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Scanned By	Date	DOC ID	Permit
Backus	08/06/2015	24808	3214T-TRANSFER-2001

APPROVED
DIVISION OF WASTE MANAGEMENT
SOLID WASTE SECTION
Date 08/04/2015 By Patricia N. Beckus
DIN 24034
Attachment 1 Part VI Document 9
Permit 9808T-TRANSFER-2000 Permit DIN 24158

Permit Renewal Application

Stone Park Court Transfer Station
(Permit No. 32-14T)
Durham, North Carolina

Prepared for:

Waste Industries, LLC
Raleigh, North Carolina

April 2015

Prepared by:

SMITH+GARDNER
14 N. Boylan Avenue, Raleigh NC 27603 | 919.828.0577

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David W. Pepper
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Permit Renewal Application

Stone Park Court Transfer Station (Permit No. 32-14T)

Durham, North Carolina

Applicant Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision and that the information provided in this application is true, accurate, and complete to the best of my knowledge.

I understand that North Carolina General Statute 130A-22 provides for administrative penalties of up to fifteen thousand dollars ($15,000.00) per day per each violation of the Solid Waste Management Rules. I further understand that the Solid Waste Management Rules may be revised or amended in the future and that the facility siting and operations of this solid waste management facility will be required to comply with all such revisions or amendments.

DocuSigned by:
David W. Pepper
96A7EFA9CA4343C...

Da[illegible] Date
Waste Industries, LLC.

Prepared For:

Waste Industries, LLC
Raleigh, North Carolina

S+G Project No. Durham 15-1

Madeline German, P.G.
Project Geologist

DocuSigned by:
Stacey A. Smith
27B482DF1A09438...

Stacey A. Smith, P.E.
Project Manager

NORTH CAROLINA PROFESSIONAL SEAL 042 ENGINEER STACEY A. SMITH

April 2015

SMITH+GARDNER

14 N. Boylan Avenue, Raleigh NC 27603 | 919.828.0577

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Stone Park Court Transfer Station (Permit No. 32-14T)
Durham, North Carolina

Permit Renewal Application

Table of Contents

North Carolina Solid Waste Management (15A NCAC 13B .0400) rules and the Solid Waste Management Act of 2007 addressed in each section of this document are shown in italics after each section.

Executive Summary

Attachment A — Permit Documentation
(15A NCAC 13B.0401)

Attachment B — Legal Description of Property
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(15A NCAC 13B.0401)

Attachment D — Operations Manual
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Attachment E — Financial Assurance
(SL 2007-550 §13A-295.2)

Attachment F — Site Drawings
(*15A NCAC 13B.0401)*

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EXECUTIVE SUMMARY

GENERAL

The following is a Permit Renewal Application submitted on behalf of Waste Industries, LLC a subsidiary for Waste Industries USA Inc. for continued operation of a Transfer Station at their facility on Stone Park Court in Durham, Durham County, North Carolina (NC Solid Waste Permit No. 32-14T). The original permit to construct was issued August 28, 2000. The original permit to operate was issued April 4, 2001.

The Stone Park Court Facility also contains an LCID landfill under a separate permit whereby various historic documents contained herein may reference the facility in its entirety. This permit renewal is only for the transfer station (Permit 32-14T).

Waste Industries intends to continue transfer station operation following approval of this renewal application. The proposed use includes the continuation of waste acceptance and transference to specified locations. The current permit expires on October 8, 2015, a copy is provided as Attachment A.

Property Ownership and Operation

The proposed facility is owned and operated by Waste Industries, LLC. Facility contact information is as follows:

Operator:	Waste Industries, LLC.
Contact:	Bill Davidson
Address:	148 Stone Park Court Durham, North Carolina 27703
Phone:	919-596-1363

REGULATORY REFERENCES

This submittal has been prepared in accordance with the requirements of the North Carolina Administrative Code (15A NCAC 13B .0400) regarding permit amendment requirements for Transfer Stations, and the Solid Waste Management Act of 2007 which are enforced by the Division of Waste Management (DWM) of the North Carolina Department of Environment and Natural Resources (NCDENR).

Local Government Approval (*15A NCAC 13B .0401*)
Operations Plan (*15A NCAC 13B .0401*)
Financial Assurance (General Statutes Article 9, Chapter 130A-295.2)
Site Plan (*15A NCAC 13B .0401*)

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PROPERTY DESCRIPTION

The table below lists the property owners and the deed book references for the transfer station site. The continuing development does not impact any additional properties. Legal descriptions are included in **Attachment B.**

Property Owner	Deed Book	Deed Book Page	Area (acres)	PIN
Waste Industries, Inc.	2280	201	37.1	0840-03-20-3968

The property is currently zoned as Industrial and is bounded to the northwest by an unnamed tributary of Northeast Creek. Property to the north of the site is zoned as Residential Rural; properties to the south and east are zoned as Industrial. The western portion of the site shares a boundary with Light Industrial and Planned Development Residential zoned properties. Site access is provided from Stone Park Court.

APPLICATION REQUIREMENTS

The following sections correspond with the permit renewal application requirements for a transfer station.

Local Government Approval

A Special Use Permit (SUP) determination for the facility and a Local Government Approval Letter from Durham City/County Planning Department are included as **Attachment C**. This documentation is provided in accordance the requirements in *15A NCAC 13B.0401*.

A history of the SUP determination is provided below for documentation purposes:

On July 28, 1997, Waste Industries, Inc. (WI) submitted a Special Use Permit application for a Transfer Station and Recycling Center to the Durham City/County Planning Department (Durham Planning). On April 8, 1998, Durham planning issued a denial of this application. WI filed a suit against Durham County and the County Board of Commissioners on June 26, 1998, to which Durham County Superior Court subsequently, on January 11, 1999, issued a Decision and Order where-by the previous denial was reversed and Durham County was ordered to issue a Major Special Use Permit to WI. Durham County appealed this court decision to the North Carolina Court of Appeals; while this case (COA-99-562) was pending, Durham County and WI entered into a Settlement Agreement (which included a Special Use Permit) on March 3, 2000. Subsequently, on April 14, 2000, Durham County Planning issued a Local Government Approval Letter for the WI Solid Waste Transfer Station and Recycling Center.

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Operations Manual

The Operations Manual outlines and describes protocols for facility operation and maintenance and was prepared to provide Transfer Station personnel with a clear understanding of how the Design Engineer assumed that the completed facility would be operated. Along with the Project Drawings, the Operations Manual has been prepared to comply with the requirements of *15A NCAC 13B.0402*. A copy of the Operations Manual is included in **Attachment D**.

Financial Assurance

In accordance with the North Carolina General Statutes 130A-295.2, financial assurance will be provided for the facility and will be provided to the Department by Waste Industries USA, Inc. An Engineer's Estimate has been prepared to address the financial assurance requirements for remedial activities promulgated by the General Assembly's Session Law 2007-550. The financial assurance estimate directly correlates to the transfer station. A copy of the engineer's remedial cost estimate is referenced in **Attachment E**.

Site Plan

The site plans[1] for the Transfer Station were originally prepared by Sungate Design Group dated July 12, 2000, and included in the Permit to Construct (approved in 2000). Site Plans are included in **Attachment F**. Transfer station buffers were satisfied during initial site permitting[2] and are as follows:

40' zoning buffer
50' stream buffer
80' property buffer

1 Waste Industries, Inc. Durham District Campus, Phase Two, Designed by Sungate Design Group, P.A., July 2000.
2 Stone Park Court Transfer Facility: Permit to Operate, #32-14T, April 4, 2001.

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Attachment A

Permit Documentation

Permit Renewal Application
Stone Park Court Transfer Station
Durham, North Carolina

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North Carolina Department of Environment and Natural Resources
Division of Waste Management

Beverly Eaves Perdue, Governor | Dexter R. Matthews, Director | Dee Freeman, Secretary

STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF WASTE MANAGEMENT
SOLID WASTE SECTION

MUNICIPAL SOLID WASTE TRANSFER FACILITY
Permit No. 32-14T

Waste Industries, LLC.
is hereby issued a

PERMIT TO OPERATE

STONE PARK COURT TRANSFER FACILITY

Located at *148 Stone Park Court, City of Durham, Durham County*, North Carolina, 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 legal description of the site is identified on the deeds recorded for this property listed in Attachment 1, Part III of this permit.

Edward F. Mussler, III, P.E.,
Permitting Branch Supervisor
Solid Waste Section

1646 Mail Service Center, Raleigh, North Carolina 27699-1646
Telephone 919-508-8400 \ *Fax* 919-733-4810 \ *Internet* http://wastenotnc.org

One NorthCarolina Naturally

An Equal Opportunity / Affirmative Action Employer – Printed on Dual Purpose Paper

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ATTACHMENT 1

PART I: PERMITTING HISTORY

1. The original Permit to Construct, issued. August 2000.
2. The original Permit to Operate, issued. April 2001.
3. The Permit to Operate, modified. November 2002.
4. The Permit to Operate, amended (5 year renewal). September 2005.
5. The Permit to Operate, amended (5 year renewal). October 2010.

Permit Type	**Date Issued**	**DIN**
Permit to Construct	August 28, 2000	
Permit Operate	April 4, 2001	
Permit Modification	November 8, 2002	
Permit Amendment	September 23, 2005	11640
Permit Amendment	**October 8, 2010**	**11637**

PART II: LIST OF DOCUMENTS FOR THE APPROVED PLAN

NO.	**DOCUMENT DESCRIPTION**	**DIN**
1. to 11.	*Documents Numbered 1 through 11 referenced from previous permit.*	
12.	*Email: Financial Assurance Third-party Cost Estimates*. Prepared for Waste Industries, LLC. Prepared by John Pfleger. September 14, 2010.	11582
13.	*Operation Plan Solid waste Transfer Station, Durham County*. Prepared for Waste Industries, LLC. Prepared by John Pfleger. March 18, 2010, revised September 14, 2010, revised September 23, 2010.	11638

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PART III: PROPERTIES APPROVED FOR THE SOLID WASTE FACILITY

Durham County, N.C. Register of Deeds				
Book	Page	Acreage	Grantee	PIN
2280	201	37.1±	Waste Industries, Inc	0840-03-20-3968
		37.1±	Total Facility Acreage	

Notes:

1. Deed book references are from Durham Interactive Mapping Applications website (http://gisweb.durhamnc.gov/gomaps/map/index.cfm) accessed September 2010.

PART IV: GENERAL PERMIT CONDITIONS

1. This permit is issued by the North Carolina Department of Environment and Natural Resources, Division of Waste Management, Solid Waste Section (Section). In accordance with North Carolina Solid Waste Management Rule 15A NCAC 13B .0201(d), a solid waste management facility permit shall have two parts: a Permit to Construct and a Permit to Operate. The Permit to Construct must be implemented in accordance with Attachment 2 of this permit. The Permit to Operate must be implemented in accordance with Attachment 3 of this permit.

2. The persons to whom this permit is issued ("permittee") are the owners and operators of the solid waste management facility.

3. (*Intentionally Blank*)

4. (*Intentionally Blank*)

5. By receiving waste at this facility the permittee shall be considered to have accepted the terms and conditions of this permit.

6. Operation of this solid waste management facility must be in accordance with the Solid Waste Management Rules, 15A NCAC 13B, Article 9 of the Chapter 130A of the North Carolina General Statutes (NCGS 130A-290, et seq.), the conditions contained in this permit; and the approved plan. Should the approved plan and the rules conflict, the Solid Waste Management Rules shall take precedence unless specifically addressed by permit condition.

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7. This permit is issued based on the documents submitted in support of the application for permitting the facility including those identified in Attachment 1, Part II: "List of Documents for Approved Plan", and which constitute the approved plan for the facility. Where discrepancies exist, the most recent submittals and the Conditions of Permit shall govern.

8. This permit may be transferred only with the approval of the Section, through the issuance of a new or substantially amended permit in accordance with applicable statutes and rules. In accordance with NCGS 130A-295.2(g) the permittee shall notify the Section thirty (30) days prior to any significant change in the identity or business structure of either the owner or the operator, including but not limited to a proposed transfer of ownership of the facility or a change in the parent company of the owner or operator of the facility.

9. The permittee is responsible for obtaining all permits and approvals necessary for the development of this project including approval from appropriate agencies for a General or Individual NPDES Stormwater Discharge Permit. Issuance of this permit does not remove the permittee's responsibilities for compliance with any other local, state or federal rule, regulation or statute.

- End of Section -

ATTACHMENT 2

CONDITIONS OF PERMIT TO CONSTRUCT

PART I: TRANSFER FACILITY SPECIFIC CONDITIONS

Not Applicable

PART II: MISCELLANEOUS SOLID WASTE MANAGEMENT CONDITIONS

Not Applicable

- End of Section-

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ATTACHMENT 3

CONDITIONS OF OPERATING PERMIT

PART I - TRANSFER FACILITY SPECIFIC CONDITIONS

1. The Permit to Operate shall expire **October 8, 2015.** Pursuant to 15A NCAC 13B .0201(e), no later than **(6 months prior) April 8, 2015**, the owner or operator must submit a request to the Section for permit review and must update pertinent facility plans including, but not limited to, the facility operation and waste screening plans.

2. The facility is permitted to receive solid waste as defined in NCGS 130A -290 (35).

3. The facility must meet the requirements of 15A NCAC 13B.0105. In addition, the following, at a minimum, must not be accepted at the facility; hazardous waste, liquid wastes, regulated medical waste, sharps not properly packaged, regulated-asbestos containing material as defined in 40 CFR 61, PCB waste as defined in 40 CFR 761.

4. This facility is permitted to receive; municipal solid waste (MSW) generated within Alamance, Chatham, Durham, Granville, Orange, and Wake Counties and construction and demolition debris (C&D) generated within Chatham, Durham, Franklin, Granville, Harnett, Johnson, Nash, and Wake counties. Waste must be transported for disposal to the appropriate facility; Construction and Demolition Debris (C&D) – Red Rock Disposal, LLC (Permit No. 92-28), Land Clearing and Inert Debris (LCID) – Stone Park Court LCID Landfill (Permit No. 32-J) and/or Municipal Solid Waste/Construction and Demolition Debris (MSW/C&D) – Sampson County Disposal, Inc. (Permit No. 82-02). Proposed changes to the service area and/or the disposal facility must be approved by the Section and will constitute a permit modification and be subject to the applicable permitting fee.

5. The permittee must not knowingly dispose of, or accept for transfer for subsequent disposal, municipal solid waste that is generated within the boundaries of a unit of local government that by ordinance:
   a. Prohibits generators or collectors of municipal solid waste from disposing of that type or form of municipal solid waste.
   b. Requires generators or collectors of municipal solid waste to recycle that type or form of municipal solid waste.

6. A responsible individual trained and certified in facility operations must be on-site at all times during all operating hours of the facility, in accordance with G.S. 130A-309.25.

7. The permittee must develop, and use, a training and screening program at the facility for detecting and preventing unauthorized wastes from being accepted at the facility. At a minimum, the program must include:
   a. Random inspections of incoming loads or other comparable procedures.

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b. Records of all inspections.
c. Training of personnel to recognize hazardous, liquid and other excluded waste types.

8. The facility must not cause nuisance conditions.
   a. The tipping floor and transfer trailer loading area must be maintained in a clean, sanitary condition at all times and must be cleaned at least daily in accordance with the approved Operational Plan.
   b. Waste must only be deposited on a "tipping floor" or directly into a transfer container. Waste must not be stored on the "tipping floor" after operating hours.
   c. Waste may be stored on-site, in leak proof transfer trailers, with watertight covers. Storage of the waste must not cause any nuisance, such as odor or attraction of vectors.
   d. Effective vector control measures must be applied at all times to control any potential vectors including flies, rodents, insects, and other vermin.
   e. Control measures must be utilized to minimize and eliminate visible dust emissions and blowing litter.
      i) Fugitive dust emissions are prohibited.
      ii) Windblown materials must be collected by the end of the day and no windblown material may be allowed to leave the facility boundary.

9. All water that comes in contact with solid waste, including vehicle wash-down water, is leachate and must be captured and properly treated before release to the environment.
   a. The leachate control system, such as floor drains, leachate collection devices, sanitary sewer connections and leachate storage tanks, must be operational during facility operations.
   b. The tipping floor must drain away from the building entrance and into the leachate collection system.

10. The permittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of the permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures.

11. In the event of noncompliance with the permit, the permittee must take all reasonable steps to minimize releases to the environment, and must carry out such measures as are reasonable to prevent adverse impacts on human health or the environment.

12. All sedimentation and erosion control activities must be conducted in accordance with the Sedimentation Control Act N.C.G.S. 113A-50, et seq., and rules promulgated under 15A NCAC 4.

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13. Copies of this permit, the approved plans and all records required to be maintained by the permittee must be maintained at the facility, unless otherwise approved by the Section, and made available to the Section upon request during normal business hours.

14. The permittee must maintain a record of the amount of solid waste received at the facility, including daily records of waste received and origins of the loads. Scales must be used to weigh the amount of waste received. The daily records are to be summarized into a monthly report for use in the required annual reports.

15. On or before August 1 annually, the Permittee must submit an annual facility report to the Solid Waste Section, on forms prescribed by the Section.
    a. The reporting period shall be for the previous year beginning July 1 and ending June 30.
    b. The annual facility report must list the amount of waste received in tons and be compiled:
        i) On a monthly basis.
        ii) By county, city or transfer station of origin.
        iii) By specific waste type.
        iv) By receiving disposal facility.
        v) By diversion to alternative management facilities.
    c. The completed report must be forwarded to the Regional Environmental Specialist for the facility by the date due on the prescribed annual facility report form.
    d. A copy of the completed report must be forwarded to each county manager for each county from which waste was received the facility. Documentation that a copy of the report has been forwarded to the county managers must be sent to the Regional Environmental Specialist by the date due on the prescribed annual facility report form.

16. Financial assurance as required by state rules and statutes must be continuously maintained for the duration of the facility in accordance with applicable rules and statutes. Closure and Post-Closure cost estimates and financial instruments must be updated annually.

PART II- MISCELLANEOUS SOLID WASTE MANAGEMENT CONDITIONS

General Conditions

17. Wastes received and product stored shall be maintained in containers or reasonably sized piles with adequate fire breaks and lanes in accordance with the approved operational plans and the pertinent rules.

18. Surface water shall be diverted from all operational and storage areas to prevent standing water in operational areas and under or around storage piles. Water that comes in contact with solid waste shall be contained on-site or properly treated prior to discharge.

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19. These areas shall be operated and maintained with sufficient dust control measures to minimize airborne emissions and to prevent dust from becoming a nuisance or safety hazard.

20. These areas shall be operated and maintained in a manner so as to minimize odors, prevent the creation of a nuisance, potential health hazard, or a potential fire hazard.

21. Effective vector control measures shall be applied as necessary to control flies, rodents, insects, or vermin.

22. The facility must manage all operations according to all applicable statutes and rules of the State of North Carolina.

Operational Conditions – White Goods

23. The facility is permitted to receive white goods as defined in North Carolina General Statute Article 9, Chapter 130A-290(44).

24. The facility must manage white goods according to the Operation Plan included in Attachment 1, Part II, *List of Documents for the Approved Plan*. Any revisions to the approved plan shall be approved by the Section, prior to implementation.

25. White goods collection areas shall provide for the proper removal of chlorofluorocarbon refrigerants.

- End of Permit Conditions -

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Attachment B

Legal Description of Property

Permit Renewal Application
Stone Park Court Transfer Station
Durham, North Carolina

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FILED
BOOK 2280 PAGE 201-203
'97 FEB 4 PM 1 45
WILLIE L. COVINGTON
REGISTER OF DEEDS
DURHAM COUNTY, N.C.

DURHAM COUNTY FEB4.97

[redacted]UNT 112.00

TRAN 14

STATE OF NORTH CAROLINA

Real Estate Excise Tax

Excise Tax 112.00

Recording Time, Book and Page

Tax Lot No. ..... Parcel Identifier No. 641-02-051

Verified by ..... County on the ..... day of ....., 19.....

by .....

Mail after recording to ~~XXXXXXXXX~~ Wyrick, Robbins, Yates & Ponton L.L.P., Post Office Drawer 1780 Raleigh, North Carolina 27619 (Attn: JJJ)

This instrument was prepared by WYRICK, ROBBINS, YATES & PONTON L.L.P.

Brief description for the Index Tract 2, Stone Road Industrial Park

NORTH CAROLINA GENERAL WARRANTY DEED

THIS DEED made this 18 day of December, 1996, by and between

GRANTOR	GRANTEE
CHEROKEE SANFORD, INC., formerly known as CHEROKEE SANFORD GROUP, INC., a North Carolina corporation	WASTE INDUSTRIES, INC. a North Carolina corporation P.O. Box 20366 Raleigh, North Carolina 27619

Enter in appropriate block for each party: name, address, and, if appropriate, character of entity, e.g. corporation or partnership.

The designation Grantor and Grantee as used herein shall include said parties, their heirs, successors, and assigns, a shall include singular, plural, masculine, feminine or neuter as required by context.

WITNESSETH, that the Grantor, for a valuable consideration paid by the Grantee, the receipt of which is here acknowledged, has and by these presents does grant, bargain, sell and convey unto the Grantee in fee simple, all th certain lot or parcel of land situated in the City of ....., Oak Grove Townsh Durham County, North Carolina and more particularly described as follows:

see attached Exhibit A
for a more particular description

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The property hereinabove described was acquired by Grantor by instrument recorded in

Deed Book 269, Page 546, Durham County Registry (Borden Brick and Tile Company)

A map showing the above described property is recorded in Plat Book ..... page .....

TO HAVE AND TO HOLD the aforesaid lot or parcel of land and all privileges and appurtenances thereto belongin the Grantee in fee simple.

And the Grantor covenants with the Grantee, that Grantor is seized of the premises in fee simple, has the right to co the same in fee simple, that title is marketable and free and clear of all encumbrances, and that Grantor will warrant defend the title against the lawful claims of all persons whomsoever except for the exceptions hereinafter stated. Title to the property hereinabove described is subject to the following exceptions:

- 1997 ad valorem taxes

- Easements, restrictions, and rights-of-way of record, if any.

CHEROKEE SANFORD SEAL CORPORATE

IN WITNESS WHEREOF, the Grantor has hereunto set his hand and seal, or if corporate, has caused this instrument to be signed i corporate name by its duly authorized officers and its seal to be hereunto affixed by authority of its Board of Directors, the day and year above written.

CHEROKEE SANFORD ~~GROUP~~, INC.
(Corporate Name)

By: [signature]

Chairman of the ~~President~~ Board of Directors

ATTEST: [signature]

Secretary (Corporate Seal)

USE BLACK INK ONLY

(SE

(SE

(SE

(SE

SEAL-STAMP

NORTH CAROLINA, [illegible] County.

I, a Notary Public of the County and State aforesaid, certify that [signature]

personally appeared before me this day and acknowledged the execution of the foregoing instrument. Witness hand and official stamp or seal, this 31 day of [illegible], 19 97

My commission expires: 4-11-2000

LINDA O. GAY NOTARY PUBLIC DURHAM COUNTY

[signature] Notary Pu

Use Black Ink

SEAL-STAMP

NORTH CAROLINA, ... County.

I, a Notary Public of the County and State aforesaid, certify that .....

personally came before me this day and acknowledged that ..... he is ..... Secretary

Cherokee Sanford ~~Group~~, Inc. a North Carolina corporation, and that by authority given and as the act of the corporation, the foregoing instrument was signed in its name by its Chairman ~~President~~, sealed with its corporate seal and attested by ..... as its ..... Secret

Witness my hand and official stamp or seal, this ..... day of

Use Black Ink

Board of Directors

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EXHIBIT A

BEGINNING at an existing railroad iron located in the southwestern corner of the property herein described, said iron being the northwestern corner of the property owned now or formerly by Leonard B. Shaffer (Tax Parcel 641-50; Deed Book 1212, Page 48, Durham County Registry "DCR") said iron also being located in the eastern boundary line of the property owned now or formerly by Kathleen M. Rigsbee (Tax Parcel 641-2A; Deed Book 115, Page 539, DCR); thence running along and with said eastern Rigsbee boundary North 03° 24′ 22" East 365.13 feet to a point; thence continuing with said eastern Rigsbee boundary North 56° 08′ 27" West 96.08 feet to a point; thence running a traverse line across the centerline of a creek (centerline of creek is actual property line) the following courses and distances: North 02° 03′ 28" West 75.02 feet to a point; North 59° 40′ 07" East 76.66 feet to a point; North 83° 13′ 51" East 133.12 feet to a point; North 39° 46′ 13" East 86.88 feet to a point; South 88° 50′ 02" East 87.75 feet to a point; North 13° 54′ 37" East 100.23 feet to a point; North 80° 21′ 57" East 83.59 feet to a point; North 50° 30′ 37" East 115.83 feet to a point; North 55° 08′ 55" East 106.54 feet to a point; North 64° 46′ 03" East 178.35 feet to a point; North 71° 28′ 51" East 177.60 feet to a point; North 38° 55′ 33" East 97.31 feet to a point; North 69° 33′ 30" East 108.09 feet to a point; and North 58° 47′ 02" East 171.05 feet to an angle iron; thence leaving said angle iron and running South 86° 02′ 20" East 1581.17 feet along and with the southern boundary of property owned now or formerly by Joven Five Group (Tax Parcel 639-10; Deed Book 1278, Page 668, DCR) to a point; thence leaving said Joven line and running South 06° 37′ 36" West 489.19 feet to a point in the northern margin of the right-of-way of the proposed Stone Park Court; thence running along and with the said right-of-way the following courses and distances: North 80° 04′ 57" West 197.97 feet; thence in a curve to the left having a radius of 430.00 feet and an arc length of 247.53 feet and a chord bearing and distance of South 83° 25′ 35" West 244.13 feet; thence South 66° 56′ 06" West 180.44 feet; thence in a curve to the right having a radius of 670.00 feet, an arc length of 354.40 feet and a chord bearing and distance of South 82° 05′ 19" West 350.29 feet; thence in a curve to the right having a radius of 25.00 feet, an arc length of 21.42 feet and a chord bearing and distance of North 58° 12′ 36" West 20.77 feet; thence in a curve to the left having a radius of 55 feet, an arc length of 134.90 feet, and a chord bearing and distance of South 76° 04′ 22" West 103.54 feet to a point; thence leaving the right-of-way of Stone Park Court and running North 77° 38′ 22" West 267.69 feet to a point in southeastern boundary of the existing 50′ Public Service Gas company easement; thence running along with said easement South 48° 15′ 27" West 653.44 feet to a point; thence continuing with said easement South 48° 06′ 06" West 223.37 feet to a point in the northern property line of

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Leonard B. Shaffer; thence running with the Shaffer property line North 85° 30′ 00" West 513.80 feet to the POINT AND PLACE OF BEGINNING, containing 37.197 acres and being all of Tract 2, Oak Grove Township, Durham County, according to survey by Harold "Todd" Smith entitled "Stone Road Industrial Park Phase One," dated June 27, 1996 and recorded in Plat Book 137, Page 48, Durham County Registry.

18-23

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NORTH CAROLINA

Lee COUNTY

I, the undersigned Notary Public, do hereby certify that John M. Corcoran personally appeared before me this day and acknowledged that he/she is the Secretary of Cherokee Sanford, Inc., a North Carolina corporation, and that by authority duly given and as the act of the corporation the foregoing instrument was signed by its Chairman of the Board of Directors of Cherokee Sanford, Inc., sealed with its corporate seal and attested by him/her as its _____ Secretary.

WITNESS my hand and notarial seal this 31 day of January 1997.

LINDA O. GAY NOTARY PUBLIC LEE CO. N.C.

Linda O. Gay
Notary Public

My Commission Expires:
4-11-2000

State of North Carolina - Durham County
The foregoing or annexed certificate(s) of Linda O Gay
A Notary(Notaries) Public for the Designated Governmental units is(are) certified to be correct.

