

## KANSAS CITY KANSAS PUBLIC SCHOOLS / USD 500

Purchasing Office | 2010 N. 59<sup>th</sup> Street | Room 370 \ Kansas City, KS 66104 Web Site: <u>www.kckps.org</u>

## RETAINING DEMOLITION AND REPLACEMENT OF RETAINING WALL FAIRFAX LEARNING CENTER

BID NO: IFB 21-002 ISSUE DATE: FEBRUARY 12, 2021

Kansas City Kansas Public Schools will receive sealed bids, on this form at the Purchasing Office, 2010 N. 59<sup>th</sup> Street, Room 370, Kansas City, KS 66104 until **1:30 PM., March 2, 2021**, at which time bids received will be publicly opened and read via Zoom conference, all in accordance with bid instructions, specifications and/or bid conditions attached hereto or as shown below.

### **Contact/Technical Contact:**

Wayne C. Correll, Director of Purchasing | (913) 279-2270 | email: wayne.correll@kckps.org

### **BID INSTRUCTIONS**:

FAXED BIDS WILL NOT BE ACCEPTED / EMAILED BIDS WILL NOT BE ACCEPTED.

## Per attached specifications listed in this invitation to bid. Bidders must specify unit price on services/rates/deliverables on the Bid Form or bid may be determined to be non-responsive.

Kansas City Kansas Public Schools is temporarily accepting bids via email. No Faxed Bids will be accepted.

Until further notice, the Purchasing Office of the Kansas City Kansas Public Schools is closed to the public as a result of the COVID-19 crisis. All public bid openings will be conducted via video conference call.

During this time all bids are to be submitted via UPS, FedEx or emailed to wayne.correll@kckps.org. All bids submitted must be received by the Purchasing Office by the specific bid closing date and time of 2:00PM Central Time. If emailed, it is the responsibility of the 'bidder' to ensure the bid date and time is met. FedEx and UPS currently deliver directly to the Central Office of the Kansas City Kansas Public Schools. Bids are not considered received until they are date and time stamped in the Purchasing Office. The Purchasing Office will not be responsible for late deliveries.

For questions regarding confirmation that your bid has been received by the Purchasing Office, please email Wayne Correll at <u>wayne.correll@kckps.org</u>.

The Public Bid Opening for this solicitation shall be opened in public via Zoom Video Conference Call at the hour stated in the notice at the below number:

### KCKPS Purchasing Department is inviting you to a scheduled Zoom meeting

Topic: IFB 21-002 - Bid Opening Time: Mar 2, 2021 01:30 PM Central Time (US and Canada)

Join Zoom Meeting

https://us02web.zoom.us/j/86430062033?pwd=R2IrbC8wQnRsNWg5TTBHdnlLWTR3Zz09

Meeting ID:	864 3006 2033
Passcode:	096089

One tap mobile +13462487799,,86430062033# US (Houston) +16699006833,,86430062033# US (San Jose)

Dial by your location

+1 346 248 7799 US (Houston) +1 669 900 6833 US (San Jose) +1 253 215 8782 US (Tacoma) +1 312 626 6799 US (Chicago) +1 929 205 6099 US (New York) +1 301 715 8592 US (Washington DC)

Meeting ID: 864 3006 2033 Find your local number: <u>https://us02web.zoom.us/u/kc34QhIMCh</u>

A bid tabulation will be provided in response to an emailed request to wayne.correll@kckps.org.

Per attached specifications listed in this invitation to bid. Bidders must specify unit price on services/rates/deliverables on the Bid Form or bid may be determined to be non-responsive.

- Pricing shall be FOB Kansas City, KS (All freight and fuel charges must be included in the bid price).
- Award will be to <u>ONE</u> Contractor.
- The District reserves the right to reject any or all bids, to waive any informalities, irregularities or technical defects in bids, and unless otherwise specified by the District to accept any item or groups of items in the bid, as may be in the best interest of the District.
- Time (days, weeks, etc.) required for delivery is a significant consideration with respect to this award process. The time required for delivery must be indicated in the space provided or your bid may be found non-responsive and may not be considered.
- Bid shall include copies of pertinent warranty information pertaining to the product or service offered. The bidder agrees that equipment furnished under any resultant purchase order issued by Kansas City Kansas Public Schools and Engineering Diagnostics, LLC shall be covered by commercial warranties the contractor gives to any customer for such supplies. All warranty information and certificates shall be furnished and become the property of the District upon delivery and acceptance of said items and/or the contractor must honor services and all rights and remedies stated in the warranties.
- All items are new manufacture unless otherwise specifically stated in this bid.

- All products must have passed the first line quality standard as set by the manufacturer and no seconds, blemished articles or items having defective workmanship are included.
- Bid may not be considered if a service charge, minimum dollar or minimum quantity order is applied.
- The outcome of this bid will be posted on the District's Purchasing site <u>www.kckps.org/purchasing</u> under Awards Section and will include a bid tabulation/summary.
- Bidder shall acknowledge all addenda for this bid and include the form acknowledgements with their bid.

### **INCLEMENT WEATHER OR EMERGENCY**

IF THERE IS A BUILDING CLOSING THE DAY OF THE OPENING OF PROPOSALS DUE TO INCLEMENT WEATHER OR AN EMERGENCY, THE OPENING OF PROPOSALS WILL OCCUR AT 2:00PM (CENTRAL) THE NEXT BUSINESS DAY THE DISTRICT IS OPEN.

See Attachment A for Additional Terms & Conditions

## RETAINING DEMOLITION AND REPLACEMENT OF RETAINING WALL FAIRFAX LEARNING CENTER

The Kansas City Kansas Public Schools Facilities Department is accepting sealed bids from qualified contractors to provide labor and materials for the following work:

## Scope of Work

Demolition of existing curb, wall, and removal of debris; Construction of a retaining wall, curb and gutter, curb inlet, and storm pipe along the south side of Lloyd Peterson Lane. More detail provided on attachments.

The Work summarized above is provided as a convenience and may not be inclusive of all specified work.

Any measurements and areas shown/indicated in this solicitation are approximations, and not guaranteed to be 100% accurate. Each bidder is responsible for making an on-site measurement of the area to be serviced, in order to determine exact requirements.

## All work is to be completed prior to August 1, 2021.

### Location of the Work

### **Fairfax Learning Center** 3016 N 9<sup>th</sup> Street

Kansas City, KS 66101

### **Pre-Bid Meeting**

A pre-bid meeting will be held at **10:00 AM** on **February 19, 2021**.

The Pre-bid meeting will be held at:

### **Fairfax Learning Center**

3016 N 9<sup>th</sup> Street Kansas City, KS 66101

A "walk-thru" to all review of the project area will follow the Pre-Bid meeting. Attendance at the Pre-Bid Meeting is recommended, but not mandatory.

### **Bid Security**

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Bid Bond: Bid security shall be submitted with each bid in the amount of five percent (5%) of the bid amount. No bids may be withdrawn for a period of sixty (60) days after opening of bids. Owner reserves the right to reject any and all bids and to waive informalities and irregularities.

Payment & Performance Bond: Bidder agrees to furnish a Payment & Performance Bond, in the amount of 100% (one hundred percent) of total contract value after receipt of contract.

## **Prevailing Wage**

Prevailing Wage <u>IS NOT</u> required.

## **Time of Completion**

Successful bidder shall begin the Work on receipt of the Notice to Proceed and shall complete the Work (Substantial Completion) no later than **August 1, 2021**.

## **Liquidated Damages**

**Completion of this project before August 1, 2021 is imperative.** At the District's sole discretion, liquidated damages in the amount of Two-Hundred-Fifty Dollars (\$250.00) per calendar day will be assessed against the Contract if the project is not completed by the date indicated.

## Clean-Up

The Contractor will keep the premises free from accumulations of debris and waste materials caused by its employees in performance of the work. At completion of the project, Contractor shall remove all crating, packaging, waste and debris from the building and the site, and all tools, scaffolding and surplus materials, and shall leave the building and site "broom clean" or its equivalent.

## Permits, Codes and Ordinances

Each Contractor shall file and pay for required permits affecting its work (if applicable). Each contractor shall conform to applicable codes and ordinances, including OSHA requirements.

## **Damage to District Property**

Contractor at its own expense shall promptly remedy and repair all damages or loss to any property caused in whole or part by its employees, subcontractor(s), supplier or anyone directly or indirectly employed by either of them, or by anyone for whose acts either of them may be liable.

**No Smoking:** The District adheres to the mandatory "No Smoking" policy on school premises and/or at school functions. All bidders shall comply with this "No Smoking" policy.

### **BID FORM**

By signing this bid form, the vendor certifies the forms being offered meets or exceeds all requirements and conditions of the bid, special provisions, and specifications. In compliance with the above and subject to all the conditions hereof, the undersigned offers and agrees to furnish all items upon which prices are quoted, at the price set opposite each item.

The undersigned certifies that no Federal, State, County or Municipal tax is included in the above quoted prices and that none will be added. Public schools are TAX EXEMPT. Exemption certificates will be provided upon request.

Bid Form – All Work		
Base Bid – (to include all labor, materials and other costs)	\$	
Bid Value Written Out		
Number of Days After Receipt of Order to Start Project	Days	
Number of Days to Complete Project	Days	

The Lump Sum written out immediately above governs this Bid. For comparative purposes and as the basis for future add/deduct negotiations, also list individual prices for the following work items. The total of these items must equal the Lump Sum above, and should accurately reflect the apportionment of the Bid, including overhead, profit, and taxes.

Where given, use the quantities provided for bidding; if provided quantities are later determined to be inaccurate, an equitable adjustment will be made in the Contract Price by multiplying Bidder's unit rate price times the actual quantity performed; no other pricing will be considered for changes in the Contract Price. If a quantity is not provided, Bidder shall make an independent study to estimate the actual quantity; no Change Order will be considered to correct inaccurate quantities estimated by Bidder.

Repair Item	Base Bid - Descriptions	Unit	Unit Price	Quantity	Extended Price
1	Demolition of existing curb, wall, and removal of debris	Lump Sum	\$	NA	\$
2	Construction of a retaining wall, curb and gutter, curb inlet, and storm pipe	Lump Sum	\$	NA	\$
3	Construction Performance and Payment Bonds	Lump Sum	\$	NA	\$

Designations		If Yes, Please Identify Certified Designation
MBE/WBE/Other Certification		
Is your firm certified MBE/WBE or Other?	Yes / No	
(Circle One)>>		

WE HEREBY AGREE TO FURNISH THE ITEMS ON WHICH PRICES ARE QUOTED ABOVE IN ACCORDANCE WITH ALL TERMS AND CONDITIONS PREVIOUSLY LISTED AND ANY ATTACHED SPECIFICATIONS.

BY:	DATE	
TITLE:	FIRM:	
PHONE:	EMAIL:	

### ATTACHMENT A – USD 500 STANDARD TERMS AND CONDITIONS

- 1. SCOPE: The following terms and conditions shall prevail unless otherwise modified by U.S.D. 500 within this bid document. U.S.D. 500 reserves the right to reject any bid which takes exception to these terms and conditions.
- 2. DEFINITIONS AS USED HEREIN:
  - a. The term "bid request" means a solicitation of a formal sealed bid.
  - b. The term "bid" means the price offered by the bidder.
  - c. The term "bidder" means the offeror or Contractor.
  - d. The term "U.S.D. 500" means Unified School District No. 500.
  - e. The term "Board of Education" or "BOE" means the governing body of Unified School District No.500
- 3. COMPLETING BID: Bids must be submitted ONLY on the form provided in this bid document. All information must be legible. Any and all corrections and /or erasures must be initialed. Each bid sheet must be signed by the authorized bidder and required information must be provided.
- 4. CONFIDENTIALITY OF BID INFORMATION: Each bid must be sealed and submitted in or under cover of the enclosed envelope to provide confidentiality of the bid information prior to the bid opening. Supporting documents and/or descriptive literature may be submitted with the bid or in a separate envelope marked "Literature for Bid (Number)." Do NOT indicate bid prices on literature. All bids and supporting bid documents become public information after the bid opening and are available for inspection by the general public in accordance with the Kansas Open Records Act.
- 5. ACCURACY OF BID: Each bid is publicly opened and is made part of the public record of U.S.D. 500. Therefore, it is necessary that any and all information presented is accurate and/or will be that by which the bidder will complete the contract. If there is a discrepancy between the unit price and extended total, the unit price will prevail.
- 6. EXAMINATION OF INSTRUCTIONS, CONDITIONS AND/OR SPECIFICATIONS: Bidders shall thoroughly examine and be familiar with all instructions, conditions, and/or specifications. The failure of a Bidder to receive or examine any form, attachments, addendum or other document, or visit to the site when required in order to acquaint the Bidder with existing conditions, shall in no way relieve the Bidder from obligations concerning the bid or the contract. The submission of a bid shall be taken as prima facie evidence of compliance.
- 7. VERBAL STATEMENTS OF STAFF: Bidders <u>shall not</u> rely upon any oral statements or conversations they may have with District employees, agents, or representatives regarding the solicitation, whether at the Pre-Bid Conference or otherwise. All questions must be submitted by bidders in writing and shall be answered by the District in a written addendum to the solicitation.
- 8. SUBMISSION OF BID: Bids are to be sealed and submitted to the Purchasing Department Office, 2010 North 59<sup>th</sup> Street, Room 370, Kansas City, Kansas, 66104, prior to the date and time indicated on the cover sheet.
- ADDENDA: All changes in connection with this bid will be issued by the Purchasing Office in the form of a written addendum. Signed acknowledgement of receipt of each addendum must be submitted with the bid. It is the responsibility of bidders to review the District website regularly for updates.
- 10. LATE BIDS AND MODIFICATION OR WITHDRAWALS: Bids received after the deadline designated in this bid document shall not be considered and shall be returned unopened.
- 11. BIDS BINDING: All bids submitted shall be binding upon the bidder if accepted by U.S.D. 500 within sixty (60) calendar days after the bid opening.
- 12. EQUIVALENT BIDS: When brand or trade names are used in the bid invitation, it is for the purpose of item identification and to establish standards for quality, style and features. Bids on equivalent items of substantially the same quality, style and features are invited unless items are marked "No Substitute." Equivalent bids must be accompanied by descriptive literature and/ or samples may be required and shall be supplied at no charge to the school district.
- 13. NEW MATERIALS, SUPPLIES AND EQUIPMENT: Unless otherwise specified, all materials, supplies or equipment offered by a bidder shall be new, unused, of recent manufacture, first class in every respect, and suitable for their intended purpose. All equipment shall be assembled and fully serviced, ready for operation when delivered.
- 14. WARRANTY: Supplies or services furnished as a result of this bid shall be covered by the most favorable commercial warranties, expressed or implied, that the bidder and/or manufacturer gives to any customer. The rights and remedies provided herein are in addition to and do not limit any rights afforded to U.S.D. 500 by any other clause of this bid reserves the right to request from bidders a separate manufacturer certification of all statements made in the Proposal.
- 15. METHOD OF AWARD AND NOTIFICATION: Bids will be analyzed and the award made to the lowest and best, responsive and responsible bidder(s) whose bid conforms to the specifications and whose bid is considered to be the best value in the opinion of U.S.D. 500.
- 16. U.S.D. 500 reserves the right to reject any or all bids and any part of a bid: to waive informalities, technical defects, and minor irregularities in bids received: and to award the bid on an item-by-item basis by specified groups of items or to consider bids submitted on an "all or nothing "basis if the bid is clearly designed as such or when it is determined to be in the best interest of U.S.D. 500.
- 17. OFFER/ACCEPTANCE: The signed bid shall be considered an offer on the part of the bidder: such offer shall be deemed accepted ONLY upon the issuance by U.S.D. 500 of a valid Purchase Order or other contractual documents.
- 18. DELIVERY TERMS: All deliveries shall be F.O.B. Destination and all freight charges shall be included in the bid price.
- 19. DAMAGED AND/OR LATE SHIPMENTS: U.S.D 500 has no obligation to accept damaged shipments and reserves the right to return at the Contractor's expense damaged merchandise even though the damage was not apparent or discovered until after receipt of

