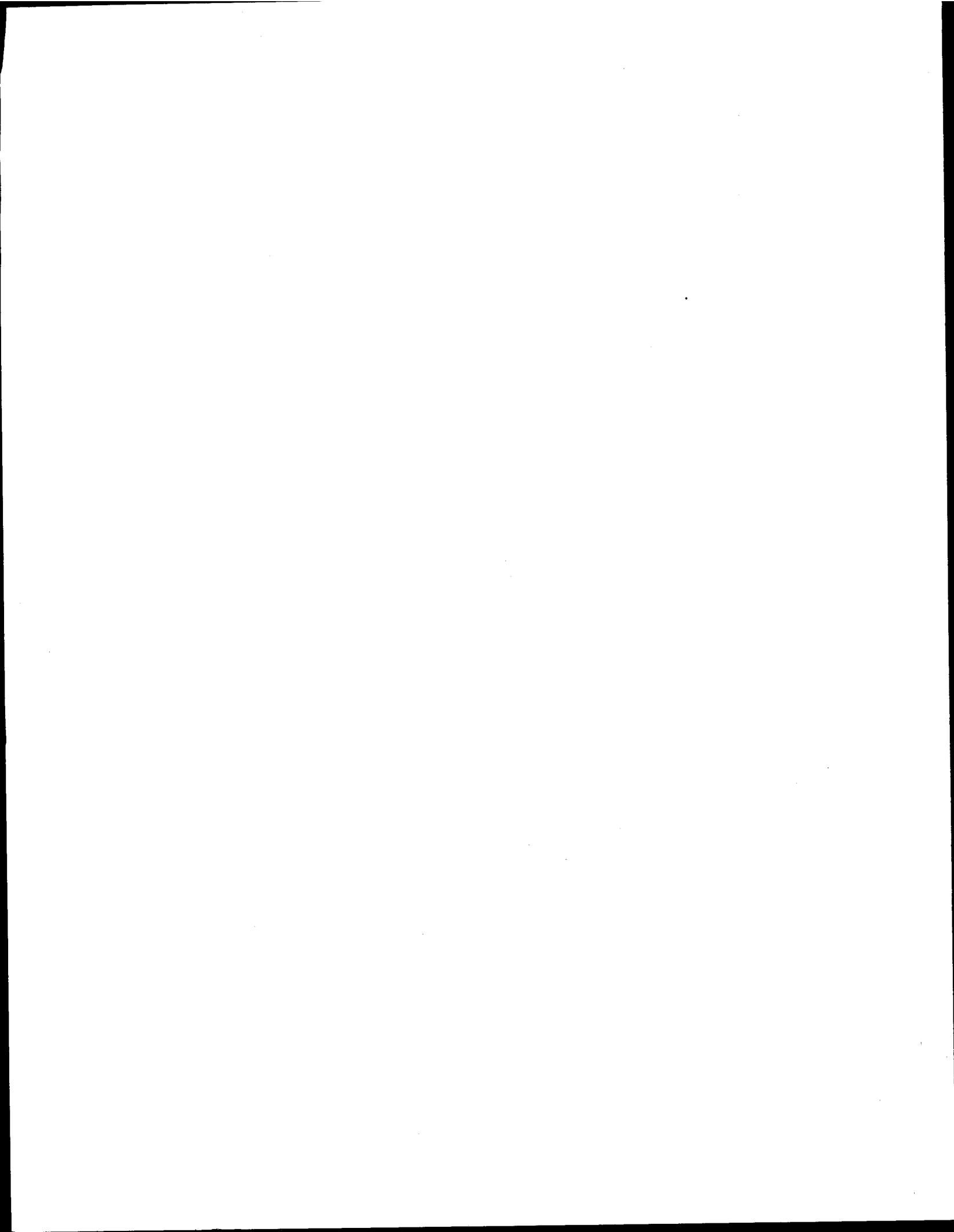
- As you requested
- With thanks
- Please telephone me about this
- May be of interest to you
- For your files

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

Stephen [Signature] 07/10/92

~~xxxx~~ Please let me have your comments

- For your signature
- Need not be returned
- Please return
- As discussed
- Other : _____



To Dennis Stewart

14



Frank B. Hicks Associates, Inc.
Consulting Engineers • Surveyors • Planners
1817 Wedgedale Dr. • Charlotte, NC • 28210
Telephone: (704) 527-1586 • Fax: (704) 553-1643



Date: MAY 27, 1992

To: N. C. WILDLIFE RESOURCES COMMISSION
512 N. SALISBURY STREET, RALIEGH, N. C.

From: F. B. HICKS, JR. *F. B. Hicks, Jr.*

RE: N. MECKLENBURG LANDFILL, APPLICATION FOR SOLID WASTE SECTION APPROVAL TO OPERATE.

Memo/Enclosures: ON MARCH 31, 1992, WE REQUESTED COMMENTS FROM YOUR OFFICE FOR THE ABOVE APPLICATION. SEE ATTACHED COPY OF LETTER.

IF ADDITIONAL INFORMATION IS DESIRED PLEASE CONTACT US AT THE ABOVE ADDRESS.

MANY THANKS.

FORWARDED WITHOUT COVER LETTER

- As you requested
- With thanks
- Please telephone me about this
- May be of interest to you
- For your files

Stephen Cozette 07/10/92

~~XXXX~~ Please let me have your comments

- For your signature
- Need not be returned
- Please return
- As discussed
- Other : _____



15

State of North Carolina
Department of Environment, Health, and Natural Resources
Division of Parks and Recreation
512 North Salisbury Street • Raleigh, North Carolina 27611

James G. Martin, Governor
William W. Cobey, Jr., Secretary

Dr. Philip K. McKnelly
Director

May 14, 1992

Mr. Frank B. Hicks, Jr.
Frank B. Hicks Associates, Inc.
1817 Wedgedale Drive
Charlotte, NC 28210

SUBJECT: N. Mecklenburg Landfill
Application for a Demolition Landfill Permit

Dear Mr. Hicks:

Thank you for your phone call of April 23 and your letter of April 24. These clarified the situation of the N. Mecklenburg Landfill. As I explained over the phone, it was not clear from the material you initially provided that the area indicated on the map has already been mined and used as a landfill. The rare species that I listed in my letter of April 16 may have once occurred there, but it is highly improbable that they now occur at the site. Of course further sedimentation and leachate would still be detrimental to stream quality and to the health of aquatic species, and it is our understanding that measures to control sedimentation and leachate will be implemented.

Please contact the Natural Heritage Program if you need additional information.

Sincerely,

A handwritten signature in cursive script that reads "Ann W. Kelly".

Ann W. Kelly
Natural Heritage Program



State of North Carolina
Department of Environment, Health, and Natural Resources
Division of Solid Waste Management
P.O. Box 27687 · Raleigh, North Carolina 27611-7687

James G. Martin, Governor
William W. Cobey, Jr., Secretary

William L. Meyer
Director

May 7, 1992

Mr. Frank B. Hicks, P.E.
1817 Wedgedale Dr.
Charlotte, N.C. 28210

Re: Completeness Review - North Mecklenburg Demolition Landfill
Application

Dear Mr. Hicks:

The Solid Waste Section has conducted a second preliminary review of the referenced project, submitted by Mr. Frank Hicks, P.E. in behalf of North Mecklenburg Landfill Inc. In accordance with the N.C. Solid Waste Management Rules, the following comments still must be addressed to continue the review process.

