

ADDENDUM 2



COLONIAL HEIGHTS HIGH SCHOOL RENOVATION/ADDITION COLONIAL HEIGHTS, VIRGINIA

VIRGINIA DOE PROJECT NUMBER: 2022-8000-2

MOSELEYARCHITECTS

ARCHITECT/ENGINEER

RICHMOND, VIRGINIA

HG DESIGN GROUP

CIVIL CONSULTANT

RICHMOND, VIRGINIA

ECS, MID-ATLANTIC, LLC

HAZARDOUS MATERIALS CONSULTANT

RICHMOND, VIRGINIA

July 29, 2022

A/E's Proj. #611565 Set No.

ADDENDUM NO. 2 / July 29, 2022

GENERAL:

All planholders are requested to attach this Addendum to the inside front cover of each Project Manual. Please inform all concerned that the Documents are modified by this Addendum. The following modifications and clarifications are hereby made a part of the Contract Documents and supersede or otherwise modify the provisions of the published *Project Manual* and *Drawings*, dated July 1, 2022; and Addendum No. 01, dated July 25, 2022.

CHANGES TO THE PROJECT MANUAL:

ADD new Documents indicated below in their entirety, noted as AD 02, dated 07/29/2022:

- A. APPENDIX C – CERTIFICATION CRIME AGAINST MINORS

DELETE the previously issued Documents indicated below in their entirety and SUBSTITUTE the revised Documents in their entirety, notes as AD 02, dated 07/29/2022:

- A. SECTION 000110 – TABLE OF CONTENTS
- B. SECTION 004100 – BID FORM
- C. SECTION 012100 – ALLOWANCES
- D. SECTION 116143 – STAGE CURTAINS
- E. SECTION 122400 – WINDOW SHADES

MODIFICATIONS TO THE DRAWINGS:

DELETE the previously issued Documents indicated below in their entirety and SUBSTITUTE the revised Documents in their entirety, noted as AD 02, dated 07/29/2022:

- A. DRAWING A1.2.1
- B. DRAWING A3.1.1
- C. DRAWING C0.50
- D. DRAWING C0.60
- E. DRAWING C0.61
- F. DRAWING C2.00
- G. DRAWING C3.00
- H. DRAWING C4.00
- I. DRAWING C4.01
- J. DRAWING C5.00
- K. DRAWING C8.00
- L. DRAWING L1.00

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REFER TO SPECIFICATION SECTIONS AND DRAWINGS ATTACHED TO THE END OF THIS ADDENDUM

All other general terms, conditions and specifications shall remain the same. Bidders must take due notice and be governed accordingly. Acknowledgement of the receipt of this addendum shall be made on your Bid Form. If your bid has already been delivered, return this addendum under a separate cover, referencing the ITB number, due date, and time on the outside of the envelope.

Failure to acknowledge this addendum may result in your bid being declared non-responsive.

APPENDIX C

CERTIFICATION CRIME AGAINST MINORS

CERTIFICATION OF CRIMES AGAINST CHILDREN

Services provided to Colonial Heights Public Schools in the presence of students during regular school hours or during school-sponsored activities:

Colonial Heights Public Schools is required by procurement regulations to obtain certifications from Offerors and their employees. The below certification is required before you provide services in the presence of students during regular school hours or during school-sponsored events.

By signing this certification, the Offeror or Offeror’s employee certifies that:

(i) he or she has not been convicted of or the subject of a pending charge for a felony or any offense involving the sexual molestation or physical or sexual abuse or rape of a child; and

(ii) whether he or she has not been convicted of or the subject of a pending charge for a crime of moral turpitude. For example:

1. Gross violation of standards or moral conduct, or vileness, such that an act was intentionally evil, making the act a crime.
2. Is a criminal behavior that gravely infringes on the moral sentiments of the community. Examples include murder, larceny, and aggravated assault.
3. Conduct done knowingly contrary to justice, honesty, or good morals.)

Any person making a materially false statement regarding any such offense shall be guilty of a Class 1 misdemeanor and, upon conviction, the fact of such conviction shall be grounds for the revocation of the contract to provide such services and, when relevant, the revocation of any license required to provide such services. Colonial Heights City School Board shall not be liable for materially false statements regarding the certifications.

Offeror Representative – Signature

Date

Offeror Representative – Print Name

Offeror Name _____

Address: _____

Phone: _____

VOLUME 1

DIVISION 00 BIDDING AND CONTRACTUAL REQUIREMENTS

001100	Invitation to Bid
002100	Instructions to Bidders (AIA Document A701)
004100	Bid Form
004313	Bid Bond (AIA Document A310)
004513	Contractor's Qualification Statement (AIA Document A305) Exhibit A: General Information Exhibit B: Financial and Performance Information Exhibit C: Project Specific Information Exhibit D: Contractor's Past Project Experience Exhibit E: Contractor's Past Project Experience, Continued
005213	Standard Form of Agreement Between Owner and Contractor (AIA Document A101)
006113	Performance Bond (AIA Document A312)
006113	Payment Bond (AIA Document A312)
007200	General Conditions of the Contract for Construction (AIA Document A201)

Prebid Question Form: (Use on-line process. To access go to
www.moseleyarchitects.com, "Bidding", "Submit a Question").

APPENDICES

Appendix A	Geotechnical Report
Appendix B	Existing Hazardous Materials Information
<u>Appendix C</u>	<u>Certification Crime Against Minors (*AD 02)</u>

SPECIFICATIONS

DIVISION 1 – GENERAL REQUIREMENTS

011000	Summary
012000	Price and Payment Procedures
012100	Allowances
012110	Sitework Unit Price Allowances
012200	Unit Prices
012300	Alternates
012500	Substitution Procedures
012501	Substitution Request Form (After Receipt of Bids)
013000	Administrative Requirements
013216	Construction Progress Schedule
014000	Quality Requirements
014200	Definitions and Reference Standards
014520	Testing, Adjusting, and Balancing for HVAC
015000	Temporary Facilities and Controls
016000	Product Requirements
017000	Execution and Closeout Requirements
017419	Construction Waste Management and Disposal
017500	General Commissioning Requirements

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017800	Closeout Submittals
017900	Demonstration and Training
018119	Indoor Air Quality Requirements
018317	Exterior Building Enclosure Air Barrier Requirements

DIVISION 2 – EXISTING CONDITIONS

020000	Existing Conditions
020800	Asbestos Remediation
024100	Demolition
024113	Selective Site Demolition
028313	Lead Remediation

DIVISION 3 – CONCRETE

033000	Cast-In-Place Concrete
033543	Polished Concrete Floor Finishing
035216	Lightweight Cellular Concrete

DIVISION 4 – MASONRY

042000	Unit Masonry
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DIVISION 5 – METALS

051200	Structural Steel Framing
052100	Steel Joists
053100	Steel Deck
054000	Cold Formed Steel Framing – Structural (CFSF-S)
054003	Continuous Insulation (CI) Framing System, Clipped
055000	Metal Fabrications
055133	Metal Ladders

DIVISION 6 – WOOD PLASTICS AND COMPOSITES

061000	Rough Carpentry
064100	Architectural Woodwork and Casework
064200	Wood Paneling

DIVISION 7 – THERMAL AND MOISTURE PROTECTION

072100	Thermal Insulation
072736	Sprayed Foam (SPF) Air Barrier
074213	Metal Wall Panels
074243	Metal Composite Material Wall Panels
075400	Thermoplastic Membrane Roofing
075499	Roofing Installer's Warranty
075700	Coated Foamed Roofing – Minor Alterations
076200	Sheet Metal Flashing and Trim
077100	Roof Specialties
077200	Roof Accessories
078400	Firestopping
079200	Joint Sealants
079513	Expansion Joint Cover Assemblies

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DIVISION 8 – OPENINGS

081113	Steel Doors and Frames
081416	Flush Wood Doors
083100	Access Doors and Panels
084313	Aluminum-Framed Storefronts
084413	Glazed Aluminum Curtain Walls
085653	Security Windows
087100	Door Hardware
088000	Glazing
088723	Safety and Security Films
088813	Fire-Rated Glazing

DIVISION 9 – FINISHES

092216	Cold Formed Steel Framing - Non-Structural (CFSF-NS)
092900	Gypsum Board
093000	Tiling
095100	Acoustical Ceilings
096500	Resilient Flooring
096513	Resilient Base and Accessories
096623	Resinous Matrix Terrazzo Flooring
096817	Textile Composite Flooring
098400	Acoustical Wall and Ceiling Units
099100	Painting

DIVISION 10 – SPECIALTIES

101100	Visual Display Surfaces
101200	Display Cases
101400	Signage
102123	Cubicle Curtains and Track
102600	Wall and Door Protection
102800	Toilet and Bath Accessories
104400	Fire-Protection Specialties
105626	High-Density Mobile Storage Shelving
107300	Protective Covers

DIVISION 11 – EQUIPMENT

113013	Residential Appliances
116143	Stage Curtains
117300	Patient Care Equipment
119500	Paint Spray Booths
119513	Kilns

DIVISION 12 – FURNISHINGS

122400	Window Shades
123583	Music Equipment Storage Casework & Accessories

DIVISION 13 – SPECIAL CONSTRUCTION (not used)

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DIVISION 14 – CONVEYING SYSTEMS (not used)

VOLUME 2

DIVISION 21 – FIRE SUPPRESSION (not used)

DIVISION 22 – PLUMBING

220500	Common Work Results for Plumbing
220513	Motors for Plumbing Equipment
220516	Expansion Fittings and Loops for Plumbing Piping
220517	Sleeves and Sleeve Seals for Plumbing Piping
220519	Meters and Gages for Plumbing Piping
220523	General-Duty Valves for Plumbing Piping
220529	Hangers and Supports for Plumbing Piping and Equipment
220553	Identification for Plumbing Piping and Equipment
220700	Plumbing Insulation
221113	Facility Natural-Gas Piping
221116	Domestic Water Piping
221119	Domestic Water Piping Specialties
221316	Sanitary Waste and Vent Piping
221319	Sanitary Waste Piping Specialties
224000	Plumbing Fixtures

DIVISION 23 – MECHANICAL

230500	Common Work Results for HVAC
230513	Motors for HVAC Equipment
230514	Variable Speed Drives
230517	Sleeves and Sleeve Seals for HVAC Piping
230529	Hangers and Supports for HVAC Piping and Equipment
230548	Vibration Control for HVAC
230553	Identification for HVAC Piping and Equipment
230700	HVAC Insulation
230900	Building Automation System
230993	Sequence of Operations for HVAC Controls
232113	Hydronic Piping
232300	Refrigerant Piping
233113	Metal Ducts
233300	Air Duct Accessories
233423	HVAC Power Ventilators
233723	HVAC Gravity Ventilators
233600	Air Terminal Units
233713	Diffusers, Registers, and Grilles
234100	Particulate Air Filtration
237313	Rooftop Units
237433	Dedicated Outdoor Air Units
238129	Variable Refrigerant Flow Systems

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DIVISION 26 – ELECTRICAL

260519	Low-Voltage Electrical Power Conductors and Cables
260526	Grounding and Bonding for Electrical Systems
260529	Hangers and Supports for Electrical Systems
260533	Raceway and Boxes for Electrical Systems
260543	Underground Ducts and Raceways for Electrical System
260544	Sleeves and Sleeve Seals for Electrical Raceways and Cabling
260553	Identification for Electrical Systems
260574	Overcurrent Protective Device ARC-Flash Study
260923	Lighting Control Devices
262200	Low-Voltage Transformers
262413	Switchboards
262416	Panelboards
262726	Wiring Devices
262813	Fuses
262816	Enclosed Switches and Circuit Breakers
262913	Enclosed Controller
264313	Surge Protective Devices
265119	LED - Interior Lighting
265619	LED - Exterior Lighting

DIVISION 27 – COMMUNICATIONS

270500	Common Work Results for Communications
270528	Pathways for Communications Systems
271500	Communications Horizontal Cabling (*AD 01)
275124	Theatre, Choral & Band Room Sound System /FM Assistance Hearing System

DIVISION 28 – ELECTRONIC SAFETY AND SECURITY

280500	Common Work Results for Electronic Safety and Security
280528	Pathways for Electronic Security
283111	Digital, Addressable Fire-Alarm System

DIVISION 31 – EARTHWORK

311000	Site Clearing
312000	Earthwork
312213	Rough Grading
312219	Finish Grading
312316	Excavation
312333	Trenching and Backfilling
312500	Erosion and Sedimentation Controls

DIVISION 32 – EXTERIOR IMPROVEMENTS

321220	Aggregates
321313	Concrete Paving
329113	Planting Soil Preparation
329119	Planting Area Finish Grading
329200	Turf and Grasses
329300	Plant Material

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DIVISION 33 – UTILITIES

331200	Water Utility Distribution Equipment
333000	Sanitary Sewerage Utilities

DIVISION 34 – TRANSPORTATION (not used)

END OF TABLE OF CONTENTS

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BID FORM (*AD 01, *AD 02)
RENOVATIONS AND ADDITON TO COLONIAL HEIGHTS HGIH SCHOOL
BID REQUEST NO.: 2022-8000-2

DATE: _____

TO: Mr. Troy Hedblom
Colonial Heights School Board
512 Boulevard
Colonial Heights, VA 23834

FROM: _____

Bidder's Name

Bidder's Address

Bidder's Address

FOR: RENOVATIONS AND ADDITION TO COLONIAL HEIGHTS HIGH SCHOOL

Having carefully examined the site, and all of the Bidding and Contract Documents, and in compliance with the "Invitation to Bid," "Instructions to Bidders," the undersigned proposes to provide all labor, materials, supplies, equipment, services, and perform all Work necessary for the construction of this Project in accordance with the Bid Documents, dated July 1, 2022, prepared by Moseley Architects.

Complete this Bid Form in blue or black ink or by typewriter. Discrepancies in the multiplications of units of work and the unit prices will be resolved in favor of the correct multiplication of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

BASE BID PRICE:

The Base Bid Price includes all Work required by and in strict accordance with the Bid Documents for this Project, for the Lump Sum of:

\$ _____ (Figures only).

LUMP SUM ALLOWANCES: (Reference Section 012100 – Allowances)

1. Allowance No. 1: Interior Signage: \$20,000.00
2. Allowance No. 2: Hazardous Materials Abatement: \$200,000.00
3. Allowance No. 3: Building Controls: ~~\$100,000.00~~ **\$142,000.00 (*AD 02)**
4. Allowance No 4: Installation of Card Readers: \$10,000.00

UNIT PRICE ALLOWANCES: (Reference Section 012110 Sitework Allowances and Section 012200 Unit Prices)

1. Unit Price Allowance No. 1: Import and Place Angular VDOT #57 Stone:
Quantity of ~~400~~ **50** c.y. at \$ _____ per c.y. (in-place unit price/measure) =

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- \$_____ (Figures only).
2. Unit Price Allowance No. 2: Import and Place VDOT 21-A/21-B Stone:
Quantity of ~~500~~ **50** c.y. at \$_____ per c.y. (in-place unit price/measure) =
\$_____ (Figures only).
3. Unit Price Allowance No. 3: Import and Place Structural Fill:
Quantity of 250 c.y. at \$_____ per c.y. (in-place unit price/measure) =
\$_____ (Figures only).
4. Unit Price Allowance No. 4: Additional Excavation and Stabilize on-site:
Quantity of ~~500~~ **250** c.y. at \$_____ per c.y. (in-place unit price/measure) =
\$_____ (Figures only)
5. Unit Price Allowance No. 5: Additional Excavation with Off-Site Disposal:
Quantity of ~~500~~ **250** c.y. at \$_____ per c.y. (in-place unit price/measure) =
\$_____ (Figures only)
6. Unit Price Allowance No. 6: Additional Excavation in Trenches
Quantity of ~~250~~ **10** c.y. at \$_____ per c.y. (in-place unit price/measure) =
\$_____ (Figures only)
7. Unit Price Allowance No. 7: Concrete Sidewalk, in place
Quantity of 10 s.y. additional concrete sidewalk at \$_____ per s.y. (in-place unit price/measure)
- ~~8. Unit Price Allowance No. 8: Mass Rock Excavation:
Quantity of 10 c.y. at \$_____ per l.f. (in-place unit price/measure) =
\$_____ (Figures only) (*AD 01)~~
9. Unit Price Allowance No. 9: Rock Excavation in Trenches:
Quantity of 10 c.y. at \$_____ per c.y. (in-place unit price/measure) =
\$_____ (Figures only)
10. Unit Price Allowance No. 10: Additional Excavation of Unsuitable Material, Disposal of Unsuitable Material and Replacement with VDOT 21/-A Stone:
Quantity of 100 c.y. at \$_____ per c.y. (in-place unit price measure) =
\$_____ (Figures only)
11. Unit Price Allowance No. 11: Moisture Vapor Treatment (MVT):
Quantity of 5,000 s.f. at \$_____ per s.f. (in-place unit price/measure) =
\$_____ (Figures only)

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UNIT PRICES: (Reference Section 012200 Unit Price)

1. Unit Price #1: Pipe insulation/elbows/fittings (various sizes - per fitting – glove bag)
\$ _____ (Figures only)
2. Unit Price #2: Pipe insulation/elbows/fittings (various sizes - per fitting –within negative pressure containment)
\$ _____ (Figures only)
3. Unit Price #3: CMU block wall filler paint (per square foot) demolition
\$ _____ (Figures only)
4. Unit Price #4: CMU block wall filler paint (per square foot) – using paint stripping
\$ _____ (Figures only)
5. Unit Price #5: Water proofing/vapor barrier (per square foot)
\$ _____ (Figures only)
6. Unit Price #6: Light heat shields (per heat shield)
\$ _____ (Figures only)
7. Unit Price #7: Locker caulk (per linear foot)
\$ _____ (Figures only)
8. Unit Price #8: Fire doors (per door)
\$ _____ (Figures only)

TOTAL BASE BID PRICE

(inclusive of Base Bid Price + all Lump Sum Allowances + all Unit Price Allowances) =

\$ _____ Figures only.

ALTERNATE BID PRICE: (Reference Section 012300 – Alternates)

1. Alternate #1 Bid Price: Music Instrument Storage and Music Storage: Provide all work associated with Music Instrument Storage and Music Storage, in strict accordance with the Bid Documents; Lump Sum + Lump Sum Allowances + associated Unit Price Allowances
\$ _____ (Figures only)
2. Alternate #2 Bid Price: Mechanical Screen on Roof over Room A120 Student Collaboration
\$ _____ (Figures only)

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RECEIPT OF ADDENDA

We acknowledge the receipt of the following Addenda:

Addendum No. _____, dated _____
Addendum No. _____, dated _____
Addendum No. _____, dated _____
Addendum No. _____, dated _____

TIME OF COMPLETION

Based upon a Notice to Proceed within forty-five (45) calendar days from the opening of the bid, Work included in this Contract shall be Substantially Complete no later than December 1, 2023 and finally complete no later than sixty (60) calendar days thereafter.

LIQUIDATED DAMAGES

Liquidated Damages (refer to General Conditions for additional information): \$500.00 per calendar day.

REGISTRATION

The Undersigned is a licensed Class A Contractor in accordance with applicable state statutes and regulations, as amended, Certificate No. _____, dated ____/____/____. A Class A Contractor License is required for this project.

Indicate whether your business ____ is or ____ is not located in the City of Colonial Heights, Virginia and whether you ____ have or ____ have not obtained a City of Colonial Heights, Virginia license to conduct or engage in this business, trade, or occupation in City of Colonial Heights, VA.

A bid by a corporation shall further give the State of incorporation _____, State Corporation Commission ID number _____, and have the corporate seal affixed in the space provided herein.

CERTIFICATION

I certify that the firm name given below is the true and complete name of the Bidder and that the Bidder is legally qualified and licensed, to perform all Work included in the scope of the Contract.

Legal Name of Bidder (Company) _____

Bidder's (Company) Address _____

Corporate
Seal

Signature _____
(Signature of person(s) legally authorized to bind Bidder (Company) to this Contract)

By: _____
(Typed or printed Name(s) of Person(s) Signing)

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Title: _____
(Typed or printed Title(s) of Person(s) Signing)

Telephone Number: _____ E-mail: _____
(include Area Code) (of person indicated above)

(This form may be reproduced in exact detail)

END OF BID FORM

SECTION 012100
ALLOWANCES (*AD 02)

PART 1 GENERAL

1.01 SUBMITTALS

- A. Allowance Proposal: Submit initial proposal for purchase of products and materials, on Change Order form.
- B. Supporting Documentation:
 - 1. Products and Material: Provide invoices and other documents as required, for products and materials indicating quantities, prices, taxes, delivery fees, and other costs.
 - 2. Labor and Installation: Provide time sheets and other documents as required, indicating all on-site Subcontractor costs, including hours worked, quantity or amount of product/material installed, hourly wages, and Subcontractor overhead and profit.

1.02 LUMP-SUM AND QUANTITY ALLOWANCES

- A. Costs Included in Lump-Sum and Quantity Allowances: All Subcontractor's costs: Cost of products and materials, taxes, freight, delivery, receiving and handling, labor and installation, Subcontractor overhead and profit.
- B. Costs Not Included in Lump-Sum and Quantity Allowances: All General Contractor's costs: General coordination, GC's overhead and profit.
- C. Contractor Responsibilities:
 - 1. Assist Architect in selection of products.
 - 2. Obtain proposals from suppliers and installers and offer recommendations.
 - 3. On notification of which products have been selected, execute purchase agreement with designated supplier and installer.
 - 4. Arrange for and process shop drawings, product data, and samples. Arrange for delivery.
- D. Differences in costs will be adjusted by Change Order.

1.03 ALLOWANCES SCHEDULE

- A. Allowance No. 1: Lump Sum: Signage: Include the stipulated sum of \$20,000 for interior and exterior panel signage, as specified in Division 10 Section "Signage."
- B. Allowance No. 2: Lump Sum: Hazardous Materials Remediation: Include the stipulated sum of \$200,000 for hazardous materials remediation. Coordinate with Division 1 "Unit Prices" for unit price requirements to determine amounts for each material, and payment shall be made from the lump sum allowance for actual amount of material remediated.
- C. Allowance No. 3: Lump Sum: Building Controls: Include the stipulated sum of ~~\$100,000~~ **\$142,000** to provide building controls by Owner-designated subcontractor, to tie in to existing building controls system. **(*AD 02)**
- D. Allowance No. 4: Lump Sum: Card Readers: Include the stipulated sum of \$10,000 to provide and install new Card Readers at designated doors by Owner designated subcontractor.