the items. The Contractor is responsible to notify U.S.D. 500 Purchasing Office of any late or delayed shipments. U.S.D. 500 reserves the right to cancel all or any part of an order if the shipment is not made as promised.

- 20. CREDIT TERMS: Bidder shall indicate all discounts for full and/or prompt payment. Discounts shall be considered as a cost factor in the determination of award, except discounts offered for payment within less than ten (10) calendar days. Discounts offered shall be computed from date of receipt of correct invoice or receipt and acceptance of products, whichever is later.
- 21. SELLER'S INVOICE: Invoices shall be prepared and submitted in duplicate to address shown on the Purchase Order. Invoices shall contain the following information: Purchase Order number, contract number, item number, description of supplies or services, sizes, unit of measure, quantity, unit price and extended totals.
- 22. TAX EXEMPT: U.S.D. 500 is exempt from Federal, State and local taxes by KS-FZLEKBLQ. Sites of all transactions under the order(s) that shall be derived from this bid request shall be deemed to have been accomplished within the State of Kansas.
- 23. SAFETY: All practices, materials, supplies and equipment shall comply with the federal Occupational Safety and Health Act, as well as any pertinent Federal, State and/or local safety or environmental codes.
- 24. DISCLAIMER OR LIABILITY: U.S.D. 500 will not hold harmless or indemnify any bidder for any liability whatsoever.
- 25. TERMINATION RIGHTS: KCKPS shall have the right to terminate/cancel the Agreement for its convenience and without penalty upon thirty (30) days prior written notice to the Contractor.
- 26. HOLD HARMLESS: The Contractor agrees to protect, defend, indemnify and hold the Board of Education, its officers, employees and agents fee and harmless from and against any and all losses, penalties, damages, settlements, costs, charges, professional fees or other expenses or liabilities or every kind and character 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 this agreement and/or the performance hereof. Without limiting the generality of the foregoing, any and all such claims, etc., relating to personal injury, infringement of any patent trademark, copyright (or application for any thereof) or of any other tangible or intangible personal or property right, or actual or alleged violation of any applicable statute, ordinance, administrative order, rule or regulation, or decree of any court, shall be included in the indemnity hereunder. The Contractor further agrees to investigate, handle, respond to, provide defense for and defend any such claims, etc., at his/her sole expense and agrees to bear all other costs and expenses related thereto, even if such claim is groundless, false or fraudulent. NO MUTUAL INDEMNIFICATION:
  - K.S.A.72-8201a: Contracts; indemnification or hold harmless provisions, void.
    - (a) It is the public policy of the state of Kansas that all contracts entered into by the board of education of a school district, or any officers or employees thereof acting on behalf of the board, provide that the school district and board of education shall be responsible solely for the district's or board's actions or failure to act under a contract.
    - (b) The board of education of a school district or any officers or employees thereof acting on behalf of the board shall not have the authority to enter into a contract under which the school district or board agrees to, or is required to, indemnify or hold harmless against damages, injury or death resulting from the actions or failure to act on the part of any party to a contract other than the board or district.
    - (c) The provisions of any contract entered into in violation of this section shall be contrary to the public policy of the state of Kansas and shall be void and unenforceable.
- 27. INSURANCE: Upon receipt of award, Contractor shall provide Certificate of Insurance as required within three (3) days after notification issued by the Purchasing Department.
  - A. The following general insurance requirements apply to any and all work under this contract by all Contractors and subcontractors of any tier.
    - (1) Any and all insurance required by this contract with each and any and all insurance required by this contract shall be maintained during the entire length of this contract, including any extensions thereto, and until all work has been completed to the satisfaction of the Kansas City Kansas Public Schools. Any and all insurance must be on an occurrence basis.
    - (2) No Contractor or subcontractor shall commence work under a contract until all insurance requirements contained within the solicitation have been complied with and until evidence of all insurance requirements in each and every contract with each and every subcontractor of any tier and shall require the same to comply with all such requirements.
    - (3) The Kansas City Kansas Public Schools and Engineering Diagnostics, LLC shall be covered as an Additional Insured under any and all insurance required by this contract. Confirmation of this shall appear on all certificates of insurance and on any and all applicable policies. The title of the awarded contract shall also appear on any and all applicable policies.
    - (4) The Kansas City Kansas Public Schools shall be given no less than thirty (30) days' written notice of cancellation. The Kansas City Kansas Public Schools shall be given not less than thirty (30) days' prior written notice of material changes of any insurance required under this contract. The Kansas City Kansas Public Schools shall be given written notice of renewal of coverage not less than thirty (30) days prior to the expiration of any particular policy.
    - (5) Each and every agent shall warrant when signing the certificate of insurance that he is acting as an authorized representative on behalf of the companies affording insurance coverage under the contract and that he is licensed by the State of Kansas to conduct insurance business in the State of Kansas and that the companies affording insurance coverage are currently licensed by the State of Kansas and are currently in good standing with the Commissioner of Insurance for the State of Kansas.
    - (6) Any and all companies providing insurance required by this contract shall meet the minimum financial security requirements as set forth below. The rating for each company must be indicated on the certificate of insurance.

For all contracts, regardless of risk, companies providing insurance under this contract must have a current:

- (a) Best's Rating not less than A, and
- (b) Best's Financial Size Category not less than Class VII
- (7) In the event the Contractor neglects, refuses, or fails to provide insurance required by the contract documents, or if such insurance is canceled for any reason, Kansas City Kansas Public Schools shall have the right, but not the duty, to procure the same, and the cost thereof shall be deducted from monies then due or thereafter to become due to the Contractor or Kansas City Kansas Public Schools shall have the right to cancel the contract.
- B. Worker's Compensation and Employer's Liability Insurance

The Contractor shall procure and maintain Worker's Compensation and Employer's Liability Insurance in the following limits. Such insurance is to cover each and every employee who is or may be engaged in work under this contract.

Worker's Compensation.....Statutory Employer's Liability

Bodily Injury by Accident	\$1,000,000 each accident
Bodily Injury by Disease	\$1,000,000 each employee
Bodily Injury by Disease	
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C. Comprehensive General Liability Insurance

The Contractor shall procure and maintain Comprehensive Insurance in an amount not less than \$1,000,000 for bodily injury and property damage combined single limit. The following specific extensions of coverage shall be provided and indicated on the certificate of insurance:

- (1) Comprehensive Form
- (2) Contractual Insurance
- (3) Personal Injury
- (4) Broad Form Property Damage
- (5) Premises Operations
- (6) Completed Operations

This coverage shall cover the use of all equipment, hoists, and vehicles on the site(s) not covered by Automobile Liability under this contract. Policy coverage must be on an occurrence basis.

D. Automobile Liability Insurance

The Contractor shall procure and maintain Automobile Liability Insurance in an amount not less than \$1,000,000 for bodily injury and property damage combined single limit. The following extensions of coverage shall be provided and indicated on the certificate of insurance.

- (1) Comprehensive Form
- (2) Owned, Hired, Leased and non-owned vehicles

If the Contractor does not own any vehicles in the corporate name, non-owned vehicles coverage shall apply and must be endorsed on either the Contractor's personal automobile policy or the Comprehensive General Liability coverage required under this contract.

E. Commercial Crime insurance (when applicable)

The Contractor shall procure and maintain Commercial Crime/Fidelity insurance in an amount not less than \$1,000,000.00, including coverage for theft or loss of KCKPS property.

- 28. LAW GOVERNING: All contractual agreements shall be subject to, governed by, and construed according to the laws of the State of Kansas.
- 29. ANTI-DISCRIMINATION CLAUSE: No bidder on this request shall in any way, directly or indirectly, discriminate against any person because of age, race, color handicap, sex, national origin, or religious creed.
- 30. BID BOND/PERFORMANCE BOND (Applicable ONLY to Construction/Remodel/Repair Projects, Unless Waived by the District).
  - A. Each proposal must be accompanied by a certified or cashier's check, or a bid bond in the amount of five percent (5%) of the Contractor's total bid.
  - B. A Performance Bond and a Material and Labor Payment Bond in amounts equal to one hundred percent (100%) of the contract price shall be furnished by the successful bidder. Bonds shall be issued by a surety acceptable to the Board.
  - C. NO BID BOND OR PERFORMANCE BOND IS REQUIRED FOR SERVICES

### 31. DISQUALIFICATION:

- A. The Director of Purchasing may, at her/his sole discretion, disqualify a bidder for one or any combination of the following reasons:
  - 1. Bidder's product does not meet the specifications or bid conditions of the solicitation;
  - 2. Bidder's tendered bid is not received on the District's bid form;
  - 3. Bidder's tendered bid is not signed;
  - 4. Required bid bond is not furnished at time of bid opening;
  - 5. Failure to comply with bid instructions, terms and conditions that are judged to be essential to the competitive process and in the best interests of the District.
- B. Disqualification of bidders on future bids may be considered for any one or combination of the following reasons:
  - 1. Refusal of the bidder to complete a contract or bid;

- 2. Bidder's past history of late deliveries or partial/incomplete shipments,
- 3. Bidder's products or services have proven unreliable, unworkable or have not accomplished the result requested in the District's specifications.
- 32. SUPPLIER DIVERSITY: The Kansas City Kansas Public Schools encourages supplier diversity and participation of MBE/WBE/DBE designated businesses. However, such participation will not result in any selection or scoring advantage in the bid evaluation process.
- 33. CONTRACTUAL PROVISIONS ATTACHMENT: The Provisions found in Contractual Provisions Attachment (Form DA-146a, Rev. 06-12), which is attached hereto, are hereby incorporated in this contract and made a part thereof."

### 34. INCLEMENT WEATHER/EMERGENCY POLICY

IF THERE IS A SCHOOL OR BUILDING CLOSURE THE DAY OF THE SCHEDULED BID OPENING, DUE TO INCLEMENT WEATHER OR AN EMERGENCY, THE BID OPENING WILL OCCUR AT 2:00PM (CENTRAL) THE NEXT BUSINESS DAY THAT THE DISTRICT IS OPEN.

## **GENERAL NOTE**

All work in public easements and Right-of-Way and all erosion control work must comply with the latest edition of the Technical Provision & Standard Drawings for Roads and Sewers, of the Unified Government of Wyandotte County/Kansas City, Kansas. If any of the general notes conflict with the Technical Provision & Standard Drawings for Roads and Sewers, of the Unified Government of Wyandotte County/Kansas City, Kansas, the UG's standards shall override.

## UTILITIES

<u>NOTE:</u> 48 hours prior to commencement of construction, the contractor shall notify the following companies for field verification of underground utilities.

BPU Water Jenny Li 540 Minnesota Ave Kansas City, KS 66101-2930 (913) 573-9845

Atmos Energy **Richard Yunghans** 25090 W 110th Ter Olathe, KS 66061 (913) 764-0531, ext. 234

Kansas Gas Service Christina Murphy 1421 N 3rd St Kansas City, KS 66101 (913) 599-8953

Unified Government of Wyandotte County/Kansas City, Kansas Water Pollution Control Department - Sanitary and Storm

Kevin Swearengin or Kirk Roland 913-573-1360



1-800-DIG-SAFE (1-800-344-7233)



Know what's below. Call before you dig.

