

**Request for Proposal
Operational Lease Agreement For
City Landfill**

Contract Number: E-19-008-101

City of Chattanooga, Tennessee

October 2019

Section 1

Introduction

REQUEST FOR PROPOSALS
OPERATIONAL LEASE AGREEMENT FOR
THE CITY OF CHATTANOOGA CITY LANDFILL
CONTRACT NO. E-19-008-101
CITY OF CHATTANOOGA, TENNESSEE

1.0 INTRODUCTION

1.1 BACKGROUND

The City of Chattanooga (City) Landfill is located at 9327 Birchwood Pike, Harrison, TN 37341. The City Landfill is an active municipal solid waste (MSW) landfill owned and operated by the City (See Figure 1). The Summit Landfill is located at 4238 Old Woodland Drive, Ooltewah, TN 37363. The Summit Landfill is a closed MSW landfill owned and maintained by the City.

1.2 PURPOSE OF RFQ

The City plans to contract with a private entity for professional services to operate the City Landfill. The City is using this RFP as the mechanism for soliciting Proposal Packages (QPs) from interested operators.

1.3 DESCRIPTION OF PROJECT SCOPE

The purpose of this scope of work is for the City to enter into an operational lease agreement with a private entity (Operator) who will fully operate the active City Landfill, as well as provide post-closure care of the closed Summit Landfill. The term of the operational lease will extend through post-closure for both facilities. Title to the landfills and all applicable permits shall remain in the name of the City.



Figure 1 – Current Site Layout of City Landfill

Section 2

Proposal Package Instructions

2.0 PROPOSAL PACKAGE INSTRUCTIONS

2.1 GENERAL

Three (3) bound copies, one (1) unbound original copy, and an electronic copy in Word or PDF format of the QP shall be submitted. The QP should be limited to the requested content.

All QPs shall be submitted in a sealed envelope or box marked **E-19-008-101 – Operational Lease Agreement for City Landfill**. The original and copies of the QP shall be indexed with tabs for each section.

All QPs shall be submitted no later than **4:00 p.m. EDT, on Friday, December 6, 2019** to the attention of:

City of Chattanooga

Debbie Talley

Purchasing Department

101 E. 11th Street, Suite G13

Chattanooga, TN 37402

Phone: (423) 643-7230

FAX: (423) 643-7244

NOTE: *QPs shall address only the information requested in the RFQ. The City is not interested in “fluff or filler.” It is interested in the resumes of the people that will be working on the project and descriptions of similar facilities which the QP submitter has successfully operated.*

2.2 QP WITHDRAWAL PROCEDURE

QPs may be withdrawn up until the date and time set above for opening of QPs. Any QP not so withdrawn shall, upon opening, constitute an irrevocable offer for a period of (90) days to provide the services set forth in the QP or until one of the QPs has been accepted and a contract has been executed between the City and the successful QP submitter.

2.3 RESERVATION OF CITY RIGHTS

A. The City reserves the right to request clarification of submitted information and to request additional information of one (1) or more QPs.

B. The City reserves the right to negotiate an Agreement/Contract for **Operational Lease Agreement for City Landfill** with the next most qualified finalist if the successful finalist does not execute an Agreement/Contract within seven (7) days after submission of an Agreement to such offer. The City reserves the right to negotiate all elements of work that comprise the selected QP submitter.

C. The City reserves the right, after opening the QPs or at any other point during the selection process, to reject any or all QPs, modify or postpone the proposed project, evaluate any alternatives offered or accept the QP that, in the City's sole judgment, is in its best interest.

D. The City reserves the right to terminate the Agreement if the Operator fails to commence the work described herein within the timeframe established in the contract documents.

2.4 PRE- RFQ CONFERENCE

No Pre-RFQ Conference is scheduled.

2.5 FACILITY VISIT

A site visit is not currently planned. The facility is open Monday-Friday, 7:00 am – 5:00 pm for those who would like to visit prior to the RFQ submission.

2.6 ADDITIONAL REQUESTS FOR INFORMATION

Any additional requests for information must be directed in writing to the City by **12:00 p.m. EDT, on Monday, November 25, 2019**. The requests will be addressed to the fullest extent possible by the City in writing and sent to each responder to the RFQ by **end of day on Monday, December 2, 2019**. After that time, no further requests for information will be received or responded to.

Requests for information or clarification shall be sent to:

City of Chattanooga

Debbie Talley

Purchasing Department

101 E. 11th Street, Suite G13

Chattanooga, TN 37402

Phone: (423) 643-7230

FAX: (423) 643-7244

The City specifically requests that any contact concerning this RFQ be made exclusively with the Purchasing Department, or its designee, until selection has been completed. Failure to honor this request will be negatively viewed in the selection process.

2.7 AFFIRMATIVE ACTION PLAN

The City is an equal opportunity employer and during the performance of this Contract, the Operator agrees to abide by the equal opportunity goals of the City of Chattanooga as follows:

A. The Operator will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, or handicap. The Operator will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, national origin, or handicap. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training including apprenticeship. The Operator agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.

B. The Operator will, in all solicitations or advertisements for employees placed by or on behalf of the Operator; state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, or handicap.

C. The Operator will send to each labor union or representative of workers with which he/she has a collective bargaining agreement or other contract or understanding, a notice advising said labor union or workers' representatives of the Operator's commitments under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

D. In all construction contracts or subcontracts in excess of \$10,000 to be performed for the City, any Operator and/or subcontractor is further required to file in duplicate within ten (10) days of being notified that it is the lowest responsible bidder, an affirmative action plan with the EEO Director of the City of Chattanooga. This plan shall state the Operator's goals for minority and women utilization as a percentage of the work force on this project.

E. This Plan or any attachments thereto, shall further provide a list of all employees annotated by job function, race, and sex who are expected to be utilized on this project. This plan or attachment thereto, shall further describe the methods by which the Operator and/or subcontractor will utilize to make good faith efforts at providing employment opportunities for minorities and women. During the term of this Contract, the Operator upon request of the City will make available for inspection by the City copies of all payroll records, personnel documents, and similar records or documents that may be used to verify the Operator's compliance with these Equal Opportunity provisions.

Section 3

Proposal Package Contents

3.0 PROPOSAL PACKAGE CONTENTS

3.1 GENERAL INFORMATION

The QP shall provide the following general information:

- A. The name, address, telephone and facsimile numbers, and email address of the Operator and principal contact person.
- B. Identify the type of firm or organization (corporation, partnership, joint venture, etc.) and describe the entity that will serve as the contracting party.
- C. Submit a project organization chart.
- D. QP shall identify the portions of the work that will be undertaken directly by the Operator and what portions of the work will be subcontracted. At a minimum, QPs must identify the lead parties that will undertake the various roles for the various services to be provided.
- E. Describe the proposed contractual relationships between the Operator and all major partners and subcontractors relative to the various services to be provided of the project.
- F. Describe the history of the relationships among the Project Team members, including a description of past working relationships.
- G. Provide the history, ownership, organization, and background of the Operator. If the Operator is a joint venture, the required information must be submitted for each member of the joint venture firm. Include the following:
 - 1. Names of partners, and company officers who own 10 percent or more of the shares.
 - 2. If the Operator or joint venture is a subsidiary of a parent company, state when the subsidiary was formed and its place in the corporate structure of the parent company. If a subsidiary is newly created for the purposes of responding to this RFQ, the reasons for this action must be fully disclosed.
 - 3. Identify any lawsuits or litigation, permit violations, and/or contract disputes for other projects by the Operator.

3.2 QUALIFICATIONS AND EXPERIENCE

The Operator shall provide the following regarding technical qualifications and experience dealing with the subject property.

- A. General Experience Provide a summary of the experience of the Operator's Project Team.
- B. Project Team Members Experience Provide resumes of the Operator's Project Team including the Project Manager and all key technical personnel that will be used. Resumes should include information on professional registrations and certifications of each team member.

C. Previous Experience with Similar Projects Provide a list of three (3) to five (5) projects of similar type that the Operator's Project Team has worked on independently or together. Include the name, description, and location of each project; dates work was performed; and name, address, and phone number of owner and/or contact person.

3.3 PROPOSED SCOPE OF WORK

A. General Scope of Work

The Operator shall describe in detail the overall approach that will be used by its Project Team to perform the scope of work described herein for the Landfill Operational Lease Agreement.

The Operator shall provide all labor, benefits, equipment, materials, fuel, utilities, insurance, out-of-pocket expenses, and other related services required in connection with the Landfill Operational Lease Agreement.

1. The Operator shall maintain all necessary permits and approvals from all federal, state, and local regulatory agencies related to the Landfill Operational Lease Agreement. Furnish copies of all required permits and approvals to the City.
2. The Operator shall provide and submit reports and certifications as required by all applicable federal, state, and/or local regulations in regards to the Landfill Operational Lease Agreement. Furnish a copy of all required reports to the City in a timely manner.
3. The Operator shall coordinate its work with the operating schedule of the City as required.
4. The Operator shall conduct the work related to the Landfill Operational Lease Agreement in compliance with all applicable federal, state, and local laws, regulations, permits, and approvals.
5. The Operator shall provide adequate supervision, and technical and managerial oversight of the Operator's employees, subcontractors, and agents.

B. Specific Scope of Work

The Operator shall provide professional services for the execution of the Landfill Operational Lease Agreement as described earlier in this RFQ.

1. Operator shall assume all operational activities as well as associated costs at City Landfill.
 - a. All activities shall be performed in compliance with the approved facility solid waste permit, as well as appropriate use standards, safety standards, and regulatory requirements. Operator understands that it will be solely responsible for any liability, fees, fines, claims, etc., which may arise from non-compliance.
 - b. Operator shall make annual reports to the City. Such reports shall include tonnage received, airspace volume used, copies of all test, inspection and monitoring results, regulatory correspondence and all other documents related to activities required to maintain compliance with any applicable permits or laws.
2. Operator shall receive all tipping fees for the incoming waste at City Landfill and shall pay a per-ton host fee to the City.
3. Operator shall assume payment of the current debt service on City Landfill.
4. Operator shall fund and perform the construction of the remainder of Area 3 (Phases 2 and 3) of City Landfill in accordance with the approved facility solid waste permit.
5. Operator shall complete the closure of Area 3 of City Landfill, once final waste grades have been reached, in accordance with the approved facility closure plan.
6. Operator shall assume responsibility for all ongoing post-closure care activities for closed portions of City Landfill (Area 2) until TDEC releases the landfill from post-closure care. Post-closure care activities shall be performed as required by the approved facility post-closure plan.

7. Operator shall assume responsibility for all ongoing post-closure care activities for the closed Summit Landfill until TDEC releases the landfill from post-closure care, which is expected to be 10/31/2032. Post-closure care activities shall be performed as required by the approved facility post-closure plan.
8. Operator shall assume responsibility for all future post-closure care activities for Area 3 of City Landfill once the landfill has been closed as described in Item 4. Post-closure care activities shall be performed until the landfill is released from post-closure care by TDEC. Post-closure care activities shall be performed as required by the approved facility post-closure plan.
9. Operator shall dispose of all MSW at City Landfill as follows:
 - a. Operator shall dispose of all MSW received in accordance with all applicable federal, state, and local laws, standards and regulations and shall maintain disposal records and documentation.
 - b. Operator acknowledges, represents, and warrants to the City that it is familiar with all laws relating to disposal of MSW and is familiar with and will comply with all guidelines, requirements, laws, regulations, and requests of any federal, state or local agencies or authorities.
 - c. Operator shall not dispose of sludge in City Landfill.
 - d. Operator acknowledges and understands that any receipt and disposal of any materials not allowed by the City Landfill's approved solid waste permit shall be at the sole risk of the Operator. Operator understands that it will be solely responsible for any liability, fees, fines, claims, etc., which may arise from its handling of materials not covered by this scope of work.
 - e. Operator shall maintain the following operating hours for City Landfill: Monday through Friday, 7:00 am until 5:00 pm. Additional operating hours must be approved in writing by the City.
 - f. Operator will accept no more than 104,400 tons annually at City Landfill. Additional tonnage must be approved in writing by the City.
10. Operator shall be responsible for providing all equipment required to conduct operations and post-closure care at City Landfill and Summit Landfill. All equipment and vehicles utilized by Operator shall meet all the requirements of federal, state, and local regulations including, without limitation, all USDOT and state regulations, and are subject to the approval of the City.
11. City will retain landfill gas rights at City Landfill and Summit Landfill.
12. City anticipates executing a mutual operating agreement with adjacent property owner, Birchwood II LLC, who intends to operate and maintain a construction and demolition landfill. The agreement would cover shared operation of the scales and scalehouse as well as site access. Operator shall comply with the terms of the executed agreement with Birchwood II LLC on behalf of the City.
13. Operator shall propose number of calendar days after contract execution necessary to mobilize and begin landfill operations.

3.4 CITY SUPPLIED SERVICES

The City will provide a Project Manager as the single point of contact who will be the responsible party for the City. Any available information that may be relevant to the project may be obtained through the Project Manager.

3.5 FINANCIAL RESOURCES

The Operator shall provide documentation that the firm is of sound financial standing and have the financial ability to work in the capacity of professional services.

3.6 TERMS AND CONDITIONS

The terms and conditions shall be those addressed in the City standard engineering contract/agreement unless otherwise listed below.

http://www.chattanooga.gov/Public_Works/70_SOPs.htm

A. The Operator shall at all times during the term of the Contract or agreement and for a period of five (5) years after the end of the contract, keep and maintain records of the work performed pursuant to this Contract or Agreement. This shall include proper records of quotations, contracts, correspondence, invoices, vouchers, timesheets, and other documents that support actions taken by the Operator. Documents shall be maintained by the Operator necessary to clearly reflect all work and actions taken. All such records shall be maintained in accordance with generally accepted accounting principles. The Operator shall at its own expense make such records available for inspection and audit (including copies and extracts of records as required) by the City at all reasonable times and without prior notice.

B. The obligations of this Section shall be explicitly included in any Subcontracts or Agreements formed between the Operator and any subcontractors or suppliers of goods or services to the extent that those Subcontracts or Agreements relate to fulfillment of the Operator's obligations to the City.

C. Costs of any audits conducted under the authority of this section and not addressed elsewhere will be borne by the City unless the audit identifies significant findings that would benefit the City. The Operator shall reimburse the City for the total costs of an audit that identifies significant findings that would benefit the City.

D. This Section shall not be construed to limit, revoke, or abridge any other rights, powers, or obligations relating to audit which the City may have by Federal, State, or Municipal law, whether those rights, powers, or obligations are express or implied.

3.7 LENGTH OF CONTRACT

The length of contract is expected to extend through post-closure for both facilities.

Section 4

Review and Evaluation of QPs

4.0 REVIEW AND EVALUATION OF QPs

4.1 REVIEW COMMITTEE

A review committee consisting of individuals selected by the City shall receive and review all submitted QPs. The City, in its sole judgment, shall decide if a QP is viable.

4.2 FORMAL PRESENTATIONS

After reviewing each QP submittal, the City may prepare a short list of up to three (3) qualified firms for formal presentations. The City reserves the right to invite more or less than this number if the quality of the QPs so merits, or not to prepare a short list and require formal presentations.

4.3 SELECTION CRITERIA

Selection of Operators for formal presentations and the selection of one (1) Operator for contract/agreement negotiation will be based on an objective evaluation of the following criteria:

A. General

- a. Proposal and/or SOQ properly interpret the Request for Qualifications.
- b. Proposal and/or SOQ contain no technical errors.
- c. Proposal and/or SOQ contain no discrepancies, omissions, ambiguous, and/or misleading statements.

B. Problem Statement and Background Summary

- a. Proposal and/or SOQ demonstrate good understanding of the problem.

C. Proposal Plan (Objectives and Tasks)

- a. Proposal and/or SOQ cite specific tasks clearly.
- b. Difficult areas are identified and details for overcoming them are given.
- c. Proposal and/or SOQ represent a novel idea or technical approach that is worth considering.

D. Products and Implementation

- a. Proposal and/or SOQ clearly define reports to be delivered annually.
- b. SOQ includes a practical, realistic implementation plan, and schedule, showing a familiarity with City procedures and policies, as well as demonstrated ability to meet budgets and schedules without compromising sound engineering practice for similar projects.

E. Staffing and Facilities

- a. Availability of personnel is clearly defined.

- b. Proposal and/or SOQ show a depth of qualified personnel.
- c. Personal qualifications and education are directly related to the requirements of the project.
- d. Key personnel have direct experience and accomplishments with this type of project.
- e. Proposal and/or SOQ show ability to manage a project of this size.
- f. Proposal and/or SOQ include plans for specific key personnel assignment.
- g. Project does not depend excessively on Subconsultants/Subcontractors or recruited personnel.
- h. Submitter's location will not hinder project completion.
- i. Subconsultants/subcontractor's location will not hinder project completion.

F. City Involvement

- a. City involvement is clearly described and quantified.
- b. City involvement is not excessive.

G. Evaluation proceedings shall be conducted within the established guidelines regarding equal employment opportunity and discriminatory action based upon the grounds of race, color, sex, creed, or national origin.

4.4 SELECTION OF FINALIST

After the review of the QPs by the Review Committee and possibly formal presentations, the City may, at its sole option, elect to reject all QPs or elect to pursue the project further. In the event that the City decides to pursue the project further, the City will select the highest ranked finalist to negotiate an Agreement.

Attachment A
Proposed Project Timeline for Operational Lease Agreement
for City Landfill
10/18/19

RFQ

<u>Action Required</u>	<u>Date</u>
Advertisement	October 29
Evaluate RFQ's	December 6
Recommendation/Approval	February 7
Negotiate Contract	February 21
Send up for Council Action	February 28
Council Action	March 24
Notice to Proceed	March 26

EXHIBIT "A"

SCOPE OF SERVICES

The primary purpose of this scope of work is for the City of Chattanooga (Owner) to enter into an operational lease agreement with a private entity (Operator) who will fully operate the active City of Chattanooga Landfill on Birchwood Pike (City Landfill), as well as provide post-closure care of the closed Summit Landfill. The term of the operational lease will extend through post-closure for both facilities. Title to the landfills and all applicable permits shall remain in the name of the Owner.

City Landfill (TDEC solid waste permit no. SNL 33 0273) is an active municipal solid waste (MSW) landfill owned and operated by the Owner. Area 2 of the landfill consists of 32 acres that have been filled and closed and are currently in post-closure. Area 3 of the landfill consists of a 19.5-acre cell (Phase 1) that is currently receiving waste. As of July 1, 2018, Phase 1 had an estimated achievable remaining capacity of 253,239 cubic yards. Phases 2 and 3 of the landfill comprise an additional 29.4 acres that have been permitted but have not yet been constructed. Phases 2 and 3, once constructed, will add an additional 4,667,780 cubic yards of capacity.

Summit Landfill (TDEC solid waste permit no. SNL 33 0035) is a closed MSW landfill owned and maintained by the Owner. The landfill consists of approximately 103 acres and is currently in post-closure care.

The Operator will provide the services itemized below.

Item 1. Operation of City Landfill:

The Operator shall assume all operational activities as well as associated costs at City Landfill, including, but not limited to, the following:

- a. Receive, place, and compact MSW into the active areas of the landfill,
- b. Place daily cover (sufficient quantity available on site per Owner),
- c. Collect and dispose of all leachate,
- d. Conduct all required environmental monitoring not included in Item 5 (groundwater, surface water and methane),
- e. Maintain all environmental compliance permits (Title V, NPDES and Industrial Discharge),
- f. Perform any required landfill remediation activities,
- g. Provide dust and litter control,
- h. Provide maintenance of all site facilities, including haul roads and service roads, and
- i. Fund all necessary capital expenditures (equipment).

All above activities shall be performed in compliance with the approved facility solid waste permit, as well as appropriate use standards, safety standards, and regulatory requirements. Operator understands that it will be solely responsible for any liability, fees, fines, claims, etc., which may arise from non-compliance.

Operator shall make annual reports to the Owner. Such reports shall include tonnage received, airspace volume used, copies of all test, inspection and monitoring results, regulatory correspondence and all other documents related to activities required to maintain compliance with any applicable permits or laws.

Owner shall retain access and inspection rights to all on-site buildings and land surrounding the landfill, as well as the right to conduct unannounced inspections of the landfill to confirm that operations are occurring in compliance with all applicable permits.

Item 2. Payment of Host Fee to Owner

The Operator shall receive all tipping fees for the incoming waste and shall pay a per-ton host fee to Owner as proposed under EXHIBIT B line item 2.

Item 3. Debt Service on City Landfill:

The Operator shall assume payment of the current debt service on City Landfill. The total outstanding bond debt as of June 30, 2019, was \$5,714,334, per the FY2019 Solid Waste Debt Schedule included as Exhibit C.

Item 4. Construction of Remaining Phases of City Landfill:

The Operator shall fund and perform the construction of the remainder of Area 3 (Phases 2 and 3) of City Landfill in accordance with the approved facility solid waste permit. A copy of the Area 3 Lateral Expansion Permit drawings is included as Exhibit D. Upon completion of construction, Operator would continue to operate the landfill as described in Item 1.

Item 5. Closure of City Landfill (Area 3):

The Operator shall complete the closure of Area 3 of City Landfill, once final waste grades have been reached. Closure will be carried out in accordance with the approved facility closure plan and shall include, but not be limited to, the following activities:

- a. Place final cover system, including 6" gas venting layer, geosynthetic clay liner, geonet drainage composite and 18" vegetative soil cover,
- b. Install erosion control and drainage features,
- c. Install landfill gas extraction system, including gas extraction wells, air supply lines, gas collection lines, condensate collection lines,
- d. Provide Construction Quality Assurance, and
- e. Submit appropriate closure documentation to TDEC.

Item 6. Ongoing Post-Closure Care of City Landfill (Area 2):

The Operator shall assume responsibility for all ongoing post-closure care activities for closed portions of City Landfill (Area 2) until TDEC releases the landfill from post-closure care. Post-closure care activities shall be performed as required by the approved facility post-closure plan and shall include, but not be limited to, the following:

- a. Quarterly methane monitoring at 7 locations,
- b. Semi-annual groundwater monitoring at 8 locations,
- c. Annual surface water monitoring at 6 locations,
- d. Ongoing maintenance of leachate collection system,
- e. Ongoing operation and maintenance of landfill gas collection system,
- f. Collection and disposal of leachate and condensate,
- g. Monthly inspection of final cover system, including repairs and revegetation as needed,

- h. Mowing 5 times per year, and
- i. Monthly inspection of drainage structures and cleaning as necessary.

Item 7. Ongoing Post-Closure Care of Summit Landfill:

The Operator shall assume responsibility for all ongoing post-closure care activities for the closed Summit Landfill until TDEC releases the landfill from post-closure care, which is expected to be 10/31/2032. Post-closure care activities shall be performed as required by the approved facility post-closure plan and shall include, but not be limited to, the following:

- a. Quarterly methane monitoring at 63 locations,
- b. Quarterly groundwater monitoring at 13 locations,
- c. Annual surface water monitoring at 6 locations,
- d. Ongoing maintenance of leachate collection system,
- e. Ongoing operation and maintenance of landfill gas collection system, including weekly inspections,
- f. Collect and dispose of leachate and condensate,
- g. Maintain all environmental compliance permits (Title V and NPDES),
- h. Monthly inspection of final cover system, including repairs and revegetation as needed,
- i. Mowing 5 times per year, and
- j. Monthly inspection of drainage structures and cleaning as necessary.

Owner will retain access and inspection rights to all on-site buildings and land surrounding the landfill. Access will continue to be provided to model airplane club and other third parties as approved by Owner.

Item 8. Future Post-Closure Care of City Landfill (Area 3):

The Operator shall assume responsibility for all future post-closure care activities for Area 3 of City Landfill once the landfill has been closed as described in Item 4. Post-closure care activities shall be performed until the landfill is released from post-closure care by TDEC. Post-closure care activities shall be performed as required by the approved facility post-closure plan and shall include, but not be limited to, the following:

- a. All required quarterly methane monitoring,
- b. Semi-annual groundwater monitoring at 3 locations,
- c. Annual surface water monitoring at 4 locations,
- d. Ongoing maintenance of leachate collection system,
- e. Ongoing operation and maintenance of landfill gas collection system,
- f. Collect and dispose of leachate and condensate,
- g. Maintain all environmental compliance permits (Title V and NPDES),
- h. Monthly inspection of final cover system, including repairs and revegetation as needed,
- i. Mowing 5 times per year, and
- j. Monthly inspection of drainage structures and cleaning as necessary.

Owner will retain access and inspection rights to all on-site buildings and land surrounding the landfill.

Item 9. MSW Disposal:

- A. Operator shall dispose of all MSW received in accordance with all applicable federal, state, and local laws, standards and regulations and shall maintain disposal records and documentation.
- B. Operator acknowledges, represents, and warrants to the Owner that it is familiar with all laws relating to disposal of MSW and is familiar with and will comply with all guidelines, requirements, laws, regulations, and requests of any federal, state or local agencies or authorities.
- C. Operator shall not dispose of sludge in City Landfill.
- D. Operator acknowledges and understands that any receipt and disposal of any materials not allowed by the City Landfill's approved solid waste permit shall be at the sole risk of the Operator. Operator understands that it will be solely responsible for any liability, fees, fines, claims, etc., which may arise from its handling of materials not covered by this scope of work.
- E. Operator shall maintain the following operating hours for City Landfill: Monday through Friday, 7:00 am until 5:00 pm. Additional operating hours must be approved in writing by Owner.
- F. Operator will accept no more than 104,400 tons annually at City Landfill. Additional tonnage must be approved in writing by Owner.

Item 10. Operator Equipment:

The Operator shall be responsible for providing all equipment required to conduct operations and post-closure care at City Landfill and Summit Landfill. All equipment and vehicles utilized by the Operator shall meet all the requirements of federal, state, and local regulations including, without limitation, all USDOT and state regulations, and are subject to the approval of the Owner.

Item 11. Landfill Gas Rights:

Owner will retain landfill gas rights at City Landfill and Summit Landfill.

Item 12. Access for Birchwood II LLC:

Owner anticipates executing a mutual operating agreement with adjacent property owner, Birchwood II LLC, who intends to operate and maintain a construction and demolition landfill. The agreement would cover shared operation of the scales and scalehouse as well as site access. Operator shall comply with the terms of the executed agreement with Birchwood II LLC on behalf of Owner. A draft of the agreement is attached as Exhibit "E".

Item 13. Commencement of Operations:

Operator will propose number of calendar days after contract execution necessary to mobilize and begin landfill operations under EXHIBIT B line item 13.

EXHIBIT "B"
ITEMIZED PROPOSAL

Date _____

Proposal of _____

(hereinafter called "Operator"), authorized to do business under the laws of the Tennessee, proposes to the City of Chattanooga, Tennessee, (hereinafter called "Owner").

The Operator, in compliance with your invitation for proposals for:

THE CITY OF CHATTANOOGA, CITY LANDFILL OPERATIONAL LEASE

Having examined the specifications with related documents and the sites of the proposed work and being familiar with all conditions surrounding the work of the proposed project, including availability of equipment and labor, hereby proposes to perform in accordance with this Request for Proposal, the items selected below. The Operator shall cover all expenses incurred in performing the work required under the Contract Documents, of which this proposal is a part.

Operator hereby agrees to commence work under this contract in accordance with EXHIBIT B line item 13.

This itemized proposal form must be completed, signed, and submitted. No substitute forms will be accepted. Proposals submitted without this completed itemized proposal form will be rejected.

Operator acknowledges receipt of the following addenda:

Operator agrees to complete the below selected items of the project as described in accordance with the specifications and other information included in the contract documents (note that item descriptions in the below list are truncated, but tasks shall be performed fully as described in EXHIBIT A). Additional sheets may be added if needed for comments.

ITEM DESCRIPTION	OPERATOR ACCEPTS		COMMENTS
	YES	NO	
1. Operation of City Landfill			
a. Receive, place and compact MSW	_____	_____	_____
b. Place daily cover	_____	_____	_____
c. Collect and dispose of leachate	_____	_____	_____
d. Conduct environmental monitoring	_____	_____	_____
e. Maintain environmental compliance permits	_____	_____	_____
f. Perform landfill remediation activities	_____	_____	_____
g. Provide dust and litter control	_____	_____	_____
h. Provide maintenance of site facilities	_____	_____	_____
i. Fund all capital expenditures	_____	_____	_____
2. Payment of Host Fee to Owner	_____	_____	If yes, proposed fee: _____/ton
3. Payment of Debt Service on City Landfill	_____	_____	_____
4. Construction of Remaining Phases of City Landfill	_____	_____	_____
5. Closure of City Landfill (Area 3)			
a. Place final cover system	_____	_____	_____
b. Install erosion control and drainage features	_____	_____	_____
c. Install landfill gas extraction system	_____	_____	_____
d. Provide construction quality assurance	_____	_____	_____
e. Submit closure documentation to TDEC	_____	_____	_____
6. Ongoing Post-Closure Care of City Landfill (Area 2)			
j. Quarterly methane monitoring	_____	_____	_____
k. Semi-annual groundwater monitoring	_____	_____	_____
l. Annual surface water monitoring	_____	_____	_____
m. Ongoing maint. of leachate collection system	_____	_____	_____
n. Ongoing O&M of landfill gas collection system	_____	_____	_____
o. Collection & disposal of leachate & condensate	_____	_____	_____
p. Monthly inspection/repair of final cover system	_____	_____	_____
q. Mowing 5 times per year	_____	_____	_____
r. Monthly inspect/clean drainage structures	_____	_____	_____
7. Ongoing Post-Closure Care of Summit Landfill			
a. Quarterly methane monitoring	_____	_____	_____
b. Quarterly groundwater monitoring	_____	_____	_____
c. Annual surface water monitoring	_____	_____	_____
d. Ongoing maint. of leachate collection system	_____	_____	_____
e. Ongoing O&M of landfill gas collection system	_____	_____	_____

- | | | | |
|---|--|-------|-------|
| f. Collect & dispose of leachate & condensate | _____ | _____ | _____ |
| g. Maintain all environmental compliance permits | _____ | _____ | _____ |
| h. Monthly inspection/repair of final cover system | _____ | _____ | _____ |
| i. Mowing 5 times per year | _____ | _____ | _____ |
| j. Monthly inspect/clean of drainage structures | _____ | _____ | _____ |
| | | | |
| 8. Future Post-Closure Care of City Landfill (Area 3) | | | |
| k. All required quarterly methane monitoring | _____ | _____ | _____ |
| l. Semi-annual groundwater monitoring | _____ | _____ | _____ |
| m. Annual surface water monitoring | _____ | _____ | _____ |
| n. Ongoing maint. of leachate collection system | _____ | _____ | _____ |
| o. Ongoing O&M of landfill gas collection system | _____ | _____ | _____ |
| p. Collect & dispose of leachate & condensate | _____ | _____ | _____ |
| q. Maintain all environmental compliance permits | _____ | _____ | _____ |
| r. Monthly inspect/repair of final cover system | _____ | _____ | _____ |
| s. Mowing 5 times per year | _____ | _____ | _____ |
| t. Monthly inspect/clean of drainage structures | _____ | _____ | _____ |
| | | | |
| 9. MSW Disposal | _____ | _____ | _____ |
| | | | |
| 10. Operator Shall Provide all Equipment | _____ | _____ | _____ |
| | | | |
| 11. Owner Retains Landfill Gas Rights | _____ | _____ | _____ |
| | | | |
| 12. Access for Birchwood II | _____ | _____ | _____ |
| | | | |
| 13. Commencement of Operations | _____ calendar days after contract execution | | |

EXHIBIT "C"

FY2019 SOLID WASTE DEBT SCHEDULE

CITY OF CHATTANOOGA, TENNESSEE

SCHEDULE OF BONDS, NOTES AND CAPITAL LEASES PAYABLE

June 30, 2019

(continued from previous page)

INTERCEPTOR SEWER SYSTEM

Fiscal Year Ended June 30	Issue	Interest Rate	Principal	Due Interest	Total Interest and Principal
	Total Interceptor Sewer System indebtedness		148,899,705	21,839,516	170,739,221

SOLID WASTE FUND

2020	2004 Note Payable - Tennessee Municipal	0.823%	35,113	1,517	36,630
2021	Bond Fund	0.823%	36,034	1,228	37,262
2022		0.823%	37,003	931	37,934
2023		0.823%	37,996	627	38,623
2024		0.823%	38,131	314	38,445
			184,277	4,617	188,894
2020	2014 General Obligation Refunding	5.00%	934,930	70,129	1,005,059
2021		3.00%	253,342	42,955	296,297
2022		2.00%	249,736	36,658	286,394
2023		2.25%	245,228	31,402	276,630
2024		3.00%	242,523	25,005	267,528
2025		3.00%	239,818	17,770	257,588
2026		3.00%	237,114	10,616	247,730
2027		3.00%	234,935	3,529	238,464
			2,637,626	238,064	2,875,690
2020	2017B Series GO Bond Refunding	3.00%	-	107,750	107,750
2021		3.00%	340,000	107,750	447,750
2022		3.00%	350,000	90,750	440,750
2023		3.00%	335,000	73,250	408,250
2024		3.00%	355,000	56,500	411,500
2025		3.00%	375,000	38,750	413,750
2026		5.00%	400,000	20,000	420,000
			2,155,000	494,750	2,649,750
	Total Solid Waste Fund indebtedness		4,976,903	737,431	5,714,334

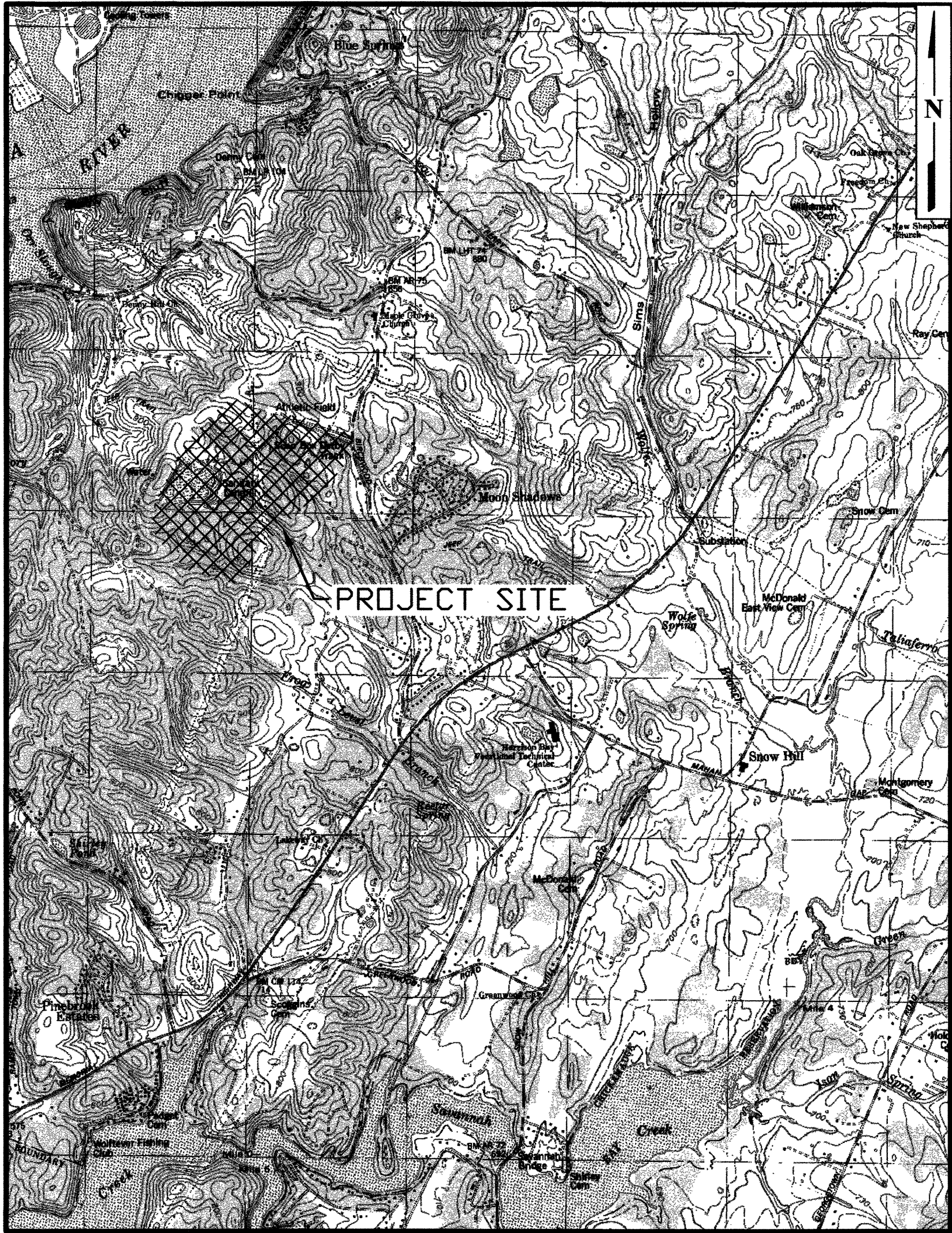
(continued on next page)

EXHIBIT "D"

APPROVED CITY LANDFILL AREA 3 LATERAL EXPANSION DRAWINGS

CITY OF CHATTANOOGA, TENNESSEE
CITY LANDFILL ON BIRCHWOOD PIKE
MAJOR MODIFICATION
AREA 3 LATERAL EXPANSION
CONTRACT NO. W-06-002

TITLE	DRAWING INDEX	DRAWING NO.
TITLE SHEET	-----	1
VICINITY PLAN	-----	2
EROSION AND SEDIMENT CONTROL PLAN	-----	3
EROSION AND SEDIMENT CONTROL DETAILS	-----	4
PHASE 1 GRADING PLAN	-----	5
LEACHATE COLLECTION SYSTEM PLAN	-----	6
PLAN OF STOCKPILE AREA	-----	7
PLAN AND PROFILE STORM DRAINAGE PIPES A & B	-----	8
SEDIMENTATION/DETENTION POND NO. 1 (NORTH)	-----	9
SEDIMENTATION/DETENTION POND NO. 2 (SOUTH)	-----	10
LANDFILL CROSS SECTIONS (SHEETS 1 THRU 5)	-----	11 THRU 15
ROADWAY AND DRAINAGE SECTIONS (SHEET 1 OF 2)	-----	16
ROADWAY AND DRAINAGE SECTIONS (SHEET 2 OF 2)	-----	17
LINER DETAILS (SHEET 1 OF 2)	-----	18
LINER DETAILS (SHEET 2 OF 2)	-----	19
LEACHATE FORCE MAIN PLAN AND PROFILE	-----	20
LEACHATE COLLECTION LINE PROFILES	-----	21
PUMP STATION NO. 3 - PLAN, SECTIONS & DETAILS	-----	22
LEACHATE PUMP STATION - ELECTRICAL	-----	23
MISCELLANEOUS DETAILS (SHEET 1 OF 2)	-----	24
MISCELLANEOUS DETAILS (SHEET 2 OF 2)	-----	25



LOCATION MAP
SCALE: 1"=2000'

MAYOR AND CITY COUNCIL

- RON LITTLEFIELD, MAYOR
SALLY ROBINSON, CHAIRPERSON
LEAMON PIERCE, VICE CHAIRPERSON
LINDA BENNETT
JACK BENSON
JOHN FRANKLIN, JR.
YUSUF HAKEEM
DAN PAGE
MANUEL RICO
MARTI RUTHERFORD

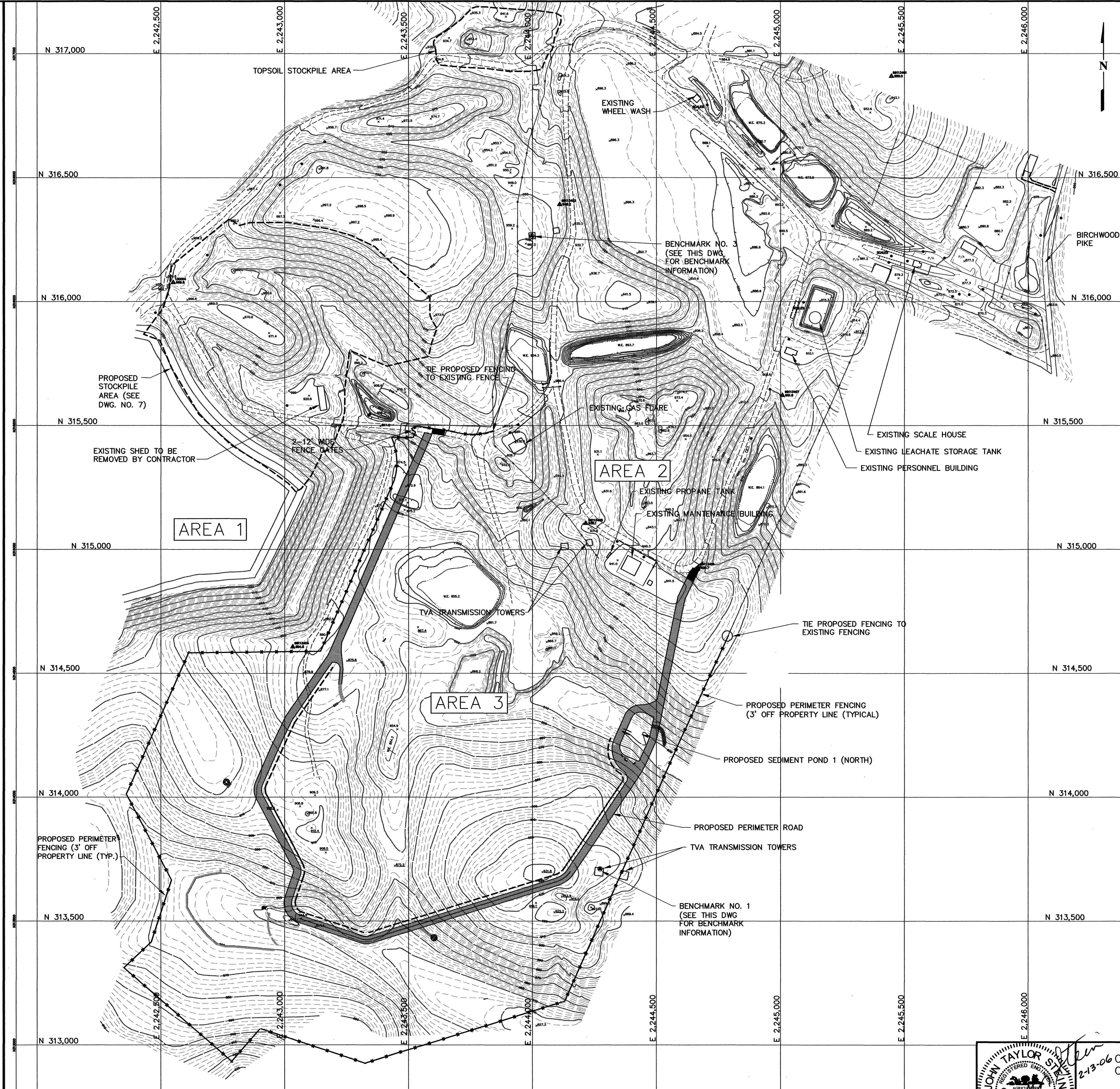
- STEVE LEACH, ADMINISTRATOR
DEPARTMENT OF PUBLIC WORKS
BILL PAYNE, P.E. CITY ENGINEER
JERRY W. STEWART, P.E. DIRECTOR
DIVISION OF WASTE RESOURCES

I CERTIFY THAT THESE PLANS HAVE BEEN REVIEWED
AND APPROVED BY THE CITY OF CHATTANOOGA

Jerry W. Stewart 2/14/06
JERRY W. STEWART, P.E. DATE

PREPARED BY:
CT CONSOLIDATED TECHNOLOGIES, INC.
ENGINEERS IN WATER AND EARTH SCIENCES
401 CHESTNUT STREET, SUITE 220
CHATTANOOGA, TN 37402
J. Taylor Stein 2/14/06
J. TAYLOR STEIN, PE DATE
TENNESSEE LICENSE NO. 20269

S:\C05057-1\BIRLANDFILL.DWG, VICINITY, 2/22/2006 8:54:53 AM



BENCHMARK LOCATIONS			
MONUMENT NO.	NORTH	EAST	ELEVATION
1.	313,710.63	2,244,272.70	913.24
3.	316,265.18	2,243,998.06	959.26

LEGEND

NOTE: THIS LEGEND APPLIES TO ALL DRAWINGS

- FENCE
- EXISTING SURFACE CONTOUR
- PROPOSED SURFACE CONTOUR
- DITCH FLOW LINE
- GROUNDWATER MONITORING WELL
- ROCK CHECK DAM
- GAS PROBE
- LANDFILL ACCESS ROAD
- HDPE PIPE (LEACHATE)
- STORM DRAIN PIPE
- PROPERTY LINE
- MANHOLE
- STORM DRAIN HEADWALL
- LEACHATE LINE CLEANOUT
- BENCHMARK

GENERAL NOTES:

- SITE GRID AND COORDINATES ARE BASED ON STATE PLANE COORDINATE SYSTEM.
- TOPOGRAPHIC INFORMATION IS FROM NOVEMBER 2000 AERIAL SURVEY BY CONTINENTAL AERIAL SURVEYS.