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PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION 012100

SECTION 116143
STAGE CURTAINS (*ADDENDUM NO. 2)

PART 1 GENERAL

1.01 REFERENCE STANDARDS

- A. ASTM A53/A53M - Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless 2020.
- B. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware 2016a.
- C. ASTM A391/A391M - Standard Specification for Grade 80 Alloy Steel Chain 2021.
- D. ASTM A413/A413M - Standard Specification for Carbon Steel Chain 2021.
- E. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process 2020.
- F. FM (AG) - FM Approval Guide current edition.
- G. ITS (DIR) - Directory of Listed Products current edition.
- H. NFPA 70 - National Electrical Code Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- I. NFPA 701 - Standard Methods of Fire Tests for Flame Propagation of Textiles and Films 2019.
- J. UL (DIR) - Online Certifications Directory Current Edition.

1.02 ADMINISTRATIVE REQUIREMENTS

- A. Preinstallation Meeting: Conduct a preinstallation meeting one week prior to the start of the work of this section; require attendance by all affected installers.

1.03 SUBMITTALS

- A. See Section 013000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide for each type of product as follows:
 - 1. Stage Curtains: Provide information on type of curtain, weight, location for use on project, and type of flame retardancy.
 - 2. Tracks: Provide capacity of each curtain track to support curtain weight and control curtain operation.
 - 3. Pipe Grid and Rigging: Provide product data for each component of pipe grid assembly, including load capacity of pipe grid components and rigging chain and cable.
- C. Shop Drawings: Indicate installation information for components not dimensioned or detailed in product data.
 - 1. Submit floor plans, elevations, sections, attachment details of curtains and operating clearances.
 - a. Submit layout of pipe grid and battens, including attachment locations to structure.
 - 2. Submit documentation indicating load capacity of pipe grid, battens, track, attachment, and rigging components.
 - 3. Submit attachment locations for each type of curtain, and corresponding loads imposed on structure.

- D. Selection Samples: Submit color chart for each type of stage curtain indicated that includes full range of colors, textures, and patterns available, along with 12-inch square fabric sample, in any color, of each fabric type and seam.
- E. Verification Samples: Submit fabric full width by at least 12-inch long section of each selected fabric, with specified treatments applied and showing repeat of patterns; mark top and face of fabric.
- F. Certificate: Certify that products of this section meet or exceed specified requirements.
- G. Delegated Design Data: Indicate stage curtain system structural attachments, including analysis data signed and sealed by qualified designer responsible for their preparation.
- H. Designer's Qualification Statement.
- I. Installer's Qualification Statement.
- J. Warranty Documentation: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

1.04 QUALITY ASSURANCE

- A. Designer Qualifications: Perform design of track support system under direct supervision of a Professional Engineer experienced in design of this type of work and licensed in the State in which the Project is located.
- B. Installer Qualifications: Company specializing in performing work of the type specified; certified installation representative of curtain fabricator/manufacturer.

1.05 FIELD CONDITIONS

- A. Ambient Conditions: Do not install stage curtains until spaces are fully enclosed and watertight, and the following:
 - 1. Wet work in adjacent areas is complete and surfaces are dry.
 - 2. Work at and above ceiling level has been completed.
 - 3. Ambient temperatures and humidity of adjacent areas are maintained at levels when occupied for intended use.
- B. Field Measurements: Confirm supporting structural element locations and adjacent construction for stage curtains and rigging, and complete field measurements prior to fabrication and include these dimensions on shop drawings.

1.06 WARRANTY

- A. See Section 017800 - Closeout Submittals, for additional warranty requirements.
- B. Correct defective Work within a two year period after Date of Substantial Completion.
 - 1. Defective Work includes, but is not limited to, stage curtain support and rigging that is not operating properly.

PART 2 PRODUCTS

2.01 FABRICATORS

- A. Stage Curtain and Track/Rigging Assembly Fabricators:
 - 1. Beck Studios Inc.; Milford, OH; <https://www.beckstudios.net/>
 - 2. Georgia Stage; Duluth, GA; <https://www.gastage.com/>
 - 3. LuXout Stage Curtains; Richmond, VA; <https://www.luxout.com/>
 - 4. Janson Industries; Canton, OH; <http://www.jansonindustries.com/>

5. J.R. Clancy, Inc; Syracuse, NY; <https://www.jrclancy.com/>
6. Texas Scenic Company, Inc; San Antonio, TX; <https://www.texasscenic.com/>
7. Substitutions: See Section 016000 - Product Requirements.

2.02 PERFORMANCE REQUIREMENTS

- A. Stage Curtain Systems Design: Engage qualified designer to develop design of stage curtain system, including comprehensive project specific analysis of necessary structural system attachments in compliance with performance requirements.
- B. Structural Performance: Ensure attachment of stage curtain system to structure withstands material weight and operational loads applicable for this project and in compliance with local building codes and authorities having jurisdiction.
 1. Design Loads: Weight of stage curtains and track system.
- C. Fire-Test Characteristics: Stage curtain fabrics in compliance with NFPA 701 flame propagation fire test requirements conducted by authorized testing agency, listed by UL (DIR), ITS (DIR), or FM (AG) and acceptable to authorities having jurisdiction.
 1. Permanently attach label to fabric of each curtain assembly indicating fabric treatment as follows:
 - a. Inherently Flame Retardant (IFR), fibers/yarns that are non-combustible for life of fabric.
- D. Electrical Components: Devices that are listed and labeled in compliance with NFPA 70, by a qualified testing agency, and marked for designated application.

2.03 STAGE CURTAIN FABRICS

- A. Provide curtains of matching fabric and color from single dye lot, and when size and quantity of curtains exceeds maximum dye lot size, provide curtain or adjacent pair of curtains from only one dye lot, and arrange curtain dye lots to minimize exposure of any differences.
- B. Polyester Velour: Weighing at least 22 oz/linear yd, napped fabric of 100 percent polyester with minimum pile height of 75 mil, 0.075 inch and minimum width of 54 inches.
 1. Application: Theatre Room cyclorama curtains.
 2. Color: As selected by Architect from manufacturer's full range.
 3. Texture: As selected by Architect from manufacturer's full range.
 4. Pattern: As selected by Architect from manufacturer's full range.
 5. Products:
 - a. Fred Krieger & Company; IFR Prism Velour 22 oz.
 - b. KM Fabrics, Inc; Prestige.
 - c. LuXout; Prologue 22 oz.
 - d. Rose Brand; Encore..
 - e. Substitutions: See Section 016000 - Product Requirements.

2.04 CURTAIN TRACK

- A. Steel Track: Commercial quality, roll-formed, galvanized steel sheet, ASTM A653/A653M, with G60 coating designation; with continuous bottom slot and each half of track in single continuous piece; black paint finish; including support and operation accessories.
 1. Thickness: As recommended by manufacturer for curtain loads and operation.
 - a. ~~Heavy Duty: 14 gauge, 0.0747 inch minimum thickness. (*AD 02)~~
 - b. Medium Duty: 16 gauge, 0.0598 inch minimum thickness. (*AD 02)

2. Products:
 - a. ~~Automatic Devices Company; Silent Steel 280 series~~ (*AD 02)
 - b. Automatic Devices Company; Besteel 170 series. (*AD 02)
 - c. H & H Specialties, Inc.; 200 series.
 - d. Substitutions: See Section 016000 - Product Requirements.
- B. Curved Track: Shop fabricate curved portions of curtain track.
 1. Curved Track Cable Guides: Provide outside idlers, mule pulleys, spindles, and guides as required for curve configuration and track length.
- C. Curtain Rails: Provide single or double curtain capacity as indicated on drawings, and end stops.
- D. ~~Curved Suspended Track Stiffener: Steel pipe, 1-1/2 inch nominal diameter, Grade A, Schedule 40 in accordance with ASTM A53/A53M; support both sections of curved suspended tracks, with curve to match track.~~ (*AD 02)
- E. Clamp and Bracket Hangers: Steel clamps and brackets of required strength to support loads for attaching track to overhead support.
- F. Track-Lap Clamp: Clamp that matches track channel finish as necessary for attaching two tracks at center overlap.
- G. Operation:
 1. Manual Walk-Along Operation: Curtain track without a cord, cable, pulleys, or floor pulley; must walk with curtain to open and close.
- H. Track System: Provide heavy-duty curtain track with components as recommended by manufacturer for loads and operation, including track end stops.
 1. Carriers: Standard plated-steel carriers with a pair of polyethylene tired ball-bearing wheels riveted parallel to body, and equip carriers with rubber or neoprene bumpers to reduce noise and plated-steel swivel eye and trim chain for attaching curtain snap or S-hook, and required number of curtain carriers for track length and curtain fabrication.
 - a. Master Curtain Carriers: One plated-steel master carrier for each leading curtain edge, with two pairs of nylon tired ball-bearing wheels and with two line guides per carrier.
 2. ~~Pulleys: One dead end, single wheel pulley; one live end, double wheel pulley; and one adjustable pulley to maintain proper tension on operating line; each with molded nylon tired ball-bearing sheaves enclosed in steel housings; pulleys with steel housing finished to match track and with bracket for securing off-stage end of curtain.~~ (*AD 02)

2.05 FABRICATION - CURTAINS

- A. General: Provide vertical seams unless otherwise indicated, locate vertical seams so they do not fall on faces of pleats, and only use fabric that is cut greater than half the width of fabric.
 - B. Vertical and Top Hems: Machine sew hems as follows, unless otherwise indicated:
 1. Vertical Hems: Fabricate at least 2 inches wide, and at least 4 inches wide at borders, valances, teasers, and tormentors with at least 1-inch tuck and without visible selvedge material from front of curtain; sew open ends of hems closed.
 2. Turnbacks: Fabricate leading-edge and trailing-edge turnbacks for traveler curtains by folding back at least 12 inches of face fabric, with at least 1-inch tuck, and vertically secured by sewing.
-

COLONIAL HEIGHTS HIGH SCHOOL RENOVATION/ADDITION
COLONIAL HEIGHTS, VIRGINIA
Architect's Project No.: 611565

3. Top Hems: Fabricate by double-stitching 3-1/2-inch wide heavy jute or laminated synthetic webbing to top edge at back side of curtain, and with at least 2 inches of face fabric turned under.
- C. Fullness:
 1. 50 Percent Fullness: Provide this fullness, exclusive of turnbacks and hems, and spaced at 12 inches on center along top hem reinforcement as follows:
 - a. Sewing additional material into 3-inch double-stitched, flat, box pleats.
- D. Grommets:
 1. Black Colored Curtains: No. 3 brass or No. 4 brass grommets with black finish.
 2. Pleated Curtains: Provide grommets centered on each box pleat and placed 1 inch from corner of curtain; for snap hooks or S-hooks.
- E. Bottom Hems: Machine sew hems as follows, unless otherwise indicated:
 1. For Curtains With Fullness:
 - a. Floor Length Curtains: Provide hems at least 6 inches deep, with individual weights in individual closed pockets sewn above finished bottom edge of curtain, and open ends of hems sewn closed.

2.06 PIPE GRID

- A. General: Fabricate pipe grid in configuration indicated on Drawings from steel pipe battens, trim and support cable and chain, clamps, and anchors, as specified in Accessories article below.
 1. Clamps: At pipe grid, provide a cross grid connection clamp at each intersection of battens.
 2. Suspend stage curtain track from pipe grid batten with manufacturer's recommended clamp and hanger assembly.

2.07 ACCESSORIES

- A. S-Hooks: Manufacturer's standard heavy-duty plated wire hooks, at least 2 inches long.
- B. Tie Lines: No. 4 or No. 4-1/2 cord or braided soft cotton tape, colored to best match curtain; at least 5/8 inch wide by 36 inches long and threaded through grommets.
- C. Battens: Fabricate using steel pipe and minimize the number of joints; connect pipe at joints using 18-inch long internal splice sleeve secured with four flush rivets, plug welds, threaded couplings, or equally strong method.
 1. Steel Pipe: 1-1/4-inch nominal diameter, Grade A, Schedule 40 in accordance with ASTM A53/A53M.
 2. Finish: Matte black with 1-inch wide yellow-colored stripe along center of each batten.
- D. Support, Clamps, and Anchors: Galvanized after fabrication sheet steel, Class B in accordance with ASTM A153/A153M; manufacturer's standard thickness.
- E. Trim and Support Cable: 1/4-inch diameter, 7x19 galvanized steel cable with minimum breaking load (MBL) of 7,000 lb.
 1. Provide fittings in accordance with cable manufacturer's written instructions for size, number, and method of installation, including a drop-forged galvanized turnbuckle to allow for leveling.
- F. **Trim and Support Chain: ~~Hardened alloy steel chain rated for overhead lifting, Grade 80 in accordance with ASTM A391/A391M. (*AD 02)~~**
 1. Trim Chain: Proof coil chain, No. 8, zinc plated, 1/4-inch diameter, Grade 30 in accordance with ASTM A413/A413M.

- a. Trim Chain shall have a minimum working load of 750 lbs.
 - b. Connection between end link and lifting cable shall be made with a thimble and copper Nicopress sleeve.
 - c. Trim chains shall be wrapped one and one half turns around batten and attached back to thimble at the end of the lift line with a 1/4 inch forged shackle. Adjustment is made by connecting the shackle into a link along the return side of the chain.
- G. Inserts, Bolts, Rivets, and Fasteners: Manufacturer's standard and corrosion-resistant.
- H. Individual Curtain Bottom Weights: Curtain manufacturer's standard segmented weights in compliance with requirements for curtain type and location.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine areas and conditions, with installer present, for compliance with requirements for supporting structural members, blocking, clearances, installation tolerances, and other conditions that may impact performance of stage curtain assembly.
- B. Examine placement and condition of inserts, clips, blocking, or other supports installed by others and for use in supporting track and battens of stage curtain assembly.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 INSTALLATION, GENERAL

- A. Install stage curtain assembly in accordance with curtain and track manufacturers written instructions.

3.03 INSTALLATION - CURTAIN

- A. Track Hung: Secure curtains to track carriers with S-hooks.

3.04 INSTALLATION - BATTENS (PIPE GRID)

- A. Install battens by suspending at heights as indicated with trim and supports spaced as required to support loads; do not exceed 10 feet between supports.
 - 1. Cable Trim and Support:
 - a. Fasten cables securely to either structure or to inserts, eye screws, or other applicable devices that are appropriate for substrate and not subject to deterioration or failure with time or elevated temperatures.
 - b. Attach other end of cable to pipe clamps with turnbuckles, housed or fixed securely after adjustment to prevent loosening.
 - 2. Chain Support: Secure chain as required for application with load-rated terminations.

3.05 INSTALLATION - TRACK

- A. Mounting of Track Assembly:
 - 1. Batten Mounted: Install track by suspending from pipe batten with manufacturer's acceptable track clamp hangers securely attached to batten pipe clamps and within intervals indicated in manufacturer's written instructions for on center spacing.
- B. Track Support Spacing: Comply with manufacturer's recommendations for applied loads, and not to exceed the following dimensions between track supports:
 - 1. Heavy-Duty Track: 6 feet, maximum.

- C. Install track for center-parting curtains with at least 24-inch overlap of track sections at center-line, and supported with track lap clamps.

3.06 CLOSEOUT ACTIVITIES

- A. Demonstration: Demonstrate operation of system to Owner's personnel.
 - 1. Use operation and maintenance data as reference during demonstration.
 - 2. Briefly describe function, operation, and maintenance of each component.
- B. Training: Train Owner's personnel on operation and maintenance of system.
 - 1. Use operation and maintenance manual as training reference, supplemented with additional training materials as required.
 - 2. Provide minimum of two hours of training.

3.07 PROTECTION

- A. Protect installed stage curtain assembly from subsequent construction operations until Date of Substantial Completion.

END OF SECTION 116143

SECTION 122400
WINDOW SHADES (*ADDENDUM NO. 2)

PART 1 GENERAL

1.01 REFERENCE STANDARDS

- A. ASTM G21 - Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi 2015, with Editorial Revision (2021).
- B. NFPA 701 - Standard Methods of Fire Tests for Flame Propagation of Textiles and Films 2019.
- C. UL (GGG) - GREENGUARD Gold Certified Products Current Edition.

1.02 ADMINISTRATIVE REQUIREMENTS

- A. Preinstallation Meeting: Convene one week prior to commencing work related to products of this section; require attendance of affected installers.
- B. Sequencing:
 - 1. Do not fabricate shades until field dimensions for each opening have been taken with field conditions in place.
 - 2. Do not install shades until final surface finishes and painting are complete.

1.03 SUBMITTALS

- A. See Section 013000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide manufacturer's standard catalog pages and data sheets, including materials, finishes, fabrication details, dimensions, profiles, mounting requirements, and accessories.
- C. Shop Drawings: Include shade schedule indicating size, location and keys to details, head, jamb and sill details, mounting dimension requirements for each product and condition, and operation direction.
- D. Source Quality Control Submittals: Provide test reports indicating compliance with specified fabric properties.
- E. Selection Samples: Include fabric samples in full range of available colors and patterns.
- F. Verification Samples: Minimum size 6 inches square, representing actual materials, color and pattern.
- G. Operation and Maintenance Data: List of all components with part numbers, sources of supply, and operation and maintenance instructions; include copy of shop drawings.

1.04 QUALITY ASSURANCE

- A. Installer Qualifications: Authorized installation representative of fabricator/manufacturer.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver shades in manufacturer's unopened packaging, labeled to identify each shade for each opening.
- B. Handle and store shades in accordance with manufacturer's recommendations.

1.06 FIELD CONDITIONS

- A. Do not install products under environmental conditions outside manufacturer's absolute limits.

1.07 WARRANTY

- A. See Section 017800 - Closeout Submittals, for additional warranty requirements.
- B. Provide manufacturer's warranty from Date of Substantial Completion, covering the following minimum terms:
 - 1. Electric Motors and Components: 5 years, minimum.
 - 2. Manual Operating Mechanism / Clutch: 10 years, minimum (excludes bead chain).
 - 3. Fabric: 10 years, minimum.
 - 4. Balance of Shade Hardware and Non-Operating Materials and Components: 25 years, minimum.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Interior Manually Operated Roller Shades:
 - 1. Basis of Design: WT Shade; HeliaRise.
 - 2. Draper, Inc; Clutch Operated FlexShade.
 - 3. Hunter Douglas Architectural; RB500 Manual Roller Shades.
 - 4. Lutron Electronics Co., Inc; Contract Roller Manual Roller Shades.
 - 5. MechoShade Systems LLC; Mecho/5 System.
- B. Interior Motorized Roller Shades, Motors and Motor Controls:
 - 1. Basis of Design: WT Shade; MotoRise.
 - 2. Draper, Inc; Motorized FlexShade.
 - 3. Hunter Douglas Architectural; RB500 Motorized Roller Shades.
 - 4. Lutron Electronics Co., Inc; Contract Roller Motorized Roller Shades.
 - 5. MechoShade Systems LLC; Electroshade.
- C. Source Limitations: Provide products produced by a single manufacturer and obtained from a single supplier.

2.02 ROLLER SHADES

- A. General:
 - 1. Provide shade system components that are easy to remove or adjust without removal of mounted shade brackets.
 - 2. Provide shade system that operates smoothly when shades are raised or lowered.
- B. Roller Shades:
 - 1. Description - Interior Roller Shades: Single- and dual-roller as indicated, fabric window shade system complete with mounting brackets, roller tubes, hembars, hardware, and accessories. Provide both manual and motorized operation, per locations indicated on Drawings.
 - a. Drop Position: Regular roll.
 - b. Roll Direction: Roll down, closed position is at window sill.
 - c. Mounting: Window jamb mounted - inside, between jambs.
 - d. Size: As indicated on drawings for rough opening sizes; field verify rough openings prior to fabrication.
 - 2. Brackets and Mounting Hardware: As recommended by manufacturer for mounting indicated and to accommodate shade fabric roll-up size and weight.

- a. Double Roller Brackets: Configured for light-filtering and room-darkening shades in one opening.
 - 1) Light-Filtering Fabric: Room-side of opening.
 - 2) Room-Darkening Fabric: Glass-side of opening.
3. Roller Tubes: As required for type of shade operation.
 - a. Material: Extruded aluminum, clear anodized finish or electrogalvanized/epoxy primed steel, as standard with manufacturer.
 - b. Size: As recommended by manufacturer; selected for suitability for installation conditions, span, and weight of shades.
 - c. ~~Fabric Attachment: Utilize extruded channel in tube to accept vinyl spline welded to fabric edge. (*AD 02)~~
 - d. **Fabric Attachment: Utilize manufacturer's standard method for attaching shade fabric material to rollers. (*AD 02)**
4. Hembars: Designed to maintain bottom of shade straight and flat.
 - a. Style: Full wrap fabric covered bottom bar, flat profile with heat sealed closed ends.
5. Manual Operation for Interior Shades:
 - a. Clutch Operator: Manufacturer's standard material and design, permanently lubricated.
 - b. Drive Chain: Continuous loop beaded ball chain, 95 pounds minimum breaking strength. Provide upper and lower limit stops.
6. Accessories:
 - a. Fascia: Extruded aluminum, size as required to conceal shade mounting, attachable to brackets without exposed fasteners; clear anodized finish.
 - b. End Caps: Provide manufacturer's standard end caps to cover exposed ends of brackets.
 - c. **Ceiling Pockets: Provide premanufactured metal shade pocket where bottom of shade assembly is indicated to be level with ceiling, for recess mounting shade hardware into ceiling. Provide removable closure panel to conceal underside of brackets and roller tubes. (*AD 02)**
 - d. ~~Ceiling Pockets with Prewired Raceway: UL 325 listed, extruded aluminum shade pocket with removable closure panel and ceiling tile support, for recess mounting in acoustical tile or drywall ceilings; size and configuration as indicated on drawings. (*AD 02)~~
 - 1) **Designed to accommodate installation of motor control and wiring accessories within pocket. (*AD 02)**
 - e. Fasteners: Noncorrosive, and as recommended by shade manufacturer.