BPU Electric Courtney Connor 6742 Riverview Kansas City, KS 66111 (913) 573-9538

<u>AT&T</u> Randal Gaskin rg9513@att.com (913) 383-6948

<u>Spectrum</u> Alex Cashman charles.cashman@charter.com (913) 915-0553

WYANDOTTE COUNTY VERTICAL CONTROL POINT BENCHMARK BENCHMARK NUMBER: 2 ELEVATION= 864.81' SET RAILROAD SPIKE IN SOUTH FACE OF POWER POLE #153849.49 ±45 FEET NORTH OF CP#12 EAST SIDE OF 9TH STREET.

## SITE DISTURBANCE DATA

Site Area

# FAIRFAX ELEMENTARY **ENGINEERING PLANS** 3101 N 10TH ST **KANSAS CITY, KS 66101**



## BENCHMARKS

(DATUM: NAVD88) WYANDOTTE COUNTY VERTICAL CONTROL POINT BENCHMARK BENCHMARK NUMBER: 1 ELEVATION= 865.78'

SET RAILROAD SPIKE IN NORTH FACE OF POWER POLE #15391 ±75 FEET SOUTHEAST OF CP#10 ON THE EAST SIDE OF NORTH 10TH STREET.

PROJECT CONTROL TABLE (NAD83 KANSAS STATE PLANE, NORTH ZONE, US SURVEY FOOT)						
POINT NO.	CONTROL POINT/ BENCHMARK DESCRIPTION	GROUND VALUE NORTHING COORDINATE	GROUND VALUE EASTING COORDINATE	ELEV.	GRID VALUE NORTHING COORDINATE	GRID VALUE EASTING COORDINATE
10	CP10/IB4 CP CAP	311527.53	2266552.46	860.24'	311527.53	2266552.46
11	CP11/MAG&WASHER IN ASPHLT	311544.90	2266972.15	860.69'	311544.90	2266972.15
12	CP12/IB4 CP CAP	311534.25	2267318.52	858.74'	311534.25	2267318.52

GRID = GROUND AT CP#11 WITH A COMBINED SCALE FACTOR OF: 0.999922643

Land Disturbance: Increase in Imperviousness: Earthwork - Cut: Earthwork - Fill:

3.42 ac 6434 sf 219 sf 23 су 360 cy



## **SHEET INDEX**

Sheet Number	Sheet Title
Ocs	Cover
C1.0	General Information
C2.0	Demolition Plan
C3.0	Site Plan
C4.1	Grading Plan
C4.2	Erosion Control Plan
C5.0	Civil Details
C6.1	Wall General Notes
C6.2	Wall Plan & Profile
Сб.3	Section A-A
C6.4	Wall Details

## OWNER

Kansas City, Kansas Public Schools 2220 N 59th St Kansas City, KS 66104

## CERTIFICATION

I hereby certify that this project has been designed and prepared to meet or exceed the Design Criteria of the Unified Government, Wyandotte County, Kansas City, Kansas.

## **PREPARED & SUBMITTED BY:**

**BHC** *RHODES* Overland Park, Kansas

Kurt Yoder, J.E - Project Engineer Kansas P.E. No. 26369

## **APPROVED BY:**

By the Unified Government of Wyandotte County, Kansas City, Kansas.

Date

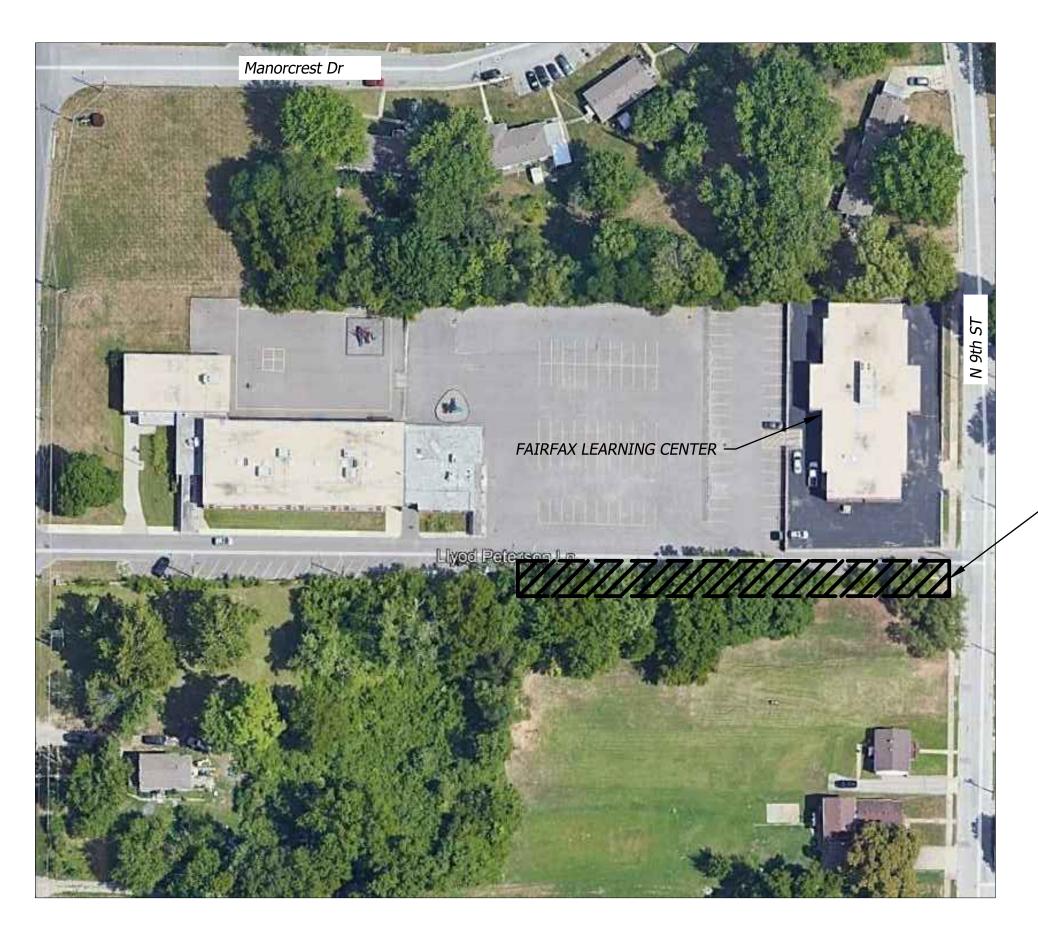
08/25/2020

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	PRO			263	Y( NSE 369 5/20 5/20		į	
			Chill Environment Criminan I Militica		7101 College Blvd., Suite 400	Uverland Park, Kansas 66210	p. (913) 663-1900 f. (913) 663-1633	ייני ו לעומליונים אי המספווימים לא מימוצמימי ו ימושעווינים אי אי המסויינים אי אי ה
Prepared For:		KANSAS CITY KANSAS PUBLIC SCHOOLS	2220 N 59TH ST	KANSAS CITY, KS 66104		(013) 677 38ED	0COC-170 (CTE)	
EVIDEAY ELEMENTADY		3101 N 10TH ST	KANCAC CITV KC 66101		CONSTRUCTION DOCUMENTS		COVER	
Design: KMY Drawn: KMY Checked: KMY Issue Date: 04/06/2020 Project Number: 027470								

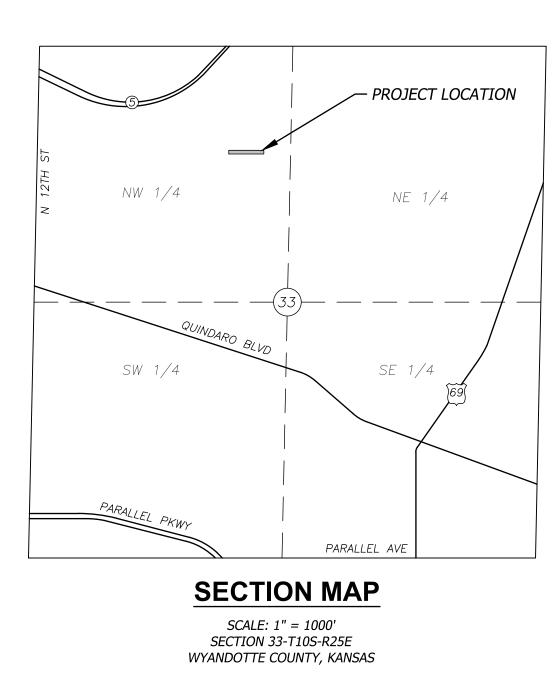
	Proposed Line Types and Symbols shown. Existing	GEND Line Types and Symbols shall L	be the same, but screened,
		y the inclusion of a survey by c	
•	Set Survey Monument	STM	Storm Sewer Line
	Set Survey Monument (in concrete)	<u></u>	Storm Sewer Manhole
0	Found Survey Monument		Curb Inlet Field Inlet
$\bigcirc$	Found Survey Monument in Box		Junction Box
(O.U.)	Origin Unknown Found Piebt of Way Marker		Grate Inlet Grate Inlet (Round/Domod)
$\overline{ \mathbf{A}}$	Found Right-of-Way Marker Control Point		Grate Inlet (Round/Domed) End Section
$\mathbf{\hat{e}}$	Benchmark		Headwall
	Set Hub	<b>C</b>	Down Spout
— — онс —	<ul> <li>Overhead Utility Line(s)</li> </ul>	RD CMP	Roof Drain Corrugated Metal Pipe
E	Underground Electric Line Marker	CMAP	Corrugated Metal Arch Pipe
— UGE ——	- Underground Electric Line	CPP	Corrugated Plastic Pipe
— кср&l ——	<ul> <li>Underground KCP&amp;L Line (e.g.)</li> <li>Utility Pole</li> </ul>	HDPE RCP	High Density Polyethylene Pipe Reinforced Concrete Pipe
-Ö-	Utility Pole with Transformer	RCAP	Reinforced Concrete Arch Pipe
— —	Guy Anchor Utility Pole w/Light & arm	RCB FES	Reinforced Concrete Box Flared End Section
	Street Light Pole w/ arm	$\sim$	Pipe Continues-Outlet or Source
٩	Street Light Pole (14')		Not Found or Not Surveyed
EP. EM	Electric Pedestal (above ground) Electric Meter	-0000	Wood Fence
EV.	Electric Access Vault (underground)		Chain Link Fence
EB	Electric Access Box (mounted)	<del>- /// /// /// ///</del>	Wire Fence (with or without barb)
© ©	Electric Manhole Electric Pull Box (underground)	<del>- x - x - x - x - x</del>	Barbed Wire Fence Plastic Fence
	Transformer (pad mounted)	$\sim \sim \sim \sim$	Iron or Metal Fence
*	Yard Light	0	Gate Post
AC	Air Conditioner Unit		Retaining Wall
w	- Water Line		Single Pole Sign
— ws ——	- Water Service Line	~	Single Pole Sign
$\overline{\mathbb{V}}$	Underground Water Line Marker Water Valve	<del></del>	Double Pole Sign
<b>d</b> Q	Fire Hydrant	<del>淡</del>	Railroad Crossing Gate
Ŭ M	Fire Hydrant Assembly Water Meter	مصٰت	Railroad Switch Machine
WM W	Water Meter Water Manhole	+++++++++++++++++++++++++++++++++++++++	Railroad Tracks
WV	Water Vault (underground)		Wheel Stop
<u>SC</u> 8	Sprinkler Control Box Sprinkler Head	Ŀ.	ADA Parking Stall
*	Sprinkier Head Yard Hydrant	33333	ADA Detection Warning Pad
BFV	Backflow Valve (BFV)	6	Bush
BFP BO	Backflow Preventer (BFP) Blow-Off Assembly	s CM	
	DIUW-UT ASSETTUTY	<u></u>	Deciduous Tree and Size (Scaled for Size)
— GAS ——	– Gas Line	(مع) کمن ۲۸ (۱۳۷۲) مع	(Jealed IVI JIZE)
— GS —	<ul> <li>Gas Service Line</li> <li>Underground Spire Line (e.g.)</li> </ul>		Coniferous Tree and Size
V	Underground Gas Line Marker		(Scaled for Size)
G	Gas Manhole or Access Lid		Tree Stump
€ RG	Gas Valve Regulator Unit	., , , , , , , , , , , , , , , , , , ,	Foliage Drip Line/Edge of Timber Hedge
GM	Gas Meter		-
ſ 	Casing Vent 	Г PL	Center Line Property Line
₽	<ul> <li>Underground Pipe Line (High Capacity)</li> <li>Underground Pipe Line Marker</li> </ul>	PL R/W	Property Line Right-of-Way Line
v		R=	Radius
— UGT —— — — ATT —	<ul> <li>Underground Telephone Line</li> <li>Underground AT&amp;T Line (e.g)</li> </ul>	L= CB	Arc Length Chord Bearing
$=$ $\sim$ $\sim$ $\sim$ $\sim$	Underground Telephone Line Marker	CD	Chord Distance
Ď	Telephone Pedestal (above ground)	Δ	Interior Angle (Delta)
(T) TA	Telephone Manhole Telephone Access Vault (underground)	I.T.B. R/W	Initial Tangent Bearing Right-of-Way
TB	Telephone Access Vault (underground) Telephone Access Box (mounted)	R/W (M)	Monumented
— FO ——	- Underground Fiber Optic Line	( <i>m</i> )	Measured
V E	Underground Fiber Optic Line Marker Fiber Optic Pedestal	(D) (P)	Deeded Platted
Ē	Fiber Optic Manhole	(F) (C)	Calculated
FV	Fiber Optic Vault (underground)	(CR)	Calculated from Record Dimensions
	Fiber Optic Pedestal on top of Vault	(CM) (PR)	Calculated from Found Monuments Proportioned
[36']	Traffic Signal Post w/ Mast Arm	BK.	Book
•	Pedestrian Signal Pole	PG.	Page Document Number
€ 3 1	Traffic Control Manhole Traffic Control Cabinet	DOC. INS.	Document Number Instrument Number
CV	Traffic Control Vault (underground)	VOL.	Volume
	- Underground Cable TVU inc	ESMT. R /I	Easement Building Setback Line
— UGTV — — — SPC —	<ul> <li>Underground Cable TV Line</li> <li>Underground Spectrum Line (e.g.)</li> </ul>	B/L U/E	Building Setback Line Utility Easement
$\bigtriangledown$	Underground Cable TV Marker	D/E	Drainage Easement
<u>/Ť</u>	Cable TV Pedestal (above ground)	ST/E	Storm Sewer Easement
0	Manhole-Unknown Purpose	S/E IE/E	Sanitary Sewer Easement Ingress/Egress Easement
0 0	Grease Trap Access Lid	TC/E	Temporary Construction Easement
$\odot_{MW}$	Monitoring Well	SQ. FT.	Square Feet
O <sub>BH</sub> ⊗	Bore Hole Fill Lid (for Underground Tank)	AC CY	Acres Cubic Yard
- SAN	- Sanitary Sewer Line	LF	Linear Feet
_ ss	<ul> <li>Sanitary Sewer Service Line</li> <li>Sanitary Sewer Manhole</li> </ul>	CO. L/S	<i>Company</i> <i>Landscaping (Bushes, Trees, Flowers,</i>
<b>(S)</b> 0	Sanitary Sewer Manhole Clean-out	L/ S	Border, Mulch, any or all of them)
VCP	Vitrified Clay Pipe	ASPH	Asphalt
DIP	Ductile Iron Pipe Polywinyl Chloride Pine	CONC	Concrete
PVC CIP	Polyvinyl Chloride Pipe Cast Iron Pipe	COR R.WALL	Corner Retaining Wall
		STA.	Station
V	Underground Utility Line Marker – Metal Guard Pail or Handrail	Lt Bt	Left Piaht
~	<ul> <li>Metal Guard Rail or Handrail</li> <li>Flag Pole</li> </ul>	Rt Pl	Right Point of Intersection
Ŏ	Satellite Dish	PC	Point of Curve
6	Mailbox Concrete or Metal Bollard	PT /	Point of Tangent Not To Scale
•	Concrete or Metal Bollard	-/	Not To Scale

