



HABERSHAM COUNTY  
GEORGIA | Est. 1818

**HABERSHAM COUNTY**  
**Development Authority**  
130 Jacobs Way, Suite 302 , Clarkesville, GA 30523  
706-839-0200

[www.habershamga.com](http://www.habershamga.com)

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## REQUEST FOR PROPOSALS

Habersham County Development Authority is soliciting proposals for  
HBP Pad 10 Grading & Drainage

PROPOSALS DUE:

June 14, 2023  
10:00 AM EST

SUBMIT PROPOSALS TO:

Habersham County  
Purchasing, Finance Department  
“HBP Pad 10 Grading & Drainage”  
130 Jacobs Way, Suite 302  
Clarkesville, GA 30523  
[purchasing@habershamga.com](mailto:purchasing@habershamga.com)  
706-839-0200



**Office of County Commissioners**  
**Project No. HIP 10 Grading & Drainage**  
**Proposal Due Wednesday June 14, 2023**  
**2:00 PM EST**

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**PROJECT DESCRIPTION AND GENERAL NOTES**

PROJECT NO.: **HBP Pad 10 Grading & Drainage**

**PROJECT CONSISTS OF:** Drainage and grading improvements on Habersham Business Park (HBP) Pad 10. The drainage improvements consist of providing all equipment and labor for the complete installation and compaction of approximately 351 LF of 24” HDPE Pipe, 307 LF of 30” HDPE Pipe, and 42 LF of 36” CMP. In addition, there are 10 complete precast drainage structures and 2 flared CMP sections. All improvement materials (pipe, concrete structures, and #57 aggregate for bedding and/or structural backfill) are to be provided by the winning bidder. Safety items, personnel, materials, equipment, and/or tools that may be required for OSHA compliance for trenching and shoring shall be the responsibility of the bidding contractor.

HBP Pad 10 also includes rough grading of the site. Plans and profiles made a part of this bid proposal represent what the expected finish grades will be.

**PROPOSAL GUARANTY:** NOT LESS THAN FIVE (5) PERCENT OF THE TOTAL BID.

PERFORMANCE AND PAYMENT BONDS WILL BE REQUIRED

NO PROPOSAL SHALL BE WITHDRAWN FOR A PERIOD OF SIXTY (60) DAYS FROM DATE OF BID OPENING.

BIDDER SHALL ENTER ALL UNIT PRICES, MAKE ALL EXTENSIONS AND TOTAL BID.

PROJECT COMPLETION DATE: **August 1, 2023**

**NOTE:**

*All work on this project shall be in accordance with Plans, if any, and Project Special provisions*

<b>Addendums</b>	<b>Signature</b>
Addendum 1	
Addendum 2	
Addendum 3	
Addendum 4	
Addendum 5	

## RFP Timetable

Description	Date
RFP released	May 17, 2023
Deadline for proposal questions	June 2, 2023 at 2:00 PM EST
<b>Submittal deadline</b>	<b>Wednesday June 14, 2023 at 2:00 PM EST</b>
Tentative award date	TBD
Project Completion Date	August 1, 2023

### Submittal Requirements

Each bidder must submit their proposal, enclosed in a sealed envelope or box, and marked with the bidders' name, address and labeled: **"HBP Pad 10 Grading & Drainage"** and addressed to:

Habersham County  
Purchasing, Finance Department  
130 Jacobs Way, Suite 302  
Clarkesville, GA 30523

Proposals shall be received no later than **2:00 PM, Wednesday, June 14, 2023** at Habersham County's Administration Building at 130 Jacobs Way, Suite 302, Clarkesville, GA 30523, at which time and place all proposals will be publicly opened and acknowledged.

Hand delivered copies may be delivered to the above address ONLY between the hours of 8:00AM and 5:00PM EST, Monday through Friday, excluding holidays observed by the Habersham County Government. For a complete listing of holidays please visit [www.habershamga.com](http://www.habershamga.com).

## **SPECIAL PROVISIONS**

**PROPOSAL GAURANTY:** No proposal will be considered unless accompanied by a Proposal Guaranty consisting of a Bid bond, certified check, or negotiable instrument in the amount of **Five (5) Percent** of the total bid received as assurance that the bidder, upon acceptance of his/her bid, can execute such contractual documents as may be required within a specified period of time.

**DELIVERY OF PROPOSAL:** Each proposal together with the Proposal Guaranty shall be in a sealed envelope so marked as to identify the contents without being opened. Proposals will be received until the time and date set in the Notice to Contractors for opening and must be in the hands of the officials indicated by that time. Proposals received after the time established for opening of bids will be returned unopened to the Bidder.

**AWARDS OF CONTRACT:** If a contract is awarded, it will be awarded to the lowest responsible bidder whose Proposal shall have met all prescribed requirements. The Contract will be awarded, if at all, within 60 calendar days after opening of Proposals.

**CANCELLATION OF AWARD:** The Development Authority reserves the right to cancel the Award of any Contract at any time before the execution of said Contract by all parties without any liability against the Development Authority.

**RETURN OF PROPOSAL GUARANTY:** All Proposal Guaranties except that of the lowest responsible Bidder will be returned immediately following the Award of the Contract. The Guaranty of the successful Bidder to whom the Award is made will be retained until the project is accepted by the Habersham Development Authority.

**REQUIREMENTS OF PERFORMANCE AND PAYMENT BONDS:** 100% each for the total base bid.

**PAYMENT:** the Habersham County Development Authority will finance the project as follows: Payment will be made to the contractor each calendar month based on the estimated amount of work complete in place.

**NOTICE TO PROCEED:** The work shall begin within 10 days after notification to begin work by the Development Authority and shall be carried through to completion without unreasonable delays and without suspension of the work unless authorized in writing by the Development Authority. If there are unreasonable delays or unauthorized suspensions of the work, The Development Authority reserves the right to charge the Contractor, not as a penalty, but as liquidated damages as prescribed by the current edition of the Georgia Department of Transportation Standard Specifications.

RETAINAGE: Retainage will be withheld from payments.

**SECTION-107 LEGAL REGULATIONS AND RESPONSIBILITY TO THE PUBLIC:**

Delete Sub-Section 107.15 and Substitute the following:

107.15 RESPONSIBILITY FOR CLAIMS: The contractor shall indemnify and save harmless the Development Authority, its officers and employees, from all suits, actions, or claims of any character brought because of any injuries or damage received or sustained by any person, persons, or property on account of the operations of the said Contractor; or on account of or in consequence of any neglect in safe-guarding THE WORK; or through use of unacceptable materials in constructing THE WORK; or because of any act or omission, neglect or misconduct of said Contractor; or because of any claims or amount recovered from any infringements or patent, trademark, or copyright; or from any claims or amounts arising or recovered under the "Workmen's Compensation Act," or any other law, ordinance, order, or decree; and so much of the money due the said Contractor under and by virtue of his Contract as may be considered necessary by the Development Authority for such purpose may be withheld for use of the Development Authority; or, in case no money is due, his surety may be held until such suit or suits, action or actions, claim or claims for injuries or damages as aforesaid shall have been settled and suitable evidence to that effect furnished to the Development Authority; except that money due the Contractor will not be withheld when the Contractor produces satisfactory evidence that he is adequately protected by public liability and property damage insurance.

**SECTION 108.08 OF THE GEORGIA DEPARTMENT OF TRANSPORTATION  
STANDARD SPECIFICATIONS:**

Failure or Delay in Completing the Work on Time.

Any Liquidated Damages Assessed by the Development Authority for failure or delay in completing the Work on time shall be in accordance with Section 108.08 of the latest edition of the Georgia Department of Transportation Standard Specifications. Completion date is September 1, 2017. Wet conditions, inclement weather, or reasons beyond the contractor's control that prohibits work will not be charged as a working or available day.

**SECTION 150 – TRAFFIC CONTROL DURING CONSTRUCTION:**

Traffic Control, if required, will be provided by Contractor.

**EROSION AND SEDIMENTATION CONTROL**

Erosion Control for the grading and drainage improvements on HIP Pads 8 and 9 will be the responsibility of the Contractor. Remaining Erosion Control measures will be the responsibility of others.

**SECTION 208 – EMBANKMENTS**

The bidding contractor shall familiarize himself with Section 208 and compaction requirements therein. Compaction testing for embankment and backfills will be required and is considered incidental. No separate payment will be made

**SECTION 550 – STORM DRAIN PIPE**

The bidding contractor shall familiarize himself with Section 550 and the GDOT Thermoplastic Pipe Standard Details.

**INSURANCE REQUIREMENTS:**

The Limits of Liability for the insurance by the General Conditions shall not be less than the following amounts:

**A. WORKERS COMPENSATION:**

- (1) State Statutory
- (2) Applicable Federal (e.g. Longshoreman’s) Statutory
- (3) Employer’s Liability \$1 Million

**B. Comprehensive General Liability (including Contractual Liability, Premises-Operations; Independent Contractor’s Protective; Products Liability - Completed Operations; Broad Form Property Damages):**

- (1) General Aggregate (Except Products – Completed Operations) \$2 Million
- (2) Products – Completed Operations Aggregate \$1 Million
- (3) Personal and Advertising Injury (per Person/Organization) \$1 Million
- (4) Each Occurrence (Bodily Injury) \$25,000
- (5) Each Occurrence (Property Damage) \$50,000
- (6) Excess or Umbrella Liability \$3 Million
  - a. General Aggregate \$3 Million
  - b. Each Occurrence \$3 Million

**NOTICE TO ALL BIDDERS:** Certificates of Insurance must be available at the time contract is signed by the Habersham County Development Authority.

**ALL BIDDERS MUST FURNISH PROOF OF LIABILITY INSURANCE, WORKER’S COMPENSATION LIABILITY INSURANCE, AND ANY OTHER INSURANCE REQUIRED BY APPLICABLE STATE, FEDERAL, AND ADMINISTRATIVE LAW.**

Such proof shall be submitted with the bid/proposal and show evidence of insurability satisfactory to Habersham County as to form and content. If the bid is selected by the County, the Bidder must maintain, at a minimum, the insurance policies and minimums indicated in the selected bid. If the Bidder maintains broader coverage and/or higher limits than shown in the bid, Habersham County shall be entitled to coverage for the higher limits maintained by the Bidder.

Any and all Insurance Coverage(s) and Bonds required under the terms and conditions of the contract shall be maintained during the entire length of the contract, including any extensions



or renewals thereto, and until all work has been completed to the satisfaction of Habersham County. Evidence of said insurance coverages shall be provided on or before the inception date of the Contract.

Bidder shall provide written notice to Habersham County immediately if it becomes aware of or receives notice from any insurance company that coverage afforded under such policy or policies shall expire, be cancelled or altered.

Certificates of Insurance are to list Habersham County Government, its' Officers, Officials and Employees as an Additional Insured (except for Workers' Compensation and Professional Liability). This insurance shall apply as Primary Insurance before any other insurance or self-insurance, including any deductible, non-contributory, and Waiver of Subrogation provided in favor of Habersham County. If Habersham County shall so request, the Bidder will furnish the County for its inspection and approval such policies of insurance with all endorsements, or confirmed specimens thereof certified by the insurance company to be true and correct copies.

The obligations for the Bidder to procure and maintain insurance shall not be constructed to waive or restrict other obligations. It is understood that neither failure to comply nor full compliance with the foregoing insurance requirements shall limit or relieve the Bidder from any liability incurred as a result of their activities/operations in conjunction with the Contract and/or Scope of Work.

## **QUESTIONS, INTERPRETATIONS AND ADDENDA**

No inquiries or interpretation of meaning concerning this Request for Proposal will be made to any interested party orally. Every inquiry or request for interpretation should be made in writing via e-mail. All inquiries and requests for interpretation should be sent via e-mail to Purchasing at [purchasing@habershamga.com](mailto:purchasing@habershamga.com) All questions, answers, and addenda will be posted on the website [www.habershamga.com](http://www.habershamga.com). The final date for questions is April 4, 2018. It will be the responsibility of interested parties to periodically check the website for any new information.

**SIGNATURE SHEET**

PROJECT NO.: **HBP Pad 10 Drainage & Grading**  
HABERSHAM COUNTY DEVELOPMENT AUTHORITY

BID SUBMITTED

BY: \_\_\_\_\_  
(Print Name of Firm)

CONTRACT EXECUTED ON BEHALF OF THE CONTRACTOR:

This the \_\_\_\_\_ Day of \_\_\_\_\_, 2023

BY: \_\_\_\_\_ TITLE \_\_\_\_\_

\_\_\_\_\_  
Printed Name of Official Signing Contract

WITNESS FOR THE  
CONTRACTOR \_\_\_\_\_



CONTRACT EXECUTED ON BEHALF OF HABERSHAM COUNTY DEVELOPMENT  
AUTHORITY:

This the \_\_\_\_\_ Day of \_\_\_\_\_, 2023

BY: \_\_\_\_\_

\_\_\_\_\_  
Habersham County Development Authority Chairman

WITNESS FOR THE  
AUTHORITY \_\_\_\_\_

ATTEST: \_\_\_\_\_ COUNTY COMMISSION CLERK

**BIDDERS DECLARATION**

The bidder understands, agrees and warrants:

That the bidder has carefully read and fully understands the full scope of the requirements.

That the bidder has the capability to successfully undertake and complete the responsibilities and obligations in said specifications.

That the bidder has acceptable liability insurance and a declaration of insurance form will be provided before the commencement of any work.

That this bid may be withdrawn by requesting such withdrawal in writing at any time prior to **Wednesday, June 14, 2023 at 10:00 P.M.** but may not be withdrawn after such date and time.

That Habersham County Development Authority reserves the right to reject any or all bids and to accept that bid which will, in its opinion, best serve the public interest. The Habersham County Development Authority reserves the right to waive any technicalities and formalities in the bidding.

That by submission of this bid the bidder acknowledges that the Habersham County Development Authority has the right to make any inquiry or investigation it deems appropriate to substantiate or supplement information supplied by the bidder.

If a partnership, a general partner must sign.

If a corporation, the authorized corporate officer(s) must sign and the corporate seal must be affixed to this bid.

**BIDDER:**

\_\_\_\_\_  
Name Title

\_\_\_\_\_  
Name Title

**AFFIX CORPORATE SEAL (If Applicable)**

**CERTIFICATE OF NON-DISCRIMINATION**

In connection with the performance of work under this contract, the bidder agrees as follows:

The bidder agrees not to discriminate against any employee or applicant for employment because of race, creed, color, sex, national origin, ancestry or disability. The vendor shall take affirmative action to insure that employees are treated without regard to their race, creed, color, sex, national origin, ancestry or disability. Such action shall include, but not be limited to the following: employment, upgrading, demotion, transfer, recruiting or recruitment, advertising, lay-off or termination, rates of pay or other compensation and selection for training, including apprenticeship.

In the event of the bidder’s non-compliance with this non-discrimination clause, the contract may be canceled or terminated by the Habersham County Development Authority. The bidders may be declared, by the Habersham County Development Authority, ineligible for further contracts with the Habersham County Development Authority until satisfactory proof of intent to comply shall be made by the vendor. The bidder agrees to include this non-discrimination clause in any sub-contracts connected with the performance of this agreement.

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**BIDDER**

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**SIGNATURE**

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**TITLE**

NON-COLLUSION AFFIDAVIT  
***(MUST BE SUBMITTED WITH ALL BIDS)***

The bidder, by its officers and agents or representatives present at the time of filing this bid, being duly sworn, on their oaths say that neither they nor any member of their firm, have in any way, directly or indirectly, entered into any arrangement or agreements with any other bidder, or with any public officer of the Habersham County Development Authority whereby such affiant or affiants or either of them, has paid or is to pay to such bidder or public officer any sum of money, or has given, or is to give to such other bidder or public officer anything of value whatever; or such affiant or affiants or either of them has not, directly or indirectly; entered into any arrangement or agreement with any other bidder(s), which tends to, or does lessen or destroy free competition in the letter of the contract sought for by the attached bids; that no inducement of any form or character other than that which appears upon the face of the bid will be suggested, offered, paid or delivered to any person whomsoever to influence the acceptance of the bid or awarding of the contract, nor has this bidder any understanding or agreement of any kind whatsoever, with any person whomsoever to pay, deliver to, or share with any other person in any way or manner, any of the proceeds of the contract sought by this bid.

Contractor: \_\_\_\_\_

By: \_\_\_\_\_

Authorized Contractor Representative

This the \_\_\_\_\_ Day of \_\_\_\_\_, 2023

Notary Public: \_\_\_\_\_

My Commission Expires: \_\_\_\_\_, 20\_\_ \_\_



**Office of County Commissioners**  
130 Jacob's Way, Suite 302, Clarkesville, GA 30523  
706-839-0200 Fax: 706-839-0219  
[www.habershamga.com](http://www.habershamga.com)

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**STATE OF GEORGIA  PROGRAM VENDOR/CONTRACTOR  
AFFIDAVIT AND AGREEMENT**

**COMES NOW** before me, the undersigned officer duly authorized to administer oaths, the undersigned contractor, who, after being duly sworn, states as follows:

By executing this affidavit, the undersigned contractor verifies it's compliance with O.C.G.A 13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services on behalf of the Habersham County Development Authority has registered with, is authorized to use, and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. 13-10-91. Furthermore, the undersigned contractor will continue to use the federal work authorization program throughout the contract period and the undersigned contractor will contract for the physical performance of services in satisfaction of such contract only with subcontractors who present an affidavit to the contractor with the information required by O.C.G.A. 13-10-91 (b). Contractor hereby attests that its federal work authorization user identification number and date are as follows:

\_\_\_\_\_  
EEV / Basic Pilot Program User ID Number (E-Verify)

**FURTHER AFFIANT SAYETH NOT.**

\_\_\_\_\_  
BY: Authorized Officer or Agent Signature

\_\_\_\_\_  
Contractor Address

\_\_\_\_\_  
Title of Authorized Officer or Agent of Contractor Above

\_\_\_\_\_  
Company / Contractor Name

\_\_\_\_\_  
Contractor City, State, Zip Code

\_\_\_\_\_  
Date of Contract between Contractor and Habersham County

**Sworn to and subscribed before me**

This \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

\_\_\_\_\_  
Notary Public

My commission expires: \_\_\_\_\_

\* Any of the electronic verification of work authorization programs operated by the United States Department of Homeland Security or any equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, pursuant to the Immigration Reform and Control Act of 1986 (IRCA), P.L. 99-603. As of the effective date of O.C.G.A. § 13-10-91, the applicable federal work authorization program is the "EEV I Basic Pilot Program" operated by the U.S. Citizenship and Immigration Services Bureau of the U.S. Department of Homeland Security in conjunction with the Social Security Administration (SSA).

## Request for Taxpayer Identification Number and Certification

**Give Form to the  
 requester. Do not  
 send to the IRS.**

<b>Print or type See Specific Instructions on page 2.</b>	Name (as shown on your income tax return)	
	Business name/disregarded entity name, if different from above	
	Check appropriate box for federal tax classification: <input type="checkbox"/> Individual/sole proprietor <input type="checkbox"/> C Corporation <input type="checkbox"/> S Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Trust/estate  <input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶ _____  <input type="checkbox"/> Other (see instructions) ▶ _____	Exemptions (see instructions):  Exempt payee code (if any) _____ Exemption from FATCA reporting code (if any) _____
	Address (number, street, and apt. or suite no.)	Requester's name and address (optional)
	City, state, and ZIP code	
List account number(s) here (optional)		

### Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on the "Name" line to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Social security number									

**Note.** If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

Employer identification number									

### Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
3. I am a U.S. citizen or other U.S. person (defined below), and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

**Certification instructions.** You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 3.

<b>Sign Here</b>	Signature of U.S. person ▶	Date ▶
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### General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

**Future developments.** The IRS has created a page on IRS.gov for information about Form W-9, at [www.irs.gov/w9](http://www.irs.gov/w9). Information about any future developments affecting Form W-9 (such as legislation enacted after we release it) will be posted on that page.

#### Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, payments made to you in settlement of payment card and third party network transactions, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the

withholding tax on foreign partners' share of effectively connected income, and

4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct.