2.03 SHADE FABRIC

- A. Fabric: Nonflammable, color-fast, impervious to heat and moisture, and able to retain its shape under normal operation.
 1. Manufacturers:
 - a. Basis of Design: EcoFabrix 253 for 3% fabric and EcoFabrix 770GC for blackout, or comparable products by one of the following.
 - b. Lutron Electronics Co., Inc.
 - c. Mermet Corporation.
 - d. Phifer, Inc.
 2. Material: Vinyl coated fiberglass.

3. Material Certificates and Product Disclosures:
 - a. Low-Emitting Material Certification: Greenguard Gold certified and listed in UL (GGG).
4. Performance Requirements:
 - a. Flammability: Pass NFPA 701 large and small tests.
 - b. Fungal Resistance: No growth when tested according to ASTM G21.
5. Openness Factor: 3% and blackout as required.
6. Color: As selected by Architect from manufacturer's full range of colors.
7. Fabrication:
 - a. Fabric Orientation: Railroaded, fabric is turned 90 degrees off the roll.
 - b. If height of opening requires multiple panels of railroaded fabric, use manufacturer's standard sewn seams.

2.04 MOTOR CONTROLS

- A. Unless specifically indicated to be excluded, provide all required equipment, conduit, boxes, wiring, connectors, hardware, supports, accessories, software, system programming, etc. as necessary for a complete operating system that provides the control intent indicated.
- B. Provide all components and connections necessary to interface with other systems as indicated.
- C. Manual Controls:
 1. Control Functions:
 - a. Open: Automatically open controlled shade(s) to fully open position when button is pressed.
 - b. Close: Automatically close controlled shade(s) to fully closed position when button is pressed.
 2. Wall Controls: Provided by shade manufacturer.
 - a. ~~Finish: Match other cover and switch plates in same room. (*AD 02)~~
 - b. **Finish: White. (*AD 02)**

2.05 ROLLER SHADE FABRICATION

- A. Field measure finished openings prior to ordering or fabrication.
- B. Dimensional Tolerances: Fabricate shades to fit openings within specified tolerances.
 1. Vertical Dimensions: Fill openings from head to sill with 1/4 inch maximum space between bottom bar and window stool.
 2. Horizontal Dimensions - Inside Mounting: Fill openings from jamb to jamb, with maximum 1/4 inch gap at each edge of jamb.
- C. At openings requiring continuous multiple shade units with separate rollers, locate roller joints at window mullion centers; butt rollers end-to-end.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine finished openings for deficiencies that may preclude satisfactory installation.
- B. Start of installation shall be considered acceptance of substrates.

3.02 PREPARATION

- A. Prepare surfaces using methods recommended by manufacturer for achieving best result for substrate under the project conditions.
- B. Coordinate with window installation and placement of concealed blocking to support shades.

3.03 INSTALLATION

- A. Install in accordance with manufacturer's instructions and approved shop drawings, using mounting devices as indicated.
- B. Adjust level, projection, and shade centering from mounting bracket. Verify there is no telescoping of shade fabric. Ensure smooth shade operation.

3.04 CLEANING

- A. Clean soiled shades and exposed components as recommended by manufacturer.
- B. Replace shades that cannot be cleaned to "like new" condition.

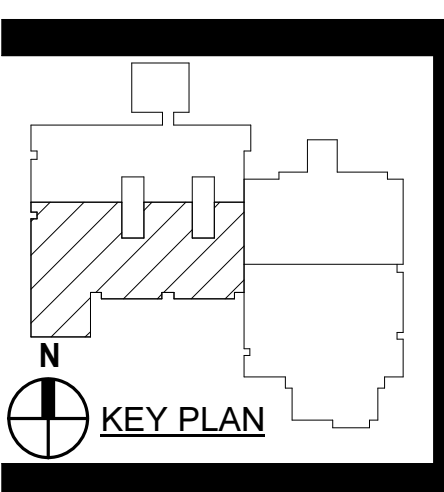
3.05 CLOSEOUT ACTIVITIES

- A. Demonstration: Demonstrate operation and maintenance of window shade system to Owner's personnel.
- B. Training: Train Owner's personnel on operation and maintenance of system.
 - 1. Use operation and maintenance manual as training reference, supplemented with additional training materials as required.
 - 2. Provide minimum of two hours training by manufacturer's authorized personnel at location designated by the Owner.

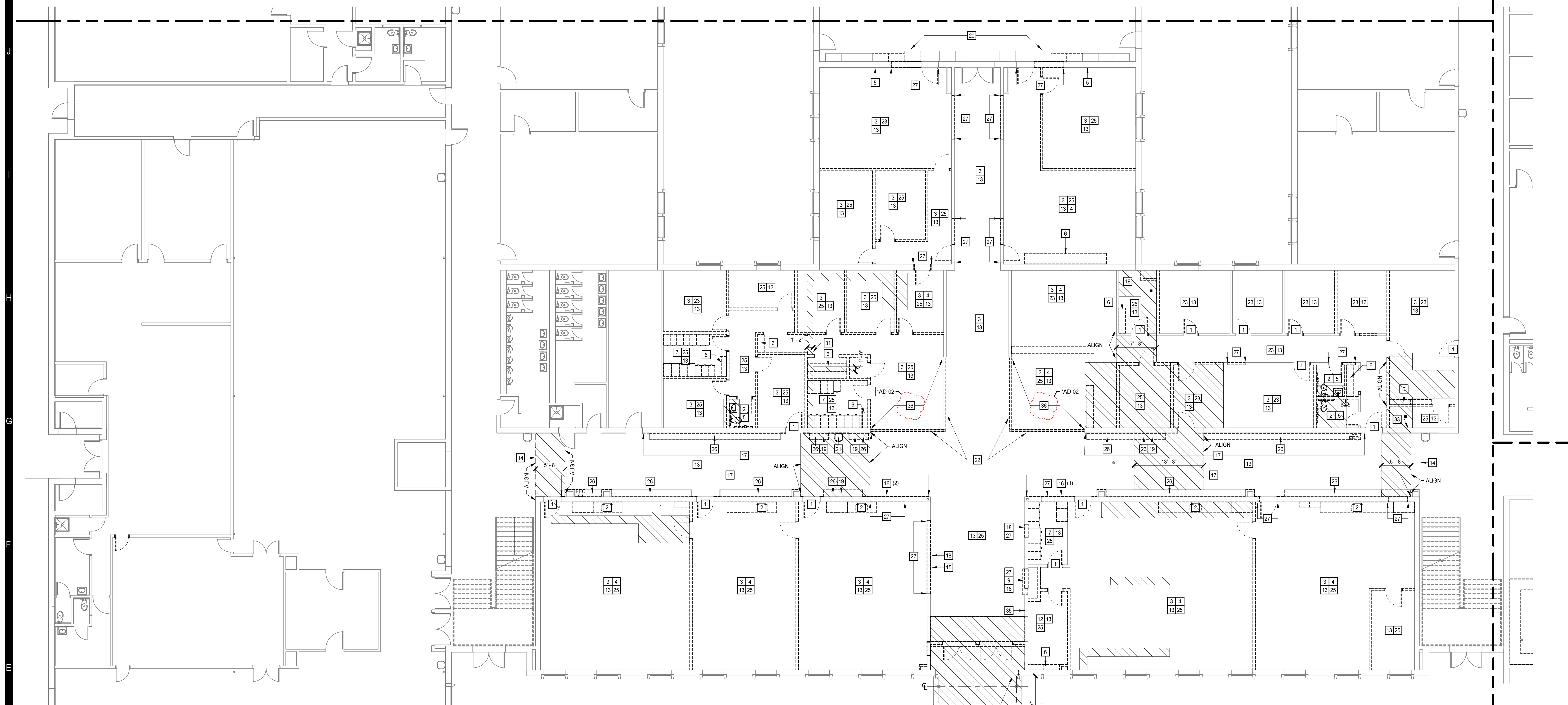
3.06 PROTECTION

- A. Protect installed products from subsequent construction operations.
- B. Touch-up, repair, or replace damaged products before Substantial Completion.

END OF SECTION 122400



DATE	REVISIONS
July 1, 2022	
07/29/22	*AD 02



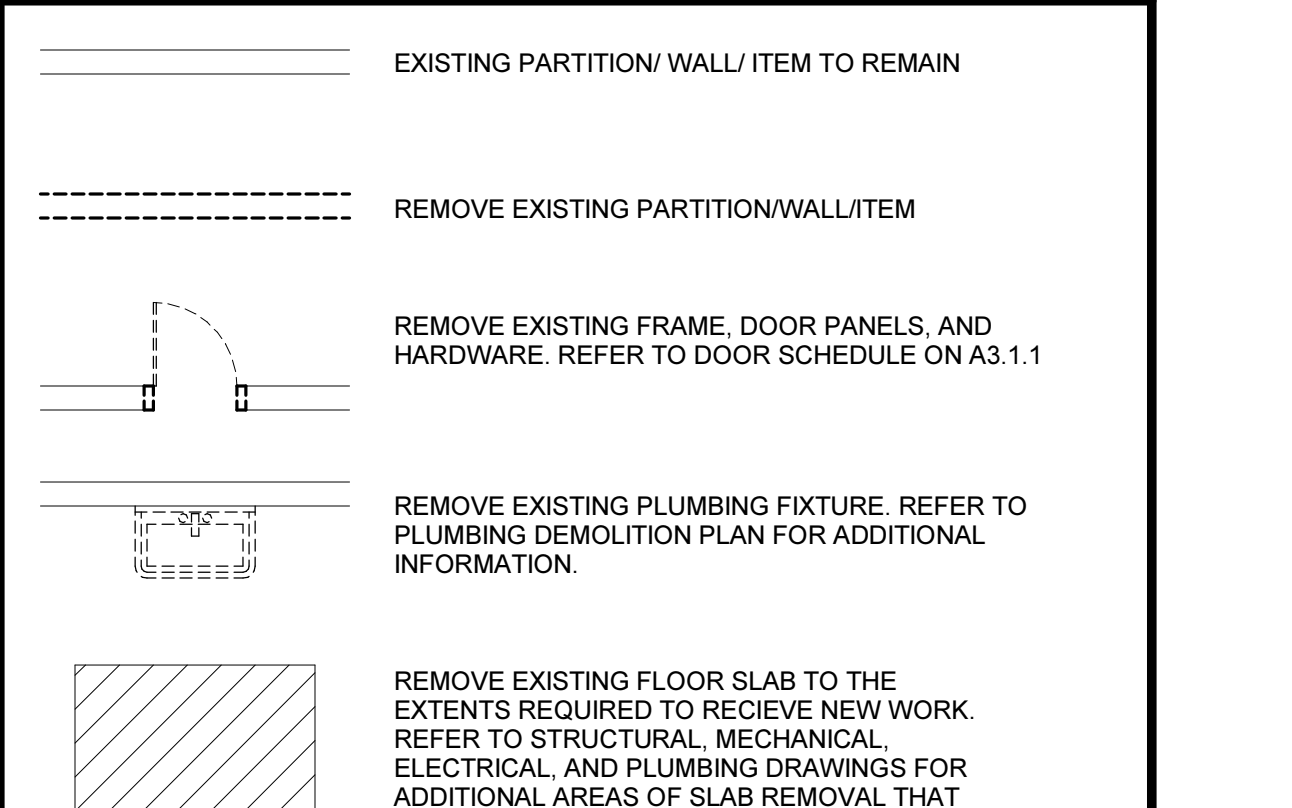
DEMOLITION PLAN GENERAL NOTES

- A. PLAN DIMENSIONS ARE TO FACE OF WALL OR CENTERLINE OF STRUCTURAL FRAMING, UNLESS NOTED OTHERWISE. ALL DIMENSIONS SHOWN FOR EXISTING CONSTRUCTION ARE APPROXIMATE; FIELD VERIFY ALL DIMENSIONS.
- B. DEMOLITION WORK NOTED ON THESE DRAWINGS INVOLVES THE REMOVAL OF EXISTING RENOVATION FLOOR PLANS AND DETAILS. REMOVE EXISTING CONSTRUCTION AS INDICATED FOR FINISH CONSTRUCTION AND NEW WORK TO CONFORM TO CONTRACT DOCUMENTS.
- C. REPRESENTATIONS OF EXISTING ITEMS REQUIRING REMOVAL ARE TO BE CONSIDERED GENERAL IN NATURE BASED UPON INFORMATION PROVIDED IN RECORD DRAWINGS AND FIELD OBSERVATIONS. THIS DEMOLITION PLAN AND THE DEMOLITION PLANS BY OTHER DISCIPLINES ARE NOT INTENDED TO BE COMPREHENSIVE IN ALL DETAILS OF EXISTING CONSTRUCTION THAT REQUIRE REMOVAL TO COMPLETE THE WORK OF THE CONTRACT. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY UPON NOTICE OF A DISCREPANCY BETWEEN THE DEMOLITION DRAWINGS, EXISTING CONDITIONS, AND NEW WORK INDICATED.
- D. REFER TO APPLICABLE PLUMBING, MECHANICAL, AND ELECTRICAL DEMOLITION PLANS FOR ADDITIONAL INFORMATION.
- E. ITEMS IDENTIFIED TO BE SALVAGED SHALL BE DELIVERED TO A STORAGE AREA LOCATED ON SITE DESIGNATED BY THE OWNER FOR THIS PURPOSE. ITEMS OWNER CHOOSES TO RETAIN SHALL BE RELOCATED FROM THE STORAGE AREA BY OWNER. ALL OTHER ITEMS SHALL BE SUBSEQUENTLY REMOVED & DISPOSED OF BY THE CONTRACTOR.
- F. WHERE REMOVAL OF EXISTING CMU WALLS (IN PART OR IN FULL) OCCURS, REMOVE BLOCK 4" MINIMUM BELOW FLOOR SLAB WHEN EXISTING WALL CONTINUES THROUGH THE SLAB AND REPLACE CONCRETE SLAB. SOME NON-LOAD BEARING WALLS SIT ON MONOLITHIC POURED TERRAZZO. CAREFULLY REMOVE WALLS AS TO NOT DAMAGE TERRAZZO FLOORING AT THESE LOCATIONS.
- G. NOT ALL ITEMS TO BE REMOVED ARE NUMBERED WITH KEYNOTES. REFER TO DEMOLITION LEGEND AND THESE GENERAL NOTES AND SPECIFICATION SECTION 024119 "SELECTIVE DEMOLITION".
- H. REFER TO DIVISION 1 AND 2 SPECIFICATIONS FOR ADDITIONAL INFORMATION ON DEMOLITION WORK. COORDINATE DEMOLITION WORK WITH OTHER TRADES.
- I. PROTECT ALL WORK THAT IS INDICATED TO REMAIN DURING THE DEMOLITION PROCESS. PROMPTLY REPAIR ANY DAMAGE TO PRE-DEMOLITION CONDITIONS.
- J. WHERE DEMOLITION WORK EXPOSES SURFACES SCHEDULED TO RECEIVE NEW FINISH, THE EXPOSED SURFACE SHALL BE PREPARED AS REQUIRED BY SPECIFICATIONS AND MANUFACTURER FOR ACCEPTABLE INSTALLATION OF THE WORK.
- K. EXISTING CONSTRUCTION SHALL BE SHORED AND BRACED AS REQUIRED DURING DEMOLITION AND CONSTRUCTION.
- L. COORDINATE IN THE FIELD WITH OWNER/ARCHITECT ALL EXISTING ITEMS TO BE SALVAGED PRIOR TO STARTING DEMOLITION. SALVAGED ITEMS SHALL BE STORED AS DIRECTED BY OWNER.
- M. KEYED DEMOLITION NOTES USED WITHOUT LEADERS ARE INTENDED TO APPLY TO THE ENTIRE SPACE/ROOM UNLESS NOTED OTHERWISE.
- N. DEMO ENOUGH OF EXISTING PARTITIONS TO ALLOW TOOTHING IN OF MASONRY TO MATCH EXISTING ADJACENT SURFACE UNLESS NOTED OTHERWISE.
- O. ALL EXPOSED SURFACES AFFECTED BY THE DEMOLITION WORK SHALL BE PATCHED TO MATCH EXISTING COURSING AND PATTERN AT NEW FRAME LOCATIONS.
- P. EXISTING MATERIALS AND ITEMS NOT USED AS PART OF NEW CONSTRUCTION, INCLUDING BUT NOT LIMITED TO PIPING, DUCTS, CONDUITS, HANGERS, DRAINS, AND JUNCTION BOXES SHALL BE REMOVED AND NOT ABANDONED IN PLACE UNLESS REMOVAL IS NOT POSSIBLE (AS DETERMINED BY THE ARCHITECT/OWNER).
- Q. PATCH, REPAIR, OR FILL ALL EXISTING INTERIOR WALL LOCATIONS WHERE EXISTING DUCTWORK OR PIPING HAS BEEN REMOVED WITH SAME CONSTRUCTION TYPE AS EXISTING WALL.

DEMOLITION PLAN GENERAL NOTES

- R. UNLESS NOTED OTHERWISE, ALL INTERIOR CMU PARTITIONS INDICATED TO BE DEMOLISHED IN THEIR ENTIRETY SHALL BE DONE SO PER REQUIREMENTS OF THE HAZARDOUS MATERIALS SPECIFICATIONS.
- S. COORDINATE WITH ARCHITECT PRIOR TO DEMOLITION THE DESIGN INTENT FOR SLAB CUTTING AND PATCHING. REFER TO DEMOLITION, ARCHITECTURAL, AND FINISH FLOOR PLANS FOR AREAS WHERE SPECIFIC LOCATIONS AND DIMENSIONS ARE INDICATED.
- T. WINDOW ROLLER SHADES ARE EXISTING TO REMAIN, UNLESS NOTED OTHERWISE.

DEMOLITION PLAN LEGEND



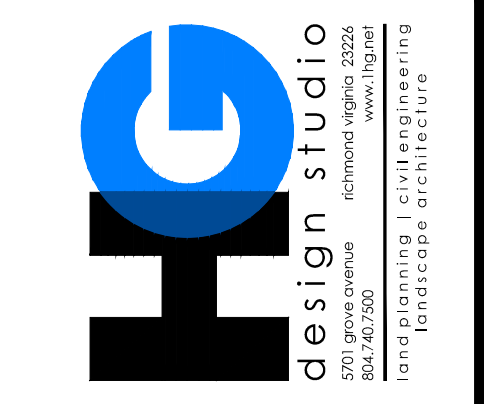
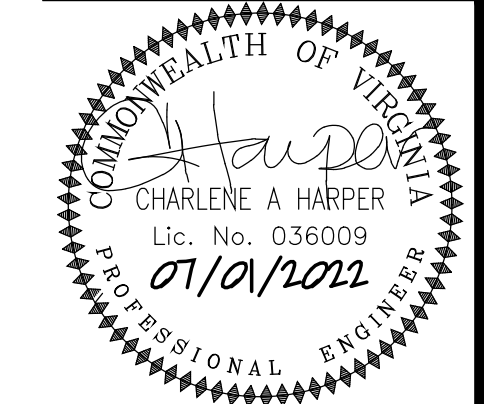
DEMOLITION PLAN KEYNOTES

- REPRESENTED BY [Symbol]
 APPLIES TO DRAWINGS A1.2.1 - A1.2.2
- 1 REMOVE DOOR AND ASSOCIATED HARDWARE. EXISTING DOOR FRAME TO REMAIN. CUT AND PATCH FRAME TO RECEIVE NEW HARDWARE.
 - 2 REMOVE ALL PLUMBING FIXTURES AND ALL TOILET AND SINK ACCESSORIES. (REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION)
 - 3 REMOVE ALL TACKBOARDS, TACKSTRIPS, MARKERBOARDS, CHALKBOARDS, WOOD TRIM, TYP. PATCH AND REPAIR EXISTING WALL TO RECEIVE NEW WORK.
 - 4 REMOVE ALL BASE AND WALL CABINETS, AND REMOVE ALL COUNTERTOPS, INCLUDING ALL ACCESSORIES, ROUGH-INS, BUILT-IN FIXTURES, AND BUILT-IN ELECTRICAL CONNECTIONS.
 - 5 REMOVE WALL TILE AT LOCATIONS WHERE EXISTING CMU WALLS ARE TO REMAIN. REMOVE ALL ASSOCIATED MORTAR, TILE, AND BACKING MESH. CLEAN AND PREPARE EXISTING CMU WALL TO RECEIVE NEW WORK. REFER TO FINISH SCHEDULE.
 - 6 REMOVE ALL BUILT-IN SHELVING, INCLUDING ALL ACCESSORIES AND HARDWARE.
 - 7 SALVAGE EXISTING FILING CABINETS AND STORE IN OWNER PROVIDED LOCATION ON SITE.
 - 8 SALVAGE EXISTING DISPLAY CASES AND STORE IN OWNER PROVIDED LOCATION ON SITE.
 - 9 REMOVE EXISTING DISPLAY CASES TO EXTENT INDICATED.
 - 10 REMOVE HANDRAILS AND ASSOCIATED HARDWARE AS REQUIRED FOR THE INSTALLATION OF NEW WORK. STAIRS TO REMAIN.
 - 11 SALVAGE EXISTING KILN AND STORE IN OWNER PROVIDED LOCATION. REMOVE ASSOCIATED DUCT WORK.
 - 12 EXISTING DATA RACK AND ASSOCIATED CABLES/ACCESSORIES TO REMAIN.
 - 13 REMOVE ALL CEILINGS, CEILING TILE, GRID, HANGERS, AND LIGHTING AND PREPARE TO RECEIVE NEW WORK.
 - 14 CEILINGS BEYOND DEMARCATION LINE TO REMAIN.
 - 15 SALVAGE EXISTING PLAQUE AND STORE IN OWNER PROVIDED LOCATION ON SITE.
 - 16 SALVAGE EXISTING WALL MOUNTED DISPLAY BOARDS AND STORE IN OWNER PROVIDED LOCATION.
 - 17 DEMOLISH GLAZED WALL TILE AT AREAS INDICATED, AND TO EXTENT REQUIRED TO COMPLETE NEW WORK.
 - 18 SALVAGE EXISTING BRICK VENEER TO EXTENT REQUIRED TO COMPLETE NEW WORK.
 - 19 REMOVE EXISTING CONCRETE CURB/PAD/BASE TO EXTENT REQUIRED TO COMPLETE NEW WORK. PREPARE SLAB TO RECEIVE SCHEDULED FLOOR FINISH.