## **GENERAL NOTES**

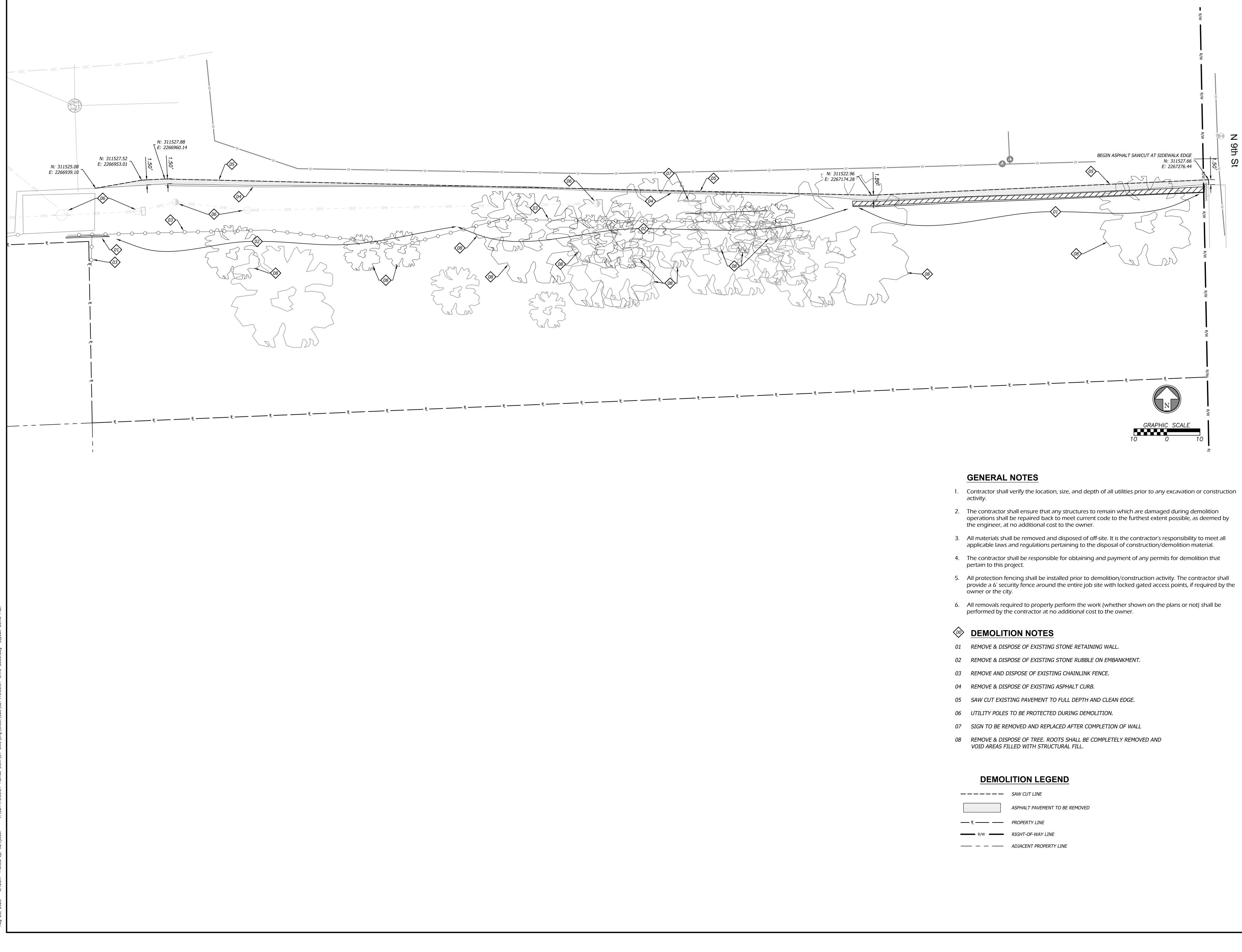
- 1. All work in public easements and Right-of-Way and all erosion control work must comply with the latest edition of the Technical Provision & Standard Drawings for Roads and Sewers, of the Unified Government of Wyandotte County/Kansas City, Kansas. If any of the general notes conflict with the Technical Provision & Standard Drawings for Roads and Sewers, of the Unified Government of Wyandotte County/Kansas City, Kansas. If any of the general notes conflict with the Technical Provision & Standard Drawings for Roads and Sewers, of the Unified Government of Wyandotte County/Kansas City, Kansas, the UG's standards shall override.
- 2. The Contractor shall be required to obtain all Federal, State, and Local permits required for this project prior to commencing construction.
- 3. Any work adjacent to or crossing existing streets requires proper traffic control devices. Traffic control devices shall be placed in accordance with the Manual of Uniform Traffic Control Devices (MUTCD).
- 4. The contractor shall be required to demolish, remove and dispose of all existing structures, pavements, and features necessary to construct the improvements shown hereon. Any waste materials generated during construction shall be removed from the site by the Contractor and disposed of in accordance with all local, State, and Federal regulations governing such disposal.
- 5. The contractor shall prevent any trash, debris, or liquid wastes from being disposed of in sanitary sewers, storm sewers, or open drainage systems.
- 6. The Contractor shall be solely responsible to protect adjacent property, structures, and other improvements from damage during construction. In the event of damage to adjacent property, structures, or improvements, the contractor shall repair or replace such damage to the Owners's satisfaction at the Contractor's expense.
- 7. Contractors at the site shall be solely responsible for jobsite safety for all aspects of work shown hereon.
- 8. All work and materials used in the construction of the improvements shown hereon shall comply with all referenced standards, specifications, and plan notes.
- 9. Contractor shall be responsible for contacting all utility companies for field locations of underground utilities affected by the contract. All existing utilities indicated on these plans are according to the best information available to the engineer; however, all utilities actually existing may not be shown. Utilities damaged through the negligence of the contractor to obtain the location of same shall be repaired or replaced at the expense of the contractor.
- 10. Coordinate with facility representative as to when construction activities may be performed to work with the operations of the facility.
- 11. Any and all hazards shall be properly identified and barricaded from access during all non-construction periods.
- 12. Unless specified otherwise, all construction shall meet the requirements of the Kansas Department of Transportation (KDOT) Standard Specifications, except as modified by these plans.
- 13. Third party inspection of the storm sewer is required, after inspection, provide documentation to the Unified Government.
- 14. Private Erosion & Sediment Control inspections are required in accordance with NPDES schedule and requirements. After inspections, provide the Unified Government with reports and documentation.
- 15. A Right-of-Way permit is required from the Unified Government, Kansas Public Works Department for any work within the public right-of-way.



← PROJECT SITE

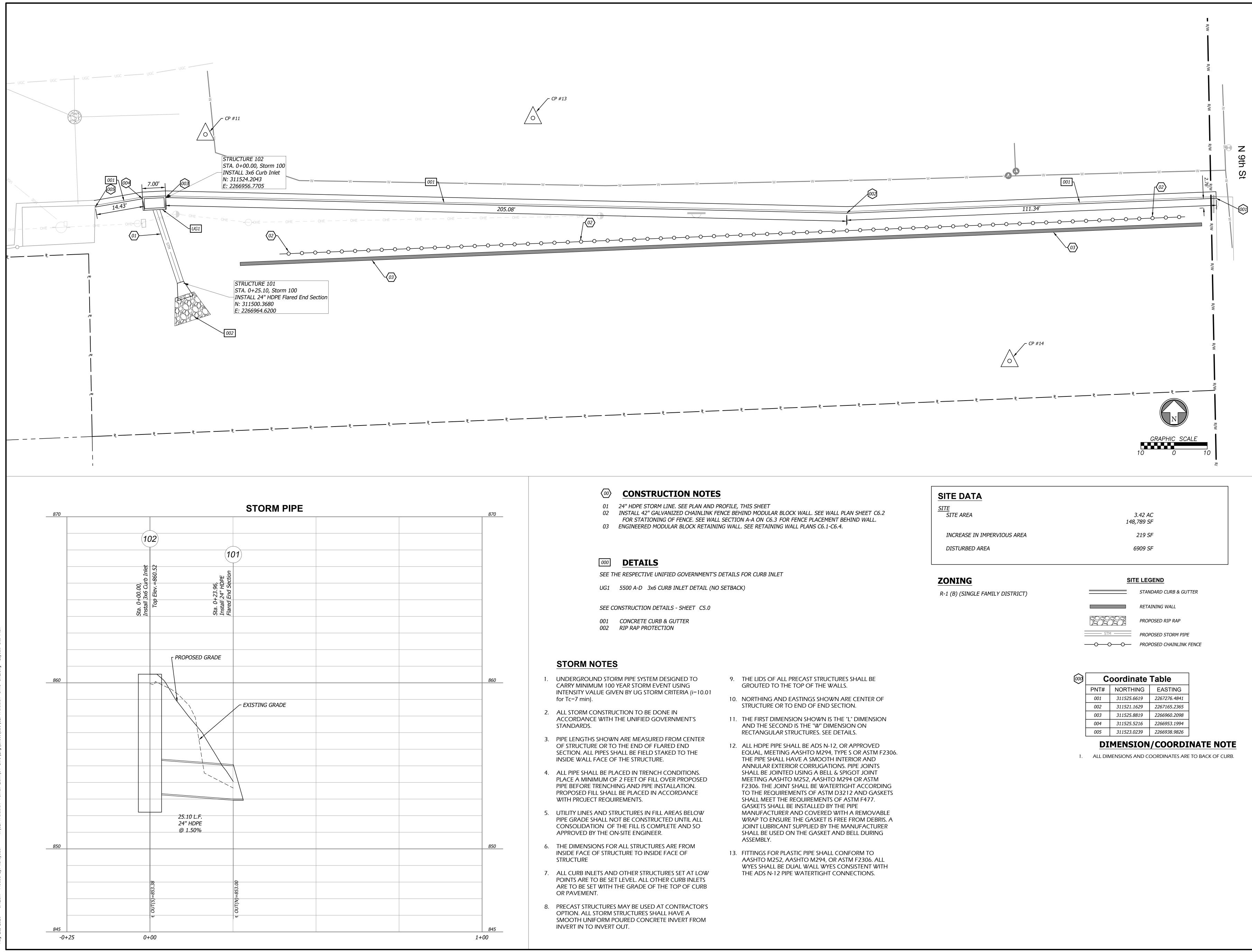


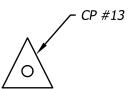
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Prepared For:		KANSAS CITY KANSAS PUBLIC SCHOOLS	2220 N 59TH ST	KANSAS CITY, KS 66104		(012) 577 38F0	0COC-170 (CTE)	
EVIDEAY ELEMENTADY		3101 N 10TH ST	KANSAS CITV KS 66101		CONSTRUCTION DOCUMENTS		GENERAL INFORMATION	
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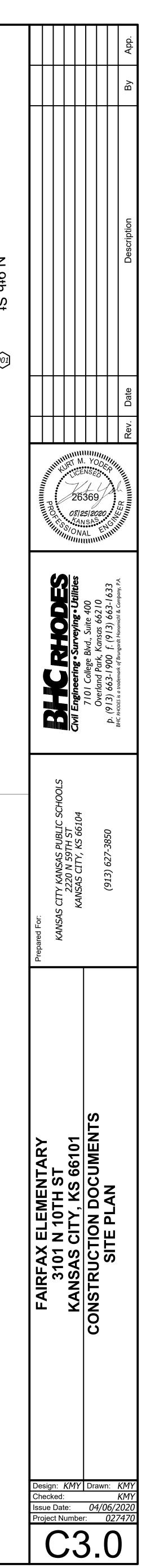
 SAW CUT LINE
ASPHALT PAVEMENT TO BE REMOVED
 PROPERTY LINE
 RIGHT-OF-WAY LINE
 ADJACENT PROPERTY LINE