**Note.** If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

**Definition of a U.S. person.** For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

**Special rules for partnerships.** Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax under section 1446 on any foreign partners' share of effectively connected taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1446 require a partnership to presume that a partner is a foreign person, and pay the section 1446 withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid section 1446 withholding on your share of partnership income.

# SITE CONSTRUCTION PLANS

FOR:

# HABERSHAM INDUSTRIAL PARK LOT 10

LAND LOT 169  
10th DISTRICT  
CITY OF BALDWIN  
HABERSHAM COUNTY, GA



Know what's below.  
Call before you dig.

**PROJECT SUBMITTAL & REVISION SUMMARY**

DATE	SUBMITTAL/ REVISION

**OWNER/ DEVELOPER:**

HABERSHAM COUNTY DEVELOPMENT AUTHORITY  
555 MONROE STREET UNIT 20  
CLARKESVILLE, GA 30523  
Ph: 706-839-0210

**ENGINEER:**

FOOTHILLS LAND DESIGN, LLC  
164 PROFESSIONAL DRIVE  
BALDWIN, GA 30511  
Ph: 706-778-0067

**PROJECT CONSTRUCTION SCHEDULE**

ACTIVITY DESCRIPTION	MONTH 1	MONTH 2	MONTH 3	MONTH 4	MONTH 5	MONTH 6
BMP INSTALLATION	█					
BMP MAINTENANCE	█	█	█	█	█	█
ROUGH GRADING	█	█				
TEMP VEGETATION		█	█	█	█	█
PIPE INSTALLATIONS		█	█			
BUILDING CONSTRUCTION		█	█	█	█	█
FINAL GRADING						█
CURBING & PAVING						█
FINAL VEGETATION						█

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**TAX PARCEL NUMBER: 090 025**

**ZONING: I-1**

**THIS PROPERTY IS NOT LOCATED WITHIN A 100 YEAR FLOOD PLAIN PER FIRM PANEL NO. 13137C0281D, DATED 1/4/2018.**

**DETENTION/ STORMWATER POND OR SEDIMENT BASIN/ STORAGE SHALL BE INSTALLED AND FUNCTIONING PRIOR TO ANY MAJOR GRADING, OR IMPERVIOUS SURFACE CONSTRUCTION.**

**THE CITY OF BALDWIN PUBLIC WORKS DIRECTOR SHALL BE NOTIFIED A MINIMUM 48 HOURS (MONDAY THROUGH FRIDAY) PRIOR TO COMMENCEMENT OF ANY WORK THAT REQUIRES INSPECTION TO REQUEST AN INSPECTION. CITY OF BALDWIN SHALL INSPECT SUBGRADE, BASE, AND BE PRESENT DURING PAVING OF ALL DRIVEWAYS AND ROADWAYS WITHIN THE EXISTING AND PROPOSED RIGHT-OF WAY".**

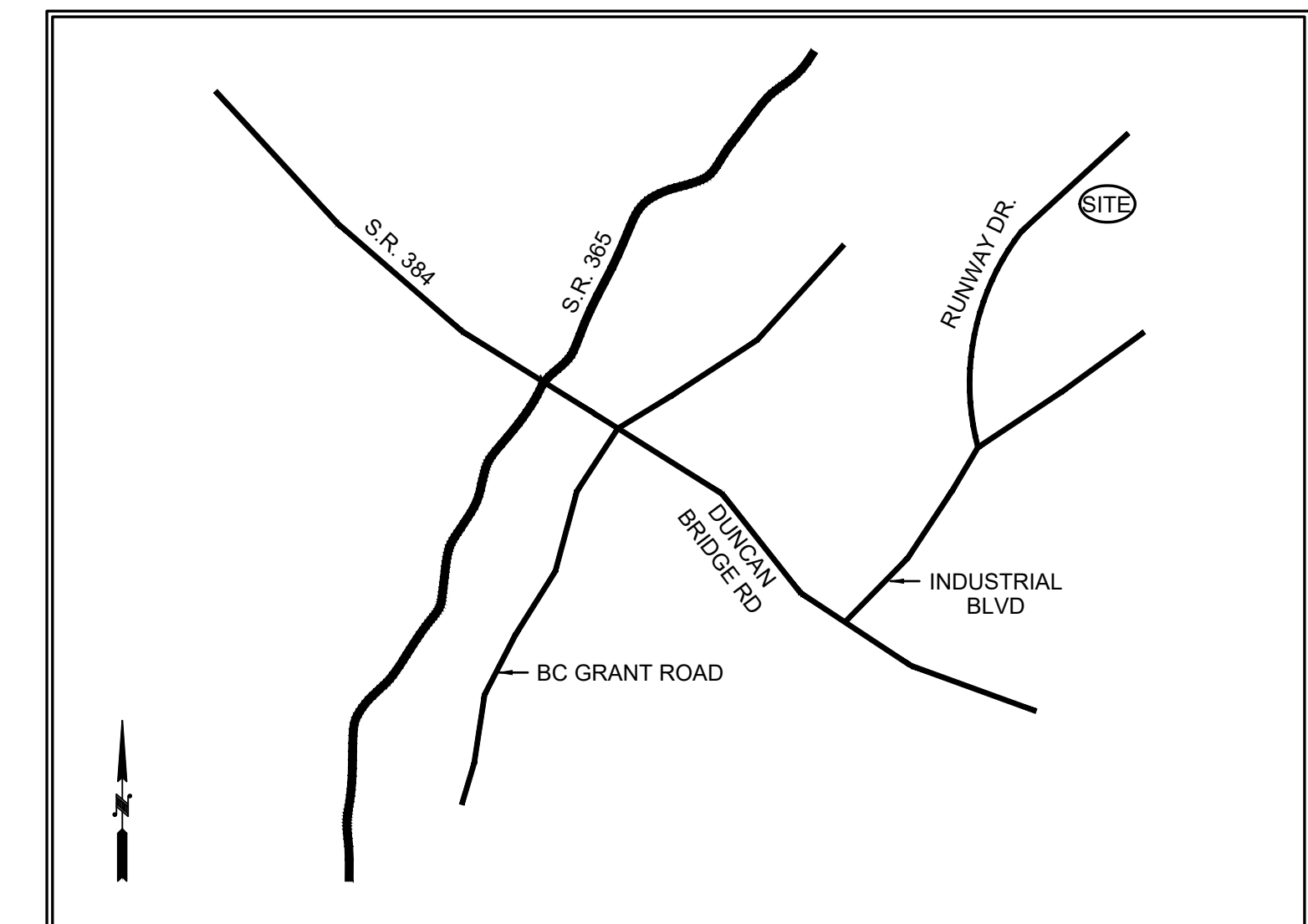


MAY 9, 2023



GSWCC LEVEL II #9832

**SITE LOCATION MAP (N.T.S.)**

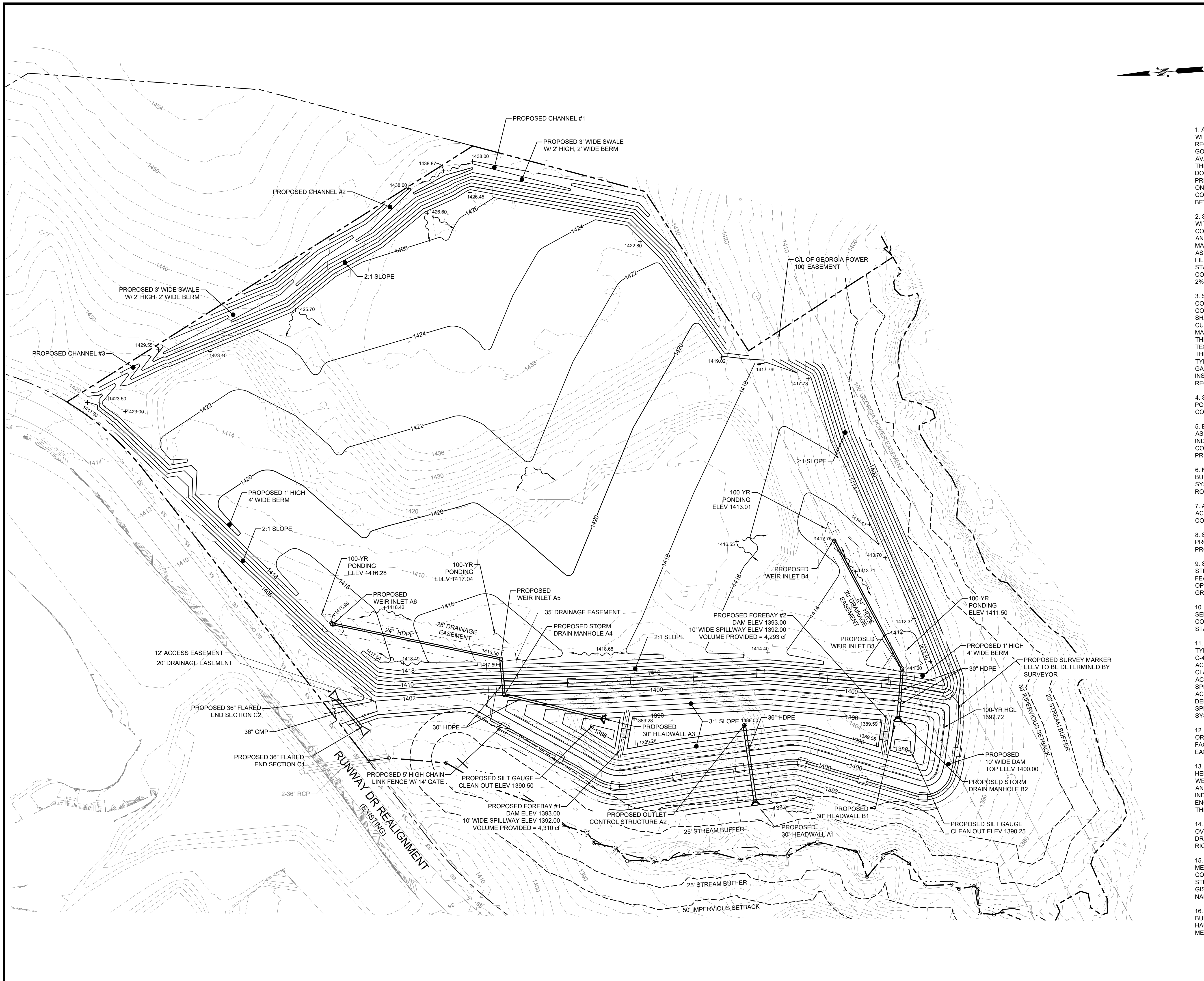


**24 HOUR CONTACT: MIKE BEECHAM @ 706-968-5882**

**THE INSTALLATION OF EROSION CONTROL MEASURES AND PRACTICES SHALL TAKE PLACE PRIOR TO LAND DISTURBING ACTIVITIES**



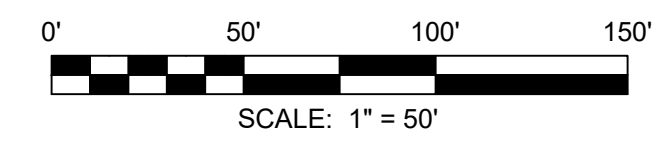




### LEGEND

- PROPOSED SURFACE WATER FLOW
- PROPOSED CONTOUR
- EXISTING CONTOUR
- x1456.08 PROPOSED SPOT ELEVATION

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE REQUIREMENTS AND STANDARDS OF THE LOCAL GOVERNING AUTHORITY. IF A SOILS REPORT IS AVAILABLE THEN RECOMMENDATIONS SET FORTH THEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND IN CASE OF CONFLICT SHALL TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER OF ANY DISCREPANCY BETWEEN SOILS REPORT AND PLANS, ETC.
2. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THE LOCAL GOVERNING AUTHORITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING ALL SOFT, YIELDING OR UNSUITABLE MATERIALS AND REPLACING WITH SUITABLE MATERIALS AS SPECIFIED IN THE SOILS REPORT. ALL EXCAVATED OR FILLED AREAS SHALL BE COMPACTED TO 95% OF STANDARD PROCTOR MAXIMUM DENSITY. MOISTURE CONTENT AT TIME OF PLACEMENT SHALL NOT EXCEED 2% ABOVE NOR 3% BELOW OPTIMUM.
3. STORM DRAIN PIPES WILL BE CLASS III REINFORCED CONCRETE PIPE (RCP), TYPE II ALUMINIZED CORRUGATED METAL PIPE (AT2 CSP) OR HDPE. HDPE SHALL BE ADS N-12, HANCOR HI-Q, OR SOUTHEAST CULVERT NFLOW. PIPE BEDDING TO BE TO MANUFACTURER'S SPECIFICATIONS OR DIRECTION OF THE GEOTECHNICAL AND CONSTRUCTION MATERIALS TESTING CONSULTANT. HDPE PIPE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-294 AND AASHTO MP7, TYPE S & D. CONNECTIONS SHALL USE A RUBBER GASKET, WHICH CONFORMS TO ASTM F-477. INSTALLATION SHALL BE IN ACCORDANCE WITH ASTM RECOMMENDED PRACTICE D-2321.
4. STORM DRAIN DETENTION PROVIDED BY REGIONAL POND LOCATED WEST OF THE PROPERTY FOR THE COMMERCIAL DEVELOPMENT.
5. EXISTING CONTOURS ARE FROM PROPOSED GRADING AS SHOWN ON CONSTRUCTION PLANS FOR HABERSHAM INDUSTRIAL PARK, DATED OCTOBER 12, 2016. CONTRACTOR SHALL VERIFY ALL EXISTING ELEVATIONS PRIOR TO CONSTRUCTION.
6. NO ADDITIONAL CONSTRUCTION OR IMPROVEMENTS BUT NOT LIMITED TO WALLS, SIGNS, FENCES, SPRINKLER SYSTEM, LIGHTS, ETC. WILL BE ALLOWED WITHIN THE ROAD RIGHT-OF-WAY.
7. ALL TEMPORARY TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
8. SAWCUT ALONG EDGE OF EXISTING PAVEMENT TO PROVIDE JOINT UNIFORMITY PRIOR TO PLACEMENT OF PROPOSED PAVEMENT.
9. STORMWATER/ DETENTION POND, OUTLET CONTROL STRUCTURES, AND TEMPORARY SEDIMENT BASIN FEATURES ARE TO BE CONSTRUCTED AND FULLY OPERATIONAL PRIOR TO ANY OTHER CONSTRUCTION OR GRADING NOT ASSOCIATED WITH THESE FACILITIES.
10. DEVELOPER IS TO CLEAN OUT ACCUMULATED SEDIMENT IN STORMWATER DETENTION POND AT END OF CONSTRUCTION ONCE DISTURBED AREAS HAVE BEEN STABILIZED.
11. ALL RCP PIPE JOINTS SHALL BE BELL AND SPIGOT TYPES WITH A RUBBER GASKET CONFORMING TO ASTM C-443. THE PIPE SHALL BE MANUFACTURED IN ACCORDANCE WITH AASHTO M-170 AND/ OR ASTM C-76. CLASS OF PIPE AND WALL THICKNESS SHALL BE IN ACCORDANCE WITH 1030-D. GEORGIA DOT SPECIFICATION, TABLE NO. 1. INSTALLATION SHALL BE IN ACCORDANCE WITH SECTION 550 OF THE GEORGIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS CONSTRUCTION OF TRANSPORTATION SYSTEMS, LATEST EDITION.
12. NO OBSTRUCTIONS SHALL BE BUILT, CONSTRUCTED OR PLANTED WITHIN THE STORMWATER MANAGEMENT FACILITY, OR ITS ASSOCIATED DRAINAGE OR ACCESS EASEMENTS.
13. THE DESIGN PROFESSIONAL, WHOSE SEAL APPEARS HEREON, CERTIFIES THE FOLLOWING: 1) THE NATIONAL WETLAND INVENTORY MAPS HAVE BEEN CONSULTED; AND 2) THE APPROPRIATE PLAN SHEET (X) DOES NOT INDICATE AREAS OF UNITED STATES ARMY CORPS OF ENGINEERS JURISDICTIONAL WETLANDS AS SHOWN ON THE MAPS.
14. CITY OF BALDWIN ASSUMES NO RESPONSIBILITY FOR OVERFLOW OR EROSION OF NATURAL OR ARTIFICIAL DRAINS BEYOND THE EXTENT OF THE STREET RIGHT-OF-WAY.
15. THE SOURCE OF EXISTING TOPOGRAPHY IS FROM A MERGE WITH AS-BUILT TOPOGRAPHY FOR HABERSHAM COUNTY DEVELOPMENT AUTHORITY FROM LOVELL STROUD & ASSOCIATES, LLC AND HABERSHAM COUNTY GIS DATA. THE HORIZONTAL REFERENCE DATUM IS NAD83 WEST ZONE. THE VERTICAL DATUM IS NAVD1988.
16. LOCATION OF STUMPS, MATERIALS, DEBRIS TO BE BURIED ONSITE ON THE PLANS. IF THE DEBRIS IS TO BE HAULED OFFSITE, INCLUDE OFFSITE LOCATION. MUST MEET GA DNR CODE 391-3-3.06



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FAX: (706) 778-0069  
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**HABERSHAM COUNTY DEVELOPMENT AUTHORITY**

**PARK LOT 10**

LAND LOT 169, 10th DISTRICT  
CITY OF BALDWIN  
HABERSHAM COUNTY, GA

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**HABERSHAM INDUSTRIAL PARK LOT 10**

NO.	DESCRIPTION	DATE

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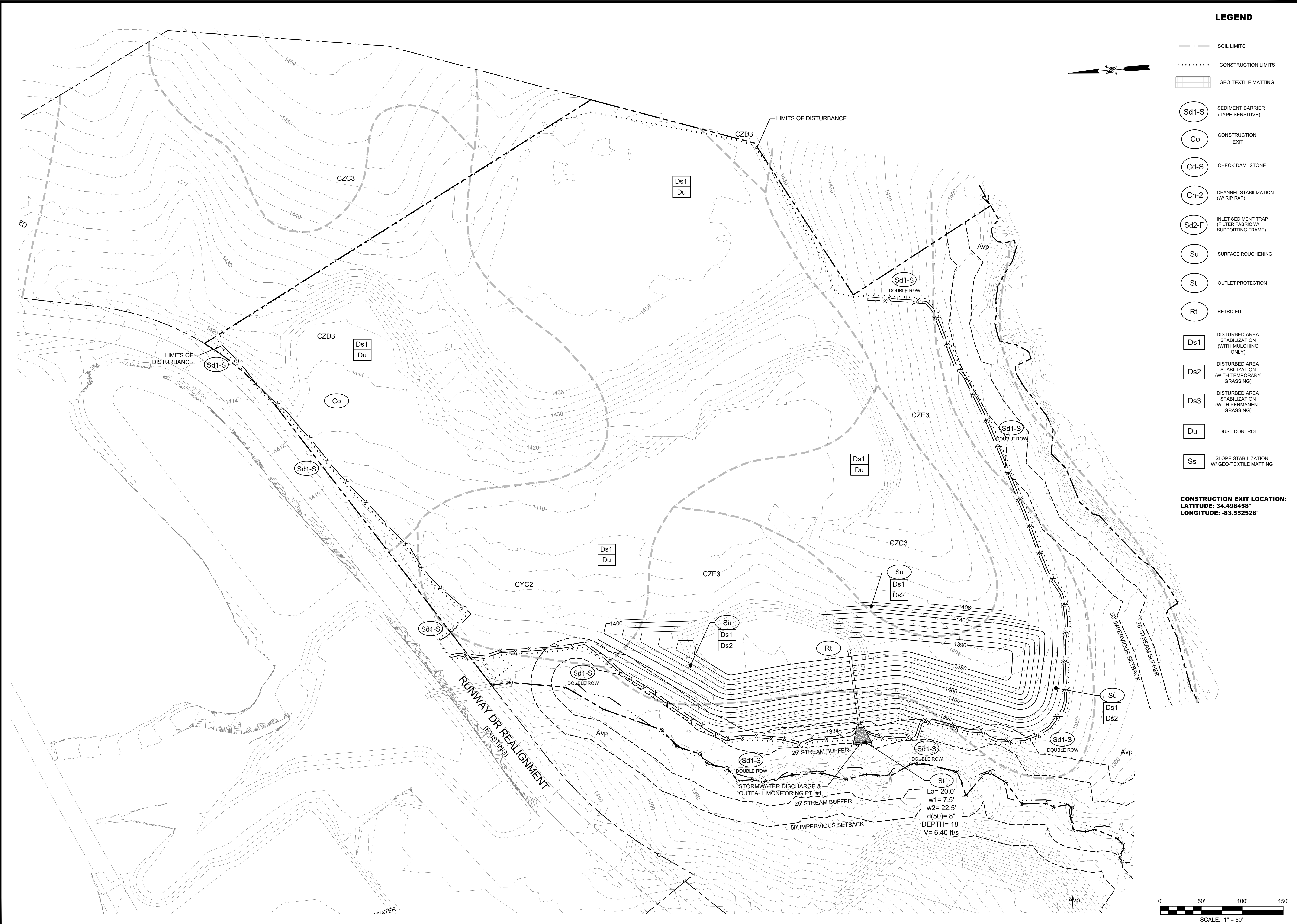
GSWCC LEVEL II #9832