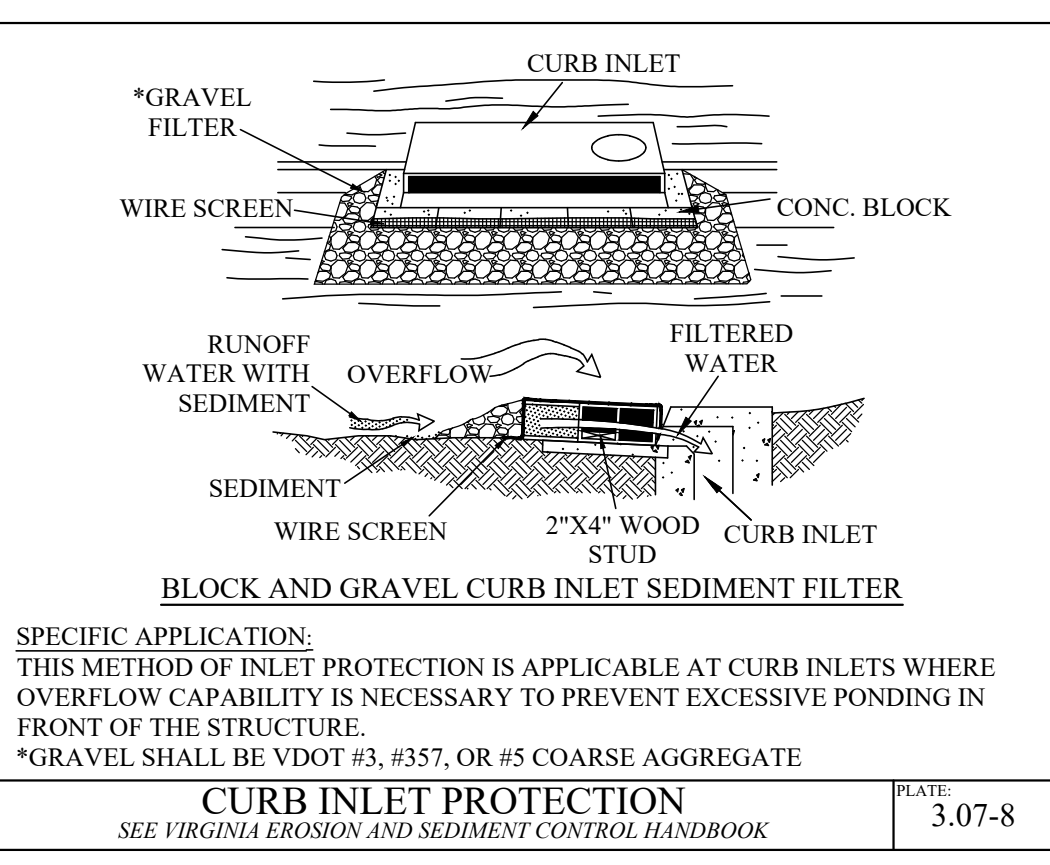
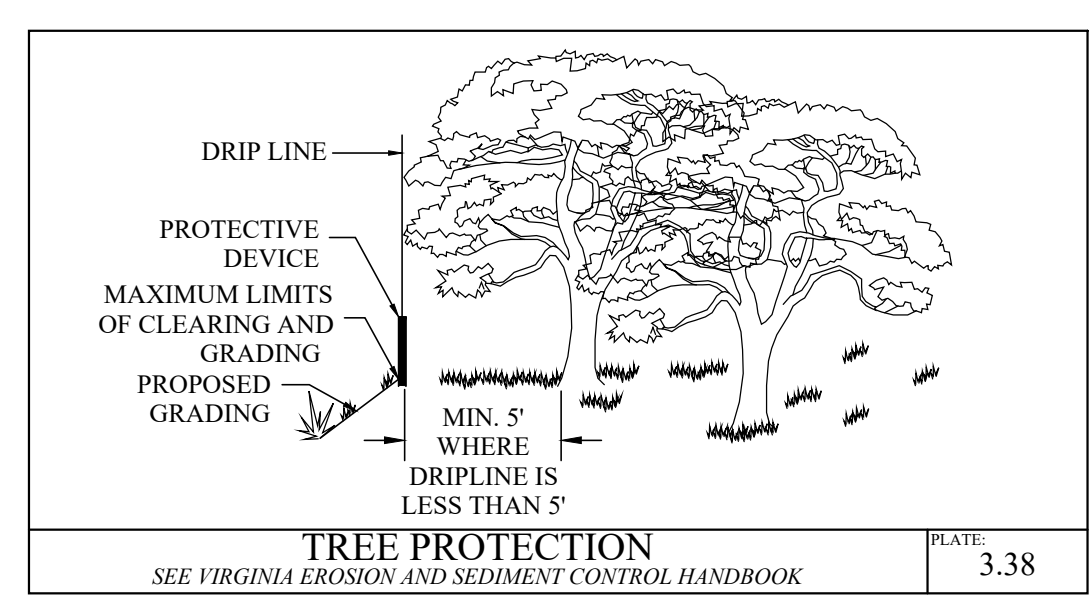
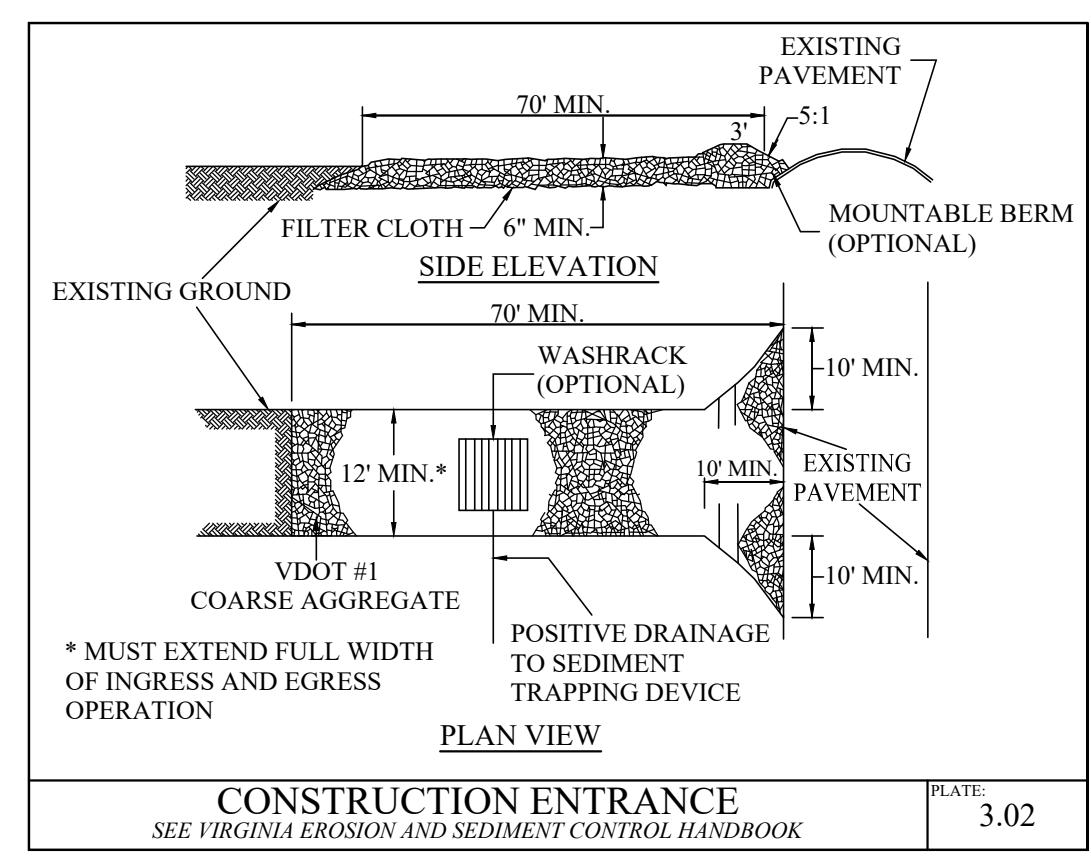
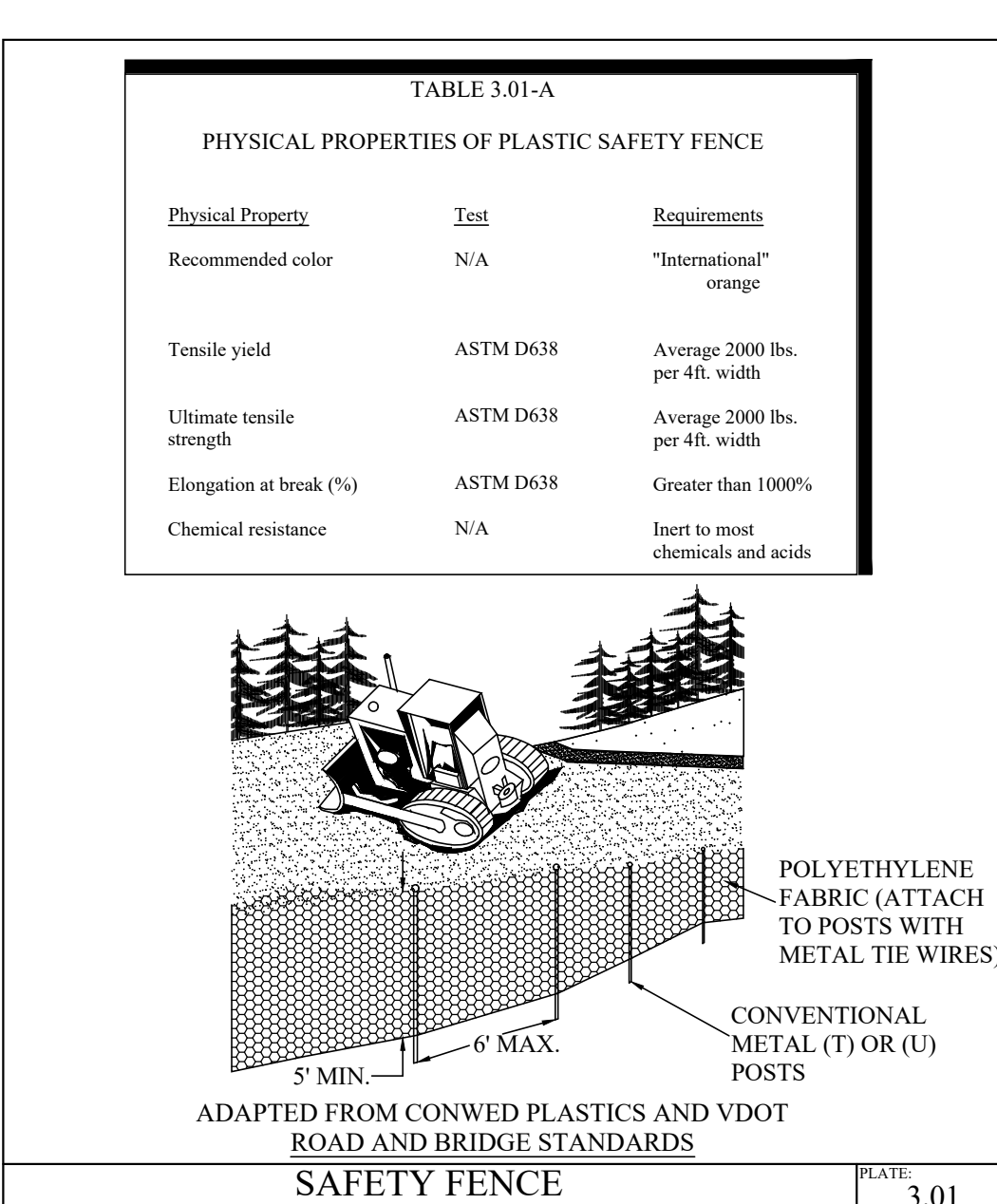
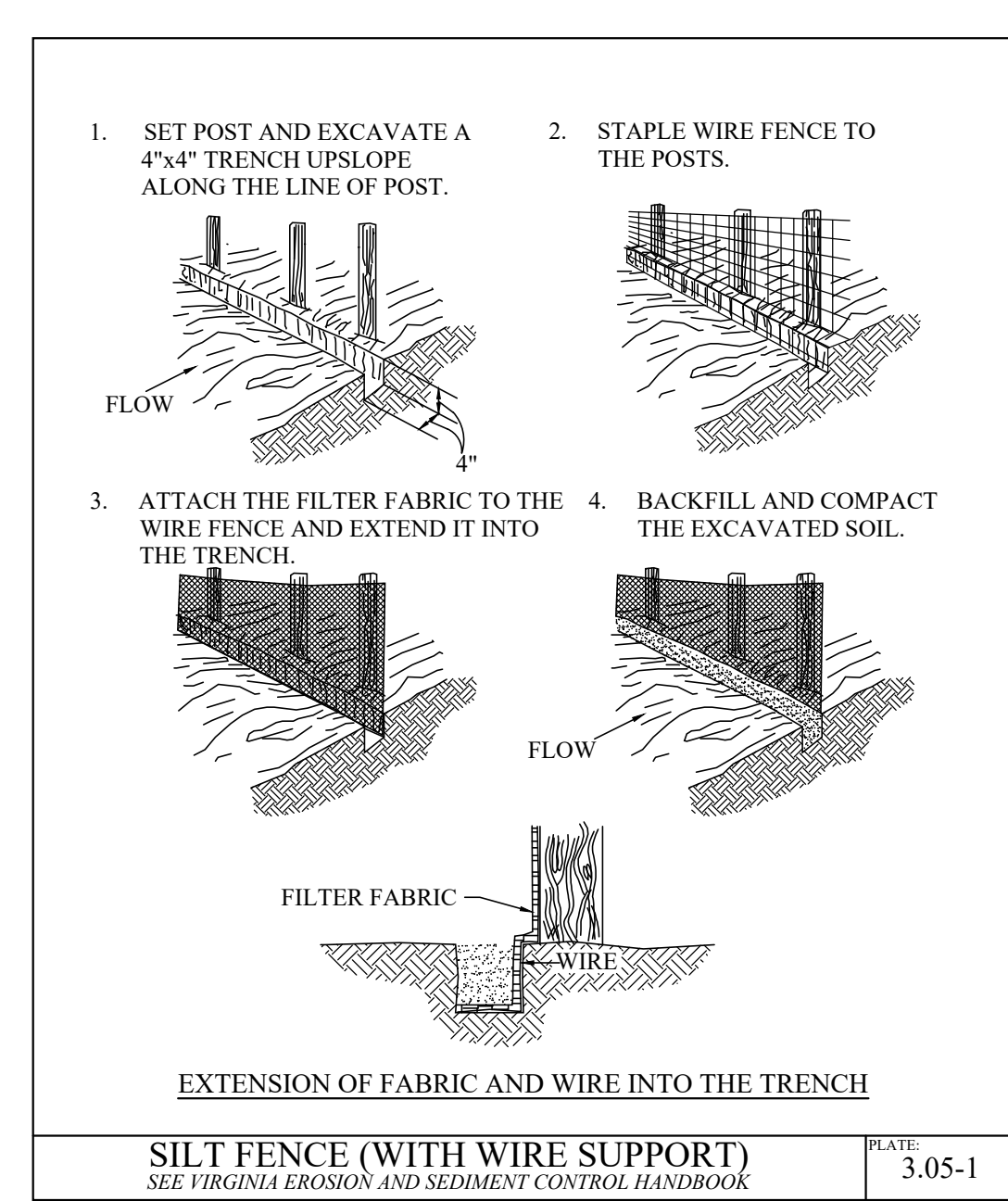
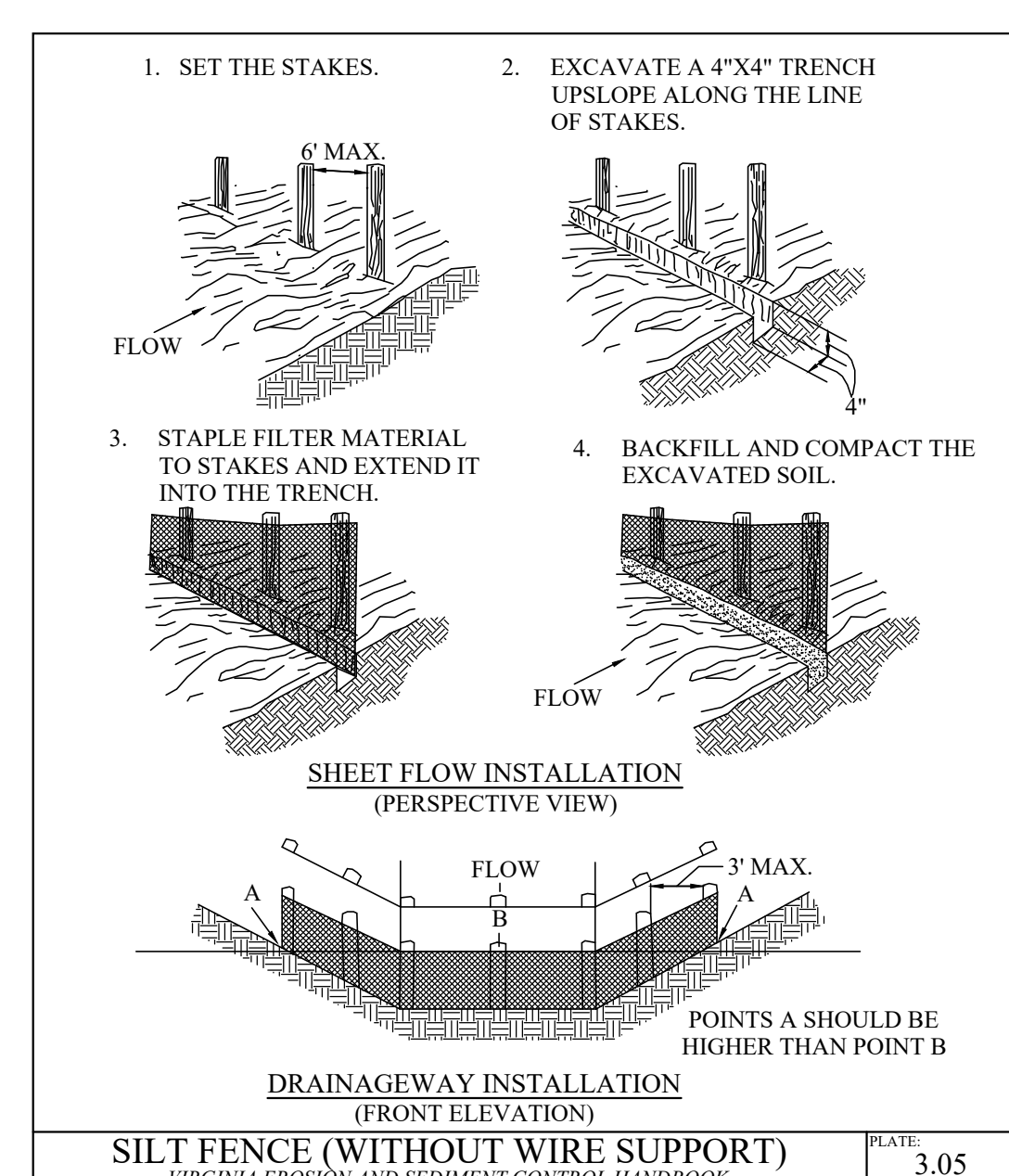
DEMOLITION PLAN KEYNOTES

- REPRESENTED BY [Symbol]
 APPLIES TO DRAWINGS A1.2.1 - A1.2.2
- 20 SALVAGE EXISTING BOOKSHELVES AS INDICATED AND DELIVER TO OWNER.
 - 21 SALVAGE WATER FOUNTAIN AND DELIVER TO OWNER.
 - 22 REMOVE GLASS WALL ASSEMBLY INCLUDING GLASS, FRAME, TRANSOM PANELS, RAILS, AND ALL ASSOCIATED HARDWARE AND SEALANTS.
 - 23 REMOVE ALL EXISTING APPLIED FLOOR FINISHES INCLUDING, VCT, CARPET, TILE, AND ALL WALL BASE MATERIALS. PREPARE EXISTING TERRAZZO FOR INSTALLATION OF NEW WORK (WHERE OCCURS) REFER TO THE FINISH SCHEDULE ON A3.0.1.
 - 24 REMOVE LOCKSET, DOOR HANDLE, AND DOOR CLOSER.
 - 25 REMOVE WALL BASE IN ITS ENTIRETY AND PREP TO RECEIVE FUTURE FINISHES. REFER TO FINISH SCHEDULE.
 - 26 REMOVE EXISTING LOCKERS AND ASSOCIATED TRIM/ANCHORS. PATCH WALL TO RECEIVE NEW WORK. CONCRETE BASE TO REMAIN UNLESS NOTED OTHERWISE.
 - 27 STRIP BLOCK FILLER PAINT, BOTH SIDES, AS REQUIRED PER HAZARDOUS MATERIALS SPECIFICATIONS PRIOR TO REMOVAL OF PORTION OF WALL.
 - 29 REMOVE ACOUSTICAL WALL COVERING MATERIAL AS REQUIRED PER HAZARDOUS MATERIALS SPECIFICATION.
 - 30 EXISTING GLAZED WALL TILE TO REMAIN AND SHALL BE FURRED OUT. REFER TO AD 2.
 - 31 INTENT IS FOR CASEWORK BASE CABINETS TO COVER SLAB PATCHING LOCATION ON SITE.
 - 32 ALIGN DOOR OPENING WITH EXISTING PUNCHED WINDOW OPENING. COORDINATE WITH EQUIPMENT IN CONTROL ROOM TO ALLOW FULL DOOR SWING CLEARANCE.
 - 33 PARTIAL WALL DEMOLITION REQUIRED FOR PLUMBING WORK SHALL OCCUR ON THIS SIDE. OPPOSITE SIDE OF WALL AND ASSOCIATED WALL FINISH SHALL REMAIN UNDISTURBED.
 - 34 REMOVE EXTERIOR CONCRETE RAMP AND HANDRAILS.
 - 35 SALVAGE EXISTING TV MONITOR AND STORE IN OWNER PROVIDED LOCATION ON SITE.
 - 36 SALVAGE EXISTING SURFACE MOUNTED, BATTERY POWERED MOTORIZED ROLLER SHADES. REFER TO A3.1.1 FOR REINSTALLATION LOCATIONS.