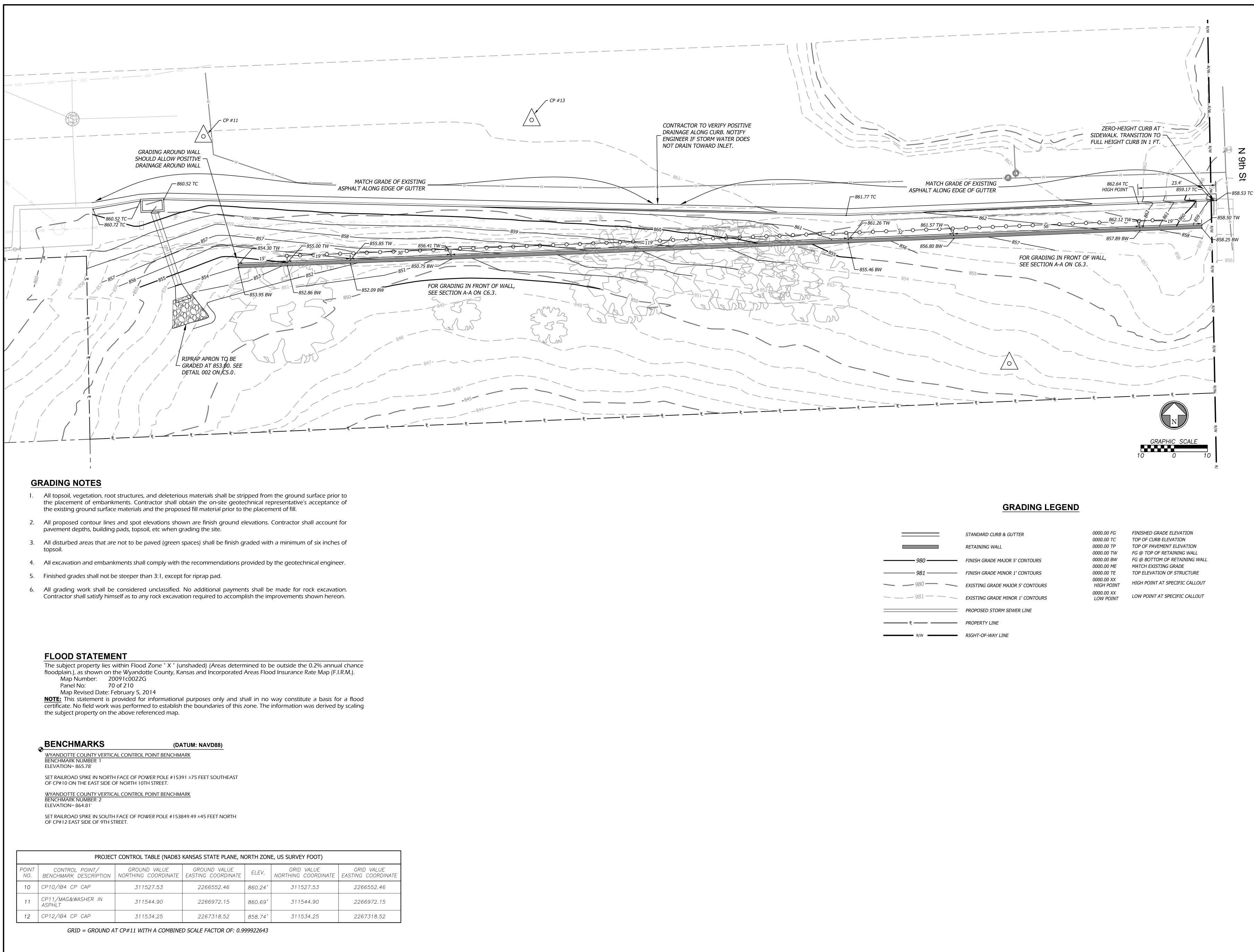
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Coordinate Table				
PNT#	NORTHING	EASTING		
001	311525.6619	2267276.4841		
002	311521.1629	2267165.2365		
003	311525.8819	2266960.2098		
004	311525.5216	2266953.1994		
005	311523.0239	2266938.9826		