DATE: MAY 9, 2023

SCALE: 1" = 50'

SHEET: **C3**

JOB # 23027



- LEGEND**
- SOIL LIMITS
  - ..... CONSTRUCTION LIMITS
  - [Grid Pattern] GEO-TEXTILE MATTING
  - (Sd1-S) SEDIMENT BARRIER (TYPE SENSITIVE)
  - (Co) CONSTRUCTION EXIT
  - (Cd-S) CHECK DAM- STONE
  - (Ch-2) CHANNEL STABILIZATION (W/ RIP RAP)
  - (Sd2-F) INLET SEDIMENT TRAP (FILTER FABRIC W/ SUPPORTING FRAME)
  - (Su) SURFACE ROUGHENING
  - (St) OUTLET PROTECTION
  - (Rt) RETRO-FIT
  - [Dashed Box] Ds1 DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)
  - [Dashed Box] Ds2 DISTURBED AREA STABILIZATION (WITH TEMPORARY GRASSING)
  - [Dashed Box] Ds3 DISTURBED AREA STABILIZATION (WITH PERMANENT GRASSING)
  - [Solid Box] Du DUST CONTROL
  - [Solid Box] Ss SLOPE STABILIZATION W/ GEO-TEXTILE MATTING

**CONSTRUCTION EXIT LOCATION:**  
 LATITUDE: 34.498458°  
 LONGITUDE: -83.552526°

**ffd** foothills land design

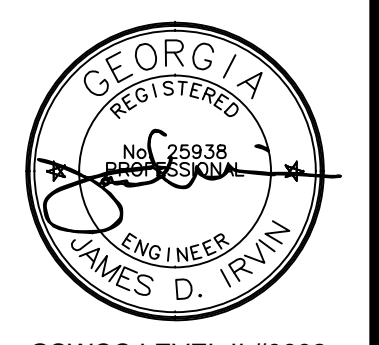
161 PROFESSIONAL DRIVE  
 BALDWIN, GA 30511  
 PHONE: (706) 778-0067  
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OWNER/DEVELOPER:  
**HABERSHAM COUNTY DEVELOPMENT AUTHORITY**  
 555 MONROE ST., UNIT 20  
 CLARKESVILLE, GA 30523  
 PH: 706-839-0210

PHASE 1 EROSION, SEDIMENT, & POLLUTION CONTROL PLAN

**HABERSHAM INDUSTRIAL PARK LOT 10**  
 LAND LOT 169, 10th DISTRICT  
 CITY OF BALDWIN  
 HABERSHAM COUNTY, GA

NO.	DESCRIPTION	DATE

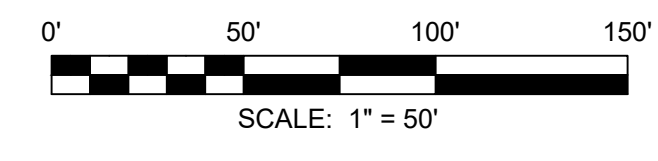


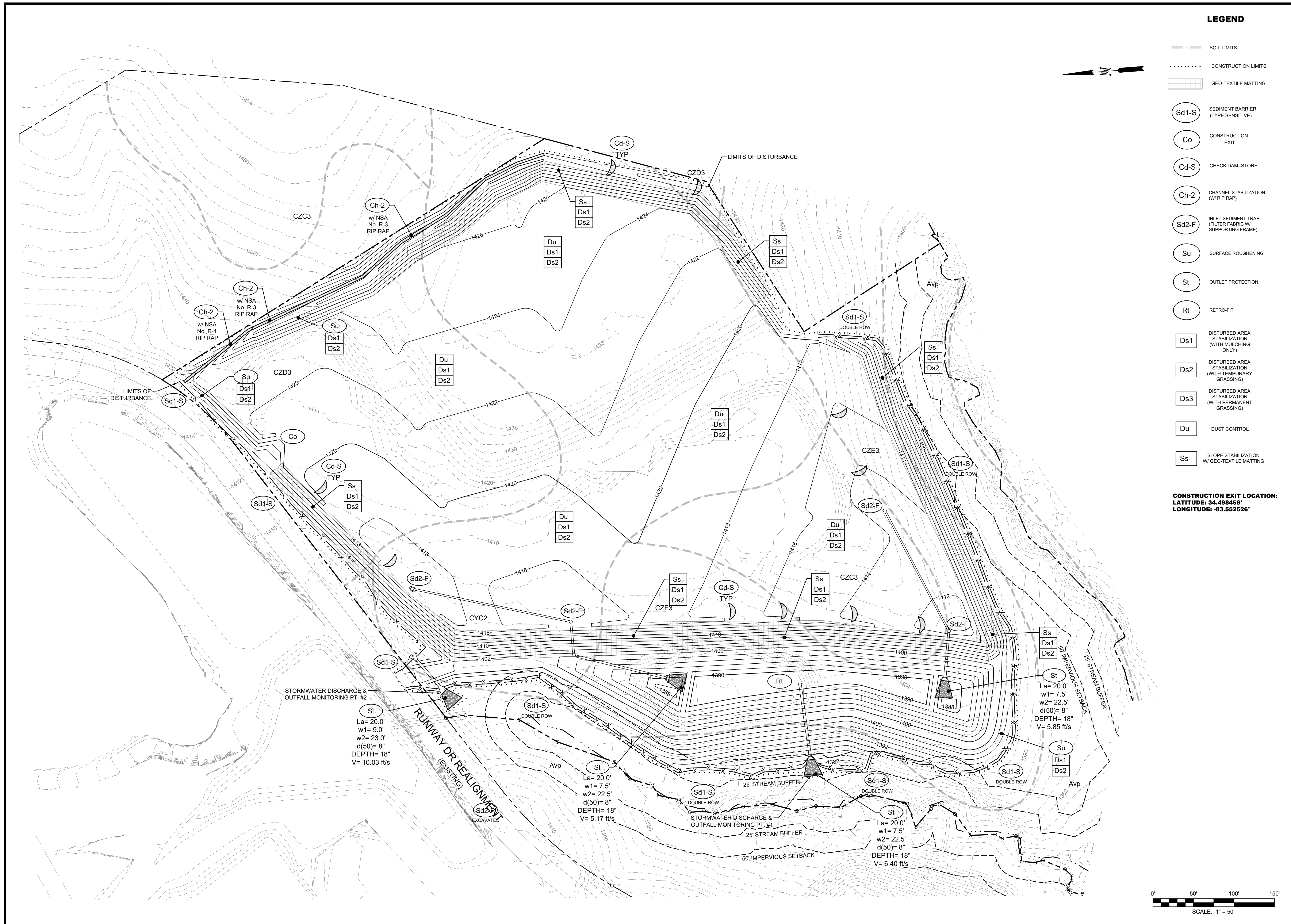
GSWCC LEVEL II #9832

DATE: MAY 9, 2023

SCALE: 1" = 50'

SHEET:  
**C4**  
 JOB # 23027





- LEGEND**
- SOIL LIMITS
  - ..... CONSTRUCTION LIMITS
  - ▧ GEO-TEXTILE MATTING
  - Sd1-S SEDIMENT BARRIER (TYPE-SENSITIVE)
  - Co CONSTRUCTION EXIT
  - Cd-S CHECK DAM- STONE
  - Ch-2 CHANNEL STABILIZATION (W/ RIP RAP)
  - Sd2-F INLET SEDIMENT TRAP (FILTER FABRIC W/ SUPPORTING FRAME)
  - Su SURFACE ROUGHENING
  - St OUTLET PROTECTION
  - Rt RETRO-FIT
  - ▭ Ds1 DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)
  - ▭ Ds2 DISTURBED AREA STABILIZATION (WITH TEMPORARY GRASSING)
  - ▭ Ds3 DISTURBED AREA STABILIZATION (WITH PERMANENT GRASSING)
  - ▭ Du DUST CONTROL
  - ▭ Ss SLOPE STABILIZATION W/ GEO-TEXTILE MATTING

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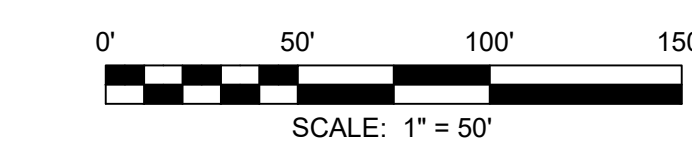
STORMWATER DISCHARGE & OUTFALL MONITORING PT. #2

St  
 La= 20.0'  
 w1= 9.0'  
 w2= 23.0'  
 d(50)= 8"  
 DEPTH= 18"  
 V= 10.03 ft/s

St  
 La= 20.0'  
 w1= 7.5'  
 w2= 22.5'  
 d(50)= 8"  
 DEPTH= 18"  
 V= 5.17 ft/s

St  
 La= 20.0'  
 w1= 7.5'  
 w2= 22.5'  
 d(50)= 8"  
 DEPTH= 18"  
 V= 6.40 ft/s

St  
 La= 20.0'  
 w1= 7.5'  
 w2= 22.5'  
 d(50)= 8"  
 DEPTH= 18"  
 V= 5.85 ft/s



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---

OWNER/DEVELOPER:  
**HABERSHAM COUNTY DEVELOPMENT AUTHORITY**  
 555 MONROE ST. UNIT 20  
 CLAYTON, GA 30523  
 PH: 706-839-0210

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PHASE 2 EROSION, SEDIMENT, & POLLUTION CONTROL PLAN

**HABERSHAM INDUSTRIAL PARK LOT 10**  
 LAND LOT 169, 10th DISTRICT  
 CITY OF BALDWIN  
 HABERSHAM COUNTY, GA

---

NO.	DESCRIPTION	DATE

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REVISIONS:

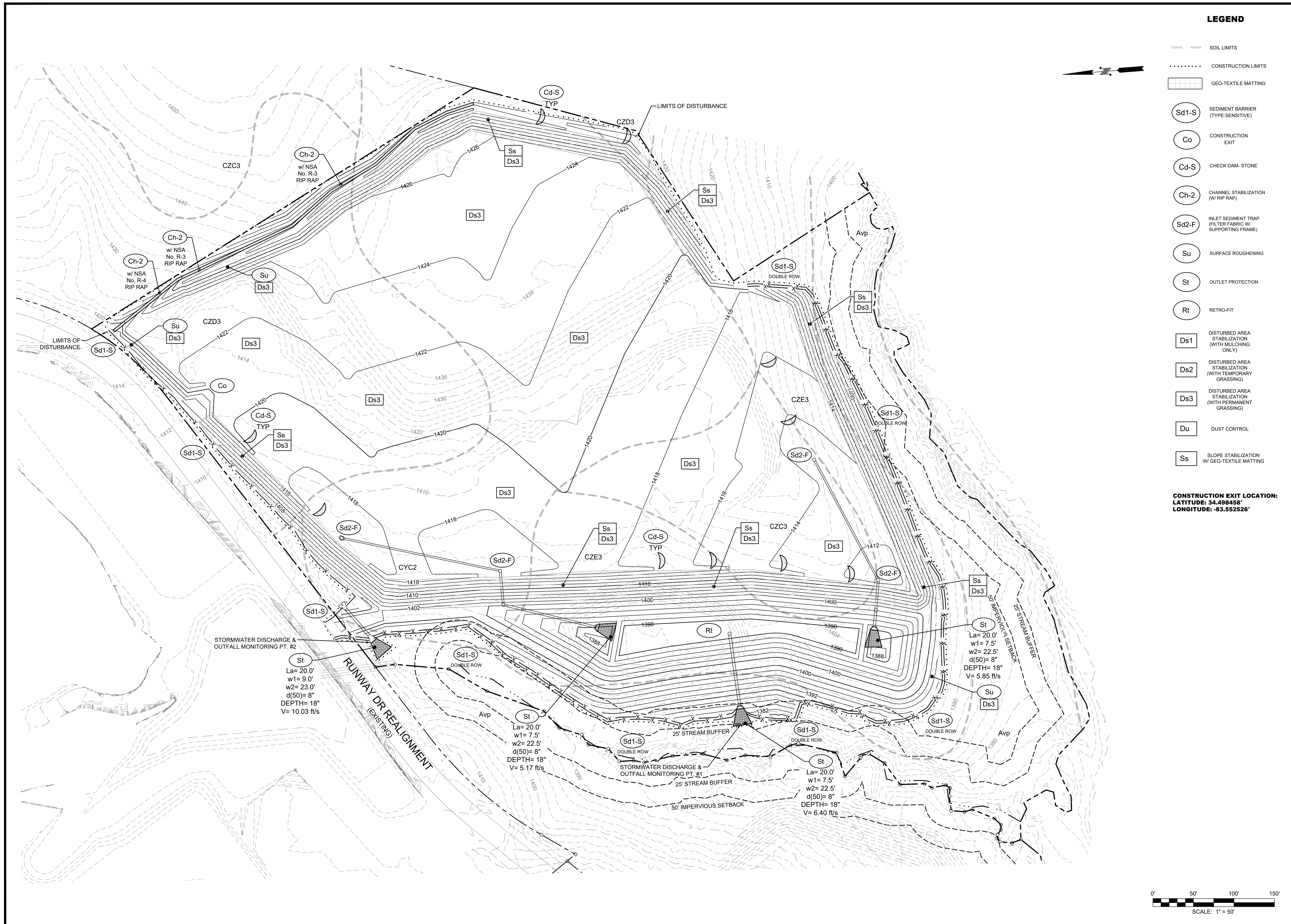
GEORGIA REGISTERED ENGINEER  
 NO. 28938  
 JAMES D. IRVING

GSWCC LEVEL II #9832

DATE: MAY 9, 2023

SCALE: 1" = 50'

SHEET:  
**C5**  
 JOB # 23027



**LEGEND**

- SOIL LIMITS
- ..... CONSTRUCTION LIMITS
- [Grid] GEO-TEXTILE MATTING
- (Sd1-S) SEDIMENT BARRIER (TYPE-SENSITIVE)
- (Co) CONSTRUCTION EXIT
- (Cd-S) CHECK DAM- STONE
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- [Ds3] DISTURBED AREA STABILIZATION (WITH PERMANENT GRASSING)
- [Du] DUST CONTROL
- [Ss] SLOPE STABILIZATION W/ GEO-TEXTILE MATTING

**CONSTRUCTION EXIT LOCATION:**  
 LATITUDE: 34.498458°  
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OWNER/DEVELOPER:  
**HABERSHAM COUNTY  
 DEVELOPMENT  
 AUTHORITY**

**HABERSHAM INDUSTRIAL  
 PARK LOT 10**  
 LAND LOT 169, 10th DISTRICT  
 CITY OF BALDWIN  
 HABERSHAM COUNTY, GA

DATE	REVISIONS:
	NO. DESCRIPTION

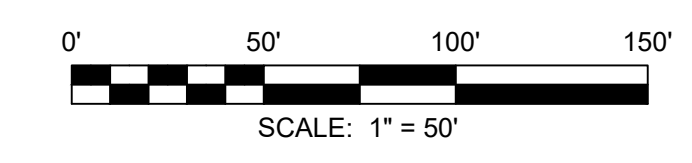


GSWCC LEVEL II #9832

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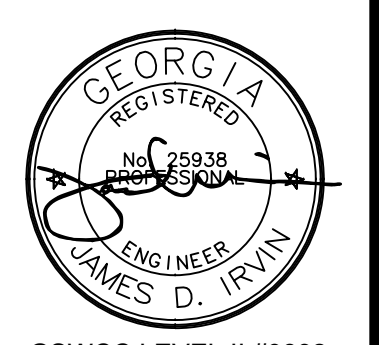
SHEET:  
**C6**  
 JOB # 23027