1. The Section is awaiting comments from the N.C. Natural Heritage Program and the N. C. Department of Cultural Resources - Archeology and Historic Preservation Section. As mentioned in previous correspondence, the Section will accept for review documentation submitted to the N.C. Wildlife Commission concerning endangered species and associated critical habitat areas. However, should the documentation previously submitted to the N.C. Wildlife Commission not adequately address endangered species and associated critical habitat areas, the Section will require comment from the N.C. Natural Heritage Program.
2. As stated in previous correspondence, Policy Memorandum No. 16 (enclosed) requires applications for demolition landfills intended for the disposal of building demolition waste to meet the requirements of 15A NCAC 13b Section 0.0504. All of 15A NCAC 13B Section 0.0504 needs to be addressed. A copy of 15A NCAC 13B is enclosed.

Also, as noted in previous correspondence, part of Section 0.0504 [part (2)(a)] requires the application to include a map showing existing features to include existing topography of the site on a scale of at least 1 inch equals 200 feet with 5 foot contours. This topographic map needs to be a recent survey of the property, not a photocopy of a county map. Preferably, the map will show property lines, bearings, distances, and bench marks as well as the existing topography.

3. Again, as noted in previous correspondence, House Bill 1109, ratified July 3, 1991, requires all municipal solid waste facilities, including landfills accepting construction/demolition waste to install scales. This requirement is based on law and does not depend on the landfill owner's personal preference.

The reason for the scale requirement is because of North Carolina's efforts to accurately measure progress towards a 25 percent waste reduction goal by June 30, 1993. For the purpose of measuring progress towards the goal, volume measurement is inferior to weight measurement because: 1) determining the volume of bulky, uneven materials is guesswork; and 2) the variability of material specific gravities makes conversion to weight extremely difficult. Therefore, the application needs to show provisions for scales.

These comments are intended to expedite the review of the application, and in no way do they restrict the Section's right to request additional information during the review process. Should you have any questions concerning this letter or if you would like to schedule a meeting to discuss the application, please feel free to contact me at (919) 733-0692.

Respectfully,

Ellis Cayton

Ellis Cayton
Environmental Engineer
Solid Waste Section

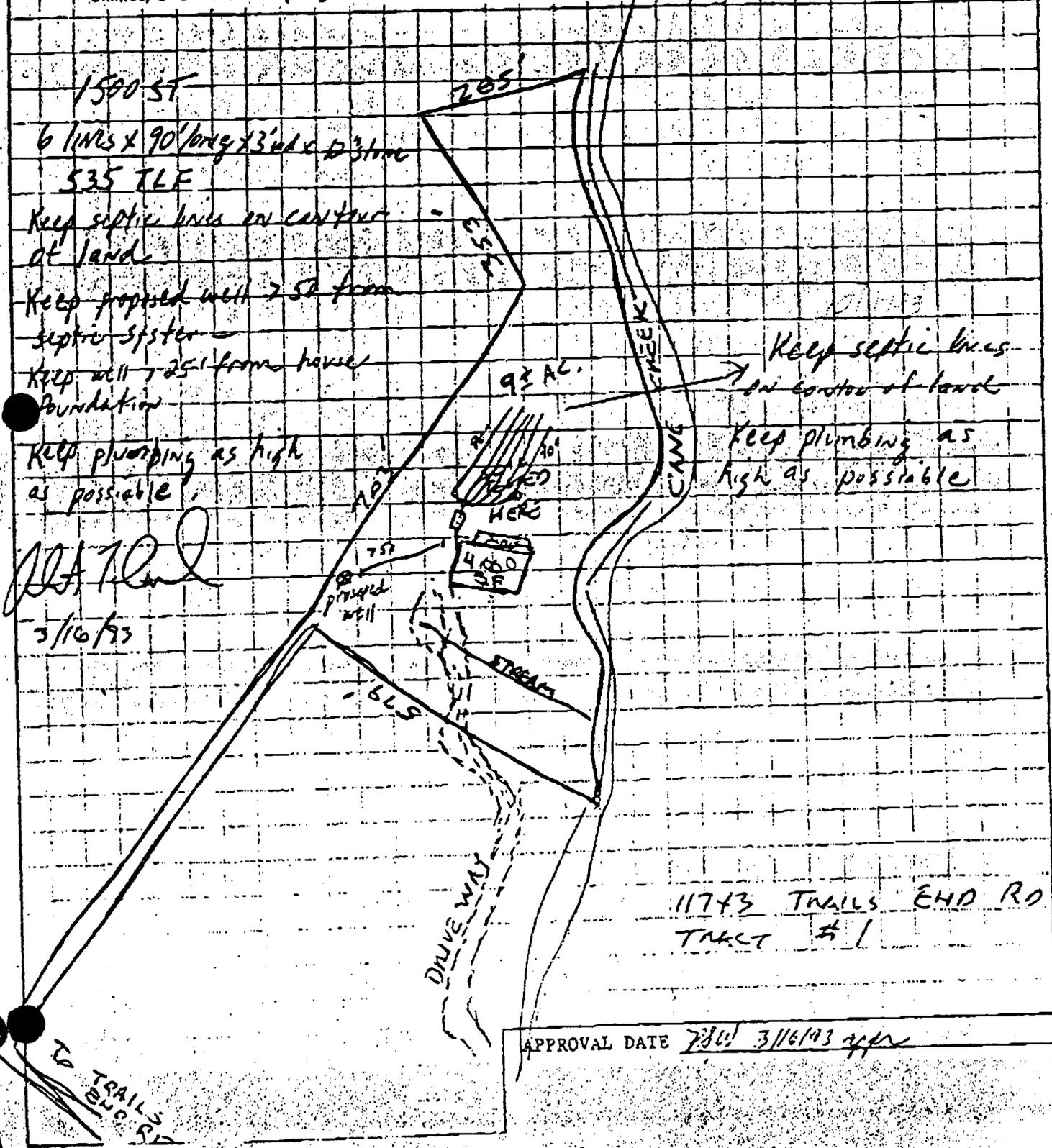
cc: John Gibson
Julian Foscue



HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
700 NORTH TRYON STREET
CHARLOTTE, NC 28202
PHONE (704) 338-5102

FILE: 4799A
TC: 019-171-1470

Draw in and name all roads adjoining the property. Draw in and accurately dimension the lot concerned. Accurately indicate property boundaries, proposed and/or existing structures and driveways, underground utilities, and wells and springs within 100 feet of the proposed building or drainfield.



1500 ST

6 LINES x 90' LONG x 3' W x 12 3/4" H

535 TLE

Keep septic lines on center of land

Keep proposed well 75' from septic system

Keep well 75' from house foundation

Keep plumbing as high as possible

Keep septic lines on center of land

Keep plumbing as high as possible

[Signature]

3/16/93

11743 TRAILS END RD
TRACT #1

APPROVAL DATE 7:30 3/16/93

To TRAILS END RD



19

North Carolina Department of Cultural Resources

James G. Martin, Governor
Patric Dorsey, Secretary

Division of Archives and History
William S. Price, Jr., Director

April 15, 1992

Frank B. Hicks, Jr., P.E.
Frank B. Hicks Associates, Inc.
1817 Wedgedale Drive
Charlotte, N.C. 28210

Re: Demolition Landfill, Mecklenburg County
ER 92-8113

Dear Mr. Hicks:

Thank you for your letter of March 27, 1992, concerning the above project.