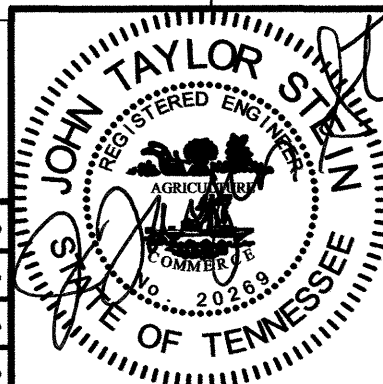
THIS DRAWING IS AN INSTRUMENT OF SERVICE OWNED BY CONSOLIDATED TECHNOLOGIES, INC. (CTI), WHICH SHALL BE DEEMED THE AUTHOR AND WHICH SHALL RETAIN ALL STATUTORY AND COMMON LAW RIGHTS, INCLUDING COPYRIGHTS. THIS DRAWING SHALL NOT BE SCANNED, COPIED, OR DISTRIBUTED TO OTHERS IN ANY FORM OR USED FOR ANY OTHER PURPOSE OR PROJECT WITHOUT PRIOR WRITTEN CONSENT OF CTI. CTI IS NOT RESPONSIBLE FOR CONSEQUENCES RELATED TO UNAUTHORIZED USE OR REUSE OF THIS DRAWING OR PORTIONS THEREOF.

REV. NO.	BY	DATE	DESCRIPTION OF REVISION



CONSOLIDATED TECHNOLOGIES, INC.
ENGINEERS IN WATER AND EARTH SCIENCES
CHATTANOOGA, TENNESSEE

DESIGNED: J.T.S.	12/05
DRAWN: M.W.D.	12/05
CHECKED: G.M.C.	12/05
APPROVED: J.T.S.	12/05



CITY OF CHATTANOOGA, TENNESSEE
CITY LANDFILL ON BIRCHWOOD PIKE

VICINITY PLAN

JOB NUMBER

C05057-1

SCALE

1"=200'

DRAWING NUMBER

2.0

3			
3			
3			
REV. NO.	REV.	DATE	DESCRIPTION OF REVISION

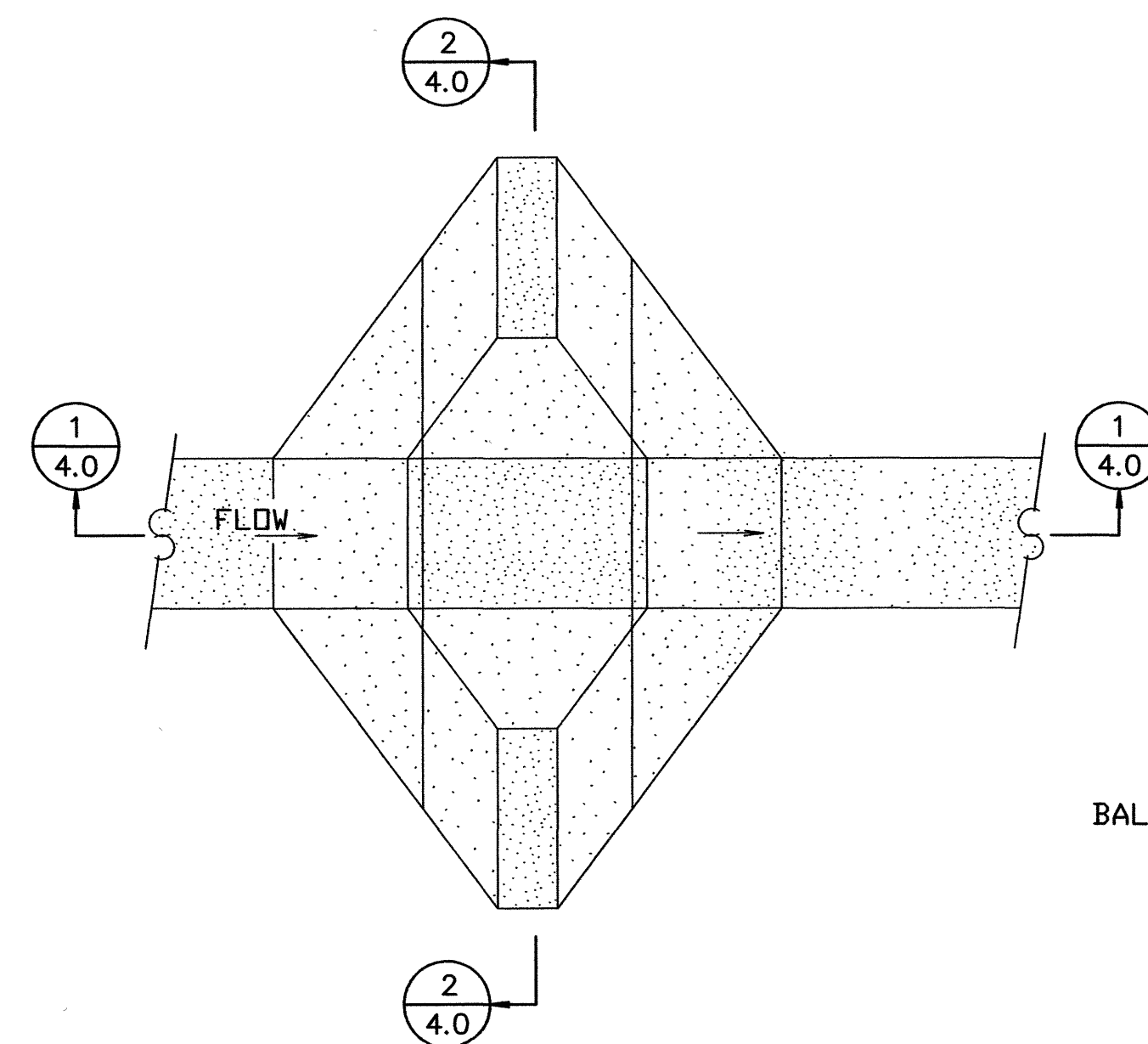


EROSION AND SEDIMENT CONTROL PLAN

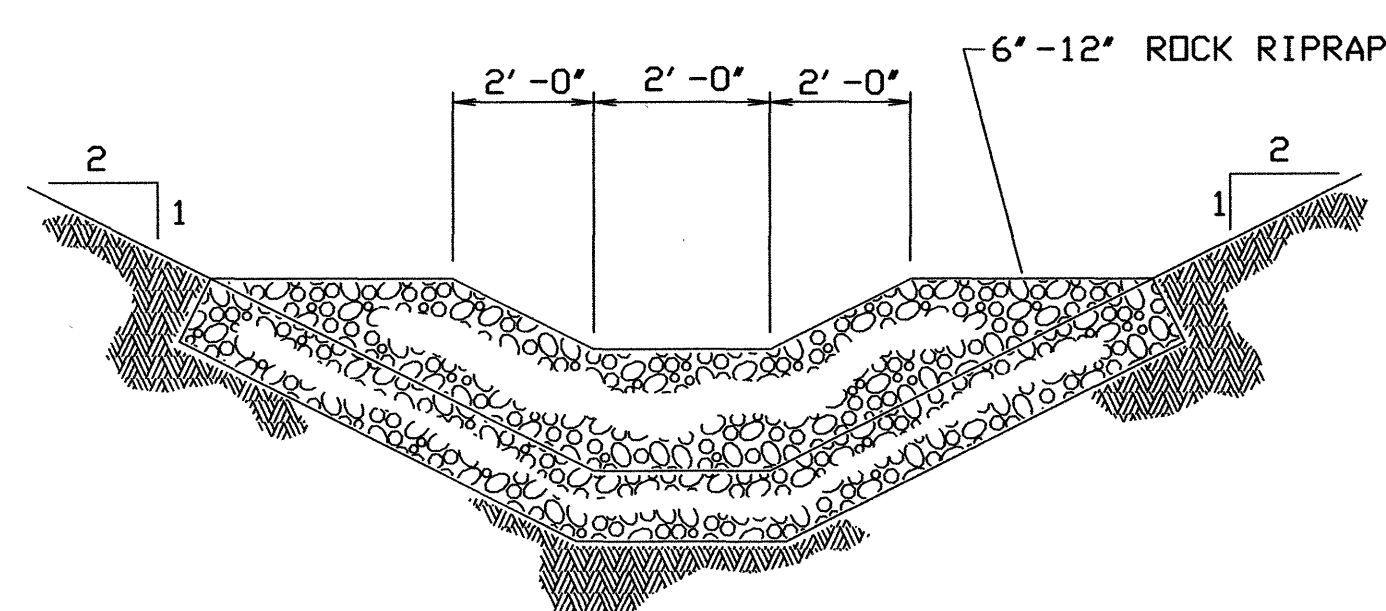
JOB NUMBER
C05057-1

SCALE
1"=100'

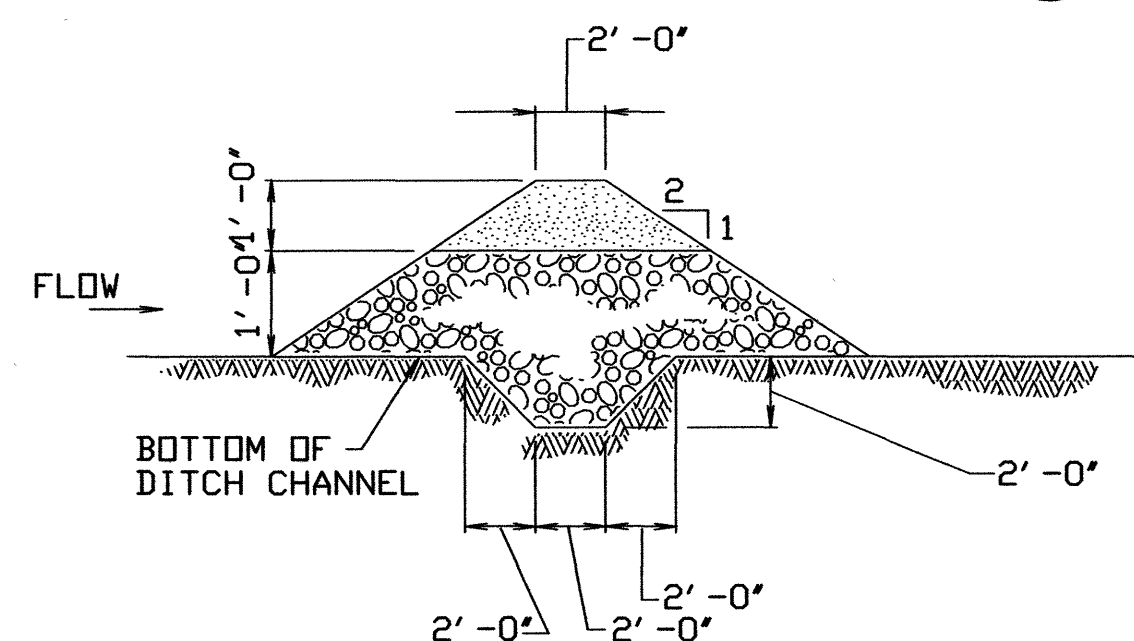
DRAWING NUMBER
30



STONE CHECK DAM-PLAN
NOT TO SCALE



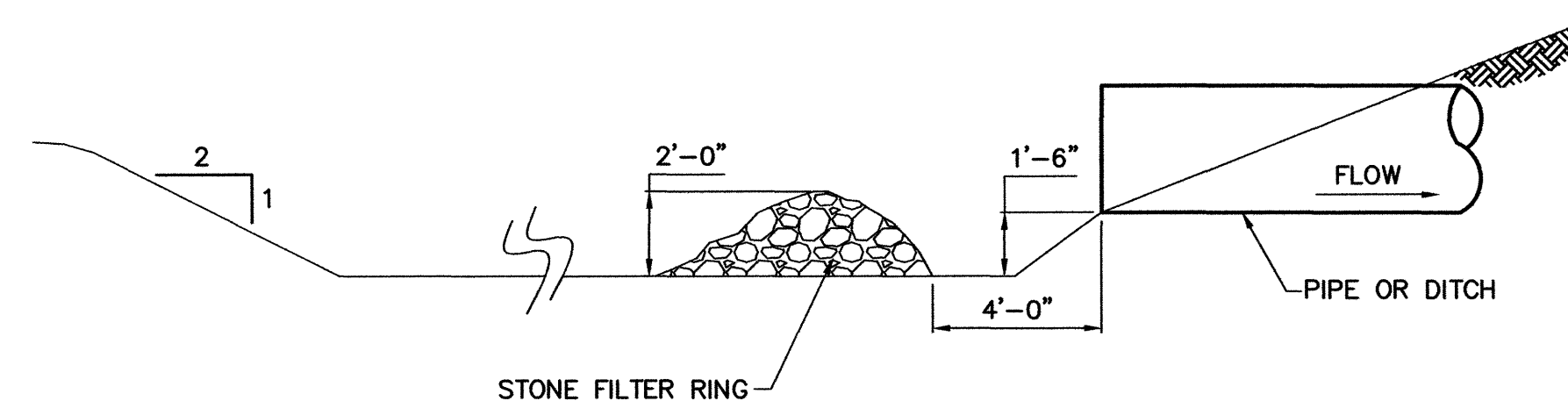
STONE CHECK DAM-SECTION 2
NOT TO SCALE 4.0



STONE CHECK DAM-SECTION

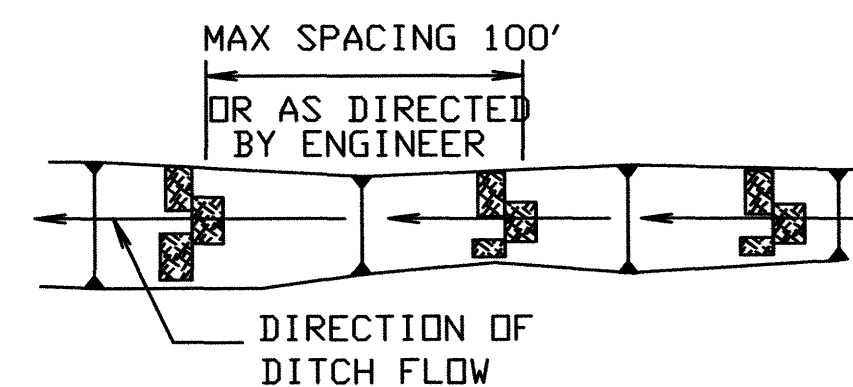
NOT TO SCALE

1
4.0

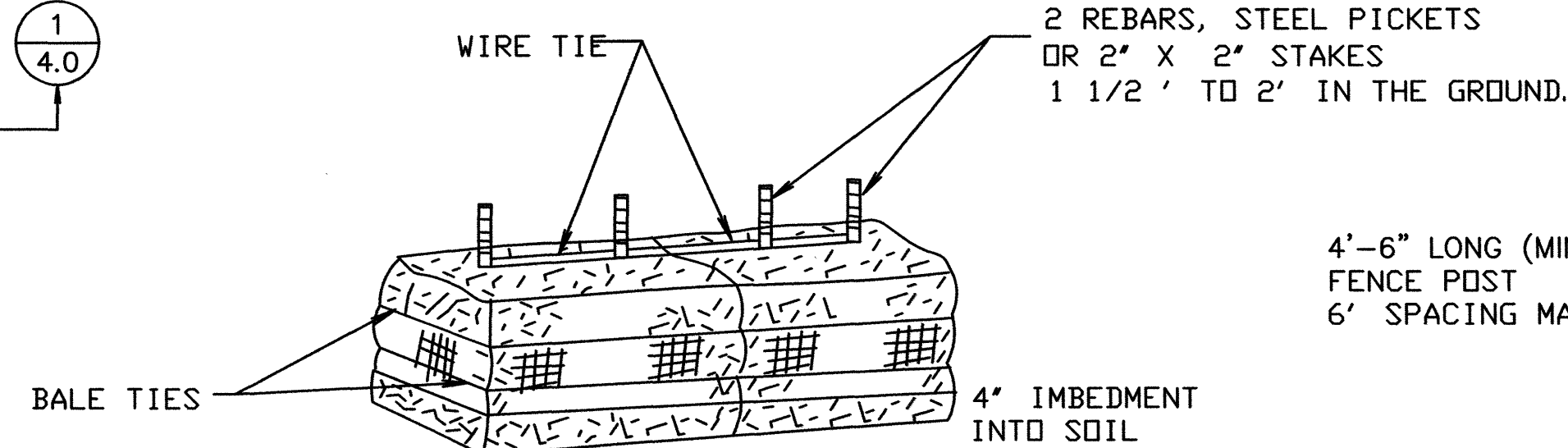


SECTION A-A

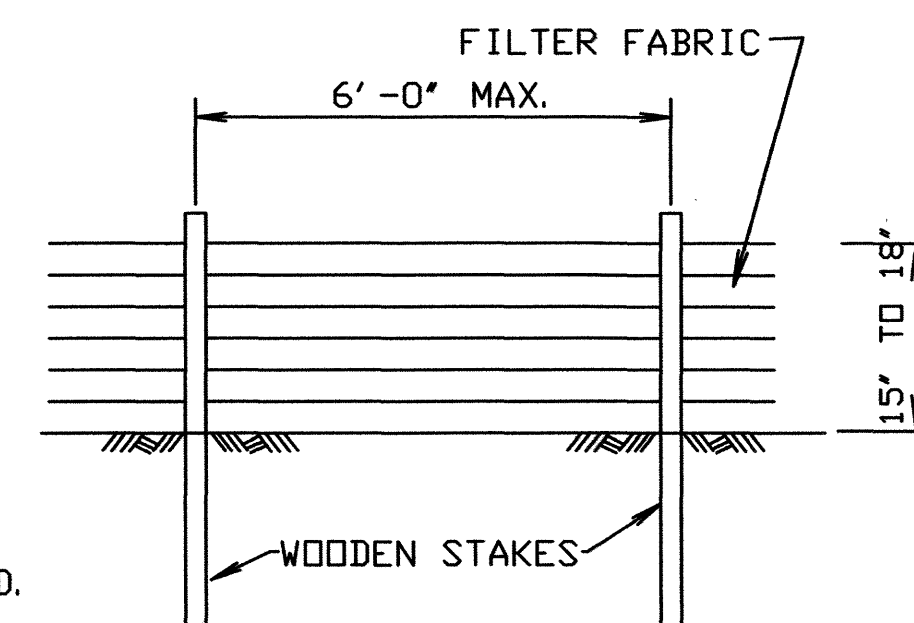
SCALE: 1/4"=1'



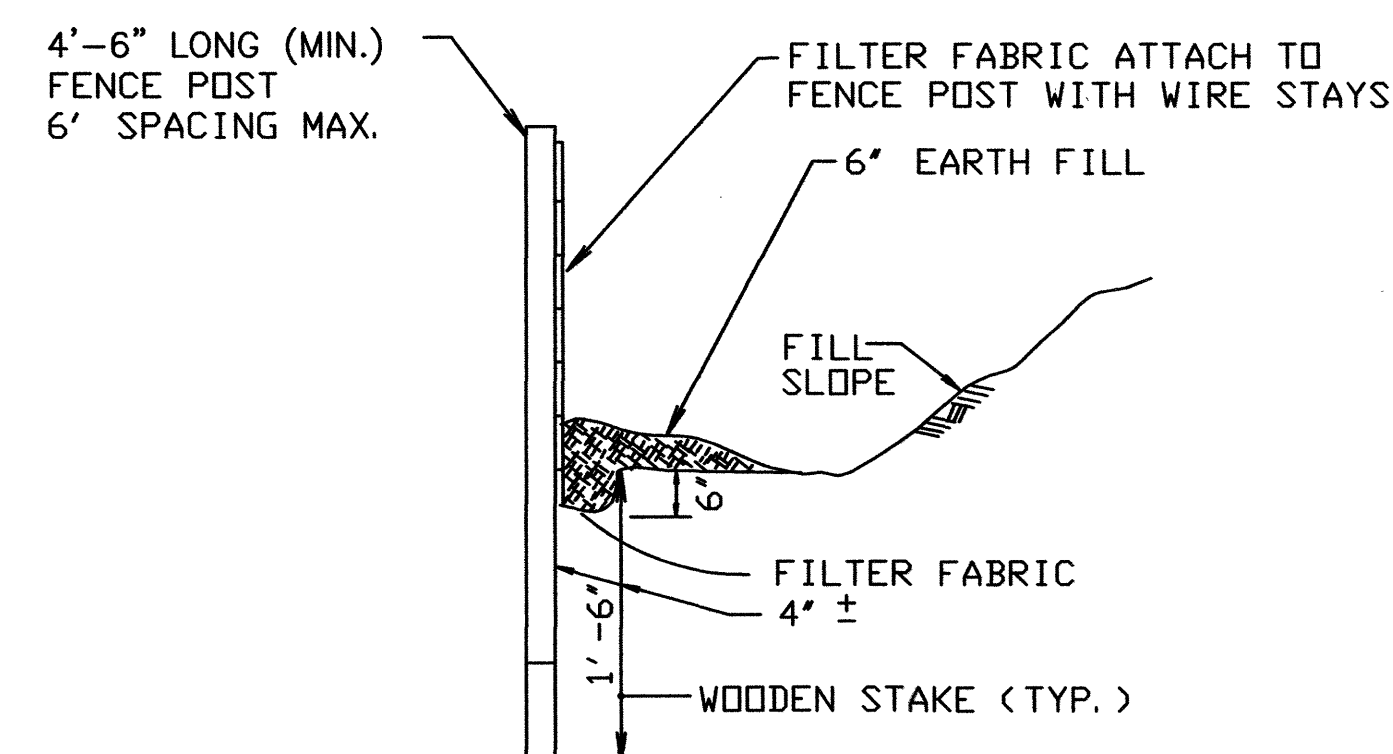
HAYBALE PLACEMENT



EROSION CONTROL HAYBALES

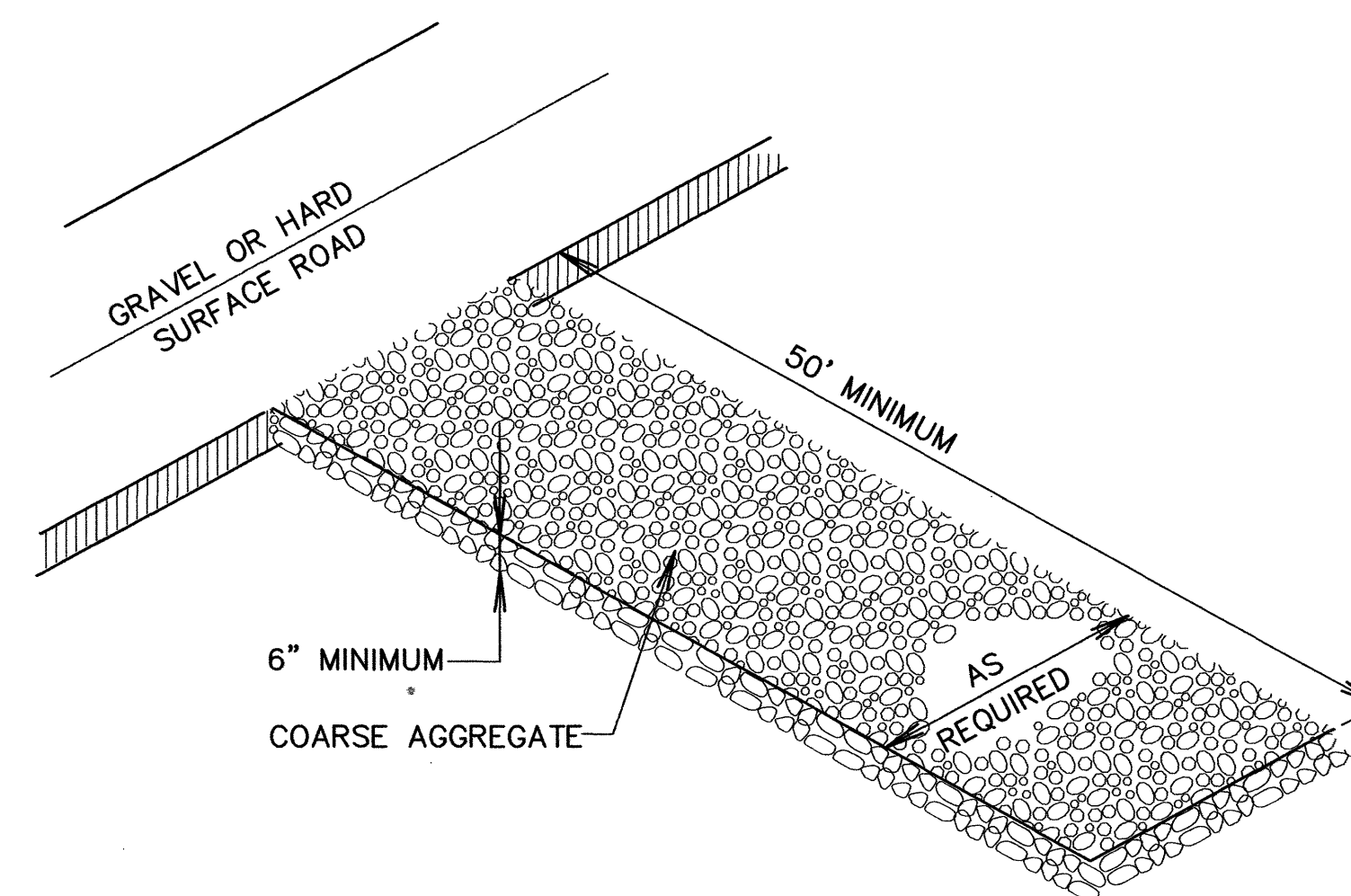


FRONT ELEVATION



SIDE ELEVATION

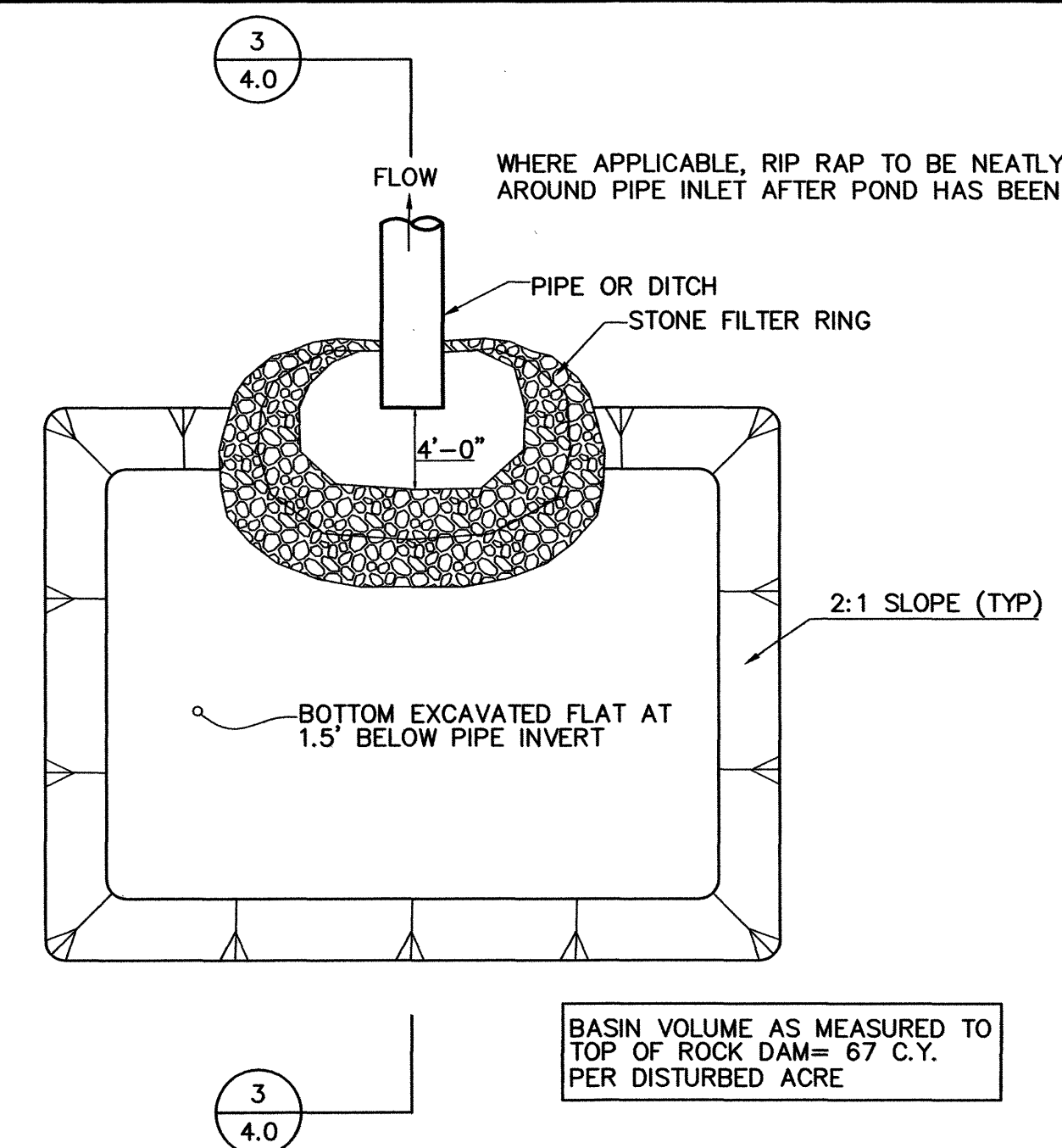
TYPICAL SILT FENCE
NOT TO SCALE



GRAVEL CONSTRUCTION ENTRANCE

- NOTES:




1. SILT FENCES AND FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL EVENTS; ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
2. SHOULD THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY; THE FABRIC SHALL BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER.
4. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE; PREPARED AND SEEDED.
5. AREA BEING DISTURBED IS 84 ACRES±
6. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION CONTROL MEASURES AND PRACTICES PRIOR TO OR CONCURRENT WITH LAND DISTURBING ACTIVITIES.
7. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL; ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
8. ALL AREAS DISTURBED BY CONSTRUCTION THAT ARE NOT PAVED WILL BE SEEDED FOR PERMANENT VEGETATION.
9. EROSION AND SEDIMENTATION CONTROL MEASURES MUST BE IN PLACE AND FUNCTIONAL BEFORE EARTH MOVING OPERATIONS BEGIN, AND MUST BE PROPERLY MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
10. CONSTRUCTION DEBRIS MUST BE KEPT FROM ENTERING STREAM CHANNELS AT ALL TIMES.
11. STOCKPILED SOIL SHALL BE LOCATED FAR ENOUGH FROM STREAMS AND DRAINAGE WAYS SO THAT RUNOFF CANNOT CARRY SEDIMENT DOWNSTREAM.
12. TEMPORARY SOIL STABILIZATION WITH APPROPRIATE ANNUAL VEGETATION SHALL BE APPLIED TO AREAS THAT WILL REMAIN UNFINISHED FOR MORE THAN 15 CALENDAR DAYS.
13. PERMANENT SOIL STABILIZATION WITH PERENNIAL VEGETATION SHALL BE APPLIED WITHIN 15 DAYS AFTER FINISH GRADING.



TEMPORARY SEDIMENT BASIN
NOT TO SCALE

NOTE: SEDIMENT TO BE REMOVED FROM TEMPORARY BASIN AFTER STABILIZATION OF DISTURBED AREAS HAS BEEN ACHIEVED. THE AREA WILL THEN BE BACKFILLED TO THE FINAL GRADES SHOWN ON THE PLANS.

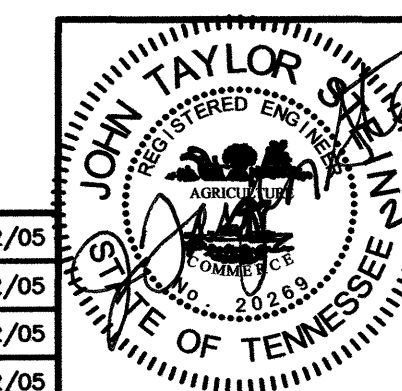
THIS DRAWING IS AN INSTRUMENT OF SERVICE OWNED BY CONSOLIDATED TECHNOLOGIES, INC. (CTI), WHICH SHALL BE DEEMED THE AUTHOR AND WHICH SHALL RETAIN ALL STATUTORY AND COMMON LAW RIGHTS, INCLUDING COPYRIGHTS. THIS DRAWING SHALL NOT BE SCANNED, COPIED, OR REUSED BY OTHERS IN ANY FORM OR USED FOR ANY OTHER PURPOSE OR PROJECT WITHOUT PRIOR WRITTEN CONSENT OF CTI. CTI IS NOT RESPONSIBLE FOR CONSEQUENCES RELATED TO UNAUTHORIZED USE OR REUSE OF THIS DRAWING OR PORTIONS THEREOF.

			
			
			
REV.NO.	BY:	DATE	DESCRIPTION OF REVISION



CONSOLIDATED TECHNOLOGIES, INC.
ENGINEERS IN WATER AND EARTH SCIENCES
CHATTANOOGA, TENNESSEE

DESIGNED: J.T.S.	12/0
DRAWN: M.W.D.	12/0
CHECKED: G.M.C.	12/0
APPROVED: J.T.S.	12/0

CITY OF CHATTANOOGA, TENNESSEE
CITY LANDFILL ON BIRCHWOOD PIKE

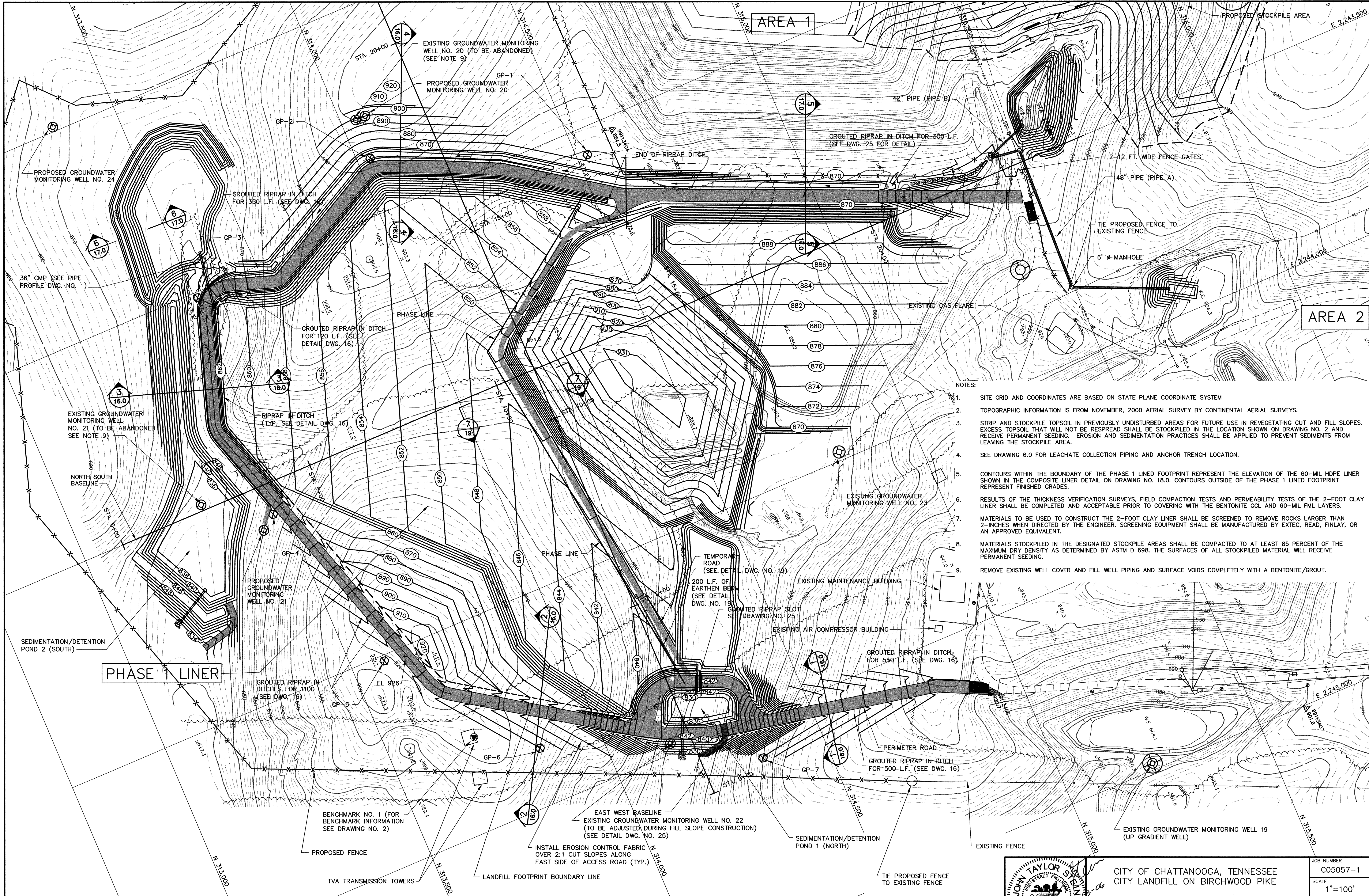
EROSION AND SEDIMENT CONTROL DETAILS

3 NUMBER
C05057-1

AS NOTED

DRAWING NUMBER

4.0



- NOTES:
1. SITE GRID AND COORDINATES ARE BASED ON STATE PLANE COORDINATE SYSTEM
 2. TOPOGRAPHIC INFORMATION IS FROM NOVEMBER, 2000 AERIAL SURVEY BY CONTINENTAL AERIAL SURVEYS.
 3. STRIP AND STOCKPILE TOPSOIL IN PREVIOUSLY UNDISTURBED AREAS FOR FUTURE USE IN REVEGETATING CUT AND FILL SLOPES. EXCESS TOPSOIL THAT WILL NOT BE RESPAID SHALL BE STOCKPILED IN THE LOCATION SHOWN ON DRAWING NO. 2 AND RECEIVE PERMANENT SEEDING. EROSION AND SEDIMENTATION PRACTICES SHALL BE APPLIED TO PREVENT SEDIMENTS FROM LEAVING THE STOCKPILE AREA.
 4. SEE DRAWING 6.0 FOR LEACHATE COLLECTION PIPING AND ANCHOR TRENCH LOCATION.
 5. CONTOURS WITHIN THE BOUNDARY OF THE PHASE 1 LINED FOOTPRINT REPRESENT THE ELEVATION OF THE 60-MIL HDPE LINER SHOWN IN THE COMPOSITE LINER DETAIL ON DRAWING NO. 18.0. CONTOURS OUTSIDE OF THE PHASE 1 LINED FOOTPRINT REPRESENT FINISHED GRADES.
 6. RESULTS OF THE THICKNESS VERIFICATION SURVEYS, FIELD COMPACTION TESTS AND PERMEABILITY TESTS OF THE 2-FOOT CLAY LINER SHALL BE COMPLETED AND ACCEPTABLE PRIOR TO COVERING WITH THE BENTONITE GCL AND 60-MIL FML LAYERS.
 7. MATERIALS TO BE USED TO CONSTRUCT THE 2-FOOT CLAY LINER SHALL BE SCREENED TO REMOVE ROCKS LARGER THAN 2-INCHES WHEN DIRECTED BY THE ENGINEER. SCREENING EQUIPMENT SHALL BE MANUFACTURED BY EXTEC, READ, FINLAY, OR AN APPROVED EQUIVALENT.
 8. MATERIALS STOCKPILED IN THE DESIGNATED STOCKPILE AREAS SHALL BE COMPACTED TO AT LEAST 85 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698. THE SURFACES OF ALL STOCKPILED MATERIAL WILL RECEIVE PERMANENT SEEDING.
 9. REMOVE EXISTING WELL COVER AND FILL WELL PIPING AND SURFACE VOIDS COMPLETELY WITH A BENTONITE/GROUT.

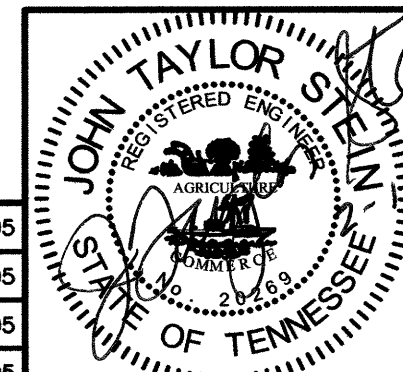
THIS DRAWING IS AN INSTRUMENT OF SERVICE OWNED BY CONSOLIDATED TECHNOLOGIES, INC. (CTI), WHICH SHALL BE DEEMED THE AUTHOR AND WHICH SHALL RETAIN ALL STATUTORY AND COMMON LAW RIGHTS. INCLUDING COPYRIGHTS. THIS DRAWING SHALL NOT BE SCANNED, COPIED, OR DISTRIBUTED TO OTHERS IN ANY FORM OR USED FOR ANY OTHER PURPOSE OR PROJECT WITHOUT PRIOR WRITTEN CONSENT OF CTI. CTI IS NOT RESPONSIBLE FOR CONSEQUENCES RELATED TO UNAUTHORIZED USE OR REUSE OF THIS DRAWING OR PORTIONS THEREOF.