This the 4 day of Feb A.D. 1997
WILLIE L. COVINGTON
Register of Deeds

Sharon A. Davis
By: ~~Assistant~~ / Deputy
Register of Deeds

851-REAL-999999-99-57700.1

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Attachment C

Local Government Approval

Permit Renewal Application
Stone Park Court Transfer Station
Durham, North Carolina

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SPECIAL USE PERMIT APPLICATION

SUBMITTED TO DURHAM CITY/COUNTY PLANNING DEPARTMENT

JULY 28, 1997

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GENERAL APPLICATION FORM
Major Special Use Permit

CASE M97-5 (To be assigned by the Planning Department)

Location: LOT 51 STONE ROAD INDUSTRIAL PARK, DURHAM, NORTH CAROLINA

Zoning: HEAVY INDUSTRIAL DISTRICT I-3 Current Use: ABANDONED BRICK MINE

Tax Map: 641 Block: 02 Lot: 51

Section of Ordinance: 4E5.5

Owner's Name, Address and zip code: WASTE INDUSTRIES, INC.
3949 BROWNING PLACE
RALEIGH, NORTH CAROLINA 27609

Owner's Signature: Ven Poole
(If different from applicant)
VEN POOLE, VICE-PRESIDENT SUPPORT SERVICES

Applicant's Name, Address and zip code: 3949 BROWNING PLACE
RALEIGH, NORTH CAROLINA 27609

Daytime Phone Number: 919-782-0095

Applicant's Signature: Ven Poole

Date Filed: Monday 28th Time Filed: 12:00 a.m. p.m.

Accepted by: Youngblood

Amount Paid: Amount Due:

Other Items Due:

Date Due: Time Due: a.m. p.m.

12/96

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MAJOR SPECIAL USE PERMIT APPLICATION
(Please print or type)

CASE M97-5 (To be assigned by the Planning Department)

Applicant's Name: I, WASTE INDUSTRIES, INC., do hereby petition the City of Durham/County of Durham for a **Major Special Use Permit** to allow the following:

A TRANSFER STATION AND RECYCLING CENTER IN A HEAVY INDUSTRIAL DISTRICT (I-3)
LOCATED ON LOT 51 OF THE STONE ROAD INDUSTRIAL PARK

The Board may approve this request only if it finds that the use as proposed is:

1. In harmony with the area and will not substantially injure the value of properties in the general vicinity; and

2. In conformance with all special requirements applicable to the use and in conformance with the Supplementary Requirements Section (Section 7) of the Zoning Ordinance; and

3. Will not adversely affect the health or safety of the public.

Considerations: Before any **Major Special Use Permit** shall be granted, the Council/Board must find that satisfactory consideration has been given to the following. **Your plan, application and testimony at the hearing must provide sufficient evidence to persuade the Council/Board that these considerations have been adequately and appropriately addressed.** (Attach additional sheets as needed.)

a. **Circulation** - Number and location of access points to the property and proposed structures and uses, with particular reference to automotive and pedestrian safety and convenience, traffic flow and control, and access in case of fire, emergency or catastrophe.

SEE ATTACHED SHEETS

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b. **Parking and Loading** - Location of off-street parking and loading areas.

SEE ATTACHED SHEETS

c. **Effect on Adjacent Property** - Levels of noise, glare or odor, and the effects of proposed use on adjacent property.

SEE ATTACHED SHEETS

d. **Service Entrances and Areas** - Location of refuse and service areas, with reference to ingress and egress of service vehicles.

SEE ATTACHED SHEETS

e. **Utilities** - Utility location and availability.

SEE ATTACHED SHEETS

f. **Screening and Landscaping** - Installation of screening and fencing where necessary to protect adjacent property.

SEE ATTACHED SHEETS

g. **Signs and Lighting** - Location of exterior lighting and signs with reference to glare, traffic safety, economic effect and compatibility with other property in the area.

SEE ATTACHED SHEETS

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h. **Open Space** - Location of required yards and other open spaces; preservation of existing trees and other natural features.

SEE ATTACHED SHEETS

i. **Compatibility** - The level of general compatibility with adjacent properties and the appropriateness of the use in relationship to other properties in the area.

SEE ATTACHED SHEETS

j. Any other review factors appropriate to the property in question.

SEE ATTACHED EXHIBIT "A"

NOTE: Please make sure you are prepared to address the requirements of any applicable supplementary use regulations, preferably as a written part of your application.

In granting a **Major Special Use Permit**, the Council/Board may place conditions on the use to assure that adequate mitigation measures are associated with the use. All special requirements and conditions must be followed by the applicant in order to maintain the validity of the use permit. **Major Special Use Permits** are typically authorized for one year, but can be authorized for a longer or shorter period, and are revocable by the Council/Board at any time for failure to adhere to the terms of the Zoning Ordinance or any imposed requirements or conditions. All conditions imposed by the Council/Board shall be completed prior to issuance of a Certificate of Compliance.

Ken Pool. 7-28-97

Applicant's Name Date

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SPECIAL USE PERMIT APPLICATION
WASTE INDUSTRIES, INC.
TRANSFER STATION AND RECYCLING CENTER

a. **Circulation - Number and location of access points to the property and proposed structures and uses, with particular referenced to automotive and pedestrian safety and convenience, traffic flow and control, and access in case of fire, emergency or catastrophe.**

The proposed Recycling Facility and Transfer Station are "Owner Controlled" facilities that are staffed during operational hours. All access is controlled through a gated entrance which will also include truck scales to record inventory and volume. As part of an overall campus, the trucking traffic is separated from the general employee and public traffic with regard to access and parking. As policy, public visitors must "check-in" at the District Facility prior to entering the operational area. To insure safety, the entire campus area will be fenced to prohibit unauthorized access. Emergency access is accommodated through either the main entrance or a secondary entrance through the truck parking and storage yard. Public roadways provide access to the campus via Angier Avenue and Wrenn Road.

b. **Parking and Loading - Location of off-street parking and loading areas.**

The proposed Transfer Station and Recycling Facility site layout includes employee off-street parking adjacent to the structure with direct access to the operational areas. Due to the proposed structure's function, multiple loading areas are required. The structure's design will embrace top, side, and rear loading areas in response to the various material processing systems. All loading and parking areas will be screened and landscaped in accordance with the Durham City/County Zoning Code.

c. **Effect on Adjacent Property - Levels of noise, glare or odor, and the effects of the proposed use on adjacent property.**

The proposed Transfer Station and Recycling Facility are located internally within the site in order to provide additional setback distance and vegetative buffer. The proposed location is adjacent to a 50 feet Public Gas Easement which serves as continuous berm and provides a visual separation from the Stone Road residents. Additional berms are proposed along the northern boundary (vacant residentially zoned property). The structure will provide internal operational areas that are partially enclosed by perimeter building walls. The majority of the delivery truck traffic will occur internal to the site and away from the surrounding properties. The nearest residence is approximately 1,400 feet from the proposed use.

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The internal siting, additional vegetative buffer and enclosed structure will minimize the noise impact on the surrounding properties. Due to the nature of the use and operation, no glare should impact the adjacent properties. Odor control will be a function of operation. Waste Industries must submit an Operational Plan as part of the North Carolina Division of Solid Waste Management Permitting. The Operational Plan will address the daily processing of materials and the "wash-down" requirements. The materials entering the facility will be processed that day or packageed for transport the next working day. Also, the processing surfaces will be washed daily to eliminate the source of possible odor.

d. Service Entrances and Areas - Location of refuse and service areas, with reference to ingress and egress of service vehicles.

The proposed Transfer Station and Recycling Facility are "Owner Controlled" refuse management uses. The structure's function is to receive collected materials from service vehicles, process and transport the processed materials for final disposal or sale. The structure is designed to accommodate a broad range of service vehicles. All ingress and egress to the proposed structure will be controlled and monitored via a gated entrance. A separate access route is provided for this proposed facility.

e. Utilities - Utility location and availability.

Waste Industries is constructing the infrastructure of the Stone Road Industrial Park which will include "All Public Utilities".

f. Screening and Landscaping - Installation of screening and fencing where necessary to protect adjacent property.

The internal location of the proposed Transfer Station and Recycling Facility will provide visual and physical separation from the adjacent properties. The Stone Road residential area (South) is separated from the proposed use by the District Facility, industrial lots and the 50 feet Public Gas Easement. The Gas Easement provides a grade separation in the form of a vegetative berm. Increased vegetative buffer and building setback together with the stream protective buffer will provide "green-transition" to the vacant residentially zoned property along the northern boundary. All operational and storage areas are screened in accordance with the Durham City/County Zoning Ordinance.

g. Signs and Lighting - Location of exterior lighting and signs with reference to glare, traffic safety, economic effect and compatibility with other property in the area.

The signage system for the Proposed Transfer Station and Recycling Facility will be consistent with the overall campus signing. The anticipated signage will consist of

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identification and directional signs. The signs are not to be lighted and will be in accordance with the Durham City/County Zoning Ordinance.

The Lighting for the Proposed Transfer Station and Recycling Facility will consist of external building lighting and outdoor security lighting. The selection and location of the lighting fixtures will be such to restrict the "spill over" of illumination onto the adjacent properties.

h. Open Space - Location of required yards and other open spaces; preservation of existing trees and other natural features.

The internal siting of the Proposed Transfer Station and Recycling Facility allows for additional preservation of the existing vegetation. Where possible, the existing trees will be protected and additional planting provided to increase the screening effect and satisfy the landscape requirements. The 50 feet Public Gas Easement is not only a site constraint, but also an additional open space area. In general, the location of the proposed structure exceeds the siting requirements as set forth in the Durham City/County Zoning Ordinance.

i. Compatibility - The level of general compatibility with adjacent properties and the appropriateness of the use in relationship to other properties in the area.

The Proposed Transfer Station and Recycling Facility is part of the Waste Industries Solid Waste Management Campus and is located in an evolving area of Durham County. The property is located in an area designated as an "Urban Growth Area" and zoned Heavy Industrial (I-3). As part of the Stone Road Industrial Park, it is the first major development in the area. The surrounding zoning is mixed, with industrial zoning to the south and west and residentially zoned property to the north and east. The properties adjacent to the proposed use are undeveloped. The subject property is located on an abandoned brick mine that has been the target of speculative uses ranging from industrial complexes to a selected site for a municipal sanitary landfill. The proposed development by Waste Industries eliminates the uncertainty harbored by the community and provides the reclamation of a scared landscape. At present, the site is a dumping ground and gathering place drawing concerns and complaints from the area residents. The proposed development represents approximately 50% of the Stone Road Industrial Park and will provide a uniform development scheme and transition from the industrial use to the adjacent residential property. Due to the nature of the proposed uses, many of the permitting requirements of the North Carolina Division of Solid Waste Management exceed the local regulations with regard to buffers, setbacks, stormwater control and operational plans. The development of the Waste Industries Solid Waste Management Campus is appropriate based on the zoning, site conditions, operation and ability to provide protection to the adjacent properties.

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j. Any other review factors appropriate to the property in question.

SEE EXHIBIT "A"

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July 18, 1997

EXHIBIT 'A'

SPECIAL USE PERMIT
WASTE INDUSTRIES TRANSFER and
RECYCLING FACILITY
DURHAM, NORTH CAROLINA

Introduction

Waste Industries is proposing to develop an innovative "Solid Waste Management and Processing Campus" within the Stone Road Industrial Park. The proposed project is located in the southeast quadrant of Durham County and will consist of approximately 37 acres zoned Heavy Industrial (I-3). The subject property is designated as an Urban Growth area in the Durham Land Use Plan and all public utilities will be available.

Waste Industries was founded in 1970 and is recognized as one of the state's leading and most progressive solid waste management firms. Through continued growth, it has established operations in over 15 locations in North Carolina to respond to the local community's solid waste management needs. In 1987, the Durham District Branch was established to provide services to commercial, industrial and residential customers. To date, Waste Industries manages approximately 35% of Durham County's "waste stream" with service to 1,280 non-residential clients, 5,000 residential customers and numerous special services such as in-house management of industrial and manufacturing solid waste. The present operation consist of 55 employees as follows:

Administrative/Sales.....12
Shop/Maintenance.....6
Drivers.....24
Special Services/Support.....13

The workforce is projected to grow to from 65 employees in 1997 to 97 employees by 2001 if this project is able to be completed as planned.

In 1991, governmental legislation and regulations mandated programs directed toward the segregation and separation of portions of the waste stream to allow reuse and recycling. Additional mandates were issued to eliminate yard waste from landfill disposal and to encourage comprehensive programs for processing construction and demolition debris. Waste Industries responded to the legislative changes and embarked on a pro-active course of action needed to provide full service waste management facilities to serve a diversified customer base. Waste Industries is seeking to establish "Solid Waste Management Campuses" that will provide the resources and flexibility needed to respond to market trends and changes in governmental regulations.

Even though this Special Use Permit Application is specific to the Transfer Station and the Recycling Facility, an overview of the entire campus is necessary in order gain a clear understanding of all the integrated functions. The proposed Solid Waste Management and

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Processing Campus to include administrative offices, truck terminal, outdoor truck parking and storage, transfer station, recycling facility, woodwaste processing area and a Land Clearing and Inert Debris Demolition Landfill (LCID).

Administrative Offices and Truck Terminal:

The administrative offices and truck terminal is considered the main operational building. This facility will house all staff functions and provide an area for customer contact. The building will serve as the shop for repair and maintenance of vehicles and collection equipment. The areas immediately adjacent to the building will provide storage areas for vehicles, containers and other equipment. This element of development has received Site Plan Approval from the Durham City/County Development Review Board.

Recycling Facility and Transfer Station:

The Recycling Facility will consist of a partially enclosed structure covering a concrete floor and equipped with various sorting and process systems. Both internal and external loading areas will be incorporated to allow top, rear and side loading operations. The anticipated operations are consistent with most processing and transfer operations. The materials are delivered to the site, deposited on the tipping/sorting floor, separated and conveyed to the appropriate storage or transfer area. The separated materials are then processed (shredded, compacted, ground, bailed, etc.) to produce a marketable or transportable product. A maximum of 6 employees will be required during full operation. It should be noted that this structure must be flexible in order to adapt to the market changes and trends as well as governmental regulations. This is not a single use facility and the function will be a direct response to the community's needs or market trends.
The Transfer Station requires a North Carolina Division of Solid Waste Management Permit related to siting, design and operation.

Woodwaste Processing Facility:

The Woodwaste Processing Facility is an open area prepared to receive wood products for temporary collection, processing and storage. The materials consist of stumps, limbs, non-treated wood and pallets. Additionally, wood products entering the Recycling and Transfer Station Facility are sorted and (if acceptable) are mixed with the wood materials directly deposited at the woodwaste processing area. Once processed, the wood materials are considered as part of the "waste-to-energy" programs and transported as a fuel source. A small portion of the wood and yard waste materials are converted to mulch. This facility requires a North Carolina Division of Solid Waste Management Permit related to siting, design and operation.

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LCID Facility:

The LCID Facility proposed for this particular site is considered a reclamation project to convert the abandoned brick mine into a useable industrial site. Waste Industries is proposing this facility as a "Temporary Demolition Landfill" for the controlled depository of land clearing and inert debris. Also included in the fill material will be the "by-products" generated from the recycling and woodwaste processing. The anticipated materials will consist of inert materials such as rock, soil, concrete, etc. and considered beneficial fill. All access and egress will be controlled through a gated entrance to insure that materials will be monitored and weighed. The constructing or filling process represents the first step of the reclamation project. The affected site must be properly planned to produce an "end product" that is useable. In this case, the end use is focused on creating a future building site with adjacent areas suitable for parking and storage. This facility type also requires a Permit from the North Carolina Division of Solid Waste Management.

Waste Industries began their search for a Durham Campus in 1991 and researched eight (8) sites spread throughout the area. This particular site was selected on the basis of location, zoning, land mass, air space and the ability to utilize the existing site constraints (Public Gas Easement and mine excavation). This proposed facility is considered a progressive approach to the issues of solid waste management, reduction in the waste stream, reuse of our products and a service to the citizens of Durham County.

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SPECIAL USE PERMIT APPLICATION

DENIAL BY DURHAM CITY/COUNTY PLANNING

April 8, 1998

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ORDER DENYING A MAJOR SPECIAL USE PERMIT FOR WASTE INDUSTRIES, PHASE II CASE M97-5

The Board of County Commissioners of the County of Durham, having conducted a hearing on Case M97-5 and having considered all evidence presented at such hearing, hereby determines that the Ordinance requirements for the granting of a Major Special Use Permit in this case have **not** been met, and that the Major Special Use Permit should **not** be granted.

THE BOARD OF COUNTY COMMISSIONERS HEREBY FINDS the following:

1. The proposed use **is not** in conformance with adopted long range plans for the development of this area, particularly with regard to the development of mixed uses supportive of regional rail transit.

2. There are health and safety issues associated with the railroad crossing at Wrenn Road as it relates to anticipated traffic for this site. The additional traffic associated with the proposed use will adversely affect the health or safety of the public.

3. There are problems regarding traffic impacts at the Angier Avenue and Wrenn intersection. These problems are related to truck traffic crossing, or preparing to cross, the railroad intersection. Also, there are problems regarding the timing intervals for train traffic, both present and future.

4. There will be a substantial increase in rail traffic and more frequent Wrenn Road railroad crossing blockages when the planned regional commuter rail system begins operation.

5. Traffic origin/destination questions were discussed; whereupon, additional concerns were raised about the impact of trucks on both the condition of and congestion on parts of Angier Avenue.

6. Because of the timing intervals for train traffic, truck stacking is currently a problem. If the proposed use is allowed truck stacking will become more of a problem in the future.

7. The subject area is in a regional transit study corridor as shown in the adopted Durham 2020 Comprehensive Plan. The Triangle Transit Authority is presently studying the feasibility of a rail transit station near Glover Road and Angier Avenue. The proposed use would not be compatible with that rail transit station.

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8. Use of this site for the requested use would not be conducive to the development of the area around a possible rail transit station in a way that is supportive of transit and the adopted plan.

9. The traffic impact study presented by the Petitioner did not take into consideration that there will be a substantial increase in rail traffic when the regional rail system begins operation.

10. The traffic impact study presented by the Petitioner was flawed. The traffic impact study failed to take into consideration that trains block the crossing adjacent to the proposed use up to 30 to 40 minutes.

11. The traffic impact study presented by the Petitioner did not consider the current light rail plan and how that plan and the proposed use would negatively impact traffic in this area, particularly traffic at the railroad crossing at Wrenn Road.

12. The proposed use would not comply with the Durham 2020 Comprehensive Plan adopted by the County.

Based upon the foregoing findings of fact the Board of County Commissioners makes the following:

CONCLUSIONS OF LAW

1. That the proposed use fails to comply with Durham County Zoning Ordinance Section 13.2.3.2 and is not in conformance with all special requirements applicable to the use and in conformance with the Supplementary Requirements Section of the Ordinance.

2. That the proposed use fails to comply with Durham County Zoning Ordinance Section 13.2.3.3 and will adversely affect the health or safety of the public.

3. That the Board of County Commissioners was unable to find that satisfactory consideration has been given to the following:

   §13.2.4.1, Circulation: Number and location of access points to the property and the proposed structures, with particular reference to automotive and pedestrian safety and convenience, traffic flow and control, and access in case of fire or catastrophe.

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§13.2.4.9, Compatibility: The level of general compatibility with adjacent properties and the appropriateness of the use in relationship to other properties.

WHEREFORE, based upon the foregoing findings of fact and conclusions of law, the Board of County Commissioners hereby FIND that the requirements for the granting of a Major Special Use Permit in this case have not been met, pursuant to the applicable provisions of the Durham City/County Zoning Ordinance, and ORDERS that the Major Special Use Permit should not be granted.

The result in the foregoing case was rendered by the Durham County Board of Commissioners on the 5th day of March and the written decision confirming said vote was approved by the Board on the 23rd day of March, 1998.

This the 8th day of April, 1998.

MaryAnn Black

MaryAnn Black, Chairperson
Durham County Board of Commissioners

ATTEST: Garry E. Umstead

Garry E. Umstead
Clerk
Durham County Board of Commissioners

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DURHAM COUNTY SUPERIOR COURT

DECISION AND ORDER

JANUARY 11, 1999

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NORTH CAROLINA

DURHAM COUNTY

FILED
99 JAN 13 AM 11:32
DURHAM COUNTY, C.S.C.
BY_____

IN THE GENERAL COURT OF JUSTICE
SUPERIOR COURT DIVISION
98 CVS 1594

WASTE INDUSTRIES, INC.

Petitioner,

v.

COUNTY OF DURHAM and
DURHAM COUNTY BOARD OF
COUNTY COMMISSIONERS,

Respondents.

DECISION AND ORDER

AUG 2000
Received
Solid Waste
Section

This matter came on for hearing before the undersigned on December 22, 1998 in Durham County Civil Superior Court pursuant to a Writ of Certiorari issued by this Court dated May 14, 1998. Petitioner Waste Industries, Inc. ("Waste"), sought review pursuant to North Carolina General Statutes section 153A-340 of the record of proceedings (the "Record") held before the Respondent Durham County Board of County Commissioners (the "Board"), and a subsequent order of the Board dated April 8, 1998 (the "Order"), denying Waste's application for a Major Special Use Permit (the "Application") to construct a transfer station and recycling center (the "Project"), in accordance with the terms of the Application and a site plan (the "Site Plan") for the Project which had been approved by the Durham Development Review Board on January 30, 1998. Waste's Application was submitted to the Board pursuant to the applicable sections of the Durham City/County Zoning Ordinance (the "Code"). The parties consented to the hearing of this matter on December 22, 1998 out of term and out of session, the hearing having been continued at the request of the Respondents from December 11, 1998.

At the hearing before the Court, the parties to this proceeding, through their counsel, made arguments and submitted memoranda of law. After the Court's detailed review of the Code and the Record which was certified and filed by the Respondents with this Court on June 26, 1998, the Court has determined that the Order should be reversed and the Respondents should be directed to issue a Major Special Use Permit to Waste permitting the construction of the Project and use of the property as described in the Application and approved Site Plan. The reasons for the Court's decision and order are as follows:

1. The Order contains numerous errors of law, and most of the findings of fact in the Order are not supported by competent, material and substantial evidence found in the whole Record. The Court applied the *de novo* standard when reviewing the Order for errors of law relating to the interpretation of the Code, and applied the whole record test when determining whether the Record supported the findings of fact contained in the Order. Specifically:

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a.) Finding number 1 is erroneous as a matter of law because it is not based upon the applicable sections of the Code.

b.) Finding number 1 also is not supported by competent, material and substantial evidence in the whole Record.

c.) Finding number 2 is not supported by competent, material and substantial evidence in the whole Record.

d.) Finding number 3 is not supported by competent, material and substantial evidence in the whole Record.

e.) Finding number 4 is not supported by competent, material and substantial evidence in the whole Record.

f.) Finding number 5 is not supported by competent, material and substantial evidence in the whole Record.

g.) Finding number 6 is not supported by competent, material and substantial evidence in the whole Record.

h.) Finding number 7 is not supported by competent, material and substantial evidence in the whole Record.

i.) Finding number 8 is not supported by competent, material and substantial evidence in the whole Record.

j.) Finding number 9 is erroneous as a matter of law because it is not based upon the applicable sections of the Code.

k.) Finding number 10 is erroneous as a matter of law because it is not based upon the applicable sections of the Code.

l.) Finding number 10 also is not supported by competent, material and substantial evidence in the whole Record.

m.) Finding number 11 is erroneous as a matter of law because it is not based upon the applicable sections of the Code.

n.) Finding number 12 is erroneous as a matter of law because it is not based upon the applicable sections of the Code.

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o.) Finding number 12 also is not supported by competent, material and substantial evidence in the whole Record.

2. Based upon the Court's review of the findings contained in the Order, the Conclusions of Law contained the Order are unsupported. Therefore, the Order is erroneous as a matter of law and should be reversed.

3. The Record demonstrates that Waste submitted competent, material and substantial evidence on each matter which the Code required the Board to consider when deciding whether to issue the Major Special Use Permit requested by Waste. Accordingly, Waste established a *prima facie* case entitling it to issuance of the Major Special Use Permit which it had requested.

4. The Court has carefully reviewed the Record to locate competent, material and substantial evidence which conflicted with or otherwise rebutted Waste's *prima facie* case. After reviewing the Record and applying the whole record test, the Court has concluded that Waste's *prima facie* case was not rebutted by competent material and substantial evidence in the Record. Specifically:

a.) With regard to the general findings the Board was required to make pursuant to section 13.2.3 of the Code, Waste met its burden of proof by presenting competent, material and substantial evidence in the whole record that the Project as proposed met each of these general findings.

b.) With regard to the general findings the Board was required to make pursuant to section 13.2.3 of the Code, (a) there is no competent, material and substantial evidence in the whole Record showing that the Project will have any adverse impact on surrounding property values; (b) there is no competent, material and substantial evidence in the whole Record showing that Waste's Application has not met all of the applicable requirements of the Code; and (c) apart from some vague and general references to health and safety issues, there is no competent, material and substantial evidence in the whole Record that the Project will adversely affect the health or safety of the public.

c.) With regard to the considerations of Section 13.2.4 of the Code, Waste met its burden of proof by presenting competent, material and substantial evidence in the whole record that the Project as proposed gave satisfactory consideration to each of these factors.

d.) With regard to the considerations of Section 13.2.4 of the Code, there is no competent, material and substantial evidence in the whole Record showing that the Project as proposed did not give satisfactory consideration to each of these factors.

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5. Because Waste established its *prima facie* case, it was entitled to the Major Special Use Permit which it sought unless competent, material and substantial conflicting or rebutting evidence was submitted in opposition. After careful review of the Record, the Court determines that no such evidence was proffered. In the Court's opinion, other than the evidence submitted by Waste, the most competent, material and substantial evidence in the Record was submitted by the Respondents' professional planning staff in support of the issuance of the Major Special Use Permit requested by Waste.

6. Accordingly, the Record does not contain competent, material and substantial evidence which conflicts or rebuts Waste's *prima facie* case, and Waste is entitled to issuance of the Major Special Use Permit which it sought as a matter of law.

WHEREFORE, IT IS HEREBY ORDERED, ADJUDGED AND DECREED:

A. The Order of the Durham County Board of County Commissioners dated April 8, 1998 denying Waste's Application for a Major Special Use Permit is hereby REVERSED;

B. The County of Durham and the Durham County Board of County Commissioners are hereby DIRECTED AND ORDERED to issue a Major Special Use Permit to Waste Industries, Inc. allowing it to construct the Project in accordance with the Application and approved Site Plan.

This the 11th day of January, 1999.

David Q. LaBarre, Superior Court Judge Presiding

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FILED

CERTIFICATE OF SERVICE

99 JAN 13 AM 11:32

The undersigned hereby certifies that he served the foregoing and attached **DECISION AND ORDER** upon the attorney shown below by hand delivering it to him at the address stated below.

DURHAM COUNTY, C.S.C.

BY _____

This the 13th day of January, 1999.

WOMBLE CARLYLE SANDRIDGE & RICE, PLLC

By: _____
William J. Brian, Jr.
Post Office Box 13069
Research Triangle Park, NC 27709
(919) 484-2300

ATTORNEYS FOR PETITIONER WASTE INDUSTRIES, INC.

SERVED:

Lowell L. Siler, Esq.
Deputy County Attorney
County of Durham
200 East Main Street
Old Durham County Courthouse
Durham, North Carolina 27701

ATTORNEY FOR RESPONDENTS
COUNTY OF DURHAM AND
DURHAM COUNTY BOARD OF
COMMISSIONERS

RTP#11299.1

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SETTLEMENT AGREEMENT

AND SPECIAL USE PERMIT

MARCH 3, 2000

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NORTH CAROLINA
DURHAM COUNTY

SETTLEMENT AGREEMENT AND
MAJOR SPECIAL USE PERMIT

This SETTLEMENT AGREEMENT AND MAJOR SPECIAL USE PERMIT (collectively referred to as "Settlement Agreement") is entered into this 3rd day of ~~February~~ March, 2000, by and between WASTE INDUSTRIES, INC. ("Waste"), and THE COUNTY OF DURHAM, NORTH CAROLINA ("County").

WITNESSETH:

A. Waste and the County currently are engaged in litigation in Durham County North Carolina, which action is captioned Waste Industries, Inc. v. County of Durham and Durham County Board of Commissioners, 98 CVS 1594, Superior Court Division (the "Litigation").

B. The Litigation arose from a dispute between the parties regarding Waste's request for a Major Special Use Permit (the "Special Use Permit") to establish, as a phase II of its existing regional campus facility in the Stone Road Industrial Park, a waste transfer station and recycling center in Durham County, North Carolina (the "Project"). The Project is located near the intersection of Wrenn Road and Angier Avenue (the "Intersection") in Durham County. A site plan (the "Site Plan") for the Project was approved on January 30, 1998. The Site Plan is incorporated herein by reference. The County denied Waste's request for the Special Use Permit. Waste appealed and the County's denial of the Special Use Permit was reversed by the Durham County Superior Court on January 11, 1999. The Court entered an Order (the "Order") directing the County to issue the Special Use Permit to Waste and permitting it to build the Project in accordance with the previously approved Site Plan. The County subsequently appealed the Order to the North Carolina Court of Appeals, Case No. COA-99-562 (the "Appeal"), where it is pending as of the date of this Settlement Agreement. There are no parties in the Litigation other than Waste and the County.