We have conducted a review of the project and are aware of no properties of architectural, historic, or archaeological significance which would be affected by the project. Therefore, we have no comment on the project as currently proposed.

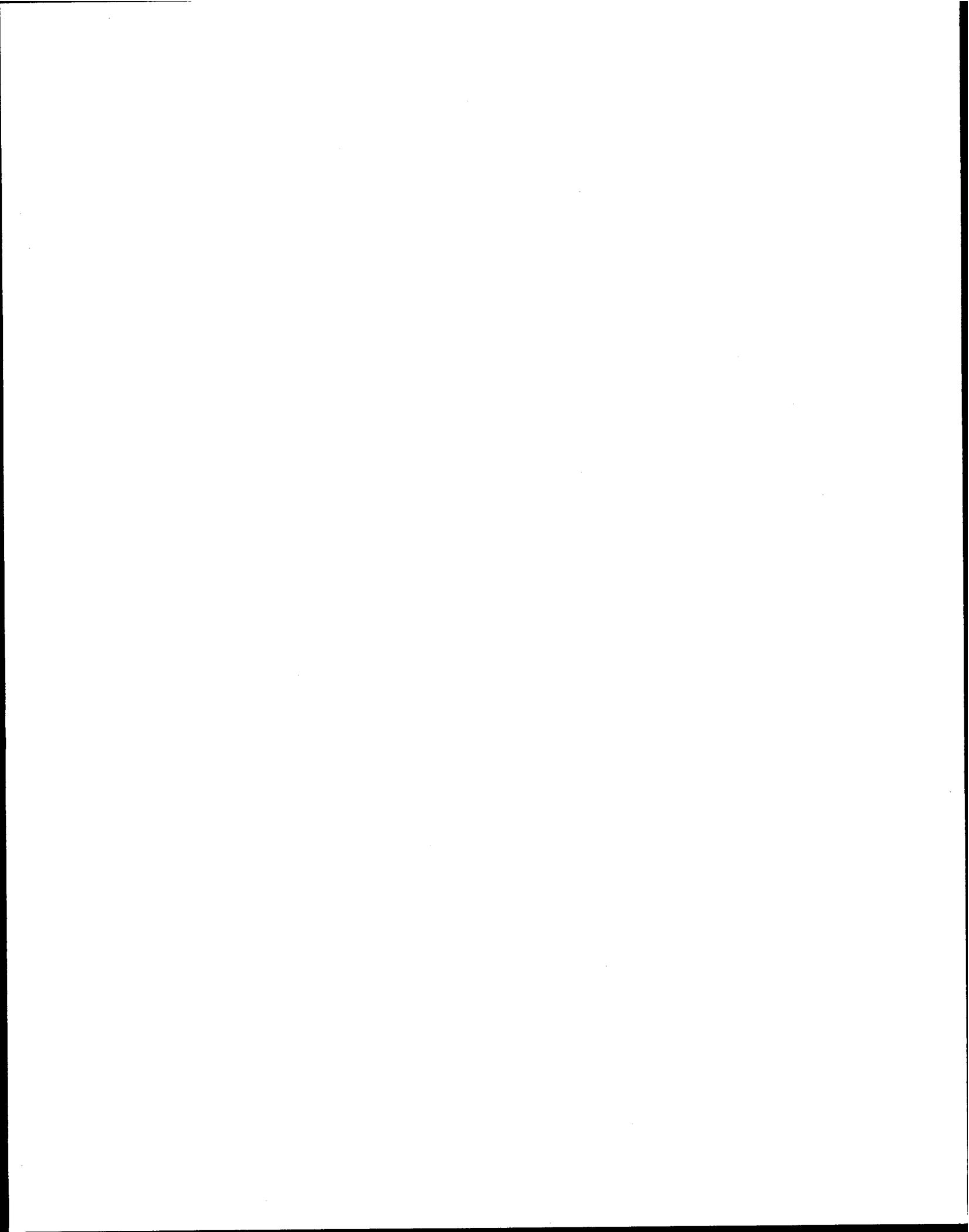
The above comments are made pursuant to Section 106 of the National Historic Preservation Act of 1966 and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106, codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, please contact Renee Gledhill-Earley, environmental review coordinator, at 919/733-4763.

Sincerely,

David Brook
Deputy State Historic Preservation Officer

DB:slw





Frank B. Hicks Associates, Inc.

Consulting Engineers • Surveyors • Planners
1817 Wedgedale Dr. • Charlotte, NC • 28210
Telephone: (704) 527-1586 • Fax: (704) 553-1643

2

April 2, 1992



N. C. Department of Environment, Health, and Natural Resources
Division of Solid Waste Management
P. O. Box 27687
Raleigh, N. C. 27611-7687

Re: N. Mecklenburg Landfill
Application for C&D Lanfill Approval

Attn: Mr. Ellis Cayton

Gentlemen:

This addenda to the above application is in response to Mr. Caytons letter of March 25, 1992 and is the same order as those comments in the letter.

If additional information is desired, please contact us.

Very truly yours,

FRANK B. HICKS ASSOCIATES, INC.

Frank B. Hicks, Jr., P. E.
FBH;b

cc: N. Mecklenburg Landfill
Mr. John Gibson, Mecklenburg Co.

Enclosure: Copy of Deed to Property on which this landfill is located.

NORTH MECKLENBURG LANDFILL
15300 HOLBROOKS ROAD,
HUNTERSVILLE, N. C. 28078

April 2, 1992

ADDENDA TO APPLICATION FOR A CONSTRUCTION AND DEMOLITION LANDFILL

This addenda is in response to the March 25, 1992 letter from the Division of Solid Waste and in the order of those comments.

1. Floodplain Map - A copy of the recorded official map from the County is included.
2. Copies of Letters are included requesting responses from the the three State Agencies:

N. C. Wildlife Commission
Division of Parks and Recreation
Division of Archives and History

Responses will be forwarded to you as they are received.

3. Methane Gas - Should any Methane Gas be generated by the two categories of waste to be buried in this site, i.e., "Inert Debris" and "Const. and Dem. Debris" (as defined in Policy Memo. #16), should escape or be retained by the following,
 1. Escape thru the 3:1 final fill slopes on the outside of landfill, and/or,
 2. Be confined and retained by the Creeks that border the site for this waste on three sides.

There are no residential dwellings adjacent to the site or between the site and the adjacent creeks.

4. Topographic Maps - Two copies of the topographic maps at a scale of 1"=200' and with contour intervals of 5 feet vertically are enclosed.
5. Use of Scales - This landfill prefers to continue charging by the Volume - per cubic yard basis rather than using scales. It has always used the volume method.
6. Types of waste to be buried in this landfill section as defined in Policy Memo #16:
Inert debris - solid waste which consists soley of material that is virtually inert, such as brick, concrete, rock and clean soil and,
Construction or Demolition debris - solid waste resulting from contruction, remodeling, repair or demolation operations on pavement, buildings, or other structures.