1 DEMOLITION FIRST FLOOR PLAN - PART A
 A5.1.1 A1.2.1 1/8" = 1'-0"



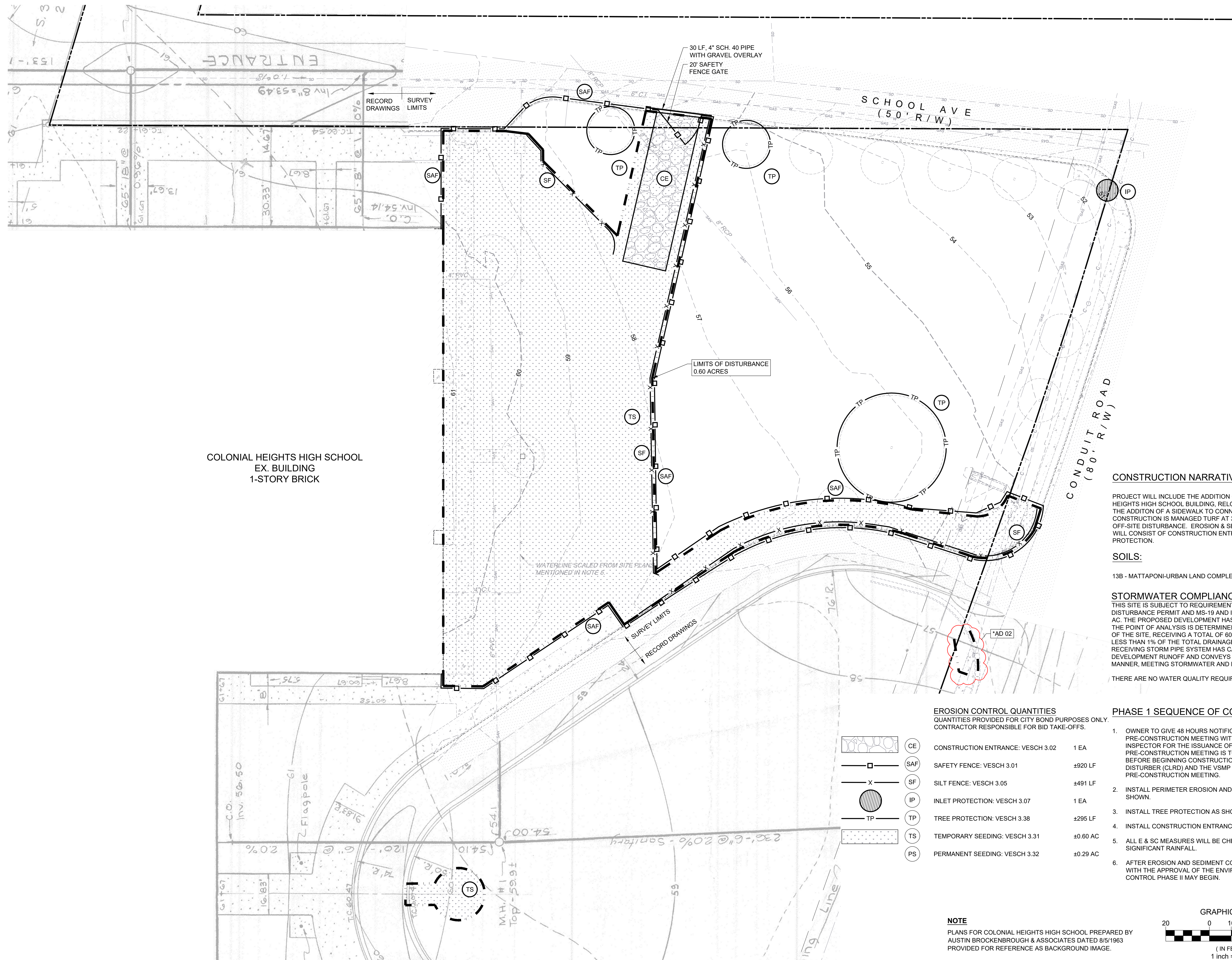
PROJECT NO:	611565
DATE:	July 1, 2022
REVISIONS	
DATE	DESCRIPTION
07/29/22	*AD 02



OUTFALL ADEQUACY									
In accordance with Minimum Standard 19 of the Erosion and Sediment Control Regulations, adequacy of off-site receiving channels or pipes must be verified by addressing one of the following Adequacy Situations:									
A. The drainage area from the project at the discharge point is less than or equal to one percent of the total drainage area at the discharge point and the 10-year storm is contained within the channel banks (Project Drainage Area and Total Drainage Area are required).									
OR									
B. Natural channels must be analyzed to demonstrate that the 2-year storm will not cause erosion of the channel bed or banks ($Q_{capacity}$, Q_2 , $V_{allowable}$, and V_2 are required).									
OR									
C. Man-made channels must be analyzed to demonstrate that (1) the 10-year storm will not overtop the channel banks and (2) the 2-year storm will not cause erosion of the channel bed or banks ($Q_{capacity}$, Q_2 , Q_{10} , $V_{allowable}$, and V_2 are required).									
OR									
D. Pipes and storm sewer systems must be analyzed to demonstrate that the ten-year storm will be contained within the system ($Q_{capacity}$, Q_{10} , and hydraulic grade line calculations are required).									
OR									
E. Runoff is discharged through an energy dissipator at the limits of the 100-year floodplain, RPA buffer or SPA buffer.									
*AD 02									
Discharge Point	Adequacy Situation	Project Drainage Area	Total Drainage Area	Q_2	V_2	Q_{10}	$V_{allowable}$	$Q_{capacity}$	Cross Section, Profile and Calculations Shown on Sheet(s)
EX #4	A	2.21	60.61	19.34	7.78	10.69	10.06	62.19	CR 00

Discharge Point = unique identifier for the discharge point
 Adequacy Situation = either A, B, C, D, or E as described above
 Project Drainage Area = drainage area of the project that drains to the discharge point (ac.)
 Total Drainage Area = total drainage area to the discharge point in (ac.)
 $Q_{capacity}$ = carrying capacity of the channel or pipe in cfs
 Q_2 = peak discharge at the discharge point for the 2-year storms (cfs)
 Q_{10} = peak discharge at the discharge point for the 10-year storms (cfs)
 $V_{allowable}$ = max. velocity the channel lining can withstand without eroding (fps)
 V_2 = velocity at the discharge point for the 2-year storm (fps)

Generally, scaled channel cross-sections must be provided every fifty (50) feet and at the most constricted locations of all outfall channels for a minimum of 150 feet of profile.



COLONIAL HEIGHTS HIGH SCHOOL
EX. BUILDING
1-STORY BRICK

SCHOOL AVE
(50' R/W)

CONDUIT ROAD
(80' R/W)

30 LF. 4" SCH. 40 PIPE
WITH GRAVEL OVERLAY
20' SAFETY
FENCE GATE

LIMITS OF DISTURBANCE
0.60 ACRES

*WATERLINE SCALED FROM SITE PLAN
MENTIONED IN NOTE 6.

EROSION CONTROL QUANTITIES
QUANTITIES PROVIDED FOR CITY BOND PURPOSES ONLY.
CONTRACTOR RESPONSIBLE FOR BID TAKE-OFFS.

	CONSTRUCTION ENTRANCE: VESCH 3.02	1 EA
	SAFETY FENCE: VESCH 3.01	≈920 LF
	SILT FENCE: VESCH 3.05	≈491 LF
	INLET PROTECTION: VESCH 3.07	1 EA
	TREE PROTECTION: VESCH 3.38	≈295 LF
	TEMPORARY SEEDING: VESCH 3.31	≈0.60 AC
	PERMANENT SEEDING: VESCH 3.32	≈0.29 AC

PHASE 1 SEQUENCE OF CONSTRUCTION:

- OWNER TO GIVE 48 HOURS NOTIFICATION TO SCHEDULE AN ON-SITE PRE-CONSTRUCTION MEETING WITH THE ENGINEER AND ENVIRONMENTAL INSPECTOR FOR THE ISSUANCE OF THE LAND DISTURBANCE PERMIT. THE PRE-CONSTRUCTION MEETING IS TO BE HELD AT LEAST 72 HOURS BEFORE BEGINNING CONSTRUCTION. THE CERTIFIED RESPONSIBLE LAND DISTURBER (CLRD) AND THE VSMP QUALIFIED PERSON MUST ATTEND THE PRE-CONSTRUCTION MEETING.
- INSTALL PERIMETER EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN.
- INSTALL TREE PROTECTION AS SHOWN.
- INSTALL CONSTRUCTION ENTRANCE AS SHOWN. INSTALL SWPPP ITEMS.
- ALL E & SC MEASURES WILL BE CHECKED DAILY AND AFTER EACH SIGNIFICANT RAINFALL.
- AFTER EROSION AND SEDIMENT CONTROL MEASURES ARE IN PLACE, AND WITH THE APPROVAL OF THE ENVIRONMENTAL INSPECTOR, EROSION CONTROL PHASE II MAY BEGIN.

CONSTRUCTION NARRATIVE:

PROJECT WILL INCLUDE THE ADDITION OF 6,884 SF TO EXISTING COLONIAL HEIGHTS HIGH SCHOOL BUILDING, RELOCATION OF SEVERAL UTILITIES, AND THE ADDITION OF A SIDEWALK TO CONNECT TO CONDUIT ROAD. THE AREA OF CONSTRUCTION IS MANAGED TURF AT 3% SLOPE. THERE WILL BE NO OFF-SITE DISTURBANCE. EROSION & SEDIMENT CONTROL MEASURES USED WILL CONSIST OF CONSTRUCTION ENTRANCE, SILT FENCE, AND INLET PROTECTION.

SOILS:

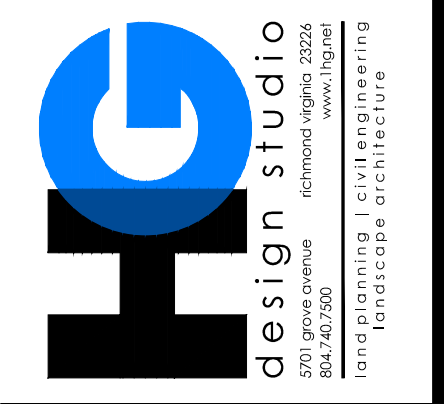
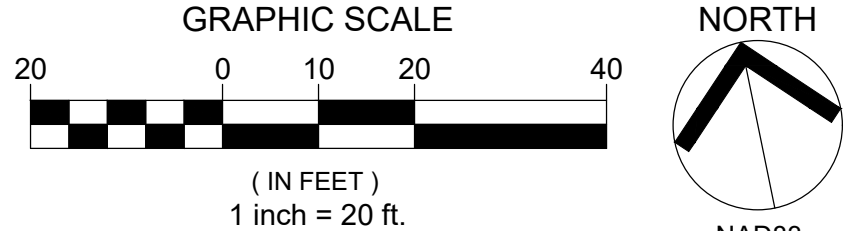
13B - MATTAPONI-URBAN LAND COMPLEX WITH 0 TO 6 PERCENT SLOPES.

STORMWATER COMPLIANCE NOTE

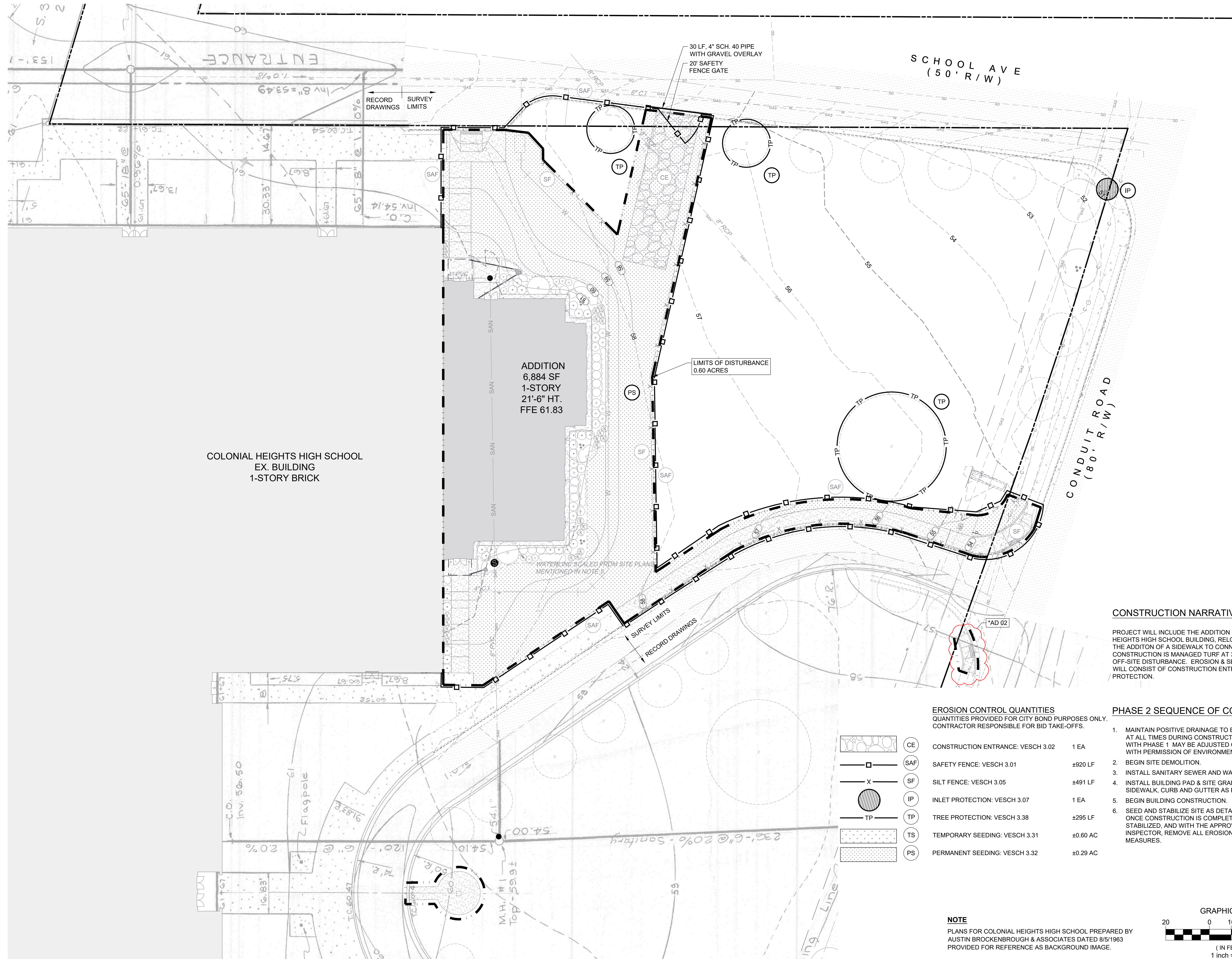
THIS SITE IS SUBJECT TO REQUIREMENTS ASSOCIATED WITH A LAND DISTURBANCE PERMIT AND MS-19 AND IS DISTURBING APPROXIMATELY 0.60 AC. THE PROPOSED DEVELOPMENT HAS NO CHESAPEAKE BAY DISTURBANCE. THE POINT OF ANALYSIS IS DETERMINED TO BE A 36" PIPE (EX4) DOWNSTREAM OF THE SITE, RECEIVING A TOTAL OF 60.61 ACRES OF DRAINAGE. THE SITE IS LESS THAN 1% OF THE TOTAL DRAINAGE TO THE POINT OF ANALYSIS. THE RECEIVING STORM PIPE SYSTEM HAS CAPACITY TO RECEIVE THE PROPOSED DEVELOPMENT RUNOFF AND CONVEYS THE RUNOFF IN A NON-EROSIVE MANNER, MEETING STORMWATER AND MS-19 REQUIREMENTS.

THERE ARE NO WATER QUALITY REQUIREMENTS FOR THIS SITE.

NOTE
PLANS FOR COLONIAL HEIGHTS HIGH SCHOOL PREPARED BY
AUSTIN BROCKENBROUGH & ASSOCIATES DATED 8/5/1993
PROVIDED FOR REFERENCE AS BACKGROUND IMAGE.



PROJECT NO:	611565
DATE:	JUN 1, 2022
REVISIONS	
DATE	DESCRIPTION
07/29/22	*AD 02



COLONIAL HEIGHTS HIGH SCHOOL
EX. BUILDING
1-STORY BRICK

ADDITION
6,884 SF
1-STORY
21'-6" HT.
FFE 61.83

SCHOOL AVE
(50' R/W)

CONDUIT ROAD
(80' R/W)

CONSTRUCTION NARRATIVE:

PROJECT WILL INCLUDE THE ADDITION OF 6,884 SF TO EXISTING COLONIAL HEIGHTS HIGH SCHOOL BUILDING, RELOCATION OF SEVERAL UTILITIES, AND THE ADDITION OF A SIDEWALK TO CONNECT TO CONDUIT ROAD. THE AREA OF CONSTRUCTION IS MANAGED TURF AT 3% SLOPE. THERE WILL BE NO OFF-SITE DISTURBANCE. EROSION & SEDIMENT CONTROL MEASURES USED WILL CONSIST OF CONSTRUCTION ENTRANCE, SILT FENCE, AND INLET PROTECTION.

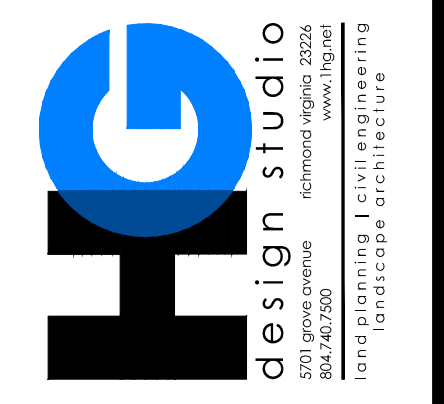
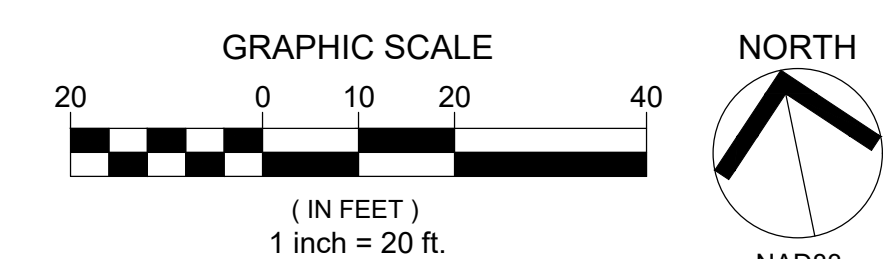
EROSION CONTROL QUANTITIES
QUANTITIES PROVIDED FOR CITY BOND PURPOSES ONLY.
CONTRACTOR RESPONSIBLE FOR BID TAKE-OFFS.

	CONSTRUCTION ENTRANCE: VESCH 3.02	1 EA
	SAFETY FENCE: VESCH 3.01	±920 LF
	SILT FENCE: VESCH 3.05	±491 LF
	INLET PROTECTION: VESCH 3.07	1 EA
	TREE PROTECTION: VESCH 3.38	±295 LF
	TEMPORARY SEEDING: VESCH 3.31	±0.60 AC
	PERMANENT SEEDING: VESCH 3.32	±0.29 AC

PHASE 2 SEQUENCE OF CONSTRUCTION:

1. MAINTAIN POSITIVE DRAINAGE TO EROSION CONTROL MEASURES AT ALL TIMES DURING CONSTRUCTION. CONTROLS INSTALLED WITH PHASE 1 MAY BE ADJUSTED OR REMOVED AS NOTED AND/OR WITH PERMISSION OF ENVIRONMENTAL INSPECTOR.
2. BEGIN SITE DEMOLITION.
3. INSTALL SANITARY SEWER AND WATERLINE, AS SHOWN.
4. INSTALL BUILDING PAD & SITE GRADING AS SHOWN. INSTALL SIDEWALK, CURB AND GUTTER AS REQUIRED.
5. BEGIN BUILDING CONSTRUCTION.
6. SEED AND STABILIZE SITE AS DETAILED ON LANDSCAPE PLANS. ONCE CONSTRUCTION IS COMPLETE AND ALL AREAS ARE STABILIZED, AND WITH THE APPROVAL OF THE ENVIRONMENTAL INSPECTOR, REMOVE ALL EROSION AND SEDIMENT CONTROL MEASURES.