REV. NO.	BY:	DATE	DESCRIPTION OF REVISION
1			
2			
3			
4			



CONSOLIDATED TECHNOLOGIES, INC.
ENGINEERS IN WATER AND EARTH SCIENCES
CHATTANOOGA, TENNESSEE

DESIGNED: J.T.S.	12/05
DRAWN: M.W.D.	12/05
CHECKED: G.M.C.	12/05
APPROVED: J.T.S.	12/05

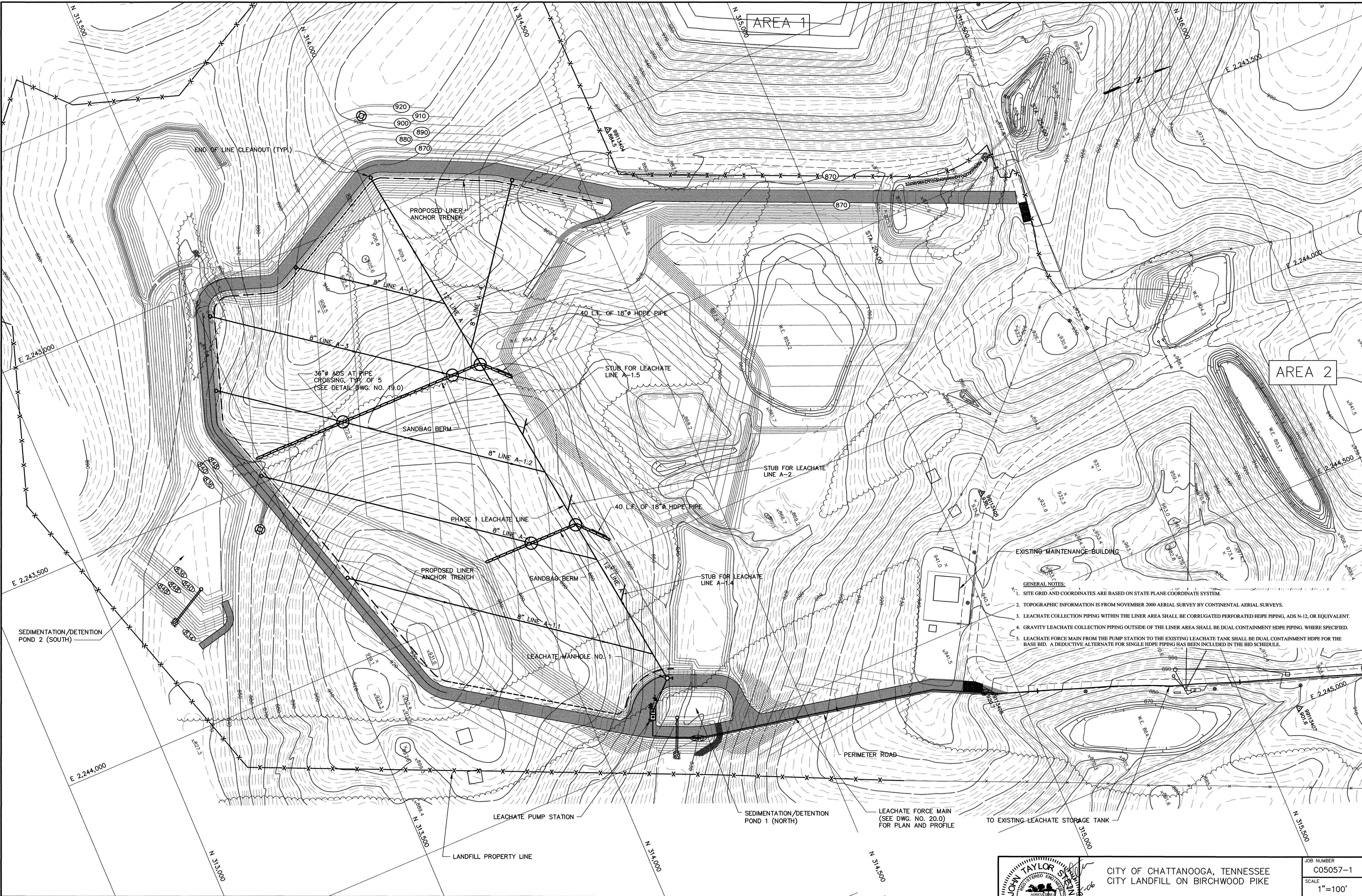


CITY OF CHATTANOOGA, TENNESSEE
CITY LANDFILL ON BIRCHWOOD PIKE

PHASE 1 GRADING PLAN

JOB NUMBER	C05057-1
SCALE	1"=100'
DRAWING NUMBER	5.0

S:\C05057-1\BRANDFILL.DWG, LEACHATE, 2/14/2006 8:50:24 AM



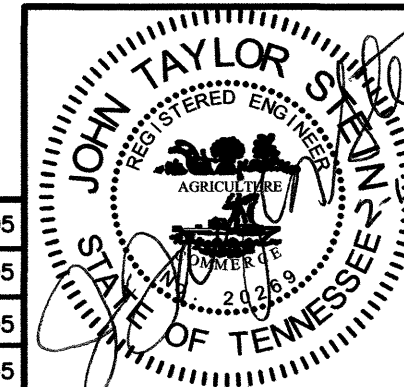
THIS DRAWING IS AN INSTRUMENT OF SERVICE OWNED BY CONSOLIDATED TECHNOLOGIES, INC. (CTI), WHICH SHALL BE DEEMED THE AUTHOR AND WHICH SHALL RETAIN ALL STATUTORY AND COMMON LAW RIGHTS INCLUDING COPYRIGHTS. THIS DRAWING SHALL NOT BE SCANNED, COPIED, OR DISTRIBUTED TO OTHERS IN ANY FORM OR USED FOR ANY OTHER PURPOSE OR PROJECT WITHOUT PRIOR WRITTEN CONSENT OF CTI. CTI IS NOT RESPONSIBLE FOR CONSEQUENCES RELATED TO UNAUTHORIZED USE OR REUSE OF THIS DRAWING OR PORTIONS THEREOF.

REV. NO.	BY	DATE	DESCRIPTION OF REVISION



CONSOLIDATED TECHNOLOGIES, INC.
ENGINEERS IN WATER AND EARTH SCIENCES
CHATTANOOGA, TENNESSEE

DESIGNED: J.T.S.	12/05
DRAWN: M.W.D.	12/05
CHECKED: G.M.C.	12/05
APPROVED: J.T.S.	12/05



CITY OF CHATTANOOGA, TENNESSEE
CITY LANDFILL ON BIRCHWOOD PIKE

LEACHATE COLLECTION
SYSTEM PLAN

JOB NUMBER
C05057-1

SCALE
1"=100'

DRAWING NUMBER
6.0

S:\C05057-1\BRANDPILL.DWG STOCKPILE, 2/10/2006 7:48:01 AM

SILT FENCE (480 L.F.)

EXISTING TVA
MODE LANDFILL

STOCKPILE AREA

SILT FENCE (110 L.F.)

SILT FENCE
(250 L.F.)

EXISTING SHED TO BE
REMOVED AND DISPOSED OF
BY CONTRACTOR

EXISTING AREA 1
LANDFILL

GENERAL NOTES:

1. FINAL CONTOURS ARE PROVIDED AS GUIDANCE IN PLACING MATERIAL IN THE STOCKPILE AREA SHOWN ON THIS DRAWING. THE AMOUNT OF EXCESS MATERIAL PRODUCED, FROM MASS EXCAVATION ACTIVITIES ASSOCIATED WITH DRAWING NO. 5 ARE EXPECTED TO BE LESS THAN THE VOLUME AVAILABLE. THE FINAL ELEVATIONS OF THE TOP OF THE STOCKPILE SHOULD THEREFORE BE LOWER THAN THOSE SHOWN ON THIS DRAWING.
2. STOCKPILED MATERIALS SHALL BE COMPACTED TO AT LEAST 85 PERCENT OF OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698.
3. FINAL SURFACE SHALL RECEIVE PERMANENT SEEDING AND 6 - INCHES OF MULCH PRODUCED FROM CLEARING OPERATIONS (IF AVAILABLE). IF NO MULCH IS AVAILABLE, FINAL SURFACES SHALL RECEIVE PERMANENT SEEDING ONLY. NO TOPSOIL RESPREADING WILL BE REQUIRED FOR THIS STOCKPILE.

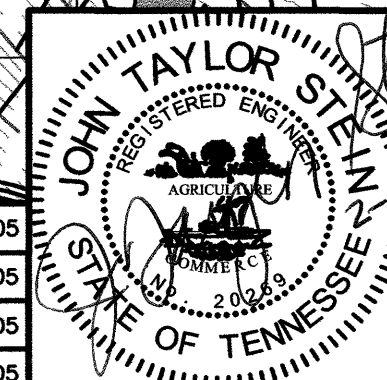
THIS DRAWING IS AN INSTRUMENT OF SERVICE OWNED BY CONSOLIDATED TECHNOLOGIES, INC. (CTI), WHICH SHALL BE DEEMED THE AUTHOR AND WHICH SHALL RETAIN ALL STATUTORY AND COMMON LAW RIGHTS, INCLUDING COPYRIGHTS. THIS DRAWING SHALL NOT BE SCANNED, COPIED, OR DISTRIBUTED TO OTHERS IN ANY FORM OR USED FOR ANY OTHER PURPOSE OR PROJECT WITHOUT PRIOR WRITTEN CONSENT OF CTI. CTI IS NOT RESPONSIBLE FOR CONSEQUENCES RELATED TO UNAUTHORIZED USE OR REUSE OF THIS DRAWING OR PORTIONS THEREOF.

REV. NO.	BY:	DATE	DESCRIPTION OF REVISION
1			
2			
3			



CONSOLIDATED TECHNOLOGIES, INC.
ENGINEERS IN WATER AND EARTH SCIENCES
CHATTANOOGA, TENNESSEE

DESIGNED: J.T.S.	12/05
DRAWN: M.W.D.	12/05
CHECKED: G.M.C.	12/05
APPROVED: J.T.S.	12/05



CITY OF CHATTANOOGA, TENNESSEE
CITY LANDFILL ON BIRCHWOOD PIKE

PLAN OF STOCKPILE AREA

JOB NUMBER
C05057-1

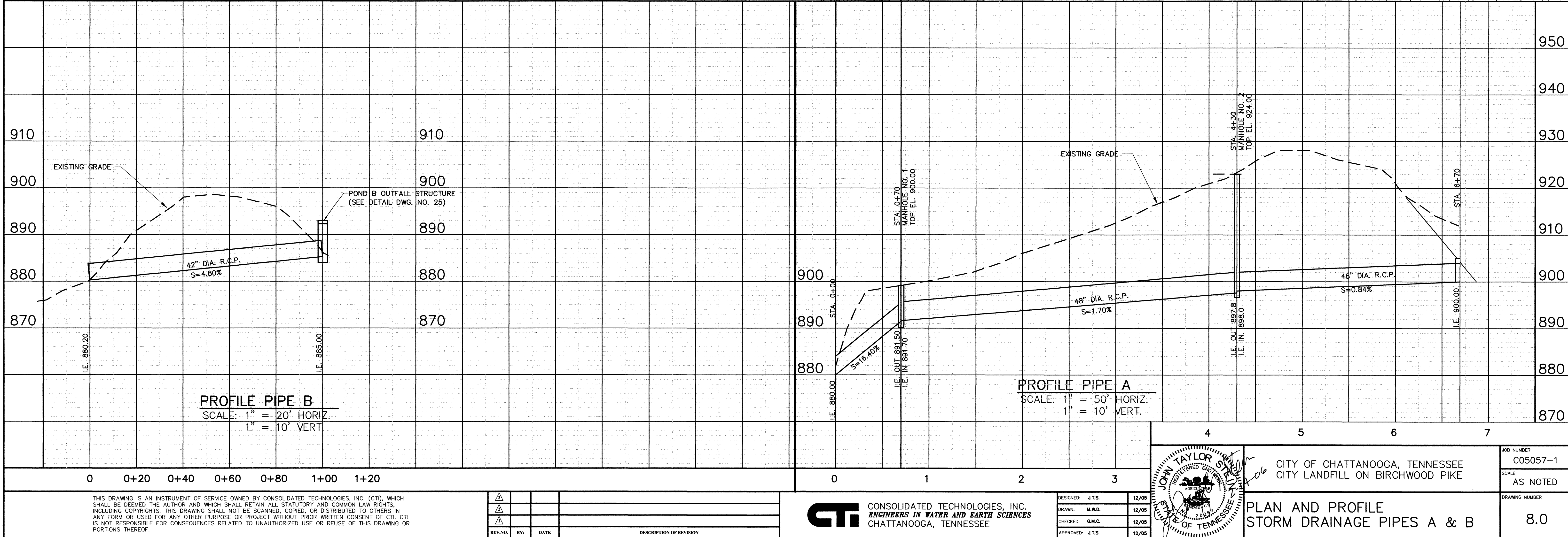
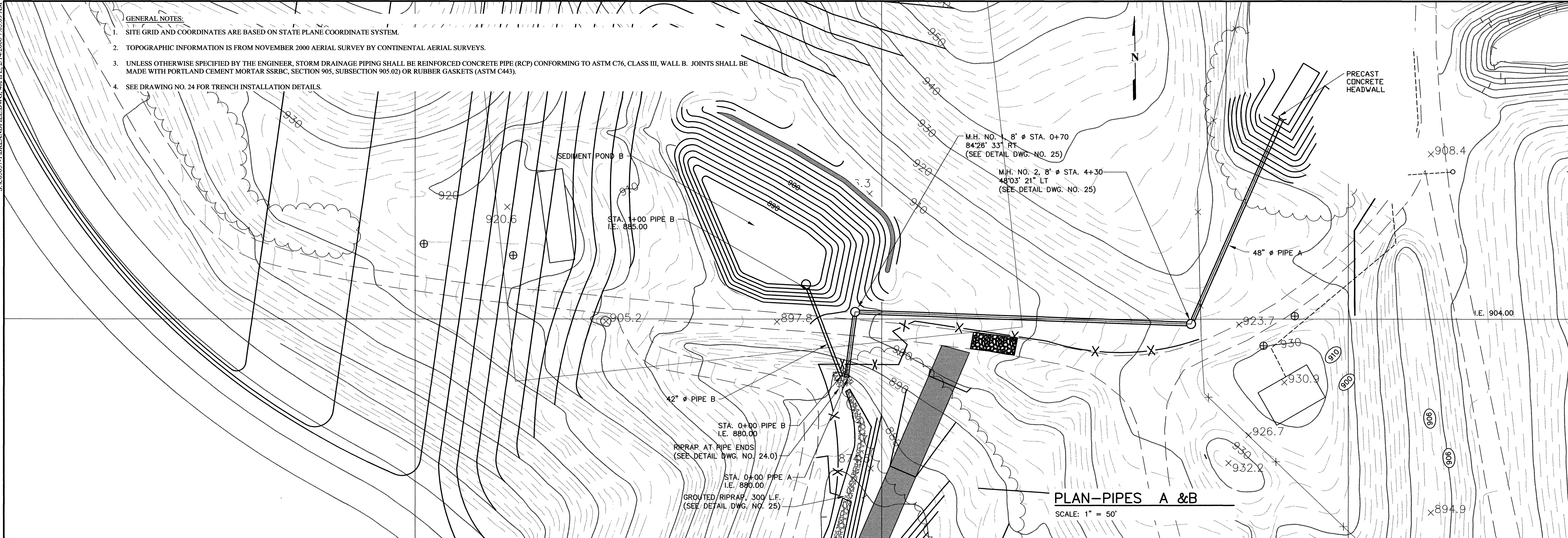
SCALE
1"=100'

DRAWING NUMBER
7.0

S:\C05057-1\BRLANDFILL.DWG, 48PIPE, 2/14/2006 7:05:09 AM

GENERAL NOTES:

1. SITE GRID AND COORDINATES ARE BASED ON STATE PLANE COORDINATE SYSTEM.
2. TOPOGRAPHIC INFORMATION IS FROM NOVEMBER 2000 AERIAL SURVEY BY CONTINENTAL AERIAL SURVEYS.
3. UNLESS OTHERWISE SPECIFIED BY THE ENGINEER, STORM DRAINAGE PIPING SHALL BE REINFORCED CONCRETE PIPE (RCP) CONFORMING TO ASTM C76, CLASS III, WALL B. JOINTS SHALL BE MADE WITH PORTLAND CEMENT MORTAR SSRBC, SECTION 905, SUBSECTION 905.02) OR RUBBER GASKETS (ASTM C443).
4. SEE DRAWING NO. 24 FOR TRENCH INSTALLATION DETAILS.



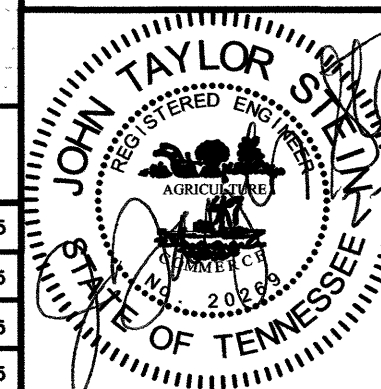
THIS DRAWING IS AN INSTRUMENT OF SERVICE OWNED BY CONSOLIDATED TECHNOLOGIES, INC. (CTI), WHICH SHALL BE DEEMED THE AUTHOR AND WHICH SHALL RETAIN ALL STATUTORY AND COMMON LAW RIGHTS, INCLUDING COPYRIGHTS. THIS DRAWING SHALL NOT BE SCANNED, COPIED, OR DISTRIBUTED TO OTHERS IN ANY FORM OR USED FOR ANY OTHER PURPOSE OR PROJECT WITHOUT PRIOR WRITTEN CONSENT OF CTI. CTI IS NOT RESPONSIBLE FOR CONSEQUENCES RELATED TO UNAUTHORIZED USE OR REUSE OF THIS DRAWING OR PORTIONS THEREOF.

REV. NO.	BY	DATE	DESCRIPTION OF REVISION



CONSOLIDATED TECHNOLOGIES, INC.
ENGINEERS IN WATER AND EARTH SCIENCES
CHATTANOOGA, TENNESSEE

DESIGNED: J.T.S.	12/05
DRAWN: M.W.D.	12/05
CHECKED: G.M.C.	12/05
APPROVED: J.T.S.	12/05



CITY OF CHATTANOOGA, TENNESSEE
CITY LANDFILL ON BIRCHWOOD PIKE

PLAN AND PROFILE
STORM DRAINAGE PIPES A & B

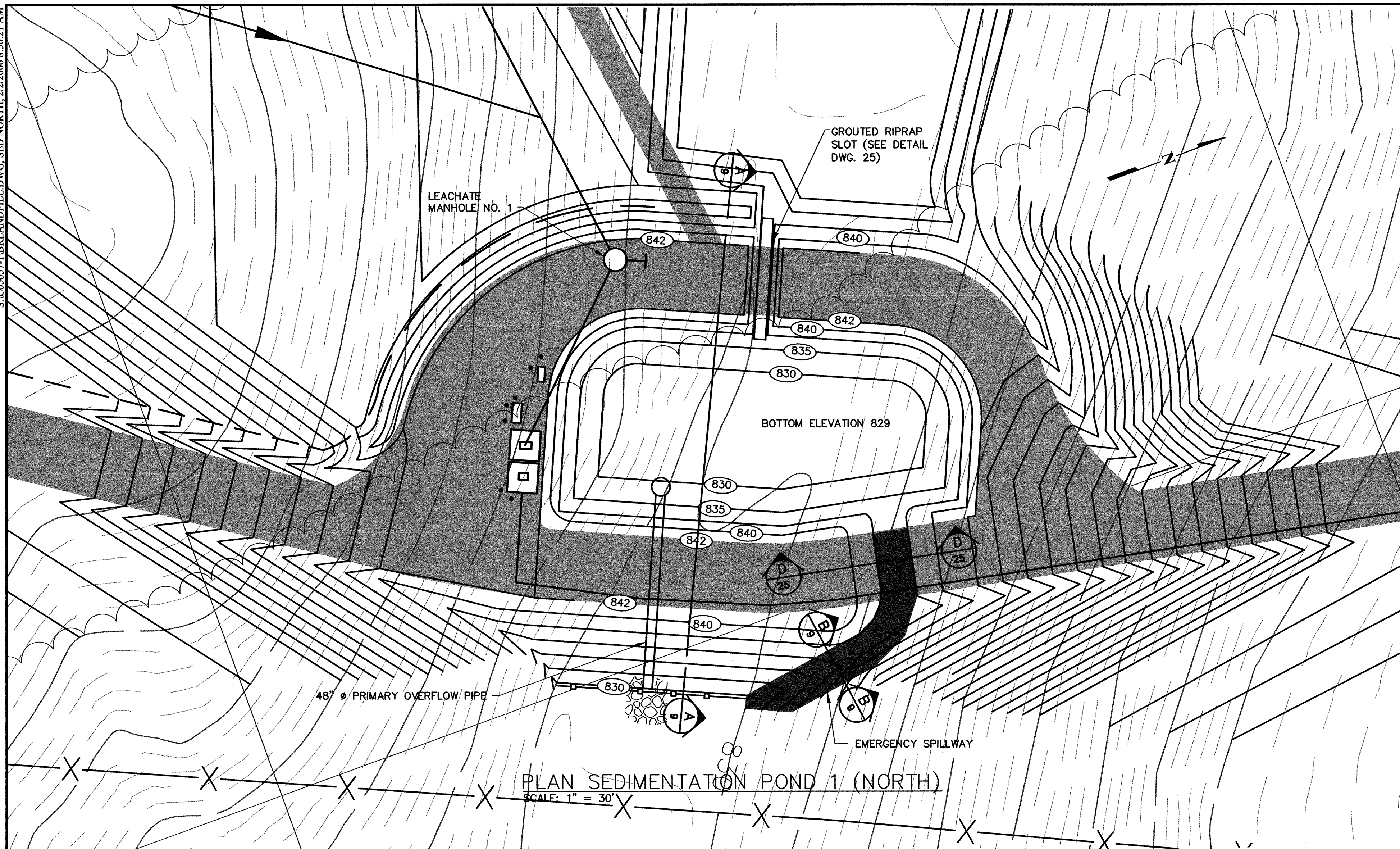
JOB NUMBER
C05057-1

SCALE
AS NOTED

DRAWING NUMBER

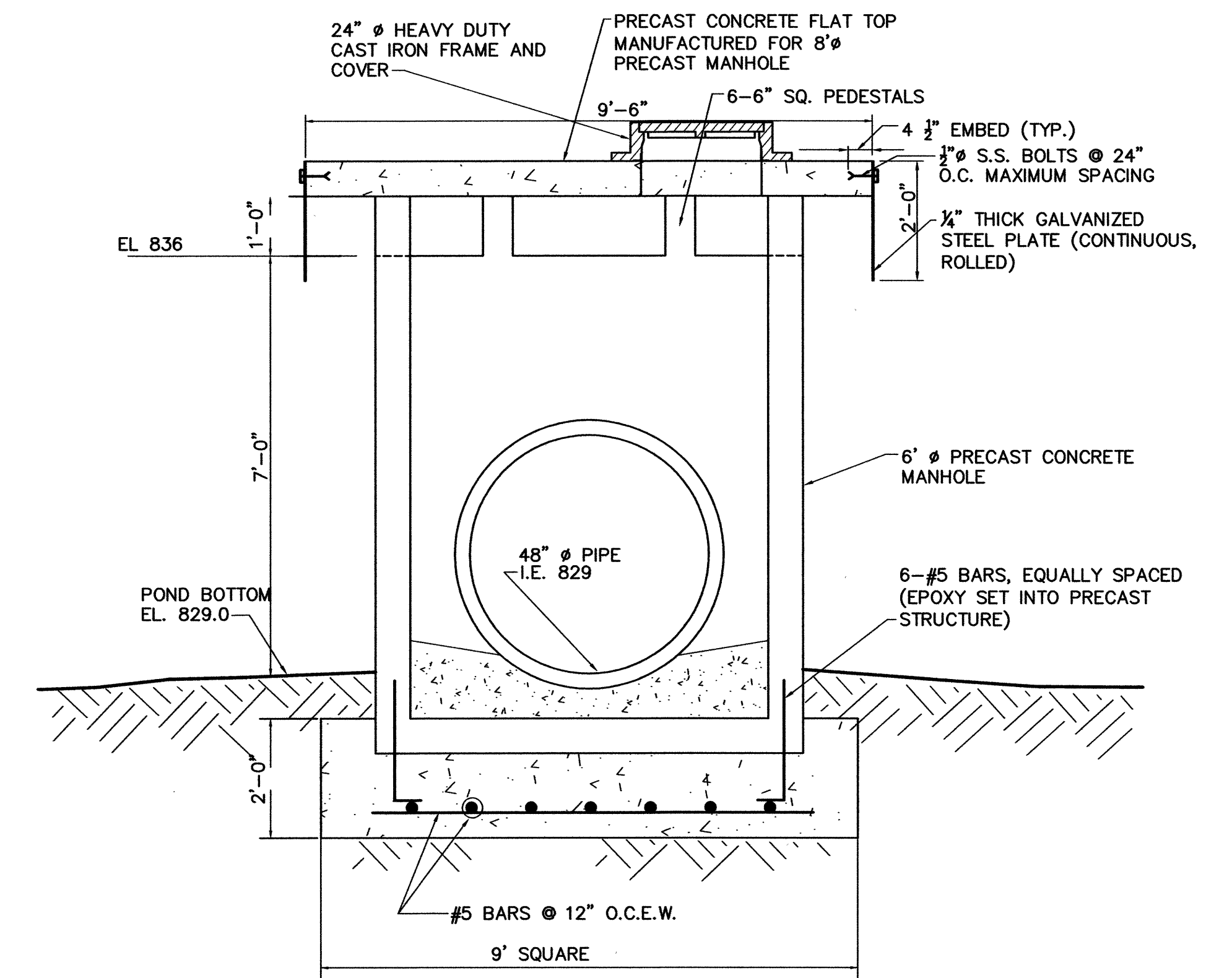
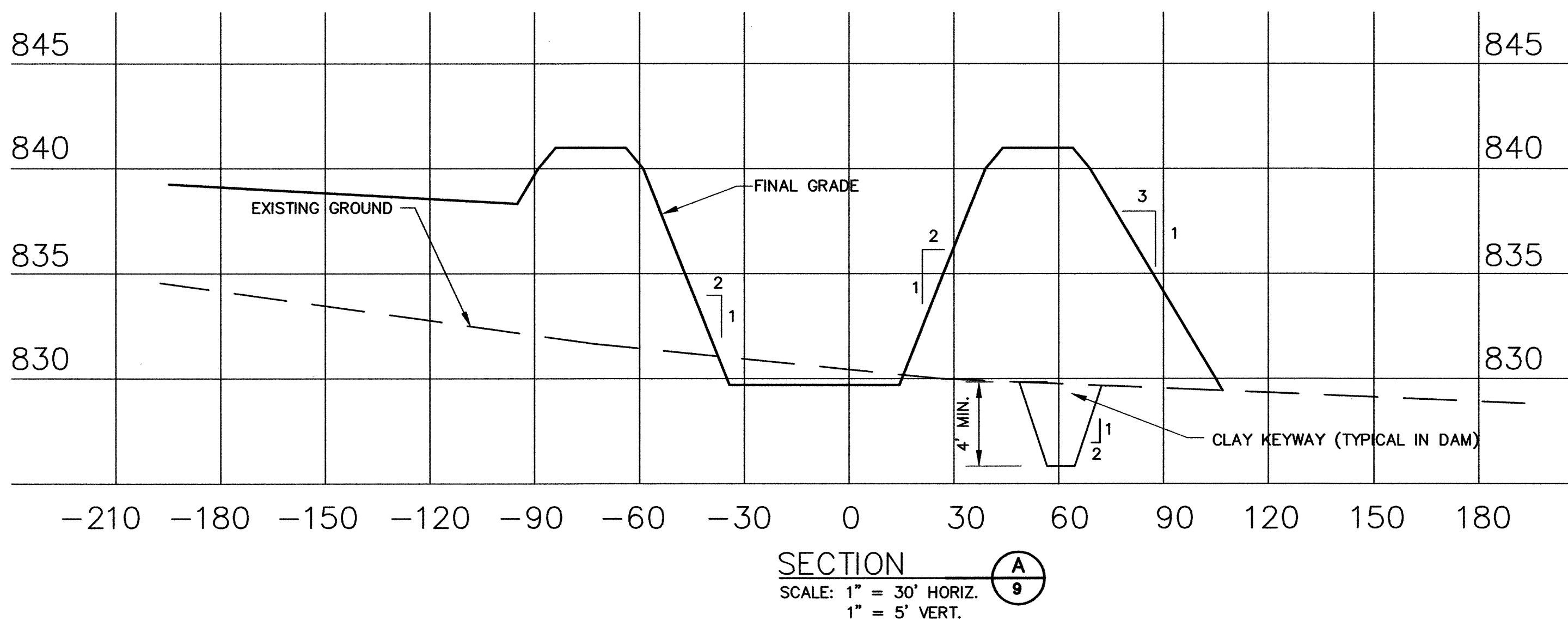
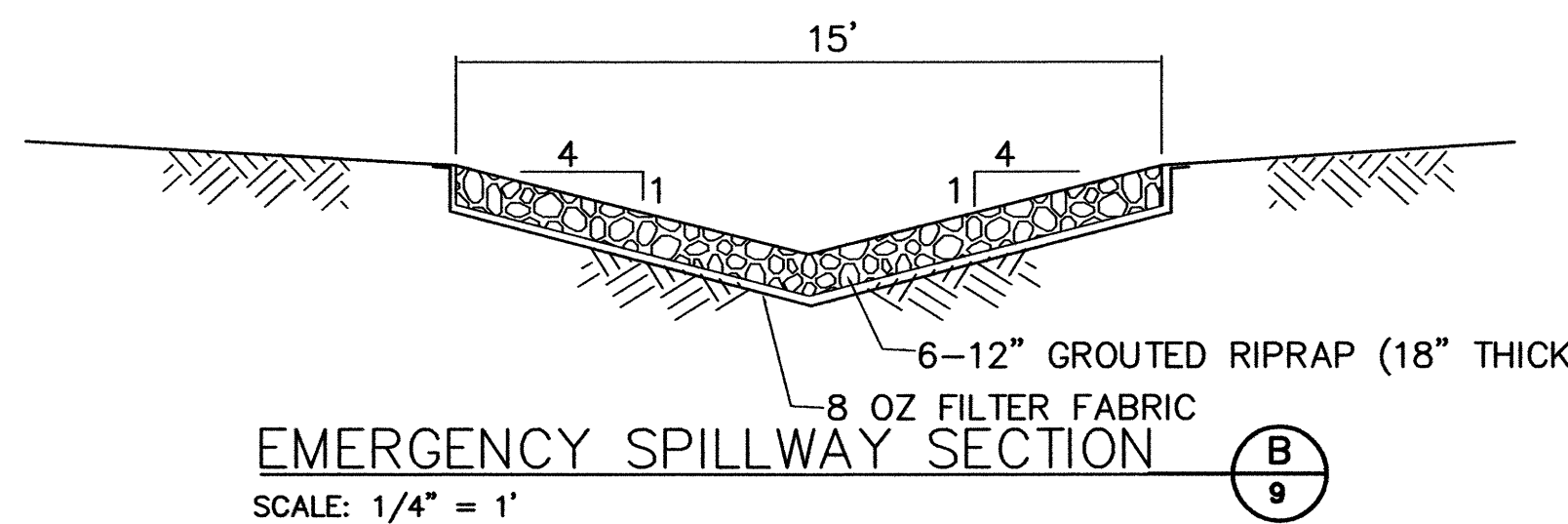
8.0

S:\C05057-1\BIRLANDFILL.DWG, SED NORTH, 2/2/2006 8:56:21 AM



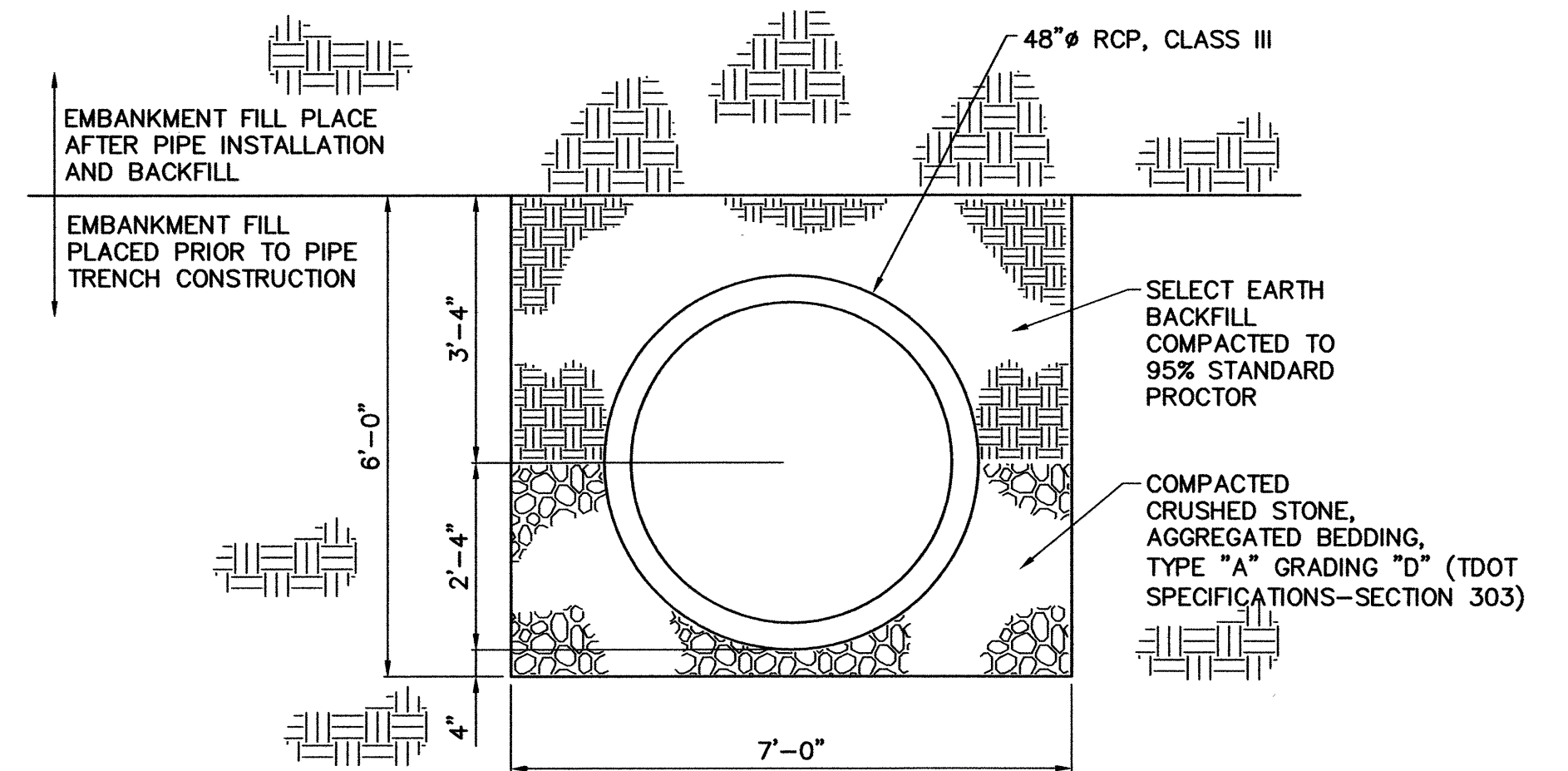
GENERAL NOTES:

1. SITE GRID AND COORDINATES ARE BASED ON STATE PLANE COORDINATE SYSTEM.
2. TOPOGRAPHIC INFORMATION IS FROM NOVEMBER 2000 AERIAL SURVEY BY CONTINENTAL AERIAL SURVEYS.
3. TWO ANTI-SEEP COLLARS SHALL BE PROVIDED ON THE PRINCIPAL SPILLWAY PIPE AS SHOWN.
4. CONCRETE FOR THE OVERFLOW PIPE FOOTING SHALL BE CLASS "A".
5. FILL SOIL AROUND PRINCIPAL SPILLWAY PIPE SHALL BE PLACED IN 4-INCH LAYERS AND COMPACTED TO 95% OF THE MAXIMUM DENSITY AT $\pm 4\%$ OPTIMUM MOISTURE AS DETERMINED BY ASTM D 698.
6. KEYWAY TRENCH SHALL BE A MINIMUM OF 4'-0" DEEP OR TO BEDROCK.



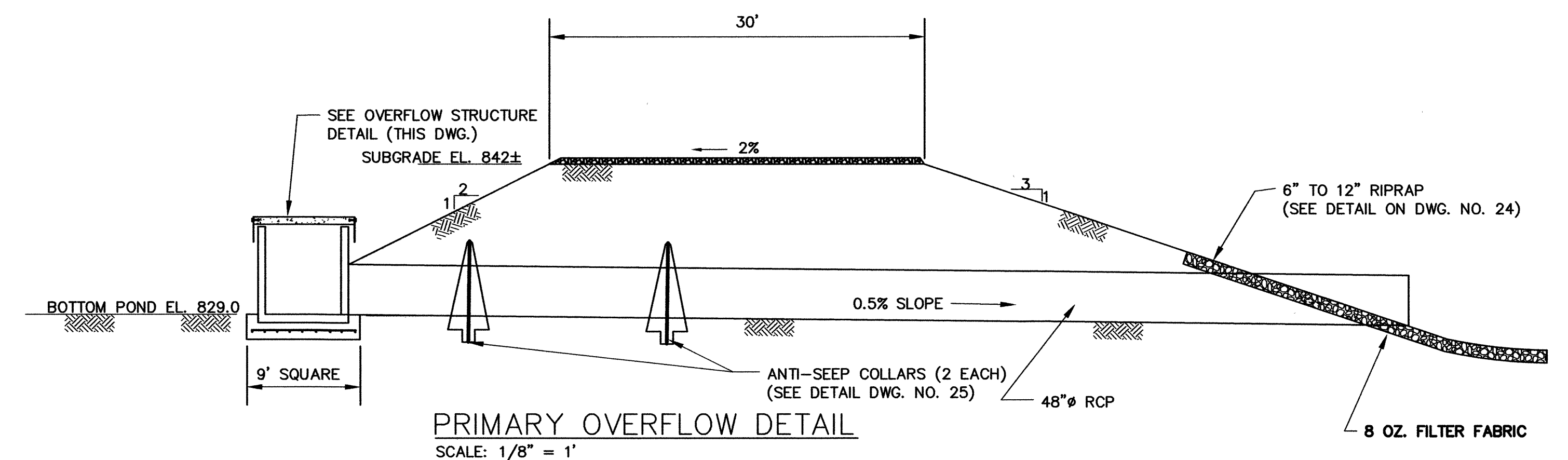
OVERFLOW STRUCTURE DETAIL

SCALE: 1/2" = 1'



48" RCP PRINCIPAL SPILLWAY PIPE
INSTALLATION DETAIL

SCALE: 1/2" = 1'-0"



PRIMARY OVERFLOW DETAIL

SCALE: 1/8" = 1'

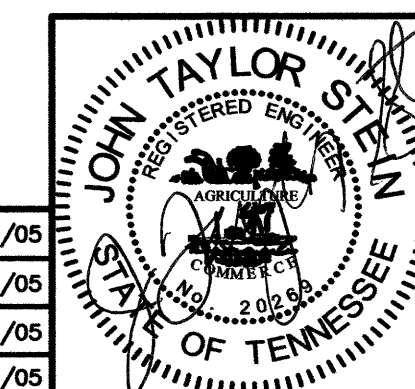
THIS DRAWING IS AN INSTRUMENT OF SERVICE OWNED BY CONSOLIDATED TECHNOLOGIES, INC. (CTI), WHICH SHALL BE DEEMED THE AUTHOR AND WHICH SHALL RETAIN ALL STATUTORY AND COMMON LAW RIGHTS, INCLUDING COPYRIGHTS. THIS DRAWING SHALL NOT BE SCANNED, COPIED, OR DISTRIBUTED TO OTHERS IN ANY FORM OR USED FOR ANY OTHER PURPOSE OR PROJECT WITHOUT PRIOR WRITTEN CONSENT OF CTI. CTI IS NOT RESPONSIBLE FOR CONSEQUENCES RELATED TO UNAUTHORIZED USE OR REUSE OF THIS DRAWING OR PORTIONS THEREOF.