Land Clearing Debris will be disposed off in the existing operating first phase of the landfill. No Yard Trash will be accepted at either of the landfill areas.



Frank B. Hicks Associates, Inc.

Consulting Engineers • Surveyors • Planners

1817 Wedgedale Dr. • Charlotte, NC • 28210

Telephone: (704) 527-1586 • Fax: (704) 553-1643

March 27, 1992

N. C. Department of Cultural Resources
Division of Archives and History
Archeological and History Preservation Section
109 E. Jones St.
Raleigh, N. C. 27601-2807

Re: N. Mecklenburg Landfill
15300 Holbrooks Road
Huntersville, N. C.
Application for a Demolition Landfill Permit

Gentlemen:

N. Mecklenburg Landfill has made application to the Division of Solid Waste Management, DEHNR, for approval to operate as a Demolition Landfill. The Landfill currently operates under a Mecklenburg County EPD Solid Waste Permit at this location.

The Solid Waste Section Rules require comments from the Division of Archives and History, Archeology and Historic Preservation Section on the damage or destruction of archeological or historic sites at this location as part of the approval process.

Attached for your use is a topographic map of the area. location sketch and related data for your use.

If you have any questions, please call us at the above phone no.

Very truly yours,

FRANK B. HICKS ASSOCIATES, INC.

Frank B. Hicks, Jr, P. E.
FBH/b

CC: N. Mecklenburg Landfill
Mr. Ellis Cayton, Env. Engr. Solid Waste Section



Frank B. Hicks Associates, Inc.

Consulting Engineers • Surveyors • Planners
1817 Wedgedale Dr. • Charlotte, NC • 28210
Telephone: (704) 527-1586 • Fax: (704) 553-1643

March 31, 1992

N. C. Wildlife Resources Commission
512 N. Salisbury Street
Raleigh, N.C. 27604-1188

Re: N. Mecklenburg Landfill
15300 Holbrooks Road
Huntersville, N. C.
Application for a Demolition Landfill Permit

Gentlemen:

N. Mecklenburg Landfill has made application to the Division of Solid Waste Management, DEHNR, for approval to operate as a Demolition Landfill. The Landfill currently operates under a Mecklenburg County EPD Solid Waste Landfill Permit at this location.

The Solid Waste Section Rules require comments from the Wildlife and Resources Commission with regard to endangered or threatened species of fish or wildlife at this location.

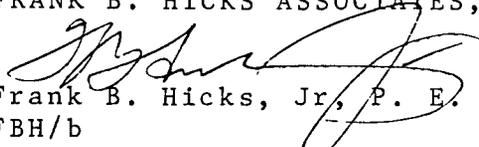
On August 23, 1991 Ms. Beth Stüdenberg made an inspection of this Landfill as part of a Mining Permit application.

Attached for your use is topographic map of the area and a location sketch on the map for site location.

If you have any questions, please call us at the above phone no.

Very truly yours,

FRANK B. HICKS ASSOCIATES, INC.


Frank B. Hicks, Jr., P. E.

FBH/b

CC: N. Mecklenburg Landfill

Mr. Ellis Cayton, Env. Engr., Solid Waste Section



Frank B. Hicks Associates, Inc.

Consulting Engineers • Surveyors • Planners

1817 Wedgedale Dr. • Charlotte, NC • 28210

Telephone: (704) 527-1586 • Fax: (704) 553-1643

March 27, 1992

N. C. Dept. of Environment, Health and Natural Resources
Division of Parks and Recreation
N. C. Natural Heritage Program
P. O. Box 27687
Raleigh, N. C. 27611

Re: N. Mecklenburg Landfill
15300 Holbrooks Road
Huntersville, N. C.
Application for a Demolition Landfill Permit

Gentlemen:

N. Mecklenburg Landfill has made application to the Division of Solid Waste Management, DEHNR, for approval to operate as a Demolition Landfill. The Landfill currently operates under a Mecklenburg County EPD Solid Waste Permit at this location.

The Solid Waste Section Rules require comments from Division of Parks and Recreation Natural Heritage Program regarding adverse impact on State Parks, Recreation or Scenic Areas.

Attached for your use is a topographic map of the Area, Location Sketch and related data for your use.

If you have any questions, please call us at the above phone no.

Very truly yours,

FRANK B. HICKS ASSOCIATES, INC.


Frank B. Hicks, Jr., P. E.
FBH/b

CC: N. Mecklenburg Landfill
Mr. Ellis Cayton, Env. Engr. Solid Waste Section



State of North Carolina
Department of Environment, Health, and Natural Resources
Division of Solid Waste Management
P.O. Box 27687 · Raleigh, North Carolina 27611-7687

James G. Martin, Governor
William W. Cobey, Jr., Secretary

William L. Meyer
Director

March 25, 1992

Mr. Frank B. Hicks, P.E.
1817 Wedgedale Dr.
Charlotte, N.C. 28210

Re: Completeness Review - North Mecklenburg Demolition Landfill
Application

Dear Mr. Hicks:

The Solid Waste Section has conducted a preliminary review of the referenced project, submitted by Mr. Frank Hicks, P.E. in behalf of North Mecklenburg Landfill Inc. In accordance with the N.C. Solid Waste Management Rules, the following comments must be addressed to continue the review process.

1. Section 0.0503 (1) (a) - The application does not fully address Section 0.0503 (1) (a) of the N.C. SWM Rules and additional information should be provided. The application should include the submittal of the referenced Mecklenburg County floodplain maps to document floodplain areas.
2. Section 0.0503 (1) (b) (i through v) - The application contains statements concerning the proposed site's impact on: endangered species; archaeological and historic sites; and state parks, recreation and scenic areas, and other lands in state nature or historic preserves. The application should provide written documentation from appropriate state agencies indicating concurrence that the proposed site does not adversely impact the areas discussed above in this paragraph. Documentation should include request and responses (with attachments, etc...) from appropriate state agencies.

The Solid Waste Section understands that the Wildlife Resources Commission performed a review of the site's impact on endangered species and associated critical habitat which was incorporated into the mining permit review process. Therefore, the Section will accept documentation from the

mining permit application process for review in lieu of resubmitting information to the N.C. Natural Heritage program. The information should address Section 0.0503 (1)(b)(i - ii).

Should the Solid Waste Section find acceptable the documentation from the Wildlife Resources Commission concerning endangered species and critical habitat, the application still needs to address archaeological and historic sites; and state parks, recreation and scenic areas, and other lands in state nature or historic preserves. The appropriate state agency in relation to state parks, recreation and scenic areas, and other lands in state nature or historic preserves is:

The N. C. Department of Environment, Health, and
Natural Resources
Division of Parks and Recreation
N.C. Natural Heritage Program
(919) 733 - 7795

The appropriate state agency in relation to archaeological and historic sites is:

The N. C. Department of Cultural Resources
Division of Archives and History
Archeology and Historic Preservation Section
(919) 733 - 4763

3. Section 0.0503 (2) (a) - Waste types characteristic of demolition landfills are capable of producing methane gas. Consequently, the application needs to address this section.
4. Policy Memorandum No. 16 (enclosed) requires applications for demolition landfills intended for the disposal of building demolition wastes to meet the requirements of 15A NCAC 13b Section 0.0504.