NO.	DESCRIPTION	DATE

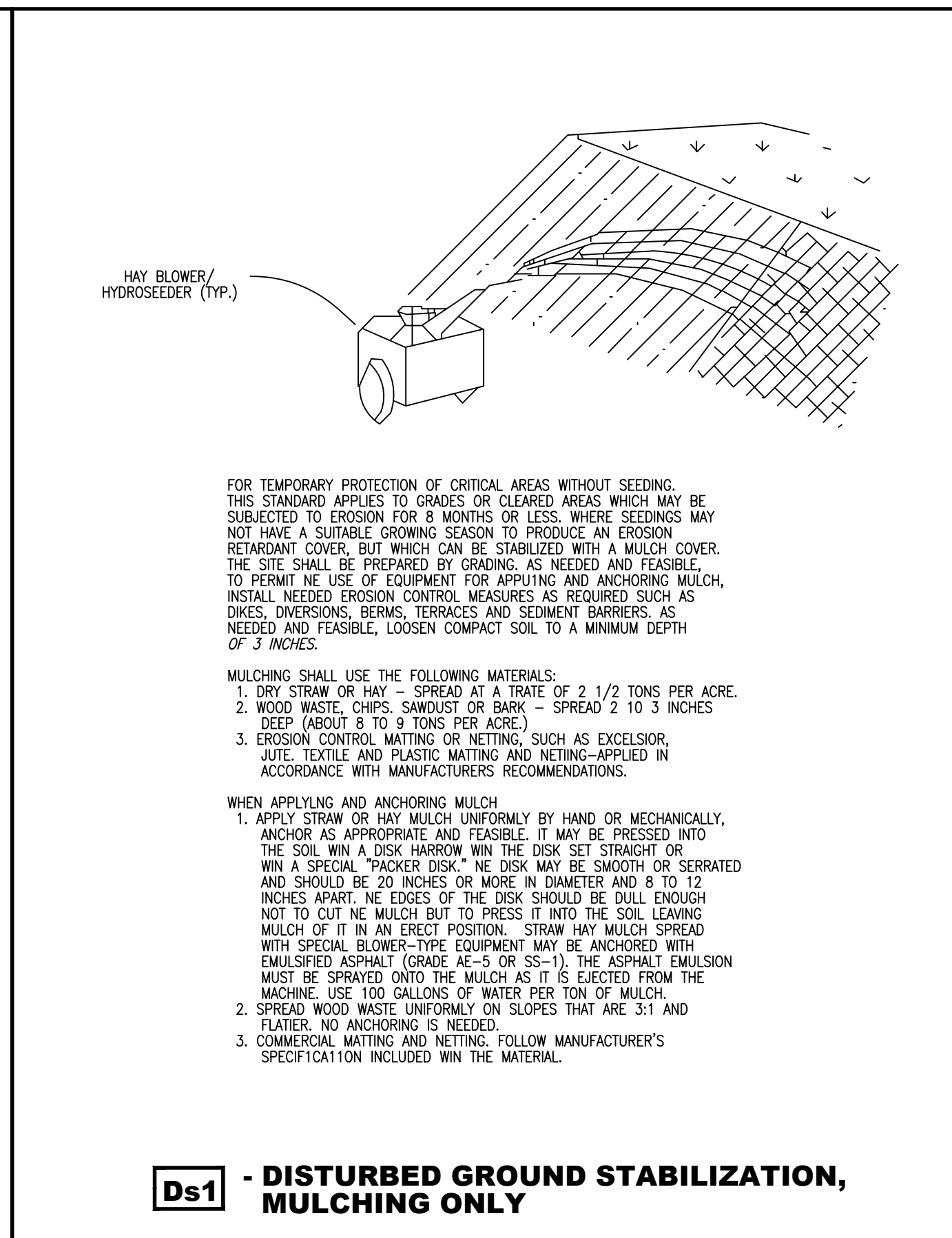
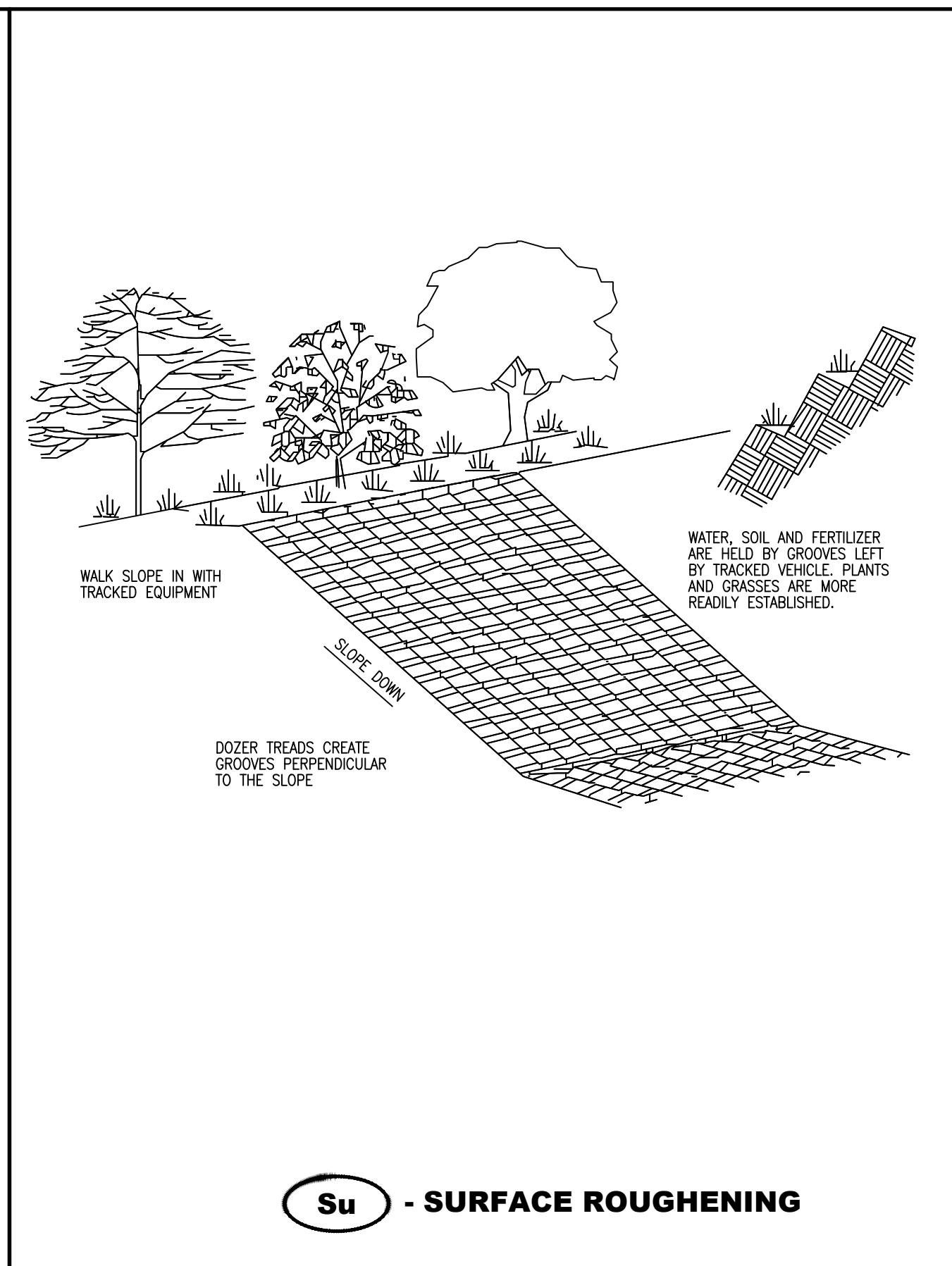
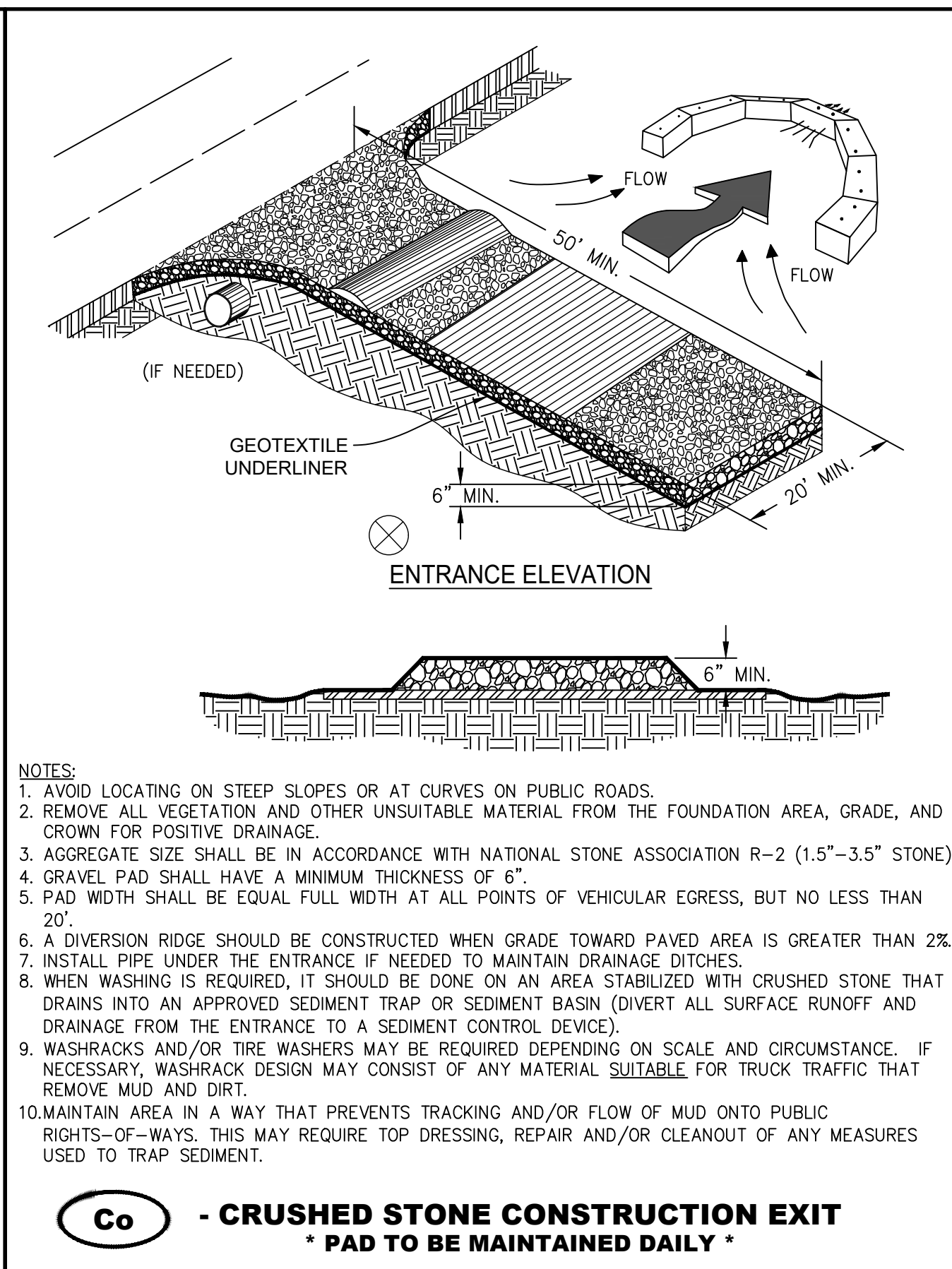
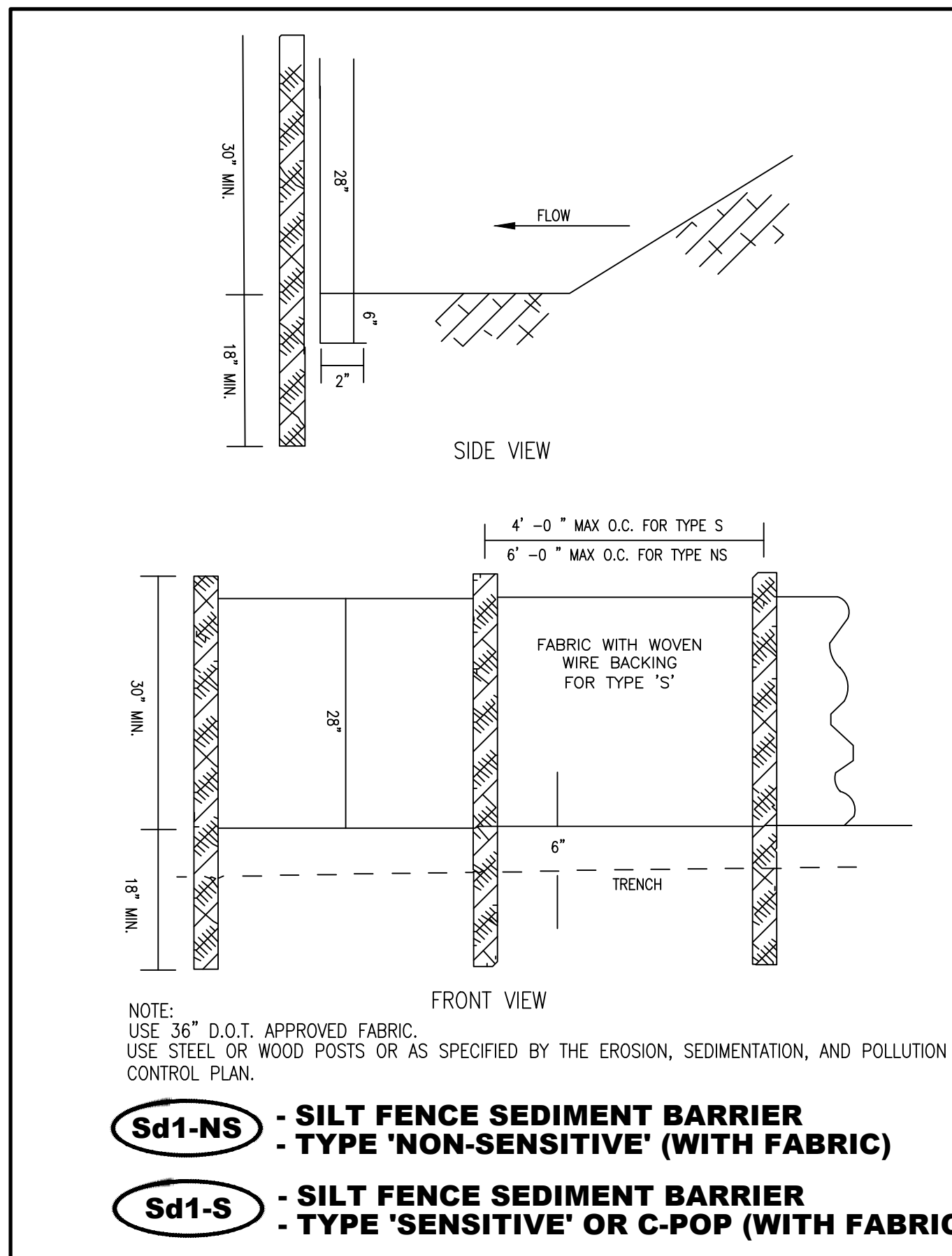


GSWCC LEVEL II #9832

DATE: MAY 9, 2023

SCALE: N/A

SHEET:  
**C9**  
JOB # 23027



**RATES FOR TEMPORARY SEEDINGS**

SPECIES	RATE PER 1000 sq ft	RATE PER ACRE	PLANTING DATES		
			MOUNTAIN	PIEDMONT	COASTAL
RYE	3 POUNDS	2-3 bu.	8/1-12/1 3/1-4/1	9/1-11/1 3/1-4/1	10/1-3/1
RYEGRASS	1 POUND	40-50 lbs.	8/1-12/1	8/15-1/1	8/15-3/1
RYE AND ANNUAL LESPEDEZA	1.5 POUNDS 0.5 POUNDS	1-5 bu. 20-25 lbs.	3/1-4/1 3/1-4/1	3/1-4/1 3/1-4/1	2/1-3/1 2/1-3/1
WEeping LOVEGRASS	0.2 POUNDS	4-6 lbs.	3/15-8/1	3/1-8/15	2/15-8/15
SUDANGRASS	1 POUND	35-45 lbs.	4/1-8/1	4/1-7/15	4/1-7/15
BROWN TOP MILLET	1 POUND	30-40 lbs.	4/1-7/1	4/1-7/15	4/1-7/15
WHEAT	3 POUNDS	2-3 bu.	10/1-12/1	10/15-1/1	11/1-1/15

**DEFINITION:**  
ESTABLISHING TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDLINGS ON DISTURBED OR DENuded AREAS.

**PURPOSE:**  
? TO REDUCE EROSION, SEDIMENT AND RUNOFF DAMAGES TO DOWNSTREAM RESOURCES.  
? TO IMPROVE WILDLIFE HABITAT.  
? TO IMPROVE AESTHETICS.  
? TO IMPROVE SAFETY AND PUBLIC ROAD TIGHTNESS?  
? TO IMPROVE TILTH AND ODD ORGANIC MATTER FOR PERMANENT PLANTINGS.

**CONDITIONS:**  
THIS PRACTICE IS APPLICABLE ON AREAS SUBJECT TO EROSION FOR UP TO TWELVE MONTHS OR UNTIL ESTABLISHMENT OF FINISHED GRADE OR PERMANENT VEGETATIVE COVER. TEMPORARY VEGETATIVE MEASURES SHOULD BE COORDINATED WITH PERMANENT MEASURES TO ASSURE ECONOMIC AND EFFECTIVE STABILIZATION.

**SPECIFICATIONS:**

**A. GRADING AND SHAPING**

- EXCESSIVE WATER RUNOFF MUST BE CONTROLLED BY PLANNED AND INSTALLED EROSION CONTROL PRACTICES SUCH AS CLOSED DRAINS, DITCHES, DIKES, DIVERSIONS, SEDIMENT BASINS AND OTHERS.
- NO SHAPING OR GRADING IS REQUIRED IF SLOPES CAN BE STABILIZED BY HAND-SEEDING VEGETATION OR IF HYDRAULIC SEEDING EQUIPMENT IS TO BE USED.

**B. SEEDBED PREPARATION**

- WHEN A HYDRAULIC SEEDER IS USED, SEEDBED PREPARATION IS NOT REQUIRED.
- WHEN USING CONVENTIONAL OR HAND-SEEDING, SEEDBED PREPARATION IS NOT REQUIRED IF THE SOIL MATERIAL IS LOOSE AND NOT SEALED BY RAINFALL.
- WHEN SOIL HAS BEEN SEALED BY RAINFALL OR CONSISTS OF SMOOTH UNDISTURBED CUT SLOPES, THE SOIL SHALL BE PITTED, TRENCHED OR OTHERWISE SCARIFIED TO PROVIDE A PLACE FOR SEED TO LODGE AND GERMINATE.

**C. LIME AND FERTILIZER**

- ALL AREAS TO BE SEEDDED SHALL HAVE LIME APPLIED AT A RATE OF 2 TONS/ACRE.
- ON REASONABLY FERTILE SOILS OR SOIL MATERIAL, FERTILIZER IS NOT REQUIRED.
- ON SOILS OF VERY LOW FERTILITY, USE 500 TO 700 POUNDS OF 10-20-20 FERTILIZER OR THE EQUIVALENT PER ACRE (12716 LBS./1,000 SQ. FT.), IF THE SITE WILL PERMIT, APPLY BEFORE LAID PREPARATION AND DISK, RIP OR CHISEL TO INCORPORATE.

**D. SEEDING**

- SELECT A GRASS OR GRASS-LEGUME MIXTURE SUITABLE TO THE AREA AND SEASON OF THE YEAR (TABLE 6924.1, P. 1347136, FIGURE 6724.1, P. 87137).
- APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTRIPACKER-SEEDER, OR HYDRAULIC SEEDER (SLURRY INCLUDING SEED AND FERTILIZER). DRILL OR CULTRIPACKER-SEEDERS SHOULD NORMALLY PLACE SEED ONE-HALF TO ONE INCH DEEP.

**E. MULCHING**  
TEMPORARY VEGETATION CAN, IN MOST CASES, BE ESTABLISHED WITHOUT THE USE OF MULCH. MULCH WITHOUT SEEDING SHOULD BE CONSIDERED FOR SHORT TERM PROTECTION.  
\*\*SEE Ds1 ? DISTURBED AREA STABILIZATION, (WITH MULCHING ONLY).\*\*

**F. IRRIGATION**  
IF WATER IS APPLIED, IT MUST BE AT A RATE NOT CAUSING RUNOFF AND EROSION. THOROUGHLY WET THE SOIL TO A DEPTH THAT WILL INSURE GERMINATION OF THE SEED. SUBSEQUENT APPLICATIONS SHOULD BE MADE WHEN NEEDED.

**ESTABLISHING A TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDLINGS.**

- LESS THAN OR EQUAL TO 12 MONTHS OR UNTIL ESTABLISHMENT OF FINISHED GRADE OR PERMANENT VEGETATION

**SITE PREPARATION:**

- GRADING AND SHAPING
- SEEDBED PREPARATION
- APPLY LIME AND FERTILIZER
- PLANT SEEDING. SELECT SPECIES BY SEASON AND REGION
- APPLY MULCHING MATERIAL IF NEEDED
- IRRIGATE IF NEEDED BUT NOT AT RATE TO CAUSE EROSION.

**RATES FOR PERMANENT SEEDINGS**

SPECIES	RATE/ACRE	DATES	FERTILIZER	RATE/ACRE
SERICEA LESPEDEZA OR SWEET HAY WITH OVERSEEDING WEeping LOVEGRASS AND COMMON BERNUIDA UNHULLED W RYE GRASS	3 TONS/AC. 3-4 LBS/AC.	10/1-3/1	12-4-8 12-4-8	1500 lb. 1500 lb.
WEeping LOVEGRASS AND VIRGATA OR SERICEA LESPEDEZA (SCARIFIED)	10 LBS/AC. 15 LBS/AC.		12-4-78 12-4-8	1500 lb. 1500 lb.
WEeping LOVEGRASS AND VIRGATA OR SERICEA LESPEDEZA (SCARIFIED)	3-4 LBS/AC.	3/1-5/15	12-4-8	1500 lb.
COMMON BERNUIDA HULLED WHITE DUTCH CLOVER AND PENSACOLA BAHIA	4 LBS/AC. 6 LBS/AC. 50 LBS/AC.	4/1-6/15	12-4-8 12-4-8 12-4-8	1500 lb. 1500 lb. 1500 lb.
60% CRIMSON CLOVER (TRIFOLIUM INCARNATUM) & 40% KENTUCKY 31 FESCUE (FESTUCA ARLUNDINACEA) OR KENTUCKY 31 FESCUE W RYE GRASS	10 LBS/1000 SF. 50 LBS/AC. 15 LBS/AC.	8/15-11/15	12-4-8 12-4-8 12-4-8	1500 lb. 1500 lb. 1500 lb.
STRAW MULCH	2.5 TONS/AC.	ANY TIME FOR TEMPORARY COVER		
AGRICULTURAL LIME	2 TONS/AC.	AFTER SOIL IS PULVERIZED		

**DEFINITION:**  
PLANTING VEGETATION, SUCH AS TREES, SHRUBS, VINES, GRASSES, OR LEGUMES ON HIGHLY ERODIBLE OR CRITICALLY ERODING AREAS (DOES NOT INCLUDE TREE PLANTING MAINLY FOR WOOD PRODUCTS).

**PURPOSE:**  
? TO STABILIZE THE SOIL.  
? TO REDUCE DAMAGE FROM SEDIMENT AND RUNOFF TO DOWNSTREAM AREAS.  
? TO IMPROVE WILDLIFE HABITAT AND VISUAL RESOURCES.