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
1			
2			
3			



CONSOLIDATED TECHNOLOGIES, INC.
ENGINEERS IN WATER AND EARTH SCIENCES
CHATTANOOGA, TENNESSEE

DESIGNED: J.T.S.	12/05
DRAWN: M.W.D.	12/05
CHECKED: G.M.C.	12/05
APPROVED: J.T.S.	12/05



CITY OF CHATTANOOGA, TENNESSEE
CITY LANDFILL ON BIRCHWOOD PIKE

SEDIMENTATION/DETENTION
POND NO. 1 (NORTH)

JOB NUMBER

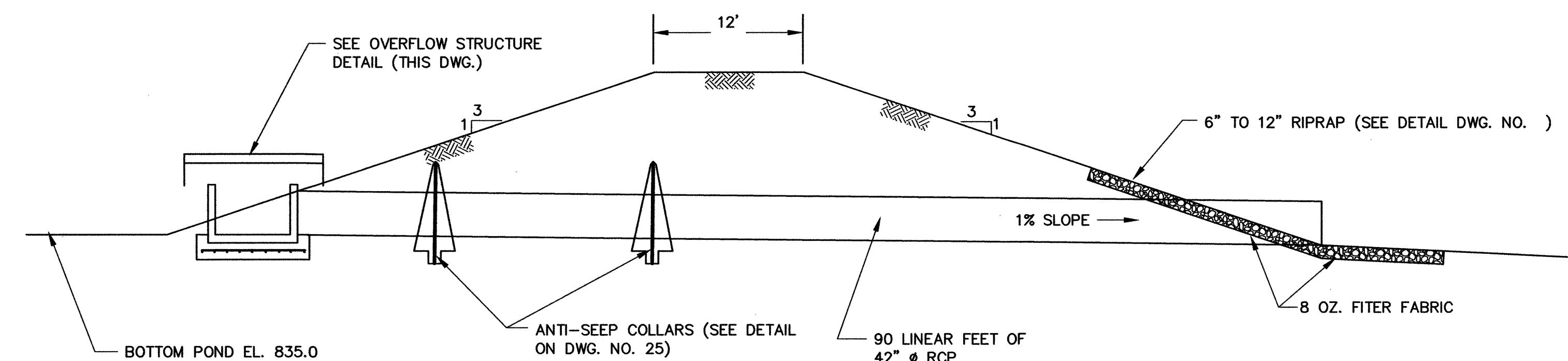
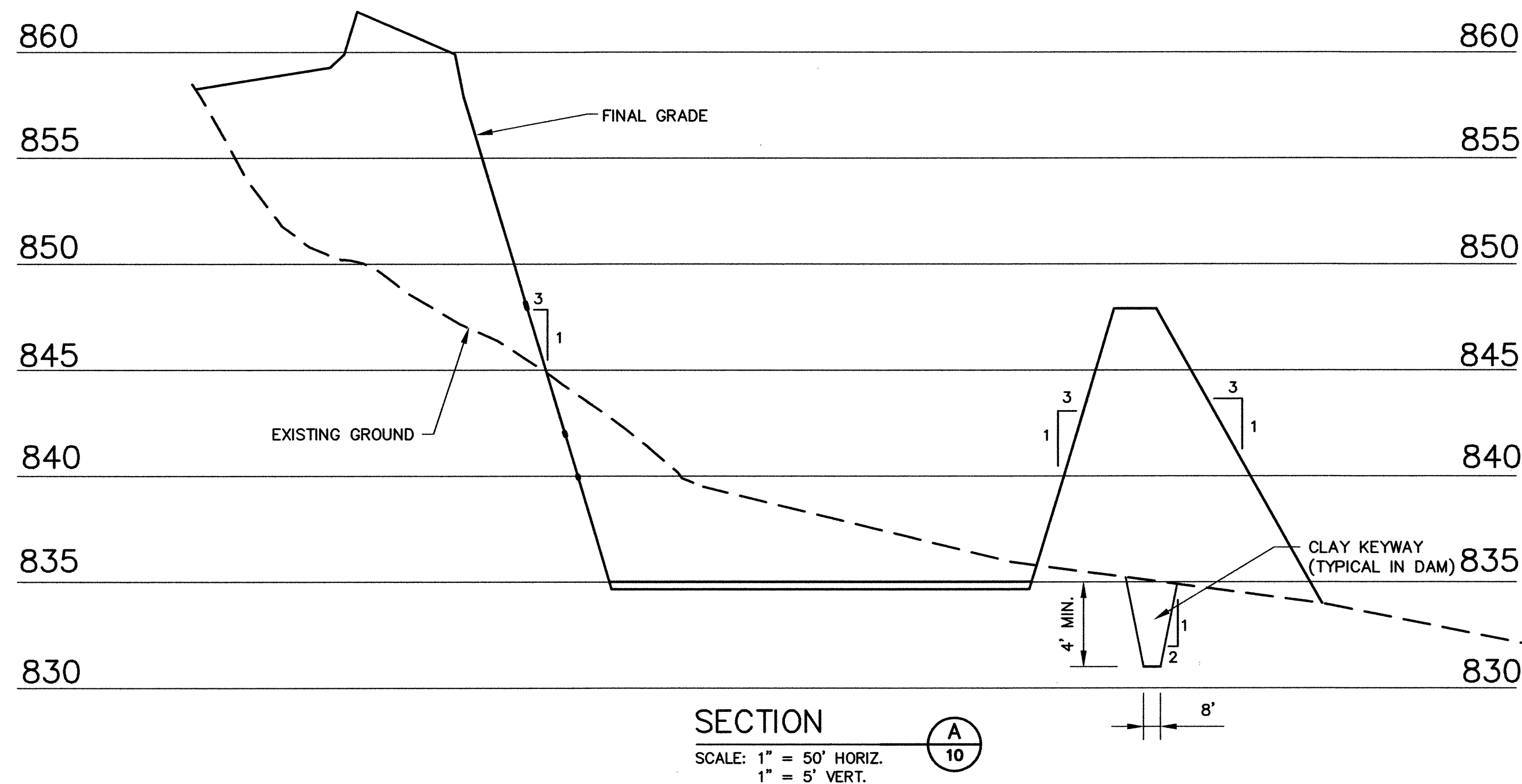
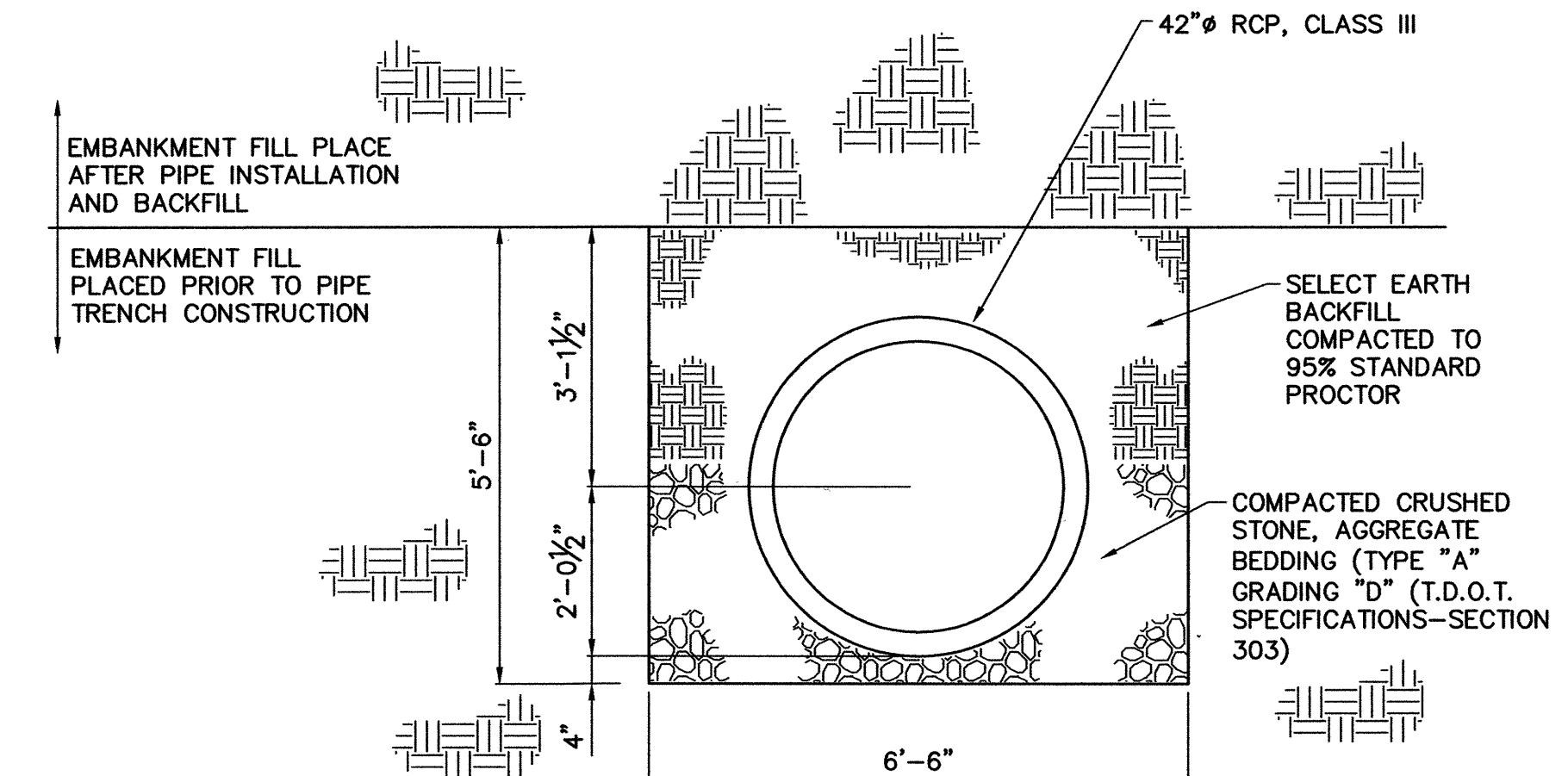
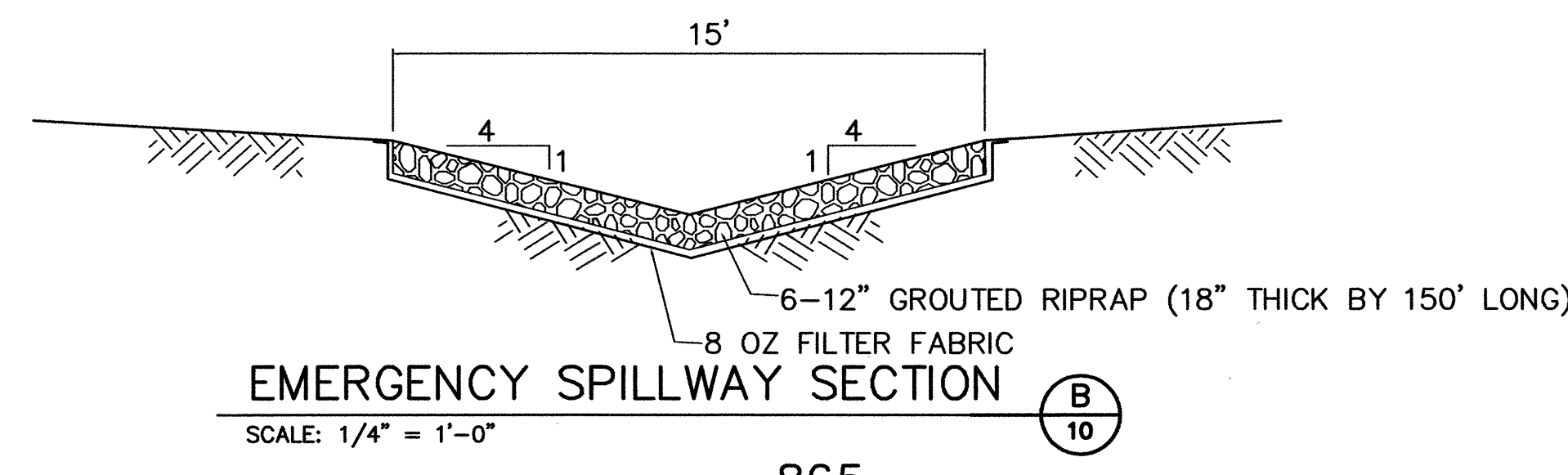
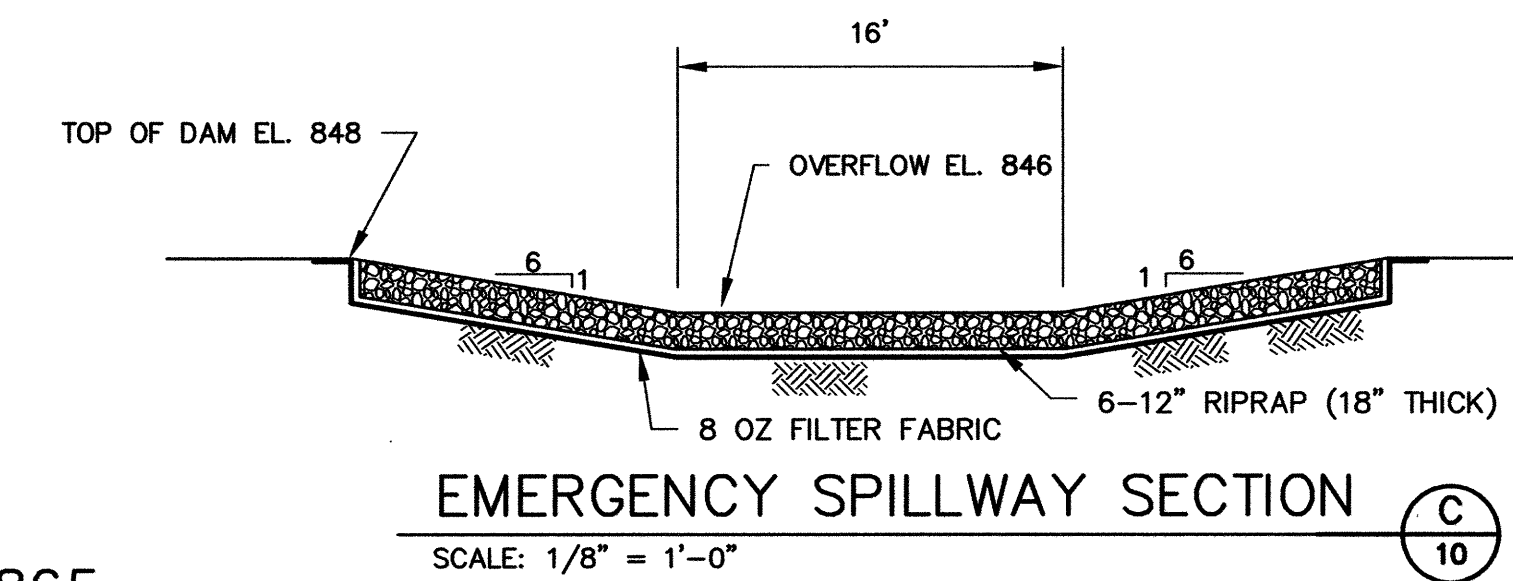
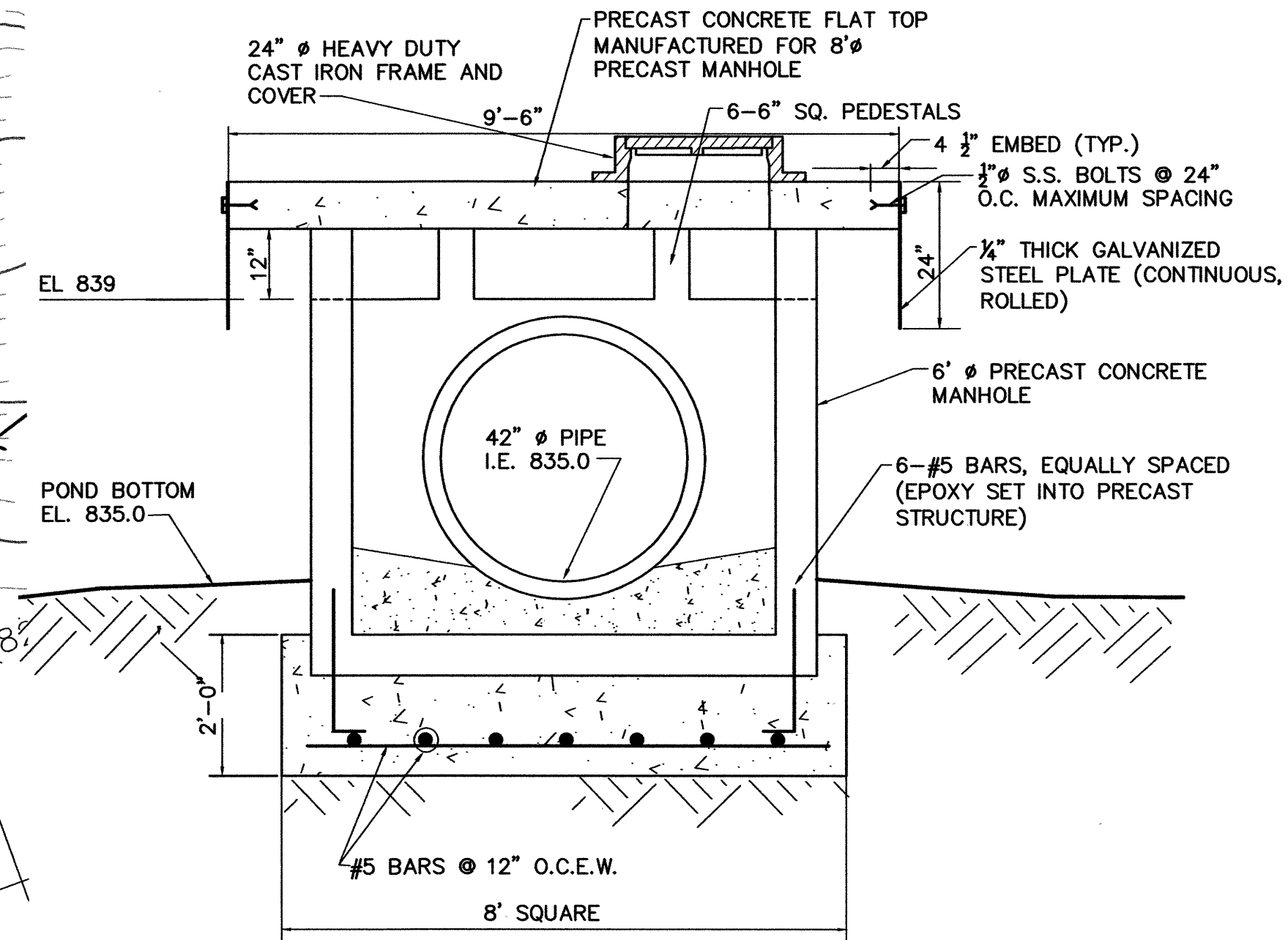
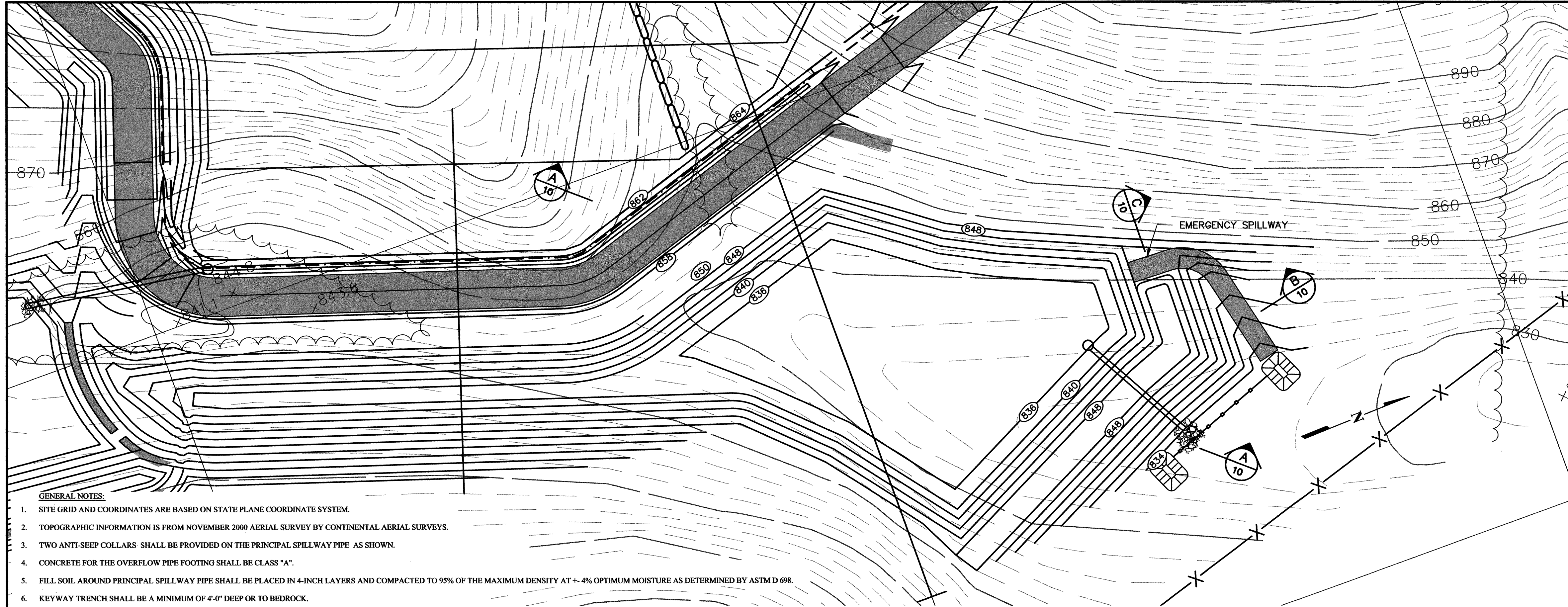
C05057-1

SCALE

AS NOTED

DRAWING NUMBER

9.0



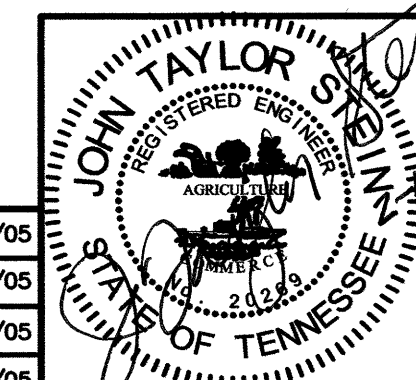
THIS DRAWING IS AN INSTRUMENT OF SERVICE OWNED BY CONSOLIDATED TECHNOLOGIES, INC. (CTI), WHICH SHALL BE DEEMED THE AUTHOR AND WHICH SHALL RETAIN ALL STATUTORY AND COMMON LAW RIGHTS, INCLUDING COPYRIGHTS. THIS DRAWING SHALL NOT BE SCANNED, COPIED, OR DISTRIBUTED TO OTHERS IN ANY FORM OR USED FOR ANY OTHER PURPOSE OR PROJECT WITHOUT PRIOR WRITTEN CONSENT OF CTI. CTI IS NOT RESPONSIBLE FOR CONSEQUENCES RELATED TO UNAUTHORIZED USE OR REUSE OF THIS DRAWING OR PORTIONS THEREOF.

REV. NO.	BY	DATE	DESCRIPTION OF REVISION



CONSOLIDATED TECHNOLOGIES, INC.
ENGINEERS IN WATER AND EARTH SCIENCES
CHATTANOOGA, TENNESSEE

DESIGNED: J.T.S.	12/05
DRAWN: M.W.D.	12/05
CHECKED: G.M.C.	12/05
APPROVED: J.T.S.	12/05



CITY OF CHATTANOOGA, TENNESSEE
CITY LANDFILL ON BIRCHWOOD PIKE

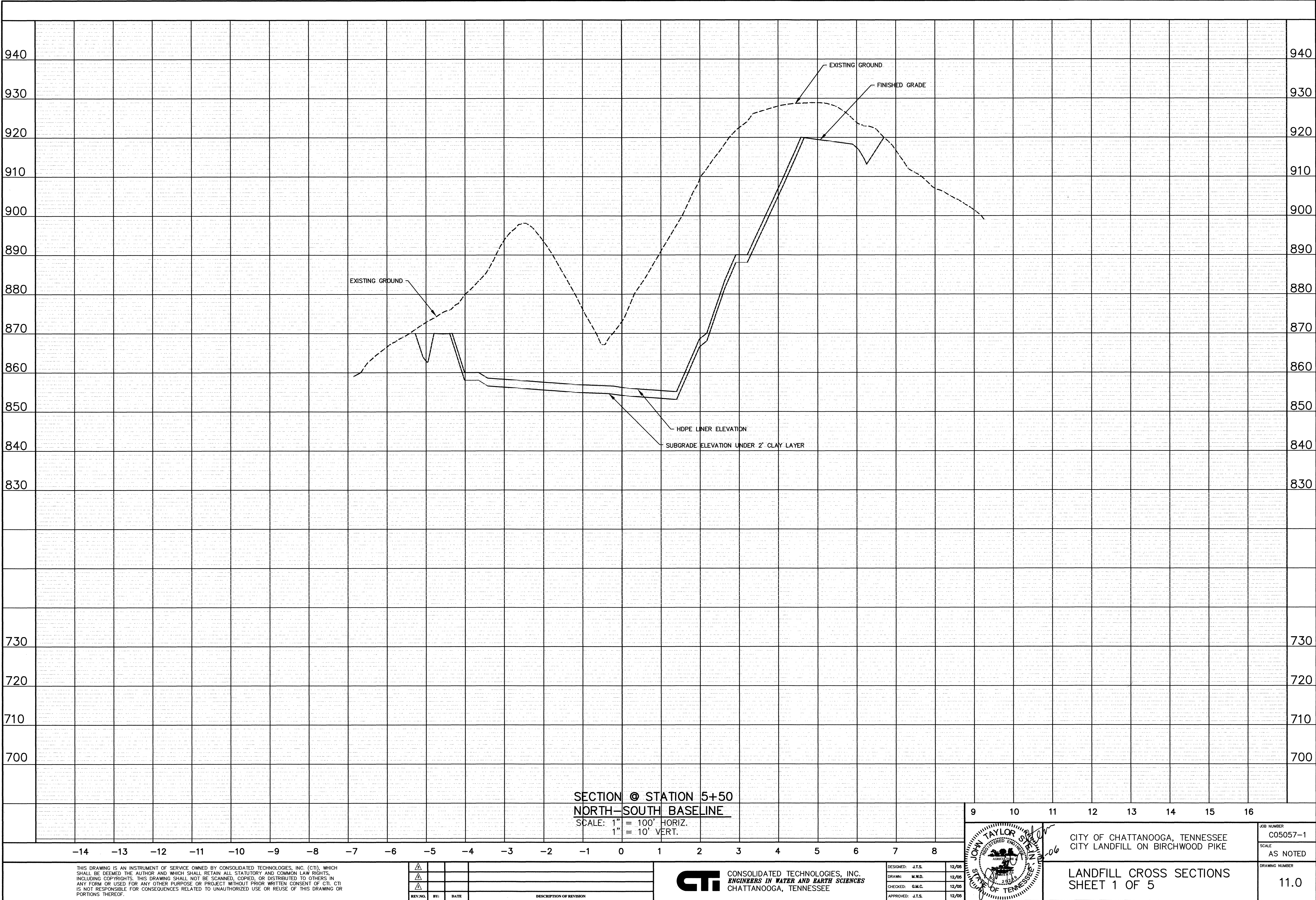
SEDIMENTATION/DETENTION
POND NO. 2 (SOUTH)

JOB NUMBER
C05057-1

SCALE
AS NOTED

DRAWING NUMBER
10.0

S:\C05057-1\NORTH50.DWG, Layout1, 2/2/2006 8:58:00 AM



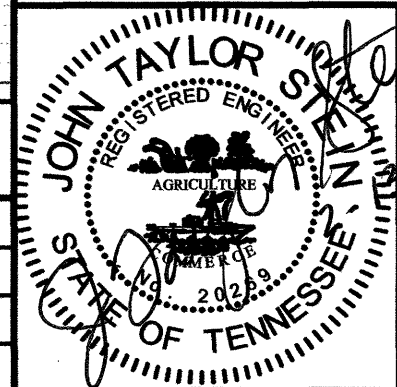
THIS DRAWING IS AN INSTRUMENT OF SERVICE OWNED BY CONSOLIDATED TECHNOLOGIES, INC. (CTI), WHICH SHALL BE DEEMED THE AUTHOR AND WHICH SHALL RETAIN ALL STATUTORY AND COMMON LAW RIGHTS, INCLUDING COPYRIGHTS. THIS DRAWING SHALL NOT BE SCANNED, COPIED, OR DISTRIBUTED TO OTHERS IN ANY FORM OR USED FOR ANY OTHER PURPOSE OR PROJECT WITHOUT PRIOR WRITTEN CONSENT OF CTI. CTI IS NOT RESPONSIBLE FOR CONSEQUENCES RELATED TO UNAUTHORIZED USE OR REUSE OF THIS DRAWING OR PORTIONS THEREOF.

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			



CONSOLIDATED TECHNOLOGIES, INC.
ENGINEERS IN WATER AND EARTH SCIENCES
CHATTANOOGA, TENNESSEE

DESIGNED: J.T.S.	12/05
DRAWN: M.W.D.	12/05
CHECKED: G.M.C.	12/05
APPROVED: J.T.S.	12/05



CITY OF CHATTANOOGA, TENNESSEE
CITY LANDFILL ON BIRCHWOOD PIKE

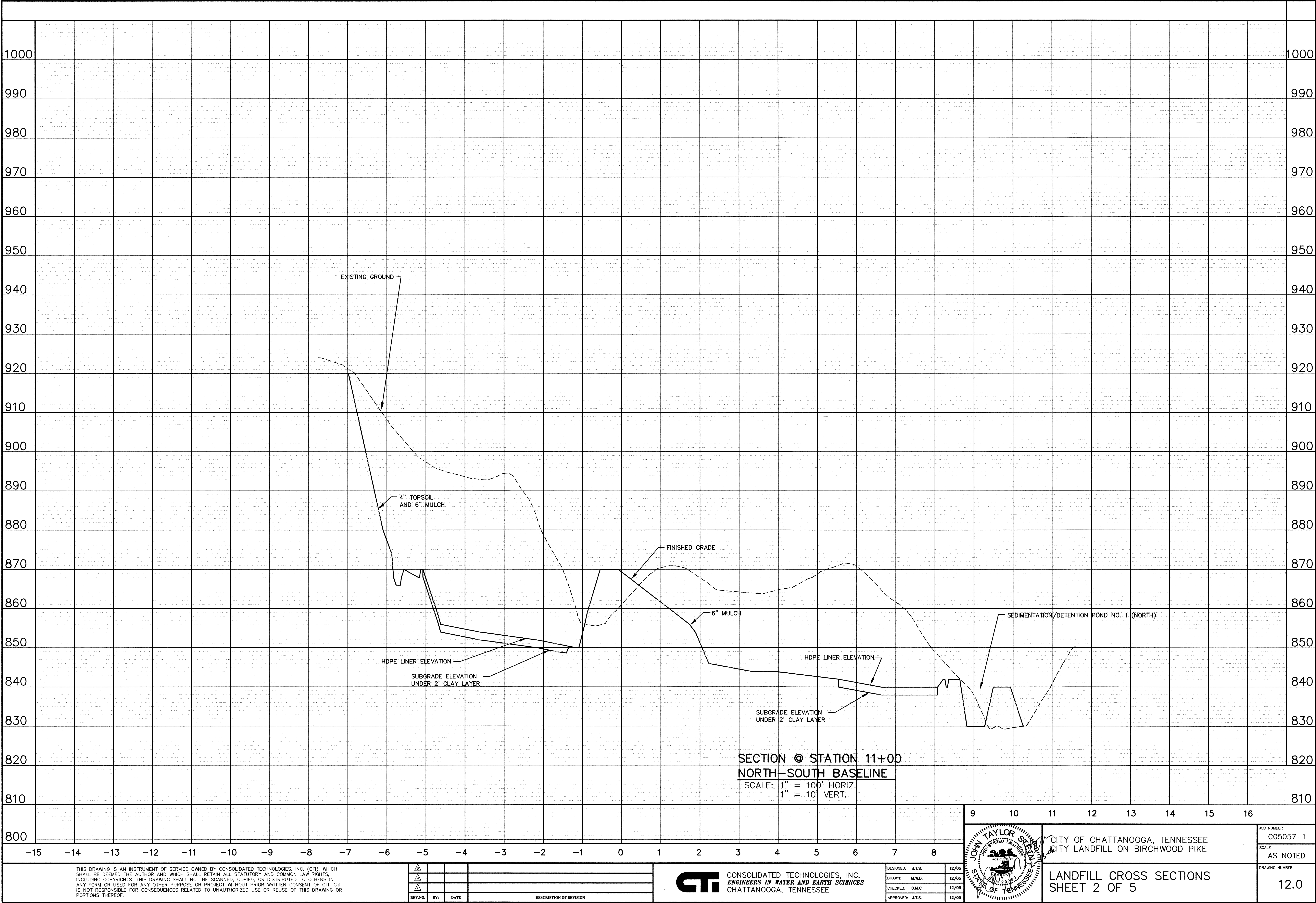
LANDFILL CROSS SECTIONS
SHEET 1 OF 5

JOB NUMBER
C05057-1

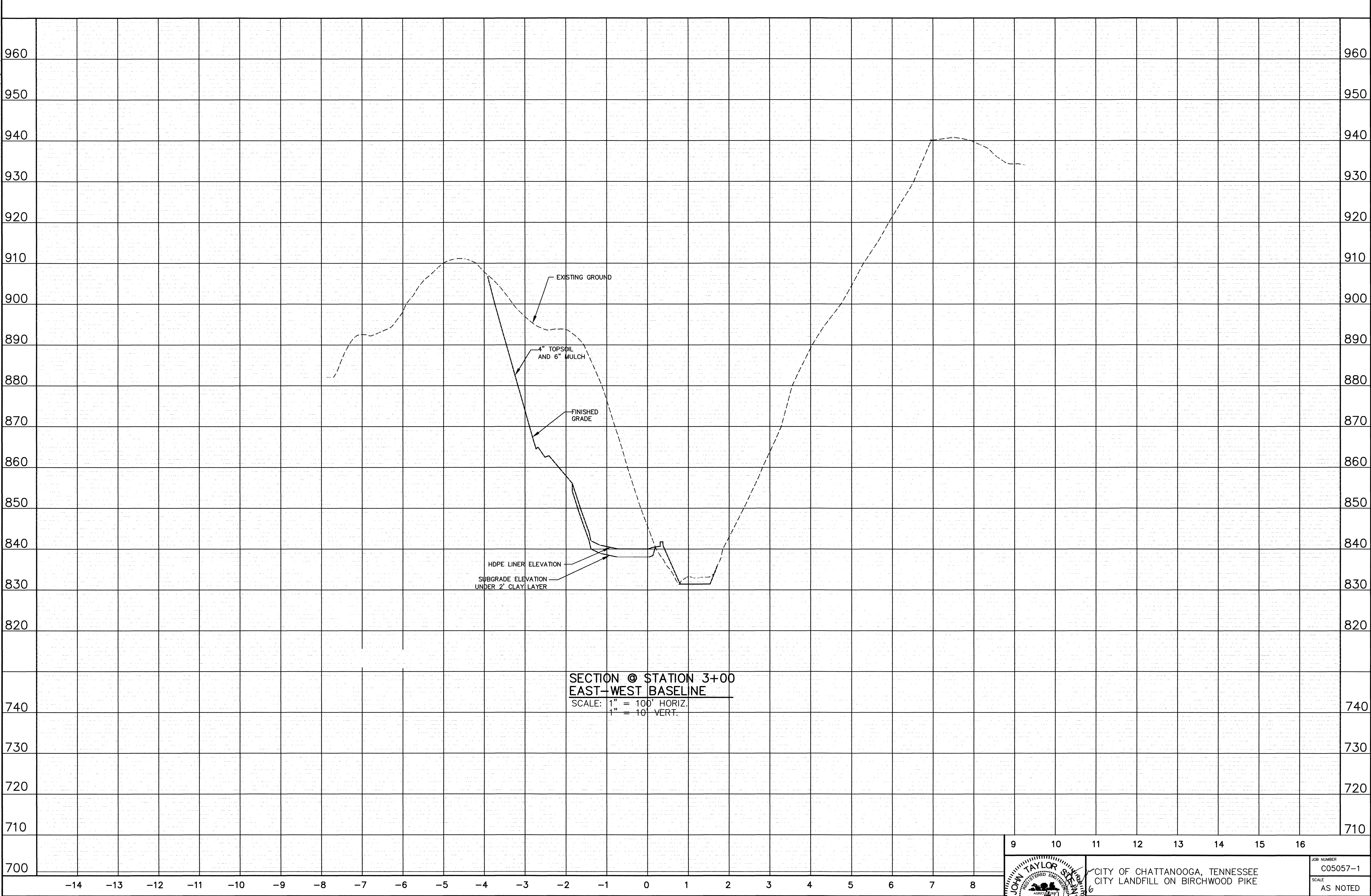
SCALE
AS NOTED

DRAWING NUMBER
11.0

S:\C05057-1\NORTH100.DWG, Layout1, 2/10/2006 8:06:53 AM



S:\C05057-1\WEST300.DWG, Layout1, 2/10/2006 8:13:58 AM



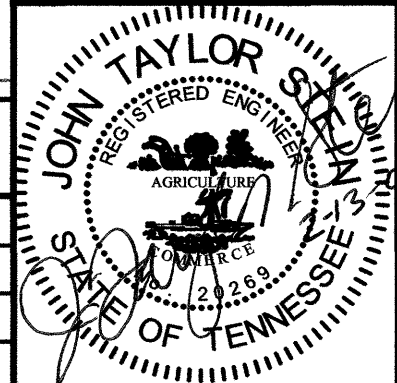
THIS DRAWING IS AN INSTRUMENT OF SERVICE OWNED BY CONSOLIDATED TECHNOLOGIES, INC. (CTI), WHICH SHALL BE DEEMED THE AUTHOR AND WHICH SHALL RETAIN ALL STATUTORY AND COMMON LAW RIGHTS, INCLUDING COPYRIGHTS. THIS DRAWING SHALL NOT BE SCANNED, COPIED, OR DISTRIBUTED TO OTHERS IN ANY FORM OR USED FOR ANY OTHER PURPOSE OR PROJECT WITHOUT PRIOR WRITTEN CONSENT OF CTI. CTI IS NOT RESPONSIBLE FOR CONSEQUENCES RELATED TO UNAUTHORIZED USE OR REUSE OF THIS DRAWING OR PORTIONS THEREOF.

△			
△			
△			
REV. NO.	BY:	DATE	DESCRIPTION OF REVISION



CONSOLIDATED TECHNOLOGIES, INC.
ENGINEERS IN WATER AND EARTH SCIENCES
CHATTANOOGA, TENNESSEE

DESIGNED:	J.T.S.	12/05
DRAWN:	M.W.D.	12/05
CHECKED:	G.M.C.	12/05
APPROVED:	J.T.S.	12/05



CITY OF CHATTANOOGA, TENNESSEE
CITY LANDFILL ON BIRCHWOOD PIKE

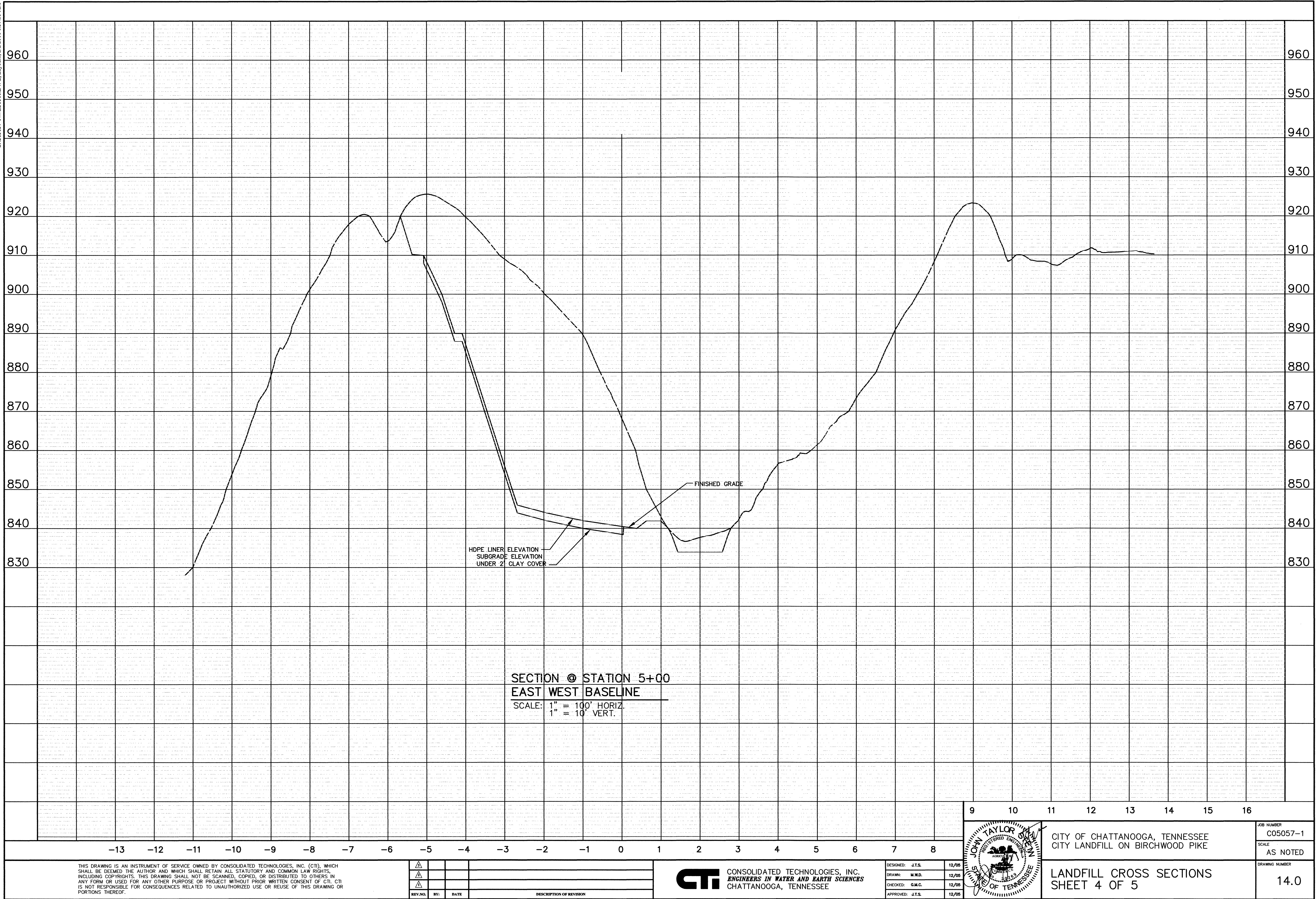
LANDFILL CROSS SECTIONS
SHEET 3 OF 5

JOB NUMBER
C05057-1

SCALE
AS NOTED

DRAWING NUMBER
13.0

S:\C05057-LW\EST500.DWG, Layout1, 2/2/2006 8:59:35 AM



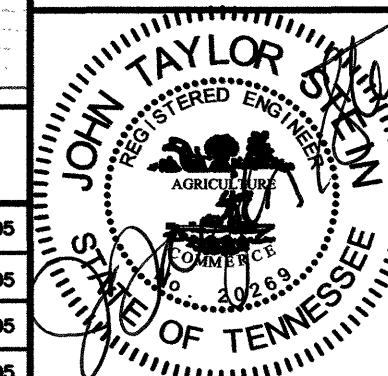
THIS DRAWING IS AN INSTRUMENT OF SERVICE OWNED BY CONSOLIDATED TECHNOLOGIES, INC. (CTI), WHICH SHALL BE DEEMED THE AUTHOR AND WHICH SHALL RETAIN ALL STATUTORY AND COMMON LAW RIGHTS, INCLUDING COPYRIGHTS. THIS DRAWING SHALL NOT BE SCANNED, COPIED, OR DISTRIBUTED TO OTHERS IN ANY FORM OR USED FOR ANY OTHER PURPOSE OR PROJECT WITHOUT PRIOR WRITTEN CONSENT OF CTI. CTI IS NOT RESPONSIBLE FOR CONSEQUENCES RELATED TO UNAUTHORIZED USE OR REUSE OF THIS DRAWING OR PORTIONS THEREOF.