Please note Section 0.0504 (2)(a) which requires the application to include a map showing existing features to include existing topography of the site on a scale of at least 1 inch equals 200 feet with 5 foot contours.

5. House Bill 1109, ratified July 3, 1991, requires all municipal solid waste facilities, including landfills accepting construction/demolition wastes as defined by Policy Memorandum #16, to install scales. The application needs to show provisions for scales.

These comments are intended to expedite the review of the application, and in no way do they restrict the Section's right to request additional information during the review process.

As you can recognize, there is an extensive amount of additional information required to complete the application. To help you expedite completion of the application process, I can be available to provide guidance on the Solid Waste Management Rules pertaining to Construction/Demolition Landfills. If you would like to schedule a meeting to discuss the application, please contact me at (919) 733-0692.

Finally, the Section recently published its latest rule revisions, and I am sending you a copy for your convenience. I am also sending a copy of Policy Memorandum No. 16. Once again, please contact me should you have any questions.

Respectfully,

Ellis Cayton

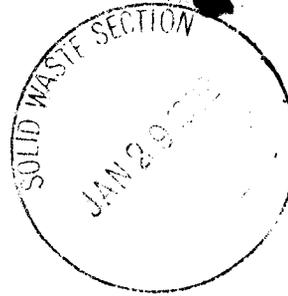
Ellis Cayton
Environmental Engineer
Solid Waste Section

cc: John Gibson
Julian Foscue



Frank B. Hicks Associates, Inc.
Consulting Engineers • Surveyors • Planners
1817 Wedgedale Dr. • Charlotte, NC • 28210
Telephone: (704) 527-1586 • Fax: (704) 553-1643

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January 27, 1992

Mr. Jim Coffey
Division of Solid Waste Management
D. E. H. N. R.
P. O. Box 27687
Raleigh, N. C. 27611

Re: ADDENDA TO N. MECKLENBURG LANDFILL APPLICATION
Huntersville, N. C.

Gentlemen:

The following additional information is submitted for
the above application:

1. This application applies to Area No. 2 only of the landfill.
Area No. 1 is being phased out of use.
2. A Mining Permit has been issued for Area No. 2.
3. As part of the review for a Mining Permit, the
N. C. Wildlife Resources Commission made a field investigation
of the site and a copy of their memo is attached.
The siltation criticisms in their memo have been
corrected and the additional silt basin, drainage ditches
to the basins, and seeding requested have been constructed.
These new siltation control measures are shown on the
drawings submitted on January 13, 1992 as part of this
application.
4. Two monitoring wells have been installed at the lower
side of the site between the site and Cane Creek.

If you have additional questions or need additional information,
please contact us.

Very truly yours,

FRANK B. HICKS ASSOCIATES, INC.

Frank B. Hicks, Jr., P. E.
FBH/b

CC: Mr. John Gibson, Mecklenburg Co. EPA
Mr. Larry Griffin, N. Meck. Landfill



8/23/91
mf

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North Carolina Wildlife Resources Commission

512 N. Salisbury Street, Raleigh, North Carolina 27604-1188, 919-733-3391
Charles R. Fullwood, Executive Director

MEMORANDUM

TO: Beth Studenberg, Assistant Mining Specialist
Land Quality Section, DEHNR

FROM: Richard B. Hamilton *Richard B. Hamilton*
Assistant Director

DATE: August 23, 1991

SUBJECT: Mining Permit Application, Larry Griffin and O.L. Parker, North
Mecklenburg Landfill Mine, Mecklenburg County.

The subject document has been reviewed by professional biologists on the Wildlife Resources Commission staff and a field investigation was conducted on 16 August 1991. Our comments are provided in accordance with certain provisions of the Mining Act of 1971 (as amended, 1982) (G.S. 74-46 through 74-68 15 NCAC 5).

The applicant(s) are requesting a permit to mine dirt in an area adjacent to the North Mecklenburg Landfill, a privately-owned demolition landfill. As indicated in your cover letter dated August 7, 1991 it is unclear exactly how many acres are to be permitted. The request is apparently for 2 acres in the area designated as "Landfill Area No. 2". Observations made at the site visit, and discussions with an employee at the landfill office, revealed that mining has been occurring on roughly 2 acres of this site for the past 3 years. There is also a small area being mined on the Landfill Area No. 1 site.

Two sediment traps were observed during the site visit, one on either side of Cane Creek, but only a portion of the mine runoff flows into a trap. A significant amount of runoff flows directly into Cane Creek, a tributary of the South Prong of Clarks Creek. These check dams are poorly vegetated, and therefore eroded. There are some brushpiles in highly eroded areas but they do not appear to be effective. No other erosion/sediment control measures were noted on the mine site.

This agency recommends denial of a mining permit at this time for the following reasons:

1. The application is unclear as to the size and location of the area to be mined. It was impossible to provide a comprehensive review of this project without this information.

2. While mining has already been taking place on the site, erosion and sedimentation control measures appear to have been virtually ineffective. We recommend that future permit issuance be made conditional upon the applicants' implementing such measures. These measures should, at a minimum, prevent direct runoff from both the landfill and the mine site into Cane Creek. We also recommend that a minimum 50' wide vegetation buffer be established and maintained along both sides of the creek.

The reclamation/revegetation specifications appear to be well done and were much improved by the suggestions of Mr. Bruce Wilson with the U.S. Soil Conservation Service. Every effort should be made to require strict adherence by the applicants to these specifications.

Thank you for the opportunity to comment on this project; we look forward to receiving additional information.

RBH/sp

cc: The Honorable Robert C. Hayes
Ken Knight, District 6 Wildlife Biologist
Stephen Pozzanghera, Habitat Conservation Biologist

APPLICATION FOR
DEMOLITION LANDFILL
FOR

NORTH MECKLENBURG LANDFILL
HUNTERSVILLE, N. C.
January 13, 1992



GENERAL.

North Mecklenburg Landfill, a demolition landfill, has operated under a Mecklenburg County Permit since 1988. All landfill operations have been concentrated in the Area No. 1 to date. (See Sht. No. 1 of Drawings.)

This application is for approval to operate under NCAC 13B "Solid Waste Management Rules", Section .0500 Disposal Sites, Para. .0503., State of North Carolina.

SITING AND DESIGN FOR THE DISPOSAL SITE.

Responses are in the same order and with the same Number as the requirement numbers in the "Solid Waste Management Rules", Section .0500, Para. .0503.

(1) SITING AND DESIGN REQUIREMENTS:

(a) The existing operating demolition landfill is not located in the documented floodplain, based on Mecklenburg County floodplain maps of the Cane Creek Area. (See Site Plan, Sht. 2)

(b) Site Location Consideration:

(i) This site does not cause or contribute to taking of any endangered or threatned species of plants, fish or wildlife.

SITING AND DESIGN FOR DISPOSAL SITES (Cont.)