**CONDITIONS:**  
ON HIGHLY ERODIBLE OR CRITICALLY ERODING AREAS, THESE AREAS USUALLY CANNOT BE STABILIZED BY ORDINARY CONSERVATION TREATMENT AND MANAGEMENT AND IF LEFT UNTREATED CAN CAUSE SEVERE EROSION OR SEDIMENT DAMAGE. EXAMPLES OF APPLICABLE AREAS ARE DAMS, DIKES, LEVEES, CUTS, FILLS, AND DENuded OR GULLED AREAS WHERE VEGETATION IS DIFFICULT TO ESTABLISH BY USUAL PLANTING METHODS.

**PLANNING CONSIDERATIONS:**

- USE CONVENTIONAL PLANTING METHODS WHERE POSSIBLE.
- COMPANION CROPS AND IN GETTING PERMANENT COVER ESTABLISHED, ESPECIALLY WHEN MIXED PLANTINGS ARE DONE DURING MARGINAL PLANTING PERIODS.
- NO TILL PLANTING IS EFFECTIVE WHEN PLANTING IS DONE FOLLOWING A SUMMER OR WINTER ANNUAL COVER CROP. SERICEA LESPEDEZA PLANTED NOTTILL INTO STRAWS OF RYE IS AN EXCELLENT PROCEDURE.
- BLOCK SOD IS EFFECTIVE IN CONTROLLING EROSION ADJACENT TO CONCRETE FLOORS AND OTHER STRUCTURES.
- CONSIDER USING IRRIGATION ESPECIALLY WHEN LATE PLANTINGS ARE DONE.
- USE LOW MAINTENANCE PLANTS IN MOST CASES TO ENSURE LONG-LASTING EROSION CONTROL.
- MOWING SHOULD NOT BE PERFORMED DURING THE QUAL NESTING SEASON (SEPTEMBER TO APRIL).
- WILDLIFE PLANTINGS SHOULD BE INCLUDED IN CRITICAL AREA PLANTINGS.

**ESTABLISHING A PERMANENT VEGETATIVE COVER ON A DISTURBED AREA APPLICABLE ON HIGHLY ERODIBLE OR SEVERELY ERODED AREAS, SOMETIMES CALLED 'CRITICAL AREAS', INCLUDING:**

- CUT OR FILL SLOPES
- EARTH SPILLWAYS
- BORROW AREAS
- CHANNEL BANKS
- BERMS
- ROADSIDES
- SPOIL AREAS
- GULLED LANDS

- HAVE SOIL ANALYZED FOR LIME AND FERTILIZER RATE
- MULCH SLOPES STEEPER THAN 3% AND IN BOTTOM OF SPILLWAYS MID ON ROADBANKS
- ANCHOR MULCH IMMEDIATELY

**NOTES:**

- ALL AREAS TO BE SEEDDED SHALL HAVE LIME APPLIED AT A RATE OF 2 TONS/ACRE. LIME AND FERTILIZER TO BE APPLIED PRIOR TO APPLICATION OF SEED AND MIXED THOROUGHLY WITH THE SOIL.
- ALL AREAS SEEDDED SHALL HAVE AN APPLICATION OF STRAW MULCH (APPROXIMATELY 2.5 TONS PER ACRE) IMMEDIATELY AFTER PLANTING REGARDLESS OF PLANTING METHOD AND SATURATED WITH WATER.

**DEFINITION:**  
ESTABLISHING TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDLINGS ON DISTURBED OR DENuded AREAS.

**PURPOSE:**  
? TO REDUCE EROSION, SEDIMENT AND RUNOFF DAMAGES TO DOWNSTREAM RESOURCES.  
? TO IMPROVE WILDLIFE HABITAT.  
? TO IMPROVE AESTHETICS.  
? TO IMPROVE SAFETY AND PUBLIC ROAD TIGHTNESS?  
? TO IMPROVE TILTH AND ODD ORGANIC MATTER FOR PERMANENT PLANTINGS.

**CONDITIONS:**  
THIS PRACTICE IS APPLICABLE ON AREAS SUBJECT TO EROSION FOR UP TO TWELVE MONTHS OR UNTIL ESTABLISHMENT OF FINISHED GRADE OR PERMANENT VEGETATIVE COVER. TEMPORARY VEGETATIVE MEASURES SHOULD BE COORDINATED WITH PERMANENT MEASURES TO ASSURE ECONOMIC AND EFFECTIVE STABILIZATION.

**SPECIFICATIONS:**

**A. GRADING AND SHAPING**

- EXCESSIVE WATER RUNOFF MUST BE CONTROLLED BY PLANNED AND INSTALLED EROSION CONTROL PRACTICES SUCH AS CLOSED DRAINS, DITCHES, DIKES, DIVERSIONS, SEDIMENT BASINS AND OTHERS.
- NO SHAPING OR GRADING IS REQUIRED IF SLOPES CAN BE STABILIZED BY HAND-SEEDING VEGETATION OR IF HYDRAULIC SEEDING EQUIPMENT IS TO BE USED.

**B. SEEDBED PREPARATION**

- WHEN A HYDRAULIC SEEDER IS USED, SEEDBED PREPARATION IS NOT REQUIRED.
- WHEN USING CONVENTIONAL OR HAND-SEEDING, SEEDBED PREPARATION IS NOT REQUIRED IF THE SOIL MATERIAL IS LOOSE AND NOT SEALED BY RAINFALL.
- WHEN SOIL HAS BEEN SEALED BY RAINFALL OR CONSISTS OF SMOOTH UNDISTURBED CUT SLOPES, THE SOIL SHALL BE PITTED, TRENCHED OR OTHERWISE SCARIFIED TO PROVIDE A PLACE FOR SEED TO LODGE AND GERMINATE.

**C. LIME AND FERTILIZER**

- ALL AREAS TO BE SEEDDED SHALL HAVE LIME APPLIED AT A RATE OF 2 TONS/ACRE.
- ON REASONABLY FERTILE SOILS OR SOIL MATERIAL, FERTILIZER IS NOT REQUIRED.
- ON SOILS OF VERY LOW FERTILITY, USE 500 TO 700 POUNDS OF 10-20-20 FERTILIZER OR THE EQUIVALENT PER ACRE (12716 LBS./1,000 SQ. FT.), IF THE SITE WILL PERMIT, APPLY BEFORE LAID PREPARATION AND DISK, RIP OR CHISEL TO INCORPORATE.

**D. SEEDING**

- SELECT A GRASS OR GRASS-LEGUME MIXTURE SUITABLE TO THE AREA AND SEASON OF THE YEAR (TABLE 6924.1, P. 1347136, FIGURE 6724.1, P. 87137).
- APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTRIPACKER-SEEDER, OR HYDRAULIC SEEDER (SLURRY INCLUDING SEED AND FERTILIZER). DRILL OR CULTRIPACKER-SEEDERS SHOULD NORMALLY PLACE SEED ONE-HALF TO ONE INCH DEEP.

**E. MULCHING**  
TEMPORARY VEGETATION CAN, IN MOST CASES, BE ESTABLISHED WITHOUT THE USE OF MULCH. MULCH WITHOUT SEEDING SHOULD BE CONSIDERED FOR SHORT TERM PROTECTION.  
\*\*SEE Ds1 ? DISTURBED AREA STABILIZATION, (WITH MULCHING ONLY).\*\*

**F. IRRIGATION**  
IF WATER IS APPLIED, IT MUST BE AT A RATE NOT CAUSING RUNOFF AND EROSION. THOROUGHLY WET THE SOIL TO A DEPTH THAT WILL INSURE GERMINATION OF THE SEED. SUBSEQUENT APPLICATIONS SHOULD BE MADE WHEN NEEDED.

**ESTABLISHING A TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDLINGS.**

- LESS THAN OR EQUAL TO 12 MONTHS OR UNTIL ESTABLISHMENT OF FINISHED GRADE OR PERMANENT VEGETATION

**SITE PREPARATION:**

- GRADING AND SHAPING
- SEEDBED PREPARATION
- APPLY LIME AND FERTILIZER
- PLANT SEEDING. SELECT SPECIES BY SEASON AND REGION
- APPLY MULCHING MATERIAL IF NEEDED
- IRRIGATE IF NEEDED BUT NOT AT RATE TO CAUSE EROSION.

**Ds2** - DISTURBED GROUND STABILIZATION, TEMPORARY VEGETATION

**Ds3** - DISTURBED GROUND STABILIZATION, PERMANENT VEGETATION



**Dust Control on Disturbed Areas**



**DEFINITION**  
Controlling surface and air movement of dust on construction sites, roads, and demolition sites.

**PURPOSE**  
\*To prevent surface and air movement of dust from exposed soil surfaces.  
\*To reduce the presence of airborne substances that may be harmful or injurious to human health, welfare, or safety, or to animals or plant life.

**CONDITIONS**  
This practice is applicable to areas subject to surface and air movement of dust where on and off-site damage may occur without treatment.

**METHOD AND MATERIALS**  
**A. Temporary Methods**  
**Mulches.** See standard Ds1 - Disturbed Area Stabilization (With Mulching Only). Synthetic resins may be used instead of asphalt to bind mulch material. Refer to specification Tac - Tackifiers. Resins should be used according to manufacturer's recommendations.  
**Vegetative Cover.** See specification Da2 - Disturbed Area Stabilization (With Temporary Seeding).  
**Spray-on Adhesives.** These are used on mineral soils (not effective on muck soils). Keep traffic off these areas. Refer to specification Tac - Tackifiers.  
**Tillage.** This practice is designed to roughen and bring clods to the surface. It is an emergency

**B. Permanent Methods**  
**Permanent Vegetation.** See specification Da3 - Disturbed Area Stabilization (With Permanent Vegetation). Existing trees and large shrubs may afford valuable protection if left in place.  
**Topsoiling.** This entails covering the surface with less erosive soil material. See specification Tp - Topsoiling.  
**Stone.** Cover surface with crushed stone or coarse gravel. See specification Cr-Construction Road Stabilization.

measure that should be used before wind erosion starts. Begin plowing on windward side of site. Chisel-type plows spaced about 12 inches apart, spring-toothed harrows, and similar plows are examples of equipment that may produce the desired effect.  
**Irrigation.** This is generally done as an emergency treatment. Site is sprinkled with water until the surface is wet. Repeat as needed.  
**Barriers.** Solid board fences, snowfences, burlap fences, crate walls, bales of hay and similar material can be used to control air currents and soil blowing. Barriers placed at right angles to prevailing currents at intervals of about 15 times their height are effective in controlling wind erosion.

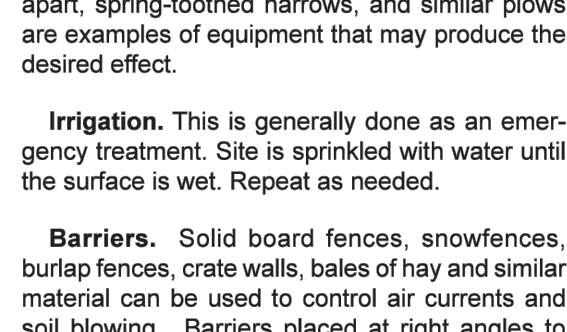
**Calcium Chloride.** Apply at rate that will keep surface moist. May need retreatment.

**Caution:** Do not use on roads or areas where it may be a hazard to traffic.

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GSWCC 2016 Edition

**Du**



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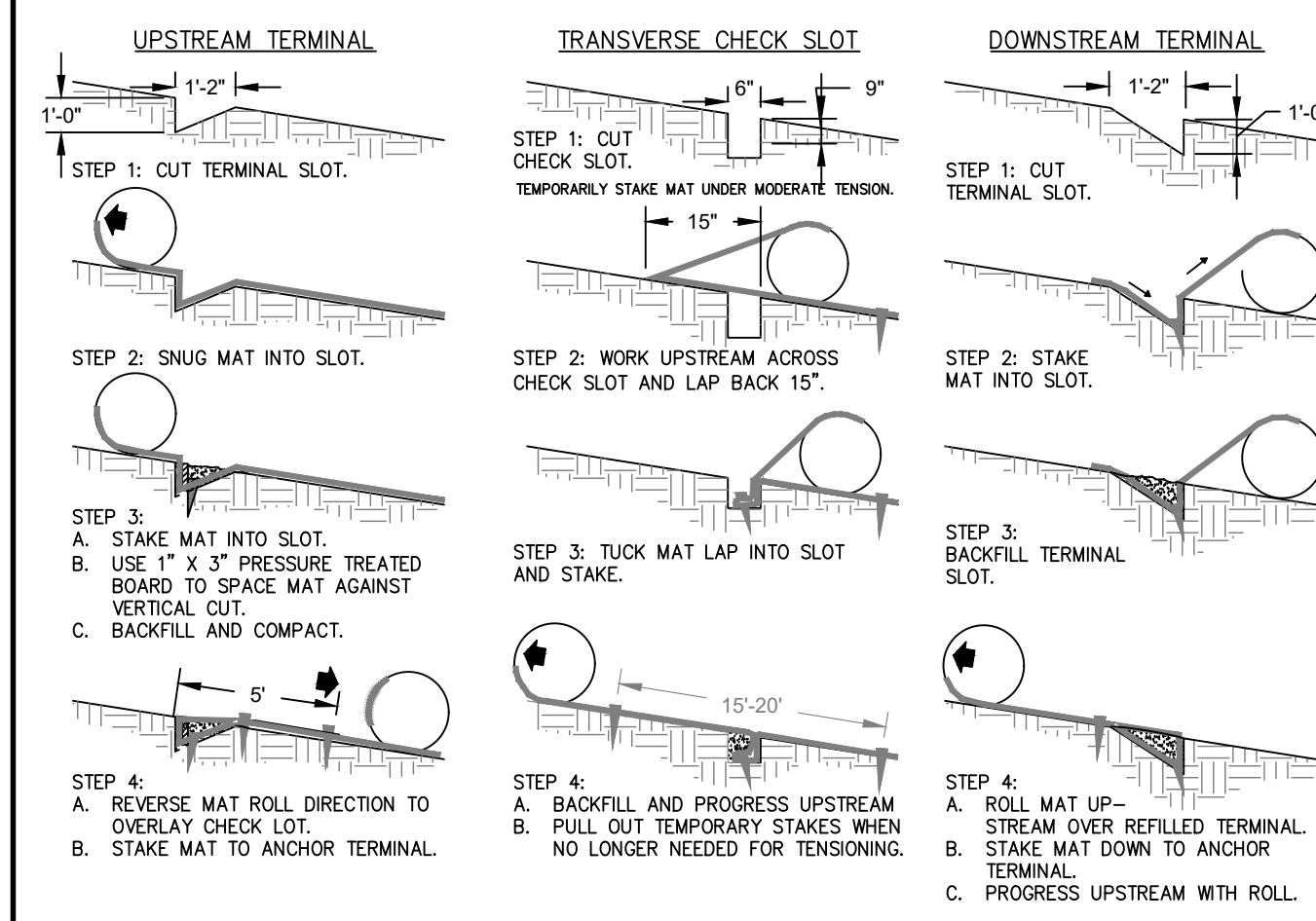
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**BLANKET AND MATTING CROSS-SECTIONS**



**UPSTREAM TERMINAL**  
STEP 1: CUT TERMINAL SLOT.  
STEP 2: SNUG MAT INTO SLOT.  
STEP 3: STAKE MAT INTO SLOT.  
STEP 4: REVERSE MAT ROLL DIRECTION TO OVERLAY CHECK LOT.  
B. STAKE MAT TO ANCHOR TERMINAL.

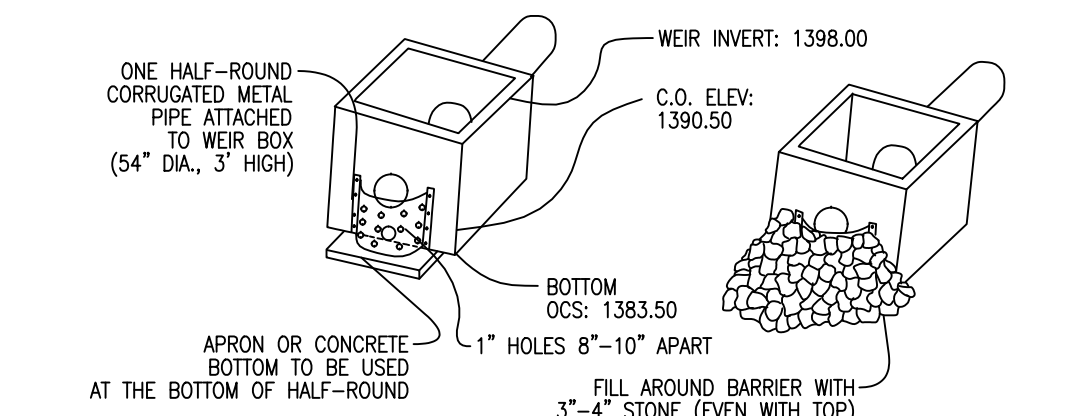
**TRANSVERSE CHECK SLOT**  
STEP 1: CUT CHECK SLOT. TEMPORARILY STAKE MAT UNDER MODERATE TENSION.  
STEP 2: WORK UPSTREAM ACROSS CHECK SLOT AND LAP BACK 15".  
STEP 3: TUCK MAT LAP INTO SLOT AND STAKE.  
STEP 4: A. BACKFILL AND PROGRESS UPSTREAM. B. PULL OUT TEMPORARY STAKES WHEN NO LONGER NEEDED FOR TENSIONING.

**DOWNSTREAM TERMINAL**  
STEP 1: CUT TERMINAL SLOT.  
STEP 2: STAKE MAT INTO SLOT.  
STEP 3: BACKFILL TERMINAL SLOT.  
STEP 4: A. ROLL MAT UP-STREAM OVER REFILLED TERMINAL. B. STAKE MAT DOWN TO ANCHOR TERMINAL. C. PROGRESS UPSTREAM WITH ROLL.

**SEQUENTIAL ROLL RUN OUT IN CHANNELS**  
ROLL #1, ROLL #2, ROLL #3. 3" OVERLAP.

**PICTORIAL VIEW OF TRANSVERSE SLOT**  
NOTES:  
1. START AT DOWNSTREAM TERMINAL AND PROGRESS UPSTREAM.  
2. FIRST ROLL IS CENTERED LONGITUDINALLY IN MID-CHANNEL AND PINNED WITH TEMPORARY STAKES TO MAINTAIN ALIGNMENT.  
3. SUBSEQUENT ROLLS FOLLOW IN STAGGERED SEQUENCE BEHIND THE FIRST ROLL. USE THE CENTER ROLL FOR ALIGNMENT TO THE CHANNEL CENTER.  
4. WORK OUTWARDS FROM THE CHANNEL CENTER TO THE EDGE.  
5. USE 3" OVERLAPS AND STAKE AT 5' INTERVALS ALONG THE SEAMS.  
6. USE 3" OVERLAPS AND SHINGLE DOWNSTREAM TO CONNECT THE LINING AT THE ROLL ENDS.