△			
△			
△			
REV. NO.	BY:	DATE	DESCRIPTION OF REVISION



CONSOLIDATED TECHNOLOGIES, INC.
ENGINEERS IN WATER AND EARTH SCIENCES
CHATTANOOGA, TENNESSEE

DESIGNED:	J.T.S.	12/06
DRAWN:	M.W.D.	12/06
CHECKED:	G.M.C.	12/06
APPROVED:	J.T.S.	12/06



CITY OF CHATTANOOGA, TENNESSEE
CITY LANDFILL ON BIRCHWOOD PIKE

LANDFILL CROSS SECTIONS
SHEET 4 OF 5

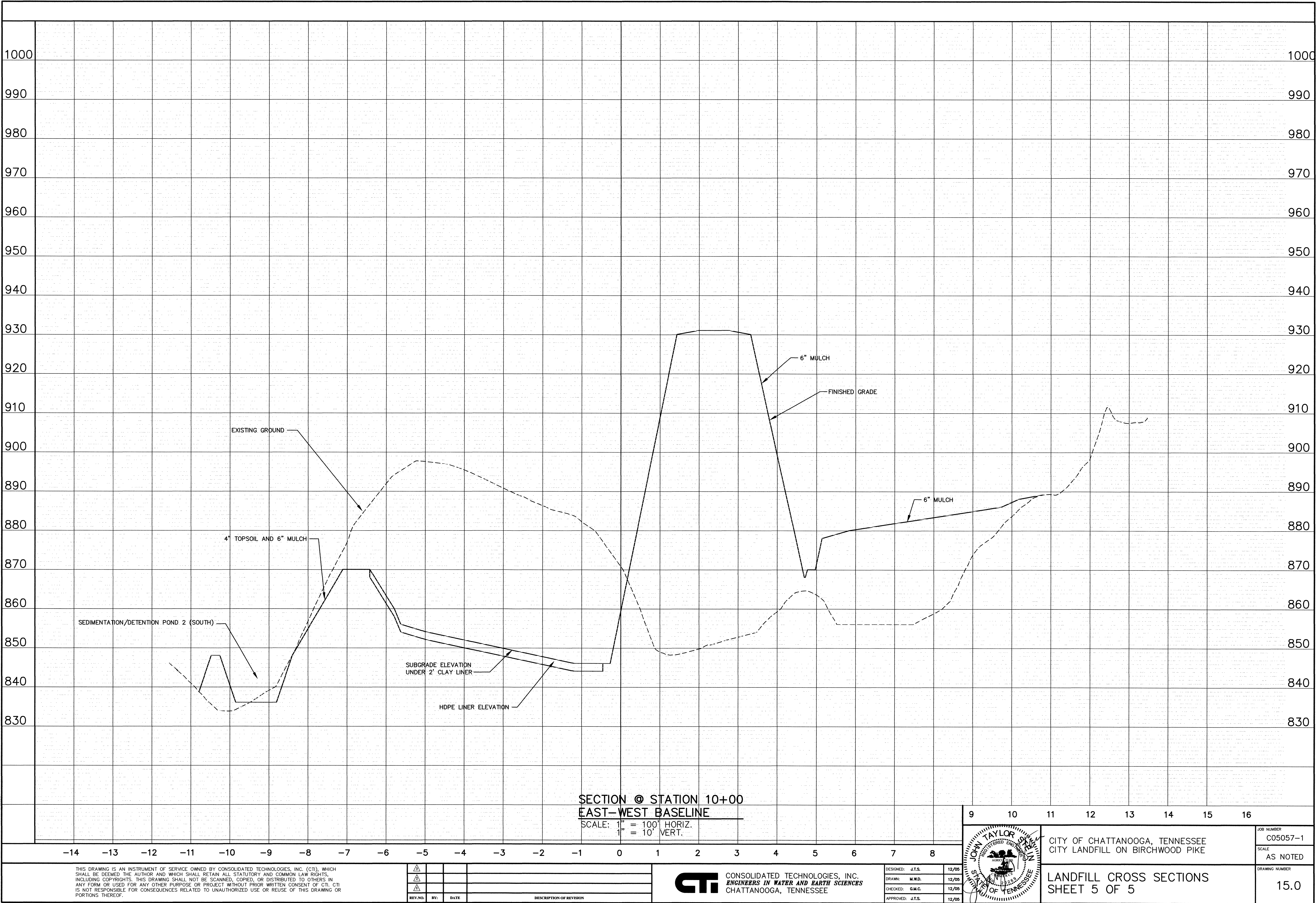
JOB NUMBER

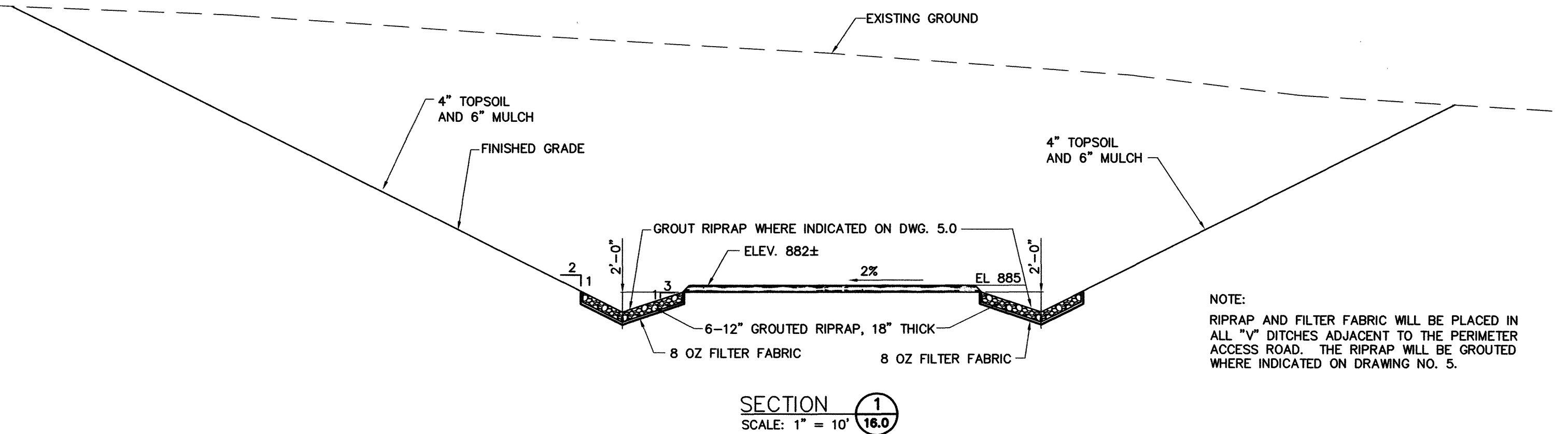
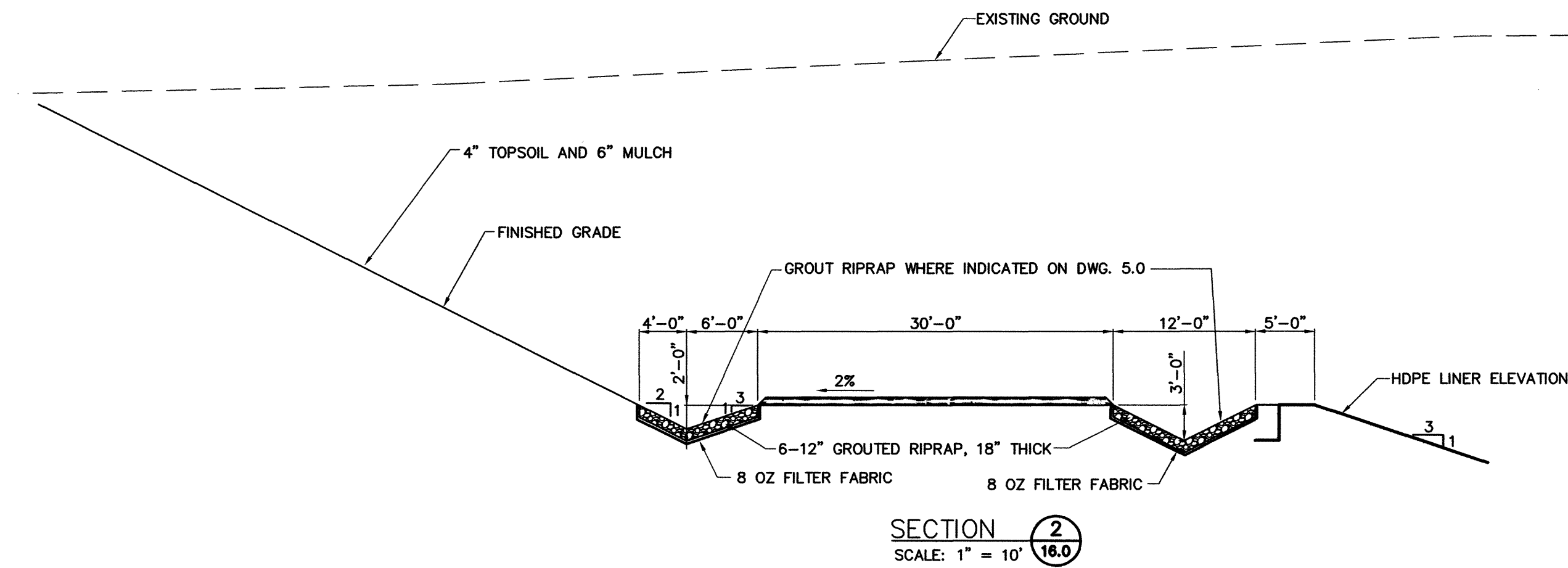
C05057-1
SCALE
AS NOTED

DRAWING NUMBER

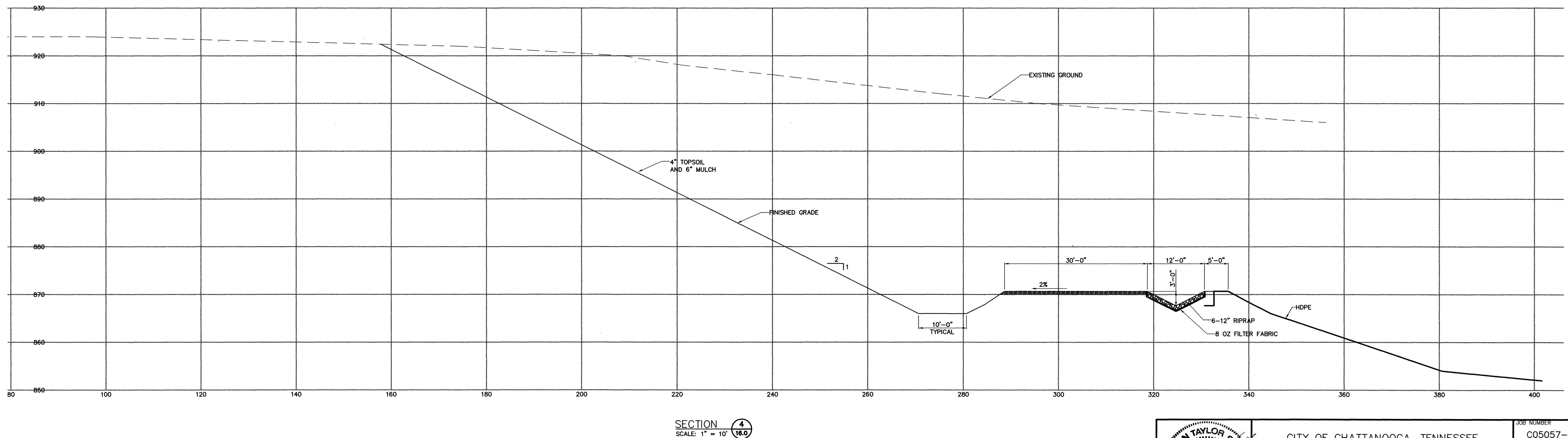
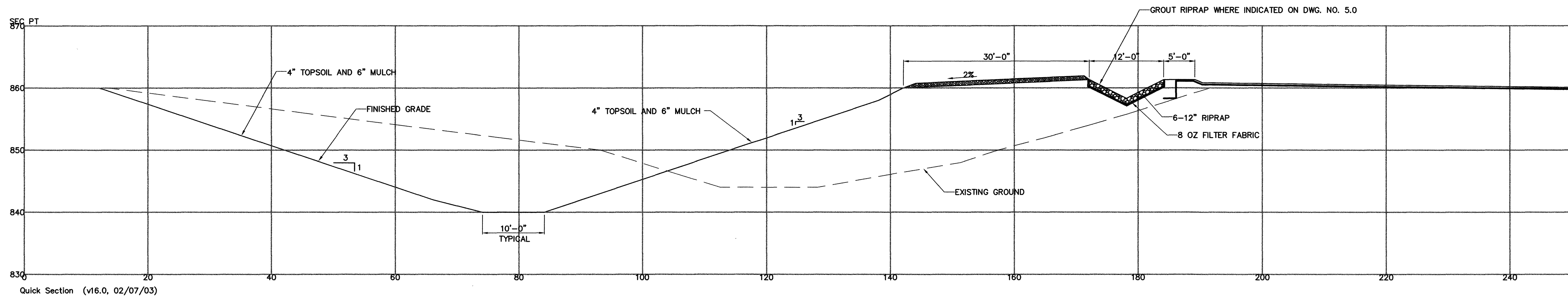
14.0

S:\C05057-1\WEST1000.DWG, Layout1, 2/10/2006 8:18:46 AM





NOTE:
RIPRAP AND FILTER FABRIC WILL BE PLACED IN ALL "V" DITCHES ADJACENT TO THE PERIMETER ACCESS ROAD. THE RIPRAP WILL BE GROUTED WHERE INDICATED ON DRAWING NO. 5.



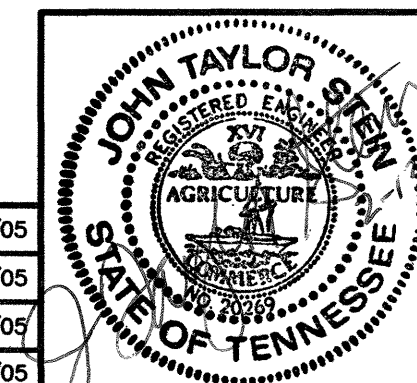
THIS DRAWING IS AN INSTRUMENT OF SERVICE OWNED BY CONSOLIDATED TECHNOLOGIES, INC. (CTI), WHICH SHALL BE DEEMED THE AUTHOR AND WHICH SHALL RETAIN ALL STATUTORY AND COMMON LAW RIGHTS, INCLUDING COPYRIGHTS. THIS DRAWING SHALL NOT BE SCANNED, COPIED, OR DISTRIBUTED TO OTHERS IN ANY FORM OR USED FOR ANY OTHER PURPOSE OR PROJECT WITHOUT PRIOR WRITTEN CONSENT OF CTI. CTI IS NOT RESPONSIBLE FOR CONSEQUENCES RELATED TO UNAUTHORIZED USE OR REUSE OF THIS DRAWING OR PORTIONS THEREOF.

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
1			
2			
3			



CONSOLIDATED TECHNOLOGIES, INC.
ENGINEERS IN WATER AND EARTH SCIENCES
CHATTANOOGA, TENNESSEE

DESIGNED: J.T.S.	12/05
DRAWN: M.W.D.	12/05
CHECKED: G.M.C.	12/05
APPROVED: J.T.S.	12/05



CITY OF CHATTANOOGA, TENNESSEE
CITY LANDFILL ON BIRCHWOOD PIKE

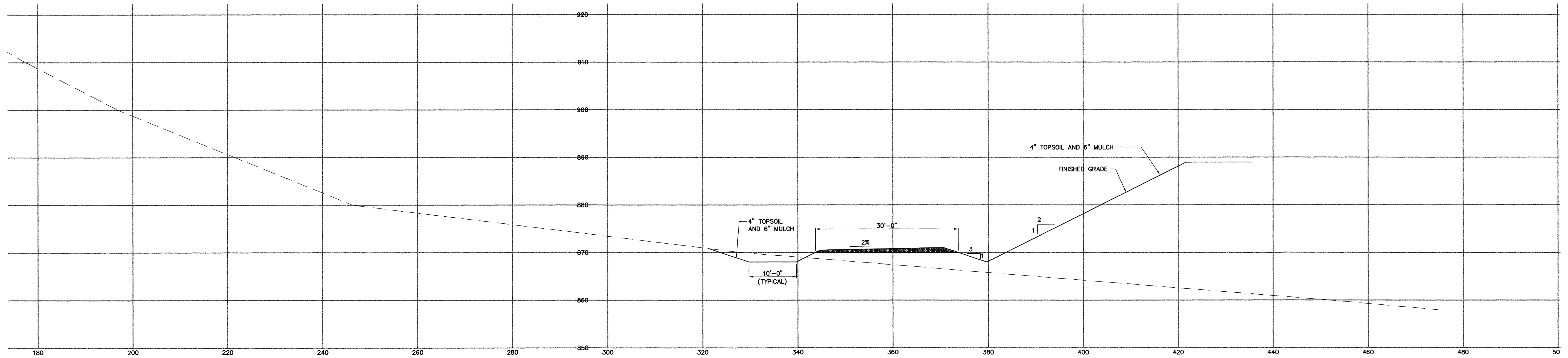
ROADWAY AND DRAINAGE
SECTIONS SHEET 1 OF 2

JOB NUMBER
C05057-1

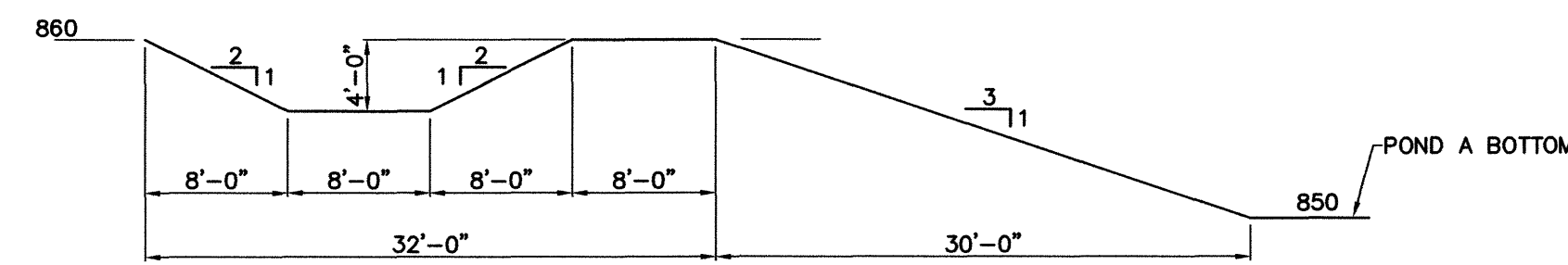
SCALE
AS NOTED

DRAWING NUMBER

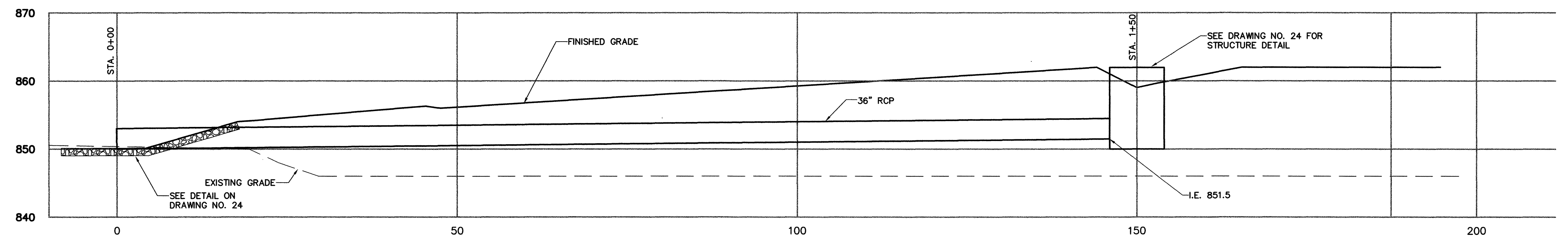
16.0



SECTION 5
SCALE: 1" = 10'



SECTION 6
DIVERSION DITCH ABOVE
SEDIMENT POND A
SCALE: 1" = 10'



PROFILE OF PIPE TO SEDIMENT POND A
SCALE: 1" = 10'

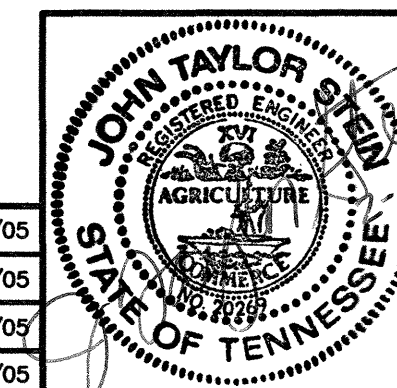
THIS DRAWING IS AN INSTRUMENT OF SERVICE OWNED BY CONSOLIDATED TECHNOLOGIES, INC. (CTI), WHICH SHALL BE DEEMED THE AUTHOR AND WHICH SHALL RETAIN ALL STATUTORY AND COMMON LAW RIGHTS, INCLUDING COPYRIGHTS. THIS DRAWING SHALL NOT BE SCANNED, COPIED, OR DISTRIBUTED TO OTHERS IN ANY FORM OR USED FOR ANY OTHER PURPOSE OR PROJECT WITHOUT PRIOR WRITTEN CONSENT OF CTI. CTI IS NOT RESPONSIBLE FOR CONSEQUENCES RELATED TO UNAUTHORIZED USE OR REUSE OF THIS DRAWING OR PORTIONS THEREOF.

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
1			
2			
3			



CONSOLIDATED TECHNOLOGIES, INC.
ENGINEERS IN WATER AND EARTH SCIENCES
CHATTANOOGA, TENNESSEE

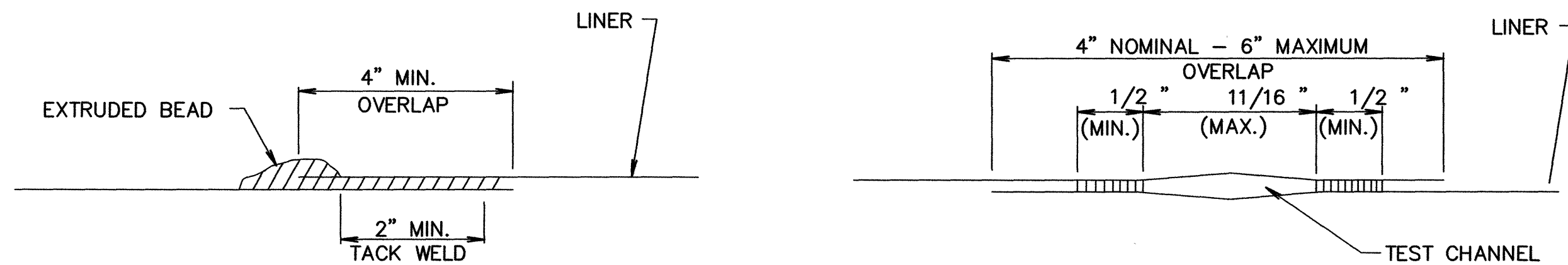
DESIGNED: J.T.S.	12/05
DRAWN: M.W.D.	12/05
CHECKED: G.M.C.	12/05
APPROVED: J.T.S.	12/05



CITY OF CHATTANOOGA, TENNESSEE
CITY LANDFILL ON BIRCHWOOD PIKE

ROADWAY AND DRAINAGE
SECTIONS SHEET 2 OF 2

JOB NUMBER
C05057-1
SCALE
AS NOTED
DRAWING NUMBER
17.0



EXTRUSION WELD DETAIL

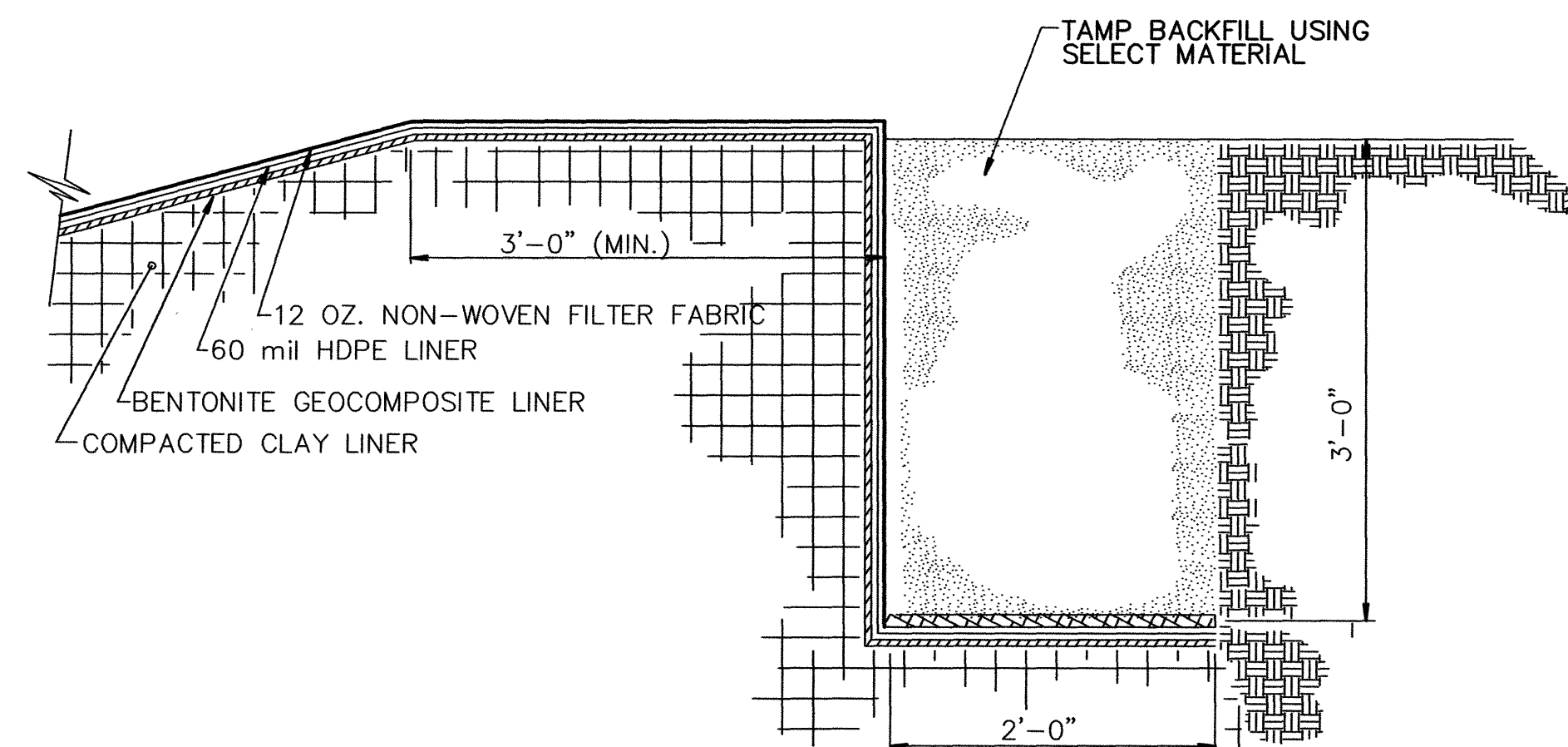
NOT TO SCALE

NOTE:
1. VACUUM BOX TEST IS THE NON-DESTRUCTIVE SEAM TEST METHOD FOR EXTRUSION WELD.

DOUBLE FUSION WELD DETAIL

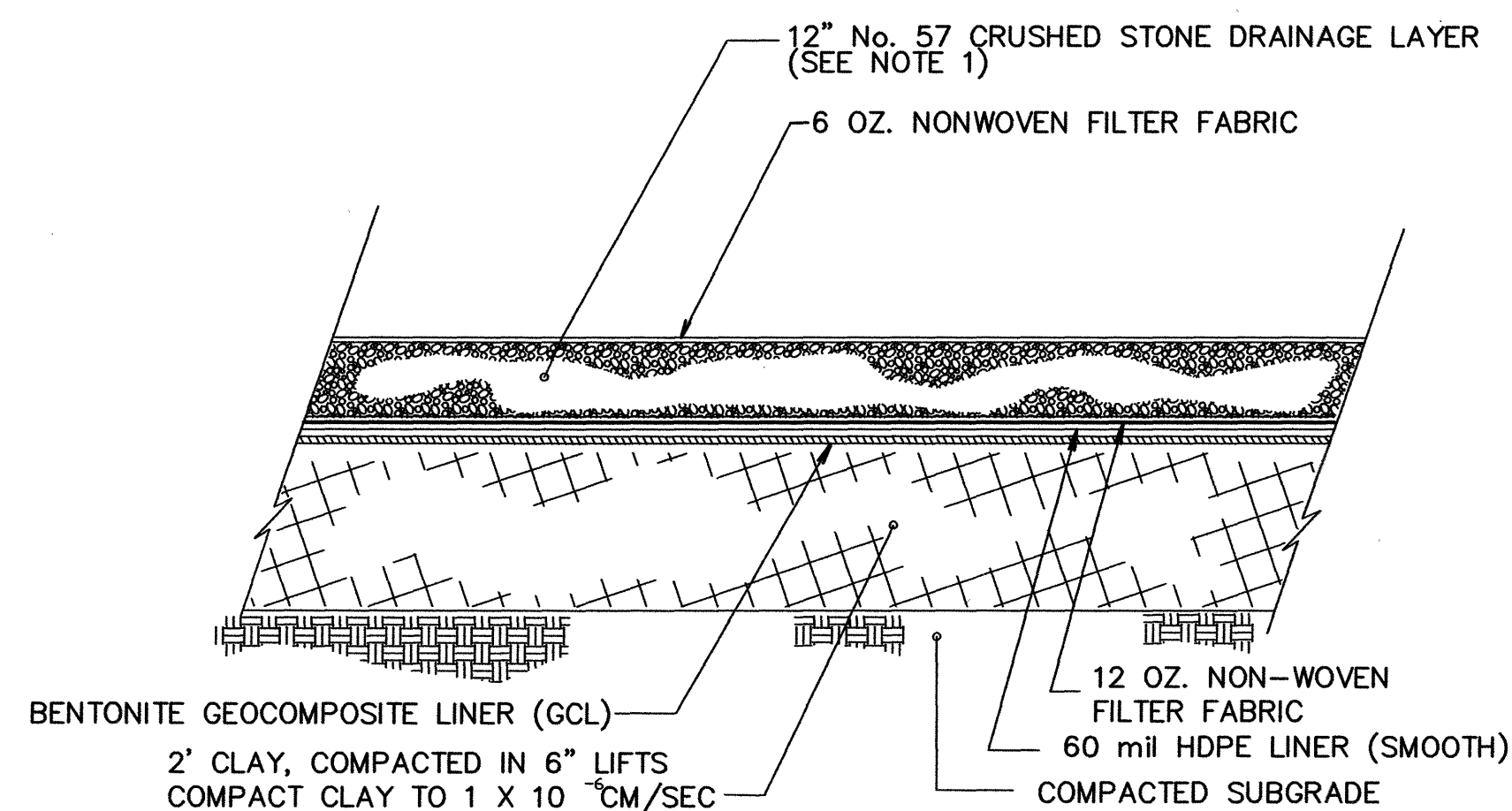
NOT TO SCALE

NOTE:
1. AIR PRESSURE TEST IS THE NON-DESTRUCTIVE SEAM TEST METHOD FOR DOUBLE FUSION WELD.



PERMANENT LINER ANCHOR TRENCH DETAIL

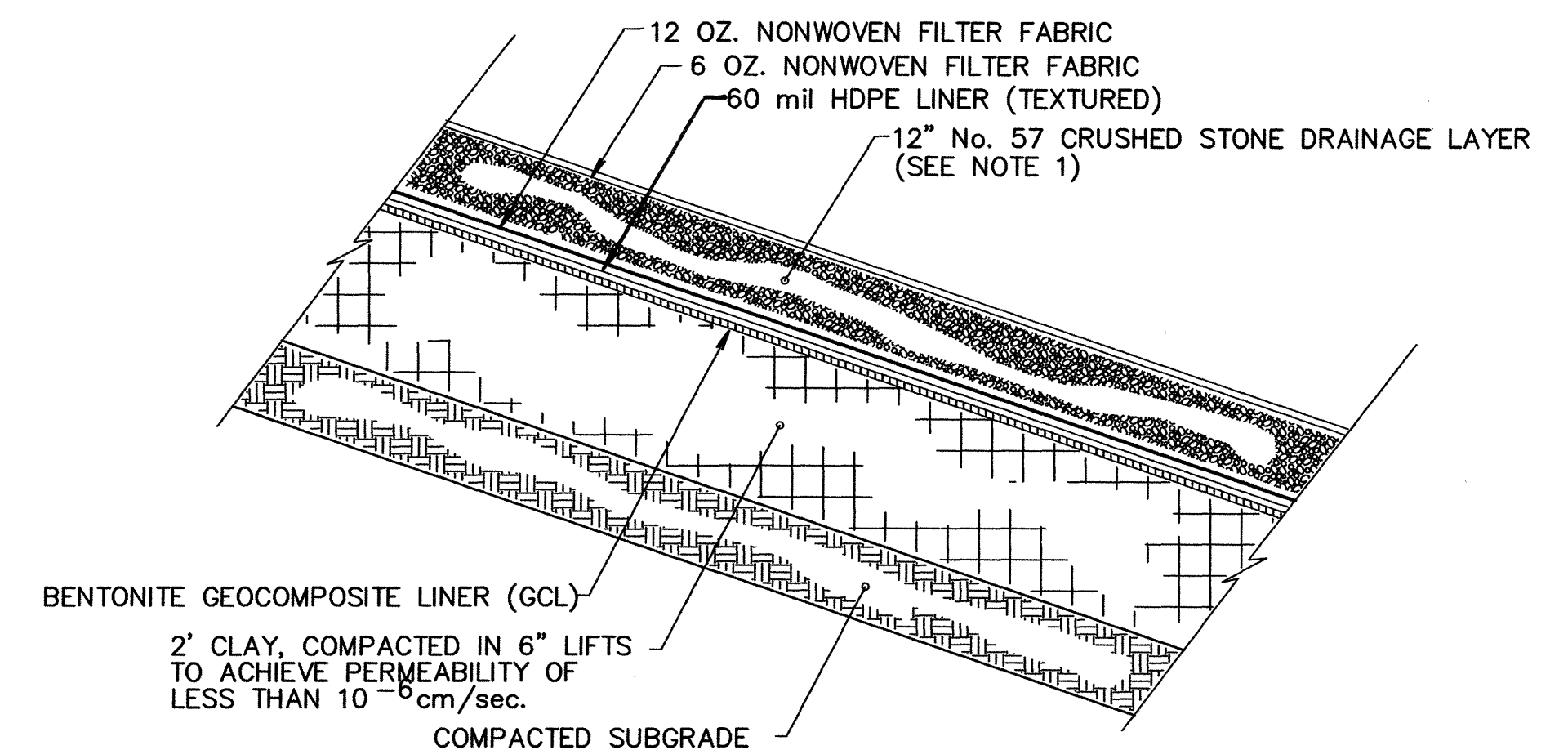
SCALE: 1" = 1'-0"



COMPOSITE LINER DETAIL

SCALE: 1/2" = 1'-0"

NOTE:
ROLL UPPER SURFACE OF CLAY LINER WITH STEEL ROLLER TO ACHIEVE SMOOTH SURFACE WITH NO PROJECTING STONES.



COMPOSITE LINER DETAIL (SLOPES)

SCALE: 1/2" = 1'-0"

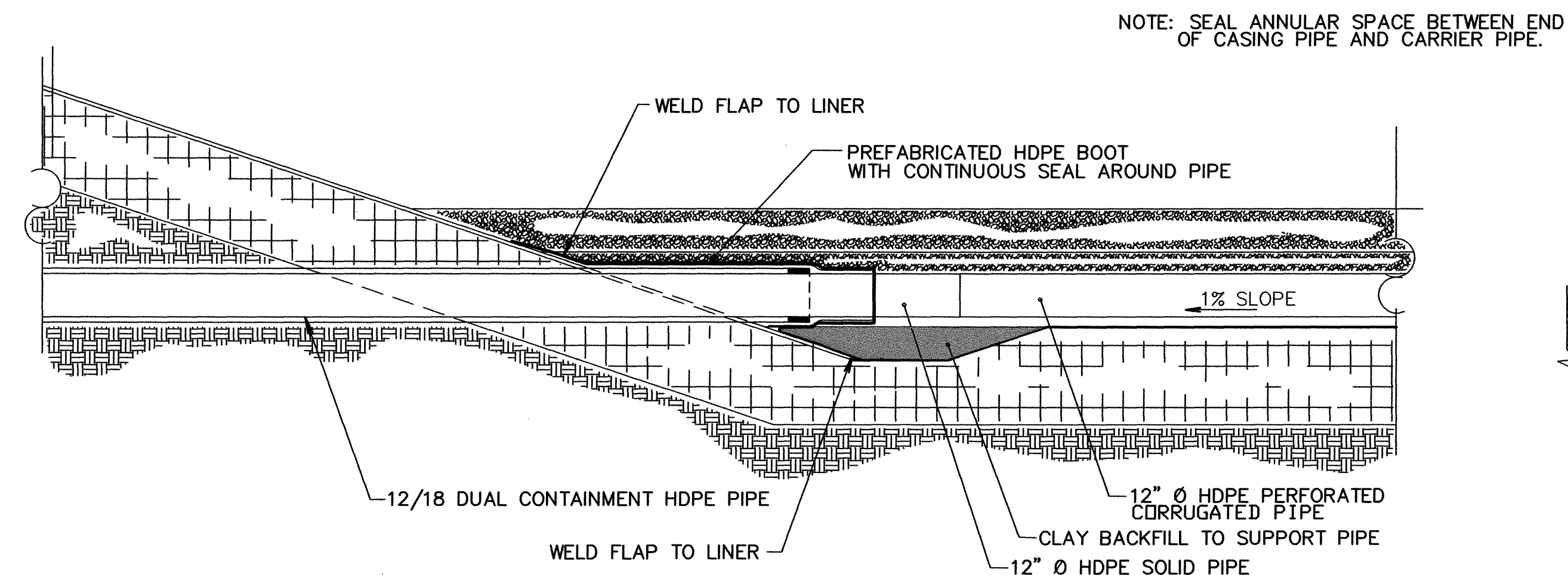
NOTE:
ROLL UPPER SURFACE OF CLAY LINER WITH STEEL ROLLER TO ACHIEVE SMOOTH SURFACE WITH NO PROJECTING STONES.

GENERAL NOTES:

1. THE CRUSHED STONE DRAINAGE LAYER SHALL BE FURNISHED AND PLACED OVER THE LINER MATERIALS AND SHALL CONSIST OF CRUSHED SANDSTONE, CRUSHED GRANITE, OR ANGULAR SILICEOUS PEA GRAVEL.

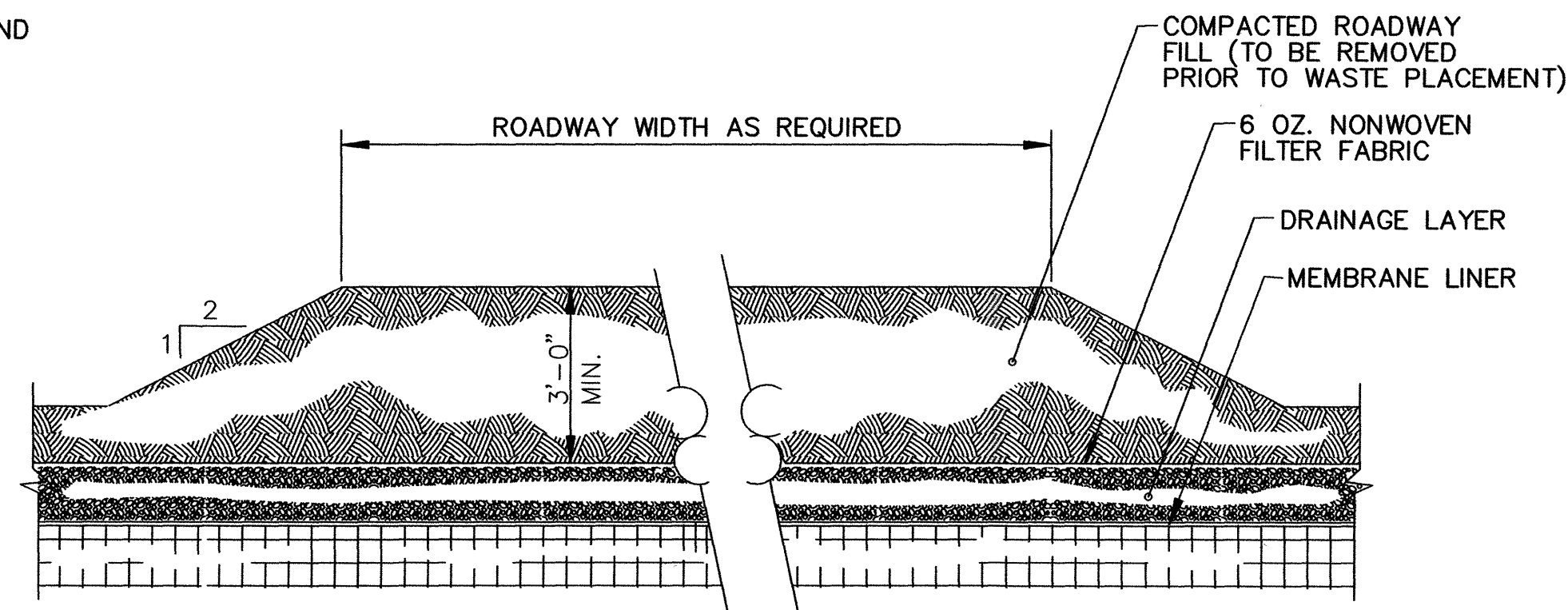
LEGEND:

COMPACTED CLAY LINER	
GRAVEL, OR CRUSHED STONE	
COMPACTED SUBGRADE	
SELECT SOLID WASTE	



LEACHATE PIPE-LINER PENETRATION DETAIL

SCALE: 3/8" = 1'-0"



TEMPORARY ACCESS ROADWAY DETAIL FOR CROSSING LINER

SCALE: 3/8" = 1'-0"

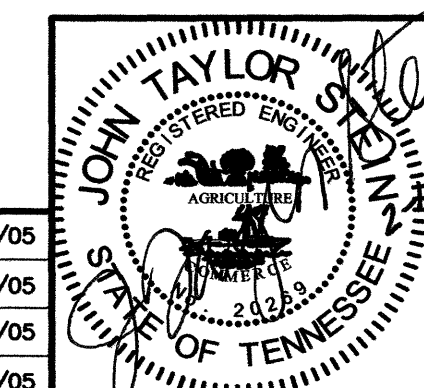
THIS DRAWING IS AN INSTRUMENT OF SERVICE OWNED BY CONSOLIDATED TECHNOLOGIES, INC. (CTI), WHICH SHALL BE DEEMED THE AUTHOR AND WHICH SHALL RETAIN ALL STATUTORY AND COMMON LAW RIGHTS, INCLUDING COPYRIGHTS. THIS DRAWING SHALL NOT BE SCANNED, COPIED, OR DISTRIBUTED TO OTHERS IN ANY FORM OR USED FOR ANY OTHER PURPOSE OR PROJECT WITHOUT PRIOR WRITTEN CONSENT OF CTI. CTI IS NOT RESPONSIBLE FOR CONSEQUENCES RELATED TO UNAUTHORIZED USE OR REUSE OF THIS DRAWING OR PORTIONS THEREOF.