- (1) (b) (ii) The site does not result in the destruction or adverse modification of the critical habitat of endangered or threatned species as identified in 50 C.F.R. Part. 17.
- (iii) The site does not damage or destroy an archaeological or historical site.
- (iv) The site does not cause an adverse impact to State park, recreation or scenic areas, or any other lands included in the State nature and historic preserves.
- (c) This Landfill will not accept putrescible wastes and the site is not within 10,000 ft. of an existing airport. (See Site Plan No. 1)
- (d) Adequate suitable cover soils for landfill cover is available on site. In fact, North Mecklenburg Landfill has applied to the State for a Mining Permit to sell fill materials from the site.
- (2)(a) Explosive gases will not be generated from demolition waste. No putrescible will be admitted to the landfill.
- (b) Public access to the site is controlled by a gate and an office at the entrance to the landfill
- (c)(i) Landfill and site will not have discharges of pollutants into waters of Cove Creek. See Siltation Provisions on the drawings.

SITING AND DESIGN FOR DISPOSAL SITES (Cont.)

- (c)(ii) Site will not cause a discharge of dredged material or eill into adjacent waters in violation of Section 404 of the Clean Waters Act.
- (c)(iii) Site will not cause non-point source pollution or violate assigned water qualitaty standards.
- (d)(i) This is a demolation wast landfill. Putrescible waste will not be accepted.
- (ii) Bottom elevation of solid waste will be at least 4 feet above seasonal high water table.
- (e) Landfill will not engage in open burning of solid waste.
- (f) Site is a demolition waste landfill, however, a 75 foot wide buffer is provided along the outer boundry of the property.

SOIL CONSERVATION REVIEW OF GRASSING SPECIFICATIONS.

The Mecklenburg Office of Soil Conservation Service reviewed the attached construction plans and specifications as part of the "Mining Permit Process" and the grassing specifications attached are from that review and are included as part of the plans.

ATTACHED PLANS AND SPECIFICATIONS.

Included and bound seperately are the Plans and Specifications for this Landfill. The Plan Sheets Contain the requirements for approval by the County in 1988.

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1. Site Preparation - Grading of the area to be seeded should be done in such a way as to leave the soil in the best possible condition. This includes leaving as much topsoil as possible or replacing, where feasible, to improve the condition.

Where possible, grade and shape slopes to 3:1 ratio slope (3 foot horizontal to 1 foot vertical) or flatter to permit the use of conventional equipment for seedbed preparation. No seedbed preparation may be necessary on sites where seeding is done immediately after grading is done. The excavation work should be completed during the optimum seeding dates for the desired seeding mixtures.

2. Lime and Fertilizer - Where possible conduct soil test for lime and fertilizer recommendations. In the absence of a soil test report, apply 2 tons per acre of finely ground dolomitic limestone (92 lbs per 1,000 square feet) and 500 to 800 lbs of 20% superphosphate or equivalent per acre (12 to 18 lbs per 1,000 square feet). Additional amounts and analysis of fertilizers to use at seeding are:
 - A. Grasses alone - 1,000 lbs per acre of 10-10-10 fertilizer or equivalent (23 lbs per 1,000 square feet).
 - B. Grasses and *legumes or legumes alone - 800 to 1,000 lbs per acre of 5-10-10 fertilizer or equivalent (18-23 lbs per 1,000 square feet).
 - C. Normally an additional application of 30 to 50 lbs per acre of nitrogen is needed within 3 to 9 months to help establish grass plantings. Application should be timed to the growing cycle of the species being established.
3. Seedbed Preparation - Work lime and fertilizer into the soil, using a disk, rake, or similiar equipment. Sow seed uniformly across the area. Cover seed to a depth of approximately $\frac{1}{2}$ to 1 inch, depending on the size of the seed.
4. Mulching - Dry, unchopped, unweathered small grain straw or hay free of seeds of competing plants - spread at the rate of 1.5 tons per acre. Apply mulch uniformly so that approximately 25% of the ground is visible. Other mulch materials may be used.
5. Mulch Anchoring - Anchor mulch immediately after placement to minimize loss by wind and water. Size of an area, type of site, and cost should be used to determine an anchoring method. Emulsified asphalt tack at the rate of 225 gallons per acre is often used due to the ease of application over large areas, cost, etc.

* Footnote - legumes are nitrogen-fixing plants such as clover, sericea lespedeza, and crownvetch.

6. Seeding Mixtures for Mecklenburg County

Note: Attention should be given to Recommended Planting Dates and the site in selecting seed mixtures.

<u>Seeding Mixtures</u>	<u>Planting Rates Per Acre</u>	<u>Recommended Planting Dates</u>	<u>Notes</u>
Common Bermudagrass (hulled)	12 lbs	Apr 15-June 30	Likes south slopes, well drained, sunny sites, stands foot traffic.
Common Bermudagrass (unhulled)	20 lbs	Feb - March	
Crownvetch (seed)	15 lbs	Aug 29-Sept 20	Avoid wet sites. Mow only to control brush. Fescue may be used to increase land cover during establishment of crownvetch.
and Tall Fescue	20 lbs	Feb. 20-Apr 15	
Weeping lovegrass	3 lbs	Apr 15-June 15	Gives quick summer cover - well adapted to droughty sites. Best in mixtures with sericea lespedeza - tends to become clumpy with age.
Sericea lespedeza (scarified)	50 lbs	Mar 15-June	Avoid wet sites - will persist and furnish cover on eroded, draughty sites and subsoil material.
Sericea lespedeza (unscarified)	60 lbs	Sept 15-Feb	Tolerates low level of management. May be seeded alone or overseeded on fescue, lovegrass, small grain, and other compatible plants during the fall and winter months. "Appalow" best cultivar (shorter growing)
Sericea lespedeza (scarified and Weeping lovegrass (hulled))	50 lbs 3 lbs	Mar 15-June	Love grass provides quick protective cover.
Sericea lespedeza (scarified) and Common Bermudagrass	50 lbs 8 lbs	Mar 15-June	Bermudagrass gives quick land cover and heals in open areas. Bermudagrass usually disappears where sericea establishes a canopy.
Sericea lespedeza (scarified) Tall Fescue	50 lbs 30 lbs	Mar-Apr	Scarified sericea may be spring seeded on Fescue seeded the previous fall.

<u>Seeding Mixtures</u>	<u>Planting Rates Per Acre</u>	<u>Recommended Planting Dates</u>	<u>Notes</u>
Sericea lespedeza (unscarified) Tall Fescue	60 lbs 30 lbs	Aug 15-Oct	If sericea seed is unavailable at planting time it may be overseeded on Fescue later in the winter.
Tall Fescue	80 lbs	Aug 15-Oct Feb 15-Apr 15 Note: Fall plantings are more successful	Not well suited to infertile, droughty, sandy soils. Requires good maintenance.
Tall Fescue and Red Fescue	30 lbs 20 lbs	Aug 20-Oct 10 Feb 15-Apr 15 Note: Fall plantings are normally more successful	Red fescue in this mixture has a tendency to fill in voids because it is shade tolerant.
Tall Fescue and Browntop millet or Sorghum-Sudan Hybrids	60 lbs 35 lbs 30 ^{or} lbs	July 15-Aug	Keep annuals cut back to 10-12 inches. Mulching is needed.
Tall Fescue and Rye	60 lbs 30 lbs	Nov-Jan	Use only when necessary to complete a job. Mulching will be necessary to provide erosion control. Keep annuals cut back to 10-12 inches.