C. The County and Waste have agreed to settle the disputes and obligations between them with respect to the Litigation, the Project, and the Appeal, all in accord with the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the mutual promises contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. Issuance of Special Use Permit. Upon the execution of this Settlement Agreement, the Special Use Permit shall be deemed to have been issued to Waste for the Project, and Waste shall be allowed to proceed immediately with the construction of its Project in accordance with the terms of the previously approved Site Plan and the Order.

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2. Dismissal of Appeal. Immediately upon the execution of this Settlement Agreement, the parties will notify the Clerk of the North Carolina Court of Appeals that the Appeal has been settled, and the County will file with the Court of Appeals all papers necessary to dismiss its Appeal.

3. Annexation of Project. Within ten (10) days of the date of this Settlement Agreement, Waste will file the papers necessary to seek voluntary annexation of the Project into the City of Durham.

4. Construction of Right Turn Lane. Within nine (9) months of the date of this Settlement Agreement, Waste will construct a right turn lane at the Intersection, provided that the County or other relevant authority acquires any additional right-of-way which may be needed, obtains the consent and approval of the North Carolina Department of Transportation or other relevant authority to the construction of a right turn lane at that location, and relocates or causes to be relocated, the existing overhead and underground utilities as needed for the construction of a right turn lane at that location.

5. Separate Approval Process. The construction of the right turn lane pursuant to paragraph 5 above shall be dealt with by the parties as a separate project with a separate approval process.

6. Costs. The parties agree to pay their respective attorney's fees, costs, and expenses incurred in connection with their dispute over the Project, and in the course of the Litigation and the Appeal.

7. Binding Authority. The signatories hereto represent that they have full power and all requisite authority to execute and bind the respective parties to perform their obligations pursuant to this Settlement Agreement.

8. Settlement of Disputed Claim. This Settlement Agreement is a compromise of the Litigation and the Appeal and neither this Settlement Agreement nor any action on the part of the Parties hereto shall be deemed as an admission of liability by any of the Parties for any purpose. Any statements made during any meeting, telephone conference or other conversation among the parties and their respective counsel, employees and agents relating to this Settlement Agreement shall constitute "compromise negotiations" within the meaning of Rule 408 of the Federal Rules of Evidence or any other similar statute or rule that may be applicable in any subsequent proceeding, including, without limitation, civil actions, arbitrations, and contested matters and adversary and other proceedings under Title 11 of the United States Code and the use of any such statements in any such proceeding shall be limited by the above-mentioned evidentiary rules and decisions of law applying and interpreting them. No part of this Settlement Agreement may be used in any manner by any

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person in any subsequent proceeding as evidence of the respective rights, duties, or obligations of the Parties hereto in any context other than the interpretation or enforcement of the Parties' rights under this Settlement Agreement.

9. Further Documents. The parties agree to prepare and execute all documents which may be necessary or desirable to effectuate the purposes of this Settlement Agreement.

10. Entire Agreement. The parties acknowledge and represent that this Settlement Agreement contains the entire agreement between parties regarding the matters set forth herein, and that it supersedes all previous negotiations, discussions and understandings regarding such matters. The parties acknowledge and represent that they are (a) represented in this matter by independent counsel of their own choosing, (b) have reviewed the contents of this Settlement Agreement with such counsel, and (c) are relying on their own judgment and the advice of their own counsel in executing this Settlement Agreement. All of the terms of this Settlement Agreement are contractual in nature and are not mere recitals.

11. Applicable Law. North Carolina law shall govern the interpretation and enforcement of this Settlement Agreement without regard to the principles of conflicts of laws.

12. Successors and Assigns. This Settlement Agreement shall be binding upon and inure to the benefit of the parties hereto, their heirs, successors and assigns, shareholders, partners, employees, agents, subcontractors and attorneys and the Special Use Permit shall run with the land.

13. Multiple Originals and Counterparts. This Settlement Agreement may be executed in multiple originals and in separate counterparts, each of which shall constitute an original and all of which shall constitute the whole Settlement Agreement.

14. No Rights in Third Parties. Nothing contained in this Agreement shall create or be deemed to create any rights or benefits in favor of any persons other than the parties hereto.

IN WITNESS WHEREOF, the parties hereto have executed this Settlement Agreement as of the day and year first above written.

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WASTE INDUSTRIES, INC.
A North Carolina Corporation

By: _____
Its: President

ATTEST:

_____
Secretary

(Affix Corporate Seal)

THE COUNTY OF DURHAM, NORTH CAROLINA

BY: _____
Mary Ann E. Black, Chairman of the Durham County Board of County Commissioners

ATTEST:

_____
Clerk to the Durham County Board of County Commissioners

(Affix County Seal)

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LOCAL GOVERNMENT APPROVAL LETTER

FROM DURHAM CITY/COUNTY PLANNING DEPARTMENT

APRIL 14, 2000

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DURHAM
1869
CITY OF MEDICINE

Durham City/County Planning Department

101 City Hall Plaza ★ Durham ★ NC ★ 27701

Telephone: (919) 560-4137
Fax: (919) 560-4641
www.ci.durham.nc.us/planning/index.html

April 14, 2000

AUG 2000
Received
Solid Waste
Section

Mr. Jim Barbour
Eastern Area Engineer
North Carolina Department of
Environmental and Natural Resources
Division of Waste Management
Fayetteville Regional Office
225 Green Street, Suite 601
Fayetteville, North Carolina 28301-1791

RE: Local Governmental Approval Letter for Waste Industries, Inc.
Solid Waste Transfer Station and Recycling Center

Dear Mr. Barbour:

The Durham City/County Development Review Board approved a Site Plan for the above-referenced project (phases1,2, and 3) located at 148 Stone Park Court (Stone Road Industrial Park), Durham, NC. The Site Plan was approved based on the applicable zoning and development regulations. The property is located in an I-3 Heavy Industrial District and the above referenced use for phase 2 is a permitted use with a Major Special Use permit and site plan approval which was granted by court order (attached), within this zoning district. Phases 1, and 3 are uses permitted by right under the ordinance with a demolition landfill permit from Inspections and site plan approvals for both phases, which have also been granted. The Durham County Board of County Commissioners issued a major special use permit for the above-referenced project (as referenced in the court order) in accordance with the provisions of the Durham City-County Zoning Ordinance, and other applicable ordinances. No other zoning or land use approvals are required for this project prior to the filing of a sedimentation and erosion control plan and the application for a building permit.

I trust this information verifies that the required local governmental approval for this development has been obtained. Please feel free to contact me should you have questions or desire additional information.

Sincerely,

Helen Youngblood
Senior Planner, A.I.C.P.
Durham City-County Planning Department

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Attachment D

Operations Manual

Permit Renewal Application
Stone Park Court Transfer Station
Durham, North Carolina

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Scanned By	Date	DOC ID	Permit
Backus	08/06/2015	24808	3214T-TRANSFER-2001

APPROVED
DIVISION OF WASTE MANAGEMENT
SOLID WASTE SECTION
Date 08/04/2015 **By** Patricia M. Beckner
DIN 24034
Attachment 1 **Part** VI **Document** 9
Permit 9808T-TRANSFER-2000 **Permit DIN** 24158

Operations Manual

Stone Park Court Transfer Station
Durham, North Carolina
Permit No. 32-14T

Prepared for:

Waste Industries, Inc.
Raleigh, North Carolina

April 2015
Revised July 2015

Prepared by:

SMITH+GARDNER
14 N. Boylan Avenue, Raleigh NC 27603 | 919.828.0577

PRINTED ON 100% RECYCLED PAPER

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Operations Manual

Stone Park Court Transfer Station
Durham, North Carolina
Permit No. 32-14T

Prepared For:

Waste Industries, Inc.
Raleigh, North Carolina

S+G Project No. DURHAM 15-1

Madeline German, P.G.
Project Geologist

DocuSigned by:
Stacey A. Smith
27B482DF1A09438...

Stacey A. Smith, P.E.
Senior Engineer

April 2015
Revised July 2015

SMITH+GARDNER
14 N. Boylan Avenue, Raleigh NC 27603 | 919.828.0577

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Stone Park Court Transfer Station
Durham, North Carolina

Operations Manual

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1.0 GENERAL OPERATION

This Operations Manual was prepared to describe the operation of and provide general instructions for Waste Industries, LLC (Waste Industries) to properly operate the Stone Park Court Transfer Station (Permit No. 32-14T), shown on **Figure 3**. Waste Industries is the owner and operator of the Transfer Station located at 148 Stone Park Ct in Durham, North Carolina, (**Figure 1**) on the same property as the LCID Landfill (Permit No. 32-J), shown on **Figure 2**. This plan specifically addresses requirements of North Carolina Solid Waste Management Rules Section .0402 – Operational Requirements.

The information contained herein was prepared to provide facility personnel with a clear understanding of how the Design Engineer assumed that the completed facility would be operated and how regulatory operations criteria will be met.

1.1 Contact Information

All correspondence and questions concerning the Stone Park Court Transfer Station operation should be directed to the appropriate personnel listed below. For fire or police emergencies dial 911.

1.1.1 Waste Industries, LLC

148 Stone Park Court
Durham, North Carolina 27703
Scale House Phone: (919) 596-1363
Fax: (919) 557-9523

Operations Supervisor:	Bernard Harris
Phone:	(919) 730-6322
Transfer Station General Manager:	Bill Davidson
Phone:	(919) 596-1363
Regional Manager (Raleigh):	Ben Habets
Phone:	(919) 325-3000
Director of Environmental Health & Safety:	Ralph Ford
Phone:	(919) 877-7532

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1.1.2 Waste Industries USA, Inc.

3301 Benson Drive, Suite 600
Raleigh, North Carolina 27609

Region Manager:	David Pepper
Email:	david.pepper@wasteindustries.com
Phone:	(919) 877-2235
Fax:	(919)325-3018

1.1.3 Engineer

Smith Gardner, Inc.
14 N. Boylan Ave.
Raleigh, NC 27603
Phone: (919) 828-0577

Primary Contact:	Stacey A. Smith, P.E.
Email:	stacey@smithgardnerinc.com

1.1.4 North Carolina Department of Environment and Natural Resources

North Carolina DENR - Raleigh Central Office (RCO)

217 W. Jones Street
Raleigh, NC 27603
1646 Mail Service Center
Raleigh, NC 27699-1646
Phone: (919) 707-8200

North Carolina DENR - Raleigh Regional Office (RRO)

3800 Barrett Drive
Raleigh, NC 27609
Phone: (919) 571-4700
Fax: (919) 571-4718

Division of Waste Management (DWM) - Solid Waste Section:

Western District Supervisor:	Deb Aja (ARO)
Environmental Senior Specialist:	John Patrone

Division of Land Resources - Land Quality Section:

Regional Engineer:	John Holley, P.E. (RRO)

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1.2 Facility Operations

1.2.1 Hours of Operation

Normal operating hours for the Stone Park Court Transfer Station will be 7:00 AM to 4:30 PM Monday through Friday and 8:00 AM to 1:00 PM on Saturday. The Transfer Station will be closed Sunday and for the observance of some holidays.

These hours may be changed as needed depending on site conditions or as may be dictated by the clients to be serviced.

1.2.2 Service Area

The Stone Park Court Transfer Station is permitted to receive municipal solid waste (MSW) from collection routes in Alamance, Chatham, Durham, Granville Orange and Wake Counties. The routes are served by Waste Industries, Inc. as well as other solid waste companies. The waste is generated by residents, municipalities, industries, businesses, and other entities within these counties.

The recyclables, construction and demolition (C&D) debris, land clearing and inter debris (LCID), and white goods (separated from waste at the Transfer Station) may be collected from a service area including Chatham, Durham, Franklin, Granville, Harnett, Johnston, Nash, and Wake counties.

1.2.3 Access and Security

The Stone Park Court Facility shall be secured by means of gates, chains, berms, fences, and other security measures approved by the Division of Waste Management to prevent unauthorized entry. Unauthorized vehicle access is prevented by a chain-link fence surrounding the facility. All vehicles delivering waste to the Transfer Station will enter through the main entrance off Stone Park Court and are required to be weighed via the scales. Once the vehicles have passed the scale house area, they continue along the access road until reaching the tipping building apron at the Transfer Station.

1.2.4 Attendant

A responsible individual trained and certified in facility operations shall be on-site at all times during facility operating hours.

The attendant and/or operator shall maintain certification, NC-SWANA Certified Transfer Station Operations Specialist. Additional safety training is conducted monthly as required by Waste Industries Safety Policy. Material is generated by corporate office and classroom instruction is given by the Transfer Station supervisor monthly. Topics include, but are not limited to, Hearing Conservation,

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Blood Borne Pathogens, PPE, Hazard Communications, Lock-Out Tag-Out, and Fire Safety.

The Transfer Station attendant directs vehicles waiting to unload to back into the facility through the south entrance. Adequate area is available in front of the Transfer Station for drivers to queue their vehicles into a backing maneuver. Station operating personnel shall be on the station floor to direct and guide the vehicles. The vehicles shall back onto the tipping floor to and area designated by the attendant. Once the vehicle is in position, the waste load shall be discharged directly onto the tipping floor. A spotter shall inspect the discharged waste before it is mixed with other waste on the tipping floor.

1.2.5 Access Roads

Transfer station access roads are constructed of an all-weather surface (asphalt or concrete) and shall be maintained in good condition. Potholes, ruts, and debris on the roads shall receive immediate attention to avoid damage to the vehicles. Access roads shall be regarded as necessary to maintain positive slope for adequate drainage.

1.2.6 Sign Requirements

Signs are posted at the Transfer Station entrance indicating operational procedures, hours of operation, tipping fee, and permit number. Signs shall be clearly posted stating there are no hazardous or liquid waste received at this location. Traffic signs and markers shall be provided as necessary to promote an orderly traffic pattern to and from the discharge area to maintain efficient operating conditions.

1.2.7 Equipment

The Transfer Station shall utilize the following equipment for regular operation and maintenance.

- Tipper Transfer Trailers with cover
- Trailers on site
- Axle scales and software
- Large rubber-tired front end loader
- Site tractor for queuing transfer trailers
- Track hoe for picking metals, C&D and LCID

In the event of equipment failure, equipment may be rented or brought in from other Waste Industries facilities to continue normal operations.

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1.3 Fire Control

Fire Fighting services are provided by the local Fire Department, Bethesda Volunteer Fire Department. The Transfer Station is also equipped with fire extinguishers in various locations throughout the building for containment or control of incipient fires.

In case of fire, immediately contact the Fire Department. Durham County has 911 services to report fires and other emergencies. All fires shall be verbally reported to the NC DWM within 24 hours and written notification shall be submitted within fifteen (15) days. Verbal and written notification shall be submitted as specified in **Section 1.1. 4**. A NC DENR fire occurrence notification form is included in **Appendix B**.

1.3.1 Fire Protection Equipment

Fire suppression equipment shall be provided to control fires, and arrangements have been made with the local fire protection agency to immediately provide fire-fighting services when needed. The Transfer Station building is equipped with four (4) hose bibs, located on each wall of the facility, and an appropriate number of fire extinguishers to effectively control incipient fires. All personnel at the facility should be familiar with the use of the fire extinguishers on site. Fire extinguishers should be routinely inspected, serviced, and operated in accordance with manufacturer's instructions.

1.4 Record Keeping Program

In addition to normal Bookkeeping for invoices and weight records, Waste Industries Operator will maintain an operation log. Items to be noted and kept in the operating log will include but not be limited to the following items.

A. Solid Waste Permit
B. Operation Plan
C. Inspection reports
D. Facility Record Drawings
E. Waste Determination Records and Information on Rejected Waste

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2.0 WASTE HANDLING

This section describes the required waste handling operations for the Stone Park Court Transfer Station.

2.1 Transfer Station Design

The tipping building apron provides access to the south side of the Transfer Station which opens to the 12,800 square foot tipping floor. The tipping building has 10-foot high push walls running along the interior walls that direct MSW to hoppers feeding the trailers on the lower level of the building. The building is divided into two separate tipping areas. The east end of the tipping floor is for MSW loads containing household waste with the west end accepting C&D and LCID mixed loads.

Metal and cardboard pulled from the MSW and C&D loads is placed into trailers staged at the dock high loading area at the west end of the Transfer Station. The trailers shall be removed as they are loaded. Until volume expands this process could take as long as one week to load the trailers.

All waste shall be contained inside the covered area of the Transfer Station. Cardboard, metals, and land clearing debris will be located in the northwest corner (C&D processing area) and is permitted to remain on the building floor for no more than 48 hours or two working days. C&D materials shall be deposited in the open top transfer trailer staged on the lower level at the northwest section of the transfer Station. Any LCID waste may be pulled from the delivered waste and loaded into open dump trailers or dump trucks to be transported as specified in Section 2.3.

2.2 Acceptable Waste

The Transfer Station will only accept waste that is generated from the approved service areas that is consistent with the North Carolina solid waste regulations and the general conditions established in the operating permit. A small track hoe and manual pickers are used to pick C&D, LCID, metals, and cardboard from the loads dumped on the tipping floor before the MSW is pushed into open top trailers.

2.3 Approved Facilities

The Transfer Station will only manage waste into approved facilities for each class of waste.

Municipal solid waste shall be disposed into approved facilities: Sampson County Disposal Landfill (Permit No. 82-02), Johnston County Landfill (Permit No. 51-03), or Wheelabrator Waste-to-Energy Facility (Permit No. PBR500).The NC DWM will be notified of any changes in disposal sites.

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Construction and demolition debris shall be disposed into approved C&D Debris Landfill: Red Rock (Permit No. 92-28) or Johnston County Landfill (Permit No. 51-03) or transferred to an alternate approved facility.

Land clearing and inert debris can be disposed into approved LCID Landfill Stone Park Court (Permit No. 32-J) owned by Waste Industries on Campus or transferred to an alternate approved facility.

Scrap steel, old corrugated cardboard and inert debris will be separated at the station and transferred to trailers for shipment to local markets.

Transfer and Processing Material may be taken to Wake Reclamation LLC (Permit No. 9224-MWP-2012) or an alternate approved facility.

2.4 Prohibited Waste

The Transfer Station shall only accept waste for which it is permitted to receive. No hazardous waste (as defined by *15A NCAC 13A* including hazardous waste from conditionally exempt small quantity generators), or liquid waste will be accepted at this facility. In addition, asbestos, or other wastes not accepted at the final disposal facility will not be accepted unless a separate waste determination is made and applied for.

2.5 Waste Receiving

All vehicles must stop at the scale house at the entrance of the facility and visitors are required to sign-in. All waste transportation vehicles are weighed and the content of the load assessed. The scale attendant(s) requests from the driver of the vehicle a description of the waste it is carrying to ensure that unacceptable waste is not allowed into the landfill. The attendant(s) then visually checks the vehicle as it crosses the scale. Signs informing users of the acceptable and unacceptable types of waste are posted at the scale house. Once passing the scales, the vehicles are routed to the transfer station tipping floor.

2.6 Waste Screening

Received waste may be screened as necessary in a separate area on the station floor to evaluate contents. When operating personnel are in doubt regarding container contents, or after receiving suspicious waste(s) from a new hauler or customer, the contents shall be inspected. Barrels and drums shall not be inspected unless they are empty, have been inspected, and are perforated to ensure that no liquid or hazardous waste is contained therein. Other than special inspections, approximately one load per day or one percent of incoming loads will be stopped for inspection weekly. Inspection records shall be maintained in the scale house.

For unacceptable wastes, the Owner will notify officials of the DWM (see Section 1.1.4) within 24 hours of attempted disposal of any waste the transfer station is not permitted

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to receive to determine the proper course of action. The hauler is responsible for removing unacceptable waste from the landfill property.

If no unacceptable waste is found, the load will be placed in the appropriate transfer trailer. All random waste inspections will be documented by landfill staff using the waste screening form provided in **Appendix A**.

2.7 Open Burning of Waste

Open burning of waste is prohibited at the Stone Park Court Transfer Station.

2.8 Control of Wind Blown Waste

All incoming vehicles with waste are required to have their loads tarped, or be fully enclosed. Outbound transfer trailers are also required to tarp their loads. Throughout the day and at the end of each operating day, facility personnel will canvass the area for any windblown litter. Since the Transfer Station is enclosed on three sides, wind blown trash should not be a major operational concern. Any wind blown trash discovered at the end of an operating day shall be collected and stored in a transfer trailer or on-site trash bin.

2.9 Wastewater Disposal At The Transfer Station

The tipping floor and transfer trailer staging area will be cleaned at the end of each operating day. The facility is designed such that wastewater will be collected; sweeping water toward the rear of the facility and into the trailer loading area. The wastewater generated on the C&D floor area is directed to trench drains, while wastewater generated on the MSW floor area is directed to pit drains, located in the trailer loading areas. This system effectively collects leachate/wastewater separately from stormwater. The wastewater and leachate is directed to an oil grit separator by pipe and pumped after separation to the local sewer system shown on **Sheet SD-5**. The local sewer system is serviced by Triangle Waste Water Treatment Plan (TWWTP). The oil grit water separator is protected from overfill by an audible and visual alarm. The alarm is tested on a monthly basis.

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3.0 ENVIRONMENTAL MANAGEMENT

3.1 Erosion Control

An existing erosion and sedimentation control plan exists for the entire Stone Park Court Facility, including the Transfer Station. Several drainage features and a sediment pond are located on the western end of the property, which convey and filter sediment-laden storm water runoff. Ditches and other drainage features were designed to collect and convey water from the disturbed area in which the Transfer Station is located and runoff from the Transfer Station area is directed into sediment basins adjacent to the western corner of the Transfer Station site.

3.2 Disease and Vector Control

Waste Industries shall provide effective vector control measures for the protection of human health and the environment. Disease vectors are defined as any rodent, flies, mosquitoes, or other animals, including insects, capable of transmitting disease to humans. Control of disease vectors will be maintained by implementation of a daily cleaning program, which involves removal of waste, leachate, and wash water from the operating areas.

The transfer station will be swept down daily. Walls, beams, and spaces behind retaining walls shall be kept clean. The floor will be washed down as warranted to prohibit nuisance conditions. Grates and traps located at the floor drain inlets will be cleaned frequently and after wash down. Waste and debris collected from the floor drains and grate will be disposed of properly. Wash water will be directed so as to not leave the confines of the building.

Stagnant ponding water shall be prevented from occurring to control mosquito breeding. If problems controlling disease vectors occur, County mosquito control or a licensed exterminator shall be employed to control vectors.

3.3 Odor Control

The large exhaust fans should reduce nuisance odors and mitigate vector problems. The Transfer Station concrete floor should be thoroughly swept down at the end of operations each day. Under normal operating conditions, the station will be free of unconfined solid waste at the end of each day. Solid waste shall not be stored on the Transfer Station floor.

Full or partially filled haul trailers will be covered if left on site overnight. The front entrance to the Transfer Station and the entrance and exits of the loading bay, together with six large ventilation fans, will allow adequate ventilation. All dumped waste shall be contained in the building either in the waiting transfer trailer or on the floor.

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FIGURES

Operations Manual
Stone Park Court Transfer Station
Durham, North Carolina

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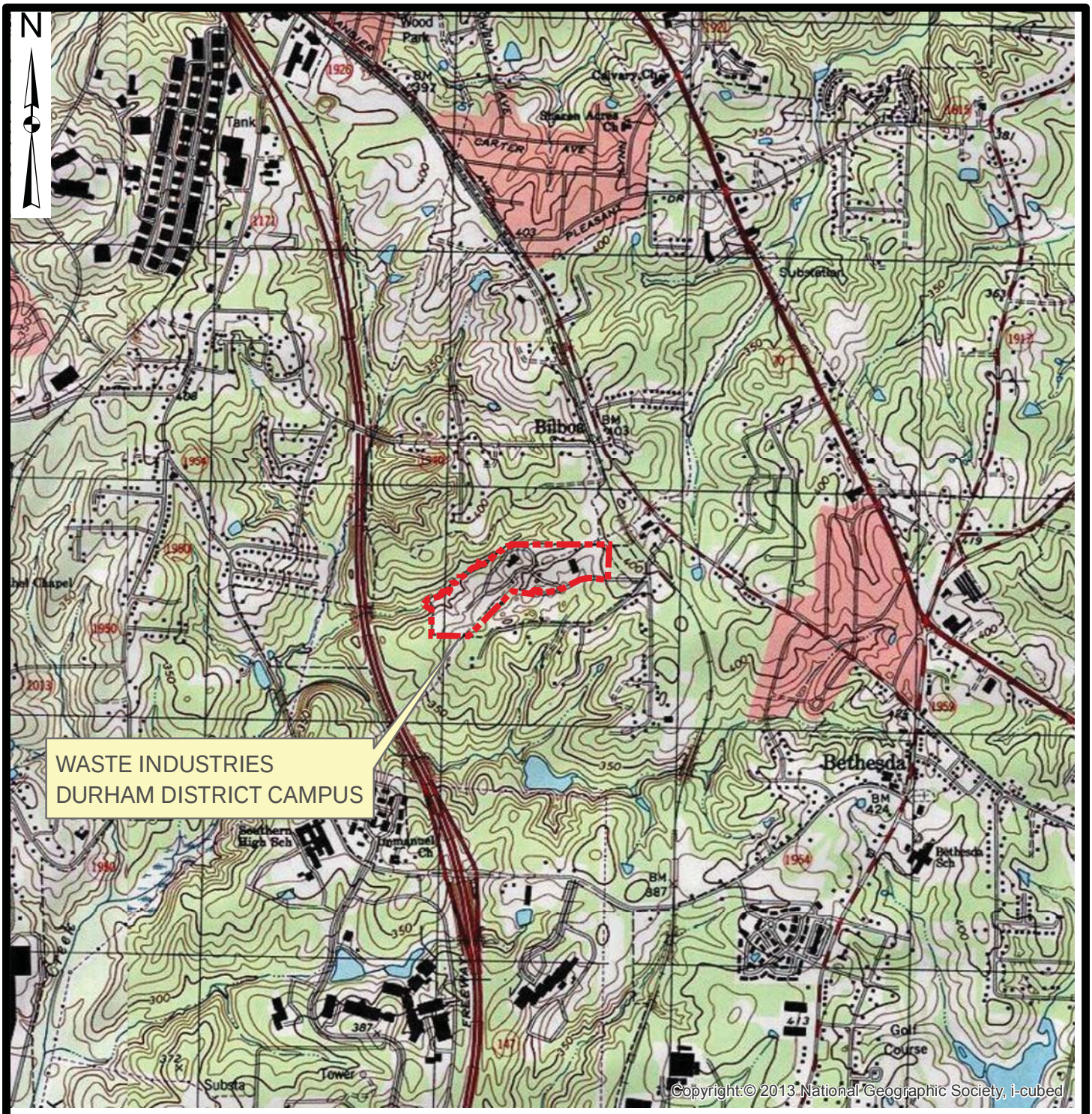

REFERENCE: TOPOGRAPHY FROM U.S.G.S. 7.5 MIN. QUADRANGLE "SOUTHEAST DURHAM", PHOTOREVISED 1993, 2002.
PROPERTY BOUNDARY SURVEY BY SURVEYING SOLUTIONS, REVISED 8/11/11.