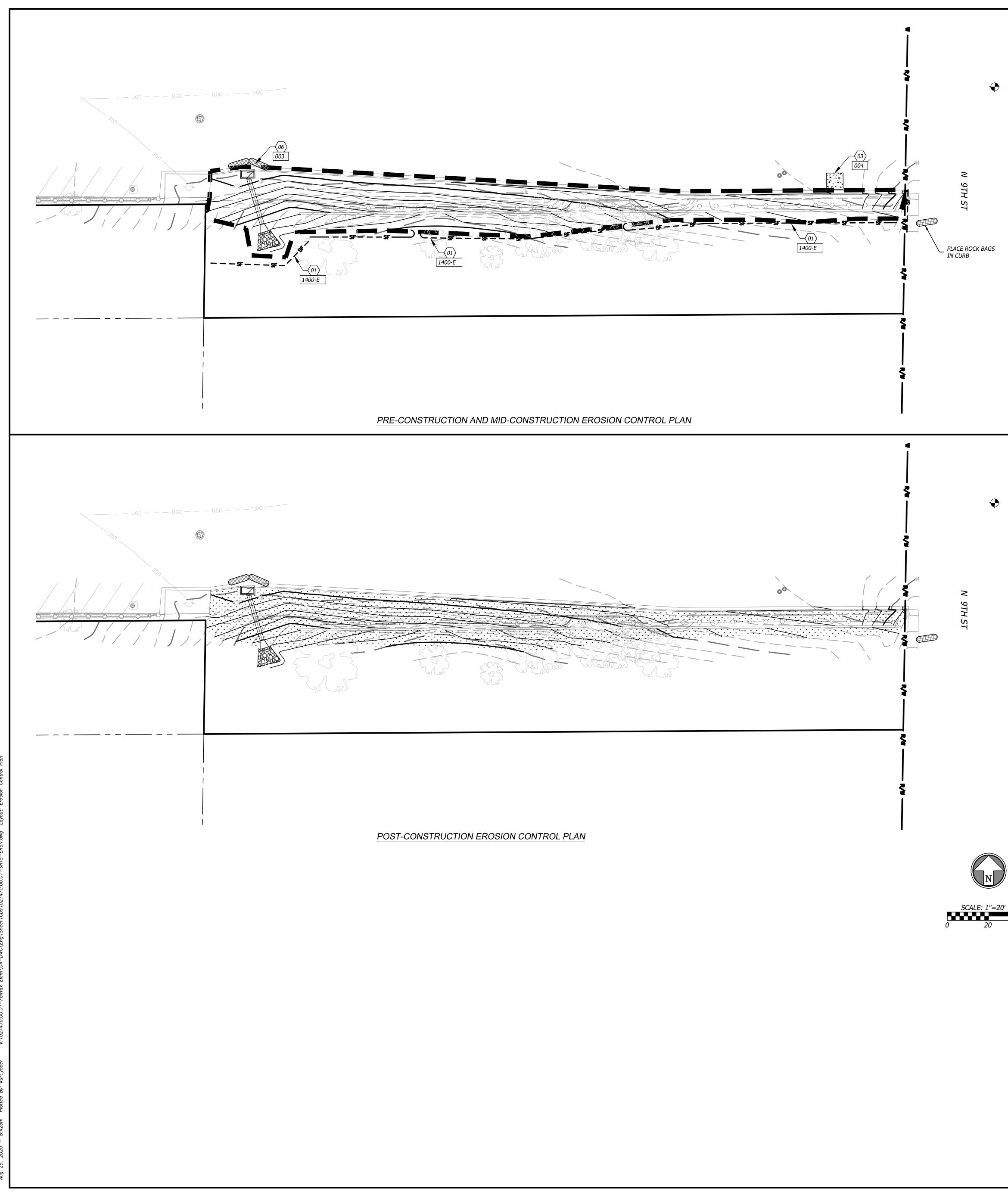


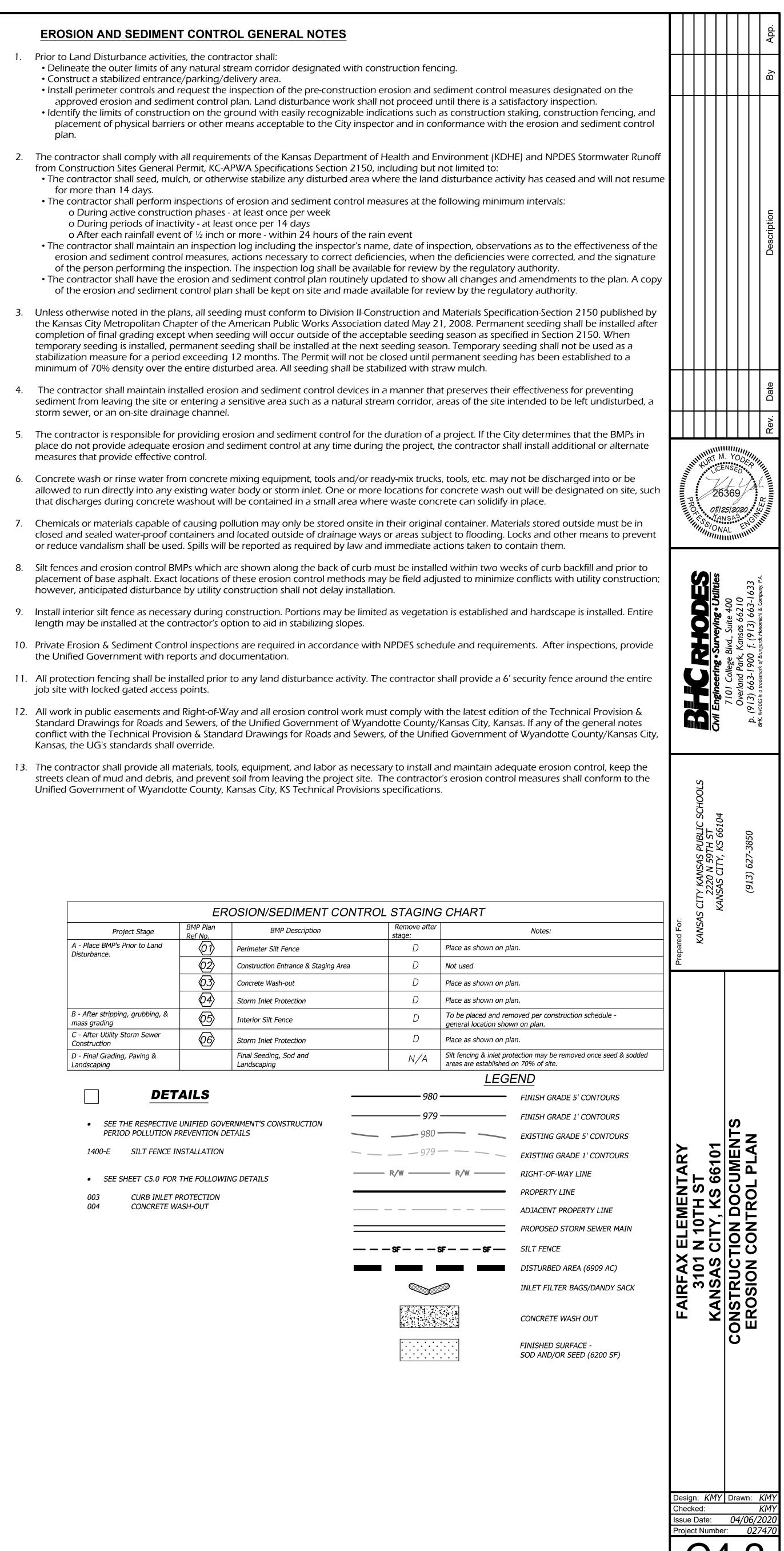


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972.15
318.52

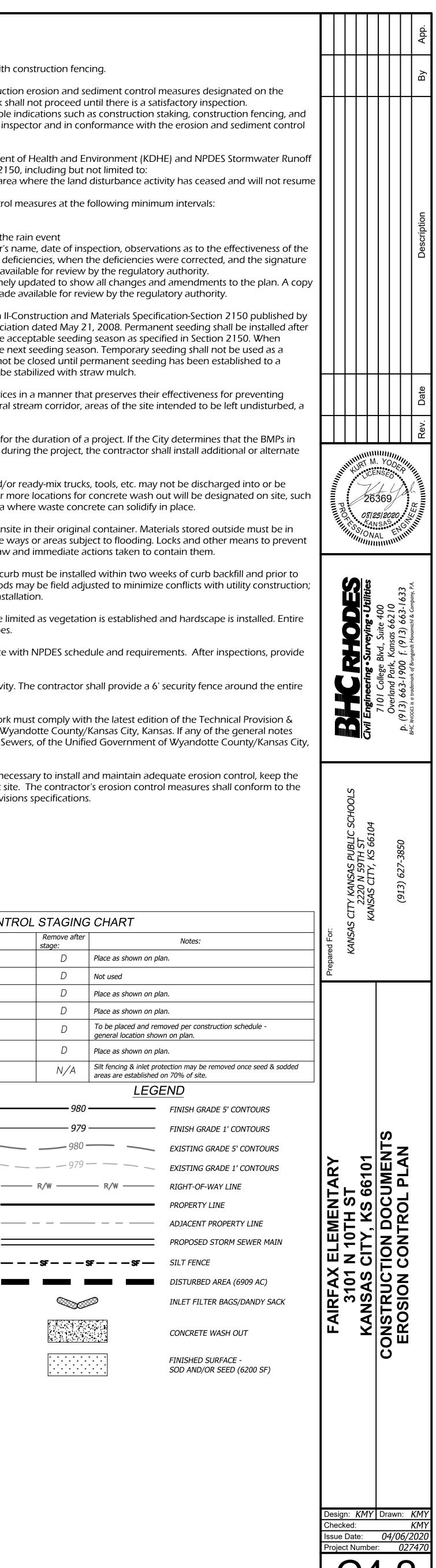
 980
 981
980
 981 —
 R/W

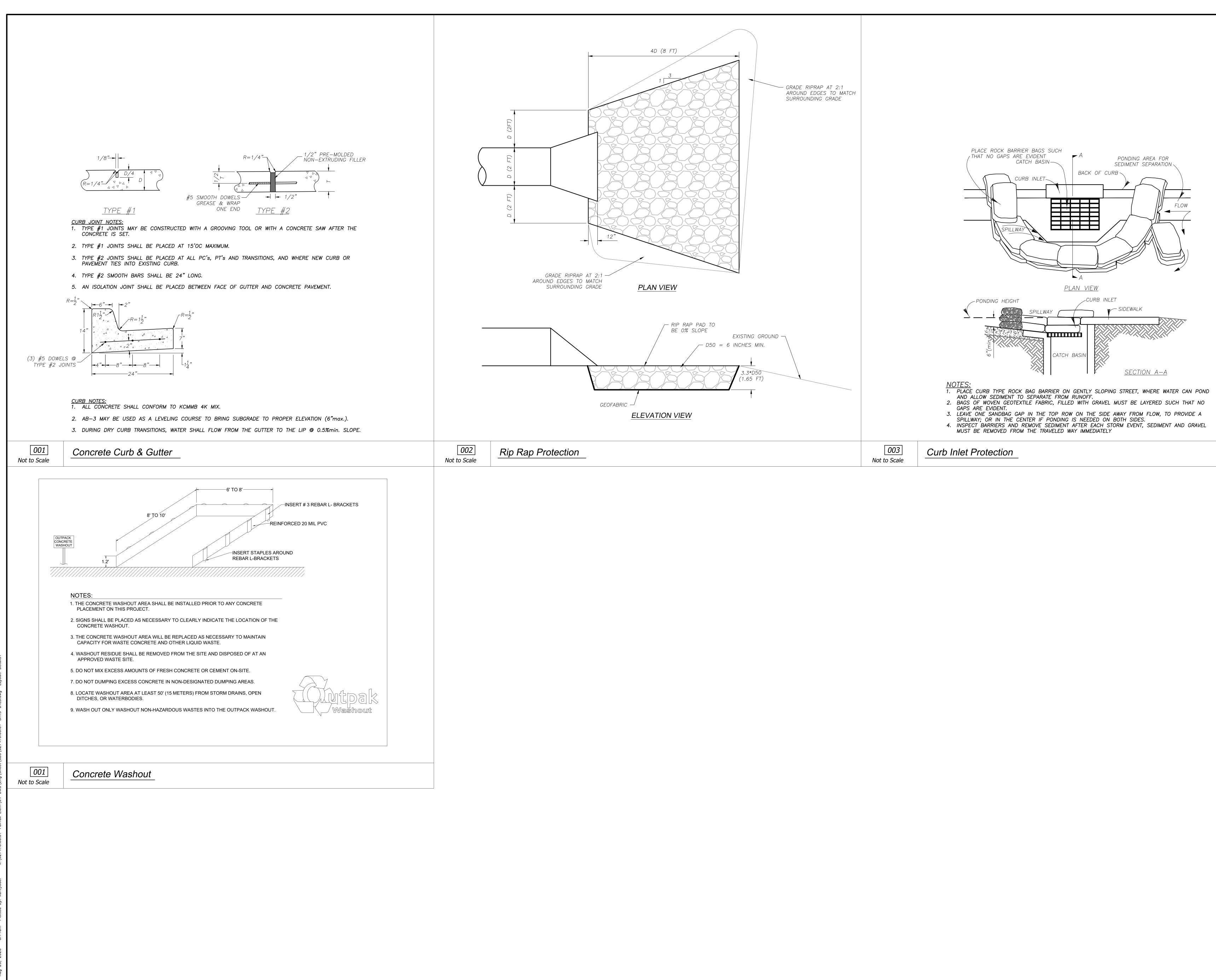
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Prepared For:		KANSAS CITY KANSAS PUBLIC SCHOOLS	2220 N 59TH ST	KANSAS CITY, KS 66104		0386 EC3 (CF0)	0606-120 (616)	
EAIPEAY EI EMENTAPY		3101 N 10TH ST	KANCAC CITV KC 66101		CONSTRUCTION DOCUMENTS		GRADING PLAN	
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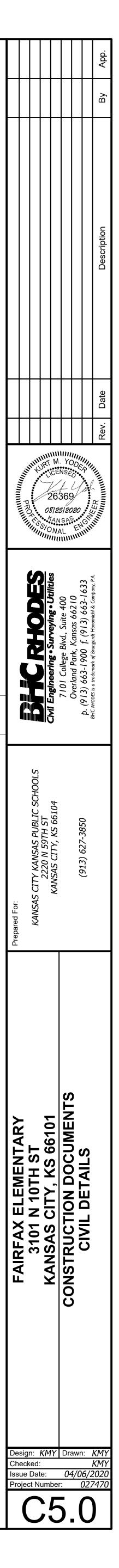




Project Stage	BMP Plan Ref No.	BMP Description	Remove after stage:	Notes:
A - Place BMP's Prior to Land Disturbance.	$\langle 0 \rangle$	Perimeter Silt Fence	D	Place as shown on plan.
	(02)	Construction Entrance & Staging Area	D	Not used
	(03)	Concrete Wash-out	D	Place as shown on plan.
	@4	Storm Inlet Protection	D	Place as shown on plan.
B - After stripping, grubbing, & mass grading	65	Interior Silt Fence	D	To be placed and removed per construction general location shown on plan.
C - After Utility Storm Sewer Construction	66	Storm Inlet Protection	D	Place as shown on plan.
D - Final Grading, Paving & Landscaping		Final Seeding, Sod and Landscaping	N/A	Silt fencing & inlet protection may be remove areas are established on 70% of site.
				LEGEND







I.0 DESIGN						<u>3.4 L</u> A. TH
A. SITE DATA, BUILDIN PREPARED BY BHC R		and retaining '	Wall Loca	tion taken from f	PLANS	RA BE
B. NO GEOTECHNICAL THE OWNER.	REPORT HAS BE	EN PREPARED FO	r this proji	ECT PER THE DIRECTIC	ON OF	B. EN
c. soil loadings cc		HIS DESIGN AND	CALCULAT	ons are based on	N THE	DE C. FIL
FOLLOWING PARAN	IETERS:					BL
<u>F</u> REINFORCED SOIL	RICTION ANGLE 34°	COHESION 0 PSF	<u>UNIT V</u> I 15 PCF	/ <u>EIGHT</u> <u>SOIL TYPE</u> ASTM C33 #57 R0	ОСК	
<b>RETAINED SOIL</b>	24°	0 PSF	120 PCF	NATIVE SILTY CLA	٩Y	D. TH W
LEVELING PAD FOUNDATION SOIL	34° - 24°		135 PCF 120 PCF	WELL GRADED R NATIVE SILTY CLA		PL
						TH EN
D. ACTUAL SOIL PARAN IN WALL CONSTRUC		EET OR EXCEED T	HESE LISTED	CONDITIONS TO BE	USED	PL US
E. WALL ROCK WILL EX		•			F THE	BA
WALL. HYDROSTATIC F. ANALYSIS ASSUMES						E. PC IS I
G. LIVE LOAD SURCHAI	RGE: 50 -250 PSF					FC F. MI
OFFSET: 5 - 15 FT H. QUALITY ASSURANC	E REQUIREMENT	rs:				
				ALL CONSTRUCTION E IN COMPLIANCE WI	T1 1	F
THESE PLANS. WOI	RK NOT IN COMP	LIANCE SHALL BE	CORRECTED	AT THE INSTALLER'S		R
EXPENSE. THIS MAY 2. LABORATORY TEST				ION-COMPLIANT WOI FESTING SHALL BE	RK.	אר כ
PERFORMED ON EA	ACH SOURCE MA	<b>TERIAL TO CONFI</b>	RM MATERIA	L COMPLIANCE.		<u>3.5</u> A. IN
3. THE SPECIAL INSPE	CTION SHALL OI	BSERVE THAT THE	FOUNDATIC	on soils are prepare		CC DE
TO SAFELY SUPPOR WITHOUT FAILURE			PRESSURE A	PPLIED FROM THE WA	ALL	B. CL
						SC TH
2.0 MATERIALS						C. LA
2.1 MODULAR WALL UN						CC D. CC
A. WALL UNITS SHALL MANUFACTURER.	l be versa-lo	k, square foo	t units pr	ODUCED BY A LICE	INSED	OI E. PL
B. WALL UNITS SHALL						W
Freeze-Thaw Prot	ECTION WITH A	N AVERAGE ABS	ORPTION RA	Shall have adec te in accordance		PL F. A[
C1372 OR AN AVERA		,			ΟΝΑΙ	TC
<b>DEVIATIONS ON THE</b>	E HEIGHT OF AN	y two units sha	LL BE 0.125	N.		G. GI Al
D. WALL UNITS SHALL WALL FACE AREA. F				GHT PER SQUARE FOO DNSIDERED 80% EFFE		י / כ
WEIGHT.						<u>3.6</u> A. EA
2.2 REINFORCED SOIL						MI B. OI
A. CRUSHED STONE (AS	STM C33 #57 STC	DNE)				TH
2.3 RETAINED SOIL						AI C. W
A. NATIVE SILTY CLAY						PF O
2.4 LEVELING PAD						D. TR
A. KDOT AB3						MI Ve
2.5 FOUNDATION SOIL						M
A. NATIVE SILTY CLAY						E. RL LE
2.6 WALL ROCK						F. TH TE
A. CRUSHED STONE (AS	STM C33 #57 STC	DNE)				CC
2.7 GEOGRID						CC TC
A. VERSA-GRID VG 3.0 S	SOIL REINFORCE	MENT GEOGRID				W 3.0
2.8 GEOTEXTILE FABRIC						
A. PROPEX GEOTEX 40	I GEOTEXTILE					<u>3.7</u> A. Al
2.9 WALL DRAIN PIPE						GE
A. 4-INCH PERFORATED			LENGTH OF	THE WALL AND TEE	INTO	B. 4-I W
WEEP HOLES EVERY	40 ON-CENTER.					· • د
3.0 WALL CONSTRUCTIO	N					<u>3.8</u> A. Gl
3.1 EXCAVATION						ST
A. CONTRACTOR SHAL						<b></b>
				es and utilities pric Dr to installation.		
C. CONTRACTOR SHAL EFFECTS OF WALL EX		SURROUNDING ST	RUCTURES A	RE PROTECTED FROM	и тне	
LITELTS OF WALLE						-
3.2 FOUNDATION SOIL I			קברד <u>ר</u> ם ניי			
	AY FOUNDATIC	N SHALL HAVE A		EARING CAPACITY OF		
PSF AS MEASURED B B. FOUNDATION SOIL			EOTECHNIC	AL ENGINEER TO FN	NSURE	
THAT THE ACTUAL	FOUNDATION	soil strength i	MEETS OR E	xceeds assumed d	ESIGN	
REPLACED WITH ACC	CEPTABLE MATE	RIAL.		HALL BE REMOVED		
C. OVER-EXCAVATED APPROVED BY THE C					ERIAL	
BASE LEVELING PADA.A 2-FT-WIDE BY 10-	•					
SHALL BE CONSTRU	•			NIMUM OF 95% STAN		PROC
Proctor. B. Top of Base Levei	ING PAD SHAL	l be located to	) Allow BC	DTTOM WALL UNITS 1	to be	1. SP 2. T⊢
BURIED TO PROPER I						BY AC
						DI
						PR W

## UNIT INSTALLATION

THE FIRST COURSE OF WALL UNITS SHALL BE PLACED ON THE PREPARED BASE WITH THE RAISED LIP FACING UP AND OUT AND THE FRONT EDGES TIGHT TOGETHER. THE UNITS SHALL BE CHECKED FOR LEVEL AND ALIGNMENT AS THEY ARE PLACED.

ENSURE THAT UNITS ARE IN FULL CONTACT WITH BASE, PROPER CARE SHALL BE TAKEN TO DEVELOP STRAIGHT LINES AND SMOOTH CURVES ON BASE COURSE PER WALL LAYOUT. FILL ALL CORES AND CAVITIES WITH WALL ROCK. WALL ROCK SHALL EXTEND BEHIND THE BLOCKS AS SHOWN ON TYPICAL DETAILS. BLOCKS SHALL BE LEVEL AND ALIGNED. USE PLATE COMPACTOR TO COMPACT THE WALL ROCK PLACED WITHIN THE BLOCKS AND IN CONSOLIDATION ZONE.