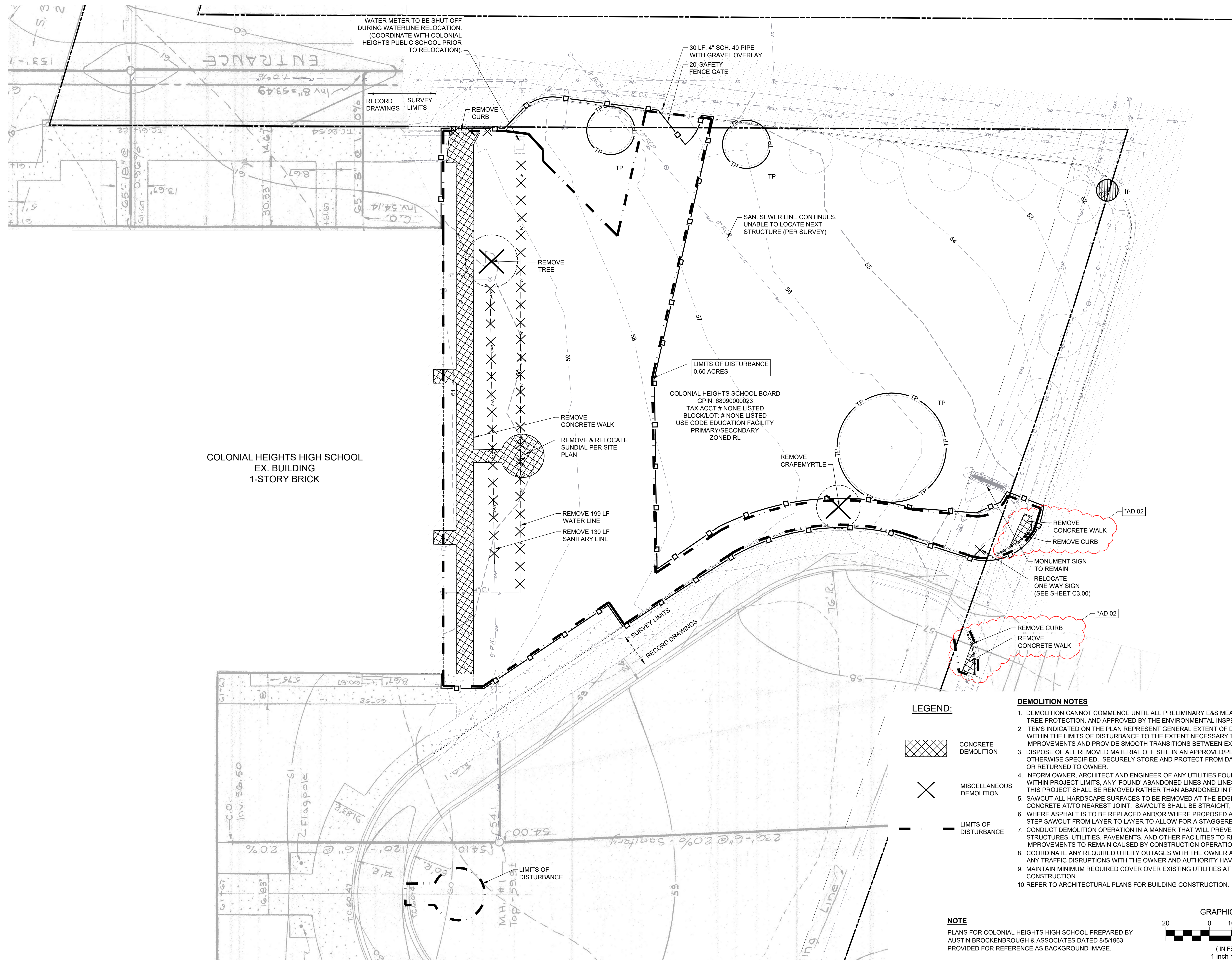
NOTE
PLANS FOR COLONIAL HEIGHTS HIGH SCHOOL PREPARED BY AUSTIN BROCKENBROUGH & ASSOCIATES DATED 8/5/1993 PROVIDED FOR REFERENCE AS BACKGROUND IMAGE.



**COLONIAL HEIGHTS HIGH SCHOOL
RENOVATION/ADDITION
COLONIAL HEIGHTS PUBLIC SCHOOLS
3600 Conduit Rd, Colonial Heights, VA 23834**

PROJECT NO:	611586
DATE:	Jun 1, 2022
REVISIONS	
DATE	DESCRIPTION
07/29/22	*AD 02

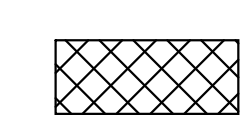


EROSION & SEDIMENT CONTROL PLAN PH 2



COLONIAL HEIGHTS HIGH SCHOOL
EX. BUILDING
1-STORY BRICK

COLONIAL HEIGHTS SCHOOL BOARD
GPIN: 6809000023
TAX ACCT # NONE LISTED
BLOCKLOT # NONE LISTED
USE CODE EDUCATION FACILITY
PRIMARY/SECONDARY
ZONED RL

LEGEND:

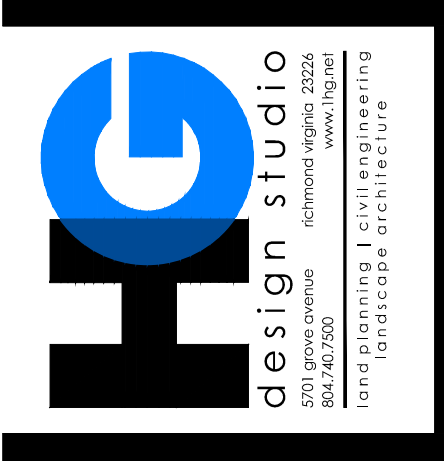
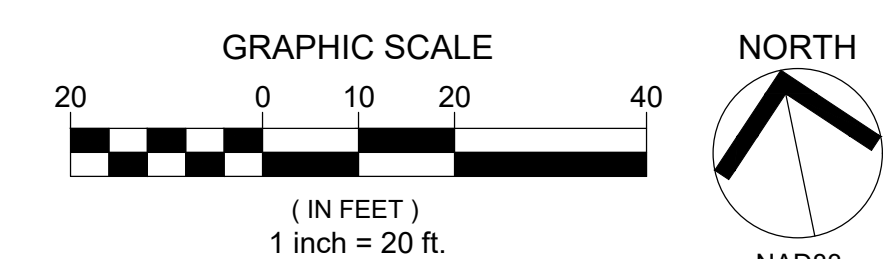
-  CONCRETE DEMOLITION
-  MISCELLANEOUS DEMOLITION
-  LIMITS OF DISTURBANCE

NOTE

PLANS FOR COLONIAL HEIGHTS HIGH SCHOOL PREPARED BY AUSTIN BROCKENBROUGH & ASSOCIATES DATED 8/5/1993 PROVIDED FOR REFERENCE AS BACKGROUND IMAGE.

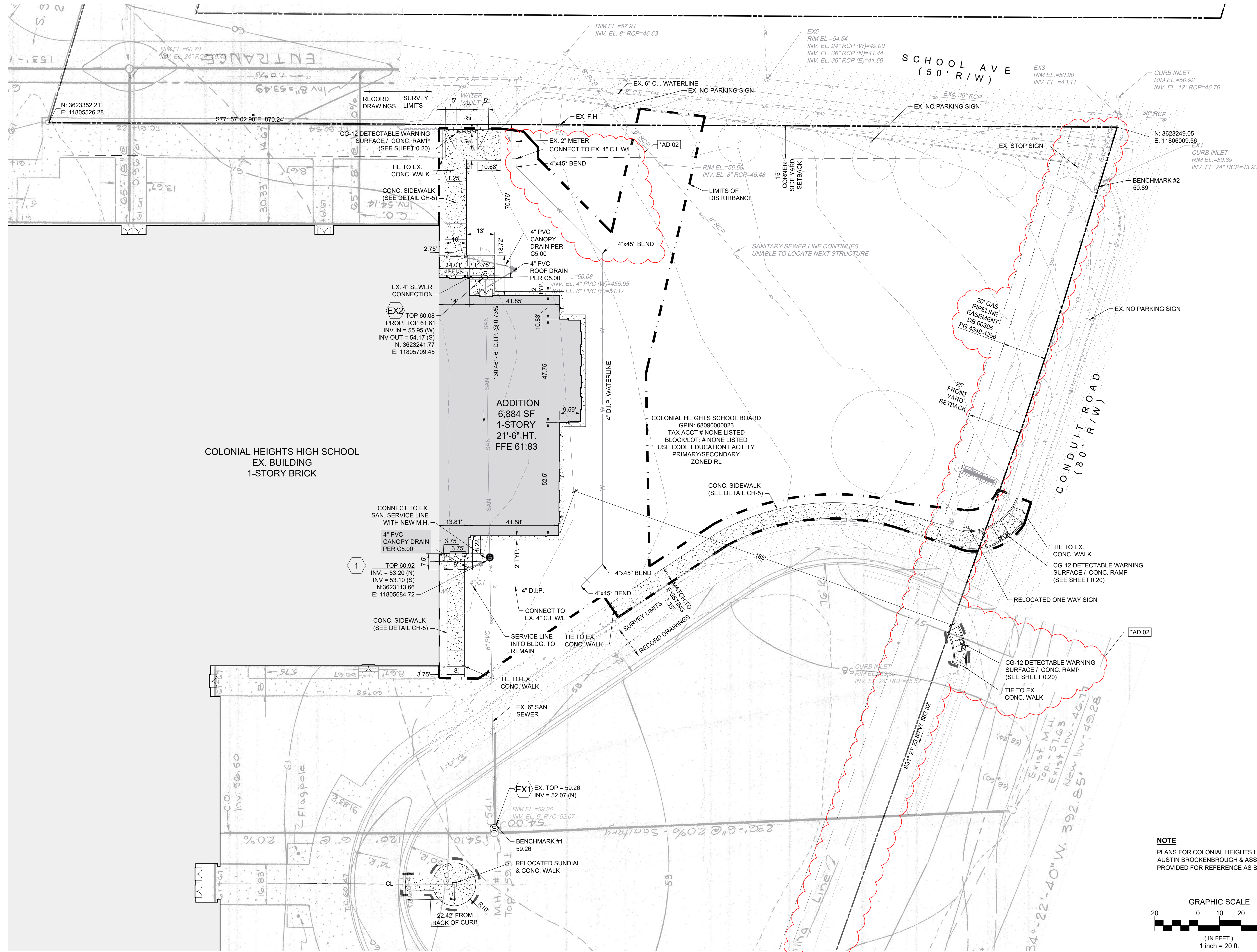
DEMOLITION NOTES

1. DEMOLITION CANNOT COMMENCE UNTIL ALL PRELIMINARY EAS MEASURES ARE IN PLACE, INCLUDING TREE PROTECTION, AND APPROVED BY THE ENVIRONMENTAL INSPECTOR.
2. ITEMS INDICATED ON THE PLAN REPRESENT GENERAL EXTENT OF DEMOLITION. DEMOLISH ALL ELEMENTS WITHIN THE LIMITS OF DISTURBANCE TO THE EXTENT NECESSARY TO ACCOMMODATE PROPOSED IMPROVEMENTS AND PROVIDE SMOOTH TRANSITIONS BETWEEN EXISTING AND PROPOSED ELEMENTS.
3. DISPOSE OF ALL REMOVED MATERIAL OFF SITE IN AN APPROVED/PERMITTED MANNER UNLESS OTHERWISE SPECIFIED. SECURELY STORE AND PROTECT FROM DAMAGE ANY ITEMS TO BE REINSTALLED OR RETURNED TO OWNER.
4. INFORM OWNER, ARCHITECT AND ENGINEER OF ANY UTILITIES FOUND UNEXPECTEDLY PRIOR TO ACTION. WITHIN PROJECT LIMITS, ANY "FOUND" ABANDONED LINES AND LINES TO BE DEMOLISHED AS PART OF THIS PROJECT SHALL BE REMOVED RATHER THAN ABANDONED IN PLACE.
5. SAWCUT ALL HARDSCAPE SURFACES TO BE REMOVED AT THE EDGES OF AREA TO BE REMOVED. SAWCUT CONCRETE AT/TO NEAREST JOINT. SAWCUTS SHALL BE STRAIGHT, SQUARE AND TRUE.
6. WHERE ASPHALT IS TO BE REPLACED AND/OR WHERE PROPOSED ASPHALT ABUTS TO EXISTING ASPHALT, STEP SAWCUT FROM LAYER TO LAYER TO ALLOW FOR A STAGGERED SEAM.
7. CONDUCT DEMOLITION OPERATION IN A MANNER THAT WILL PREVENT DAMAGE TO ADJACENT STRUCTURES, UTILITIES, PAVEMENTS, AND OTHER FACILITIES TO REMAIN. REPAIR ANY DAMAGE TO IMPROVEMENTS TO REMAIN CAUSED BY CONSTRUCTION OPERATIONS AT NO EXPENSE TO THE OWNER.
8. COORDINATE ANY REQUIRED UTILITY OUTAGES WITH THE OWNER AND UTILITY PROVIDER. COORDINATE ANY TRAFFIC DISRUPTIONS WITH THE OWNER AND AUTHORITY HAVING JURISDICTION.
9. MAINTAIN MINIMUM REQUIRED COVER OVER EXISTING UTILITIES AT ALL TIMES DURING DEMOLITION AND CONSTRUCTION.
10. REFER TO ARCHITECTURAL PLANS FOR BUILDING CONSTRUCTION.

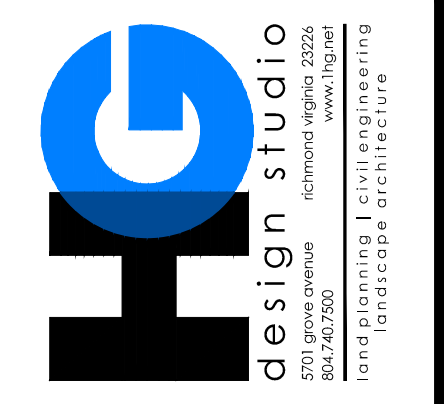
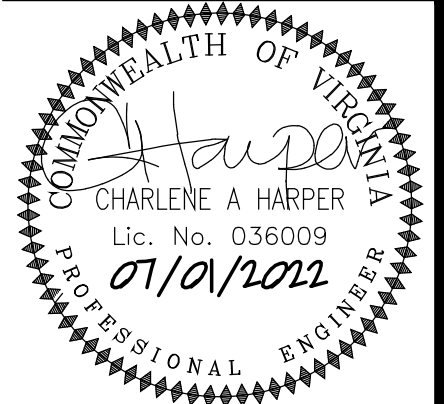
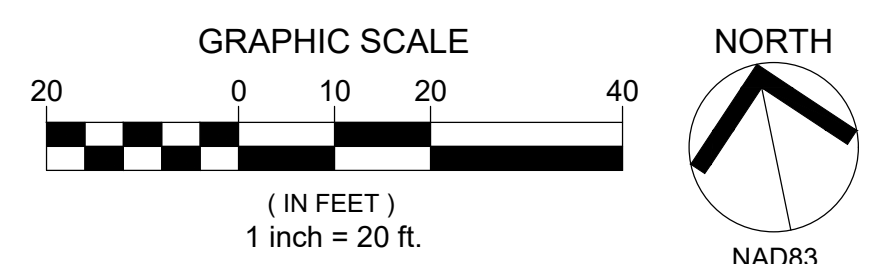


**COLONIAL HEIGHTS HIGH SCHOOL
RENOVATION/ADDITION
COLONIAL HEIGHTS PUBLIC SCHOOLS
3600 Conduit Rd, Colonial Heights, VA 23834**

PROJECT NO:	611585
DATE:	July 1, 2022
REVISIONS	
DATE	DESCRIPTION
07/29/22	*AD 02

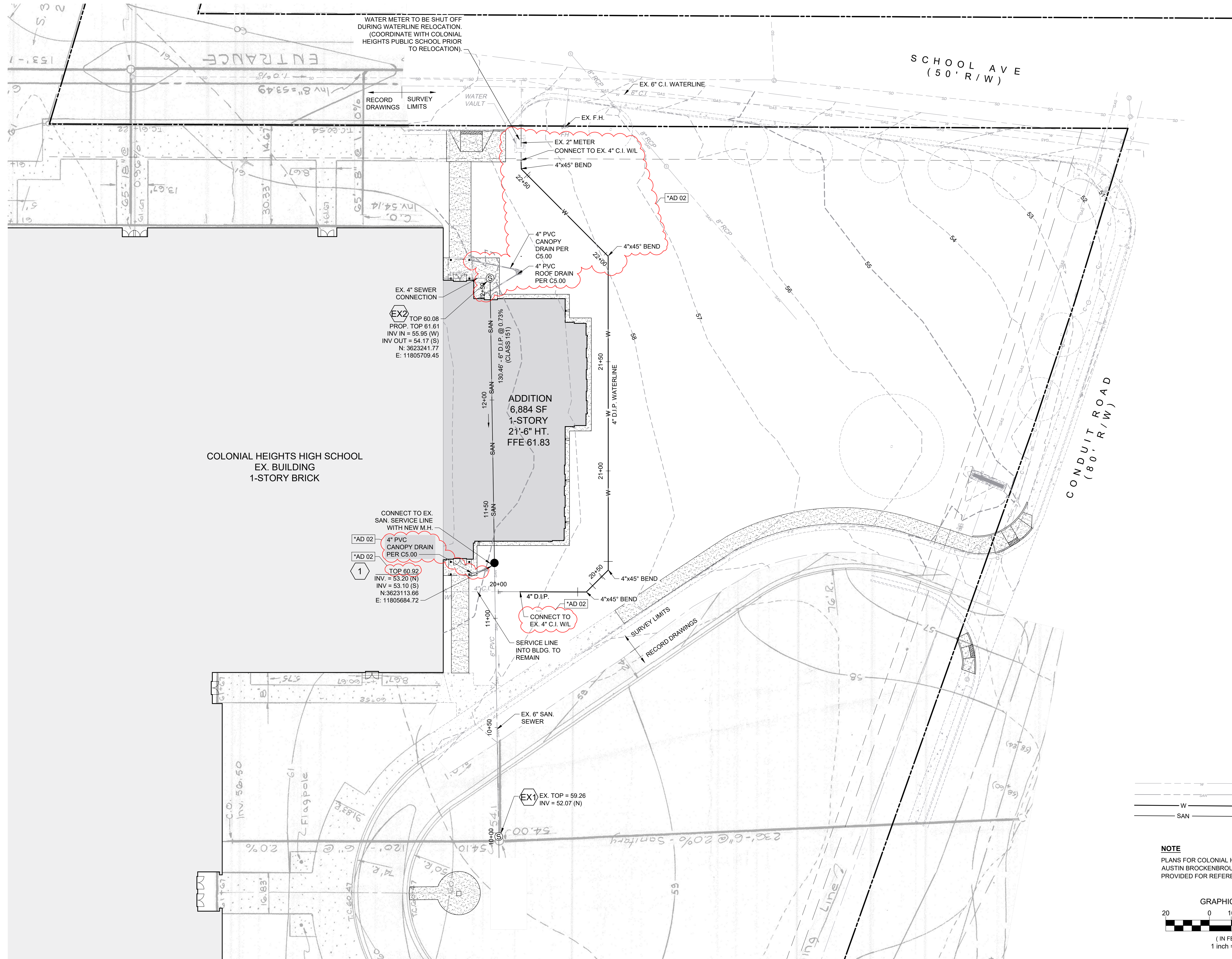


NOTE
 PLANS FOR COLONIAL HEIGHTS HIGH SCHOOL PREPARED BY
 AUSTIN BROCKENBROUGH & ASSOCIATES DATED 8/5/1993
 PROVIDED FOR REFERENCE AS BACKGROUND IMAGE.



**COLONIAL HEIGHTS HIGH SCHOOL
 RENOVATION/ADDITION
 COLONIAL HEIGHTS PUBLIC SCHOOLS
 3600 Conduit Rd, Colonial Heights, VA 23834**

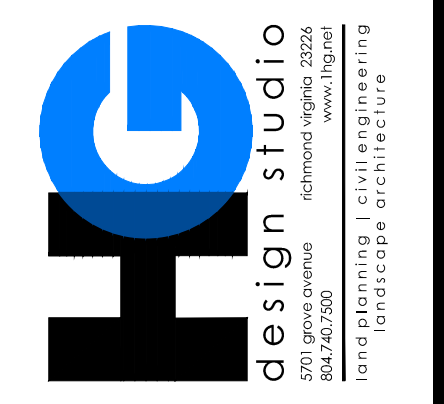
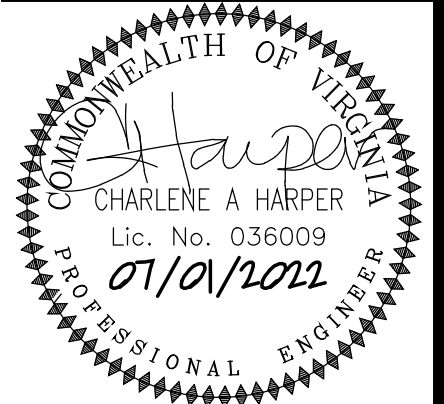
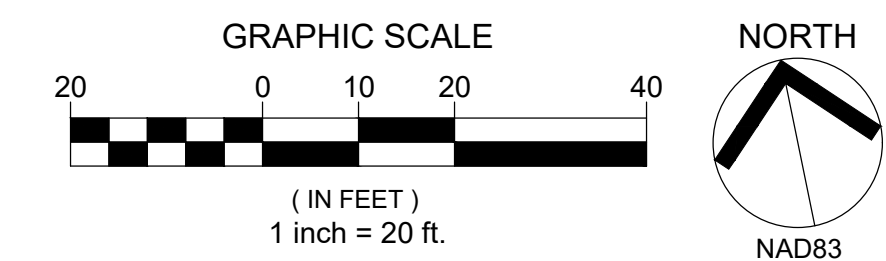
PROJECT NO:	611565
DATE:	July 1, 2022
REVISIONS	
DATE	DESCRIPTION
07/29/22	*AD 02



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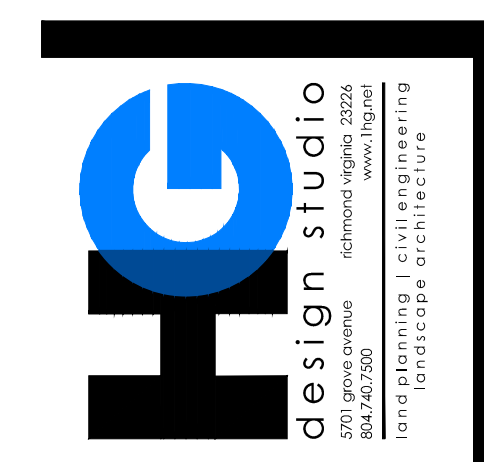
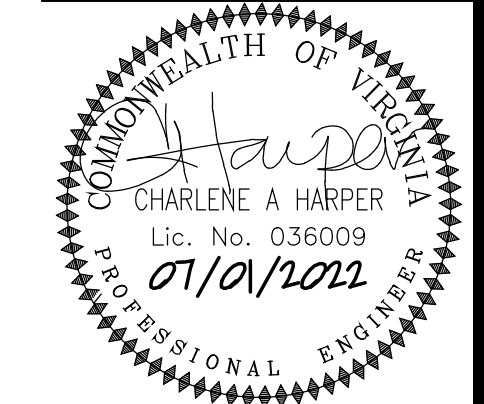
---	EX. WATER LINE
---	EX. SAN. SEWER
---	PROPOSED WATER LINE
---	PROPOSED SAN. SEWER

NOTE
 PLANS FOR COLONIAL HEIGHTS HIGH SCHOOL PREPARED BY
 AUSTIN BROCKENBROUGH & ASSOCIATES DATED 8/5/1983
 PROVIDED FOR REFERENCE AS BACKGROUND IMAGE.