0 1,000 2,000 4,000 Feet

WASTE INDUSTRIES, LLC
SOLID WASTE MANAGEMENT FACILITY
STONE PARK COURT, DURHAM, NORTH CAROLINA
SITE MAP

NC LIC. NO. C-0828 (ENGINEERING)

SMITH+GARDNER

14 N. Boylan Avenue, Raleigh NC 27603 | 919.828.0577

DRAWN:	APPROVED:	SCALE:	DATE:	PROJECT NO.:	FIGURE NO.:
J.A.L.	D.M.M.	AS SHOWN	Apr. 2015	DURHAM 15-1	1

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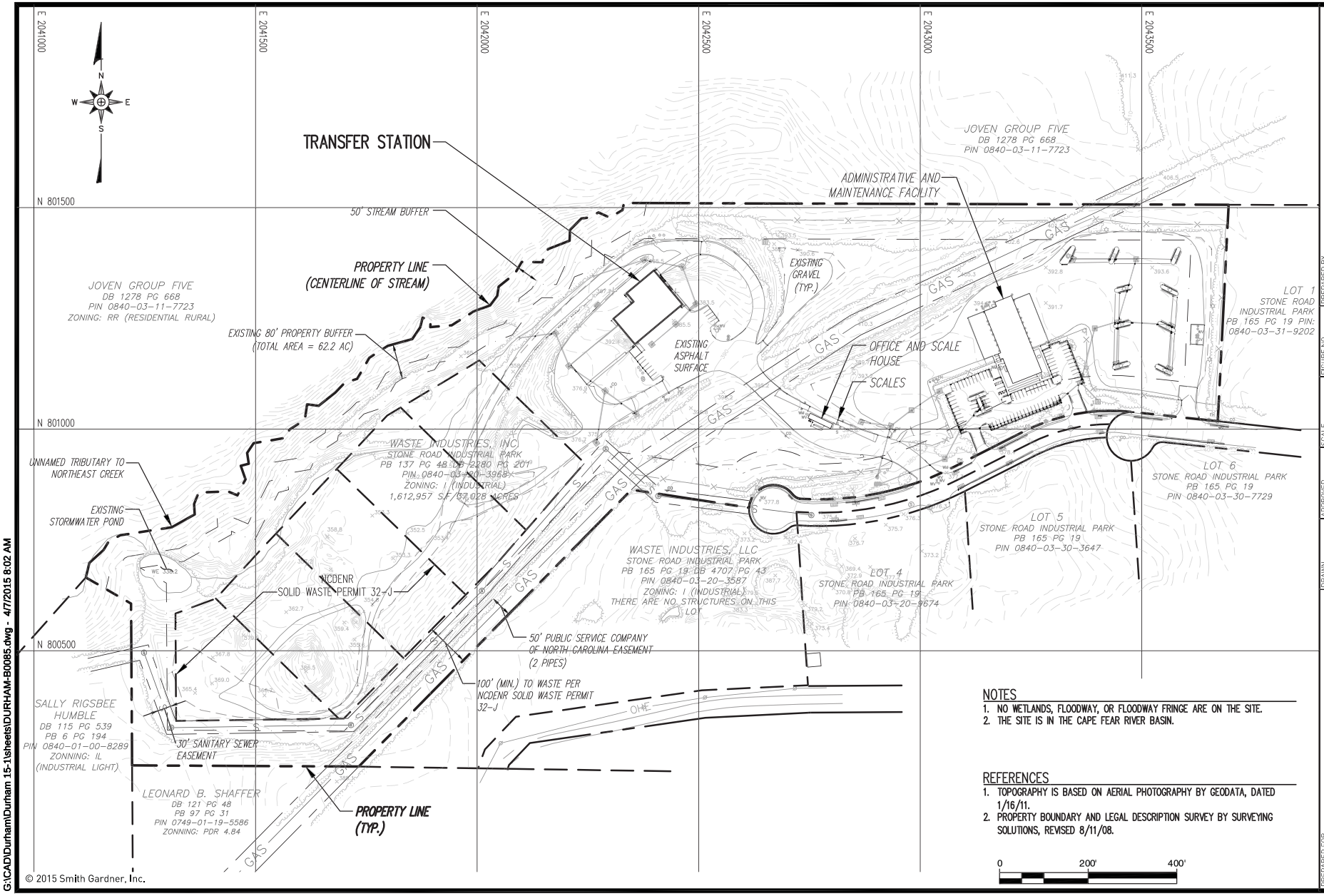

NOTES

1. NO WETLANDS, FLOODWAY, OR FLOODWAY FRINGE ARE ON THE SITE.
2. THE SITE IS IN THE CAPE FEAR RIVER BASIN.

REFERENCES

1. TOPOGRAPHY IS BASED ON AERIAL PHOTOGRAPHY BY GEODATA, DATED 1/16/11.
2. PROPERTY BOUNDARY AND LEGAL DESCRIPTION SURVEY BY SURVEYING SOLUTIONS, REVISED 8/11/08.

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PREPARED BY:

NC LIC. NO. C-0928 [ENGINEERING]
SMITH+GARDNER
14 N. Boylan Avenue, Raleigh NC 27603 | 919.828.0577

DRAWN:	APPROVED:	SCALE:	FIGURE NO.
J.A.L.	M.M.G.	AS SHOWN	2
DATE:	PROJECT NO:	FILENAME:	
Apr 2015	DURHAM 15-1	DURHAM-B0085	

PREPARED FOR:

WASTE INDUSTRIES, LLC
SOLID WASTE MANAGEMENT FACILITY
STONE PARK COURT, DURHAM, NC
EXISTING CONDITIONS

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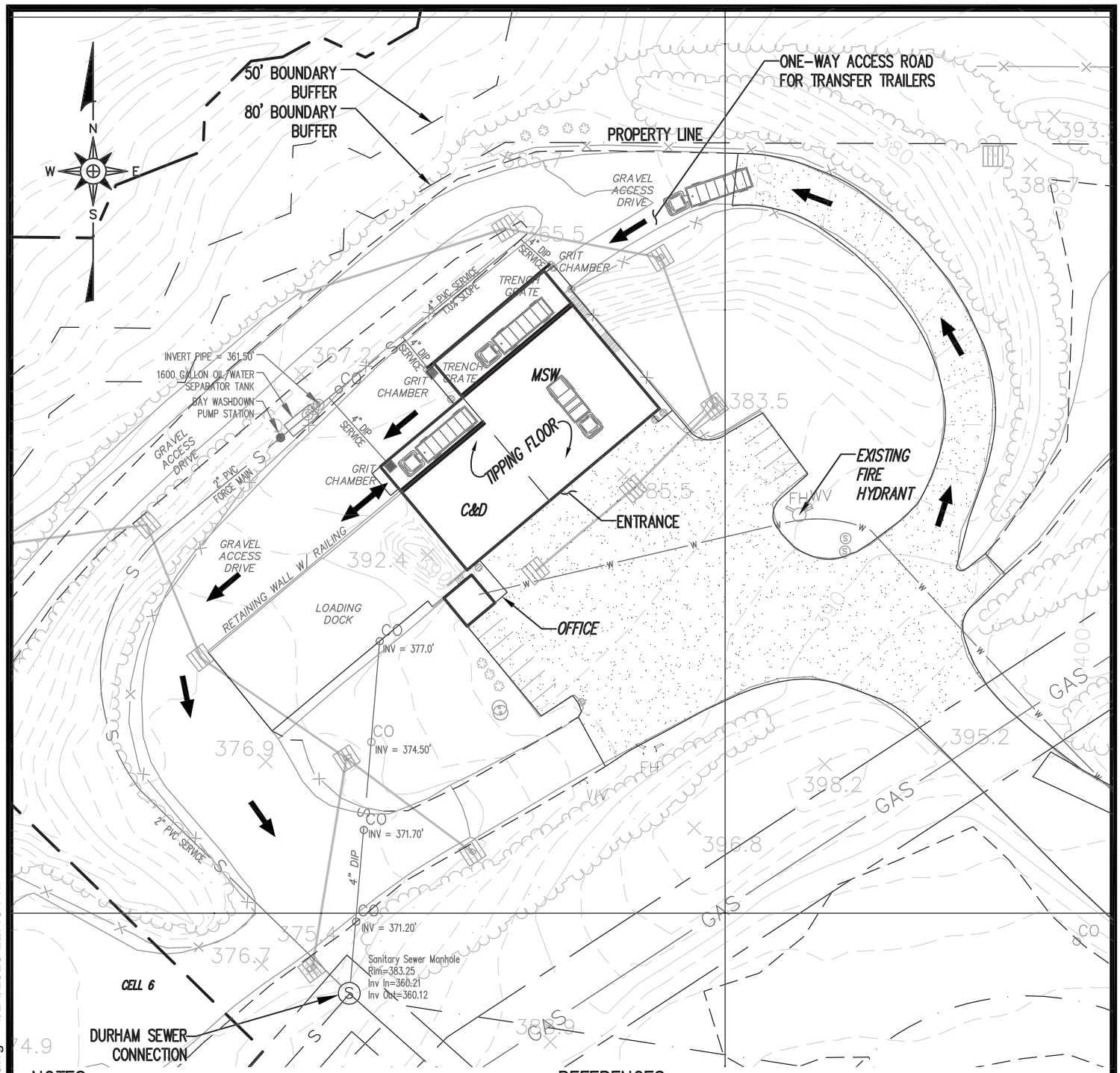

NOTES

1. NO WETLANDS, FLOODWAY, OR FLOODWAY FRINGE ARE ON THE SITE.
2. THE SITE IS IN THE CAPE FEAR RIVER BASIN.

0 80' 160'

REFERENCES

1. TOPOGRAPHY IS BASED ON AERIAL PHOTOGRAPHY BY GEODATA, DATED 1/16/11.
2. PROPERTY BOUNDARY AND LEGAL DESCRIPTION SURVEY BY SURVEYING SOLUTIONS, REVISED 8/11/08.
3. APPROXIMATE LOCATIONS OF 4" PVC AND DIP LINES BASED ON DRAWING "UTILITY PLAN" BY SUNGATE DESIGN GROUP, P.A. JUNE, 2000.

PREPARED FOR:

WASTE INDUSTRIES, LLC
SOLID WASTE MANAGEMENT FACILITY
STONE PARK COURT, DURHAM, NC
TRANSFER STATION PLAN

PREPARED BY:

NC LIC. NO. C-0828 (ENGINEERING)

SMITH+GARDNER

14 N. Boylan Avenue, Raleigh NC 27603 | 919.828.0577

DRAWN:	APPROVED:	SCALE:	DATE:	PROJECT NO.:	FIGURE NO.:	FILE NAME:
T.R.S.	D.M.M.	AS SHOWN	Apr 2015	DURHAM 15-1	3	DURHAM-A0087

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Appendix A

Waste Screening Form

Operations Manual
Stone Park Court Transfer Station
Durham, North Carolina

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Waste Industries, LLC
Stone Park Court Transfer Station
Permit No. 32-14T
(919) 596-1363

WASTE SCREENING FORM

Day / Date: _____ Time Weighed in: _____
Truck Owner: _____ Driver Name: _____
Truck Type: _____ Vehicle ID / Tag No: _____
Weight: _____ Tare: _____
Waste Generator / Source: _____

Reason Load Inspected: Random Inspection _____ Staff Initials _____
Detained at Scales _____ Staff Initials _____
Detained by Operating Staff _____ Staff Initials _____

Inspection Location: _____

Approved Waste Determination Form Present? Yes _____ No _____ N/A _____

Description of Load: _____

Load Accepted (signature) _____ Date _____
Load Not Accepted (signature) _____ Date _____

Reason Load Not Accepted (complete only if load not accepted)

Description of Suspicious Contents:
Color: _____ Hazardous Waste Markings:
Texture: _____ _____
Drums Present: _____ Smell:
Est. Cubic Yards in Load: _____ _____
Est. Tons in Load: _____

Waste Industries, LLC. Emergency Management Contacted? Yes _____ No _____

Company or Authority Contacted? _____
Hazardous Materials Present: _____

Hauler Notified (if waste not accepted) Phone: Time Contacted:
Other Observations: _____

Final Disposition
Signed: _____ Date _____
Waste Screening Inspector or Solid Waste Manager

Attach related correspondence to this form.
File completed form in Operating Record.

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Appendix B

Fire Occurrence Notification Form

Operations Manual
Stone Park Court Transfer Station
Durham, North Carolina

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SOLID WASTE MANAGEMENT FACILITY FIRE OCCURRENCE NOTIFICATION

NC DENR Division of Waste Management
Solid Waste Section

Notify the Section verbally within 24 hours and submit written notification within 15 days of the occurrence.
(If additional space is needed, use back of this form.)

NAME OF FACILITY: _____ PERMIT # _____

DATE AND TIME OF FIRE: _____ @ _____

HOW WAS THE FIRE REPORTED AND BY WHOM:

LIST ACTIONS TAKEN:

WHAT WAS THE CAUSE OF THE FIRE:

DESCRIBE AREA, TYPE, AND AMOUNT OF WASTE INVOLVED:

WHAT COULD HAVE BEEN DONE TO PREVENT THIS FIRE:

DESCRIBE PLAN OF ACTIONS TO PREVENT FUTURE INCIDENTS:

NAME: _____ TITLE: _____ DATE: _____

****

THIS SECTION TO BE COMPLETED BY SOLID WASTE SECTION REGIONAL STAFF

DATE RECEIVED _____

List any factors not listed that might have contributed to the fire or that might prevent occurrence of future fires:

FOLLOW-UP REQUIRED:

☐ NO ☐ PHONE CALL ☐ SUBMITTAL ☐ MEETING ☐ RETURN VISIT BY:_____ (DATE)

ACTIONS TAKEN OR REQUIRED:

Revised 6/8/09

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Attachment E

Financial Assurance

Permit Renewal Application
Stone Park Court Transfer Station
Durham, North Carolina

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SMITH+GARDNER

DATE: 07-Apr-15
BY: MMG

Financial Assurance
Stone Park Court Transfer Station
Engineer's Remedial Cost Estimate

Item No.	Item Description	Unit	Contractor Quantity	Contractor Unit Price	Contractor Total Price	Comments
	Transfer Station (MAX) Area (Horizontal Plan) ----->	**AC**	**1**			
1.0	**Pre-Remedial Response**			**Subtotal**	**$500.00**	
1.1	Coordination, Contracts, and Management	AC	1	$500.00	$500.00	
2.0	**Remedial Response Activities**				**$250,450.00**	Ref. 1
2.1	Mobilization, Demobilization, and Project Closeout	AC	1	$500.00	$500.00	S+G Estimate
2.2	Wash Down & Cleanup of the Transfer Station	DAY	2	$1,500.00	$3,000.00	Assume single work crew per day.
2.3	Fencing & Concrete Barrier Protection	LS	1	$5,000.00	$5,000.00	Assume close transfer station and place concrete barriers across access road.
2.4	Excess Waste Disposal	TN	4,680	$51.00	$238,680.00	Five (5) days of waste as specified by NCDENR. Hauling and loading included. Disposal locations: City of Durham Transfer Station (~$45/Ton)
2.5	Excess Hazardous Materials Disposal	DRUM	2	$1,500.00	$3,000.00	Assumes cost of waste characterization, sampling, removal, treatment or disposal.
2.6	Excess Recycling Material	40-CY container	1	$20.00	$20.00	Assume cost of loading, transportation, and disposal.
2.7	Fuel Storage Removal	GAL	1	$250.00	$250.00	Useable product to be sold.
3.0	**Quality Assurance, Certification, & Deed Notation**				**$2,250.00**	
3.1	Engineering and Reporting	LS	1	$2,000.00	$2,000.00	S+G Estimate
3.2	Deed Notation	LS	1	$250.00	$250.00	S+G Estimate
	Remedial Response Estimate ----->				**$253,200**	
	10% Contingency ----->				**$25,320**	
	Total Estimate ----->				**$278,520** (2015$) (See Note 1)	

Notes:

1. All costs are presented in current dollars and should be increased at an inflation rate of 1.5% if additional review is not performed annually.
2. This ESTIMATE has been prepared for financial assurance purposes only and shall not be considered a replacement for an actual bid from a licensed contractor and is considered acceptable within a +/- 10% of the Total Estimate value.
3. Waste quantity for 2.4 is the average 5 day waste transferred during 2014. Unit Price is the disposal plus loading costs.

References:

1. Stone Park Court Transfer Station Permit Renewal Application by Smith Gardner, Inc dated April 2015.

Denotes values calculated in spreadsheet.

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Attachment F

Site Drawings

Permit Renewal Application
Stone Park Court Transfer Station
Durham, North Carolina

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PROJECT:
WASTE INDUSTRIES, INC.
DURHAM DISTRICT CAMPUS
PHASE TWO

OWNER:

WASTE INDUSTRIES, INC.
3301 BENSON DRIVE
RALEIGH, NC 27609
919-325-3000

DESIGNER:

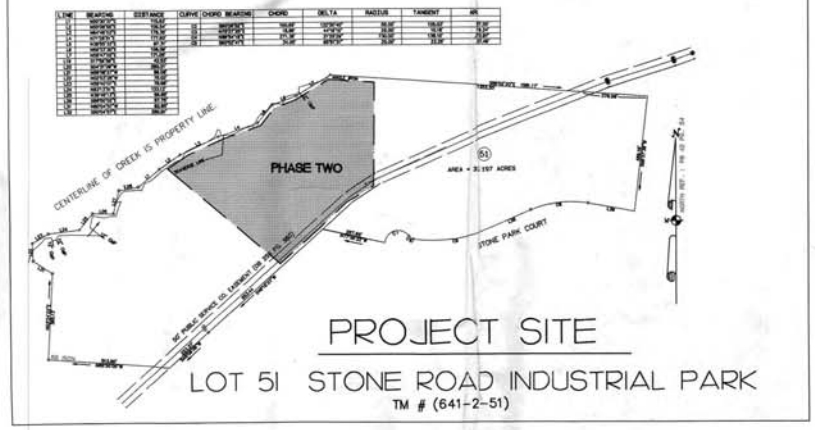
SUNGATE DESIGN GROUP. P.A.
915A JONES FRANKLIN ROAD
RALEIGH, NC 27606
919-859-2243

G. N. RICHARDSON & ASSOCIATES, INC.
Engineering and Geological Services
425 N. Boylan Avenue
Raleigh, NC 27603

CONTENTS

SHEET	ELEMENT
SD-1	MASTER PLAN (PHASE TWO)
SD-2	SITE/STAKING PLAN
SD-3	EROSION CONTROL PLAN
SD-4	GRADING and STORMWATER PLAN
SD-5, SD-5A	UTILITY
SD-6	UTILITY PROFILE
SD-7	LANDSCAPE PLAN
SD8, SD9	SITE DETAILS
SD-10	SITE DETAILS
SD-11	EROSION CONTROL DETAILS
SD-12	LANDSCAPE DETAILS

VICINITY MAP (NTS)



PROJECT SITE

LOT 51 STONE ROAD INDUSTRIAL PARK
TM # (641-2-51)

FINAL DESIGN
NOT RELEASED FOR CONSTRUCTION

NORTH CAROLINA PROFESSIONAL SEAL 9334 ENGINEER W. HENRY WELLS JR.
7/12/00 DATE

NORTH CAROLINA LANDSCAPE ARCHITECT 390 PROFESSIONAL SEAL
7.12.00 DATE

APPROVAL STAMPING

SPECIAL CONDITIONS OF APPROVAL

1. ALL LANDSCAPE MATERIAL MUST BE INSTALLED AT TIME OF FINAL BUILDING INSPECTION.
2. THIS APPROVAL IS FOR THE PROCESSING AND RECYCLING CENTER ONLY.
3. THIS APPROVAL IS NOT FOR S & E PLANS.

G. N. RICHARDSON & ASSOCIATES, INC.
Engineering and Geological Services
425 N. Boylan Avenue
Raleigh, NC 27603

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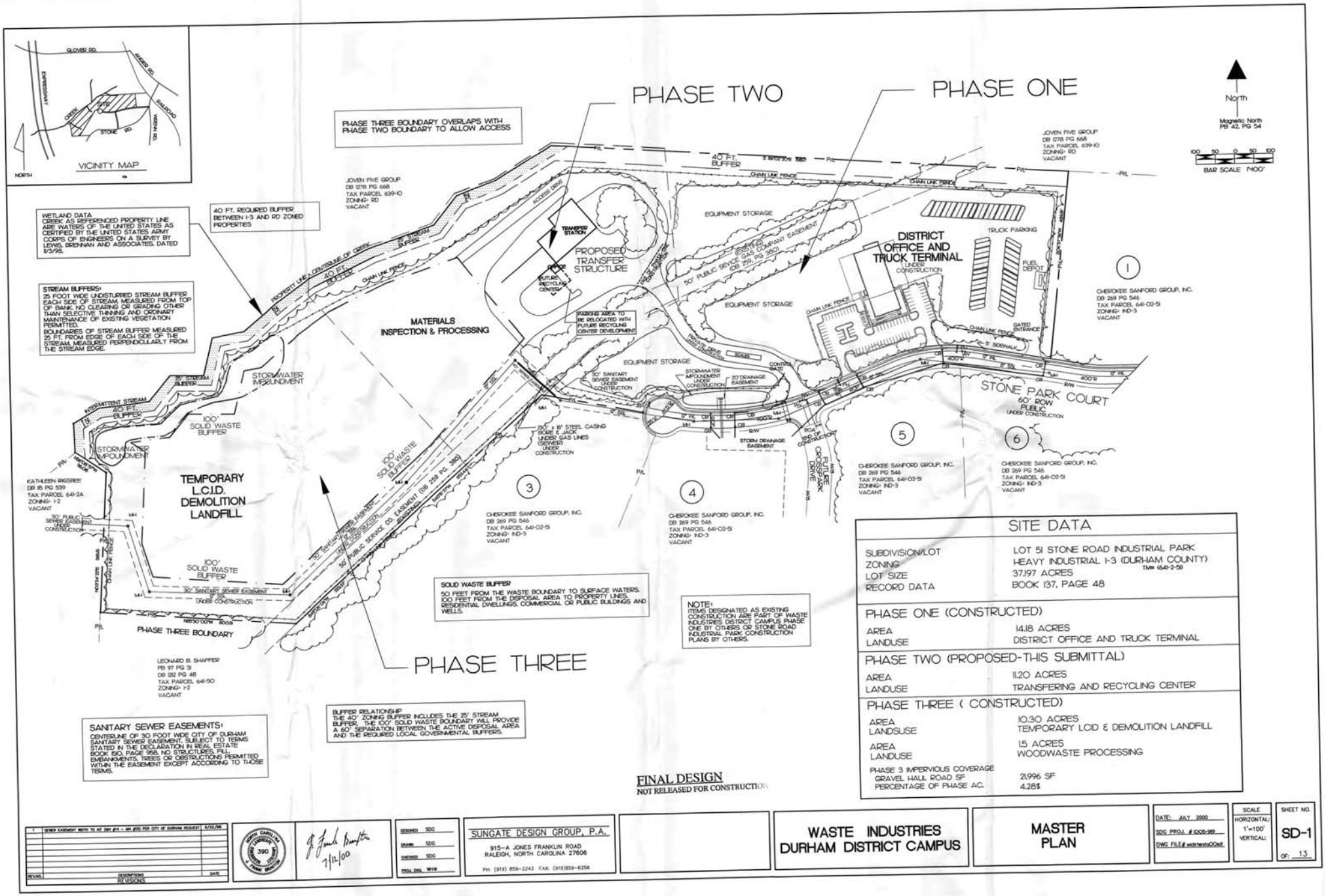

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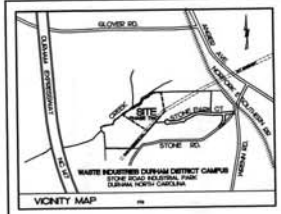
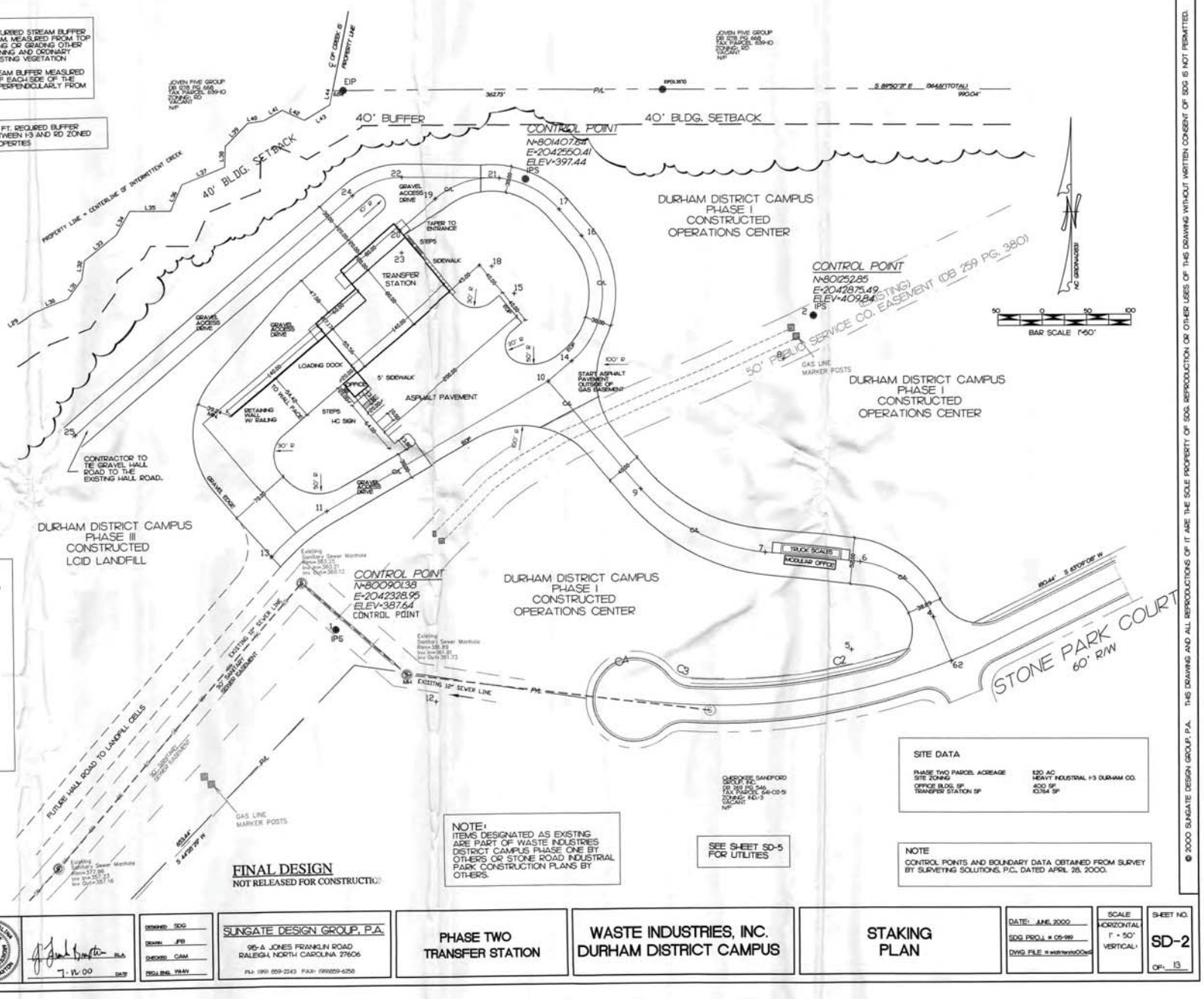


VICINITY MAP

STREAM BUFFERS:
25 FOOT WIDE UNDISTURBED STREAM BUFFER EACH SIDE OF STREAM, MEASURED FROM TOP OF BANK. NO CLEARING OR GRADING OTHER THAN SELECTIVE THINNING AND ORDINARY MAINTENANCE OF EXISTING VEGETATION PERMITTED.
BOUNDARIES OF STREAM BUFFER MEASURED 25 FT. FROM EDGE OF EACH SIDE OF THE STREAM, MEASURED PERPENDICULARLY FROM THE STREAM EDGE.

40 FT. REQUIRED BUFFER BETWEEN I-3 AND RD ZONED PROPERTIES



PARKING DATA - PHASE TWO

PARKING REQUIREMENTS

CODE REGULATIONS:

1 SPACE/250 GROSS SF---OFFICE

1 SPACE/1000 SF GROSS FLOOR AREA (PROCESSING)---RECYCLING CENTER

1 SPACE/1000 SF GROSS FLOOR AREA (PROCESSING)---TRANSFER STATION

REQUIRED PARKING

OFFICE	1 SPACE
RECYCLING CENTER	9 SPACES
TRANSFER STATION	7 SPACES
TOTAL REQUIRED (SEE FOOTNOTE)	17 SPACES

PARKING PROVIDED

OFFICE	2 SPACE
RECYCLING CENTER	0 SPACES (FUTURE)
TRANSFER STATION	3 SPACES
HC ALLOCATION	1 SPACE
TOTAL PROVIDED	6 SPACES

THE PROCESSING AND RECYCLING CENTER WILL HAVE A MAXIMUM OF 6 EMPLOYEES AND IS A SUBSIDIARY OF THE PHASE ONE DISTRICT OFFICE AND TERMINAL COMPLEX. PARKING WILL BE SHARED WITH THIS FACILITY, WITH THE ADDITIONAL PARKING REQUIREMENTS PROVIDED FROM PHASE ONE'S 85 SPACES (44 EXTRA). IT SHOULD BE NOTED THAT THERE IS NO PUBLIC PARKING AT THE PHASE TWO FACILITIES.