REV. NO.	BY	DATE	DESCRIPTION OF REVISION



CONSOLIDATED TECHNOLOGIES, INC.
ENGINEERS IN WATER AND EARTH SCIENCES
CHATTANOOGA, TENNESSEE

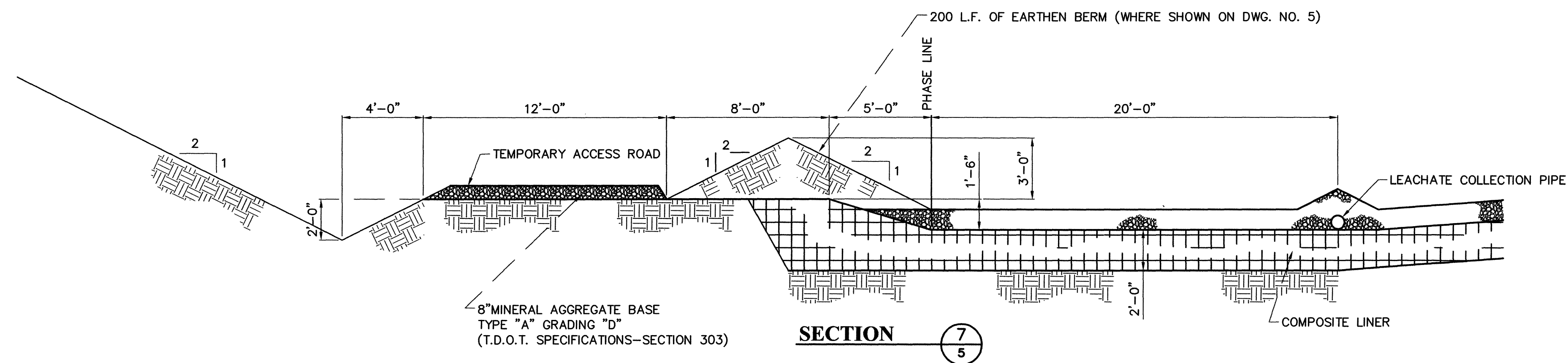
DESIGNED: J.T.S.	12/05
DRAWN: M.W.D.	12/05
CHECKED: G.M.C.	12/05
APPROVED: J.T.S.	12/05



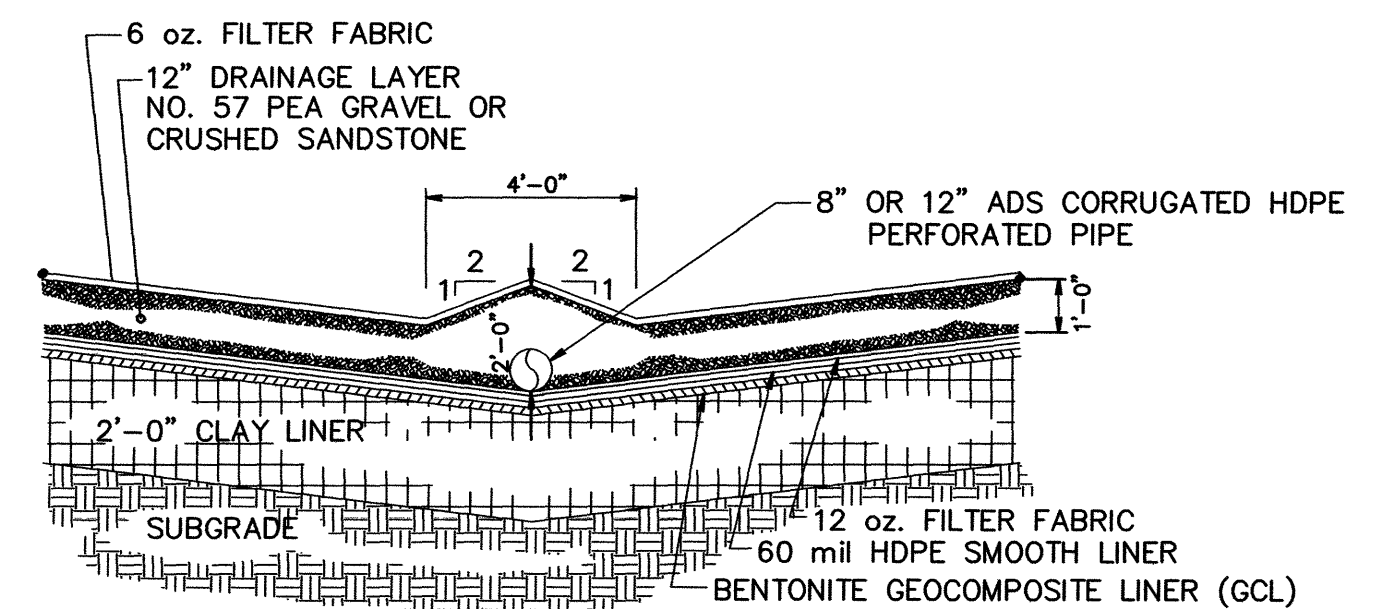
CITY OF CHATTANOOGA, TENNESSEE
CITY LANDFILL ON BIRCHWOOD PIKE

LINER DETAILS
SHEET 1 OF 2

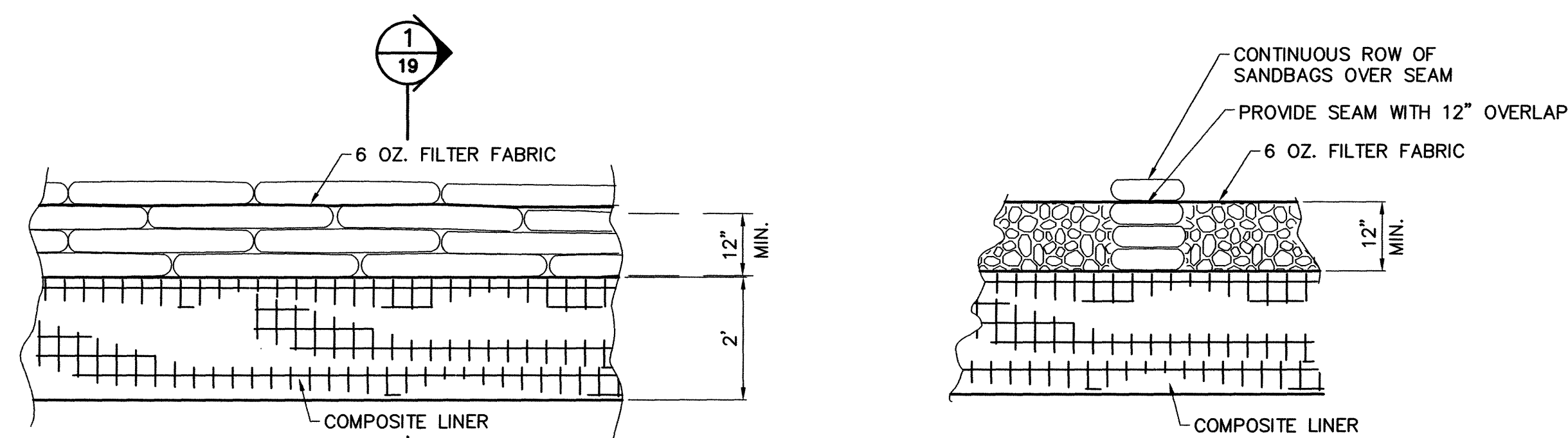
JOB NUMBER	C05057-1
SCALE	AS NOTED
DRAWING NUMBER	18.0



EDGE OF PHASE 1 LINER CONSTRUCTION
SCALE: 1/4" = 1'-0"

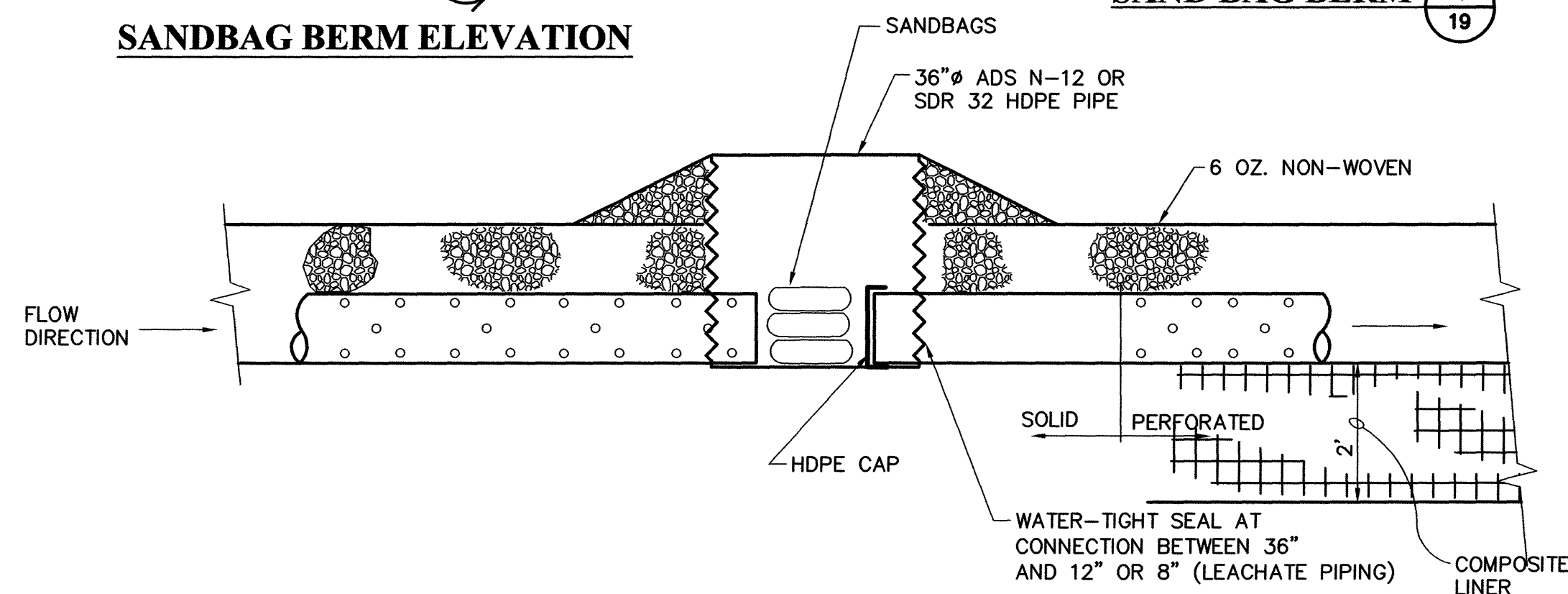


LEACHATE COLLECTION PIPE INSTALLATION FOR COMPOSITE LINER
NOT TO SCALE



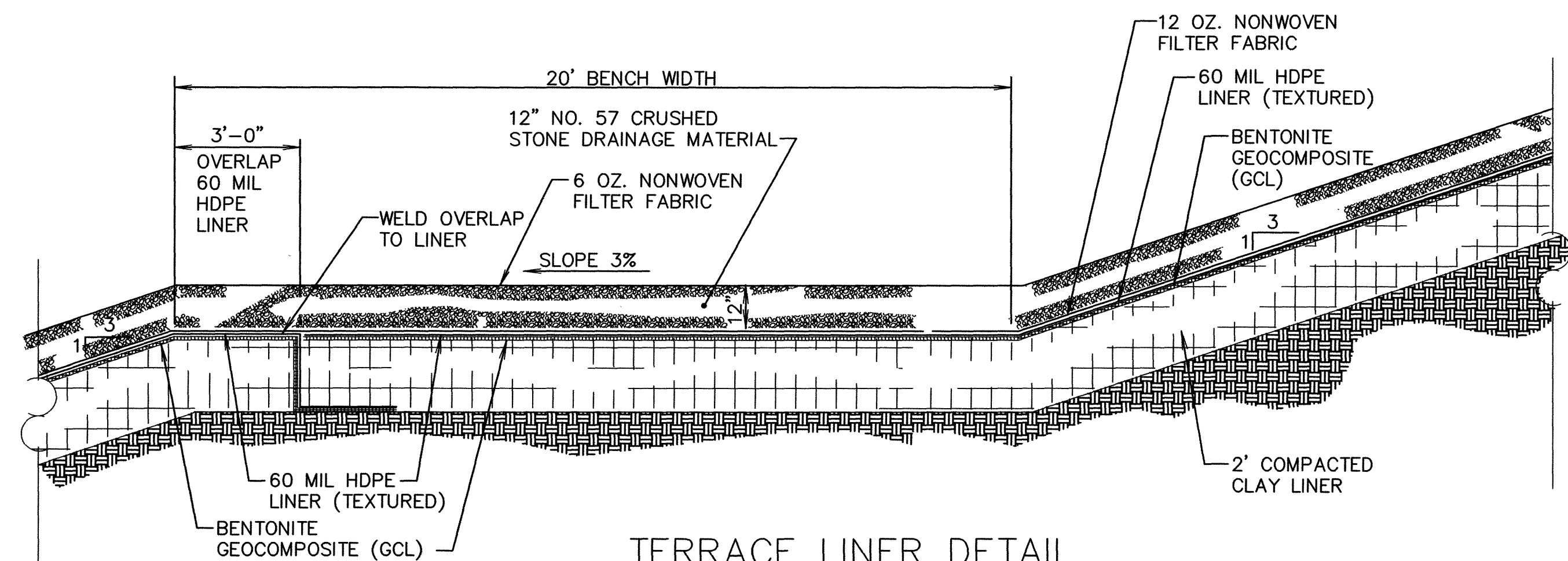
SANDBAG BERM ELEVATION

SECTION THROUGH SAND BAG BERM



TYPICAL SECTION AT PIPE CROSSING DRAINAGE DIVERSION DETAILS

SCALE: 1/2" = 1'-0"



TERRACE LINER DETAIL

SCALE: 3/8" = 1'-0"

NOTES:

1. GCL TO BE INSTALLED IN THE ANCHOR TRENCH WITH THE 60 MIL HDPE LINER.
2. AFTER BACKFILLING THE ANCHOR TRENCH, GCL INSTALLATION MAY PROCEED FROM THE EDGE OF THE 60 MIL HDPE LINER.
3. ALL LINER MATERIAL PLACED ON SLOPES TO BE ADEQUATELY WEIGHTED TO PREVENT SLIDING.

NOTES:

- 01 SANDBAGS SHALL BE WOVEN POLYPROPYLENE OR POLYETHYLENE FABRIC, MINIMUM UNIT WEIGHT OF 4 OUNCES PER SQUARE YARD, MULLEN BURST STRENGTH EXCEEDING 300 POUNDS PER SQUARE INCH IN CONFORMANCE WITH THE REQUIREMENT IN ASTM DESIGNATION D3786, AND ULTRAVIOLET STABILITY EXCEEDING 70 PER CENT IN CONFORMANCE WITH THE REQUIREMENTS IN ASTM DESIGNATION D 4355.
- 02 SANDBAG DIMENSIONS SHALL BE 14 INCHES WIDE AND 26 INCHES LONG (PLUS/MINUS 1/2 INCH). BAGS SHALL BE FILLED WITH SAND CONFORMING TO ASTM C-33. FINAL HEIGHT OF THE BARRIER SHALL BE AT LEAST 12 INCHES.
- 03 SANDBAGS TO BE PLACED TIGHTLY WITH STAGGERED LAYERS TO ELIMINATE GAPS.

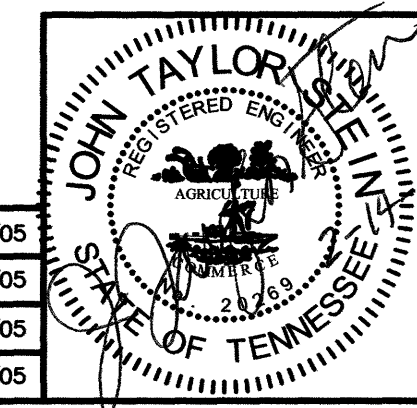
THIS DRAWING IS AN INSTRUMENT OF SERVICE OWNED BY CONSOLIDATED TECHNOLOGIES, INC. (CTI), WHICH SHALL BE DEEMED THE AUTHOR AND WHICH SHALL RETAIN ALL STATUTORY AND COMMON LAW RIGHTS, INCLUDING COPYRIGHTS. THIS DRAWING SHALL NOT BE SCANNED, COPIED, OR DISTRIBUTED TO OTHERS IN ANY FORM OR USED FOR ANY OTHER PURPOSE OR PROJECT WITHOUT PRIOR WRITTEN CONSENT OF CTI. CTI IS NOT RESPONSIBLE FOR CONSEQUENCES RELATED TO UNAUTHORIZED USE OR REUSE OF THIS DRAWING OR PORTIONS THEREOF.

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
1			
2			
3			



CONSOLIDATED TECHNOLOGIES, INC.
ENGINEERS IN WATER AND EARTH SCIENCES
CHATTANOOGA, TENNESSEE

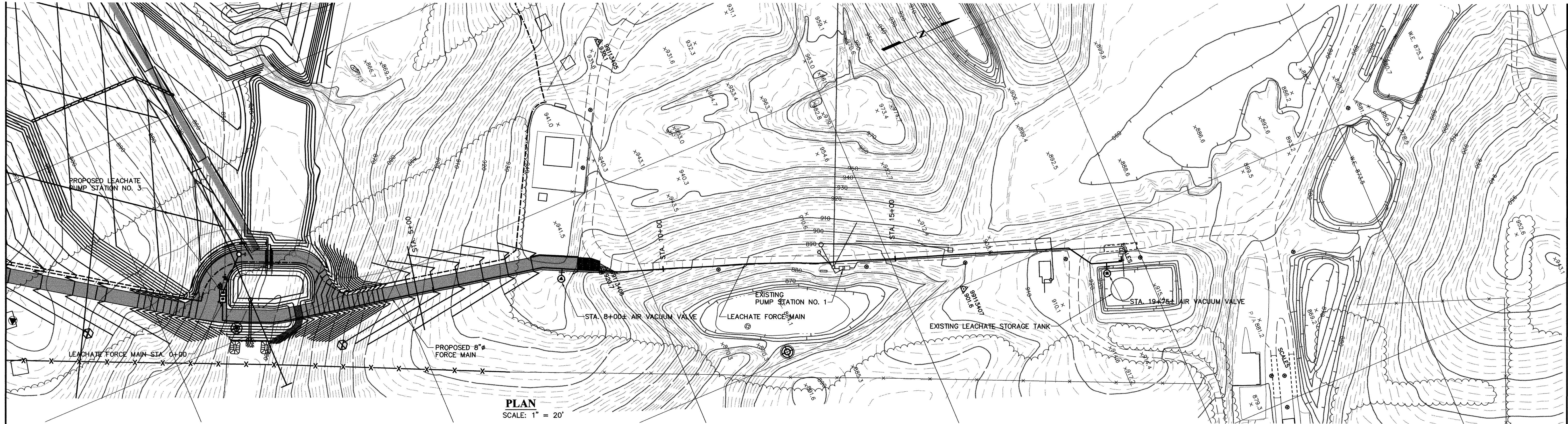
DESIGNED: J.T.S.	12/05
DRAWN: M.W.D.	12/05
CHECKED: G.M.C.	12/05
APPROVED: J.T.S.	12/05



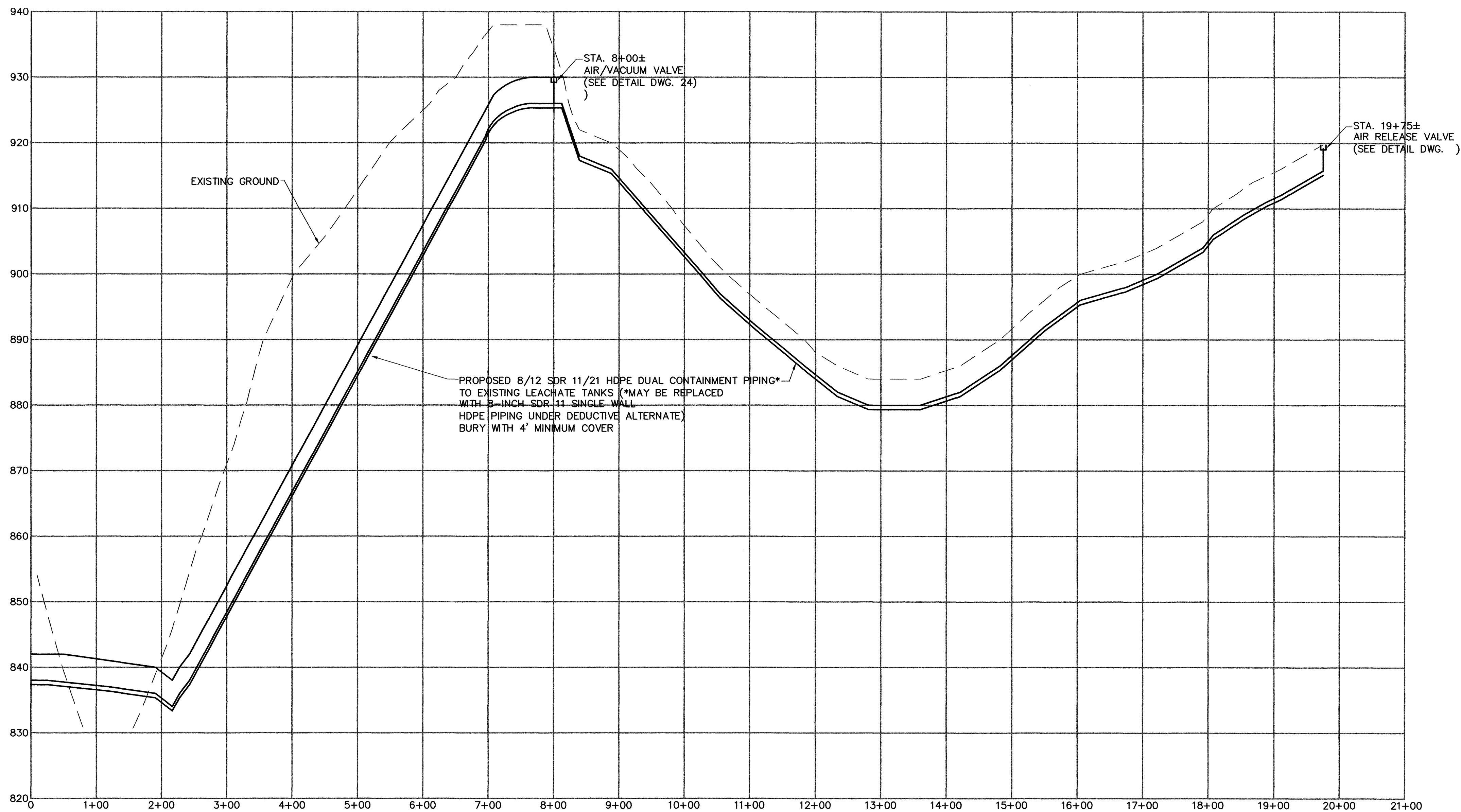
CITY OF CHATTANOOGA, TENNESSEE
CITY LANDFILL ON BIRCHWOOD PIKE

LINER DETAILS
SHEET 2 OF 2

JOB NUMBER
C05057-1
SCALE
AS NOTED
DRAWING NUMBER
19.0

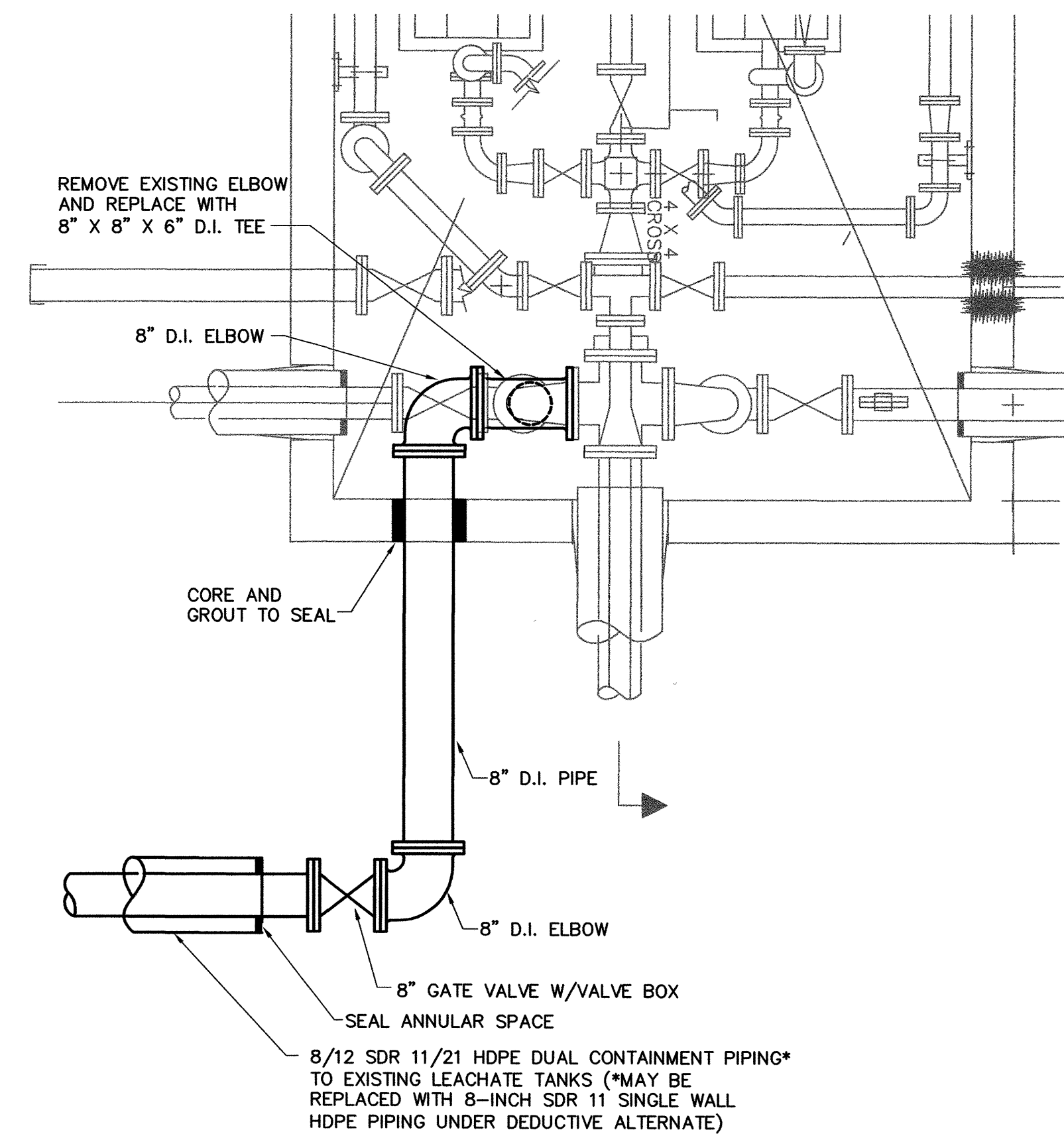


PLAN
SCALE: 1" = 20'



GENERAL NOTES:

- UNLESS OTHERWISE NOTED, INSTALL HDPE PIPING WITH MINIMUM 4 FEET OF COVER. INSTALL BARE #8 COPPER LOCATOR WIRE IN TRENCH ABOVE PIPE. PROVIDE FULL DEPTH CRUSHED STONE BACKFILL WHERE PIPE TRENCH CROSSES ROADWAYS AND DRIVEWAYS. SEE TYPICAL PIPE TRENCH DETAILS.
- CONTRACTOR IS ADVISED THAT THERE ARE NUMEROUS UNDERGROUND ELECTRICAL, LEACHATE, AIR AND GAS LINES IN THE VICINITY OF PUMP STATION 2 AND THE LEACHATE STORAGE TANK. KNOWN LINES ARE SHOWN IN APPROXIMATE LOCATION ON THIS DRAWING. CONTRACTOR SHALL FIELD LOCATE POSSIBLE CONFLICTING LINES BEFORE STARTING FORCE MAIN TRENCH EXCAVATIONS.
- BASE BID FOR THE LEACHATE FORCE MAIN PIPING IS BASED ON INSTALLING DUAL CONTAINED HDPE PIPING. A DEDUCTIVE ALTERNATE IS INCLUDED FOR INSTALLING SINGLE WALL PIPING.



FORCE MAIN TIE-IN DETAIL

SCALE: 1/2" = 1'-0"

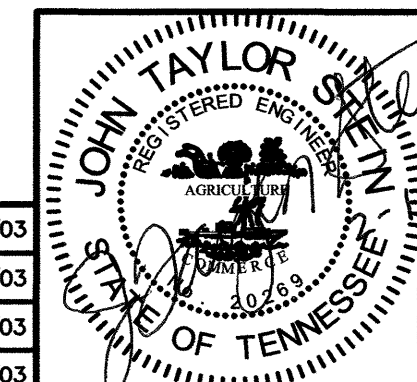
THIS DRAWING IS AN INSTRUMENT OF SERVICE OWNED BY CONSOLIDATED TECHNOLOGIES, INC. (CTI), WHICH SHALL BE DEEMED THE AUTHOR AND WHICH SHALL RETAIN ALL STATUTORY AND COMMON LAW RIGHTS, INCLUDING COPYRIGHTS. THIS DRAWING SHALL NOT BE SCANNED, COPIED, OR DISTRIBUTED TO OTHERS IN ANY FORM OR USED FOR ANY OTHER PURPOSE OR PROJECT WITHOUT PRIOR WRITTEN CONSENT OF CTI. CTI IS NOT RESPONSIBLE FOR CONSEQUENCES RELATED TO UNAUTHORIZED USE OR REUSE OF THIS DRAWING OR PORTIONS THEREOF.

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
1			
2			
3			



CONSOLIDATED TECHNOLOGIES, INC.
ENGINEERS IN WATER AND EARTH SCIENCES
CHATTANOOGA, TENNESSEE

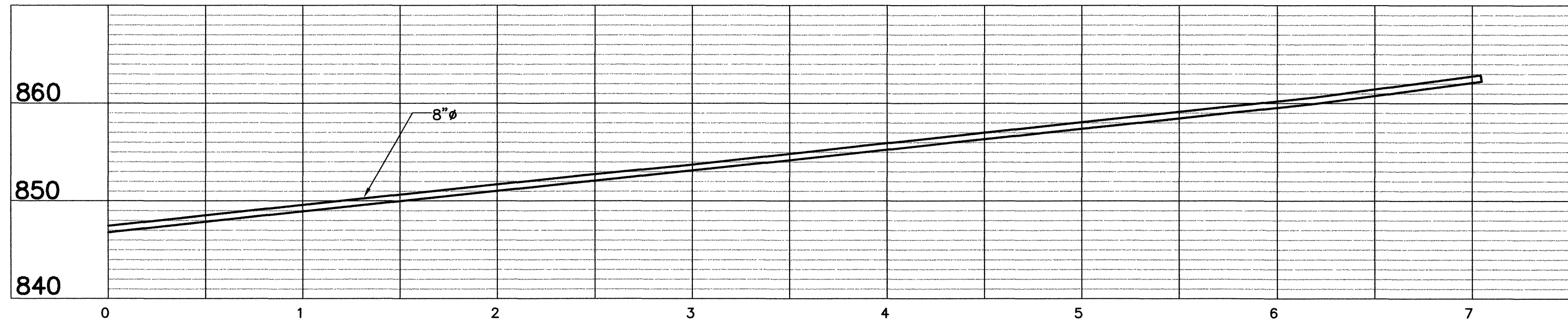
DESIGNED: J.T.S.	10/03
DRAWN: M.W.D.	10/03
CHECKED: E.R.K.	10/03
APPROVED: J.T.S.	10/03



CITY OF CHATTANOOGA, TENNESSEE
CITY LANDFILL ON BIRCHWOOD PIKE

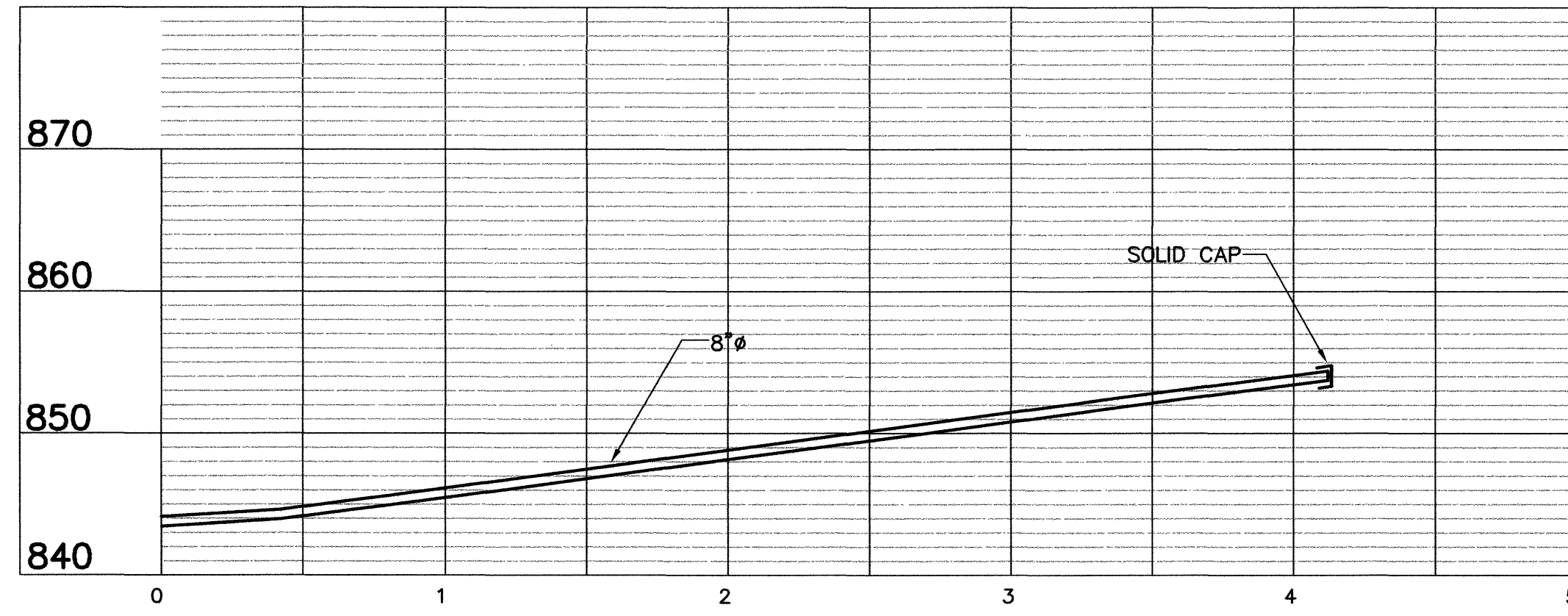
LEACHATE FORCE MAIN
PLAN AND PROFILE

JOB NUMBER	C05057-1
SCALE	AS NOTED
DRAWING NUMBER	20.0



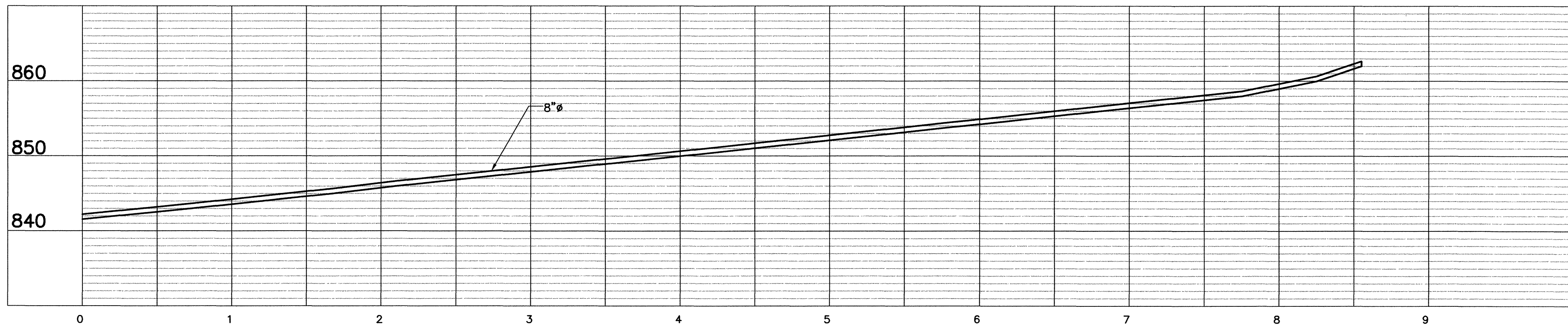
LEACHATE LINE A-3

SCALE: 1" = 50' HORIZ.
1" = 10' VERT.



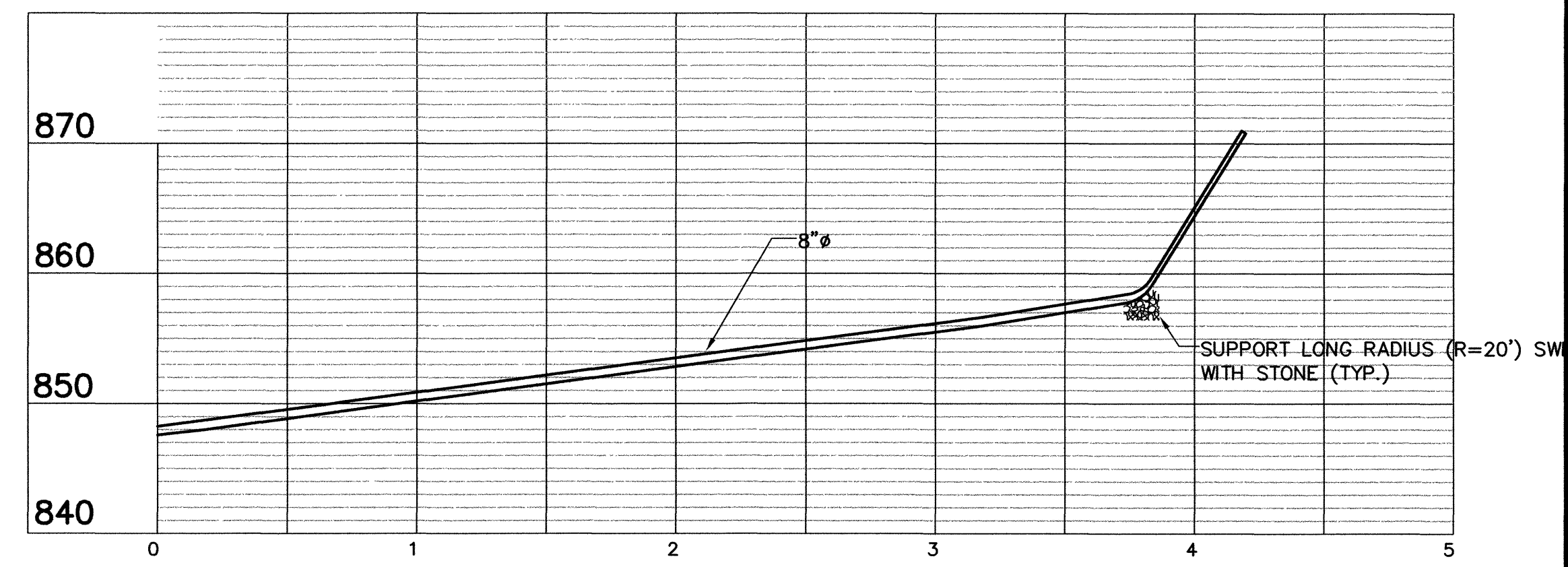
LEACHATE LINE A-2

SCALE: 1" = 50' HORIZ.
1" = 10' VERT.



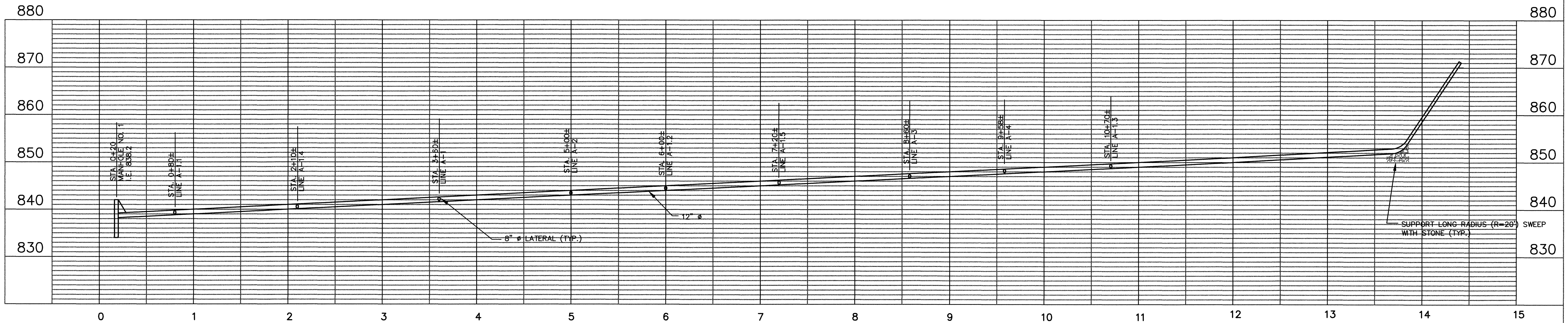
LEACHATE LINE A-1

SCALE: 1" = 50' HORIZ.
1" = 10' VERT.



LEACHATE LINE A-4

SCALE: 1" = 50' HORIZ.
1" = 10' VERT.



LEACHATE LINE A

SCALE: 1" = 50' HORIZ.
1" = 10' VERT.

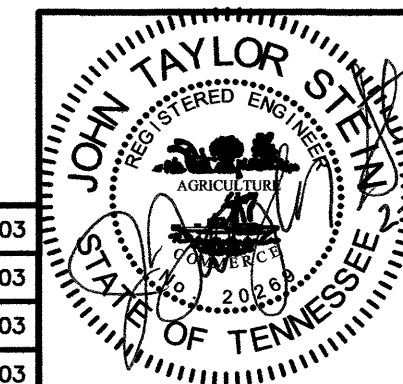
THIS DRAWING IS AN INSTRUMENT OF SERVICE OWNED BY CONSOLIDATED TECHNOLOGIES, INC. (CTI), WHICH SHALL BE DEEMED THE AUTHOR AND WHICH SHALL RETAIN ALL STATUTORY AND COMMON LAW RIGHTS, INCLUDING COPYRIGHTS. THIS DRAWING SHALL NOT BE SCANNED, COPIED, OR DISTRIBUTED TO OTHERS IN ANY FORM OR USED FOR ANY OTHER PURPOSE OR PROJECT WITHOUT PRIOR WRITTEN CONSENT OF CTI. CTI IS NOT RESPONSIBLE FOR CONSEQUENCES RELATED TO UNAUTHORIZED USE OR REUSE OF THIS DRAWING OR PORTIONS THEREOF.