THE CONSOLIDATION ZONE SHALL BE DEFINED AS 3 FT BEHIND THE WALL. COMPACTION WITHIN THE CONSOLIDATION ZONE SHALL BE ACCOMPLISHED BY USING A HAND OPERATED PLATE COMPACTOR AND SHALL BEGIN BY RUNNING THE PLATE COMPACTOR DIRECTLY ON THE BLOCK AND THEN COMPACTING IN PARALLEL PATHS FROM THE WALL FACE UNTIL THE ENTIRE CONSOLIDATION ZONE HAS BEEN COMPACTED. A MINIMUM OF TWO PASSES OF THE PLATE COMPACTOR IS REQUIRED WITH MAXIMUM 4-INCH LOOSE LIFTS. EMPLOY METHODS USING LIGHTWEIGHT COMPACTION EQUIPMENT THAT WILL NOT DISRUPT THE STABILITY OR BATTER OF THE WALL.

POSITION BLOCKS TO BE OFFSET FROM SEAMS OF BLOCK BELOW. PERFECT "RUNNING BOND" IS NOT ESSENTIAL, BUT A 3-INCH MINIMUM OFFSET IS RECOMMENDED, CHECK EACH BLOCK FOR PROPER ALIGNMENT AND LEVEL.

MINIMUM TOLERANCES: VERTICAL CONTROL: ±1.25 IN. MAX. OVER 10 FT. DISTANCE

HORIZONTAL LOCATION CONTROL: STRAIGHT LINES ±1.25 IN. OVER A 10 FT DISTANCE

ROTATION (FROM ESTABLISHED PLAN WALL BATTER): 2.0°

BULGING: 1.0 IN. OVER A 1- FT. DISTANCE

## GEOGRID INSTALLATION

INSTALL VERSA-LOK WALL TO DESIGNATED HEIGHT OF FIRST GEOGRID LAYER. BACKFILL AND COMPACT THE WALL ROCK IN LAYERS NOT TO EXCEED 4 IN. LIFTS BEHIND THE WALL TO DEPTH EQUAL TO DESIGNED GRID LENGTH BEFORE GRID IS INSTALLED.

- CUT GEOGRID TO DESIGNED EMBEDMENT LENGTH AND PLACE ON TOP OF VERSA-LOK BLOCK SO THE FRONT EDGE OF THE GRID IS ONE INCH BEHIND THE FRONT FACE OF THE WALL SO THAT THE GRID COMPLETELY COVERS THE HOLES AND SLOTS IN THE VERSA-LOK BLOCKS. LAY GEOGRID AT THE PROPER ELEVATION AND ORIENTATIONS SHOWN ON THE
- CONSTRUCTION DRAWINGS. CORRECT ORIENTATION OF THE GEOGRID SHALL BE VERIFIED BY THE CONTRACTOR AND ON-SITE SOILS ENGINEER. STRENGTH DIRECTION IS PERPENDICULAR TO WALL FACE.
- PLACE NEXT COURSE OF VERSA-LOK BLOCK ON TOP OF GRID AND FILL BLOCK CORES WITH WALL ROCK TO LOCK IN PLACE. REMOVE SLACK AND FOLDS IN GRID AND STAKE TO HOLD IN PLACE.
- ADJACENT SHEETS OF GEOGRID SHALL BE BUTTED AGAINST EACH OTHER AT THE WALL FACE TO ACHIEVE 100 PERCENT COVERAGE, NO OVERLAP OF GRID PERMITTED. GEOGRID LENGTHS SHALL BE CONTINUOUS, SPLICING PARALLEL TO THE WALL FACE IS NOT ALLOWED.

## FILL PLACEMENT

- EACH LIFT OF WALL ROCK SHALL BE SPREAD AND COMPACTED IN SUCH A MANNER THAT MINIMIZES THE DEVELOPMENT OF SLACK OR MOVEMENT OF THE GEOGRID. ONLY HAND-OPERATED COMPACTED EQUIPMENT SHALL BE ALLOWED WITHIN 3 FT BEHIND THE WALL. THIS AREA SHALL BE DEFINED AS THE CONSOLIDATION ZONE. REFER TO 3.4D ABOVE.
- WHEN FILL IS PLACED AND COMPACTION CANNOT BE DEFINED IN TERMS OF STANDARD PROCTOR DENSITY, THEN COMPACTION SHALL BE PERFORMED SO THAT NO DEFORMATION IS OBSERVED FROM THE COMPACTION EQUIPMENT.
- TRACKED CONSTRUCTION EQUIPMENT SHALL NOT BE OPERATED DIRECTLY ON GEOGRID. A MINIMUM FILL THICKNESS OF 6 INCHES IS REQUIRED PRIOR TO OPERATION OF TRACKED VEHICLES OVER THE GEOGRID. TURNING OF TRACKED VEHICLES SHOULD BE KEPT TO A MINIMUM TO PREVENT TRACKS FROM DISPLACING THE FILL AND DAMAGING THE GEOGRID. RUBBER-TIRED EQUIPMENT MAY PASS OVER THE GEOGRID REINFORCEMENT AT SLOW SPEEDS, LESS THAN 10 MPH. SUDDEN BRAKING AND SHARP TURNING SHALL BE AVOIDED.
- THE WALL ROCK SHALL BE COMPACTED TO ACHIEVE 95% STANDARD PROCTOR. COMPACTION TESTS SHALL BE TAKEN FREQUENTLY AND AT LOCATIONS TO ENSURE EACH LIFT IS PROPERLY COMPACTED. THE CONTRACTOR IS RESPONSIBLE FOR ACHIEVING THE SPECIFIED COMPACTION REQUIREMENTS. THE ON-SITE SOILS ENGINEER MAY DIRECT THE CONTRACTOR TO REMOVE, CORRECT, OR AMEND ANY SOIL FOUND NOT IN COMPLIANCE WITH THESE WRITTEN SPECIFICATIONS. IF COMPACTION CANNOT BE DEFINED IN TERMS OF DENSITY, SEE

## DRAINAGE SYSTEM

- ALL WALLS SHALL BE CONSTRUCTED WITH WALL ROCK EXTENDING THE LENGTH OF THE GEOGRID.
- 4-INCH PERFORATED DRAIN PIPE SHALL EXTEND THE LENGTH OF THE WALL AND TEE INTO WEEP HOLES EVERY 40' ON-CENTER.

## GLOBAL STABILITY

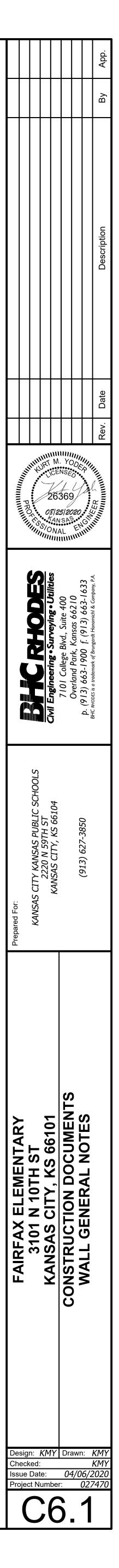
GLOBAL STABILITY CALCULATIONS HAVE NOT BEEN PERFORMED FOR THIS RETAINING WALL STRUCTURE.

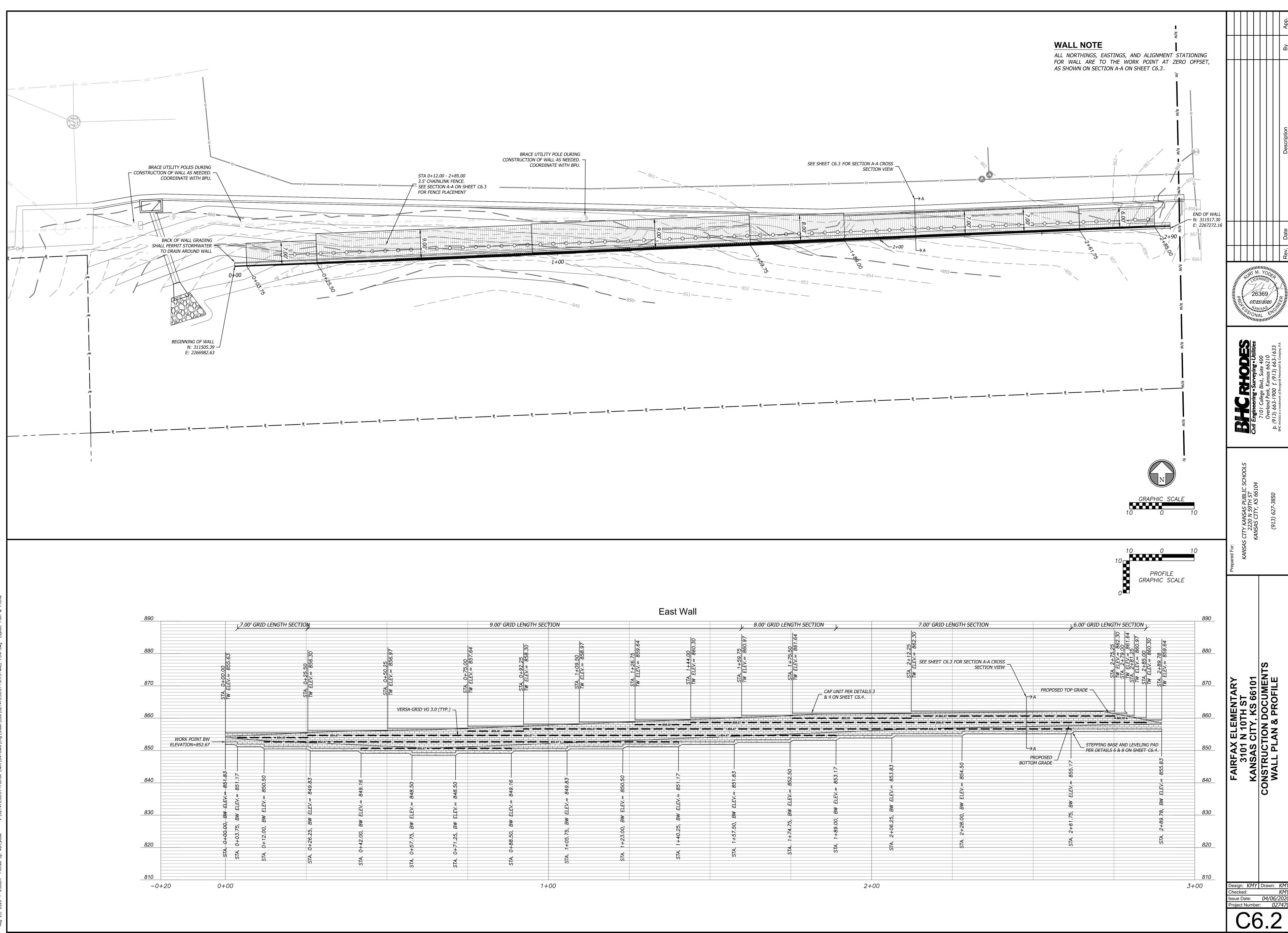
TABLE 1						
STRUCTURAL INSPECTION/SPECIAL INSPECTION PROGRAM						
ITEM	<u>CONT.</u>	PERIODIC	ITEM			
GRADING, EXCAVATION, & FILL	Х		REF NOTE 1			
FINAL FOUNDATION PREPARATION	Х		REF NOTE 1			

## OGRAM FOOTNOTES:

SPECIAL INSTRUCTIONS/CMT TESTING AGENT PROVIDED BY ENGINEER.

THE ITEMS CHECKED WITH AN 'X' SHALL BE INSPECTED IN ACCORDANCE WITH IBC CHAPTER 17 BY A CERTIFIED SPECIAL INSPECTOR FROM AN ESTABLISHED TESTING AGENCY, THE TESTING AGENCY SHALL SEND COPIES OF ALL STRUCTURAL TESTING AND INSPECTION REPORTS DIRECTLY TO THE ENGINEER AND CONTRACTOR. ANY MATERIALS WHICH FAIL TO MEET THE PROJECT SPECIFICATIONS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE WALL DESIGN ENGINEER.





## WALL AREA FOUNDATION REQUIREMENTS:

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THIS PROJECT.

2. WALL AREA FOUNDATION AND SUBGRADE PAD SHALL MEET OR EXCEED THE REQUIREMENTS OF THE SPECIFICATION EXCEPT AS HEREIN NOTED ON THESE CONSTRUCTION DRAWINGS.