CONTROL POINT COORDINATE LIST

POINT 62	N	800861.3795,	E	2043031.0550	10+00 BEGIN ROAD
POINT 4	N	800981.547,	E	2043010.9660	PC C-1
POINT 5	N	800874.3837,	E	2042981.85	RADIUS C-1
POINT 6	N	800973.8283,	E	2042986.6392	PT C-1
POINT 7	N	800985.4678,	E	2042882.2009	PC C-2
POINT 8	N	801204.2561,	E	2042841.2597	RADIUS C-2
POINT 9	N	801257.1176,	E	2042677.6559	PT C-2
POINT 10	N	801801.544,	E	2042574.6206	PT INTERSECT
POINT 11	N	801035.7558,	E	2042395.700	PC C-3
POINT 12	N	800885.2027,	E	2042443.7392	RADIUS C-3
POINT 13	N	800985.5097,	E	2042256.9749	PT C-3
POINT 14	N	801202.3940,	E	2042601.656	PC C-4
POINT 15	N	801279.0473,	E	2042536.9452	RADIUS C-4
POINT 16	N	801343.2678,	E	2042635.986	PT C-4
POINT 17	N	801373.3542,	E	2042588.3920	PC C-5
POINT 18	N	801309.1338,	E	2042517.367	RADIUS C-5
POINT 19	N	801381.7871,	E	2042447.583	PT C-5
POINT 20	N	801350.7035,	E	2042405.6425	END
POINT 21	N	801408.7466,	E	2042520.5299	INTERSECTION
POINT 22	N	801406.6483,	E	2042468.8460	PC C-6
POINT 23	N	801325.6536,	E	2042407.4041	RADIUS C-6
POINT 24	N	801390.4801,	E	2042352.4267	PT C-6
POINT 25	N	801252.497,	E	2042035.8484	END

SANITARY SEWER EASEMENT:
CENTERLINE OF 30 FOOT WIDE CITY OF DURHAM SANITARY SEWER EASEMENT, SUBJECT TO TERMS STATED IN THE DECLARATION IN REAL ESTATE BOOK 510, PAGE 958. NO STRUCTURES, FILL, EMBANKMENTS, TREES OR OBSTRUCTIONS PERMITTED WITHIN THE EASEMENT EXCEPT ACCORDING TO THOSE TERMS.

NOTE:
ITEMS DESIGNATED AS EXISTING ARE PART OF WASTE INDUSTRIES DISTRICT CAMPUS PHASE ONE BY OTHERS OR STONE ROAD INDUSTRIAL PARK CONSTRUCTION PLANS BY OTHERS.

SEE SHEET SD-5 FOR UTILITIES

SITE DATA

PHASE TWO PARCEL ACREAGE	520 AC
SITE ZONING	HEAVY INDUSTRIAL I-3 DURHAM CO.
OFFICE BLDG. SF	400 SF
TRANSFER STATION SF	10,764 SF

NOTE
CONTROL POINTS AND BOUNDARY DATA OBTAINED FROM SURVEY BY SURVEYING SOLUTIONS, P.C. DATED APRIL 28, 2000.

FINAL DESIGN
NOT RELEASED FOR CONSTRUCTION

REVISIONS	DESCRIPTIONS	DATE

NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER SEAL 390

7-11-00 DATE

DESIGNED SDG
DRAWN JFB
CHECKED CAM
PROJ. ENG. WAW

SUNGATE DESIGN GROUP, P.A.
96-A JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
PH: (919) 859-2243 FAX: (919)859-6256

PHASE TWO
TRANSFER STATION

WASTE INDUSTRIES, INC.
DURHAM DISTRICT CAMPUS

STAKING
PLAN

DATE: JUNE 2000
SDG PROJ. # 05-99
DWG FILE: H:\wdi\farris\00wdi

SCALE
HORIZONTAL 1" = 50'
VERTICAL:

SHEET NO.
SD-2
OF: 13

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OUTLET PROTECTION SCHEDULE

LOC	DA	V10	PIPE DIA.	ZONE	W	LT.	APRON DEPTH	STONE CLASS
FES#1	1.46	6.8	18"	2	6.0'	9.0'	22"	B
FES#2	0.94	4.4	15"	1	4.0'	6.0'	22"	B

SEDIMENT BASIN NO. 1
DENUDED AREA = 0.80 AC.
REQUIRED STORAGE = 1440 CY
DESIGNED STORAGE = 1440 CY
BASIN SIZE: 32'X15'X3'-4"
WEIR: 6'X1'

SEDIMENT BASIN NO. 2
DENUDED AREA = 3.70 AC.
REQUIRED STORAGE = 6660 CY
DESIGNED STORAGE = 6600 CY
BASIN SIZE: 45'X30'X5'-4"
WEIR: 10'X1'

40 FT. REQUIRED BUFFER BETWEEN I-3 AND RD ZONED PROPERTIES

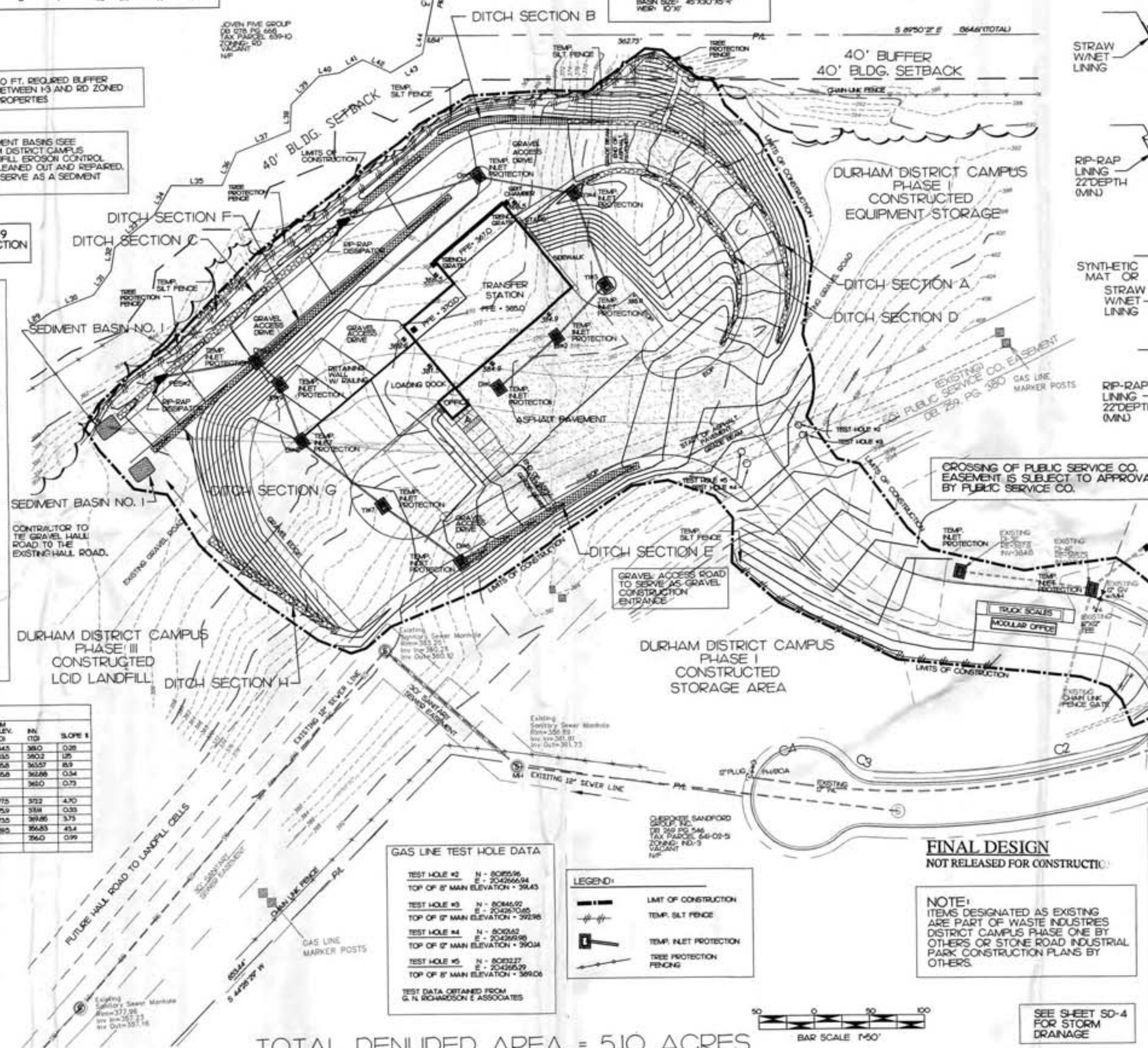
THE EXISTING SEDIMENT BASINS (SEE APPROVED DURHAM DISTRICT CAMPUS PHASE II LCID LANDFILL EROSION CONTROL PLAN), SHALL BE CLEANED OUT AND REPAIRED, IF NECESSARY, TO SERVE AS A SEDIMENT CONTROL DEVICE

STREAM BUFFERS:
25 FOOT WIDE UNDISTURBED STREAM BUFFER EACH SIDE OF STREAM, MEASURED FROM TOP OF BANK. NO CLEARING OR GRADING OTHER THAN SELECTIVE THINNING AND ORDINARY MAINTENANCE OF EXISTING VEGETATION PERMITTED.
BOUNDARIES OF STREAM BUFFER MEASURED 25 FT. FROM EDGE OF EACH SIDE OF THE STREAM, MEASURED PERPENDICULARLY FROM THE STREAM EDGE.

SEE SHEET SD-9 FOR CONSTRUCTION SEQUENCE

NOTES:

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT STATE AND LOCAL STANDARDS AND REGULATIONS AND THE SPECIFICATIONS OF THE APPROPRIATE GOVERNMENTAL AGENCY, THE CITY OF DURHAM, DURHAM CO. AND SUNGATE DESIGN GROUP, P.A.
2. EXISTING UTILITIES ARE SHOWN FOR RELATIVE LOCATION ONLY. THIS PLAN IS NOT A COMPREHENSIVE INVENTORY OR AS-BUILT SURVEY OF THE EXISTING SITE UTILITIES.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND/OR RELOCATION OF ALL UTILITIES IN COORDINATION WITH THE APPROPRIATE UTILITY AGENCY OR COMPANY.
THE CONTRACTOR IS REQUIRED TO CALL THE "ONE CALL CENTER" BEFORE DIGGING. 1-800-632-4949.
4. NO LAND DISTURBANCE ACTIVITY SHALL BEGIN UNTIL A GRADING PERMIT HAS BEEN ISSUED BY THE GOVERNING AGENCY.
5. AT THE START OF GRADING INVOLVING THE LOWERING OF THE EXISTING GRADE AROUND A TREE OR STRIPPING OF TOPSOIL, A CLEAN SHARP VERTICAL CUT SHALL BE MADE AT THE EDGE OF THE TREE SAVE AREA AT THE SAME TIME AS THE OTHER EROSION CONTROL MEASURES ARE INSTALLED. THE TREE PROTECTION FENCING SHALL BE INSTALLED ON THE SIDE OF THE CUT FARTHEST FROM THE TREE TRUNK.
6. NO STORAGE OF MATERIALS, FILL OR EQUIPMENT SHALL BE ALLOWED WITHIN THE PROTECTED AREA AND NO TRESPASSING SHALL BE ALLOWED WITHIN THE BOUNDARY OF THE PROTECTED AREA.
7. SEE SHEET SD-8 FOR TREE PROTECTION FENCING DETAIL.
8. CUT AND FILL SLOPES WILL BE STABILIZED WITHIN 15 DAYS OF ANY PHASE OF GRADING.
9. THE SITE SHALL BE STABILIZED AND SEEDED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
10. THIS PROJECT MAY REQUIRE A PRE-CONSTRUCTION CONFERENCE BEFORE A GRADING PERMIT IS ISSUED.



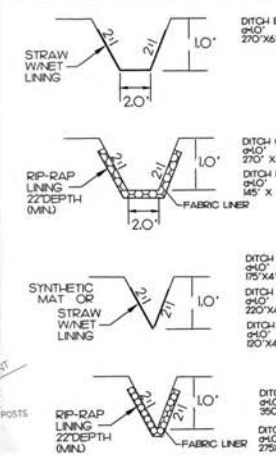
STORM DRAINAGE SCHEDULE

LOCATION FROM	LOCATION TO	RUNOFF ΣDA ACRES	RUNOFF Q10 CFS	C VALUE	I VALUE	DESIGN LF	DESIGN DIA.	RIM ELEV. (FROM)	INV. (FROM)	RIM ELEV. (TO)	INV. (TO)	SLOPE %
DI#1	DI#2	.269	1.90	0.90	7.3	71	15"	384.5	382	384.5	380	0.28
DI#2	YI#3	.468	3.40	0.90	7.3	64	15"	384.5	380	383.5	380.2	1.25
YI#3	YI#4	.5366	3.90	0.80	7.3	88	15"	383.5	380.2	365.8	363.57	18.9
YI#4	DI#5	.85	6.20	0.62	7.3	88	15"	365.8	363.3	365.8	362.88	0.34
DI#5	FES#1	.93	6.80	0.62	7.3	120	15"	365.8	362.88		362.0	0.73
DI#6	YI#7	.148	1.08	0.32	7.3	88	15"	379.0	376.33	377.5	372.2	4.70
YI#7	DI#8	.39	2.85	.75	7.3	92	15"	377.5	372.2	375.9	371.9	0.33
DI#8	JB#9	.588	4.30	0.90	7.3	55	15"	375.9	371.9	373.5	369.85	3.73
JB#9	DI#10	.588	4.30	0.90	7.3	30	15"	373.5	369.85	359.5	356.83	43.4
DI#10	FES#2	.60	4.40	0.90	7.3	84	15"	359.5	356.83		356.0	0.99

1. USE NCDOT 2GI'S (TRAFFIC BEARING) IN PAVEMENT OR GRAVEL AREAS.
2. USE NCDOT DI'S AS YI'S.
3. USE 15" CSP W/ELBOWS FROM YI#3 TO YI#4 AND JB#9 TO DI#10.

SANITARY SEWER EASEMENT:
CENTERLINE OF 30 FOOT WIDE CITY OF DURHAM SANITARY SEWER EASEMENT, SUBJECT TO TERMS STATED IN THE DECLARATION IN REAL ESTATE BOOK 1510, PAGE 958. NO STRUCTURES, FILL, EMBANKMENTS, TREES OR OBSTRUCTIONS PERMITTED WITHIN THE EASEMENT EXCEPT ACCORDING TO THOSE TERMS.

DITCH SECTIONS



DITCH B
d=1.0'
270'X6' STRAW W/NET

DITCH C
d=1.0'
270' X 6' CLASS B RIP RAP
DITCH H
d=1.0'
145' X 6' CLASS B RIP RAP

DITCH E
d=1.0'
175'X4' SYNTHETIC MAT
DITCH F
d=1.0'
220'X4' STRAW W/NET
DITCH G
d=1.0'
120'X4' STRAW W/NET

DITCH A
d=1.0'
350' X 4' CLASS B RIP RAP
DITCH D
d=1.0'
275X4' CLASS B RIP-RAP

GAS LINE TEST HOLE DATA

TEST HOLE #2 N = 808559.96 E = 2042666.94
TOP OF 8" MAIN ELEVATION = 391.43
TEST HOLE #3 N = 808469.92 E = 2042670.65
TOP OF 12" MAIN ELEVATION = 392.98
TEST HOLE #4 N = 808362 E = 2042619.98
TOP OF 12" MAIN ELEVATION = 390.14
TEST HOLE #5 N = 808327 E = 2042652.9
TOP OF 8" MAIN ELEVATION = 389.06
TEST DATA OBTAINED FROM G. N. RICHARDSON & ASSOCIATES

LEGEND:
LIMIT OF CONSTRUCTION
TEMP. SILT FENCE
TEMP. INLET PROTECTION
TREE PROTECTION FENCING

FINAL DESIGN
NOT RELEASED FOR CONSTRUCTION

NOTE:
ITEMS DESIGNATED AS EXISTING ARE PART OF WASTE INDUSTRIES DISTRICT CAMPUS PHASE ONE BY OTHERS OR STONE ROAD INDUSTRIAL PARK CONSTRUCTION PLANS BY OTHERS.

SEE SHEET SD-4 FOR STORM DRAINAGE

BAR SCALE 1"=50'

IMPORTANT NOTE
WORK IN PUBLIC SERVICE GAS CO. RIGHT OF WAY

1. FINISH GRADE SHALL BE NO GREATER THAN 3.0' ABOVE EXISTING GRADE WITHIN EASEMENT.
2. PRIOR TO BEGINNING ANY WORK IN THE EASEMENT, THE CONTRACTOR AND SUBCONTRACTOR ARE TO ARRANGE A PRE-CONSTRUCTION MEETING WITH THE PUBLIC SERVICE CO.
3. CONTRACTORS SHOULD REQUEST THAT EXACT LOCATION AND DEPTH OF GAS LINE BE FOUND BY PUBLIC SERVICE CO. THE LOCATION SHOULD BE FLAGGED IN THE FIELD AND ELEVATIONS BE PROVIDED FOR THE CONTRACTOR'S USE.
4. PUBLIC SERVICE CO. SHOULD BE GIVEN A MINIMUM OF 48 HRS. ADVANCE NOTICE PRIOR TO CLEARING, GRUBBING, GRADING, PAVING OR UTILITY WORK.
5. NO WORK SHALL BE PERFORMED WITHIN THIS EASEMENT UNLESS A PUBLIC SERVICE CO. INSPECTOR IS PRESENT AT ALL TIMES.
6. CONTRACTORS SHALL NOT USE EASEMENT FOR ACCESS, PARKING OF VEHICLES OR STOCKPILING OF MATERIALS.
7. CONTRACTORS ARE LIABLE FOR ALL DAMAGES OCCURRING TO THE PIPELINE AS A RESULT OF THEIR NEGLIGENCE OR FAILURE TO FOLLOW ALL INSTRUCTIONS IN THIS NOTE OR AS DIRECTED BY THE PUBLIC SERVICE CO.
8. EXTREME CAUTION IS WARRANTED WHEN WORKING WITHIN THIS AREA.

TOTAL DENUDED AREA = 5.10 ACRES

REVISIONS — NO. / DESCRIPTIONS / DATE

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT 390 J. FRANK BRAXTON
7-12-00 RLA DATE

DESIGNED SDG
DRAWN JFB
CHECKED CAM
PROJ. ENG. WHM

SUNGATE DESIGN GROUP, P.A.
95-A JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
PH: (919) 859-2243 FAX: (919)859-6258

PHASE TWO
TRANSFER STATION

WASTE INDUSTRIES, INC.
DURHAM DISTRICT CAMPUS

EROSION CONTROL PLAN

DATE: JUNE, 2000
SDG PROJ. # 05-99
DWG FILE #

SCALE
HORIZONTAL: 1" = 50'
VERTICAL:

SHEET NO.
SD-3
OF: 13

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VICINITY MAP

OUTLET PROTECTION SCHEDULE								
LOC	DIA	VIO	PIPE DIA.	ZONE	W	L.T.	APRON DEPTH	STONE CLASS
PES#1	1.46	6.8	18"	2	6.0'	9.0'	22"	B
PES#3	0.94	4.4	15"	1	4.0'	6.0'	22"	B

40 FT. REQUIRED BUFFER BETWEEN I-3 AND RD ZONED PROPERTIES

STREAM BUFFERS:
25 FOOT WIDE UNDISTURBED STREAM BUFFER EACH SIDE OF STREAM, MEASURED FROM TOP OF BANK. NO CLEARING OR GRADING OTHER THAN SELECTIVE THINNING AND ORDINARY MAINTENANCE OF EXISTING VEGETATION PERMITTED.
BOUNDARIES OF STREAM BUFFER MEASURED 25 FT. FROM EDGE OF EACH SIDE OF THE STREAM, MEASURED PERPENDICULARLY FROM THE STREAM EDGE.

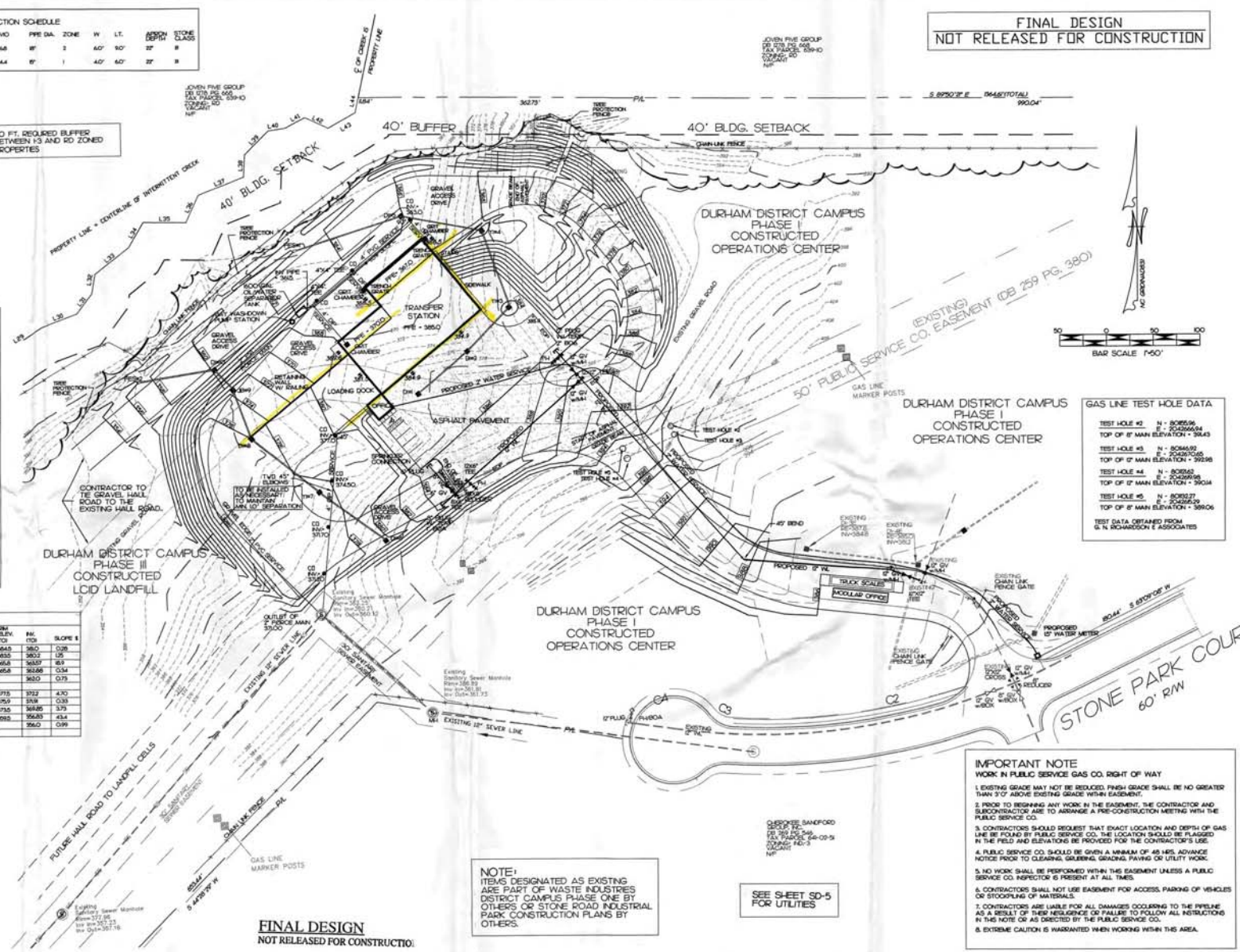
NOTES:

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT STATE AND LOCAL STANDARDS AND REGULATIONS AND THE SPECIFICATIONS OF THE APPROPRIATE GOVERNMENTAL AGENCY, THE CITY OF DURHAM, DURHAM CO. AND SUNGATE DESIGN GROUP, P.A.
2. EXISTING UTILITIES ARE SHOWN FOR RELATIVE LOCATION ONLY. THIS PLAN IS NOT A COMPREHENSIVE INVENTORY OR AS-BUILT SURVEY OF THE EXISTING SITE UTILITIES.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND/OR RELOCATION OF ALL UTILITIES IN COORDINATION WITH THE APPROPRIATE UTILITY AGENCY OR COMPANY. THE CONTRACTOR IS REQUIRED TO CALL THE "ONE CALL CENTER" BEFORE DIGGING. 1-800-632-4949.
4. NO LAND DISTURBANCE ACTIVITY SHALL BEGIN UNTIL A GRADING PERMIT HAS BEEN ISSUED BY THE GOVERNING AGENCY.
5. AT THE START OF GRADING INVOLVING THE LOWERING OF THE EXISTING GRADE AROUND A TREE OR STRIPPING OF TOPSOIL, A CLEAN, SHARP VERTICAL CUT SHALL BE MADE AT THE EDGE OF THE TREE SAVE AREA AT THE SAME TIME AS THE OTHER EROSION CONTROL MEASURES ARE INSTALLED. THE TREE PROTECTION FENCING SHALL BE INSTALLED ON THE SIDE OF THE CUT FARTHEST FROM THE TREE TRUNK.
6. NO STORAGE OF MATERIALS, FILL, OR EQUIPMENT SHALL BE ALLOWED WITHIN THE PROTECTED AREA AND NO TRESPASSING SHALL BE ALLOWED WITHIN THE BOUNDARY OF THE PROTECTED AREA.
7. SEE SHEET SD-8 FOR TREE PROTECTION FENCING DETAIL.

STORM DRAINAGE SCHEDULE														
LOCATION FROM	TO	DRAINAGE AREA	RUNOFF CFS	C VALUE	I VALUE	DESIGN LF	DIA.	RIM ELEV. (FROM)	INV. (FROM)	RIM ELEV. (TO)	INV. (TO)	SLOPE %
DI#1	DI#2	.269	1.90	0.90	7.3	71	15"	364.5	361.2	364.0	361.0	0.28
DI#2	TW#3	.448	3.40	0.90	7.3	64	15"	364.5	361.0	363.5	360.2	1.25
TW#3	TW#4	0.555	3.90	0.90	7.3	88	15"	363.5	360.2	365.8	360.07	1.53
TW#4	DI#5	.85	6.20	0.62	7.3	68	18"	365.8	360.3	365.8	362.88	0.34
DI#5	PES#1	.93	6.80	0.62	7.3	120	18"	365.8	362.88		362.0	0.75
DI#6	TW#7	.148	1.08	0.32	7.3	88	15"	379.0	376.33	377.5	372.2	4.70
TW#7	DI#8	.39	2.85	.75	7.3	92	15"	377.5	372.2	375.9	371.9	0.33
DI#8	JB#9	.588	4.30	0.90	7.3	55	15"	375.9	371.9	373.5	369.85	3.73
JB#9	DI#10	.588	4.30	0.90	7.3	30	15"	373.5	369.85	359.0	356.83	43.4
DI#10	PES#2	.60	4.40	0.90	7.3	64	15"	359.0	356.83		356.0	0.99

1. USE NCDOT 2GI'S (TRAFFIC BEARING) IN PAVEMENT OR GRAVEL AREAS.
2. USE NCDOT DI'S AS YI'S.
3. USE 15" CSP W/ELBOWS FROM YI#3 TO YI#4 AND JB#9 TO DI#10.

SANITARY SEWER EASEMENT:
CENTERLINE OF 30 FOOT WIDE CITY OF DURHAM SANITARY SEWER EASEMENT, SUBJECT TO TERMS STATED IN THE DECLARATION IN REAL ESTATE BOOK 510, PAGE 958. NO STRUCTURES, FILL, EMBANKMENTS, TREES OR OBSTRUCTIONS PERMITTED WITHIN THE EASEMENT EXCEPT ACCORDING TO THOSE TERMS.