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
1			
2			
3			



CONSOLIDATED TECHNOLOGIES, INC.
ENGINEERS IN WATER AND EARTH SCIENCES
CHATTANOOGA, TENNESSEE

DESIGNED: J.T.S.	10/03
DRAWN: M.W.D.	10/03
CHECKED: E.R.K.	10/03
APPROVED: J.T.S.	10/03



CITY OF CHATTANOOGA, TENNESSEE
CITY LANDFILL ON BIRCHWOOD PIKE

LEACHATE COLLECTION LINE
PROFILES

JOB NUMBER

C05057-1

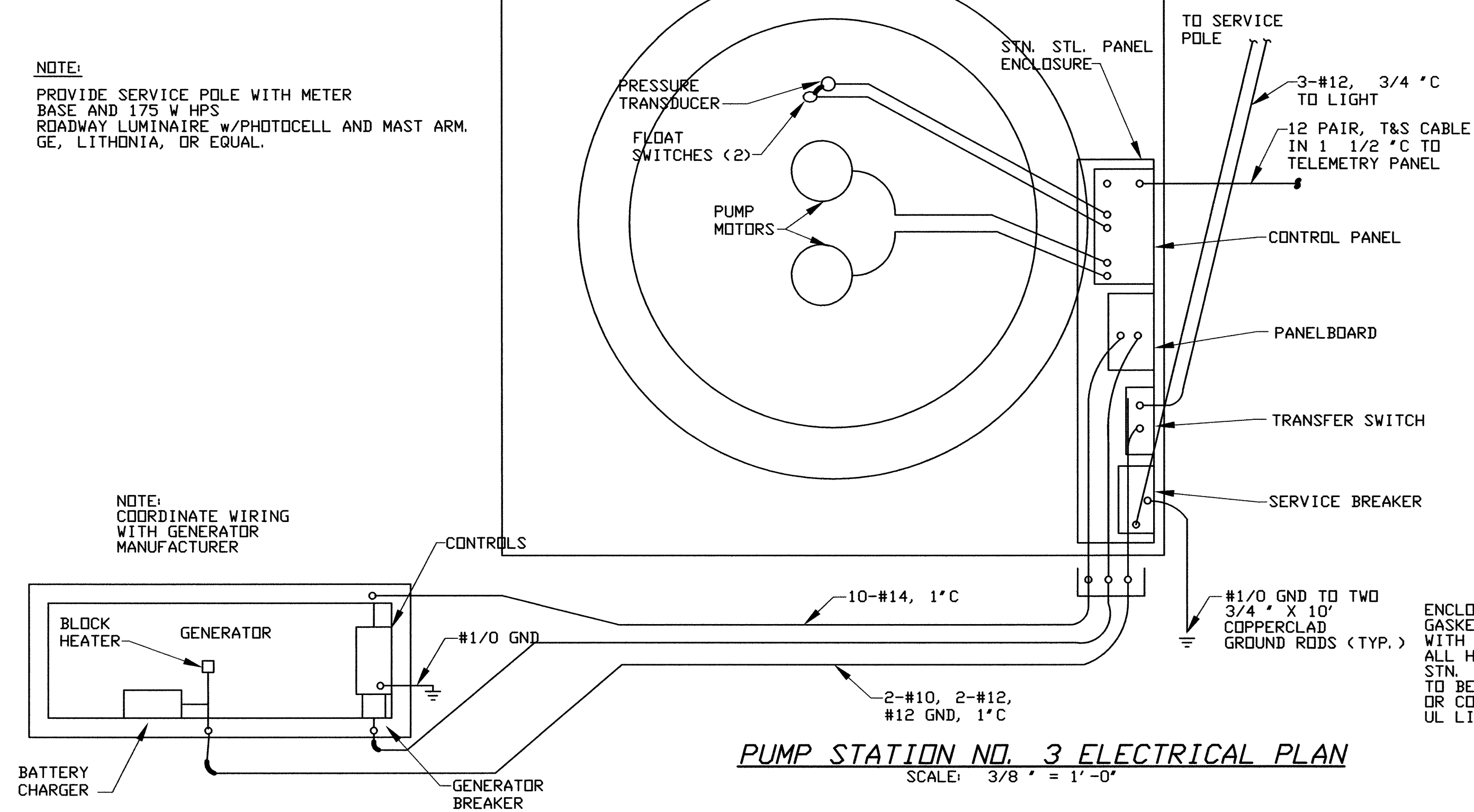
SCALE

AS NOTED

DRAWING NUMBER

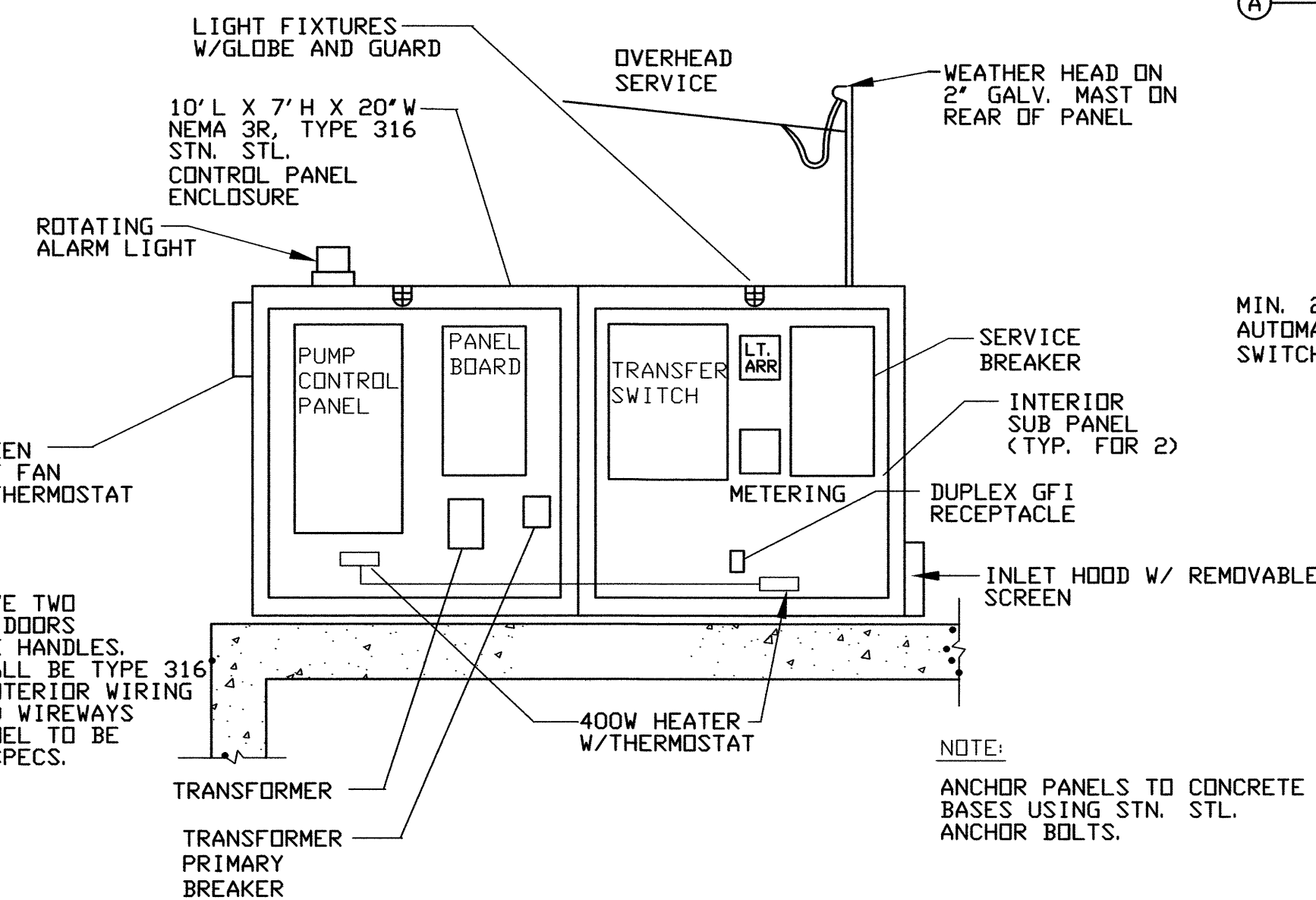
21.0

NOTE:
PROVIDE SERVICE POLE WITH METER
BASE AND 175 W HPS
ROADWAY LUMINAIRE W/PHOTOCELL AND MAST ARM.
GE, LITHONIA, OR EQUAL.

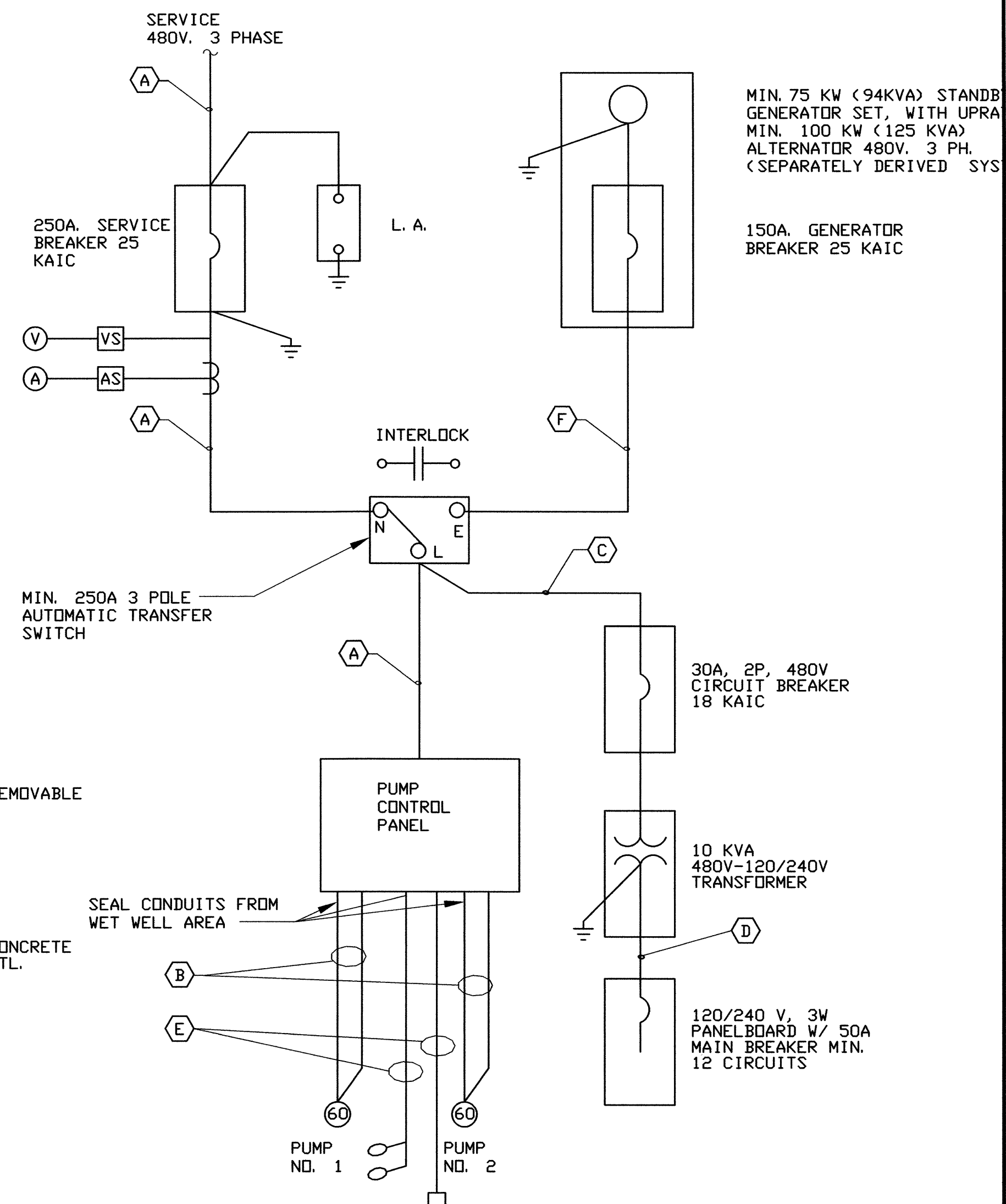


PUMP STATION NO. 3 ELECTRICAL PLAN

ENCLOSURE TO HAVE TWO
GASKETED DOUBLE DOORS
WITH PADLOCKABLE HANDLES.
ALL HARDWARE SHALL BE TYPE 316
STN. STL. ALL INTERIOR WIRING
TO BE IN COVERED WIREWAYS
OR CONDUITS. PANEL TO BE
UL LISTED. SEE SPECS.



PUMP STATION NO. 3
PANEL ENCLOSURE



PUMP STATION NO. 3 PANEL
ONE LINE DIAGRAM

PANELBOARD SCHEDULE

120/240 VOLT 1 PH.
50/2 MAIN BREAKER
20/1 RECEPTACLE
15/1 LIGHT FIXTURES
20/2 JACKET HEATER
15/1 SPARE
15/1 ENCLOSURE HEATERS
15/1 BATTERY CHARGER
15/1 ENCLOSURE FAN
/1 SPACE
/1 SPACE
PANELBOARD BREAKERS 10 KAIC MINIMUM

NOTES:

1. FLEXIBLE SUBMERSIBLE CABLES SHALL BE CONTINUOUS FROM PUMPS AND FLOAT SWITCHES TO CONTROL PANEL.
2. PROVIDE SEAL-OFF FITTINGS IN ALL CONDUITS LEADING FROM WETWELL TO CONTROL PANEL. WETWELL IS A CLASS 1, DIVISION 1 HAZARDOUS LOCATION.
3. PROVIDE WATERTIGHT COMPRESSION FITTINGS WHERE CABLES EMERGE FROM CONDUITS IN WETWELL.
4. SUPPORT FLEXIBLE CABLES AT TOP OF WETWELL INDEPENDENT OF CONDUITS.
5. SEE SPECIFICATIONS FOR REQUIRED CONTROL PANEL FUNCTIONS AND ACCESSORIES. PANEL SHALL BE WIRED SUCH THAT ONLY ONE PUMP MAY RUN AT A TIME UNDER EMERGENCY POWER.
6. UNLESS OTHERWISE NOTED ALL ELECTRICAL CONDUIT AND RELATED FITTINGS SHALL BE PVC-CODED, RIGID GALVANIZED STEEL. ENCASED, BURIED CONDUIT BETWEEN CONTROL PANEL SERVICE ENTRANCE POLE SHALL BE SCHEDULE 40 PVC. EXPOSED CONDUIT ON SERVICE ENTRANCE POLE SHALL BE RIGID GALVANIZED STEEL.
7. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE NEC AND APPLICABLE STATE AND LOCAL CODES.

POWER WIRING MINIMUM IS
2-#12, 1-#12 GND, 3/4" C.

(A) 3-#250 KCM, 1-#4 GND, 2" C.

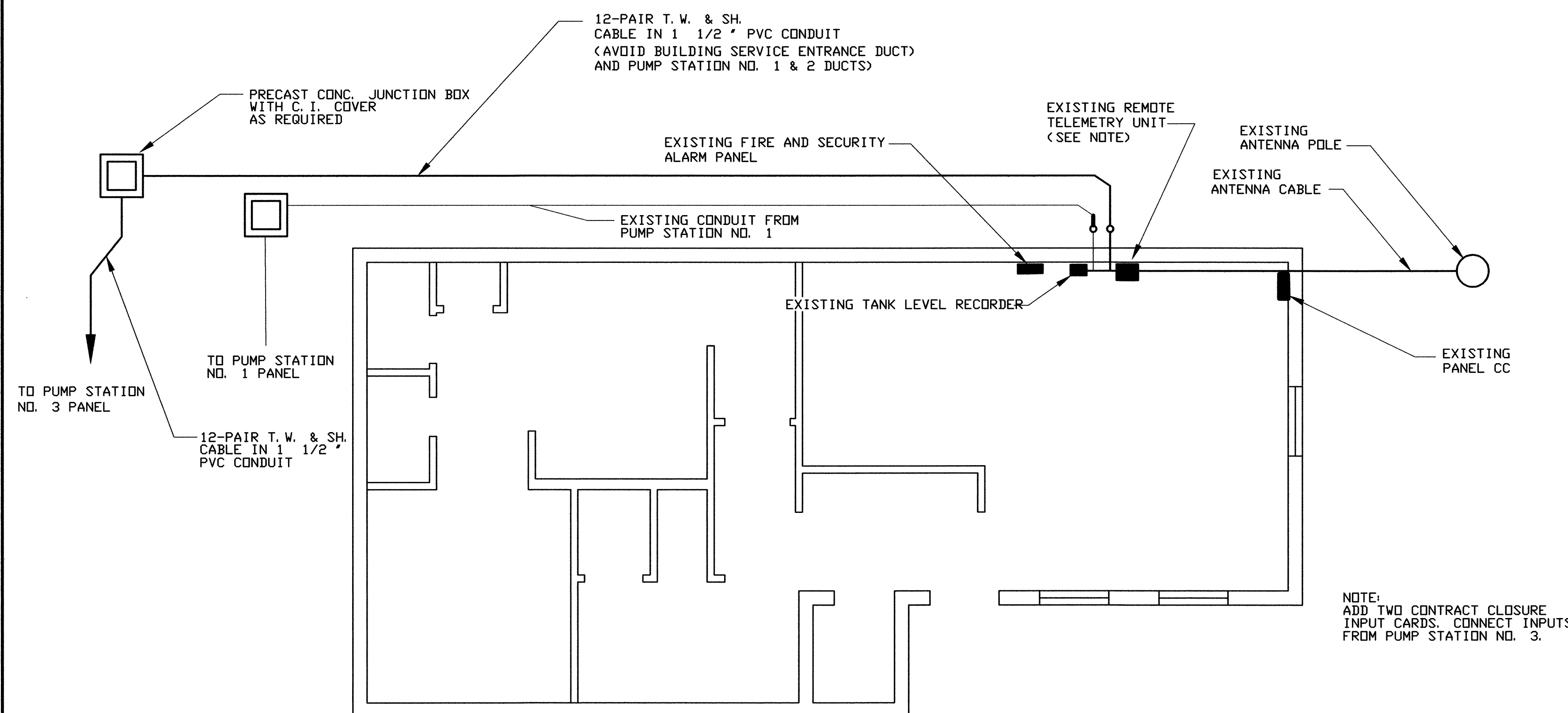
(B) POWER AND CONTROL CABLES SUPPLIED WITH PUMP;
INSTALL IN 2 1/2" C.

(C) 2-#10, 1-#10 GND, 3/4" C

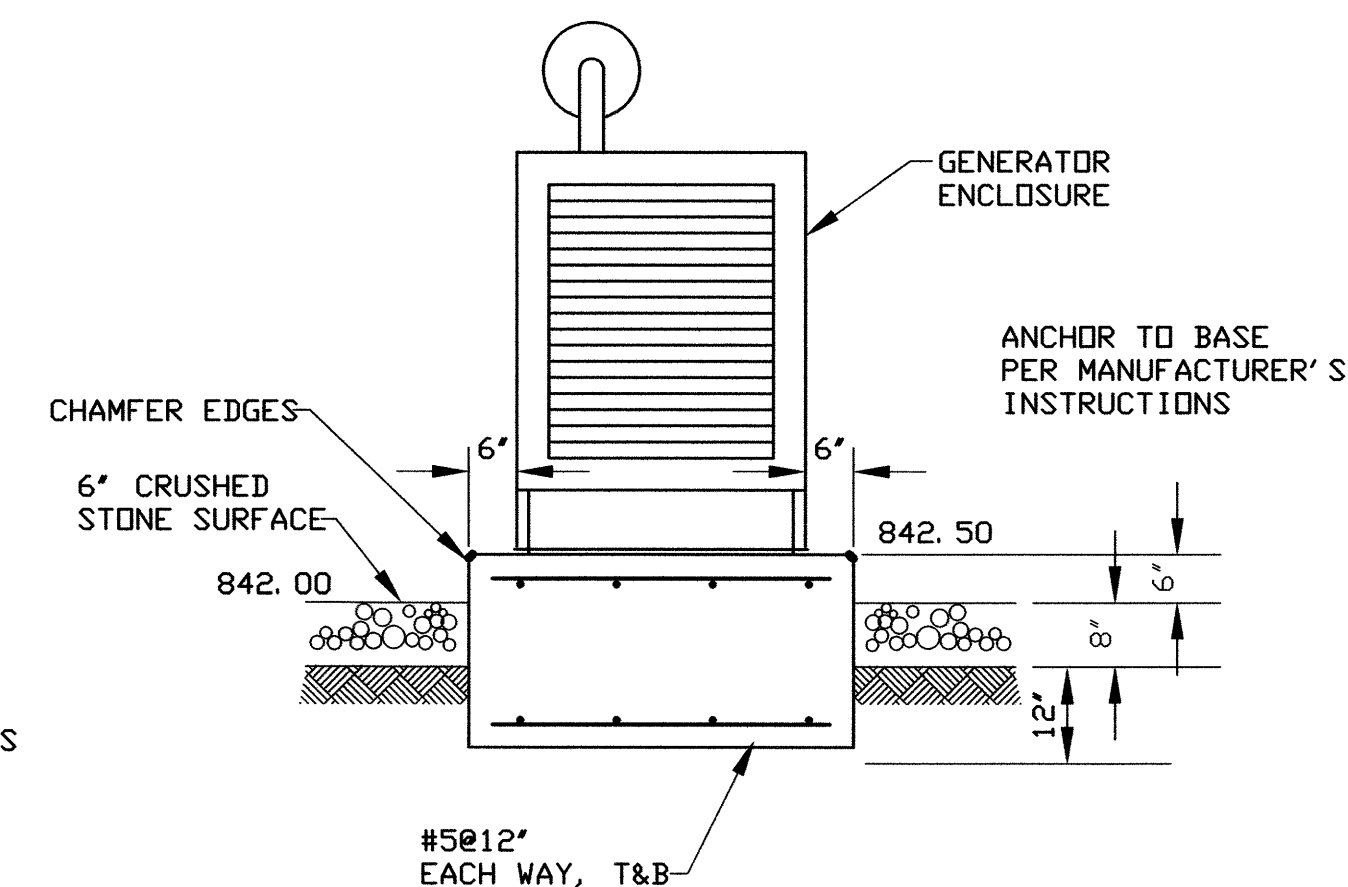
(D) 3-#6, 1-#3 GND, 1 1/4" C

(E) CABLES SUPPLIED WITH FLOAT SWITCHES
AND TRANSDUCER - INSTALL IN 1" C

(F) 2-#2/0, 1-#4 GND, 2" C



PERSONNEL BUILDING ELECTRICAL PLAN



GENERATOR FOUNDATION DETAIL

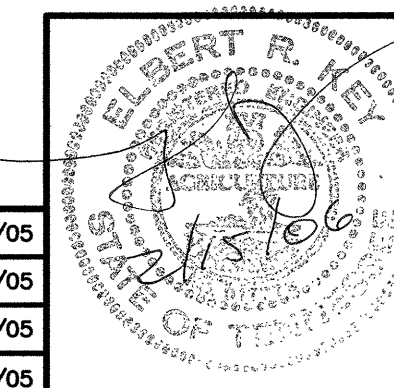
THIS DRAWING IS AN INSTRUMENT OF SERVICE OWNED BY CONSOLIDATED TECHNOLOGIES, INC. (CTI), WHICH SHALL BE DEEMED THE AUTHOR AND WHICH SHALL RETAIN ALL STATUTORY AND COMMON LAW RIGHTS, INCLUDING COPYRIGHTS. THIS DRAWING SHALL NOT BE SCANNED, COPIED, OR DISTRIBUTED TO OTHERS IN ANY FORM OR USED FOR ANY OTHER PURPOSE OR PROJECT WITHOUT PRIOR WRITTEN CONSENT OF CTI. CTI IS NOT RESPONSIBLE FOR CONSEQUENCES RELATED TO UNAUTHORIZED USE OR REUSE OF THIS DRAWING OR PORTIONS THEREOF.

REVNO.	BY	DATE	DESCRIPTION OF REVISION
1			
2			
3			



CONSOLIDATED TECHNOLOGIES, INC.
ENGINEERS IN WATER AND EARTH SCIENCES
CHATTANOOGA, TENNESSEE

DESIGNED: G.M.C.	12/05
DRAWN: M.W.D.	12/05
CHECKED: E.R.K.	12/05
APPROVED: J.T.S.	12/05



CITY OF CHATTANOOGA, TENNESSEE
CITY LANDFILL ON BIRCHWOOD PIKE

LEACHATE PUMP STATION NO. 3
ELECTRICAL

JOB NUMBER
C05057-1

SCALE
AS NOTED

DRAWING NUMBER
23.0

Diagram illustrating the main and location of gate valves near an air release valve. The diagram shows a cross-section of a vault structure with various components labeled:

- 6" THICK CLASS A CONCRETE COLLAR
- 12" (width of concrete collar)
- STANDARD MANHOLE FRAME AND COVER
- ARI D-020 COMBINATION AIR VALVE FOR SEWAGE, STAINLESS STEEL BODY, 2" THREADED, OR APPROVED EQUAL.
- 48" HDPE RISER SECTION
- 2" SHUTOFF VALVE
- HDPE TEE WITH TOP FLANGE PLATE AND GASKET, 2" THREADED HOLE FOR AIR RELEASE VALVE ASSEMBLY
- DUAL CONTAINMENT HDPE
- FUSE OUTER PIPE WALL TO VAULT
- HDPE VAULT
- 6" CRUSHED STONE

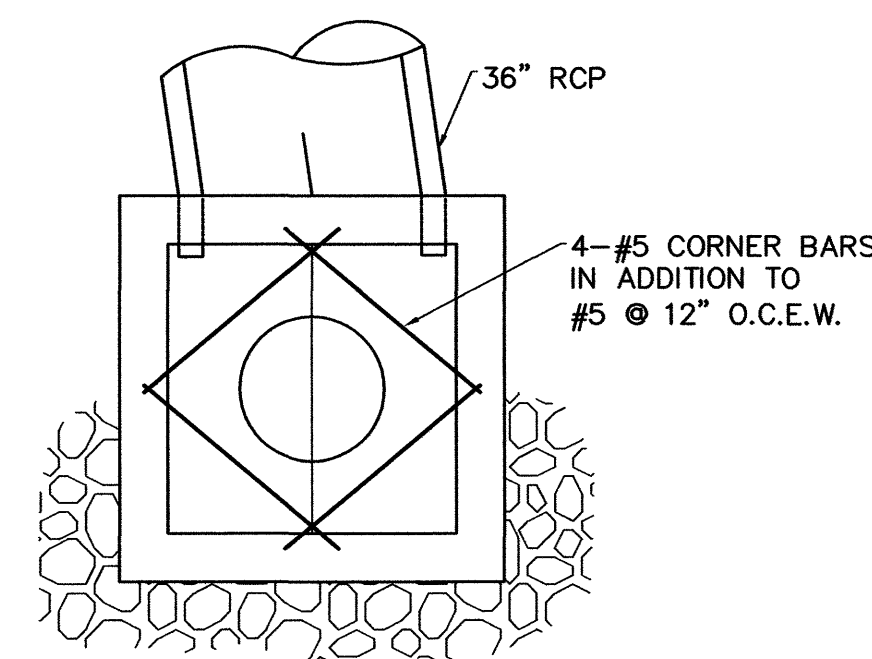
• SEE PLANS FOR SIZE OF FORCE MAIN AND LOCATION OF GATE VALVES NEAR AIR RELEASE VALVE

[illegible]

NOT TO SCALE

* ALSO APPLIES TO GRAVEL ROADS

NOTE: DETAIL DOES NOT APPLY TO OUTFALL PIPES FOR SEDIMENT/DETENTION PONDS 1 OR 2



The diagram illustrates a cross-section of a trench repair. On the left, a pipe is shown with a diameter of 5'-0". The trench is filled with two layers of riprap: a 2'-0" layer of plain riprap on the left and a 10'-0" layer of grouted riprap on the right. A vertical line separates the two riprap types. A trapezoidal shape, representing a filter fabric, is shown within the plain riprap layer, with a note indicating it is to be placed over a 6 oz filter fabric to a minimum thickness of 18 inches. The total width of the trench is labeled as 'PIPE DIAMETER PLUS 4'.

STEEL CASING WITH LOCKING CAP

GROUND SURFACE

SLOPE TO DRAIN

VENTED WELL CAP

POUR CONCRETE APRON (MIN. RADIUS OF 3 FEET AND 4 INCHES THICK)

CONCRETE COLLAR (MIN. 3 FEET THICK)

BONDED TEFLON-LINED TUBING, 3/8" Ø SAMPLE LINE, 1/4" Ø AIR LINE

2 INCH DIA. P.V.C. FLUSH-JOINT CASING

GROUT/BACKFILL (CEMENT/BENTONITE SLURRY)

TOP OF BENTONITE

BENTONITE PLUG (MIN. 2 FEET THICK)

TOP OF FILTER

TOP OF SCREEN

PIEZOMETRIC SURFACE

DRILL HOLE ADVANCE BY HOLLOW STEM AUGER 7 1/8" O/

FILTER MATERIAL (10/20 MORIE INDUSTRIAL SAND)

STAINLESS STEEL, AIR-OPERATED BLADDER PUMP, QED MODEL T1200M, OR EQUAL WITH STAINLESS STEEL INLET SCREEN

SCREEN OPENING (0.010 INCH)

BOTTOM CAP

VARIES

1'

BOTTOM OF SCREEN

TERMINATION DEPTH



2'

DESIGNED: J.T.S.	12/05
DRAWN: M.W.D.	12/05
CHECKED: G.M.C.	12/05
APPROVED: J.T.S.	12/05

DRAWING NUMBER

24.0

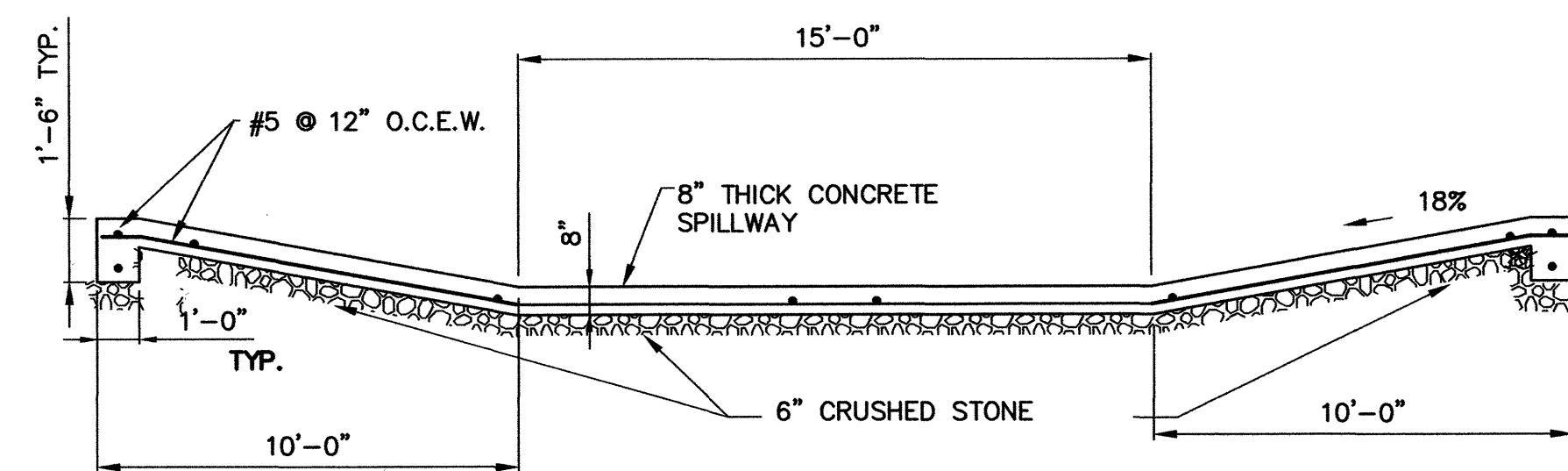
THIS DRAWING IS AN INSTRUMENT OF SERVICE OWNED BY CONSOLIDATED TECHNOLOGIES, INC. (CTI), WHICH SHALL BE DEEMED THE AUTHOR AND WHICH SHALL RETAIN ALL STATUTORY AND COMMON LAW RIGHTS, INCLUDING COPYRIGHTS. THIS DRAWING SHALL NOT BE SCANNED, COPIED, OR DISTRIBUTED TO OTHERS IN ANY FORM OR USED FOR ANY OTHER PURPOSE OR PROJECT WITHOUT PRIOR WRITTEN CONSENT OF CTI. CTI IS NOT RESPONSIBLE FOR CONSEQUENCES RELATED TO UNAUTHORIZED USE OR REUSE OF THIS DRAWING OR PORTIONS THEREOF.

			
			
REV.NO.	BY:	DATE	DESCRIPTION OF REVISION

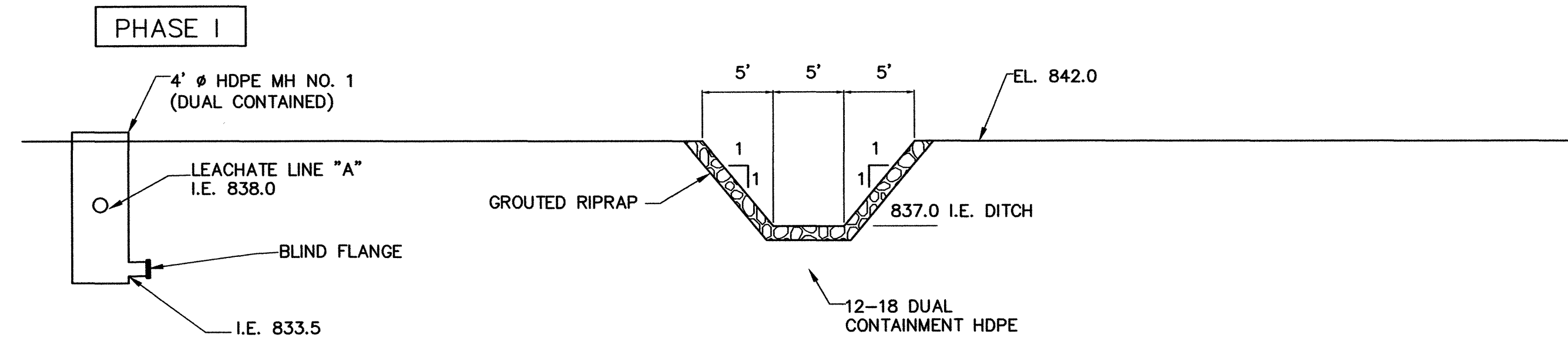


DESIGNED: J.T.S.	12/05
DRAWN: M.W.D.	12/05
CHECKED: G.M.C.	12/05
APPROVED: J.T.S.	12/05

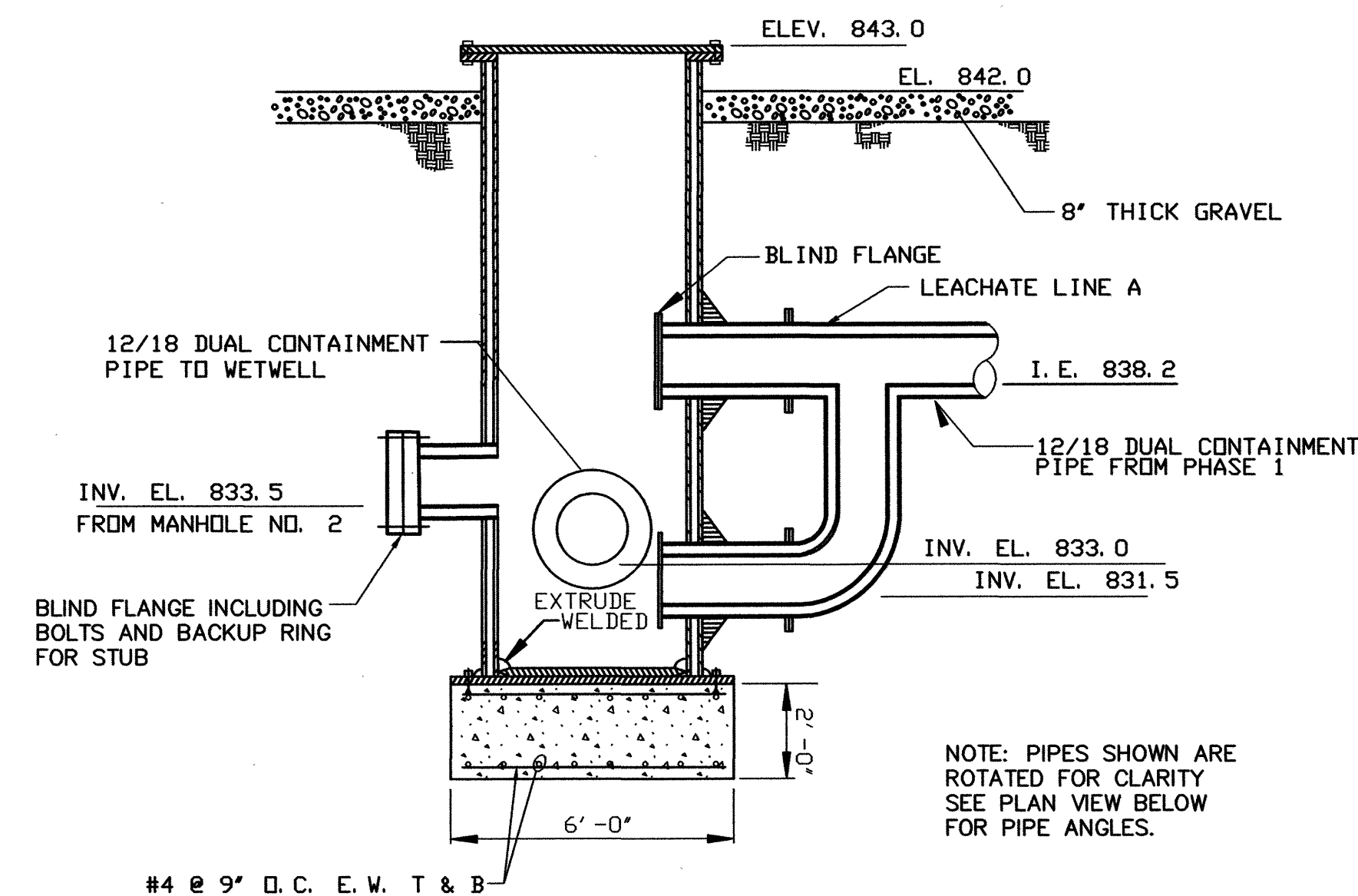
S:\C05057-1\MISCDET2.DWG, Layout1, 2/2/2006 9:06:29 AM



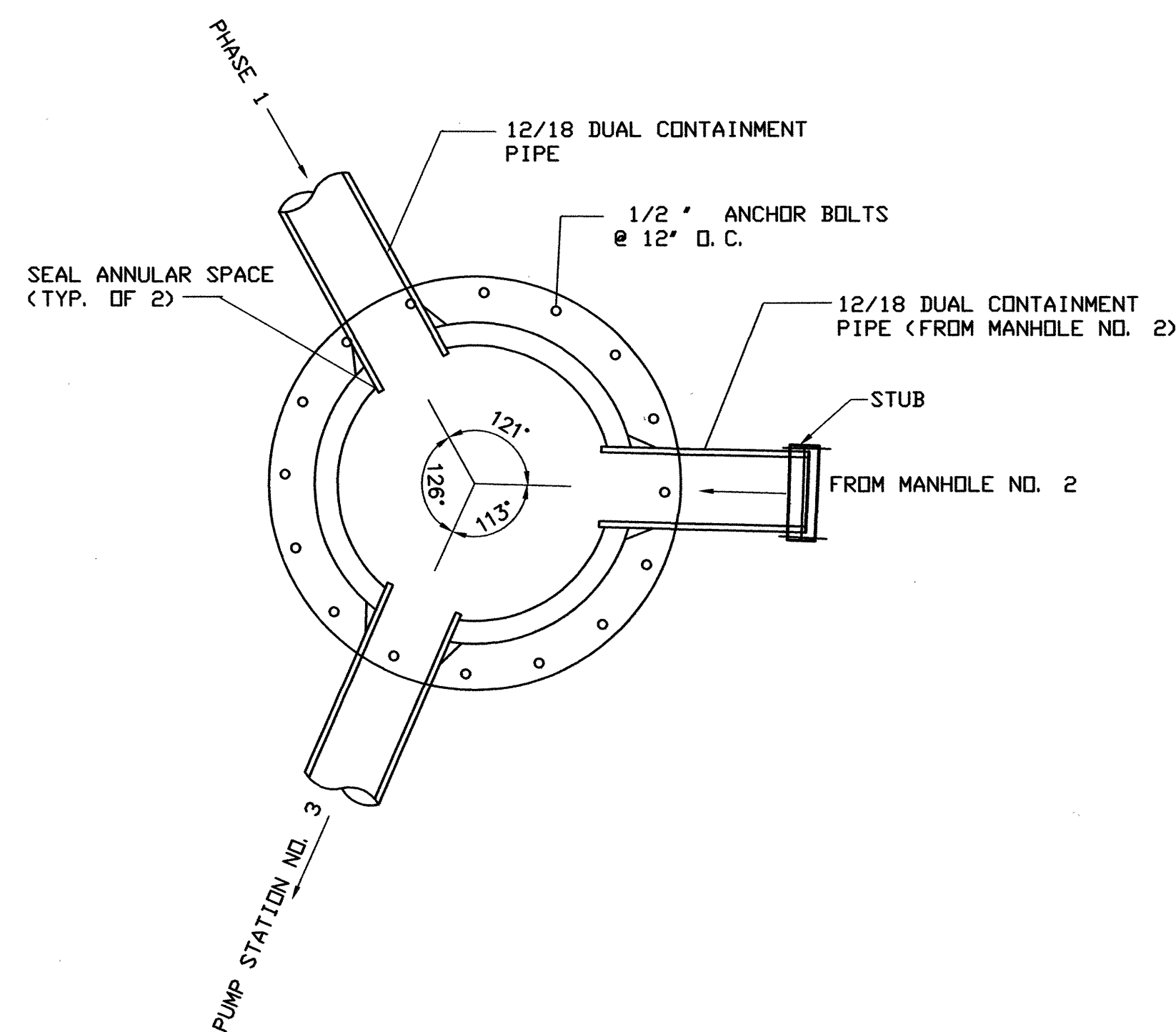
EMERGENCY SPILLWAY SECTION (D) 9
SCALE: 1/4" = 1'-0"