7. Maintenance - Most important controllable factor in retaining an effective vegetative cover.

- A. Control competition - control by mowing or herbicides
- B. Irrigation - if soil moisture is deficient, supply new plantings with adequate water (3 to 4 inches penetration) for plant growth at 10 day intervals. Most important on late seedings or abnormally dry, hot seasons.
- C. Reseed bare areas at recommended planting dates.
- D. Lime and Fertilizer - apply according to soil test reports, in the absence of such a report apply as follows:

Lime - Apply 1 to 2 tons per acre of dolomitic limestone (43 to 92 lbs per 1,000 square feet) during late fall or winter every 4 to 5 years.

Fertilizer - Fertilize annually.

-Pure stands of tall fescue and mixtures of tall fescue and red fescue - Apply 400 to 500 lbs per acre (9 to 12 lbs per 1,000 square feet) of 10-10-10 fertilizer or equivalent in early fall. Additional fertilization with nitrogen or a complete fertilizer is usually needed in early spring. Do not use nitrogen on fescue from mid-April to mid-summer.

-Pure stands of Bermudagrass and lovegrass - Apply 400 to 500 lbs per acre (9 to 12 lbs per 1,000 square feet) of 10-10-10 fertilizer or equivalent when the plants start to green up in the spring. Topdress with 60 lbs of nitrogen per acre (1 lb per 1,000 square feet) during the growing season.

-Pure stands of sericea lespedeza and crownvetch - Fertilize in early spring with 400 to 500 lbs per acre of 0-10-20 (9 to 12 lbs per 1,000 square feet).

-Mixtures of sericea lespedeza, fescue, lovegrass, or Bermudagrass - Fertilize in late winter or early spring with 400 to 500 lbs per acre (9 to 12 lbs per 1,000 square feet) of 5-10-10 or equivalent. In fescue-sericea lespedeza mixtures, apply in the fall if sericea lespedeza is developing better than fescue.

1. Site Preparation

A. Excessive water run-off must be controlled by planned and installed erosion control practices, such as closed drains, diversions or sediment basins. Grade where practical and feasible to permit use of conventional equipment for seedbed preparation, seeding, and mulching.

B. Materials

Where possible conduct a soil test for lime and fertilizer recommendations. In the absence of such a report apply 100 pounds of ground limestone or equivalent per 1000 sq. feet or (2 tons per acre) and apply 12 to 16 pounds of 10-10-10 or similar fertilizer per 1000 sq. feet or (500-700 pounds per acre). Nitrogen top dressing may be applied after grass is up for vigorous growth.

2. Seeding

A. Incorporate lime and fertilizer to a depth of 3-4 inches. The adequacy of minimum preparation is dependent upon site condition. In general, if the soil surface is such that the seeds of plants with high seedling vigor can be placed so as to remain in contact with moist soil, no preparation is required.

B. Seeding tables

Note: Select from the following table a quick growing grass with high seedling vigor that is well suited to the area, to the time of planting, and that will provide a temporary cover which will not interfere with plants sown later for permanent cover.

	<u>Per 1,000 sq. ft.</u>	<u>Per Acre</u>
<u>Late Winter-Spring</u>		
oats	2 lbs.	3 bu.
rye	3 lbs	2-3 bu.
ryegrass	1 lb.	30-40 lbs.
oats and	1 lb.	1½ bu.
ryegrass	½ lb.	20 lbs.
oats and	1 lb.	1½ bu.
Korean lespedeza	½ lb.	20 lbs.
<u>Summer</u>		
sudangrass	1 lb.	35-45 lbs.
browntop millet	1 lb.	30-40 lbs.
weeping lovegrass	0.2 lb.	4-6 lbs.
<u>Late Summer - Early Winter</u>		
rye	3 lbs	2-3 bu.
ryegrass	1 lb.	30-40 lbs.
oats (before Oct. 1)	2 lbs.	3 bu.
barley (before Oct. 15)	3 lbs.	2-3 bu.
wheat (after Oct. 1)	3 lbs.	2-3 bu.
rye and	1½ lbs.	1 bu.
ryegrass	½ bu.	20 lbs.

B. Mulching

Mulching should usually be specified to reduce damage from water run-off and improve moisture conditions for seedlings. The use of mulch is a judgement decision based on time of seeding and conditions of individual sites. Small grain straw at the rate of 1 to 2 tons per acre is recommended. Allow 25% of ground surface to be visible.

4. Irrigation (if needed)

Water should be applied as soon as the mulch is applied at a rate that does not promote run-off or erosion. A second application is needed in ten days if no rainfall has occurred.

For further information contact the USDA-Soil Conservation Service at the County Services Building, 700 North Tryon St., or call 371-6265.

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oats and	1 lb.	1½ bu.
Korean lespedeza	½ lb.	20 lbs.
<u>Summer</u>		
sudangrass	1 lb.	35-45 lbs.
browntop millet	1 lb.	30-40 lbs.
weeping lovegrass	0.2 lb.	4-6 lbs.
<u>Late Summer - Early Winter</u>		
rye	3 lbs	2-3 bu.
ryegrass	1 lb.	30-40 lbs.
oats (before Oct. 1)	2 lbs.	3 bu.
barley (before Oct. 15)	3 lbs.	2-3 bu.
wheat (after Oct. 1)	3 lbs.	2-3 bu.
rye and	1½ lbs.	1 bu.
ryegrass	½ bu.	20 lbs.

B. Mulching

Mulching should usually be specified to reduce damage from water run-off and improve moisture conditions for seedlings. The use of mulch is a judgement decision based on time of seeding and conditions of individual sites. Small grain straw at the rate of 1 to 2 tons per acre is recommended. Allow 25% of ground surface to be visible.

4. Irrigation (if needed)

Water should be applied as soon as the mulch is applied at a rate that does not promote run-off or erosion. A second application is needed in ten days if no rainfall has occurred.

For further information contact the USDA-Soil Conservation Service at the County Services Building, 700 North Tryon St., or call 371-6265.



State of North Carolina
Department of Environment, Health, and Natural Resources
Division of Parks and Recreation
512 North Salisbury Street • Raleigh, North Carolina 27611

James G. Martin, Governor
William W. Cobey, Jr., Secretary

Dr. Philip K. McKnelly
Director

May 14, 1992

Mr. Frank B. Hicks, Jr.
Frank B. Hicks Associates, Inc.
1817 Wedgedale Drive
Charlotte, NC 28210