GAS LINE TEST HOLE DATA

TEST HOLE #2	N - 80185.96
	E - 204266.04
TOP OF 8" MAIN ELEVATION = 391.43	
TEST HOLE #3	N - 80146.92
	E - 204267.06
TOP OF 12" MAIN ELEVATION = 392.98	
TEST HOLE #4	N - 80152.62
	E - 204269.98
TOP OF 12" MAIN ELEVATION = 390.14	
TEST HOLE #5	N - 80192.27
	E - 204265.29
TOP OF 8" MAIN ELEVATION = 389.06	

TEST DATA OBTAINED FROM G. N. RICHARDSON & ASSOCIATES

IMPORTANT NOTE
WORK IN PUBLIC SERVICE GAS CO. RIGHT OF WAY

1. EXISTING GRADE MAY NOT BE REDUCED. FINISH GRADE SHALL BE NO GREATER THAN 3'-0" ABOVE EXISTING GRADE WITHIN EASEMENT.
2. PRIOR TO BEGINNING ANY WORK IN THE EASEMENT, THE CONTRACTOR AND SUBCONTRACTOR ARE TO ARRANGE A PRE-CONSTRUCTION MEETING WITH THE PUBLIC SERVICE CO.
3. CONTRACTORS SHOULD REQUEST THAT EXACT LOCATION AND DEPTH OF GAS LINE BE FOUND BY PUBLIC SERVICE CO. THE LOCATION SHOULD BE FLAGGED IN THE FIELD AND ELEVATIONS BE PROVIDED FOR THE CONTRACTOR'S USE.
4. PUBLIC SERVICE CO. SHOULD BE GIVEN A MINIMUM OF 48 HRS. ADVANCE NOTICE PRIOR TO CLEARING, GRUBBING, GRADING, PAVING OR UTILITY WORK.
5. NO WORK SHALL BE PERFORMED WITHIN THIS EASEMENT UNLESS A PUBLIC SERVICE CO. INSPECTOR IS PRESENT AT ALL TIMES.
6. CONTRACTORS SHALL NOT USE EASEMENT FOR ACCESS, PARKING OF VEHICLES OR STOCKPILING OF MATERIALS.
7. CONTRACTORS ARE LIABLE FOR ALL DAMAGES OCCURRING TO THE PIPELINE AS A RESULT OF THEIR NEGLIGENCE OR FAILURE TO FOLLOW ALL INSTRUCTIONS IN THIS NOTE OR AS DIRECTED BY THE PUBLIC SERVICE CO.
8. EXTREME CAUTION IS WARRANTED WHEN WORKING WITHIN THIS AREA.

NOTE:
ITEMS DESIGNATED AS EXISTING ARE PART OF WASTE INDUSTRIES DISTRICT CAMPUS PHASE ONE BY OTHERS OR STONE ROAD INDUSTRIAL PARK CONSTRUCTION PLANS BY OTHERS.

SEE SHEET SD-5 FOR UTILITIES

FINAL DESIGN
NOT RELEASED FOR CONSTRUCTION

REVISIONS	DESCRIPTIONS	DATE

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 390 J. FRANK SHAFFER

7-12-00

DESIGNED SDG
DRAWN JFB
CHECKED CAM
PROJ. ENG. WMW

SUNGATE DESIGN GROUP, P.A.
95-A JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
PH: (919) 859-2243 FAX: (919)859-6258

PHASE TWO
TRANSFER STATION

WASTE INDUSTRIES, INC.
DURHAM DISTRICT CAMPUS

GRADING AND
STORM DRAINAGE

DATE: JUNE, 2000
SDG PROJ. # 05-99
DWG. FILE # wdi/fields00.dwg

SCALE
HORIZONTAL: 1" = 50'
VERTICAL:

SHEET NO.
SD-4
OF 13

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FINAL DESIGN
NOT RELEASED FOR CONSTRUCTION

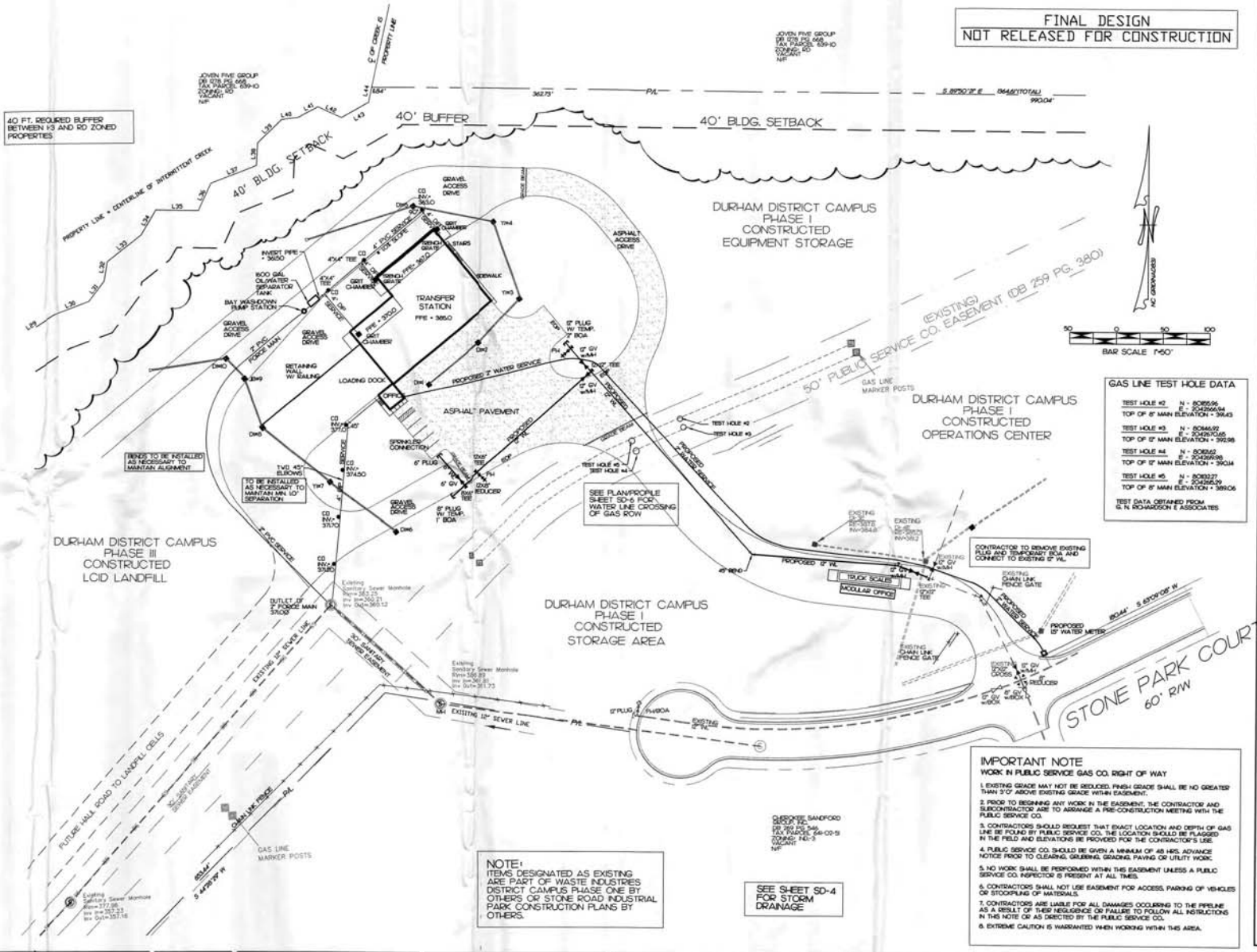
VICINITY MAP

STREAM BUFFERS:
25 FOOT WIDE UNDISTURBED STREAM BUFFER EACH SIDE OF STREAM, MEASURED FROM TOP OF BANK. NO CLEARING OR GRADING OTHER THAN SELECTIVE THINNING AND ORDINARY MAINTENANCE OF EXISTING VEGETATION PERMITTED.
BOUNDARIES OF STREAM BUFFER MEASURED 25 FT. FROM EDGE OF EACH SIDE OF THE STREAM, MEASURED PERPENDICULARLY FROM THE STREAM EDGE.

UTILITY SYSTEM CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND/OR RELOCATION OF ALL EXISTING UTILITIES IN COORDINATION WITH THE APPROPRIATE UTILITY AGENCY OR COMPANY.
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT STATE AND LOCAL STANDARDS AND REGULATIONS AND THE SPECIFICATIONS OF THE APPROPRIATE GOVERNMENTAL AGENCY. THE CITY/COUNTY OF DURHAM AND SUNGATE DESIGN GROUP, P.A.
3. ALL WATER AND SEWER LINES SHALL HAVE A FINAL COVER DEPTH OF 3' MINIMUM IN NON-TRAFFIC AREAS AND 4' MINIMUM IN TRAFFIC AREAS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE HORIZONTAL AND VERTICAL FIELD VERIFICATION OF ALL EXISTING AND PROPOSED UTILITY CONNECTIONS SHOWN HEREON.
5. EXISTING UTILITIES ARE SHOWN FOR SIZE, MATERIAL TYPE AND RELATIVE LOCATION ONLY. THIS PLAN IS NOT A COMPREHENSIVE INVENTORY OR AS-BUILT SURVEY OF THE EXISTING SITE UTILITIES.
6. ALL METER BOXES TO BE INSTALLED OUTSIDE THE PROPOSED NCDOT R/W IN PUBLIC UTILITY EASEMENTS.
7. ALL SERVICES UNDER ROADS OR DRIVEWAYS SHALL BE SLEEVED WITH SCH 40 PVC PIPE TO 10' OUTSIDE OF PAVEMENT EDGES.
8. THE MAXIMUM HORIZONTAL & VERTICAL DEFLECTION FOR WATERLINE PIPE SHALL BE IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS. THE CONTRACTOR SHALL INSTALL ADDITIONAL HORIZONTAL & VERTICAL BENDS AS NECESSARY TO MAINTAIN THE GENERAL GRADE AND LINE AS SHOWN HEREON FOR THE PROPOSED WATERLINES.
9. THE CONTRACTOR WILL SCHEDULE AND COORDINATE ALL CONNECTIONS TO THE EXISTING WATER SYSTEMS WITH THE APPROPRIATE UTILITY, SO AS TO ELIMINATE OR MINIMIZE SERVICE INTERRUPTIONS TO EXISTING WATER SUPPLY CUSTOMERS.

SANITARY SEWER EASEMENT:
CENTERLINE OF 30 FOOT WIDE CITY OF DURHAM SANITARY SEWER EASEMENT, SUBJECT TO TERMS STATED IN THE DECLARATION IN REAL ESTATE BOOK 510, PAGE 956. NO STRUCTURES, FILL, EMBANKMENTS, TREES OR OBSTRUCTIONS PERMITTED WITHIN THE EASEMENT EXCEPT ACCORDING TO THOSE TERMS.



GAS LINE TEST HOLE DATA

TEST HOLE #2	N - 80195.96 E - 204266.94 TOP OF 8" MAIN ELEVATION = 391.43
TEST HOLE #3	N - 80146.92 E - 204267.06 TOP OF 12" MAIN ELEVATION = 392.98
TEST HOLE #4	N - 80192.62 E - 204269.93 TOP OF 12" MAIN ELEVATION = 390.14
TEST HOLE #5	N - 80193.27 E - 204268.09 TOP OF 8" MAIN ELEVATION = 389.06

TEST DATA OBTAINED FROM G. N. RICHARDSON & ASSOCIATES

NOTE:
ITEMS DESIGNATED AS EXISTING ARE PART OF WASTE INDUSTRIES DISTRICT CAMPUS PHASE ONE BY OTHERS OR STONE ROAD INDUSTRIAL PARK CONSTRUCTION PLANS BY OTHERS.

IMPORTANT NOTE
WORK IN PUBLIC SERVICE GAS CO. RIGHT OF WAY

1. EXISTING GRADE MAY NOT BE REDUCED. FINISH GRADE SHALL BE NO GREATER THAN 3'-0" ABOVE EXISTING GRADE WITHIN EASEMENT.
2. PRIOR TO BEGINNING ANY WORK IN THE EASEMENT, THE CONTRACTOR AND SUBCONTRACTOR ARE TO ARRANGE A PRE-CONSTRUCTION MEETING WITH THE PUBLIC SERVICE CO.
3. CONTRACTORS SHOULD REQUEST THAT EXACT LOCATION AND DEPTH OF GAS LINE BE FOUND BY PUBLIC SERVICE CO. THE LOCATION SHOULD BE FLAGGED IN THE FIELD AND ELEVATIONS BE PROVIDED FOR THE CONTRACTOR'S USE.
4. PUBLIC SERVICE CO. SHOULD BE GIVEN A MINIMUM OF 48 HRS. ADVANCE NOTICE PRIOR TO CLEARING, GRUBBING, GRADING, PAVING OR UTILITY WORK.
5. NO WORK SHALL BE PERFORMED WITHIN THIS EASEMENT UNLESS A PUBLIC SERVICE CO. INSPECTOR IS PRESENT AT ALL TIMES.
6. CONTRACTORS SHALL NOT USE EASEMENT FOR ACCESS, PARKING OF VEHICLES OR STOCKPILING OF MATERIALS.
7. CONTRACTORS ARE LIABLE FOR ALL DAMAGES OCCURRING TO THE PIPELINE AS A RESULT OF THEIR NEGLIGENCE OR FAILURE TO FOLLOW ALL INSTRUCTIONS IN THIS NOTE OR AS DIRECTED BY THE PUBLIC SERVICE CO.
8. EXTREME CAUTION IS WARRANTED WHEN WORKING WITHIN THIS AREA.

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REVISIONS	DESCRIPTION	DATE

NORTH CAROLINA PROFESSIONAL SEAL 9334 ENGINEER W. HENRY WELLS III

7/12/00 P.E. DATE

DESIGNED SDG
DRAWN JFD
CHECKED CAM
PROJ. ENG. HWW

SUNGATE DESIGN GROUP, P.A.
95-A JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
PH: (919) 859-2243 FAX: (919)859-9258

PHASE TWO TRANSFER STATION

WASTE INDUSTRIES, INC. DURHAM DISTRICT CAMPUS

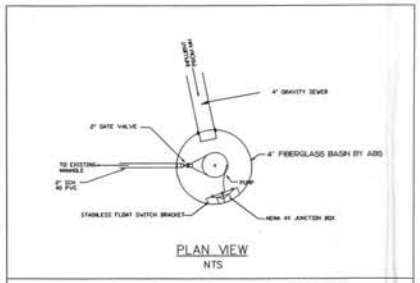
UTILITY PLAN

DATE: JUNE, 2000
SDG PROJ. # 05-99
DWG FILE: # WasteInsIsDOwg

SCALE
HORIZONTAL 1" = 50'
VERTICAL:

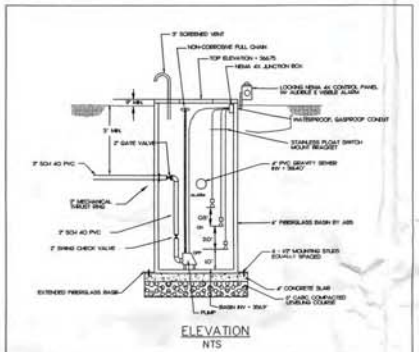
SHEET NO. SD-5
OF 13

DocuSign Envelope ID: E180AE52-43C9-4DE745CF-02AE26DAD688



PLAN VIEW
NTS

INFLUENT SEWER PUMP STATION



ELEVATION
NTS

INFLUENT SEWER PUMP STATION

INFLUENT SEWER PUMP STATION NOTES:

1. THE PUMP CONTOL PANEL SHALL BE EQUIPPED WITH AUDIBLE E VISIBLE ALARMS.
2. THE ALARM SYSTEM SHALL BE INSTALLED INDEPENDENTLY OF THE CIRCUIT FOR THE PUMPS AND CONTROLS.
3. ALL CONDUIT AND JUNCTION BOXES SHALL BE WATERPROOF AND GAS-PROOF.
4. WIRE AND CONDUIT SHALL BE SEALED OUTSIDE THE PUMPING STATION.
5. THE PUMP SHALL BE ABS AS 0530 M6/2W OR APPROVED EQUAL.
6. THE CONTRACTOR SHALL PROVIDE AND INSTALL ONE (1) NEMA ELECTRICAL BOX WITH APPROPRIATE ALL-WEATHER RECEPTACLES MOUNTED INSIDE RESPECTIVE BOX ADJACENT TO THE PUMPING STATION. THE CONTROL PANEL ENCLOSURE SHALL BE WATERPROOF AND OF NEMA 4X CONSTRUCTION.

THE CONTRACTOR SHALL PROVIDE AND INSTALL AN ELECTRIC CONTROL PANEL MEETING THE FOLLOWING PERFORMANCE GUIDLINES:

A. ACTIVATE THE PUMP AT "ON" WATER ELEVATION AS SHOWN ON PLANS.

B. UPON COMPLETION OF SPECIFIED RUN CYCLE TIME BY REACHING "OFF" WATER SURFACE ELEVATION, CUT PUMPS OFF. DO NOT ALLOW START-UP OF PUMP UNTIL "ON" WATER SURFACE ELEVATION IS REACHED.

C. ACTIVATE ALARM SYSTEM AT "ALARM" WATER SURFACE ELEVATION SHOWN ON PLANS.

D. PROVIDE MANUAL SWITCHES, AND RUN LIGHTS FOR PUMP.

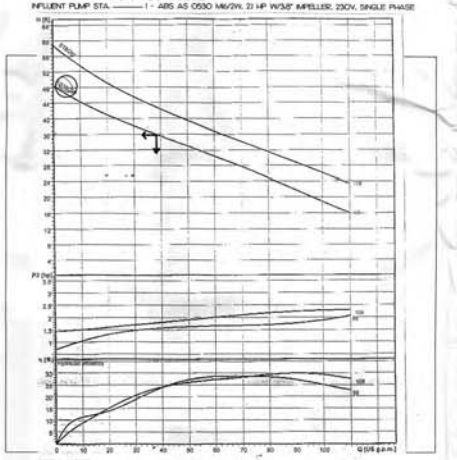
E. SHALL MEET ALL ELECTRICAL CODES AND QUALIFY FOR PERMITS APPLICABLE TO THE INSTALLATION.

CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH THE RESPECTIVE ELECTRICAL POWER AGENCY AND FOR FURNISHING THE SETTING OF A SERVICE CONNECTION AND GROUND.

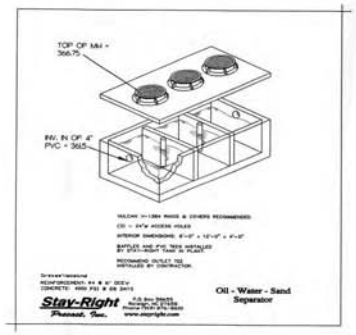
CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROVISION OF ALL ELECTRICAL CABLES, AND INCIDENTALS, AS WELL AS ALL LABOR REQUIRED TO ACCOMPLISH ALL ELECTRICAL CONNECTIONS IN ACCORDANCE WITH THE NORTH CAROLINA ELECTRICAL CODE AS IT PERTAINS TO THE WORK.

PUMP SCHEDULE

INFLUENT PUMP STA. ——— 1 - ABS AS 0530 M6/2W, 2) HP W/3/8" IMPELLER, 230V, SINGLE PHASE

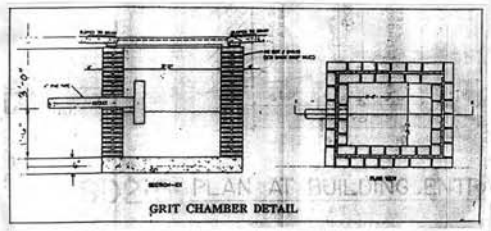


INFLUENT PUMP STATION
PUMP CURVE



Stay-Right Products, Inc.

Oil - Water - Sand Separator



GRIT CHAMBER DETAIL

R-4990 Heavy Duty Trench Frames with Grated or Solid Covers

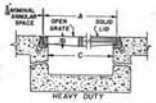
MATERIALS: All frames and grates are furnished standard in Gray Iron, Class 35, for heavy duty use. For extra heavy duty use, see page 170 for Airport Trenches.

Standard Cover Dimensions

Catalog No.	Dimensions in inches A	B	C	Weight per lineal foot (without frame) Type A	Type C	Type D	Type E	Type F	Frame**
R-4990-AX	8	1½	[illegible]	19	22	19	22	25	12
R-4990-BX	10	1½	[illegible]	24	27	29	27	31	12
R-4990-CX	12	1½	[illegible]	28	31	40	36	37	12
R-4990-DX	14	1½	[illegible]	33	35	52	47	45	12
R-4990-EX	17	1½	[illegible]	39	52	55	49	—	12
R-4990-FX	20	1½	[illegible]	54	67	70	70	—	12
R-4990-GX	23	1½	[illegible]	60	77	85	—	—	12
R-4990-HX	26	1½	[illegible]	71	100	85	—	—	12
R-4990-JX	30	2	[illegible]	100	120	100	—	—	17
R-4990-KX	33	2	[illegible]	110	140	150	—	—	17
R-4990-LX	36 *	2	[illegible]	120	130	185	—	—	17
R-4990-MX	39	2	[illegible]	130	200	180	—	—	17
R-4990-NX	45	2	[illegible]	150	245	210	—	—	17
R-4990-OX	51	2	[illegible]	190	—	215	—	—	17

*¼" Annular spacing **Weight per foot – includes both sides.

TYPE A
GRATE OPENINGS



HEAVY DUTY

NEENAH FOUNDRY COMPANY

FINAL DESIGN
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REVISIONS		
REVISIONS	DESCRIPTIONS	DATE

NORTH CAROLINA PROFESSIONAL SEAL 9934 ENGINEER H. HENRY WELLS III

P.E. 7/12/00 DATE

DESIGNED SDG
DRAWN WMD
CHECKED CAM
REGL ENG. WMW

SUNGATE DESIGN GROUP, P.A.
95-A JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
PH: (919) 859-2243 FAX: (919)859-6256

PHASE TWO
TRANSFER STATION

WASTE INDUSTRIES, INC.
DURHAM DISTRICT CAMPUS

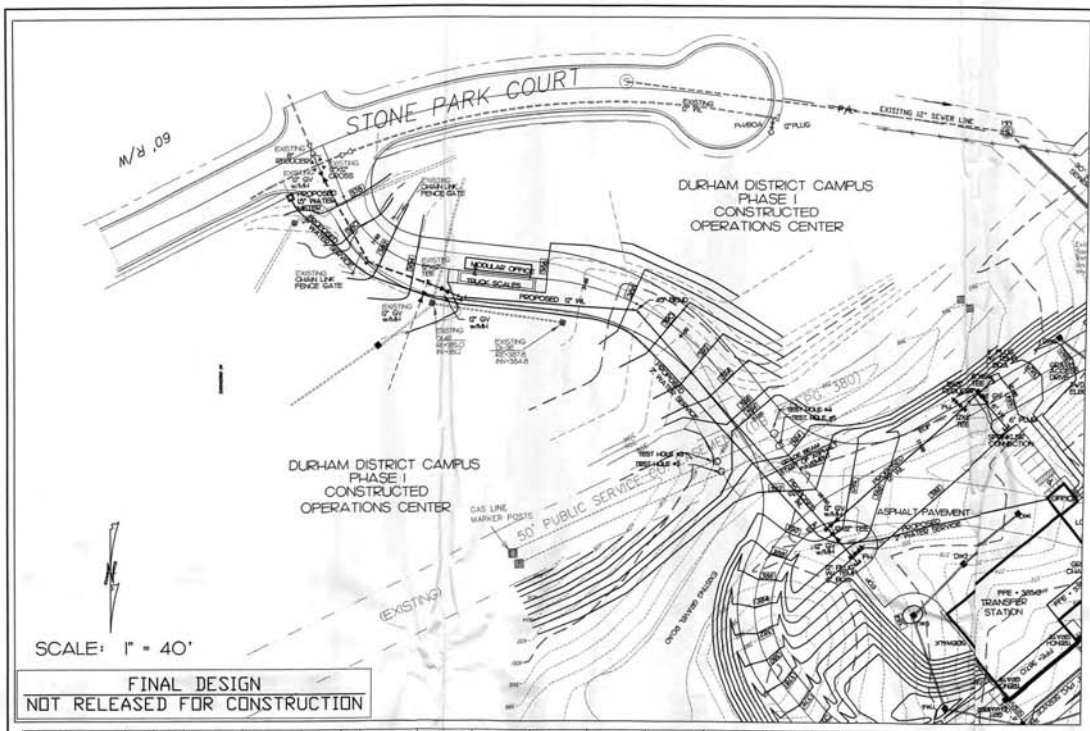
BAY WASH DOWN PUMP
AND DETAILS

DATE: JUL 00
SDG PROJ. # 1005-199
DWG FILE = PUMPDETAIL.DWG

SCALE
HORIZONTAL: NOTED
VERTICAL: NOTED

SHEET NO.
SD-5A
OF 13

DocuSign Envelope ID: E180AE52-41C9-4DE7-85CF-02AE260AD688



FINAL DESIGN
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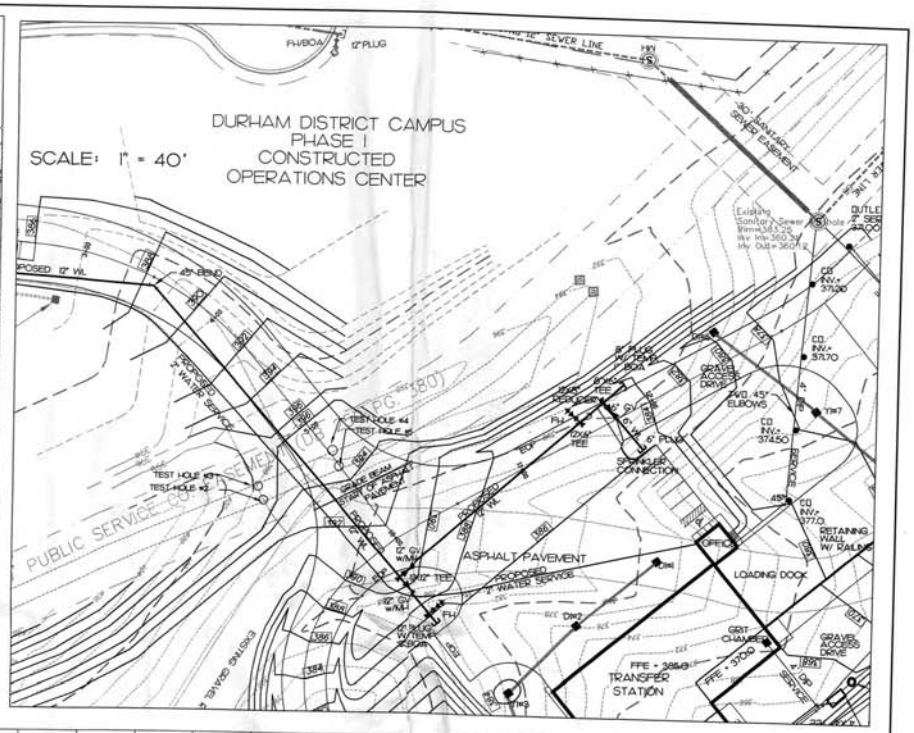

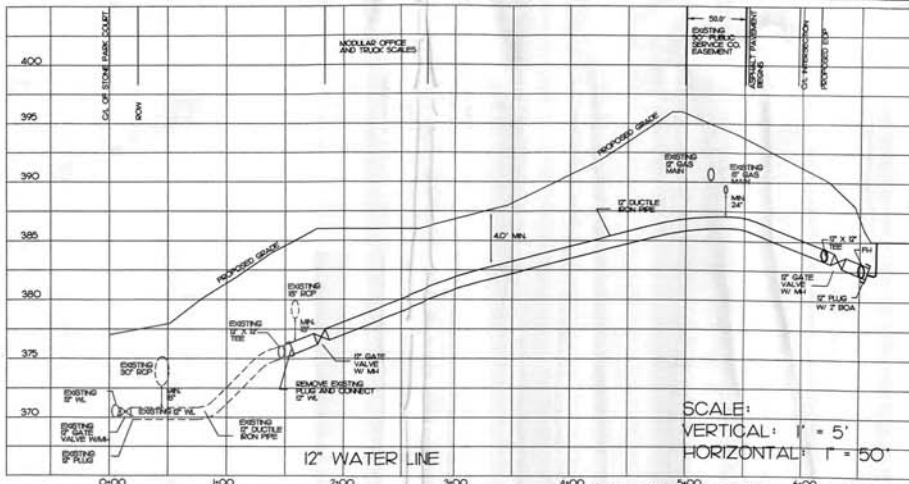

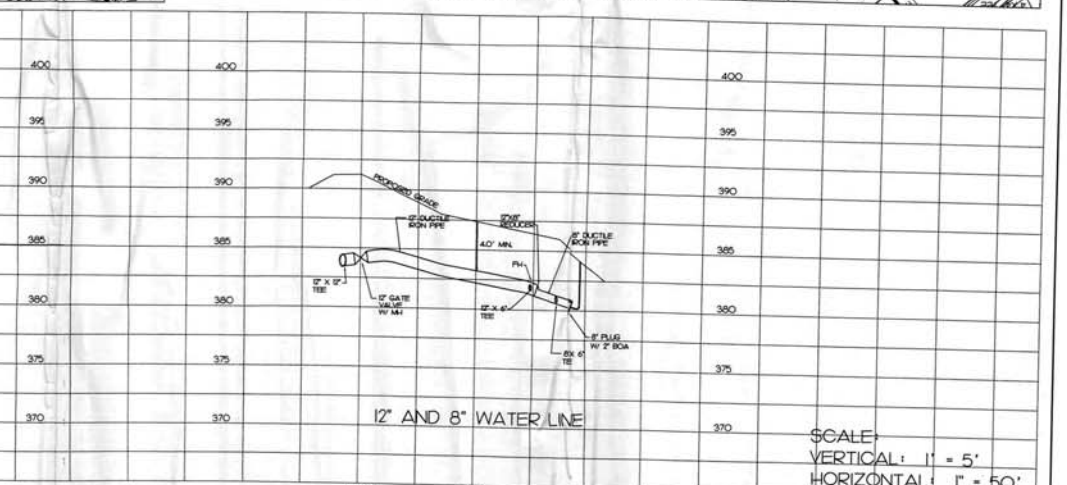

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REVISIONS	DESCRIPTIONS	DATE

NORTH CAROLINA PROFESSIONAL SEAL 9334 ENGINEER W. HENRY WELLS JR.