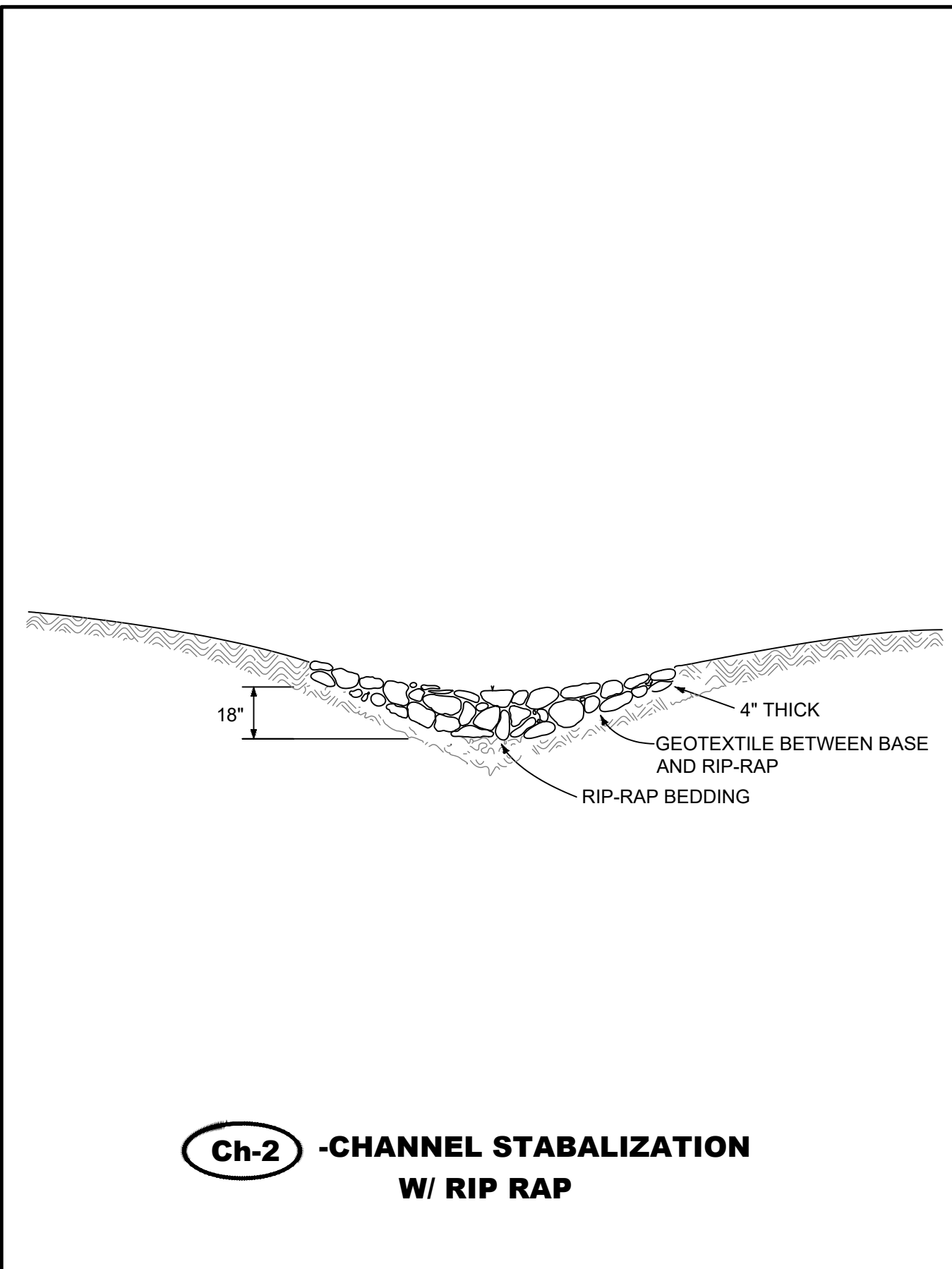
**Ss - TYPICAL INSTALLATION GUIDELINES FOR MATTINGS AND BLANKETS**



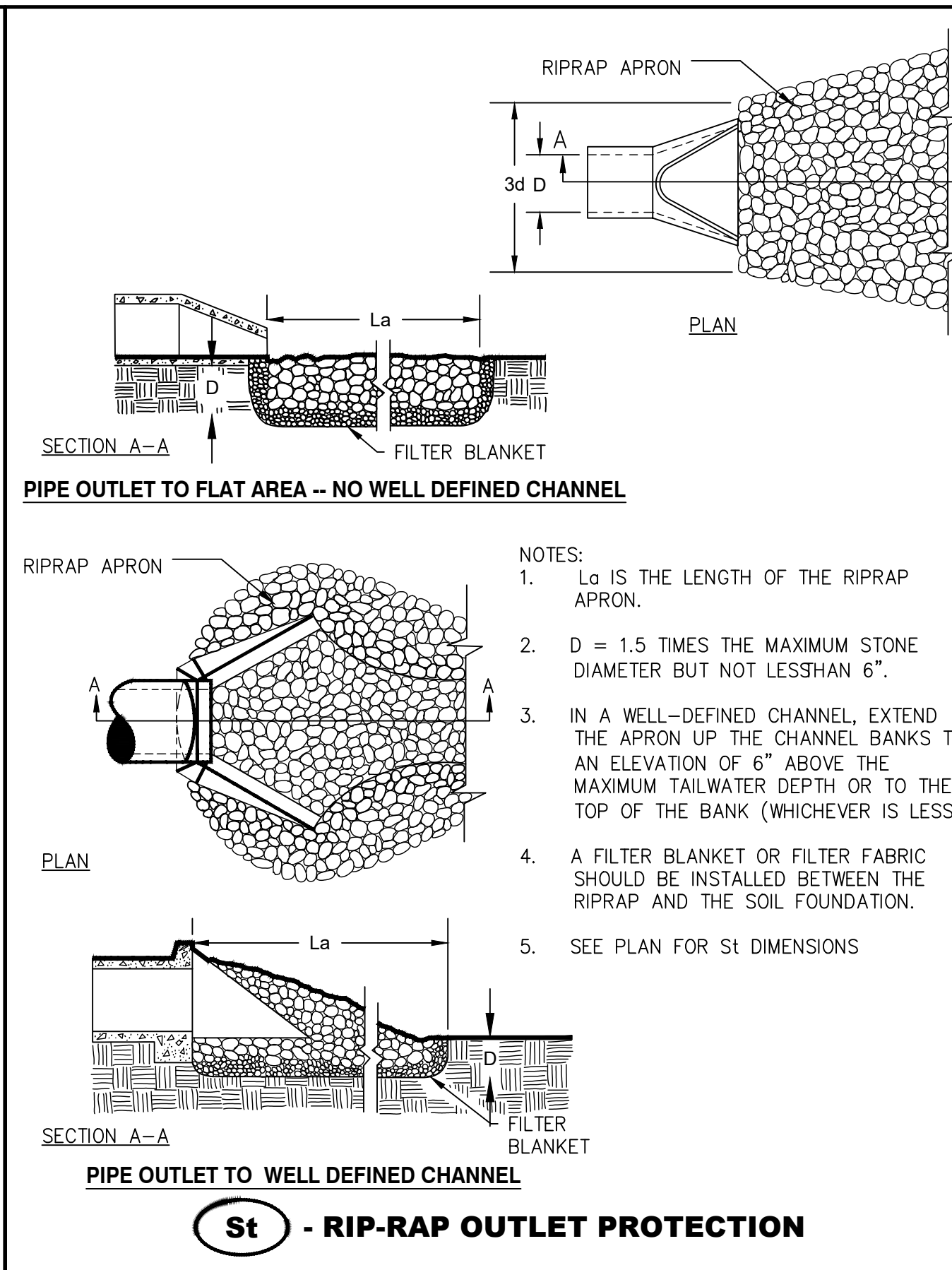
**PERFORATED HALF-ROUND PIPE WITH STONE FILTER**  
ONE HALF-ROUND CORRUGATED METAL PIPE ATTACHED TO WEIR BOX (54" DIA., 3" HIGH)  
WEIR INVERT: 1398.00  
C.O. ELEV.: 1390.50  
BOTTOM O.C.S.: 1383.50  
1" HOLES 8"-10" APART  
APRON OR CONCRETE BOTTOM TO BE USED AT THE BOTTOM OF HALF-ROUND  
FILL AROUND BARRIER WITH 3"-4" STONE (EVEN WITH TOP)  
L-2"x2"x1/4"  
HALF ROUND PERFORATED PIPE DURING CONSTRUCTION ONLY  
1/2" THREADED ROD W/NUTS AND WASHERS ANCHOR TO WALL  
FLOW  
1'-0" MIN. GRADED STONE  
NOTE: THE CLEAN-OUT ELEVATION SHALL BE CLEARLY VISIBLE ON THE FACE OF THE HALF-ROUND PIPE. CONTRACTOR TO MARK CLEAN-OUT ELEVATION WITH A BRIGHTLY PAINTED 5/8"x12" BOLT AFFIXED TO HALF-ROUND PIPE

**Project Name:** HIP LOT 10  
**Basin No. #1**  
**Storage Calculations:**  
1. Required stormwater storage = 4850.78 cy  
2. Required sediment storage = 649.23 cy  
3. Total required storage (1) + (2) = (3) = 5500.01 cy  
4. Available Storage = 9661.52 cy  
5. Is the available storage greater than the total required storage?  
XXX YES NO  
6. If "NO", the sediment storage capacity of the pond must be increased.  
Choose the method to be used:  
Raise the invert of the outlet structure in (L)\*  
Undercut the pond (W)\*  
Depth =  
Other  
7. Clean-out elevation = 1389.50 ft  
8. Is the length-width ratio 2:1 or greater? XXX YES NO  
9. If "NO", the length of flow must be increased.  
Choose the method to be used:  
Baffles Type: plywood  
Other  
Note: the CMP diameter and height if a half-round CMP retrofit is used.  
Diameter = 30 in Height = 5 ft

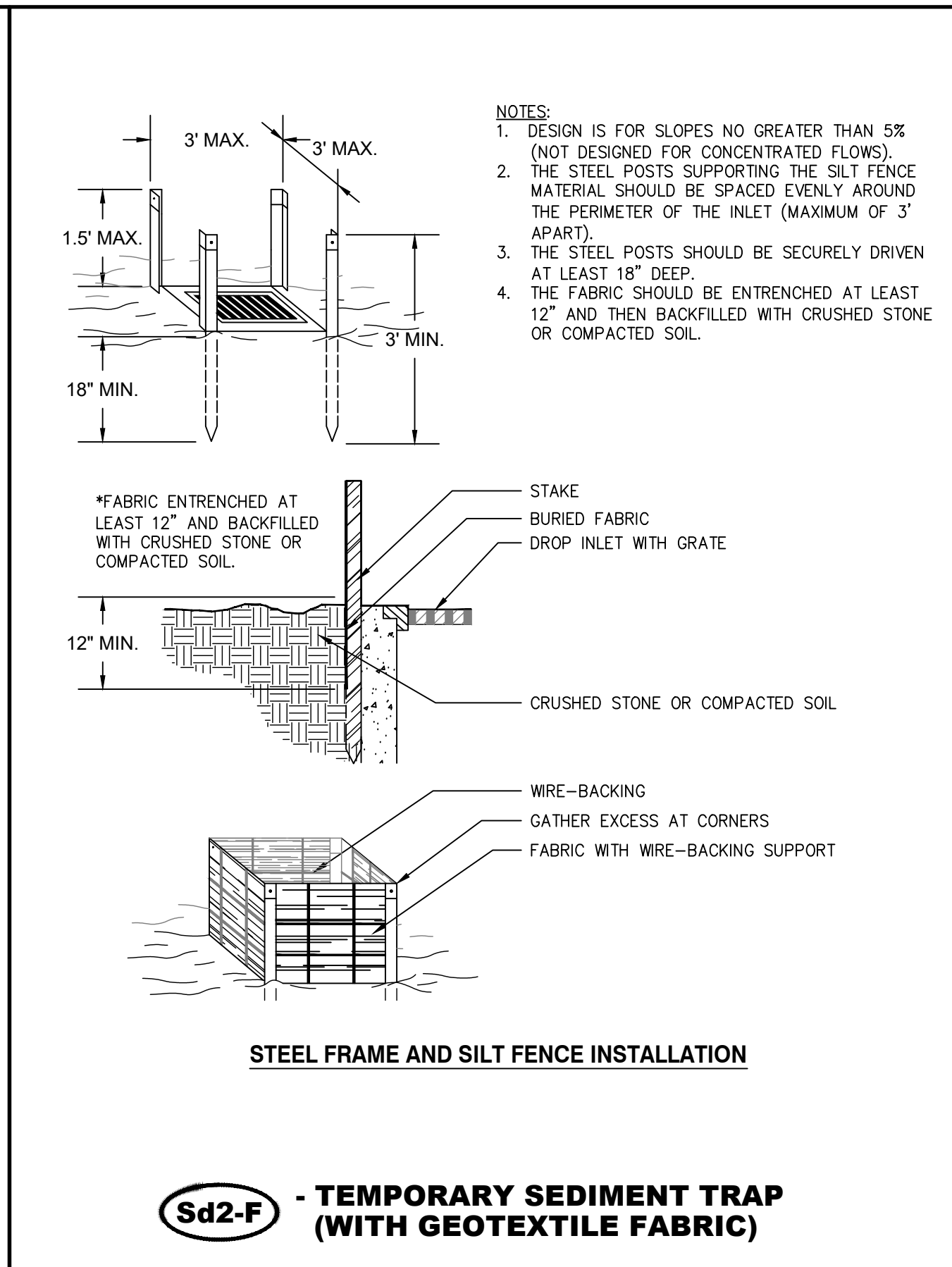
**Rt - PERFORATED HALF-ROUND PIPE WITH STONE FILTER**



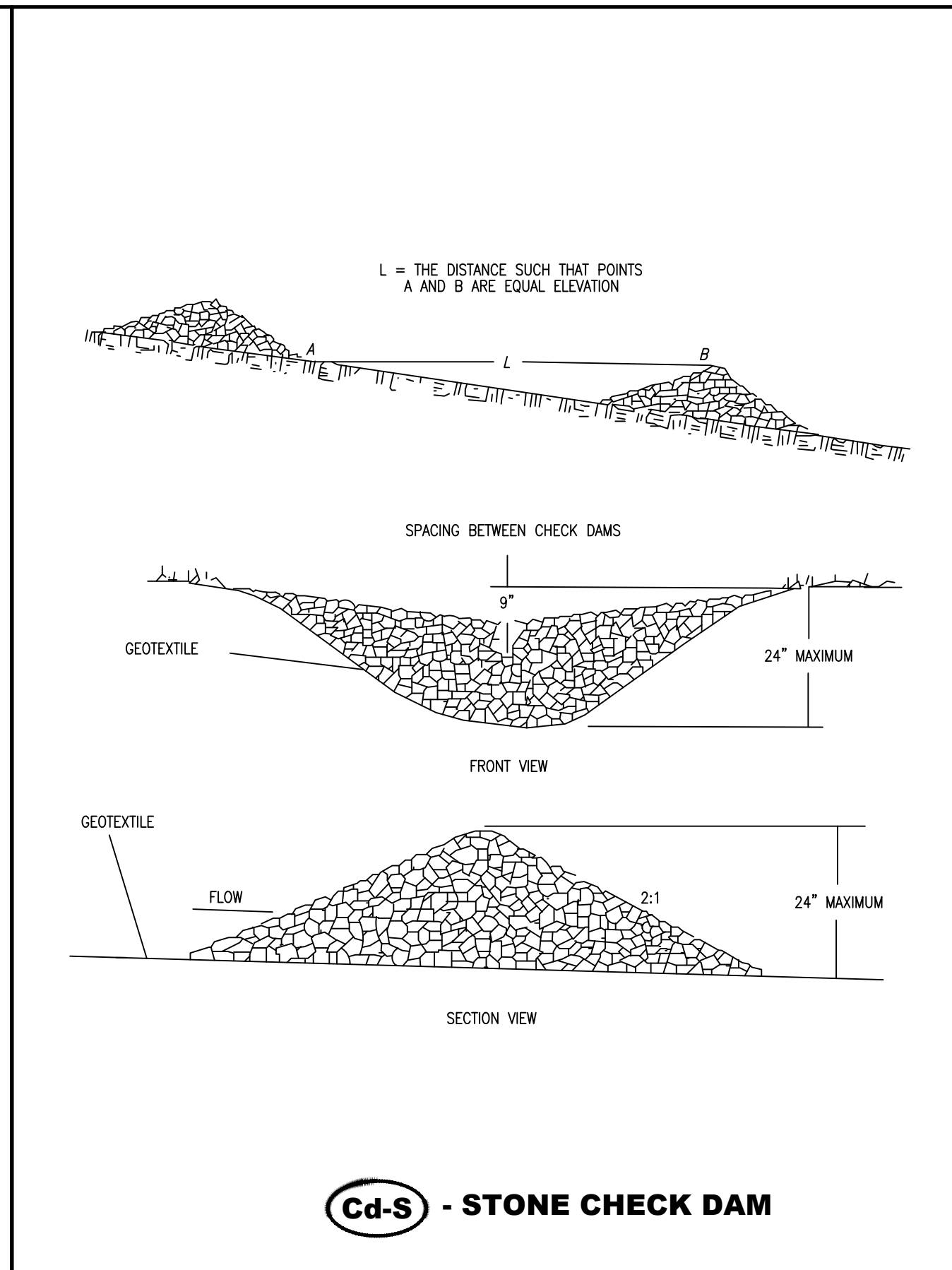
**Ch-2 - CHANNEL STABILIZATION W/ RIP RAP**



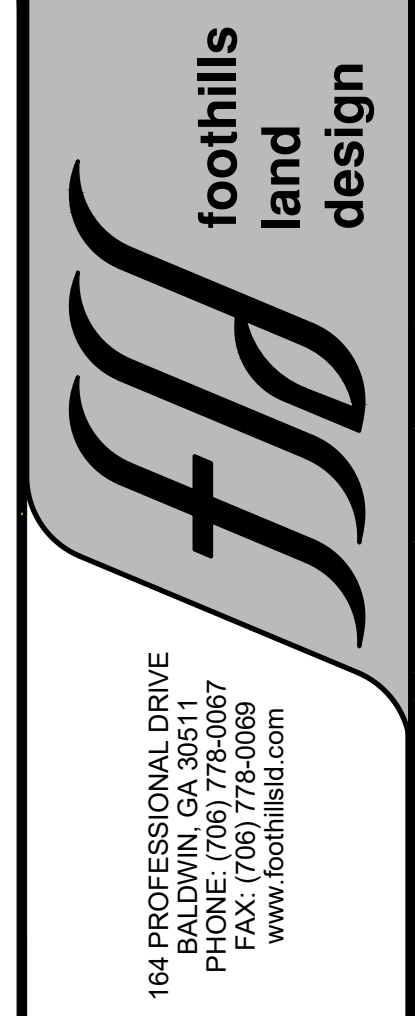
**St - RIP-RAP OUTLET PROTECTION**



**Sd2-F - TEMPORARY SEDIMENT TRAP (WITH GEOTEXTILE FABRIC)**



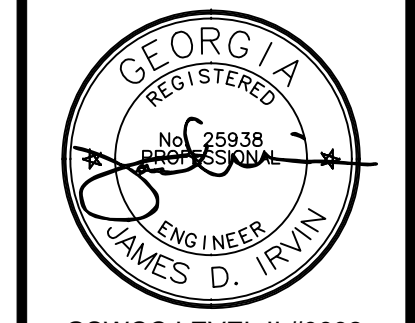
**Cd-S - STONE CHECK DAM**



**OWNER/DEVELOPER:**  
**HABERSHAM COUNTY DEVELOPMENT AUTHORITY**  
161 PROFESSIONAL DRIVE  
BALDWIN, GA 30511  
PHONE: (706) 778-0067  
FAX: (706) 778-0069  
www.foothillsland.com