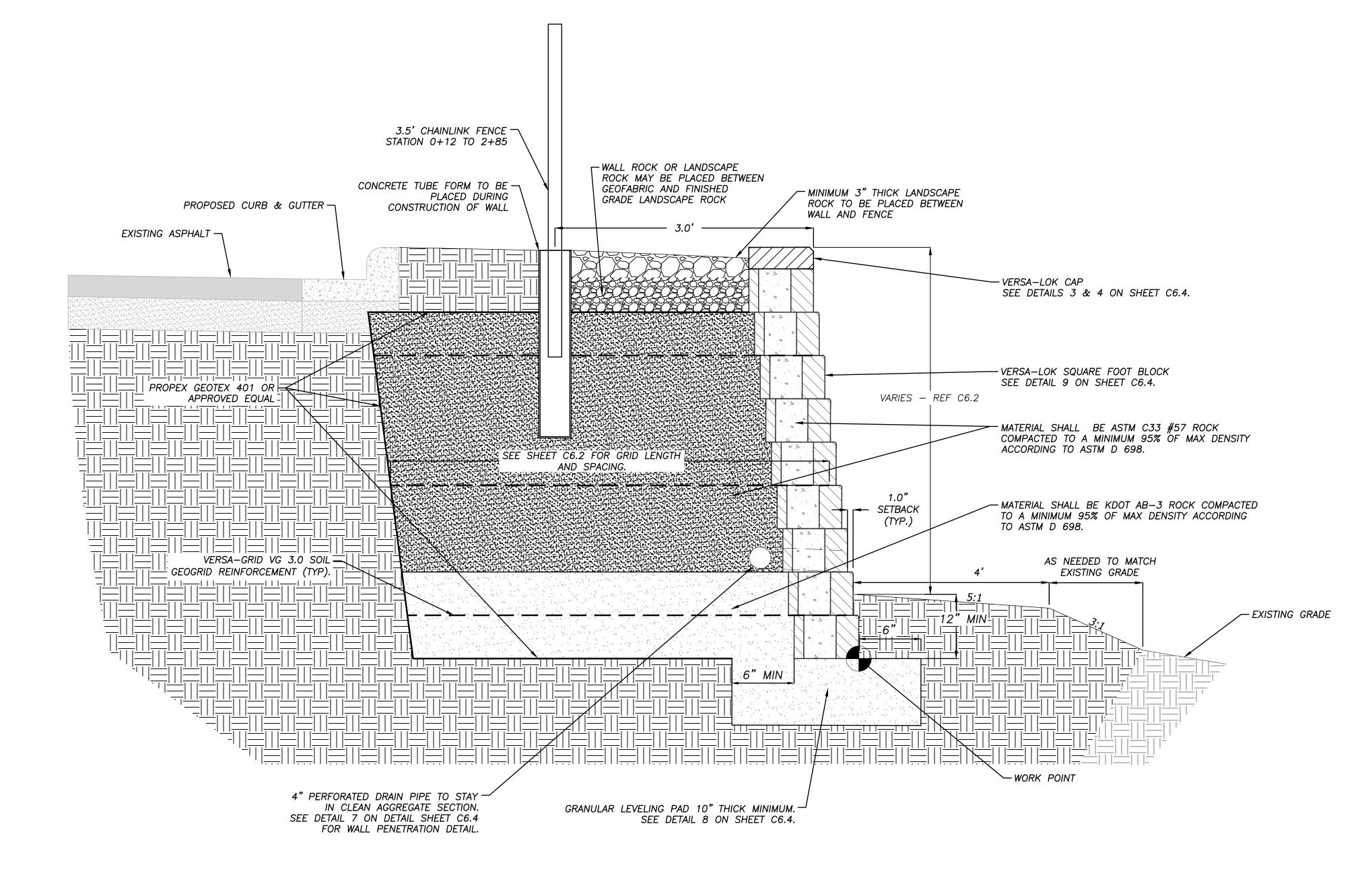
3. REMOVE SURFACE VEGETATION, TOPSOIL, ROOT SYSTEMS, ROCK FRAGMENTS LARGER THAN 6", ORGANIC MATERIAL, EXISTING UNSUITABLE FILL, AND SOFT OR OTHERWISE UNSUITABLE MATERIAL FROM THE WALL AREA.

4. AREAS ENCOUNTERED OF SOFT SUBGRADE SHOULD BE REMEDIATED AS DIRECTED BY GEOTECHNICAL ENGINEER/SPECIAL INSPECTOR.

5. AREAS EXPOSED BY EXCAVATION OR STRIPPING AND ON WHICH THE WALL SUBGRADE PREPARATIONS ARE TO BE PERFORMED SHALL BE SCARIFIED TO A MINIMUM OF 12 INCHES AND COMPACTED TO MINIMUM OF 95 PERCENT OF MAXIMUM DENSITY, IN ACCORDANCE WITH ASTM D 698. THE CONTRACTOR SHALL COORDINATE WITH THE TESTING LABORATORY TO CONDUCT DENSITY TESTS DURING FILL PLACEMENT AND/OR SOIL MODIFICATION AND MAKE ANY OTHER OBSERVATIONS NECESSARY TO DETERMINE THAT THE REQUIREMENT OF THE PLANS AND SPECIFICATIONS ARE BEING ACHIEVED. EXCAVATE AND RECOMPACT AREAS OF FAILURE OR UNSUITABLE SOILS AS SPECIFIED HEREIN. CONTINUAL FAILURE AREAS SHALL BE STABILIZED AND REPORTED TO THE ENGINEER.

6. FILL MATERIALS SHALL BE FREE OF ALL ORGANIC AND OTHER DELETERIOUS MATERIALS. ONLY FILL SOILS HAVING A LIQUID LIMIT LESS THAN 50 AND PLASTICITY INDEX LESS THAN 20 SHALL BE USED IN THE WALL FOUNDATION AREA. PLACE FILL MATERIALS IN THE WALL FOUNDATION AREA IN LIFTS OF LAYERS NOT TO EXCEED 8-INCHES LOOSE MEASURED AND COMPACTED TO A MINIMUM DENSITY OF 95 PERCENT OF MAXIMUM DENSITY, IN ACCORDANCE WITH ASTM D 698 AT OPTIMUM MOISTURE CONTENT ±2%.

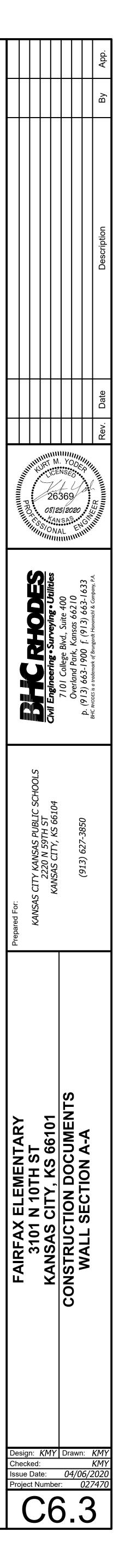
WORK
ST. B
(
0+0
0+1
0+2
0+4
0+5
0+7
0+8
1+0
1+2
1+4
1+5
1+7
1+8
2+0
2+2
2 . 6

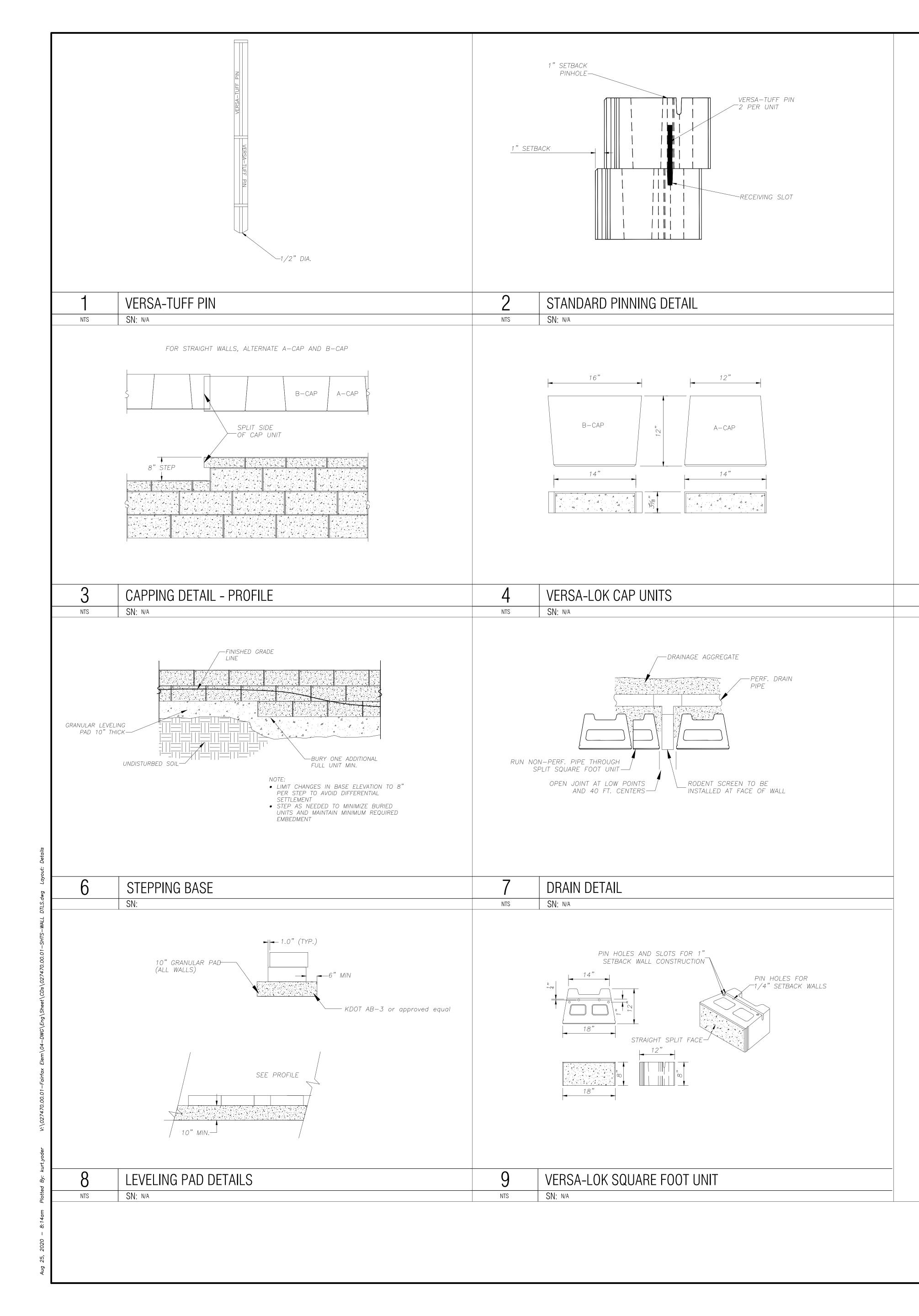


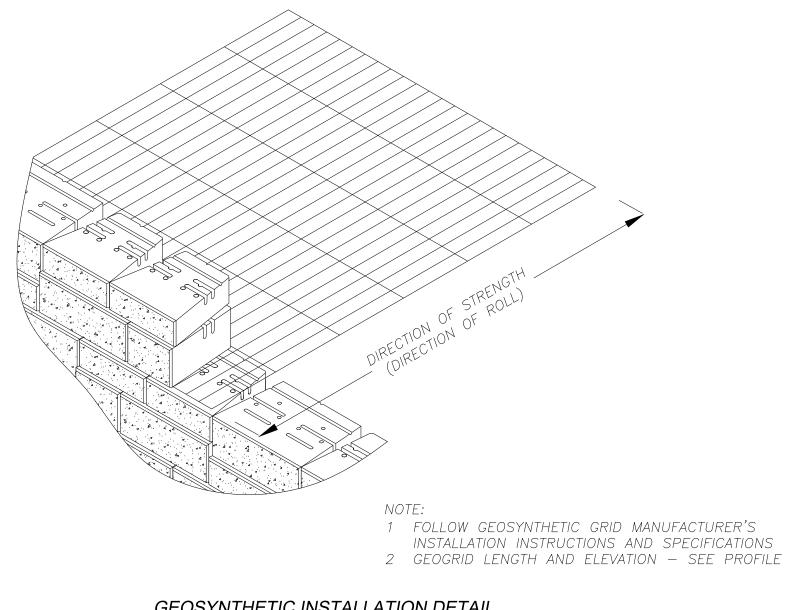
<u>SECTION A-A</u> <u>MSE WALL SECTION</u>

STATION BEGIN	STATION END	BASELINE ELEVATION	WORK POINT = TOP OF FOOTING ELEVATION	WORK PT OFFSET FROM ALIGNMENT (INCHES)	LEFT OR RIGHT
0+00	0+03.75	852.67	852.67	0	N/A
0+03.75	0+12.00	852.67	852.00	1.00	RIGHT
0+12.00	0+26.25	852.67	851.33	2.00	RIGHT
0+26.25	0+42.00	852.67	850.67	3.00	RIGHT
0+42.00	0+57.75	852.67	850.00	4.00	RIGHT
0+57.75	0+71.25	852.67	849.33	5.00	RIGHT
0+71.25	0+88.50	852.67	850.00	4.00	LEFT
0+88.50	1+05.75	852.67	850.67	3.00	LEFT
1+05.75	1+23.00	852.67	851.33	2.00	LEFT
1+23.00	1+40.25	852.67	852.00	1.00	LEFT
1+40.25	1+57.50	852.67	852.67	0.00	LEFT
1+57.50	1+74.75	852.67	853.33	-1.00	LEFT
1+74.75	1+89.00	852.67	854.00	-2.00	LEFT
1+89.00	2+06.25	852.67	854.67	-3.00	LEFT
2+06.25	2+28.00	852.67	855.33	-4.00	LEFT
2+28.00	2+61.75	852.67	856.00	-5.00	LEFT
2+61.75	2+89.78	852.67	856.67	-6.00	LEFT

## ORK POINT CALCULATION TABLE







DESIGN OF THE SRW SYSTEM WALL SEGMENT (DRAINED CONDITIONS)

REINFORCED BACKFILL

RETAINED BACKFILL\*

FOUNDATION: NATIVE CLAY

DESIGN LOADS;

LEVELING PAD

LIVE LOAD SURCHARGE = 50 – 250 PSF

5

SN:

GEOSYNTHETIC INSTALLATION DETAIL

						COU		
M	WAS	BASED	ON	IHE	FOLLOWING	SUIL	PARAMETERS:	

FRICTION ANGLE	COHESION	UNIT WEIGHT
34.0°	0 PSF	115 PCF
24.0°	0 PSF	120 PCF
24.0°	0 PSF	120 PCF
34.0°	0 PSF	135 PCF

 $BACKSLOPE = 6^{\circ} - 18^{\circ} BEHIND WALLS$ 

DESIGN AND CONSTRUCTION WORK FOR THIS PROJECT SHALL CONFORM TO THE REQUIREMENTS OF THE 2012 INTERNATIONAL BUILDING CODE

## GEOSYNTHETIC INSTALLATION DETAIL