7/12/00 DATE

DESIGNED SDG
DRAWN WSH
CHECKED CAM
PROJ. ENG. WHW

SUNGATE DESIGN GROUP, P.A.
915-A JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
PH: (919) 859-2243 FAX: (919)859-6258

PHASE TWO TRANSFER STATION

WASTE INDUSTRIES, INC.
DURHAM DISTRICT CAMPUS

UTILITY PLAN/PROFILE

DATE: JULY 2000
SDG PROJ. # 1005-9119
DWG FILE # wldtrfers100sd6

SCALE
HORIZONTAL: NOTED
VERTICAL: NOTED

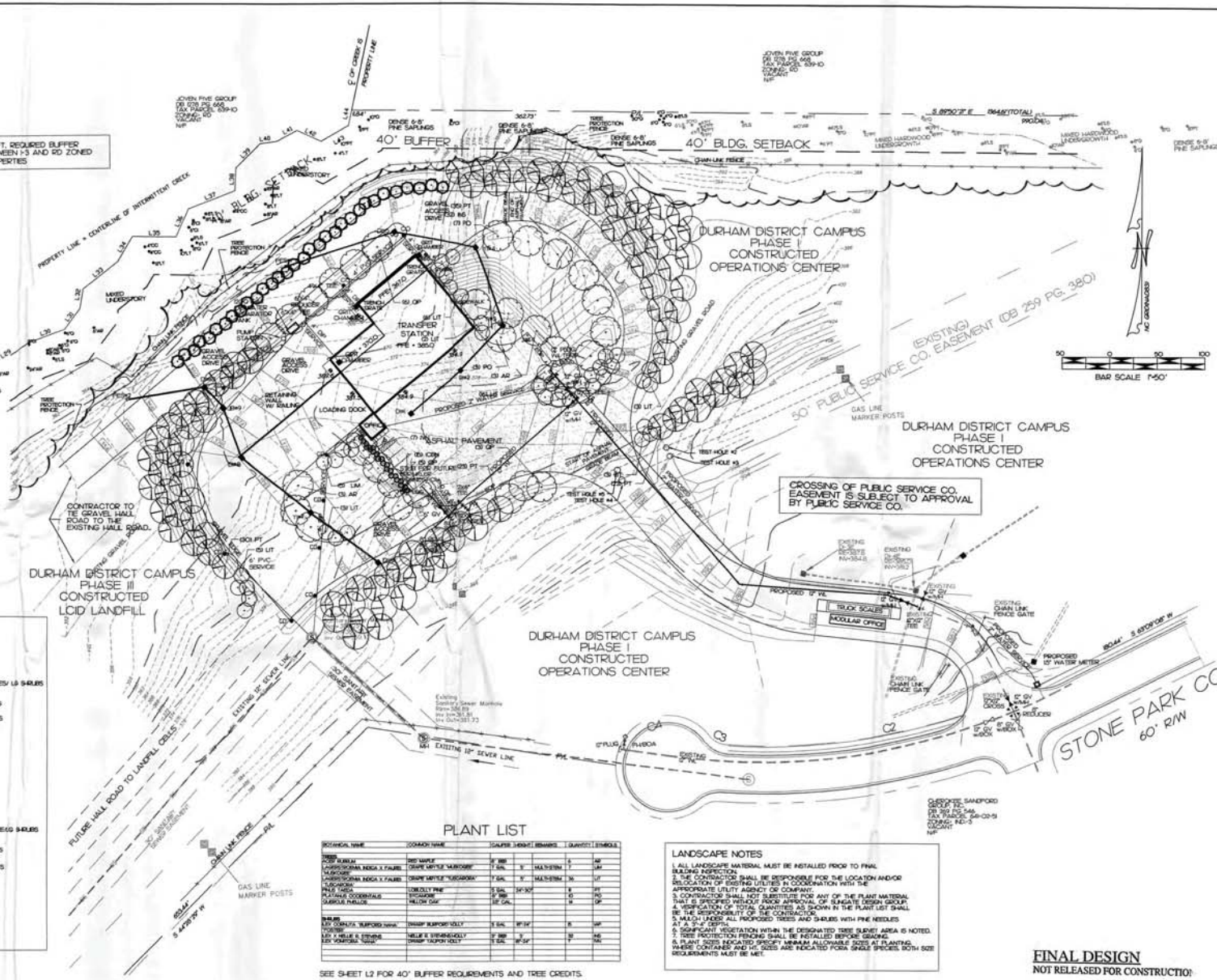
SHEET NO. SD-6
OF: 13

DocuSign Envelope ID: E180AE52-43C9-4DE7-85CF-02AE26DA0688

VICINITY MAP

40 FT. REQUIRED BUFFER BETWEEN I-3 AND RD ZONED PROPERTIES

STREAM BUFFERS:
25 FOOT WIDE UNDISTURBED STREAM BUFFER EACH SIDE OF STREAM, MEASURED FROM TOP OF BANK. NO CLEARING OR GRADING OTHER THAN SELECTIVE THINNING AND ORDINARY MAINTENANCE OF EXISTING VEGETATION PERMITTED.
BOUNDARIES OF STREAM BUFFER MEASURED 25 FT. FROM EDGE OF EACH SIDE OF THE STREAM, MEASURED PERPENDICULARLY FROM THE STREAM EDGE.



LANDSCAPE CALCULATIONS

NORTH 40 FT. LANDSCAPE BUFFER

REQUIREMENTS:
TREES
13,200 SF DIVIDED BY 1 TREE/350 SF ..... 38 TREES
SMALL TREES/LARGE SHRUB ..... 10 SM TREES/ 18 SHRUBS
NET LARGE TREES (SEE LANDCAPE WORKSHEETS) ..... 27 TREES
EVERGREEN SHRUBS
13,200 SF ÷ 1 SHRUB/25 SF ..... 105 SHRUBS
CREDIT FOR EXISTING VEGETATION
= OF REQUESTED TREE CREDITS ..... 30 CREDITS
(SEE TREE SURVEY FOR SHEETS L1 OR L2 FOR SIZE, LOCATIONS AND SPECIES)

REQUEST SMALL TREES/LARGE SHRUBS, EVERGREENS AND SHRUB REQUIREMENTS BE WAIVED DUE TO SUFFICIENT SCREENING PROVIDED BY EXISTING PLANTS IN BUFFER.

DESCRIPTION OF EXISTING TREES UNDER 4" DIA. AND UNDERGROWTH: DENSE 6-8' PINE SAPLINGS AND SMALLER UNDERGROWTH OF PINE, MAPLE AND SWEETGUM WITH VARIOUS TYPICAL WOODLAND HERBACEOUS VEGETATION.

WEST 40 FT. LANDSCAPE BUFFER

REQUIREMENTS
TREES
29,280 SF DIVIDED BY 1 TREE/350 SF ..... 84 TREES
SMALL TREES/LARGE SHRUB ..... 20 SM TREES/ 69 SHRUBS
NET LARGE TREE (SEE LANDSCAPE WORKSHEETS) ..... 64 TREES
EVERGREEN SHRUBS
29,280 SF DIVIDED BY 1 SHRUB/25 SF ..... 234 SHRUBS
CREDIT FOR EXISTING VEGETATION
= OF REQUESTED TREE CREDITS ..... 246 CREDITS
(SEE TREE SURVEY FOR SHEETS L1 OR L2 FOR SIZE, LOCATIONS AND SPECIES)

REQUEST SMALL TREES/LARGE SHRUBS, EVERGREENS AND SHRUB REQUIREMENTS BE WAIVED DUE TO SUFFICIENT SCREENING PROVIDED BY EXISTING PLANTS IN BUFFER.

DESCRIPTION OF EXISTING TREES UNDER 4" DIA. AND UNDERGROWTH: PINE, MAPLE, OAKS, DOGWOOD AND SWEETGUM WITH TYPICAL WOODLAND SUCCESSION HERBACEOUS VEGETATION.

PLANT LIST

BOTANICAL NAME	COMMON NAME	CALIPER	HEIGHT	REMARKS	QUANTITY	SYMBOLS
TREES						
ACER RUBRUM	RED MAPLE	6" BBB			6	AR
AMERICOCRATAS INDICA X FAUREI "AUTUMN GLORY"	GRAPE MYRTLE "AUTUMN GLORY"	1 GAL.	5'	MULTI-STEM	7	AM
AMERICOCRATAS INDICA X FAUREI "LUSCAROCA"	GRAPE MYRTLE "LUSCAROCA"	1 GAL.	5'	MULTI-STEM	16	LT
PINUS TAEDA	LOBLOLLY PINE	5 GAL.	24"-30"		8	PT
PLATANUS OCCIDENTALIS	SYCAMORE	6" BBB			10	PO
QUERCUS PHELLOS	WILLOW OAK	3.5" CAL			14	QP
SHRUBS						
ILEX CRENATA "BURFORDII NANA"	DWARF BURFORD HOLLY	5 GAL.	18"-24"		15	IBF
ILEX X NELLIE R. STEVENS	NELLIE R. STEVENS HOLLY	3" BBB	5'		32	NS
ILEX VOMITORIA "NANA"	DWARF YAUPON HOLLY	5 GAL.	18"-24"		7	IVN

SEE SHEET L2 FOR 40' BUFFER REQUIREMENTS AND TREE CREDITS.

LANDSCAPE NOTES

1. ALL LANDSCAPE MATERIAL MUST BE INSTALLED PRIOR TO FINAL BUILDING INSPECTION.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND/OR RELOCATION OF EXISTING UTILITIES IN COORDINATION WITH THE APPROPRIATE UTILITY AGENCY OR COMPANY.
3. CONTRACTOR SHALL NOT SUBSTITUTE FOR ANY OF THE PLANT MATERIAL THAT IS SPECIFIED WITHOUT PRIOR APPROVAL OF SUNGATE DESIGN GROUP.
4. VERIFICATION OF TOTAL QUANTITIES AS SHOWN IN THE PLANT LIST SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
5. MULCH UNDER ALL PROPOSED TREES AND SHRUBS WITH PINE NEEDLES AT A 3"-4" DEPTH.
6. SIGNIFICANT VEGETATION WITHIN THE DESIGNATED TREE SURVEY AREA IS NOTED.
7. TREE PROTECTION FENCING SHALL BE INSTALLED BEFORE GRADING.
8. PLANT SIZES INDICATED SPECIFY MINIMUM ALLOWABLE SIZES AT PLANTING. WHERE CONTAINERS AND HT. SIZES ARE INDICATED FOR A SINGLE SPECIES, BOTH SIZE REQUIREMENTS MUST BE MET.

FINAL DESIGN
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DRWG	DESCRIPTION	DATE
	REVISIONS	

NORTH CAROLINA LANDSCAPE ARCHITECT 390 — 7-12-00

DESIGNED: SDG
DRAWN: JFB
CHECKED: CAM
PROJ. ENG.: WMW

SUNGATE DESIGN GROUP, P.A.
95-A JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
PH: (919) 859-2243 FAX: (919)859-6258

PHASE TWO
TRANSFER STATION

WASTE INDUSTRIES, INC.
DURHAM DISTRICT CAMPUS

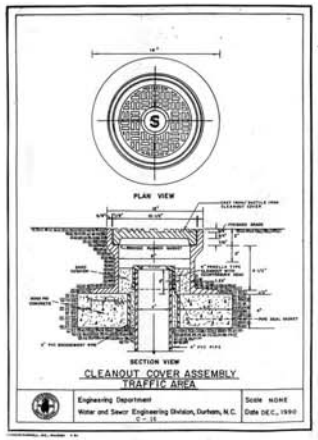
LANDSCAPE
PLAN

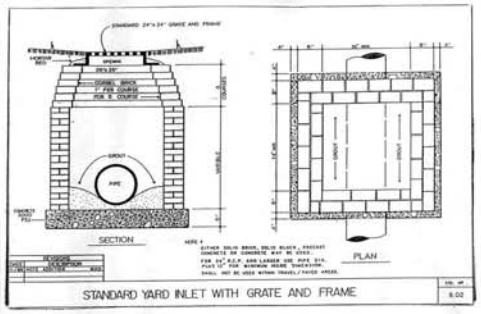
DATE: JUNE, 2000
SDG PROJ. # 05-189
DWG. FILE # wstdistrictOOsp1

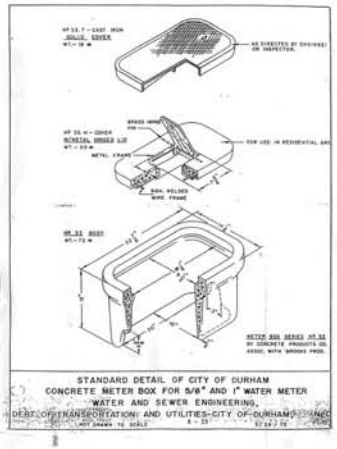
SCALE
HORIZONTAL: 1" = 50'
VERTICAL:

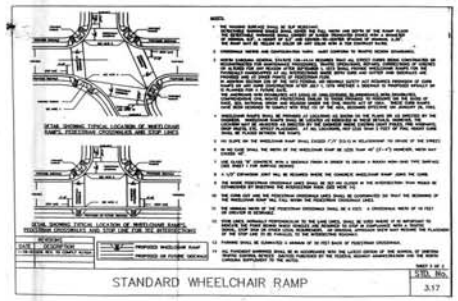
SHEET NO.
SD-7
OF: 13

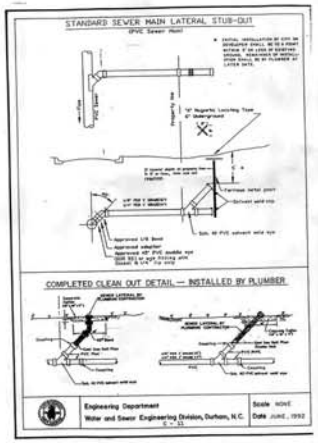
DocuSign Envelope ID: E180AE52-41C9-4DE7-85CF-02AE26DAD688

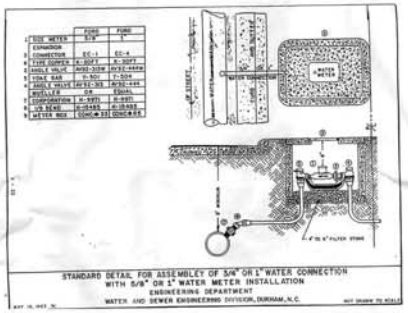


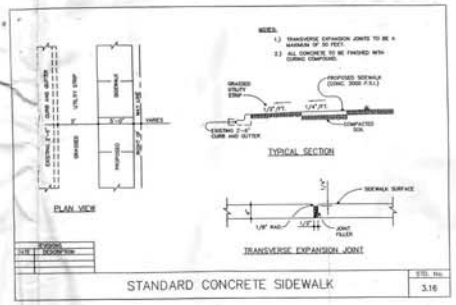


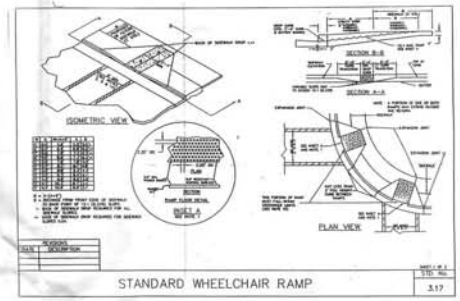


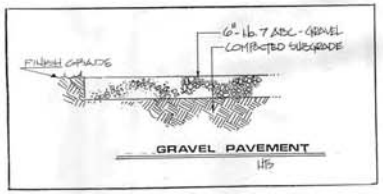


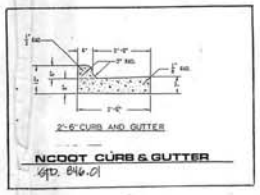




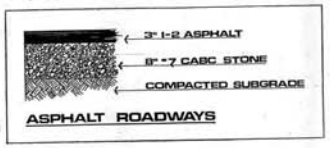




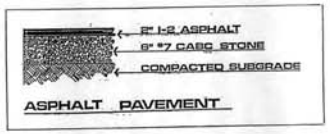




PROPOSED ROADWAY PAVEMENT SECTION



NOTE
FINAL ROADWAY PAVEMENT SECTION WILL BE DETERMINED BY GEO-TECH EVALUATION



NORTH CAROLINA LICENSED LANDSCAPE ARCHITECT 398 J. FRANK BRAXTON

1-5-93

FINAL DESIGN
NOT RELEASED FOR CONSTRUCTION

REVISIONS		
REV. NO.	DESCRIPTION	DATE

NORTH CAROLINA PROFESSIONAL SEAL 9334 ENGINEER J. HENRY WELLS JR.

1-5-93 P.E. DATE

DESIGNED SDG
DRAWN JFB
CHECKED
PROJ. ENG. WRW

SUNGATE DESIGN GROUP, P.A.
915-A JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
PH: (919) 859-2243 FAX: (919)859-8258

PHASE TWO
PROCESSING AND
RECYCLING CENTER

WASTE INDUSTRIES, INC.
DURHAM DISTRICT CAMPUS

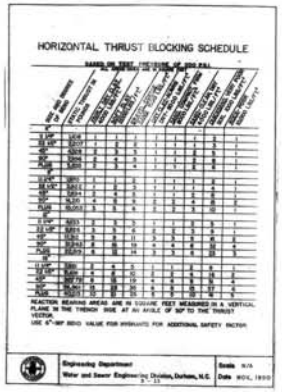
SITE
DETAILS

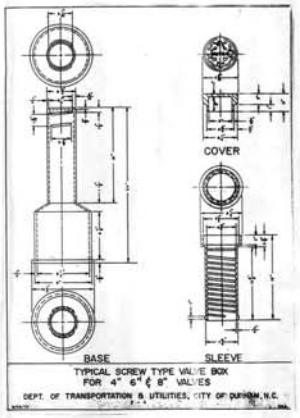
DATE: DEC 1997
SDG PROJ. # 05-9118
DWG FILE # MORECYL7501

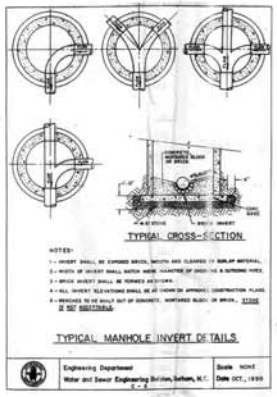
SCALE
HORIZONTAL:
VERTICAL:

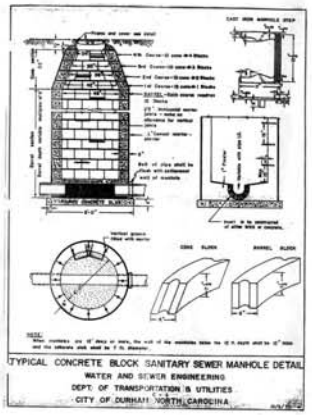
SHEET NO.
SD-8
OF: 13

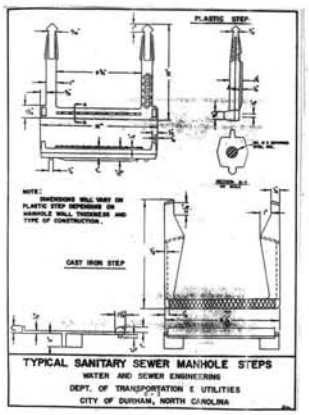
DocuSign Envelope ID: E180AE52-43C9-4DE7-85CF-02AE26DA0688

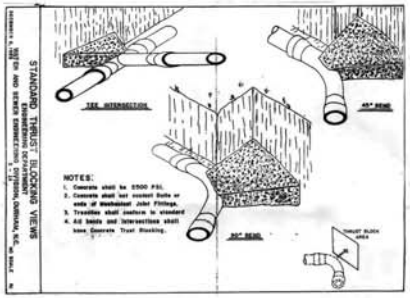


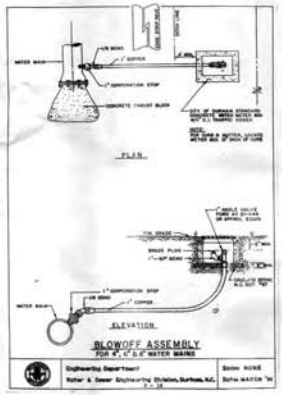


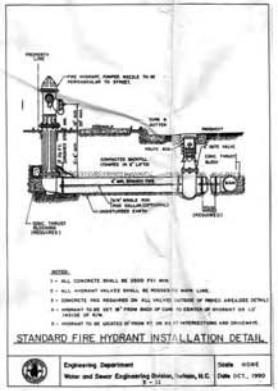


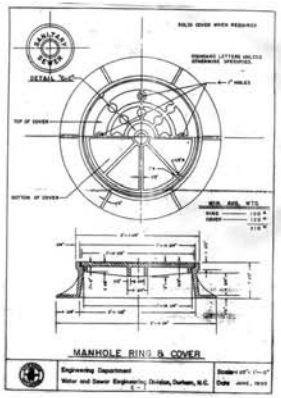


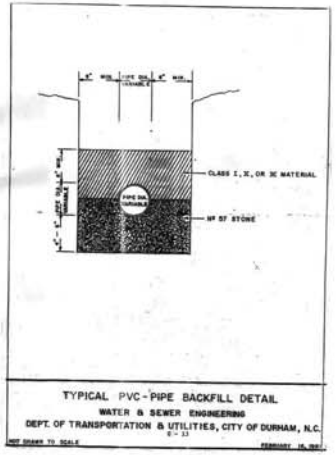


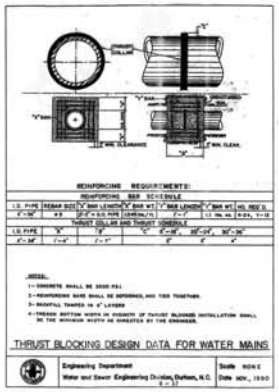












NORTH CAROLINA LICENSED LANDSCAPE ARCHITECT 390 FRANK BRAXTON

1-5-98

FINAL DESIGN
NOT RELEASED FOR CONSTRUCTION

REV.NO.	DESCRIPTIONS REVISIONS	DATE

NORTH CAROLINA PROFESSIONAL SEAL 9334 ENGINEER V. HENRY WELLS JR.

1-5-98

DESIGNED SDG
DRAWN WEH
CHECKED JFB
PROJ. ENG. WHW

SUNGATE DESIGN GROUP, P.A.
915-A JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
PH: (919) 859-2243 FAX: (919)859-6258

PHASE TWO
PROCESSING AND
RECYCLING CENTER

WASTE INDUSTRIES, INC.
DURHAM DISTRICT CAMPUS

SITE
DETAILS

DATE: DEC 1997
SDG PROJ. #05-9119
DWG FILE #MDRECYL75D2

SCALE
HORIZONTAL: 1"=50"
VERTICAL:

SHEET NO.
SD-9
OF: 13

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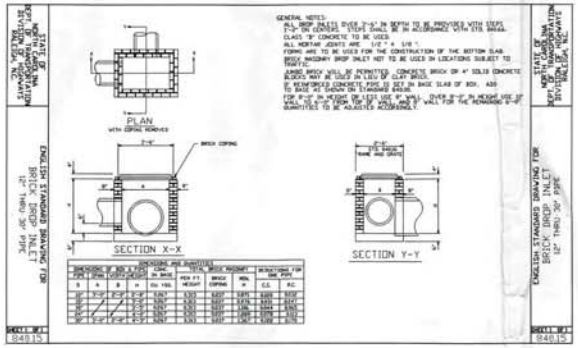

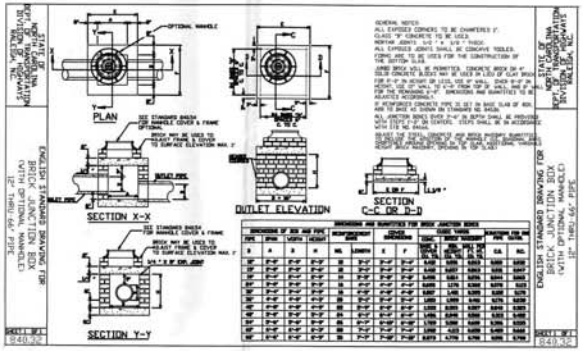

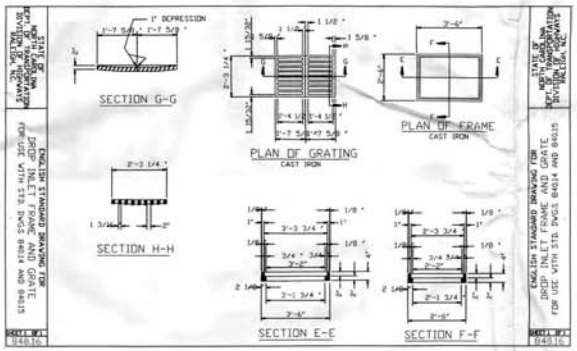

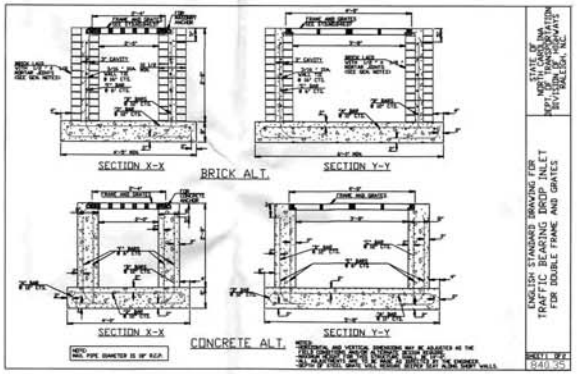

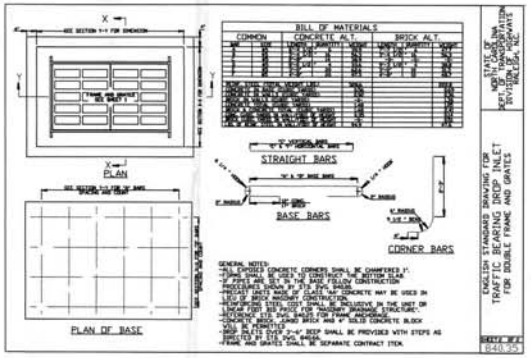

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REVISIONS		
REVISIONS	DESCRIPTION	DATE

NORTH CAROLINA LANDSCAPE ARCHITECTURAL REGISTRATION BOARD 390 — 7/14/00

DESIGNED SDG
DRAWN JFB
CHECKED CAM
PROJ. ENG. WHW

SUNGATE DESIGN GROUP, P.A.
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RALEIGH, NORTH CAROLINA 27606
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PHASE TWO
TRANSFER STATION

WASTE INDUSTRIES, INC.
DURHAM DISTRICT CAMPUS

SITE
DETAILS

DATE: June 2000
SDG PROJ. # 05-9119
DWG FILE # widtrfersdd0ba10

SCALE
HORIZONTAL:
VERTICAL:

SHEET NO.
SD-10
OF: 13

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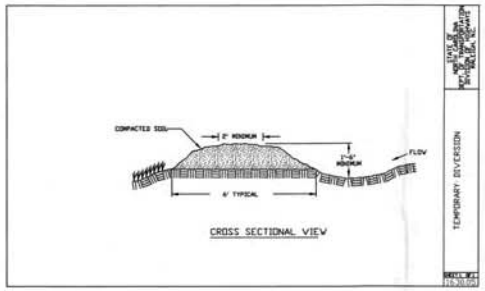
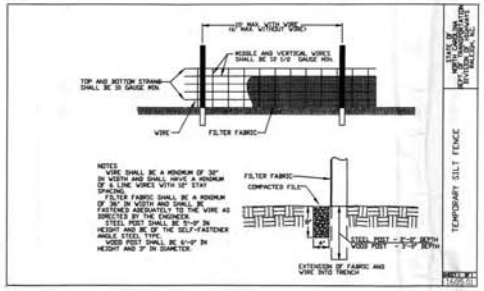
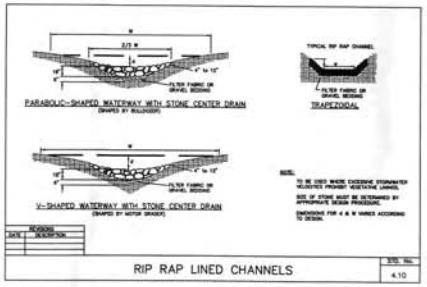






STANDARD AND SPECIFICATION FOR PERMANENT SEEDINGS ON GRADED DEVELOPMENT AREAS

DEFINITION
SEEDING PERENNIAL GRASSES AND LEGUMES ON CRITICAL AREAS FOR PERMANENT COVER.