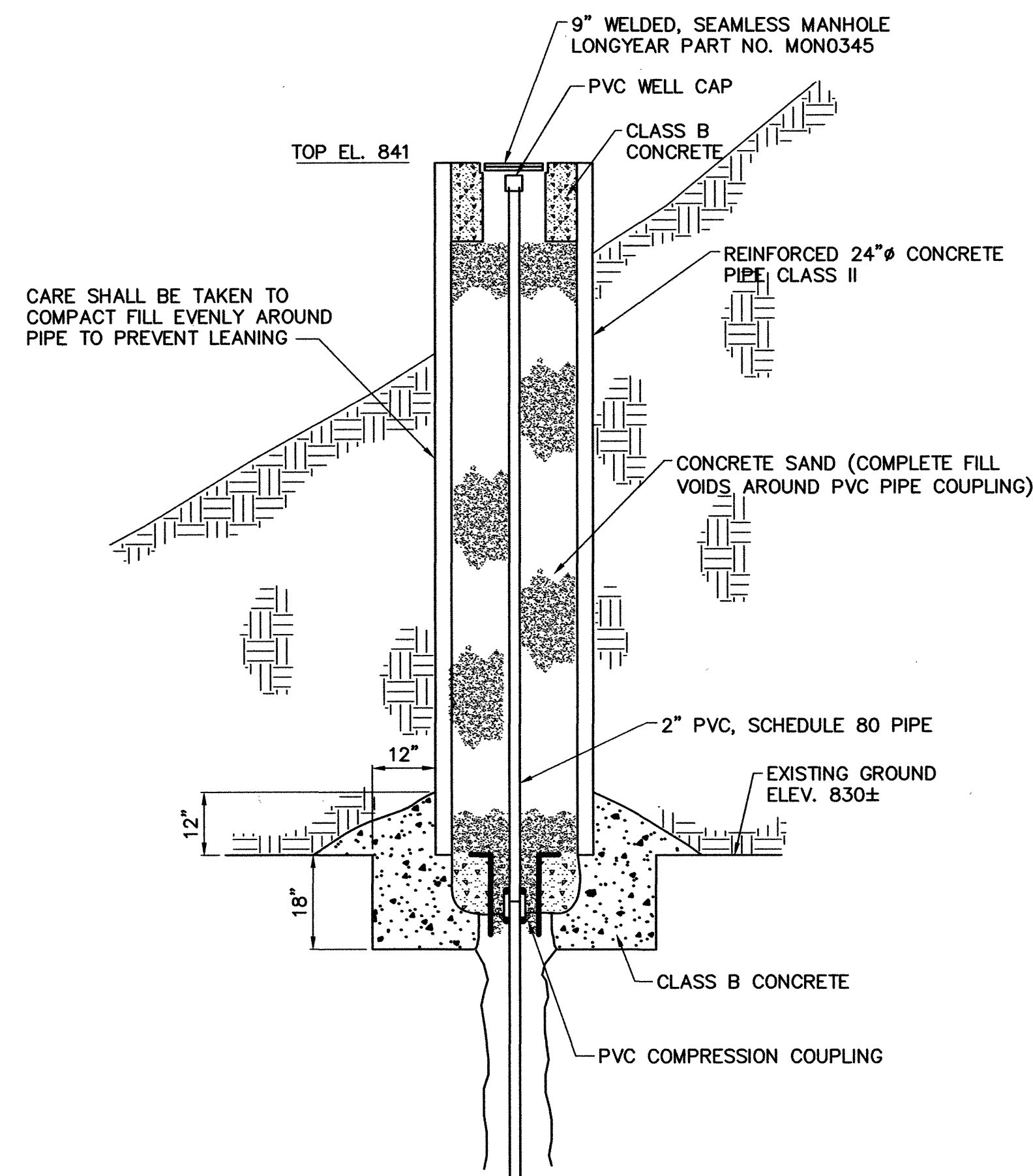
GROUTED RIPRAP SLOT DETAIL
NOT TO SCALE



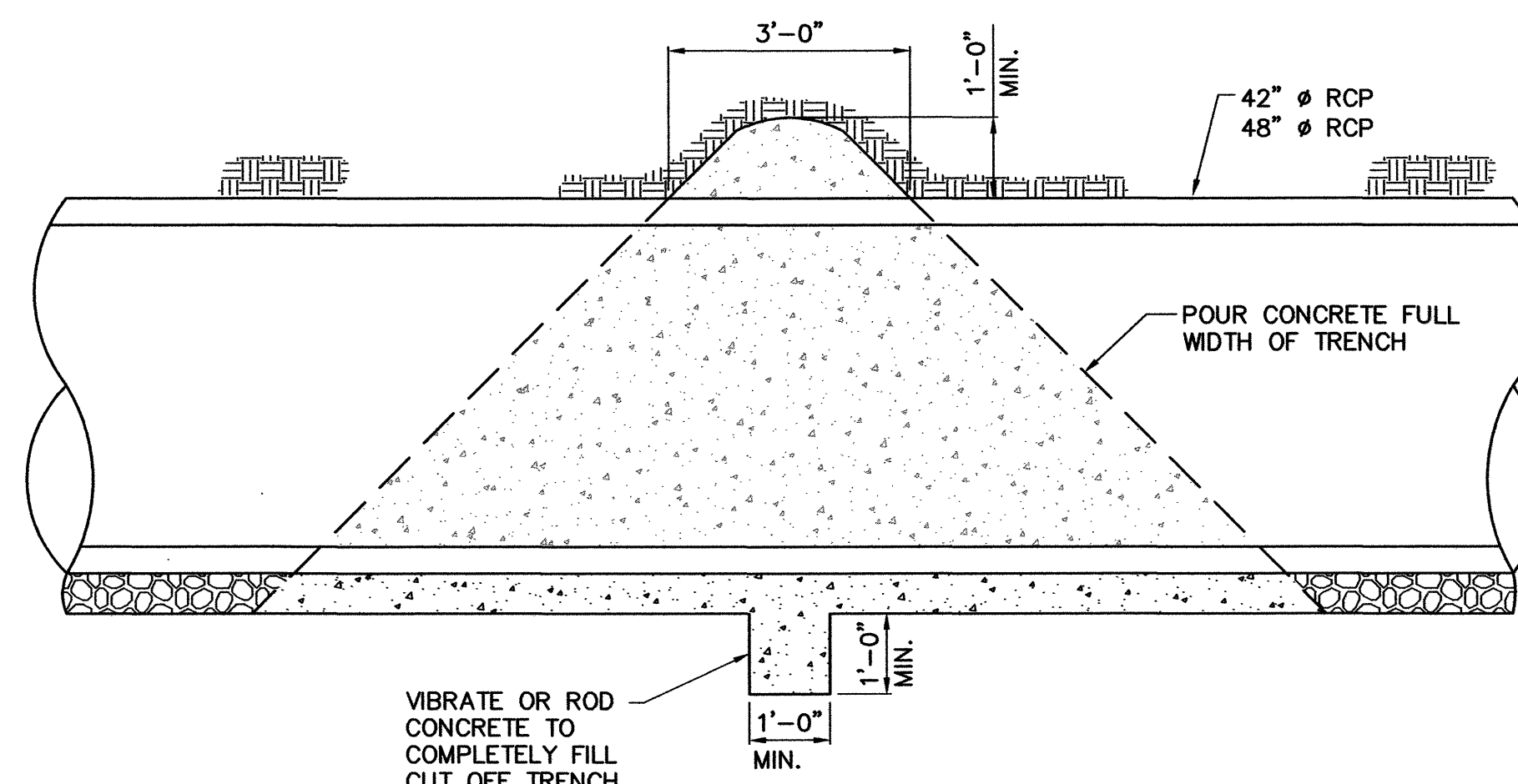
48/54 DUAL CONTAINMENT
LEACHATE MANHOLE NO. 1
NOT TO SCALE



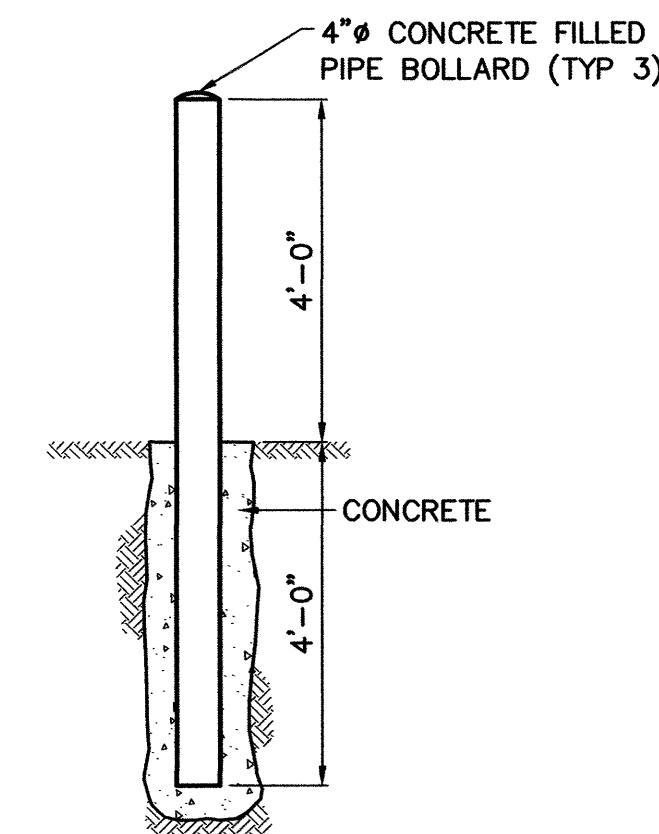
PLAN VIEW- MANHOLE NO. 1
SCALE: 1/2" = 1'-0"



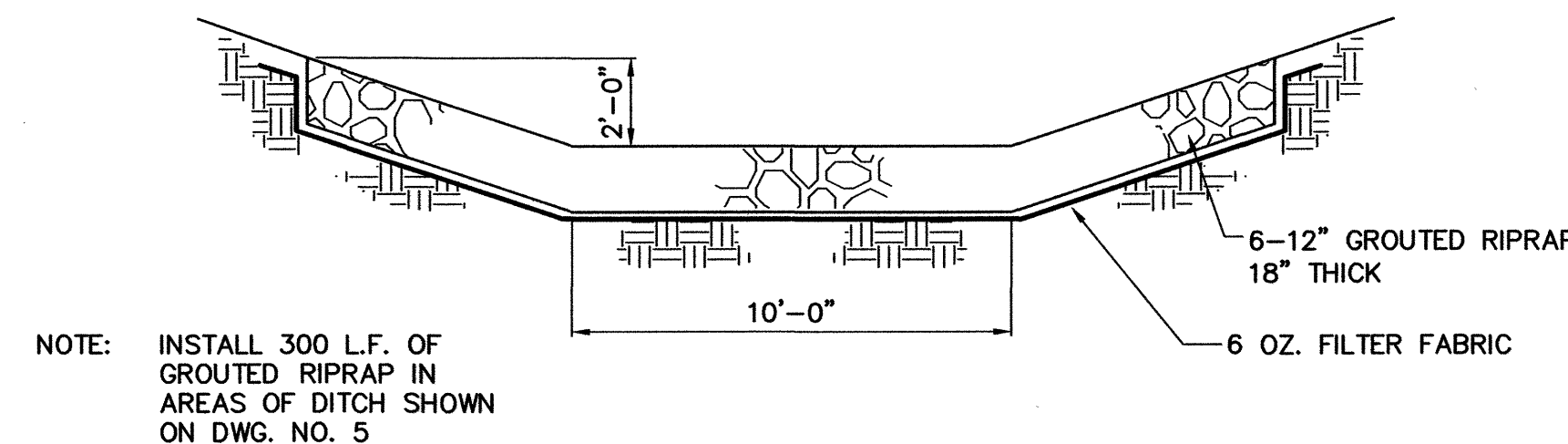
MONITORING WELL NO. 22 EXTENSION DETAIL
SCALE: 1/2" = 1'-0"



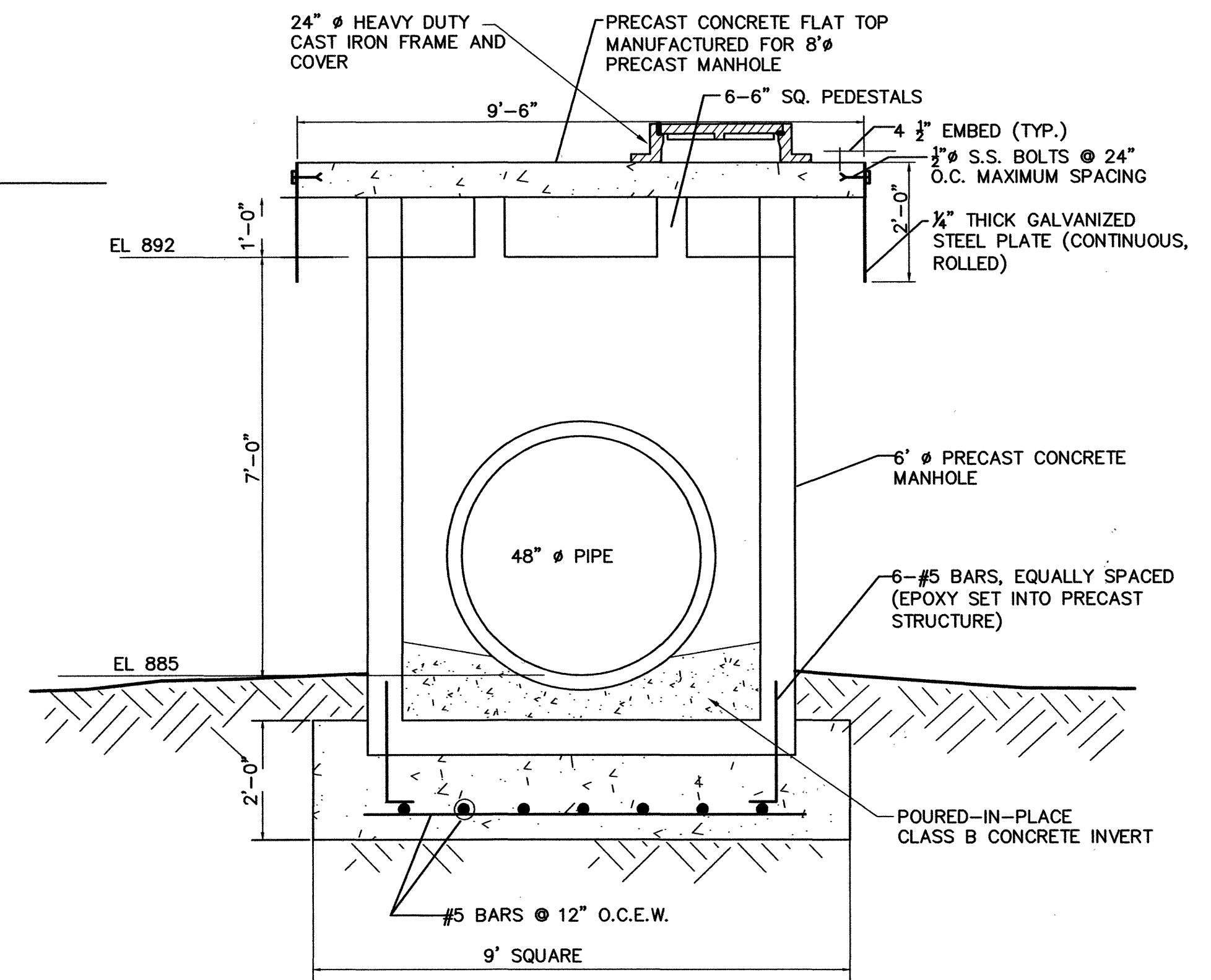
ANTI-SEEP COLLAR DETAIL
NOT TO SCALE



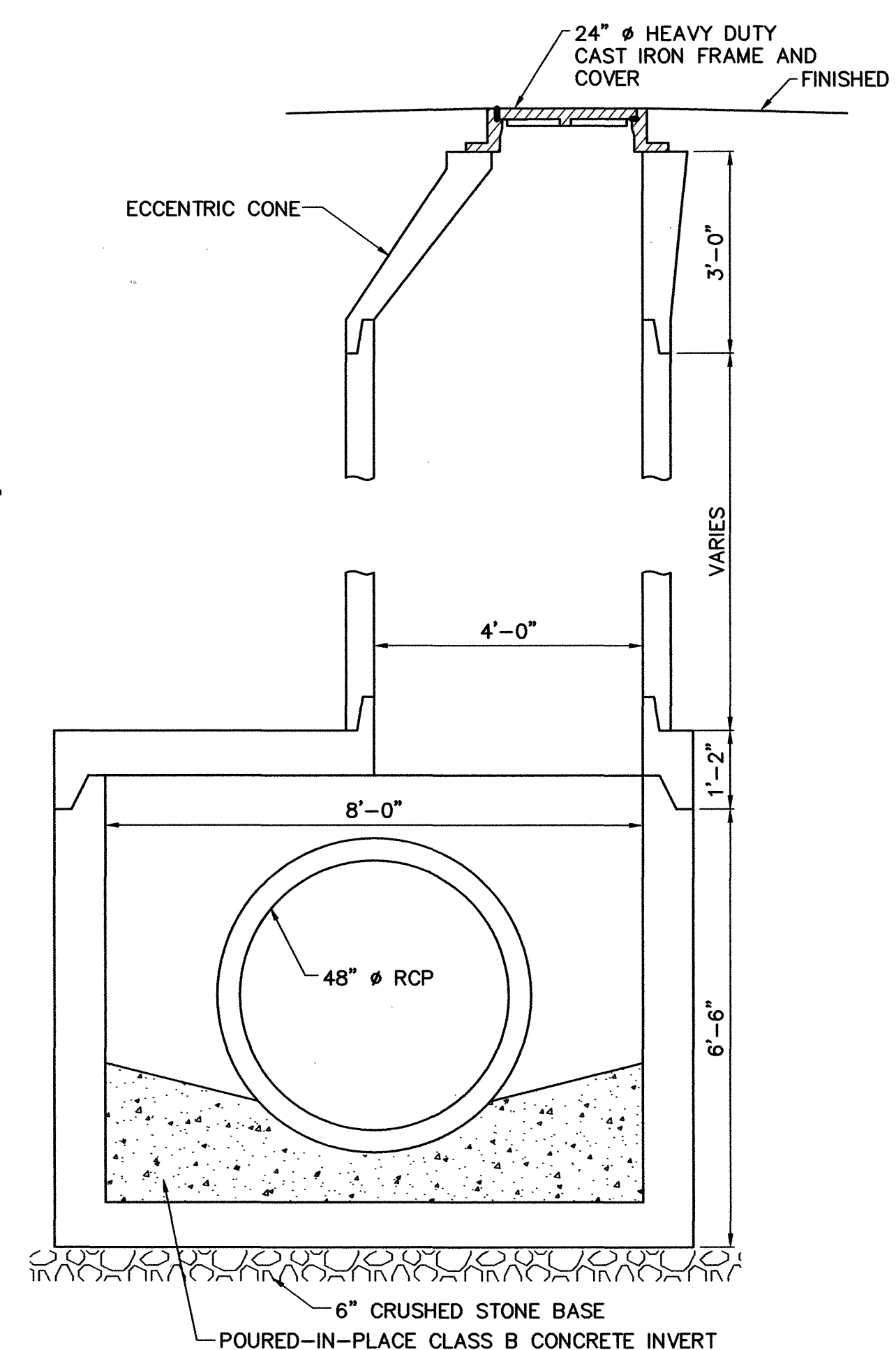
BOLLARD DETAIL
NOT TO SCALE



GROUTED RIPRAP DETAIL FOR
10 FT WIDE DITCH ON WEST SIDE
OF LANDFILL
SCALE: 1/2" = 1'-0"



SEDIMENT POND B OUTFALL STRUCTURE
SCALE: 1/2" = 1'-0"



TYPICAL PRECAST STORM DRAINAGE MANHOLE

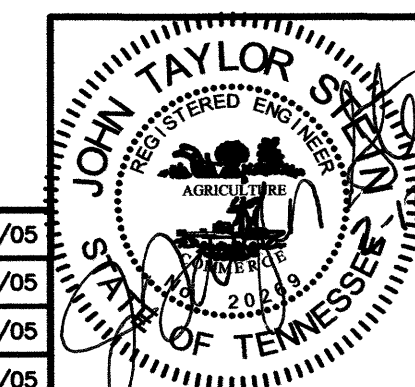
THIS DRAWING IS AN INSTRUMENT OF SERVICE OWNED BY CONSOLIDATED TECHNOLOGIES, INC. (CTI), WHICH SHALL BE DEEMED THE AUTHOR AND WHICH SHALL RETAIN ALL STATUTORY AND COMMON LAW RIGHTS, INCLUDING COPYRIGHTS. THIS DRAWING SHALL NOT BE SCANNED, COPIED, OR DISTRIBUTED TO OTHERS IN ANY FORM OR USED FOR ANY OTHER PURPOSE OR PROJECT WITHOUT PRIOR WRITTEN CONSENT OF CTI. CTI IS NOT RESPONSIBLE FOR CONSEQUENCES RELATED TO UNAUTHORIZED USE OR REUSE OF THIS DRAWING OR PORTIONS THEREOF.

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
1			
2			
3			



CONSOLIDATED TECHNOLOGIES, INC.
ENGINEERS IN WATER AND EARTH SCIENCES
CHATTANOOGA, TENNESSEE

DESIGNED: J.T.S.	12/05
DRAWN: M.W.D.	12/05
CHECKED: G.M.C.	12/05
APPROVED: J.T.S.	12/05



CITY OF CHATTANOOGA, TENNESSEE
CITY LANDFILL ON BIRCHWOOD PIKE

MISCELLANEOUS DETAILS
SHEET 2 OF 2

JOB NUMBER
C05057-1
SCALE
AS NOTED
DRAWING NUMBER
25.0

EXHIBIT "E"

CITY OF CHATTANOOGA

DRAFT MUTUAL OPERATING AGREEMENT WITH BIRCHWOOD II LLC

08-05-19

MUTUAL OPERATING AGREEMENT

This Mutual Operating Agreement is entered into between Birchwood II, LLC (herein “Contractor”), a Tennessee limited liability company and the City of Chattanooga, Tennessee (herein “City”).

WHEREAS, City owns property that is utilized as a landfill known as the City of Chattanooga Landfill on Birchwood Pike (“City Landfill”) upon which is located the City’s scales and scale house and

WHEREAS, the City’s source of title is a Quitclaim Deed from Hamilton County, Tennessee (“Hamilton County”) recorded at book 5103 page 270 in the Register’s Office of Hamilton County which includes a retained ingress and egress easement (the “Access Easement”) in favor of Hamilton County as shown on Plat of record at plat book 58 page 159 in the Register’s Office of Hamilton County; and

WHEREAS, Contractor intends to operate and maintain a construction & debris Landfill (the “Birchwood II Landfill”) in the proximity of the City Landfill which operates as a municipal solid waste landfill; and

WHEREAS, the City, Hamilton County and Contractor entered into that certain Ingress and Egress Easement Agreement (“Easement Agreement”) dated October 25, 2017 and recorded in Book 11199, Page 740 in the Register’s Office of Hamilton County, Tennessee granting to Contractor a retained ingress and egress easement over and across the City Landfill and an ingress and egress easement over the Access Easement.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, the parties agree as follows:

1. **Scale House, Wheel Wash Operation; Hours of Operation.**

During the time that City is operating the City Landfill, City will provide the services of a qualified, trained, and bonded scale operator(s) to operate the scales and scale house and will also provide the facilities, equipment, and supplies necessary to operate the scales and scale house the (collectively, “the Operational Services”); however, Contractor shall be responsible for supplying its own computer and internet connection, phone, dedicated phone line, credit card machine, and office supplies and shall provide a Manager for Operational Services at Contractor’s expense. In the event the City elects to lease the City Landfill for operation by a private entity, the City will no longer be obligated to provide the Operational Services provided, however, such lessee shall be obligated to assume the City’s obligations under this Agreement, including the obligation for operational services described herein, at not more than the Fees to the City described herein; further provided, prior to any offer by the City to lease the City Landfill for operation by a private entity, the City will offer Contractor the right to provide the Operational Services at the same rates as paid by Contractor to the City described in paragraph number 3 below.. Hours of operation for the City Landfill are Monday through Friday from 7:00

a.m. to 5:00 p.m. Contractor shall also have access to the City Landfill's wheel wash station, which has the same hours of operation as the City Landfill.2. Term.

The term of this Agreement shall be for the longer of (i) the life of the Birchwood II Landfill or (ii) twenty (20) years commencing on October 1, 2019 (the "Effective Date").. Thereafter, the Agreement may renew upon mutual agreement of the parties for three (3) consecutive additional terms of four (4) years each (each, a "Renewal Term"). Contractor shall provide City with one hundred eighty (180) days written notice of its request to exercise a Renewal Term, which shall not renew automatically, but only upon approval of City. This Agreement may be terminated early for cause by either party as specified in Paragraph 10. Additionally, either party may terminate this Agreement without cause upon one hundred eighty (180) days' written notice to the other party.

3. Fees to City.

Contractor shall remit to City from the amounts collected by City's operator(s) and deposited into Contractor's accounts a minimum amount of \$1.00 per ton of construction and debris waste deposited into Contractor's Birchwood II Landfill, which amount represents Contractor's payment of fifty percent (50%) of the costs incurred by City for the following: scale operator(s)' salary and benefits, certification and maintenance of the scales, maintenance to roads inside the City Landfill that are utilized by Contractor, maintenance and repair of the wheel wash station, and utilities (collectively, the "Fees"). Invoices shall be sent by City to Contractor on the fifteenth (15th) day of each month and shall be due and payable the first (1st) day of each month following Contractor's receipt. Interest shall accrue at the rate of four (4.0%) percent per annum from the date such payment was due until paid. The Fees shall be subject to renegotiation and appropriate adjustment annually on each anniversary date of the Effective Date to reflect changes in operational costs. This fee shall be adjusted annually on the anniversary date in accordance with the overall Consumer Price Index (CPI). Any change in the Fees shall be specified in writing within thirty (30) days of each anniversary date by amendment to this Agreement. Prior to such change taking effect, the party seeking such change shall provide reasonable documentation of changes in operational costs not less than thirty (30) days prior to the effective date of such proposed change. The other party shall indicate its acceptance or rejection within ten (10) days thereafter.

4. **DISPUTE RESOLUTION.** Claims, disputes, or other matters in question between the parties to this Agreement arising out of or relating to this Agreement, or breach thereof, shall be subject to mediation in Chattanooga, Tennessee, in accordance with the following provisions:

- a. The mediation shall be conducted by a mediator mutually acceptable to both parties.
- b. The parties agree to share equally in the expense of the mediation.
- c. Such mediation may include the Contractor or any other person or entity who may be affected by the subject matter of the dispute.
- d. Unless the parties agree otherwise, mediation shall be a condition precedent to the exercise of any legal remedy other than a proceeding seeking an immediate injunction or

restraining order to protect the rights of a party pending litigation. Notwithstanding the issuance of an injunction or restraining order, or the refusal of a court to issue such an order, the dispute shall continue to be subject to mediation.

5. Description of City Supplied Services.

A. During the time that City is operating the City Landfill, City shall provide a qualified, trained and bonded scale operator(s) to operate the scales at the scale house and ensure that an operator is present and in control of the scales and scale house during the operating hours set forth in Paragraph 1 of this Agreement.

B. During the time that City is operating the City Landfill, City shall provide all labor, benefits, and other related services required in connection with its operator(s) and employees in the operation of the scales and scale house.

C. During the time that City is operating the City Landfill and to the extent required by law, City's operator(s) shall identify and receive customers, make commercially reasonable efforts to identify the types of materials on vehicles entering the landfill, provide information about fees and other landfill services, direct customers to proper dumping locations, weigh vehicles in and out of the Landfill, generate weigh tickets and invoices, collect credit and debit card funds which shall be payable to Contractor's account, generate a summary report and reconcile the report for all money collected daily, and transfer the daily summary report and any checks collected to Contractor's Landfill Manager or its designee on a daily basis or on a schedule otherwise agreed to by the City and Contractor.

D. City shall answer phones and provide information about the City Landfill and Birchwood II Landfill, fees, hours of operations, and other related service in a friendly and professional manner.

E. City shall notify Contractor as soon as practicable about anything requiring Contractor's attention regarding the operation of or access to the Birchwood II Landfill or the performance by City of the services described herein.

F. The Easement Agreement provides access to Contractor and persons desiring to use the Birchwood II Landfill. Nothing contained in this Agreement shall create for Contractor a lease, ownership interest, or other property interest in the City Landfill, the scales or the scale house.

G. City will pay fifty percent (50%) of the costs to provide utilities (electricity and water), weigh ticket forms, maintenance of the scale house, calibration, certification and maintenance of the scales, road maintenance, and scale operator(s) salary and benefits with the other fifty percent (50%) of such costs being paid by Contractor to City as provided in Paragraph 3.

H. Current information about operation and information related to the Birchwood II Landfill shall be provided by City's operator(s) to customers and prospective customers.

6. Improvements.

Contractor agrees to make certain improvements to the City Landfill including without limitation a gate and/or fencing sufficient to ensure that Contractor's customers will not be able to gain entry onto the City Landfill. The improvements shall be constructed in the area depicted on **Exhibit A**, attached hereto and incorporated by reference.

7. Recording Operating Agreement.

The parties agree to prepare and record this Agreement in the Hamilton County Register of Deed's Office.

8. Indemnity.

Contractor agrees to protect, defend, indemnify, and hold the City and its officers, officials, employees, and agents free and harmless from and against any and all losses, penalties, damages, settlements, costs, charges, professional fees or other expenses or liabilities of every kind and character, including reasonable attorneys' fees, arising out of or relating to any and all claims, liens, demands, obligations, actions, proceedings or causes of action of every kind and character in connection with or arising directly or indirectly out of Contractor's performance of this Agreement, and such indemnification shall extend to indirect, consequential, and pollution damages. This indemnification provision shall survive the expiration or sooner termination of this Agreement.

8. Insurance.

Contractor shall purchase and maintain during the term of this Agreement, insurance coverage which will satisfactorily insure Contractor against claims and liabilities which arise because of the execution of this Agreement, with the minimum insurance coverage as follows:

- a. **Commercial General Liability Insurance**, with a limit of \$1,000,000 for each occurrence and \$2,000,000 in the general aggregate.
- b. **Employee's Liability** - \$100,000
- c. **Automobile Liability Insurance**, with a limit of \$1,000,000 for each accident, combined single limit for bodily injury and property damage.
- d. **Worker's Compensation Insurance and Employer's Liability Insurance**, in accordance with statutory requirements, with a limit of \$500,000 for each accident.
- e. **Environmental Liability Insurance** - \$1,000,000

If any of the above cited policies expire during the term of this Agreement, it is the Contractor's responsibility to forward renewal Certificates within ten (10) days after the renewal date containing all the aforementioned insurance provisions. Certificates must specifically cite the following provisions:

- i. City of Chattanooga, its agents, representatives, officers, directors, officials and employees must be named an Additional Insured under the following policies:
 - a) Commercial General Liability
 - b) Auto Liability
- ii. Contractor's insurance must be primary insurance as respects performance of subject contract.
- iii. All policies, except Professional Liability Insurance, if applicable, waives rights of recovery (subrogation) against City of Chattanooga, its agents, representatives, officers, directors, officials and employees for any claims arising out of work or services performed by Contractor under this Agreement.

9. Damage to Property.

Contractor shall be responsible for immediately repairing, at its sole expense, any damages to private or governmental property caused by the Contractor during the use of the Access Easement or operation of the Birchwood II Landfill in accordance with this Agreement. In the event that Contractor fails to immediately repair any such damage, City shall make such necessary repairs and bill the Contractor on the next monthly invoice as provided in Paragraph 3.

10. Termination Without Cause. Restriction on Acceptance of C & D Waste.

It is agreed that during the term of this Agreement, the City shall not accept C & D waste at the City Landfill in amounts in excess of or in a manner different from its current practice and such restrictions shall be binding on any lessee of the City Landfill.

11. Termination Due to Material Breach.

Upon any material breach of this Agreement by the other party, either party may terminate this Agreement early for cause upon written notice of the breach to the other party and with an opportunity to cure the breach within thirty (30) days of written notice of the breach.

12. Default.

A. The occurrence of any of the following acts shall constitute an immediate, material, non-curable default by Lessee:

i. Failure of Contractor to operate the Birchwood II, LLC Landfill for a period of thirty (30) days unless during such time Contractor is contesting any suspension of operation by regulatory authorities in which case such thirty (30) day period shall not begin until after the final determination of such contest; and

ii. Any attempted assignment in violation of Paragraph 21.

B. Contractor's failure to pay the Fees as provided herein or failure to perform any term, covenant or condition of this Agreement, other than those set forth in (a) above, shall not constitute a default unless such breach is not cured within the time period set forth below. City shall give written notice to contractor of such default and if Contractor does not cure any fee default within five (5) days, or other default within thirty (30) days, after the giving of such notice (or, if such default is of such a nature that it cannot be completely cured within such thirty (30) days), if Contractor does not commence such curing within thirty (30) days and thereafter perceived with reasonable diligence and in good faith to cure such default, then City may terminate this Agreement in not less than three (3) days' written notice to Contractor, and on the date specified in said notice the term of this Agreement shall terminate, and Contractor shall cease operations of the Birchwood II Landfill. In the event of a good faith dispute of the amounts due hereunder, the party owing fees shall pay the undisputed amount and the period of default for nonpayment shall not commence until the dispute is finally determined.

13. Equal Opportunity Employment.

Contractor shall be an equal opportunity employer and shall:

A. Provide prior to the Agreement being signed a certification that he/she will not discriminate against any worker, employee, applicant, or any member of the public because of race, creed, age, national origin, sex, or handicap or other protected category nor otherwise commit an unfair employment practice.

B. Agree to include the above noted nondiscrimination requirements in all contracts entered into with suppliers of materials and services, other contractors and sub-contractors, and all labor organizations that may perform labor or services under this Agreement.

14. Public Records.

Except for information and data that is protected as provided in the Tennessee Open Records Act ("TORA"), all reports, permits, applications, etc. filed in connection with this Agreement will be available for public inspection as provided for under TORA.

15. Records Retention and Audit.

- a. All records relating in any manner whatsoever to the Project, or any designated portion thereof, which are in the possession of the Contractor, or any of the Contractor's independent contractors, associates, and/or subcontractors, shall be made available for inspection and copying upon written request to the City.. Additionally, said records in the Contractor's possession shall be made available upon request by the City to any state, federal or other regulatory authorities and any such authority may review, inspect and copy such records. Said records include, but are not limited to, all plans, specifications, submittals, correspondence, minutes, memoranda, tape recordings, videos, or other writings or things which document the Project performance of this Agreement, its design, and its construction. Said records expressly include those documents reflecting the time expended by the Contractor and its personnel to perform the obligations of this Agreement, and the records of expenses incurred by such party the Contractor in its performance under said Agreement. The Contractor shall maintain and protect these records for no less than **seven (7) years** after the completion of the Project, or for any longer period of time as may be required by applicable law, good professional practice, and upon notice during the pendency of any claims or litigation arising from the Project.
- b. The City, or its assigns, may audit all financial and related records (including digital) associated with the terms of the contract or agreement, including timesheets, reimbursable out of pocket expenses, materials, goods and equipment claimed by the Contractor. The City may further audit any of the Contractor's records to conduct performance audits (to identify waste and abuse or to determine efficiency and effectiveness of the contract or agreement), or to identify conflicts of interest.
- c. The Contractor shall at all times during the term of the Agreement, and for a period of seven (7) years after the end of the Agreement contract, keep and maintain records of the work performed pursuant to this contract or agreement. This shall include proper records of quotations, contracts, correspondence, invoices, vouchers, timesheets, and other documents that support actions taken by the Contractor. Documents shall be maintained by the Contractor, which are necessary to clearly reflect all work and actions taken. All such records shall be maintained in accordance with general accepted accounting principles. The Contractor shall, at its own expense, make such records available for inspection and audit (including copies and extracts of records as required) by the City at all reasonable times and without prior notice.
- d. The obligations of this Section shall be explicitly included in any subcontracts, leases or similar agreements formed between the Contractor and any subcontractors, lessees or suppliers of goods or non-professional services to the extent that those subcontracts or agreements relate to fulfillment of the Contractor's obligations to the City for any amounts due under this Agreement.

- e. Costs of any audits conducted under the authority of this section and not addressed elsewhere will be borne by the City, unless the audit identifies significant findings (a variance of more than 10% for any twelve month period) that would benefit the City. The Contractor will reimburse the City for the total costs of an audit that identifies significant findings that would benefit the City.
- f. This Section shall not be construed to limit, revoke, or abridge any other rights, powers, or obligations relating to audit which the City may have by Federal, State, or Municipal law, whether those rights, powers, or obligations are express or implied.

16. Changes in Law.

In the event that changes in Federal or State laws and regulations required modification of the Agreement, the City and Contractor agree to cooperate, as the circumstances require and to modify this Agreement to comply with any applicable law or regulation.

17. Drug-free Workplace.

Contractor shall provide an affidavit prior to the Agreement being signed that it maintains a drug-free workplace program in accordance with Tennessee Code Annotated § 50-9-113.

18. Third Party Rights.

Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than City and Contractor.

19. Relationship of Parties.

Nothing contained herein shall be construed to hold or to make the City a partner, joint venture, or associate of Contractor, nor shall either party be deemed the agent of the other, it being expressly understood and agreed that the relationship between the parties is and shall at all times remain contractual as provided by the terms and conditions of this Agreement.

20. Non-Disclosure.

Contractor agrees not to disclose or to permit disclosure of any information designated by City as confidential, except to the Contractor's employees and independent Contractors, associates, and subcontractors who require such information to perform the services specified in this Agreement.

21. Assignment.

Neither party shall assign this Agreement without written approval from the other party, which approval shall not be unreasonably withheld.

22. Governing Law.

This Agreement shall be governed by the laws of the State of Tennessee.

AGREED AND ENTERED this _____ day of _____, 2019.

BIRCHWOOD II, LLC

CITY OF CHATTANOOGA, TENNESSEE

By: _____

Title: _____

By: _____

Title: _____

EXHIBIT A:



**Affirmative Action Plan
For
City of Chattanooga E-19-008-101**

(Name of Contractor)

The above named Contractor is an equal opportunity employer and during the performance of this contract, the Contractor agrees to abide by the Affirmative Action Plan of the City of Chattanooga as follows:

1. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, or handicap. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, national origin, or handicap. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay, or other forms of compensation, and selection of training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
2. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin, or handicap.
3. The Contractor will send to each labor union or representative of workers with which he/she has a collective bargaining agreement or other contract or understanding, a notice advising the said labor union or works' representatives of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
4. The DBE goal for this project has been set at 0%.
5. This Plan or any attachments thereto shall further provide a list of all employees annotated by job function, race, and sex who are expected to be utilized on this project.
6. During the term of this contract the following non-discriminatory hiring practices shall be employed to provide employment opportunities for minorities and women:

- a. All help wanted ads placed in newspapers or other publications shall contain the phrase "Equal Employment Opportunity Employer".
 - b. Maintain systematic contracts with minority groups and human relations organizations.
 - c. Encourage present employees to refer qualified minority group and female applicants for employment opportunities.
 - d. Use only recruitment sources which state in writing that they practice equal opportunity. Advise all recruitment sources that qualified minority group members and women will be sought for consideration for all positions when vacancies occur.
7. During the term of this contract, the Contractor, upon request of the City of Chattanooga Office of Economic and Community Development, will make available for inspection by the City of Chattanooga Office of Economic and Community Development, copies of payroll records, personnel records, documents and other records that may be used to verify Contractor compliance with these equal opportunity provisions.
8. The Contractor agrees to notify the City of Chattanooga Office of Economic and Community Development of any failure or refusal on the part of the contractor or any subcontractors to comply with the equal opportunity provisions set forth. Any failure or refusal to comply with the aforementioned provisions by the Contractor and/or Subcontractors shall be a breach of this contract.

(Signature of Contractor)

(Title and Name of Construction Company)

(Date)

Chapter No. 817 (HB0261/SB0377). "Iran Divestment Act" enacted.

Vendor Disclosure and Acknowledgement

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each bidder is not on the list created pursuant to § 12-12-106.

(SIGNED) _____

(PRINTED NAME) _____

(BUSINESS NAME) _____

(DATE) _____

For more information, please contact the State of Tennessee, Central Procurement Office
<https://www.tn.gov/generalservices/procurement/central-procurement-office--cpo-/library-/public-information-library.html>

SECTION 00486

DRUG-FREE WORKPLACE AFFIDAVIT OF PRIME BIDDER

STATE OF _____

COUNTY OF _____

Comes the affiant after having first been duly sworn and testifies as follows:

1. My name is _____ I hold the principal office of
_____ for _____.
(Name of Principal Office) (Name of Bidding Entity)

2. _____ has submitted a bid to the
(Name of Bidding Entity)
City of Chattanooga for the construction of Contract E-19-008-101, Operational Lease
Agreement for City Landfill RFP.

3. _____ employs more than five (5) employees.
(Name of Bidding Entity)

4. In accordance with Tenn. Code Ann. §50-9-113, this is to certify that
_____ has in effect at the time of its submission of
(Name of Bidding Entity)
a bid to perform the construction of the City of Chattanooga project identified above,
a drug-free workplace program that complies with Title 50, Chapter 9 of the Tennessee Code.

5. This affidavit is made on personal knowledge.

Further the affiant saith not this _____ day of _____, 20__.

Signature

Subscribed and sworn to before me this _____ day of _____.

Notary Public

My Commission Expires:

(Date)

(SEAL)

END OF DOCUMENT

No Contact/No Advocacy Affidavit

City of Chattanooga
Purchasing Division

For Submission with Sealed RFP or RFQ Responses:

State of _____

County of _____

_____ (agent name), being first duly sworn, deposes and says that:

(1) He/She is the owner, partner, officer, representative, or agent of _____
_____ (business name), the Submitter of the attached sealed solicitation
response to Solicitation # _____;

(2) _____ (agent name) swears or affirms that the Submitter
has taken notice, and will abide by the following No Contact and No Advocacy clauses:

NO CONTACT POLICY: After the posting of this solicitation, a potential submitter is prohibited from directly or indirectly contacting any City of Chattanooga representative concerning the subject matter of this solicitation, unless such contact is made with the Purchasing Division.

NO ADVOCATING POLICY: To ensure the integrity of the review and evaluation process, companies and/or individuals submitting sealed solicitation responses, as well as those persons and/or companies formally/informally representing such submitters, may not directly or indirectly lobby or advocate to any City of Chattanooga representative.

Any business entity and/or individual that does not comply with the No Contact and No Advocating policies may be subject to the rejection or disqualification of its solicitation response from consideration.

Submitter Signature:

Printed Name:

Title: _____

Subscribed and sworn to before me this _____ day of _____, 2_____.

Notary Public: _____

My commission expires: _____