SUBJECT: N. Mecklenburg Landfill
Application for a Demolition Landfill Permit

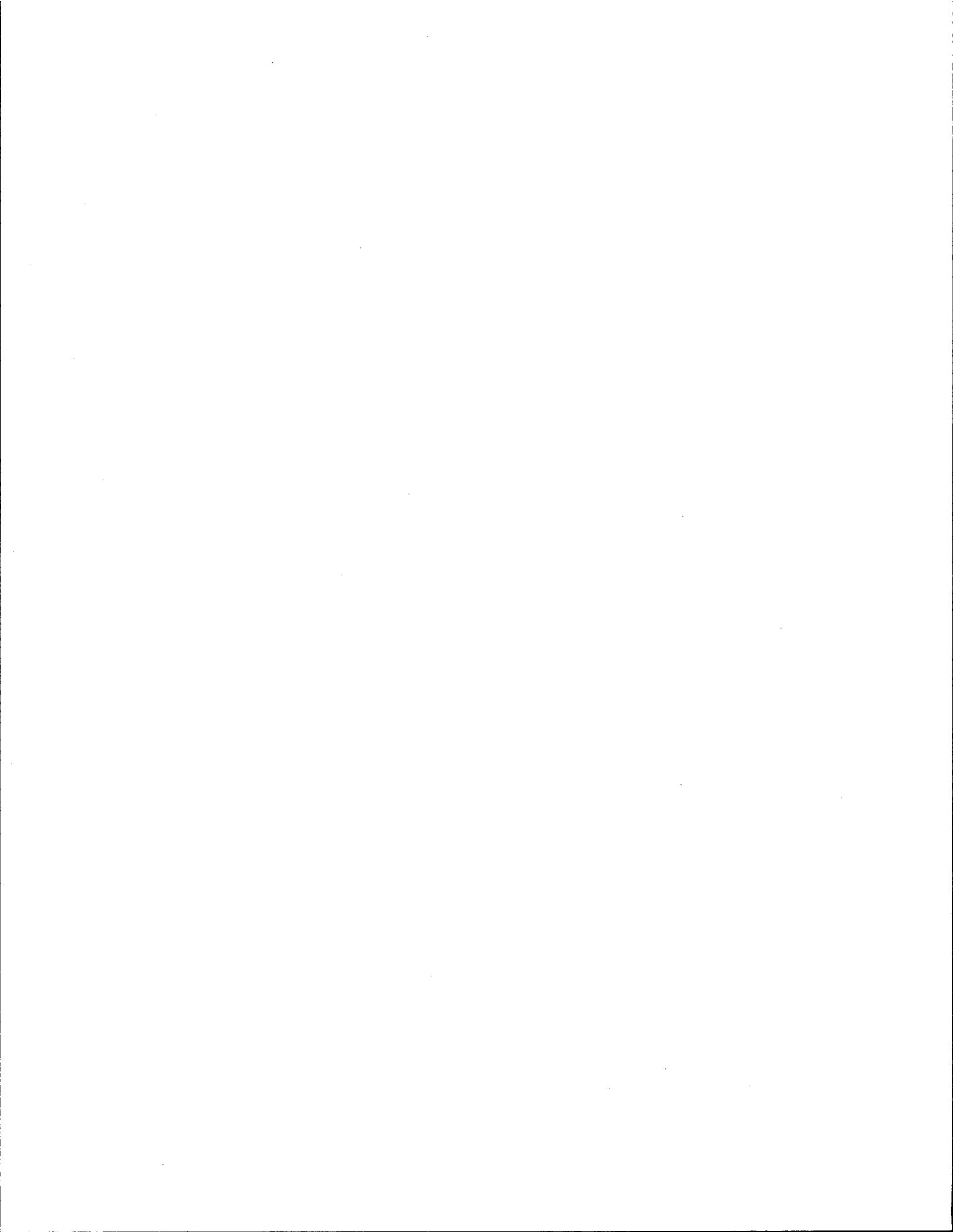
Dear Mr. Hicks:

Thank you for your phone call of April 23 and your letter of April 24. These clarified the situation of the N. Mecklenburg Landfill. As I explained over the phone, it was not clear from the material you initially provided that the area indicated on the map has already been mined and used as a landfill. The rare species that I listed in my letter of April 16 may have once occurred there, but it is highly improbable that they now occur at the site. Of course further sedimentation and leachate would still be detrimental to stream quality and to the health of aquatic species, and it is our understanding that measures to control sedimentation and leachate will be implemented.

Please contact the Natural Heritage Program if you need additional information.

Sincerely,

Ann W. Kelly
Natural Heritage Program





Frank B. Hicks Associates, Inc.

Consulting Engineers • Surveyors • Planners

1817 Wedgedale Dr. • Charlotte, NC • 28210

Telephone: (704) 527-1566 • Fax: (704) 553-1643

March 31, 1992

N. C. Wildlife Resources Commission
512 N. Salisbury Street
Raleigh, N.C. 27604-1188

Re: N. Mecklenburg Landfill
15300 Holbrooks Road
Huntersville, N. C.
Application for a Demolition Landfill Permit

Gentlemen:

N. Mecklenburg Landfill has made application to the Division of Solid Waste Management, DEHNR, for approval to operate as a Demolition Landfill. The Landfill currently operates under a Mecklenburg County EPD Solid Waste Landfill Permit at this location.

The Solid Waste Section Rules require comments from the Wildlife and Resources Commission with regard to endangered or threatned species of fish or wildlife at this location.

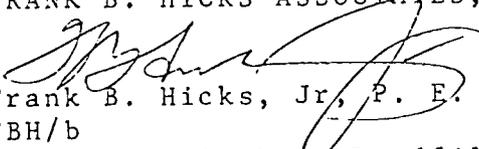
On August 23, 1991 Ms. Beth Studenberg made an inspection of this Landfill as part of a Mining Permit application.

Attached for your use is topographic map of the area and a location sketch on the map for site location.

If you have any questions, please call us at the above phone no..

Very truly yours,

FRANK B. HICKS ASSOCIATES, INC.


Frank B. Hicks, Jr., P. E.
FBH/b

CC: N. Mecklenburg Landfill
Mr. Ellis Cayton, Env. Engr., Solid Waste Section

NORTH MECKLENBURG



LANDFILL



Landfill - 15300 Holbrooks Road • Huntersville, NC 28078 • 704/875-3367
Administrative - 19141 Hwy 73 West • Huntersville, NC 28078 • 704/896-8473

March 13, 1992

Ellis Clayton
North Carolina Solid Waste
Raleigh, NC

Dear Mr. Clayton ,

The officers of North Mecklenburg Landfill Inc. are as follows:

O. L. Parker, President
L. A. Griffin, Vice President
Mike Griffin, Sec-Treas

If you need information pertaining to the operations, please address it to Larry Griffin at 704/896-8473 or FAX 704/896-0642

Sincerely,

Larry Griffin
Vice President



FRANK B. HICKS ASSOCIATES, INC.

CONSULTING ENGINEERS - SURVEYORS - PLANNERS

1817 Wedgedale Drive, Charlotte, N. C. 28210

Telephone: (704) 527-1586

FAX: (704) 553-1643

January 13, 1992

Division of Solid Waste Management
Dept. of Environment, Health and Natural Resources
P. O. Box 27687
Raleigh, N. C. 27611



Re: N. Mecklenburg Landfill
Huntersville, N. C.

Gentlemen:

We are enclosing three copies of an application, Drawings and Grassing specifications for review for approval for the existing operating N. Mecklenburg Landfill for approval from your department to operate under the N. C. Solid Waste Management 15A NCAC 13B as a "C & D" Landfill. This landfill is currently licensed to operate by Mecklenburg County as a "C & D" Landfill.

If you have any questions or need additional information, please contact us.

Very truly yours,
FRANK B. HICKS ASSOCIATES, INC.

Frank B. Hicks, Jr., P. E.
FBH/b

CC: Mr. John Gibson, Mecklenburg Co. EPA with appl.
Mr. Larry Griffin, N. Mecklenburg Landfill.