**COLONIAL HEIGHTS HIGH SCHOOL
 RENOVATION/ADDITION
 COLONIAL HEIGHTS PUBLIC SCHOOLS
 3600 Conduit Rd, Colonial Heights, VA 23834**

PROJECT NO:	611565
DATE:	July 1, 2022
REVISIONS	
DATE	DESCRIPTION
07/29/22	*AD 02

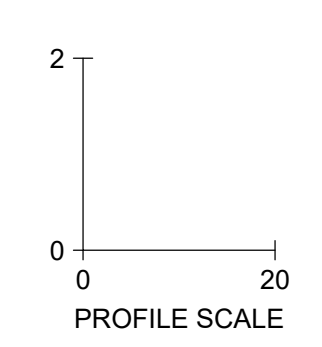
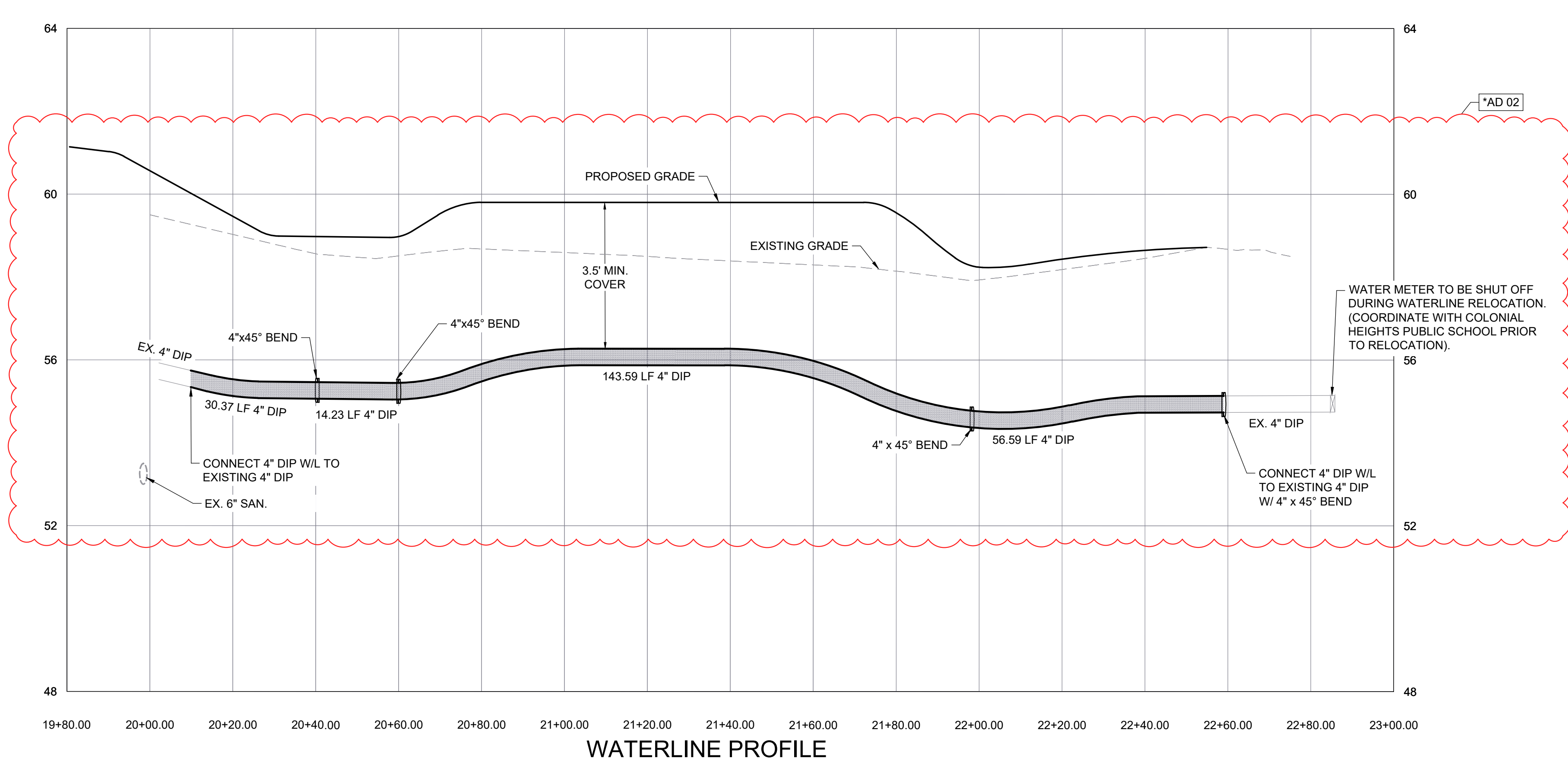
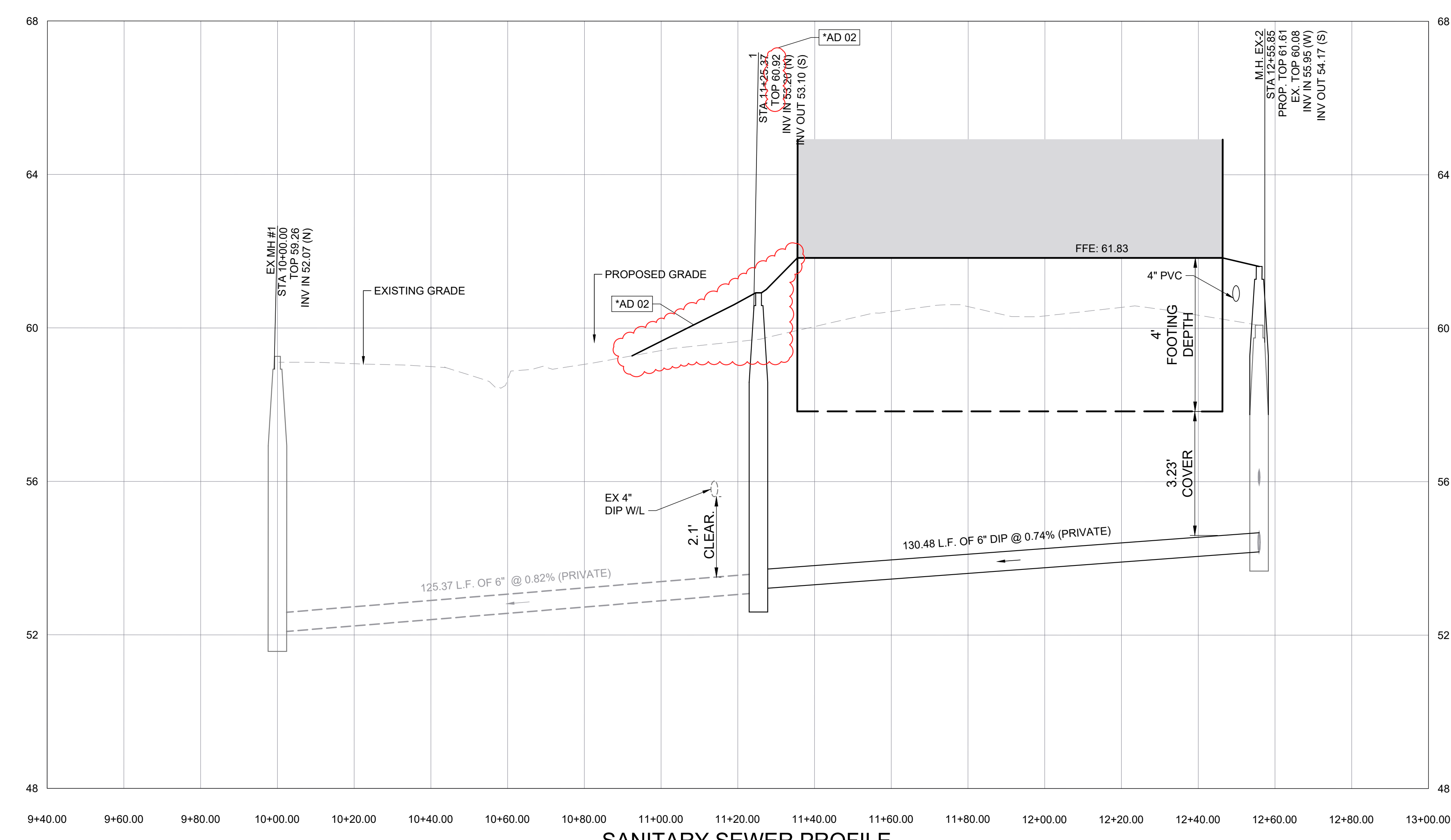


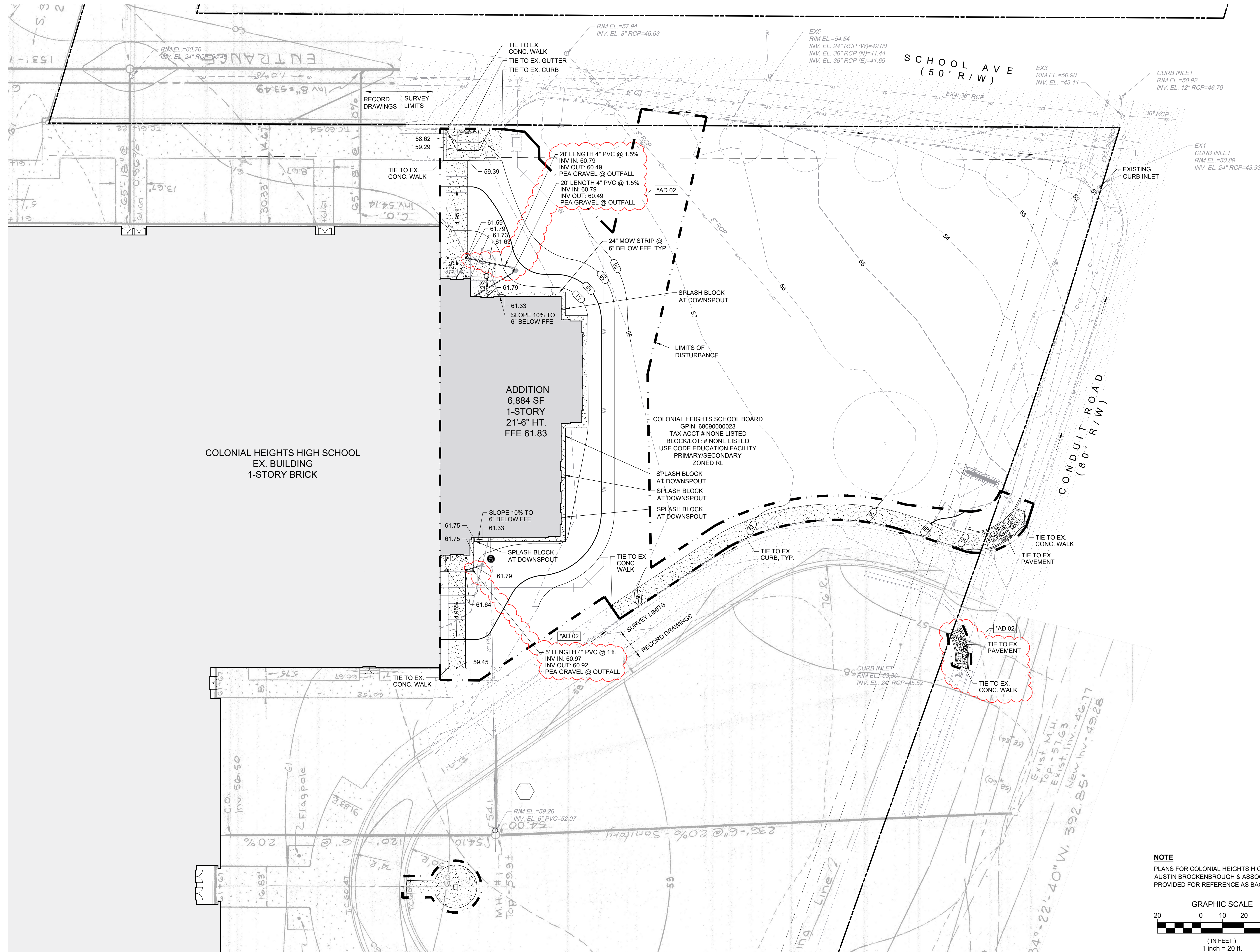
**COLONIAL HEIGHTS HIGH SCHOOL
 RENOVATION/ADDITION
 COLONIAL HEIGHTS PUBLIC SCHOOLS
 3600 Conduit Rd, Colonial Heights, VA 23834**

PROJECT NO:	611565
DATE:	July 1, 2022
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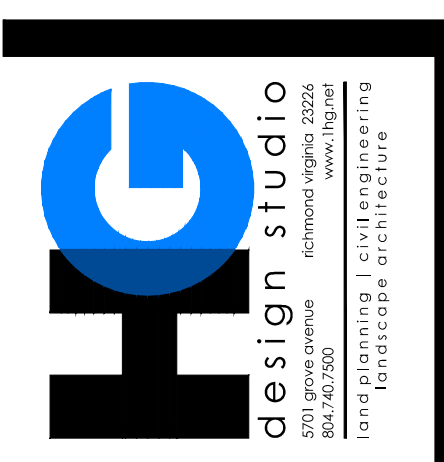
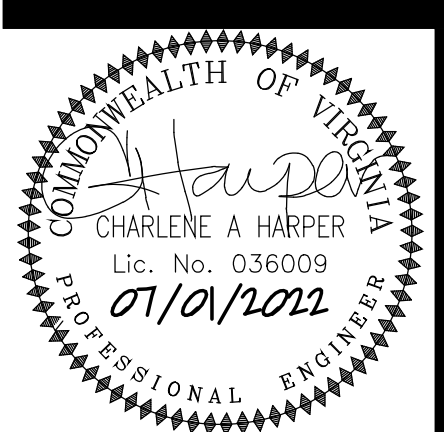
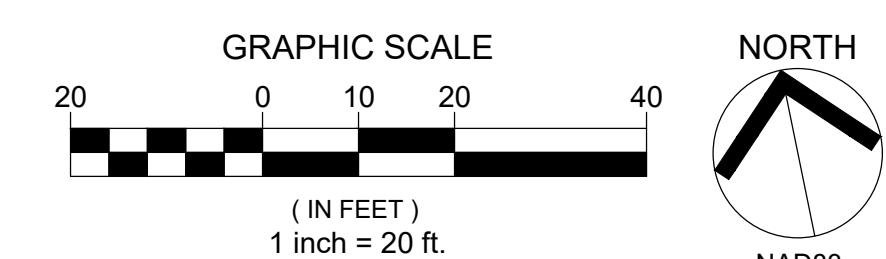
UTILITY PROFILES

C4.01



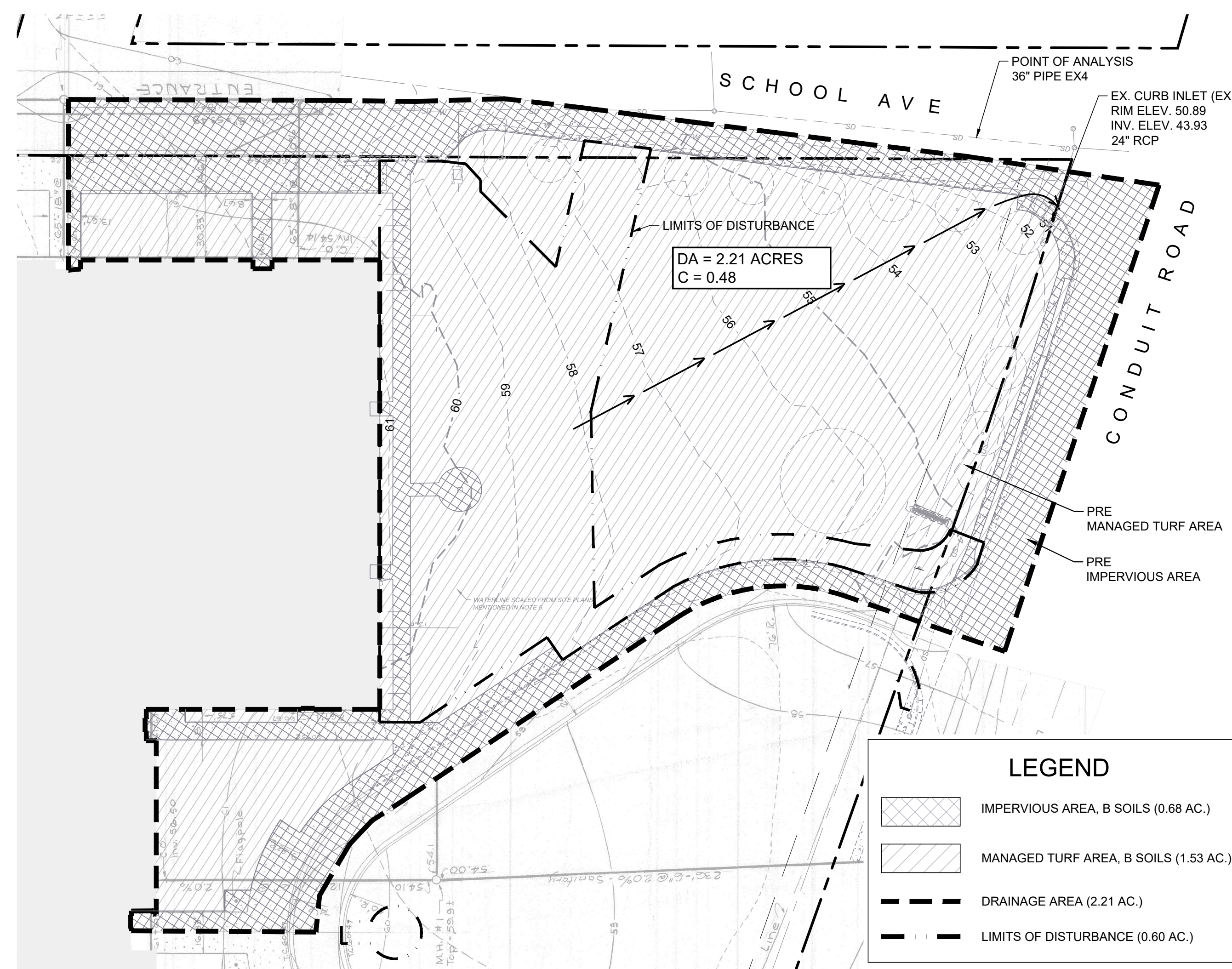


NOTE
 PLANS FOR COLONIAL HEIGHTS HIGH SCHOOL PREPARED BY
 AUSTIN BROCKENBROUGH & ASSOCIATES DATED 8/5/1963
 PROVIDED FOR REFERENCE AS BACKGROUND IMAGE.

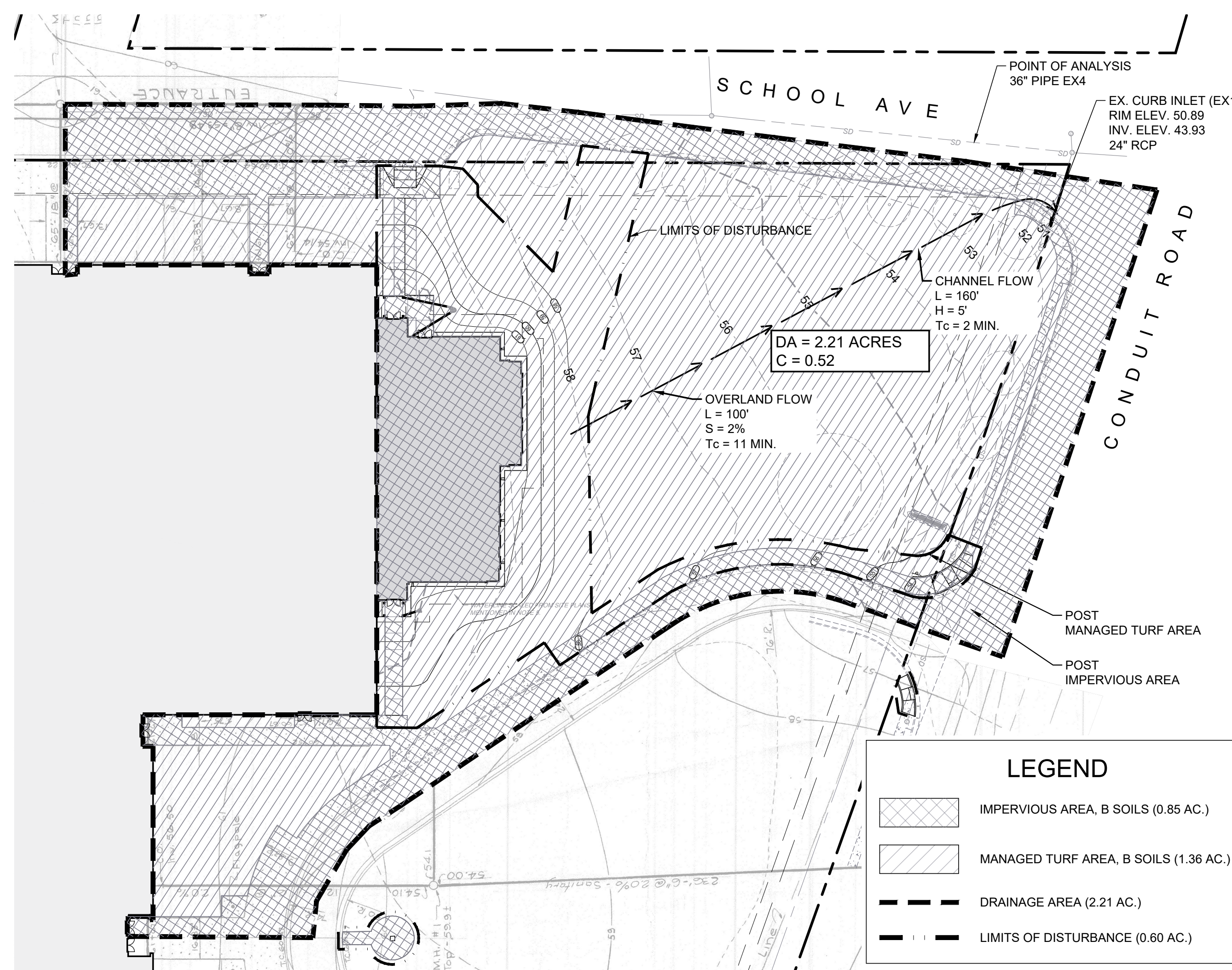


**COLONIAL HEIGHTS HIGH SCHOOL
 RENOVATION/ADDITION
 COLONIAL HEIGHTS PUBLIC SCHOOLS
 3600 Conduit Rd, Colonial Heights, VA 23834**