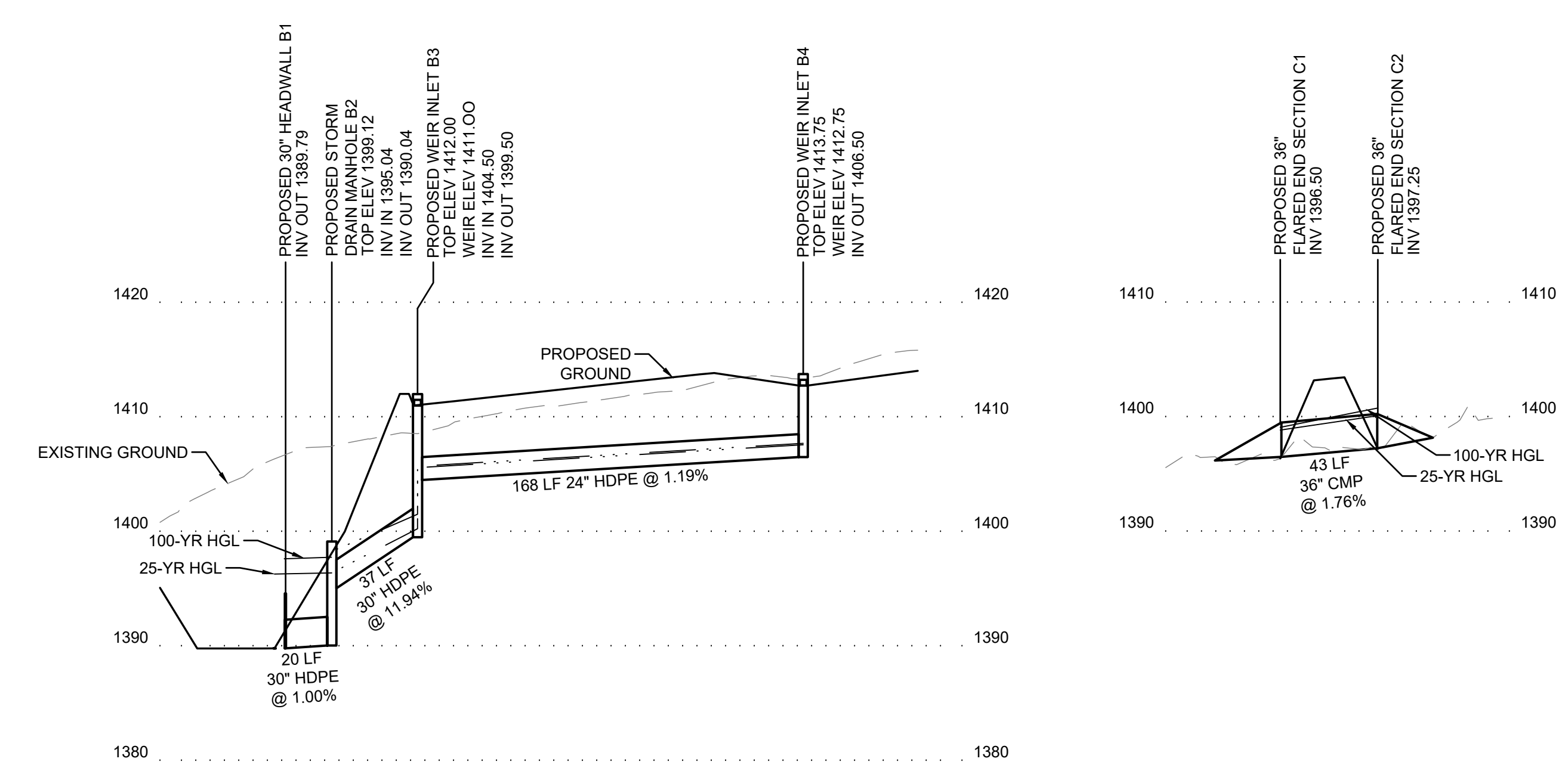
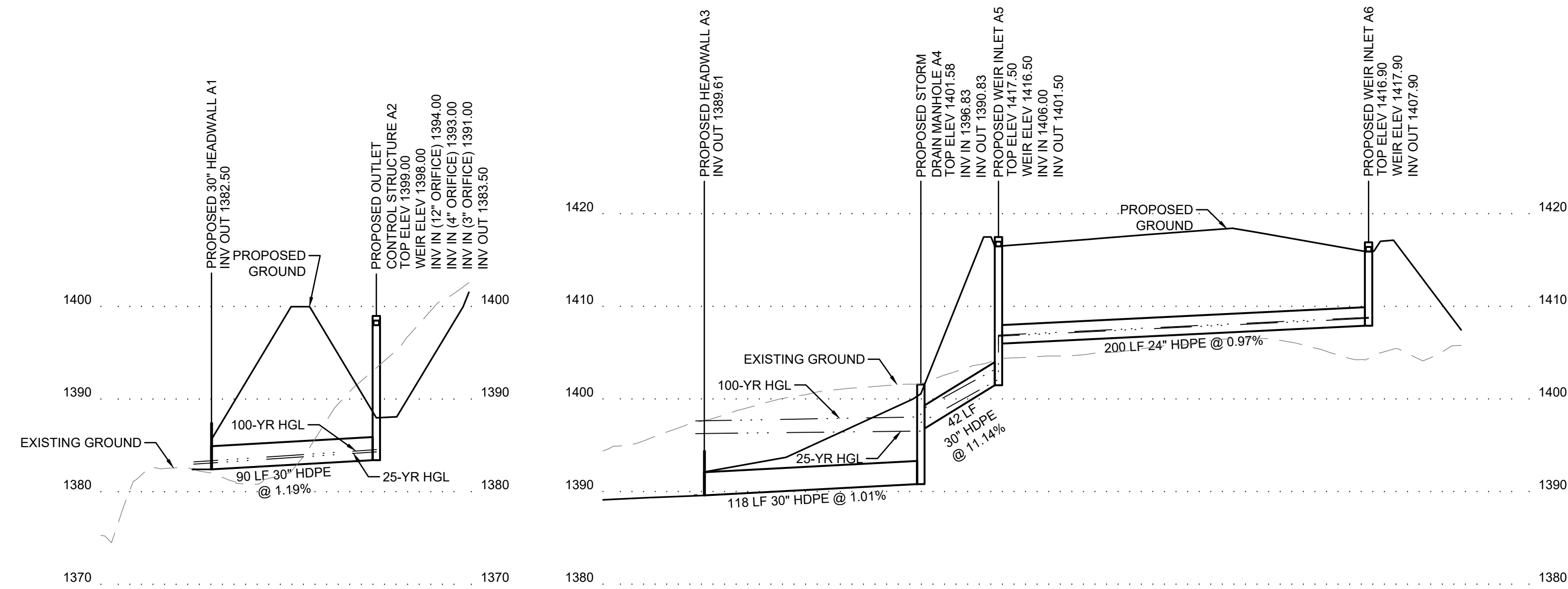
**EROSION CONTROL DETAILS**  
**HABERSHAM INDUSTRIAL PARK LOT 10**  
LAND LOT 169, 10th DISTRICT  
CITY OF BALDWIN  
HABERSHAM COUNTY, GA  
PH: 706-839-0210

NO.	DESCRIPTION	DATE



GSWCC LEVEL II #9832  
DATE: MAY 9, 2023  
SCALE: N/A

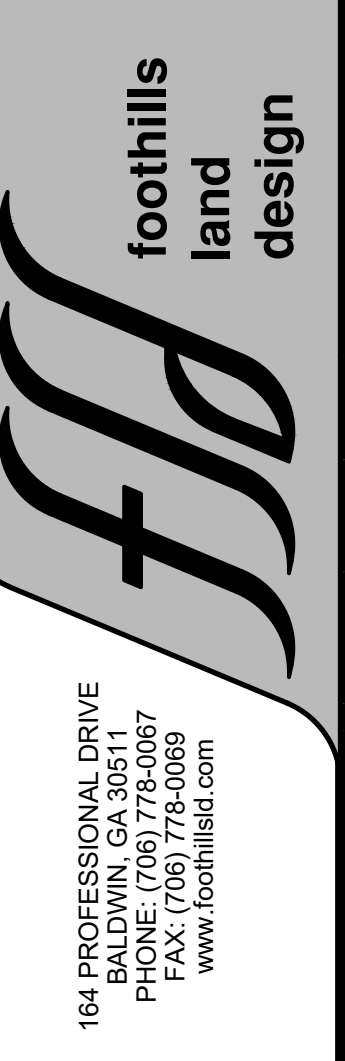
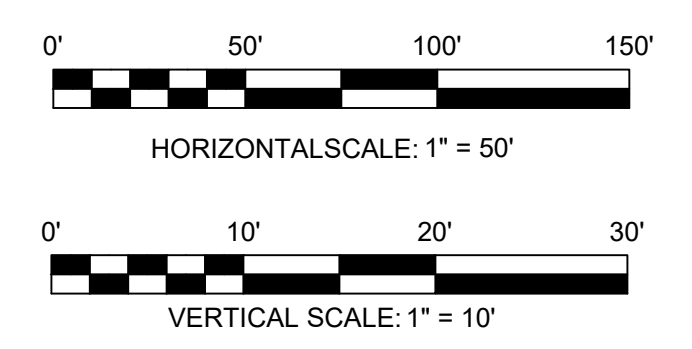
SHEET:  
**C10**  
JOB # 23027



NOTES:  
 1. GRATES WITH BARS SHALL BE PERPENDICULAR TO ROAD.  
 2. THE THROAT OF THE CURB INLETS SHALL NOT EXCEED 8 INCHES.  
 3. HDPE PIPE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-294 AND AASHTO MP7. TYPE S & D. CONNECTIONS SHALL USE A RUBBER GASKET, WHICH CONFORMS TO ASTM F-477. INSTALLATION SHALL BE IN ACCORDANCE WITH ASTM RECOMMENDED PRACTICE D-2321, AASHTO SECTION 30, OR WITH SECTION 550 OF THE GEORGIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS CONSTRUCTION OF TRANSPORTATION SYSTEMS, LATEST EDITION.

PIPE CHART FOR 25-YR STORM EVENT

Upstream Node	Downstream Node	Pipe Material	Diameter (in)	Manning's n	Pipe Length (ft)	Slope (%)	Tc (min)	Rainfall Intensity (in/hr)	Flow to Inlet (cfs)	Total Flow (cfs)	Average Velocity (fps)	Runoff Coef.	Drainage Area (Acres)
WEIR INLET A6	WEIR INLET A5	HDPE	24.00	0.010	199.83	0.97	5.00	8.22	9.76	9.76	8.30	0.83	1.43
WEIR INLET A5	STORM DRAIN MANHOLE A4	HDPE	30.00	0.010	41.92	11.14	5.00	8.22	16.65	25.59	25.75	0.83	2.44
STORM DRAIN MANHOLE A4	30\"/>												



161 PROFESSIONAL DRIVE  
 FORT MONROE, GA 30523  
 PHONE: (706) 778-0087  
 FAX: (706) 778-0069  
 www.foothillsland.com

OWNER/DEVELOPER:  
**HABERSHAM COUNTY  
 AUTHORITY**  
 555 MONROE ST., UNIT 20  
 CLARKESVILLE, GA 30523  
 Ph: 706-839-0210

**HABERSHAM INDUSTRIAL  
 PARK LOT 10**  
 LAND LOT 169, 10th DISTRICT  
 CITY OF BALDWIN  
 HABERSHAM COUNTY, GA

REVISIONS:	NO.	DESCRIPTION	DATE



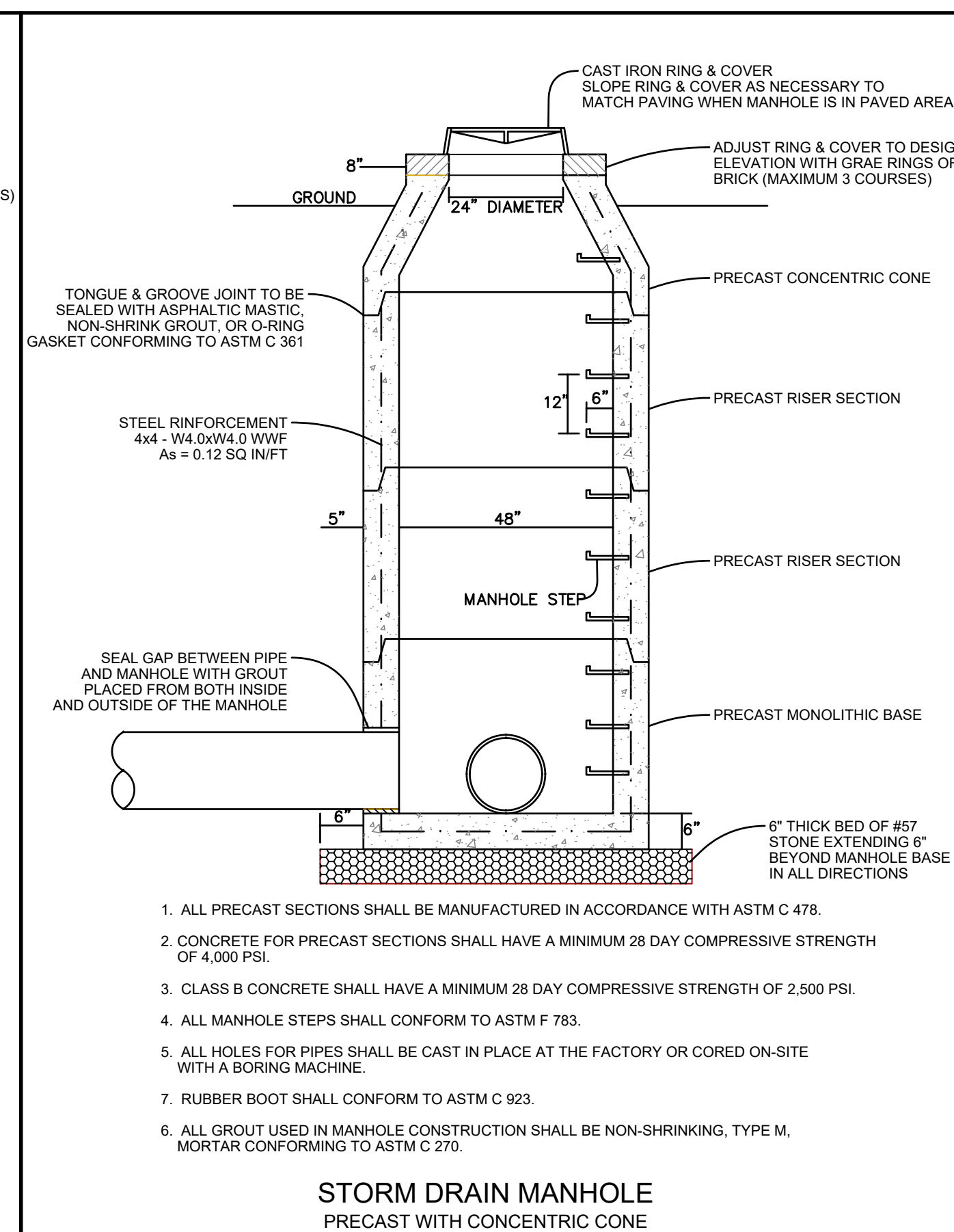
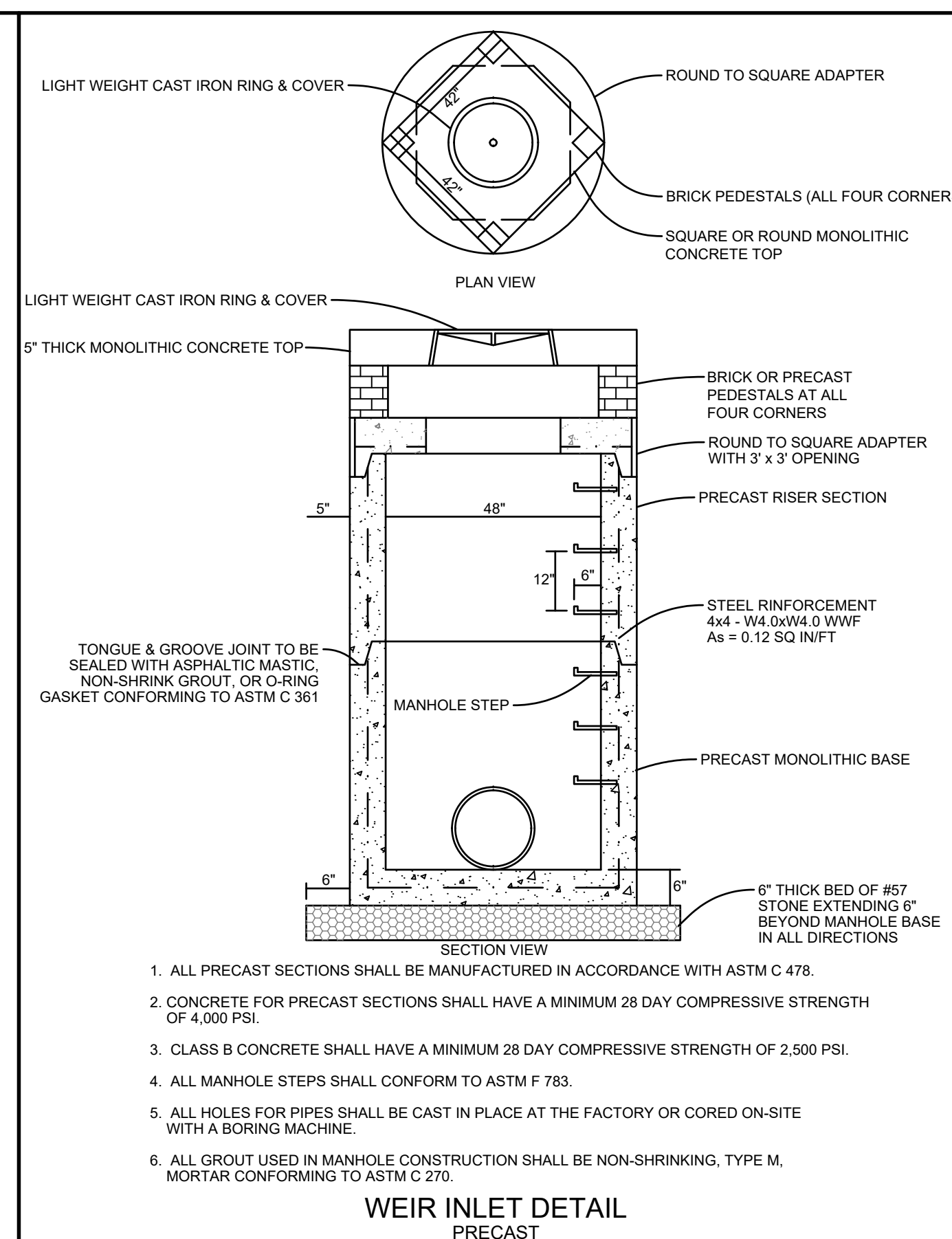
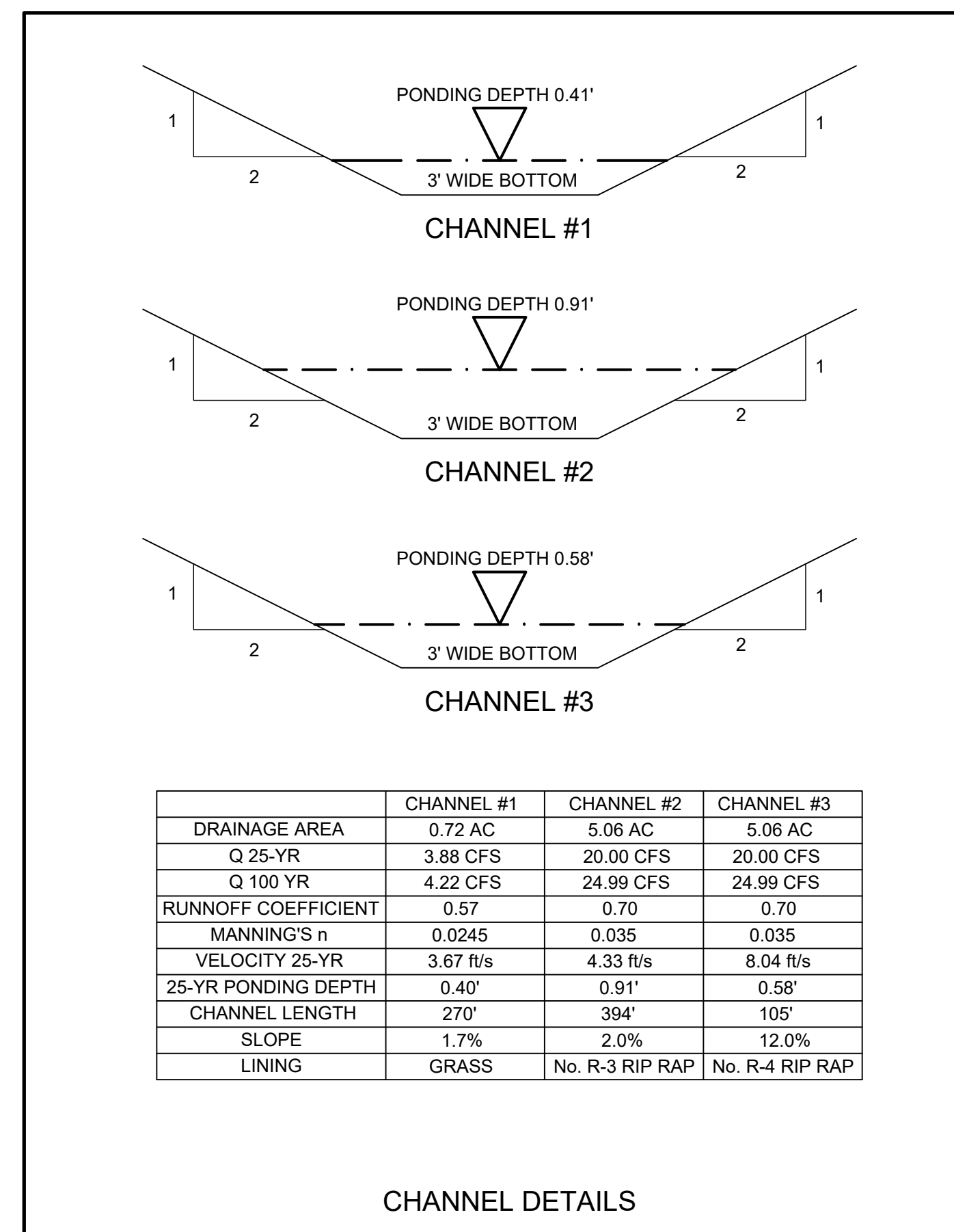
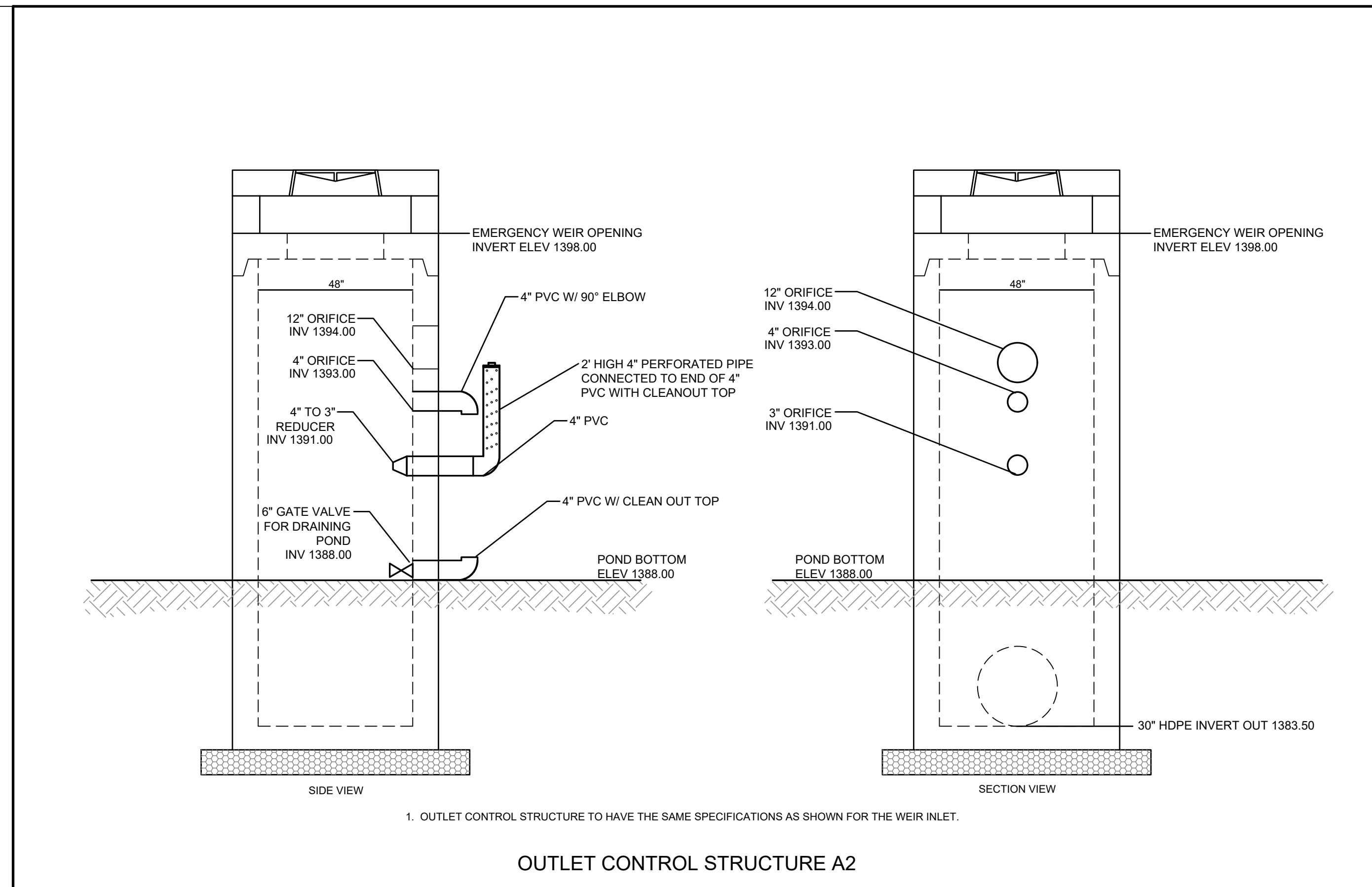
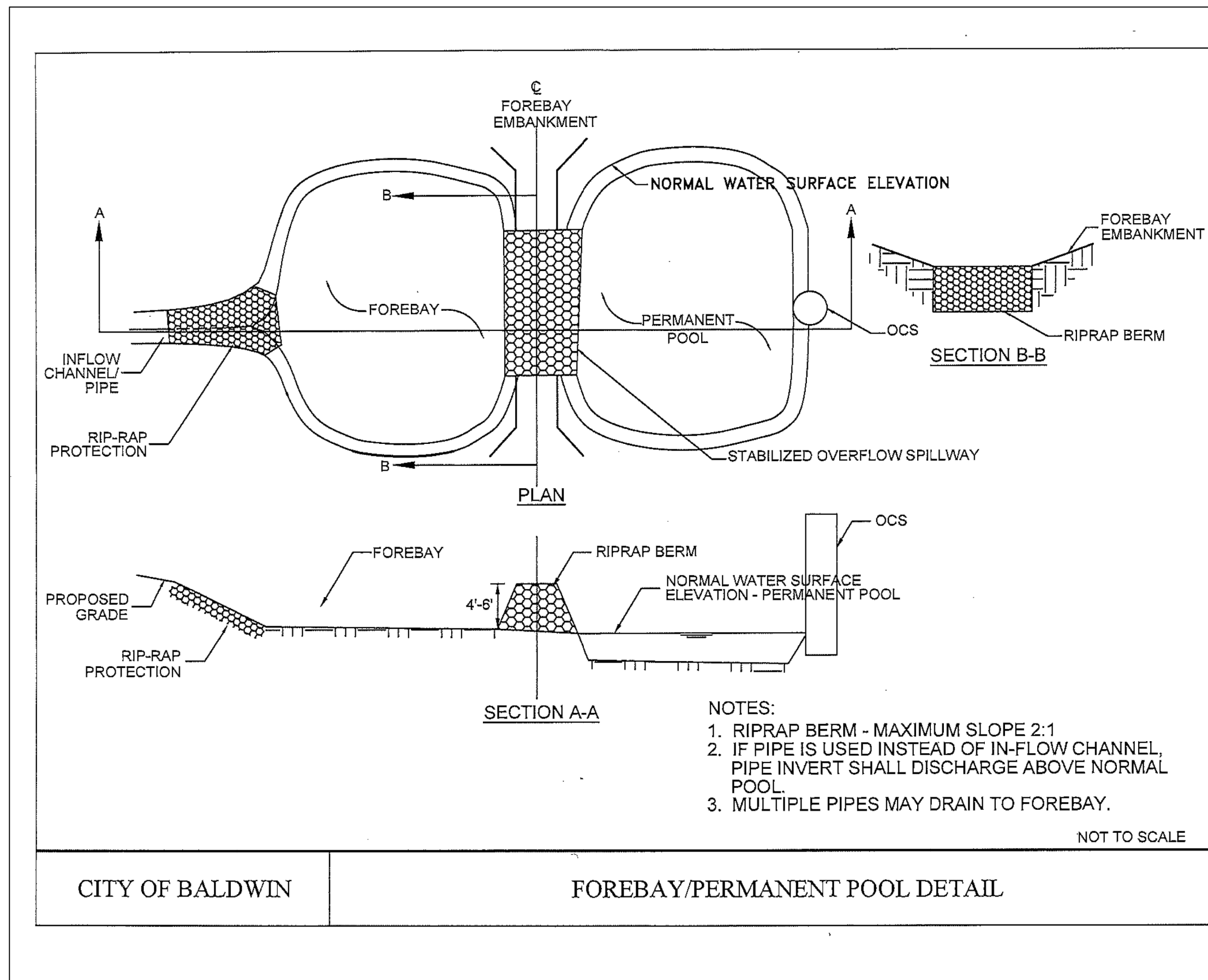
GSWCC LEVEL II #9832