PURPOSE
TO STABILIZE THE SOIL, REDUCE DAMAGE FROM SEDIMENT AND RUNOFF TO DOWNSTREAM AREAS, AND IMPROVE AN AREA FOR SAFETY AND BEAUTY.

WHERE APPLICABLE
ON ANY SEDIMENT-PRODUCING, ERODING OR ERODIBLY ERODING AREAS WHERE VEGETATION IS DIFFICULT TO ESTABLISH WITH NORMAL PLANTING METHODS SUCH AS CONSTRUCTION SITES, CUT AND FILL SLOPES, BORROW AREAS AND OTHER AREAS DENUDED OF VEGETATION WHERE PERENNIAL VEGETATION IS NEEDED FOR LONG TERM PROTECTION.

SPECIFICATIONS GUIDE

A. SITE PREPARATION
1. INSTALL NEEDED SURFACE WATER CONTROL MEASURES.
2. GRADE AND SLOPE AS FEASIBLE TO USE PLANNED EQUIPMENT. FOR SEEDING, MULCHING AND MAINTENANCE, SLOPES STEEPER THAN 3:1 ARE DIFFICULT TO ESTABLISH VEGETATION ON AND MAINTAIN WITH CONVENTIONAL EQUIPMENT.
3. CLEAN, COMPACTED AREAS AND STOCKPILED AVAILABLE TOPSOIL IF DEEP OVER2 HOMOGENEOUS SOIL CONDITIONS AS A FINAL OPERATION IN GRADING WHERE CONVENTIONAL SEEDING EQUIPMENT IS TO BE USED, OR SKIMMER AREA.
4. A MINIMUM OF GRADING AND SHAPING IS REQUIRED WHEN HYDRAULIC SEEDING EQUIPMENT IS TO BE USED.
5. REMOVE ALL LOOSE ROCKS, ROOTS AND OTHER OBSTRUCTIONS FROM THE SURFACE THAT WILL INTERFERE WITH THE ESTABLISHMENT AND MAINTENANCE OF VEGETATION. LEAVE SURFACE REASONABLY SMOOTH AND UNIFORM FOR FINAL SEEDBED PREPARATION.
6. PERFORM ALL CULTURAL OPERATIONS OF LAND PREPARATION AND SEEDING ON THE GENERAL CONTOUR.

B. LIME, FERTILIZER AND SEEDBED PREPARATION
1. WHEN SOIL MATERIAL IS REASONABLY UNIFORM, APPLY LIME AND FERTILIZER ACCORDING TO SOIL TEST REPORT. IN THE ABSENCE OF A SOIL TEST APPLY LIME AS FOLLOWS:

	TONS/ACRE	LBS/4000 SQ. FT.
CLAY AND CLAY LOAMS	2	90
SANDY LOAMS, LOAMY SILT LOAMS	1	50
LOAMY SAND, SANDY	1/2	25

AGRICULTURAL LIME USED SHALL BE WITHIN THE SPECIFICATION OF THE NC DEPARTMENT OF AGRICULTURE

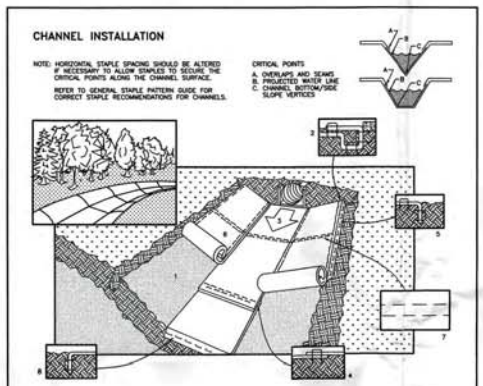
2. RATES AND ANALYSIS OF FERTILIZER IF SOIL TEST IS NOT AVAILABLE:
   a. GRASSES ALONE: 800 TO 1000 LBS PER ACRE 46-23 POUNDS/4000 SQFT) OF A 1-1-1 RATIO SUCH AS 6-24-24.
   b. LEGUMES ALONE OR GRASS AND LEGUME MIXTURE - 600 TO 1000 POUNDS PER ACRE 28-23 POUNDS/4000 SQFT) OF A 1-2-2 RATIO SUCH AS 5-20-20.
3. PHOSPHOROUS IS ESSENTIAL FOR DEVELOPING VIGOROUS SEEDING POOT SYSTEM. IF SOIL TEST IS NOT AVAILABLE, APPLY 600 TO 1000 LBS PER ACRE 28 POUNDS/4000 SQFT) PER ACRE OF 20% SUPERPHOSPHATE OR EQUIVALENT IN ADDITION TO FERTILIZER LISTED ABOVE OR USE AN ANALYSIS TO SUITE THE ADDITIONAL PHOSPHOROUS.
4. WHEN HYDRAULIC SEEDING EQUIPMENT IS USED, NO SEEDBED PREPARATION IS REQUIRED. CUT SLOPES AND COMPACTED AREAS MAY REQUIRE ROUGHENING.
   a. LIME AND FERTILIZER MIXED WITH WATER AND APPLIED IN A SLURRY. PREP MULCH WILL BE MIXED WITH WATER AND APPLIED IN A SLURRY. SPREAD THE MULCH UNIFORMLY OVER THE AREA BEING TREATED. THE SLURRY MUST BE APPLIED WITHIN ONE HOUR AFTER MIXING THE SEED WITH FERTILIZER.
   b. IF LIME WILL BE MIXED AND APPLIED ON TOP OF THE MULCH OR THE LIME MAY BE COMBINED WITH THE TOP DRESSING WHEN GRASS IS 2 TO 4 INCHES TALL.
5. WHEN CONVENTIONAL EQUIPMENT IS USE, THE LIME AND FERTILIZER WILL BE APPLIED UNIFORMLY AND MIXED WITH THE SOIL TO A DEPTH OF 4 INCHES.
   A. UNDER CONDITIONS OF SLOPES THAT AREA 3:1 OR FLATTER, PREPARE A SEEDBED 4 INCHES DEEP, EXCLUDING ROCK.
   B. CONTOUR TILLAGE UNTL A WILL PLUWSEED, FARM SEASONALLY UNIFORM SEEDBED IS PREPARED.

C. SEEDING
SELECT SPECIES FROM ATTACHED TABLE, CONSIDERING PLANT ADAPTATION TO DESIRED USE, SITE TO BE VEGETATED, SEEDING DATES AND MAINTENANCE REQUIREMENTS. CONSIDER USE OF UTILIZE THE ATTACHED SEEDING SCHEDULE AS APPROVED FOR THE AREA. SEEDS MUST BE PURE, FRESH, UNINFESTED WITH NOXIOUS WEEDS. SEED LABELED TO DEALER WILL BE LABELED TO EACH PARTY AND THE ACCEPTABLE LABELS MUST BE PRESENTED TO THE INSPECTOR. ANY SEED THAT IS DAMAGED, OR HAS BEEN STORED IN A MANNER THAT WAS RESTRICTED, OR PROHIBITED AREDS, EROSION CONTROL PLANS OR SEEDING COORDINATES SHOULD NOT SPECIFY OR MIXTURES TO BE USED. PLANTING DATES, SEED GERMINATION AND PURITY THAT ARE ACCEPTABLE.

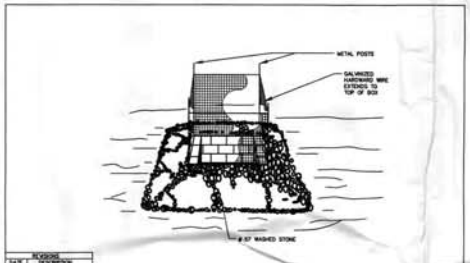
1. CONVENTIONAL SEED - SEED ON A PREWALY PREPARED, FIRM SEEDBED. USE EQUIPMENT THAT WILL APPLY SEED UNIFORMLY. SUCH AS CULTIPACKER SEEDER, DRILL OR CYCLONE SEEDER. COVER SEED LIGHTLY WITH SEEDING EQUIPMENT FOR CULTIPACK AFTER SEEDING.
2. HYDRAULIC SEEDING - USE THE PREPARED SEED AND WOOD CELLULOSE FIBER MULCH WITH WATER AND APPLY THE SLURRY UNIFORMLY OVER THE AREA BEING TREATED. THE SLURRY MUST BE APPLIED WITHIN ONE HOUR AFTER MIXING THE SEED WITH FERTILIZER.
3. USE INOCULANT PREPARED SPECIFICALLY FOR ANY LEGUME BEING SEEDED. TAKE THE RECOMMENDED RATE WILL BE USED WHEN SEEDED DRY WITH CONVENTIONAL EQUIPMENT BUT TAKE THE RECOMMENDED RATE WHEN SEEDED WITH HYDRAULIC EQUIPMENT.
4. MULCHING - MULCH ALL PERMANENT SEEDINGS ON CRITICAL AREAS IMMEDIATELY AFTER SEEDING UNLESS SUFFICIENT MULCH IS PRESENT FROM PREVIOUS TEMPORARY VEGETATION. SEDIMAL MULCH IS ESSENTIAL TO HOLD SEED, FERTILIZER AND AREA EROSION UNTIL PLANT COVER IS ESTABLISHED. USE MULCH AS SPECIFIED TO MEET SPECIFICATIONS FOR SEEDS AND AMOUNTS AND ANCHORING METHODS.
5. IRRIGATION - SUFFICIENT IRRIGATION WILL SPEED UP THE ESTABLISHMENT OF PLANT COVER DURING MOST SEASONS AND MAY PREVENT FAILURE OF SEEDINGS NOT MADE AT OPTIMUM PLANTING DATES. SEEDINGS ON ADVERSE SITE CONDITIONS THERE IRRIGATION IS USED, WATER MUST BE APPLIED AT A RATE THAT WILL NOT CAUSE SOIL SEDIMENT.

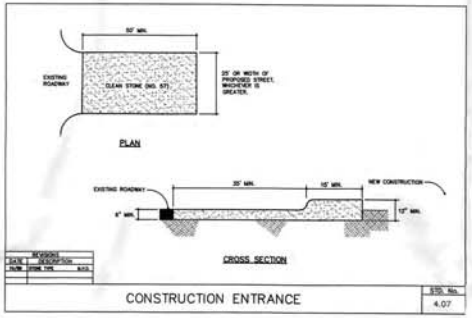
D. TREATMENT
TREATMENT AFTER SEEDING AND MAINTENANCE IS THE MOST IMPORTANT CONTROLLABLE FACTOR IN REGAINING AN EFFECTIVE VEGETATIVE COVER. THE KIND OF GRADE OF GRASS/LEGUME, SOIL, WEATHER AND LEVEL OF MANAGEMENT DEPENDS DESIRED TO GIVE A SEEDING DETERMINES THE FERTILIZATION NEEDED AFTER THE FIRST YEAR.

1. REPAIRS - INSPECT ALL SEEDED AREAS AND MAKE NECESSARY REPAIRS OR REFERRAGES WITH THE PLANTING MIXTURE WITHIN 30 DAYS. REPAIRS TO BE MADE OVER ANY DAMAGED, RE-ESTABLISH FOLLOWING ORIGINAL LIME, FERTILIZER AND SEEDING RECOMMENDATIONS.
2. CONTROL WEED GROWTH DURING ESTABLISHMENT MECHANICALLY AND/OR HERBICIDES. WHEN CHEMICALS ARE USED, FOLLOW CURRENT NORTH CAROLINA AGRICULTURAL EXPERIMENT STATION'S WEED CONTROL RECOMMENDATIONS AND ADHERE STRICTLY TO INSTRUCTIONS ON THE LABEL.



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
3. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW ON BOTTOM OF CHANNEL.
4. PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH A 6" OVERLAP. USE A DOUBLE ROW OF STAGGERED STAPLES 4" APART TO SECURE BLANKETS.
5. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED IN 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. BLANKETS ON SIDE SLOPES MUST BE OVERLAPPED 4" OVER THE CENTER BLANKET AND STAPLED (2" FOR C350 MATTING).
7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A ROW OF STAPLES 4" APART OVER ENTIRE WIDTH OF THE CHANNEL. PLACE A SECOND ROW 4" BELOW THE FIRST ROW IN A STAGGERED PATTERN.
8. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

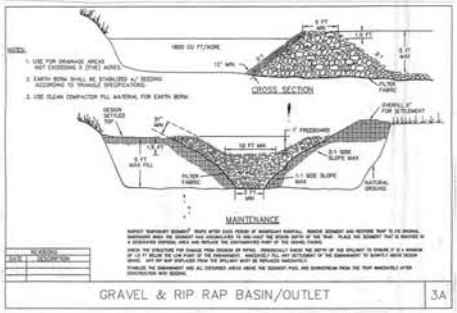


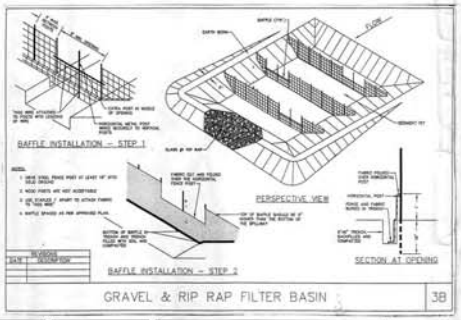


CONSTRUCTION SEQUENCE

1. SCHEDULE AN ON-SITE MEETING WITH THE DURHAM COUNTY SEDIMENTATION AND EROSION CONTROL INSPECTOR PRIOR TO THE START OF LAND DISTURBANCE.
2. INSTALL THE TREE PROTECTION FENCING AS NOTED ON THE PLANS.
3. INSTALL THE SILT FENCING AS ILLUSTRATED ON THE PLANS AND AS REQUIRED BY FIELD CONDITIONS.
4. EXCAVATE AND SHAPE THE EXISTING SEDIMENTATION BASINS TO FORM A CONTINUOUS BASIN. REMOVE THE EXISTING GRAVEL FILTER FROM AROUND THE RISER BARRELS AND REPLACE WITH NEW GRAVEL AND RIP-RAP FILTER.
5. ADD A RIP-RAP DISSIPATER AT THE OUTLET OF EACH RISER BARREL.
6. CONSTRUCT AN EMERGENCY SPILLWAY NEAR THE CENTER OF THE DAM AND RIP-RAP FROM THE BASIN TO THE ADJACENT CREEK.
7. BEGIN EXCAVATION AND SPOILS AREA OPERATIONS.
8. STABILIZE ALL WORKING FACES, SLOPES AND EXPOSED SURFACES THAT ARE NOT INCLUDED WITHIN THE MONTHLY OPERATIONAL AREAS.
9. OPERATE THE TEMPORARY L.C.I.D. LANDFILL IN ACCORDANCE WITH THE APPROVED DURHAM PERMIT AND THE PERMIT ISSUED BY THE NORTH CAROLINA SOLID WASTE DIVISION.

FINAL DESIGN
NOT RELEASED FOR CONSTRUCTION





SEEDING SCHEDULE

SHOULDERS, SIDE DITCHES AND SLOPES
(SLOPES MAX. 3:1)

DATE	TYPE	PLANTING RATE
AUGUST 15 - NOVEMBER 1	TALL FESCUE	300 LBS/ACRE
NOVEMBER 1 - MARCH 1	TALL FESCUE AND ANNUAL RYE	300 LBS/ACRE
MARCH 1 - APRIL 15	TALL FESCUE	300 LBS/ACRE
APRIL 15 - JUNE 30	HULLED COMMON BERMUDAGRASS	25 LBS/ACRE
JULY 15 - AUGUST 15	TALL FESCUE AND *** BROWNTOP MILLET	25 LBS/ACRE

CONSULT EROSION CONTROL ENGINEER OR SOIL CONSERVATION SERVICE FOR ADDITIONAL INFORMATION CONCERNING OTHER ALTERNATIVES FOR VEGETATION OF DENUDED AREAS. THE ABOVE VEGETATION RATES ARE THOSE WHICH DO WELL UNDER LOCAL CONDITIONS. OTHER SEEDING RATE CONSIDERATIONS ARE POSSIBLE.

***TEMPORARY
RESEED ACCORDING TO OPTIMUM SEASON FOR DESIRED PERMANENT VEGETATION. DO NOT ALLOW TEMPORARY COVER TO GROW OVER 12 INCHES IN HEIGHT BEFORE MOWING. OTHERWISE FESCUE MAY BE SHADED OUT.

SEEDING SCHEDULE

SHOULDERS, SIDE DITCHES AND SLOPES
SLOPES (3:1 TO 2:1)

DATE	TYPE	PLANTING RATE
MARCH - JUNE 1	SERICEA LESPEDEZA (SCARIFIED) OR	50 LBS/ACRE
MARCH 1 - APRIL 15	ADD TALL FESCUE	120 LBS/ACRE
MARCH 1 - JUNE 30	ADD WEEPING LOVEGRASS OR	10 LBS/ACRE
MARCH 1 - JUNE 30	ADD HULLED COMMON BERMUDAGRASS	25 LBS/ACRE
JUNE 1 - SEPTEMBER 1	***INITIAL FESCUE AND ***BROWNTOP MILLET ***FOX TAIL SORGHUM-SUDAN HYBRIDS	120 LBS/ACRE 25 LBS/ACRE 50 LBS/ACRE
SEPTEMBER 1 - MARCH 1	SERICEA LESPEDEZA (UNHULLED-UNSCARIFIED) AND TALL FESCUE ADD ANNUAL RYE	70 LBS/ACRE 120 LBS/ACRE 25 LBS/ACRE

CONSULT EROSION CONTROL ENGINEER OR SOIL CONSERVATION SERVICE FOR ADDITIONAL INFORMATION CONCERNING OTHER ALTERNATIVES FOR VEGETATION OF DENUDED AREAS. THE ABOVE VEGETATION RATES ARE THOSE WHICH DO WELL UNDER LOCAL CONDITIONS. OTHER SEEDING RATE CONSIDERATIONS ARE POSSIBLE.

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REVISIONS	DESCRIPTIONS	DATE

NORTH CAROLINA LICENSED LANDSCAPE ARCHITECT 390 FIRM# 00187001

7-12-00 DATE

DESIGNED SDG
DRAWN SDG
CHECKED JFB
PROJ. ENG.

SUNGATE DESIGN GROUP, P.A.
915-A JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
PH: (919) 859-2243 FAX: (919)859-6258

PHASE TWO
TRANSFER STATION

WASTE INDUSTRIES, INC.
DURHAM DISTRICT CAMPUS

SEDIMENTATION & EROSION CONTROL DETAILS

DATE: MAY 1998
SDG PROJ. # 05-9711
DWG FILE # WDURFBSE02

SCALE
HORIZONTAL:
VERTICAL:

SHEET NO.
SD-11
OF: 13

DocuSign Envelope ID: E180AE52-43C9-4DE745CF-02AE26DAD688

LANDSCAPE NOTES:

WIRE
WIRE SHALL BE SINGLE STRAND 9 GAUGE OR DOUBLE STRAND, TWISTED 12 GAUGE GALVANIZED IRON WIRE MUST BE TAUT. WIRE SHALL BE POSITIONED SO IT DOES NOT INTERFERE WITH PEDESTRIAN CIRCULATION. EACH TREE SHALL BE SECURED WITH 3 EQUALLY SPACED WIRES.

FLAGS
EACH TREE SHALL BE MARKED WITH 2 6" BRIGHTLY COLORED FLAGS SECURELY TIED.

TURNBUCKLE
EACH WIRE SHALL BE FITTED WITH A 3" GALVANIZED TURNBUCKLE.

MULCH
MULCH SHALL BE CLEAN PINE NEEDLES FREE OF DEBRIS AND FOREIGN MATTER. MULCH TO A DEPTH OF 3" WITHIN 2 DAYS OF PLANTING. BROADCAST NITROGEN ON TOP OF SOIL BEFORE LAYING MULCH.

PLANTING SOIL
SOIL MIX SHALL BE SOIL EXCAVATED FROM PLANTING HOLE FREE OF ANY LUMPS, STONES, ROOTS OR OTHER MATERIAL GREATER THAN 2" IN DIAMETER.

SOIL TEST
CONTRACTOR SHALL TAKE SOIL SAMPLES REPRESENTATIVE OF THE SITE AND HAVE THEM TESTED BY THE NC DEPARTMENT PO AGRICULTURE TO DETERMINE APPLICATION RATE FOR FERTILIZER AND LIME. CONTRACTOR SHALL PROVIDE LANDSCAPE ARCHITECT WITH A COPY OF TEST RESULTS.

LIME
GROUND LIMESTONE SHALL BE USED CONTAINING NOT LESS THAN 85% OF TOTAL CARBONATES. AT LEAST 1/2 SHOULD PASS THROUGH 100 MESH SCREEN AND ALL SHOULD PASS THROUGH A 10 MESH SCREEN.

RUBBER HOSE
HOSE TO ENCASE WIRES USED FOR SECURING TREES SHALL BE NEW OR USED 1/2" DIAMETER 3-PLY REINFORCED RUBBER GARDEN HOSE, BLACK OR DARK GREEN IN COLOR. LENGTH TO BE SUFFICIENT TO KEEP WIRE FROM DIRECT CONTACT WITH THE TREE.

FERTILIZER
FERTILIZER SHALL BE CERTIFIED ANALYSIS DOA NORTH CAROLINA. FERTILIZER SHALL BE DELIVERED DRY AND FREE FLOWING IN ORIGINAL CONTAINER, UNOPENED AND BEARING THE MANUFACTURER'S GUARANTEED ANALYSIS. COMPOSITION SHALL BE DETERMINED BY A SOIL TEST PERFORMED BY NC DEPARTMENT OF AGRICULTURE. APPLY 1# POUND OF FERTILIZER PER FOOT OF HEIGHT FOR ALL PLANT MATERIAL. FERTILIZER SHALL BE MIXED WITH PLANTING SOIL.

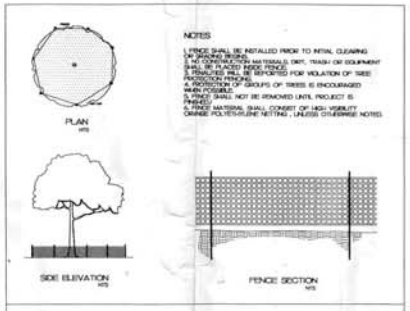
STAKES
STAKES SHALL BE 2" X 2" X 6' HARDWOOD, NOTCHED TO HOLD WIRE. DRIVEN INTO UNDISTURBED EARTH AT A 45° ANGLE AWAY FROM TREE WITH NO MORE THAN 1' EXPOSE ABOVE GRADE.

ROOT BALL
FOR B&B MATERIAL, REMOVE BURLAP FROM UPPER 1/3 OF ROOT BALL. FOR CONTAINER GROWN MATERIAL, SCARIFY ROOT BALL.

PRUNING
TREES SHALL BE PRUNED IMMEDIATELY AFTER PLANTING IN A MANNER TO OBTAIN NATURAL SHAPE. REMOVE ONLY DEAD WOOD, BROKEN BRANCHES AND BRANCHES TO BALANCE NATURAL FORM. DO NOT REMOVE LEADER OR "TOP" TREE. ALL PRUNING SHALL BE DONE WITH CLEAN SHARP TOOLS.

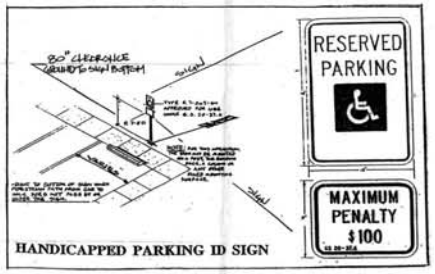
WATER
WATER SHALL BE PROVIDED BY THE CONTRACTOR. THOROUGHLY SOAK EACH TREE AFTER PLANTING.

CLEANUP
CONTRACTOR SHALL KEEP THE AREA CLEAN THROUGHOUT THE JOB. ALL DEBRIS SHALL BECOME THE PROPERTY OF THE CONTRACTOR. SHALL BE REMOVED FROM SITE AND SHALL BE DEPOSED OF IN A LEGAL MANNER. ALL PAVED AREAS SHALL BE CLEANED OF ANY SPILLS. ALL TAGS AND LABELS SHALL BE REMOVED FROM ALL PLANTS. ANY DAMAGED GRASS AREAS SHALL BE RE-SODDED.

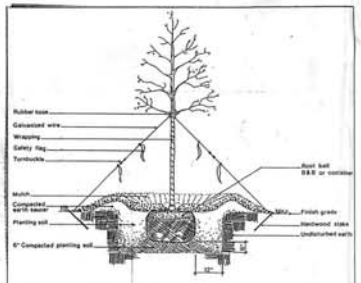


NOTES
1. FENCE SHALL BE INSTALLED PRIOR TO INITIAL CLEARING AND GRADING BEGINS.
2. NO CONSTRUCTION MATERIALS, DIRT, TRASH OR EQUIPMENT SHALL BE PLACED INSIDE FENCE.
3. PENALTIES WILL BE REPORTED FOR VIOLATION OF TREE PROTECTION FENCING.
4. PROTECTION OF GROUPS OF TREES IS ENCOURAGED WHEN POSSIBLE.
5. FENCE SHALL NOT BE REMOVED UNTIL PROJECT IS FINISHED.
6. FENCE MATERIAL SHALL CONSIST OF HIGH VISIBILITY ORANGE POLYETHYLENE NETTING - UNLESS OTHERWISE NOTED.

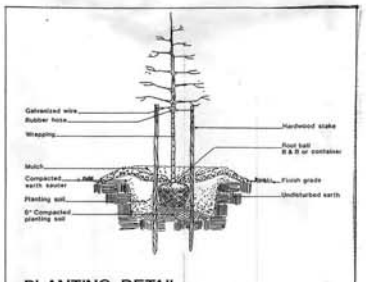
TREE PROTECTION FENCING DETAIL



HANDICAPPED PARKING ID SIGN

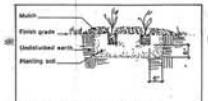


PLANTING DETAIL
6' - 10' TREE GUY & STAKE



PLANTING DETAIL
4' - 6' TREE W/STAKE

PLANTING DETAIL
GROUNDCOVER



PLANTING DETAIL
GROUNDCOVER

FINAL DESIGN
NOT RELEASED FOR CONSTRUCTION

REV NO.	DESCRIPTIONS REVISIONS	DATE

NORTH CAROLINA LANDSCAPE ARCHITECT REGISTRATION BOARD 390 J. FRANK BRAXTON
J. Frank Braxton R.L.A. 1-5-95 DATE

DESIGNED SDG
DRAWN MBH
CHECKED JFB
PROJ. ENG. MHW

SUNGATE DESIGN GROUP, P.A.
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PHASE TWO
PROCESSING AND
RECYCLING CENTER

WASTE INDUSTRIES
DURHAM DISTRICT CAMPUS

LANDSCAPE
DETAILS

DATE: DEC 1997
SDG PROJ. # 95-9119
DWG. FILE # WDRECYL7L3

SCALE
HORIZONTAL:
VERTICAL:

SHEET NO.
SD-12
OF: 13