DATE: MAY 9, 2023

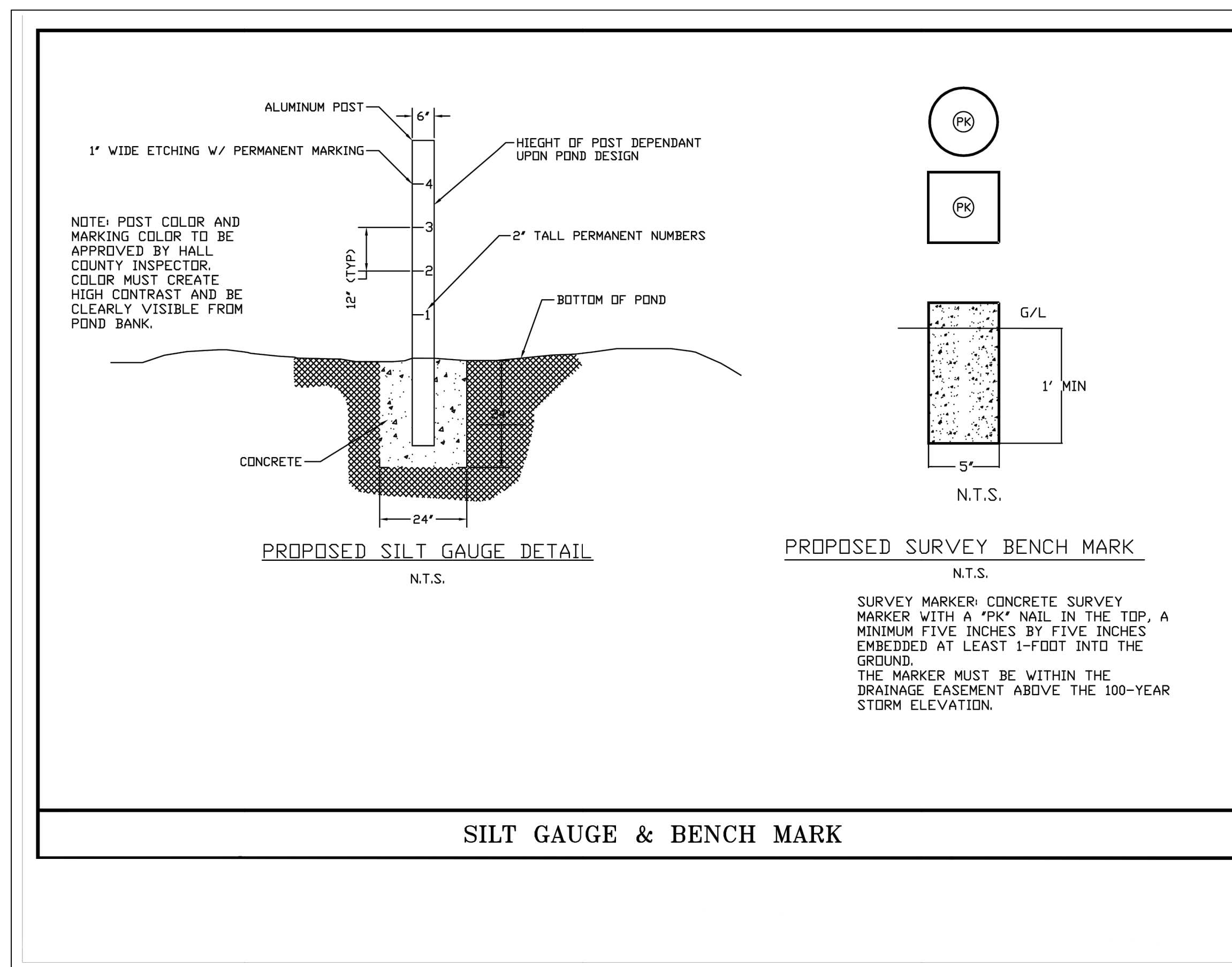
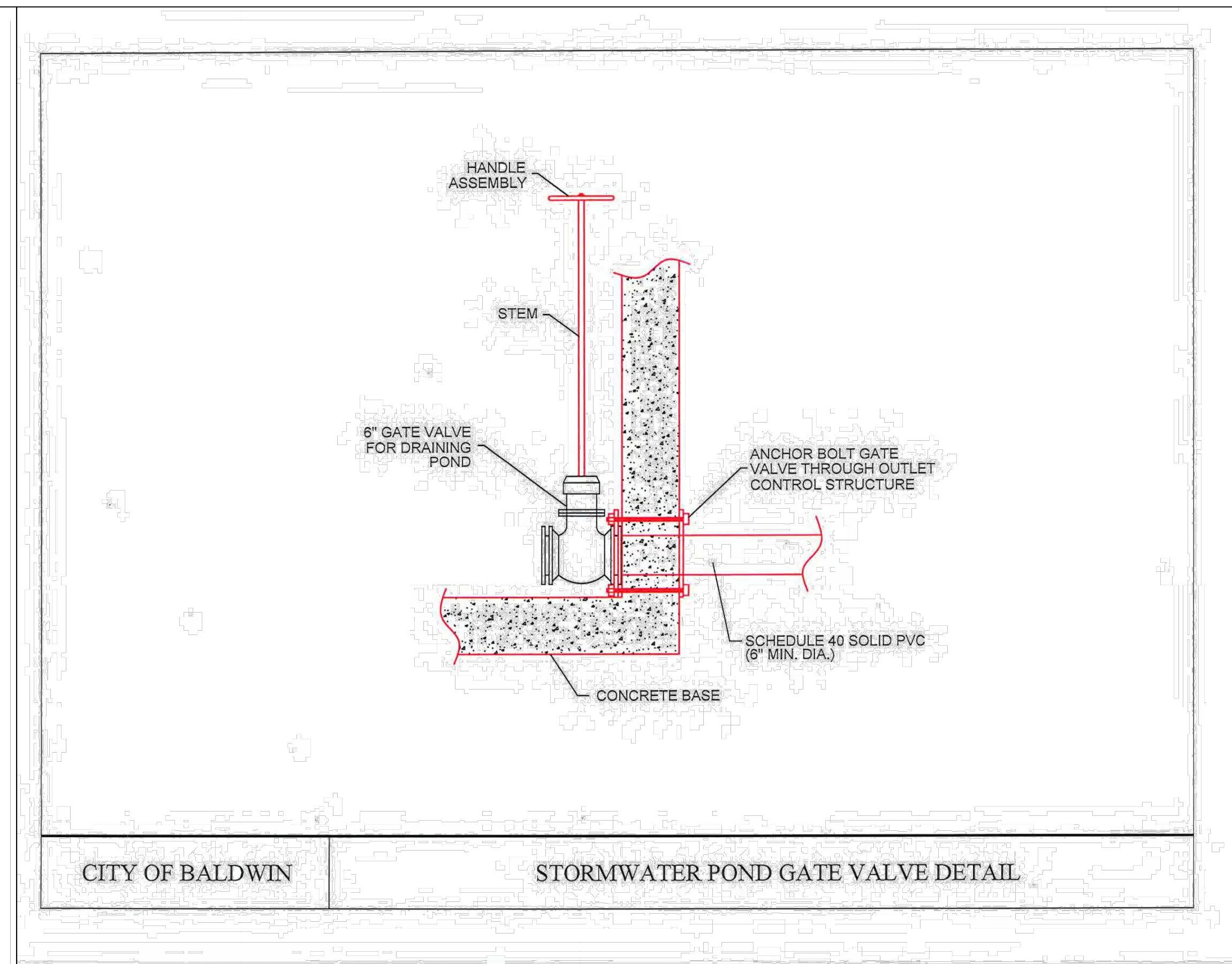
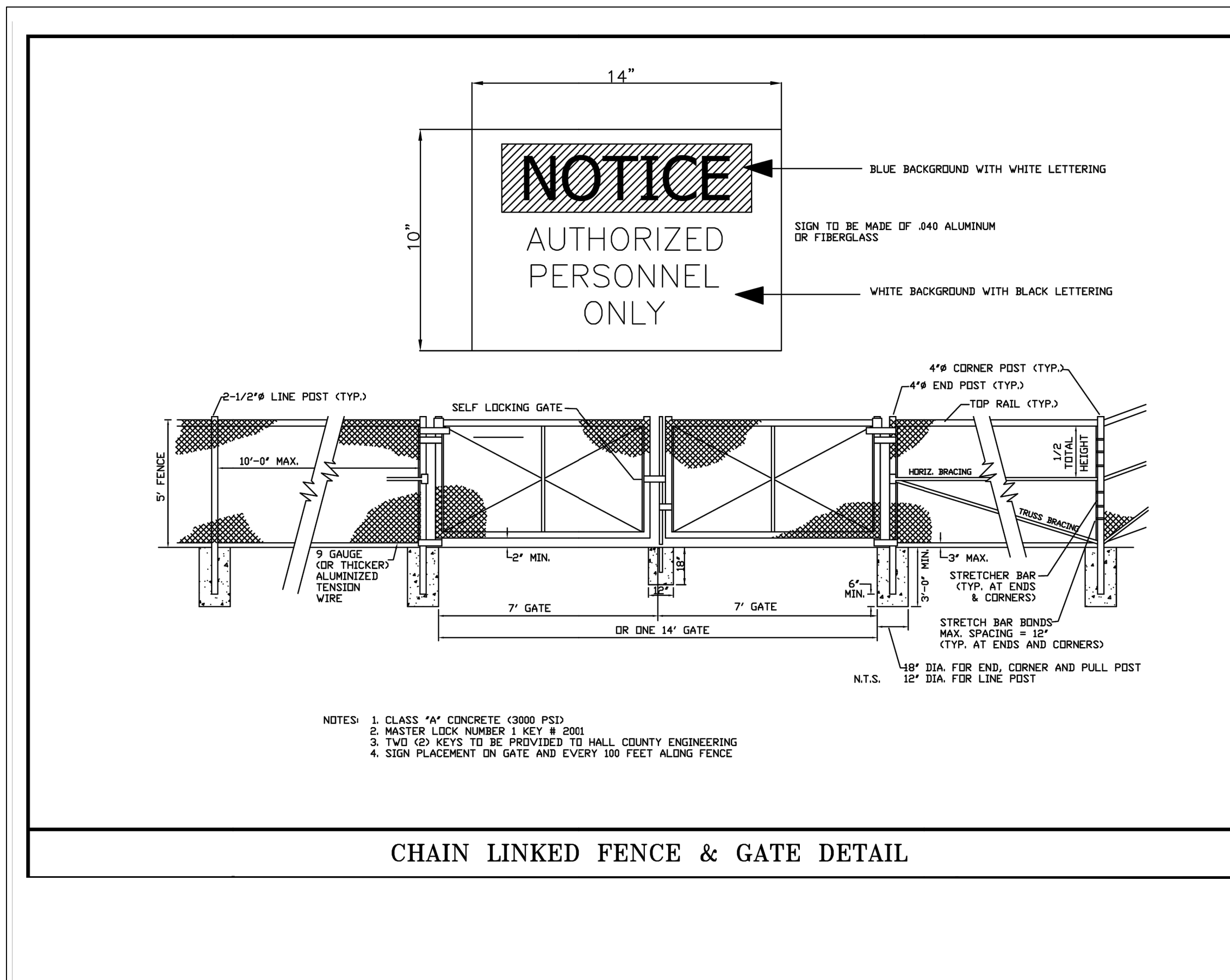
HORIZONTAL SCALE: 1" = 50'

VERTICAL SCALE: 1" = 10'

SHEET:  
**C11**  
 JOB # 23027



NO.	DESCRIPTION	DATE



NO.	DESCRIPTION	DATE