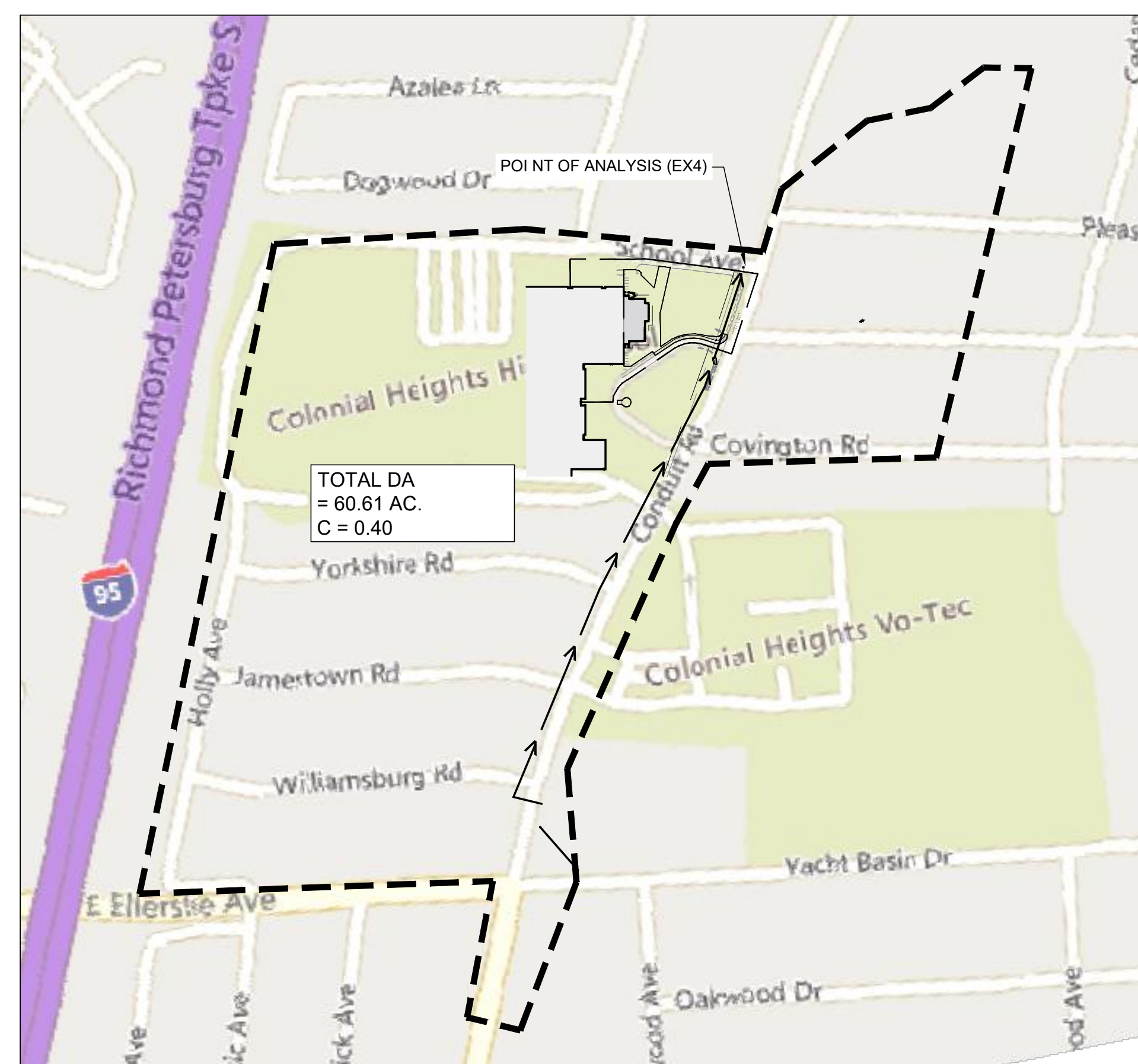
PROJECT NO:	611565
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PRE-DEVELOPMENT GROUNDCOVER



POST-DEVELOPMENT GROUNDCOVER



OVERALL DRAINAGE AREA

MS19: Properties and waterways downstream from development sites shall be protected from sediment deposition, erosion and damage due to increases in volume, velocity and peak flow rate of stormwater runoff for the stated frequency storm of 24-hour duration in accordance with the following standards and criteria. Stream restoration and relocation projects that incorporate natural channel design concepts are not man-made channels and shall be exempt from any flow rate capacity and velocity requirements for natural or man-made channels.

a. Concentrated stormwater runoff leaving a development site shall be discharged directly into an adequate natural or man-made receiving channel, pipe or storm sewer system. For those sites where runoff is discharged into a pipe or pipe system, downstream stability analyses at the outfall of the pipe or pipe system shall be performed.

b. Adequacy of all channels and pipes shall be verified in the following manner:

- The applicant shall demonstrate that the total drainage area to the point of analysis within the channel is one hundred times greater than the contributing drainage area of the project in question; or
- Natural channels shall be analyzed by the use of a two-year storm to verify that stormwater will not overtop channel banks nor cause erosion of channel bed or banks;
- All previously constructed man-made channels shall be analyzed by the use of a ten-year storm to verify that stormwater will not overtop its banks and by the use of a two-year storm to demonstrate that stormwater will not cause erosion of channel bed or banks; and
- Pipes and storm sewer systems shall be analyzed by the use of a ten-year storm to verify that stormwater will be contained within the pipe or system.

c. If existing natural receiving channels or previously constructed man-made channels or pipes are not adequate, the applicant shall:

- Improve the channels to a condition where a ten-year storm will not overtop the banks and a two-year storm will not cause erosion to channel bed or banks; or
- Improve the pipe or pipe system to a condition where the ten-year storm is contained within the appurtenances;
- Develop a site design that will not cause the pre-development peak runoff rate from a two-year storm to increase when runoff outfalls into a natural channel or will not cause the predevelopment peak runoff rate from a ten-year storm to increase when runoff outfalls into a manmade channel; or
- Provide a combination of channel improvement, stormwater detention or other measures which is satisfactory to the VESCP authority to prevent downstream erosion.

d. The applicant shall provide evidence of permission to make the improvements.

e. All hydrologic analyses shall be based on the existing watershed characteristics and the ultimate development condition of the subject project.

f. If the applicant chooses an option that includes stormwater detention, he shall obtain approval from the VESCP of a plan for maintenance of the detention facilities. The plan shall set forth the maintenance requirements of the facility and the person responsible for performing the maintenance.

g. Outfall from a detention facility shall be discharged to a receiving channel, and energy dissipators shall be placed at the outfall of all detention facilities as necessary to provide a stabilized transition from the facility to the receiving channel.

h. All on-site channels must be verified to be adequate.

i. Increased volumes of sheet flows that may cause erosion or sedimentation on adjacent property shall be diverted to a stable outlet, adequate channel, pipe or pipe system, or to a detention facility.

j. In applying these stormwater management criteria, individual lots or parcels in a residential, commercial or industrial development shall not be considered to be separate development projects. Instead, the development, as a whole, shall be considered to be a single development project. Hydrologic parameters that reflect the ultimate development condition shall be used in all engineering calculations.

k. All measures used to protect properties and waterways shall be employed in a manner which minimizes impacts on the physical, chemical and biological integrity of rivers, streams and other waters of the state.

l. Any plan approved prior to July 1, 2014, that provides for stormwater management that addresses any flow rate capacity and velocity requirements for natural or man-made channels shall satisfy the flow rate capacity and velocity requirements for natural or man-made channels if the practices are designed to detain the water quality volume and to release it over 48 hours:

- detain and release over a 24-hour period the expected rainfall resulting from the one-year, 24-hour storm; and
- reduce the allowable peak flow rate resulting from the 1.5, 2, and 10-year, 24-hour storms to a level that is less than or equal to the peak flow rate from the site assuming it was in a good forested condition, achieved through multiplication of the forested peak flow rate by a reduction factor that is equal to the runoff volume from the site when it was in a good forested condition divided by the runoff volume from the site in its proposed condition, and shall be exempt from any flow rate capacity and velocity requirements for natural or man-made channels as defined in any regulations promulgated pursuant to § 10.1-562 or 10.1-570 of the Act.

m. For plans approved on and after July 1, 2014, the flow rate capacity and velocity requirements of § 10.1-561 A of the Act and this subsection shall be satisfied by compliance with water quality requirements in the Stormwater Management Act (§ 10.1-603.2 et seq. of the Code of Virginia) and attendant regulations, unless such land-disturbing activities are in accordance with 4VAC50-60-48 of the Virginia Stormwater Management Program (VSMP) Permit Regulations.

n. Compliance with the water quality minimum standards set out in 4VAC50-60-48 of the Virginia Stormwater Management Program (VSMP) Permit Regulations shall be deemed to satisfy the requirements of Minimum Standard 19.

STORMWATER COMPLIANCE NOTE

THIS SITE IS SUBJECT TO REQUIREMENTS ASSOCIATED WITH A LAND DISTURBANCE PERMIT AND MS-19 AND IS DISTURBING APPROXIMATELY 0.60 AC. THE PROPOSED DEVELOPMENT HAS NO CHESAPEAKE BAY DISTURBANCE. THE POINT OF ANALYSIS IS DETERMINED TO BE A 36" PIPE (EX4) DOWNSTREAM OF THE SITE, RECEIVING A TOTAL OF 60.61 ACRES OF DRAINAGE. THE SITE IS LESS THAN 1% OF THE TOTAL DRAINAGE TO THE POINT OF ANALYSIS. THE RECEIVING STORM PIPE SYSTEM HAS CAPACITY TO RECEIVE THE PROPOSED DEVELOPMENT RUNOFF AND CONVEYS THE RUNOFF IN A NON-EROSIVE MANNER, MEETING STORMWATER AND MS-19 REQUIREMENTS.

THERE ARE NO WATER QUALITY REQUIREMENTS FOR THIS SITE.

STORM SEWER DESIGN COMPUTATIONS

Colonial Heights HS Addition
 Storm Sewer
 3/3/2022
 Storm Frequency - 10 year
 Minimum Structure Depth = 3.50 ft
 Minimum Slope = 0.005 ft/ft

Rainfall Intensity Formula: $I = B(T+D)^E$
 10 year: B=41.34, D=7.25, E=0.73

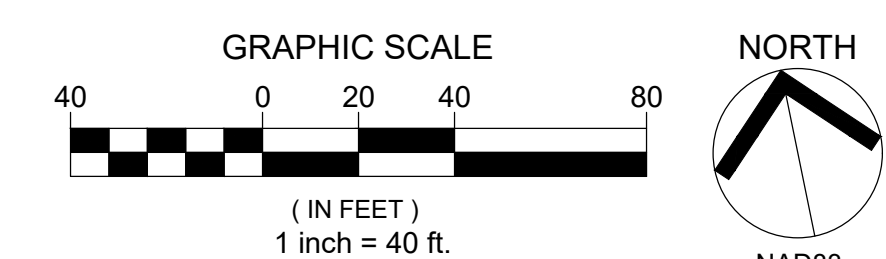
FROM POINT	PIPE NAME	TO POINT	DRAINAGE AREA (ACRES)	RUNOFF COEFFICIENT	CA INCRE	CA ACCUM.	INLET TIME (MIN)	RAINFALL (IN/HR)	RUNOFF Q (CFS)	TOP ELEV (FT)	HEIGHT (FT)	INV UPPER (FT)	INV LOWER (FT)	LENGTH (FT)	SLOPE (FT/FT)	DIA (IN)	CAPACITY (CFS)	VELOCITY (FT/S)	FLOW TIME (MIN)	Pipe Material
OnSite	EX1	EX1	30.17	0.40	12.07	12.07	40.00	2.48	29.00											
EX1	EX2	EX2	2.21	0.52	1.15	13.22	40.00	2.48	32.75	50.89	6.96	43.93	43.11	34.64	0.0235	24	34.69	12.60	0.95	RCP
EX3	EX4	EX5	28.23	0.40	11.29	24.51	40.05	2.48	60.69	50.91	7.80	43.11	41.69	163.24	0.0087	36	62.19	10.06	0.27	RCP

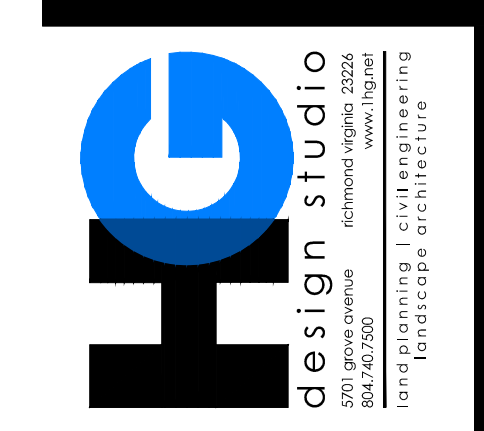
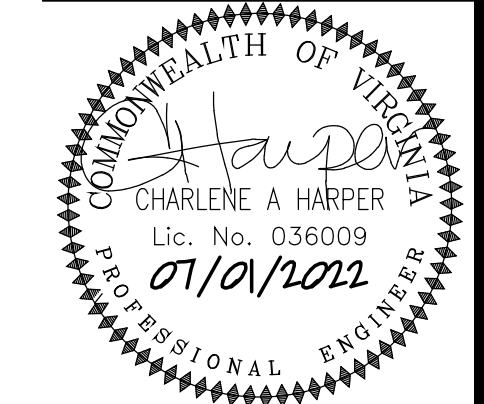
STORM SEWER DESIGN COMPUTATIONS

Colonial Heights HS Addition
 Storm Sewer
 7/28/2022
 Storm Frequency - 2 year
 Minimum Structure Depth = 3.50 ft
 Minimum Slope = 0.005 ft/ft

Rainfall Intensity Formula: $I = B(T+D)^E$
 2 year: B=41.52, D=8.75, E=0.82

FROM POINT	PIPE NAME	TO POINT	DRAINAGE AREA (ACRES)	RUNOFF COEFFICIENT	CA INCRE	CA ACCUM.	INLET TIME (MIN)	RAINFALL (IN/HR)	RUNOFF Q (CFS)	TOP ELEV (FT)	HEIGHT (FT)	INV UPPER (FT)	INV LOWER (FT)	LENGTH (FT)	SLOPE (FT/FT)	DIA (IN)	CAPACITY (CFS)	VELOCITY (FT/S)	FLOW TIME (MIN)	Pipe Material
EX3	EX4	EX5	28.23	0.40	11.29	11.29	40.05	1.71	19.34	50.91	7.80	43.11	41.69	163.24	0.0087	36	62.19	7.78	0.25	RCP

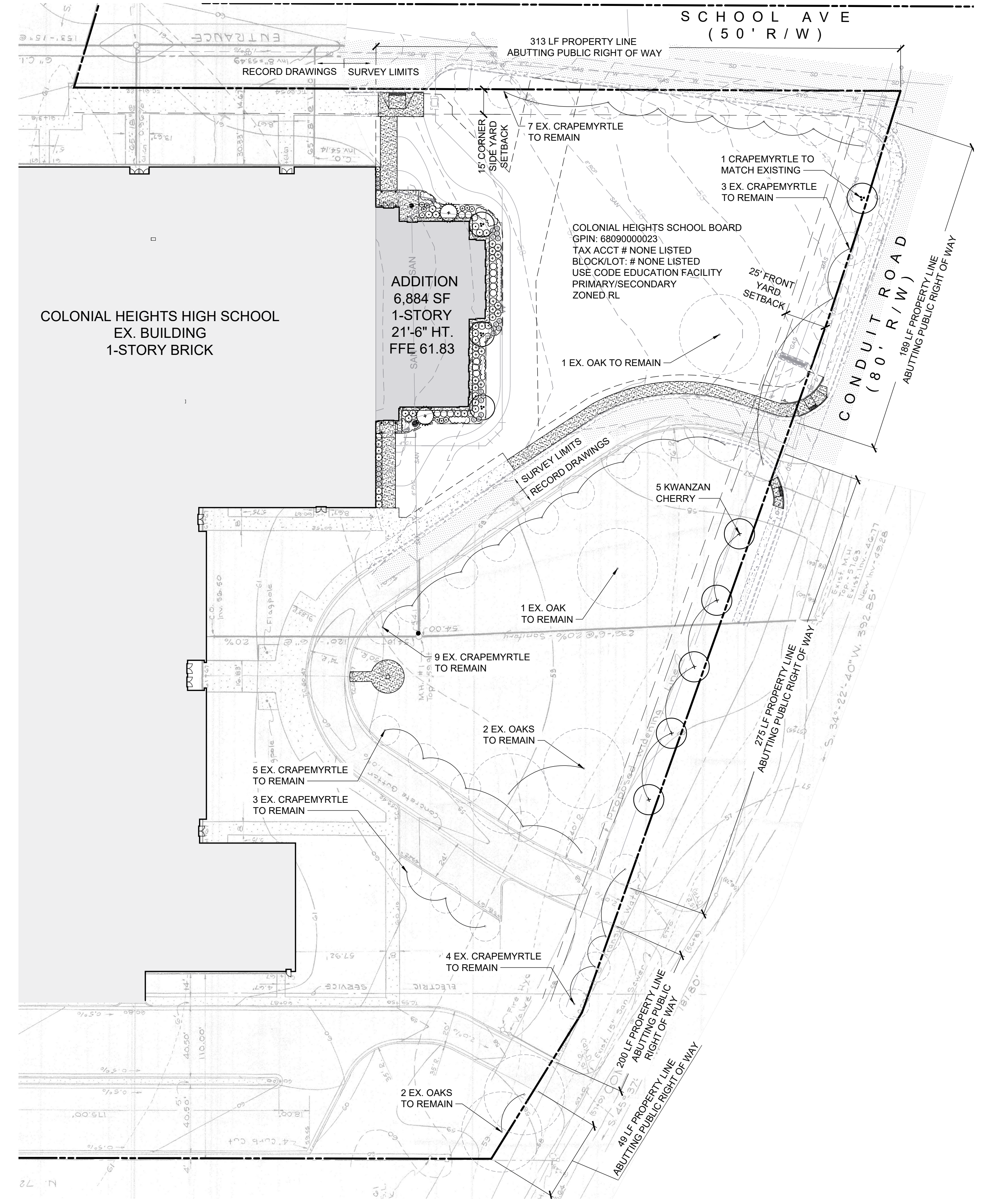




**COLONIAL HEIGHTS HIGH SCHOOL
 RENOVATION/ADDITION
 COLONIAL HEIGHTS PUBLIC SCHOOLS
 3600 Conduit Rd, Colonial Heights, VA 23834**

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LANDSCAPE PLAN

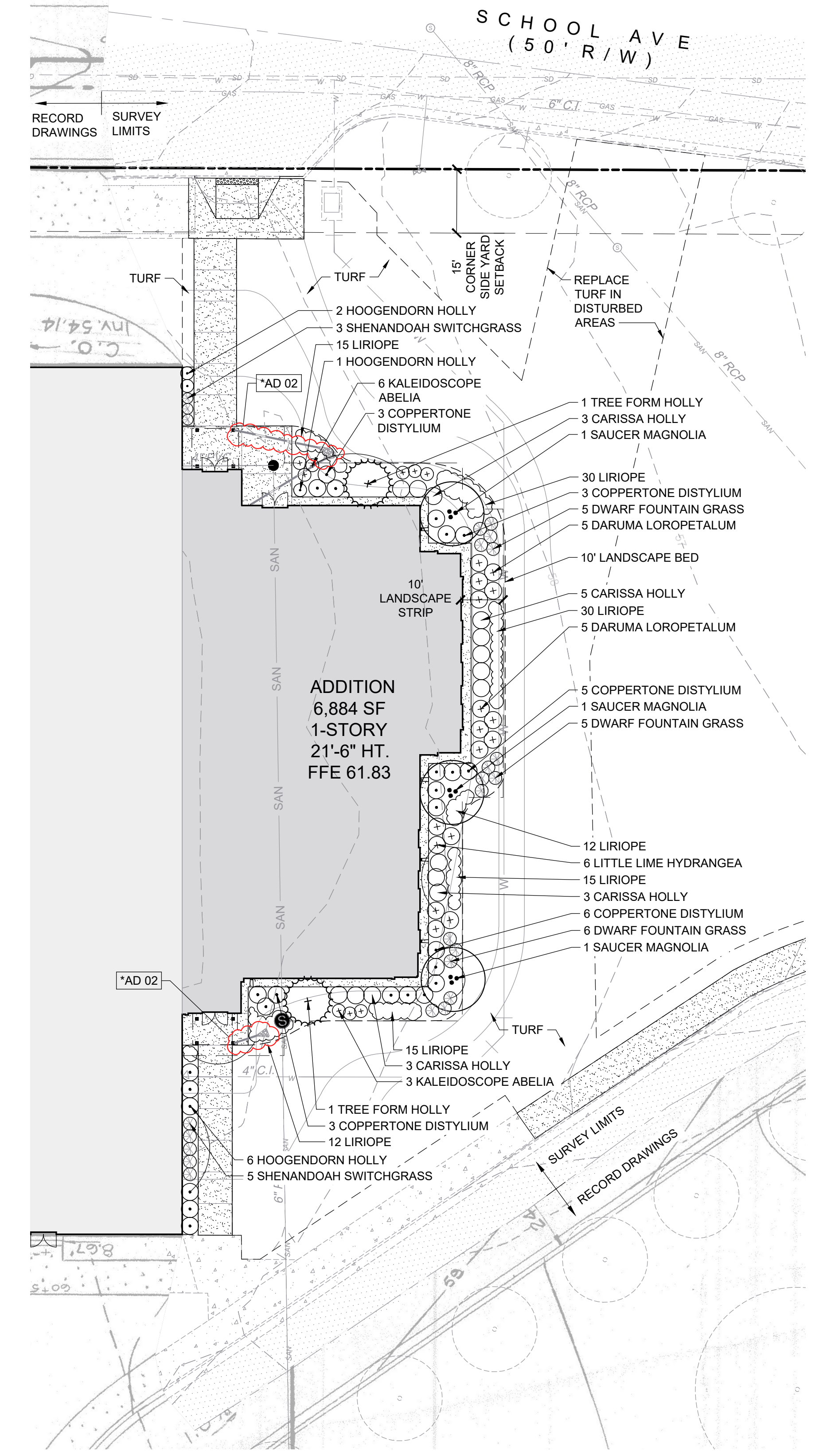
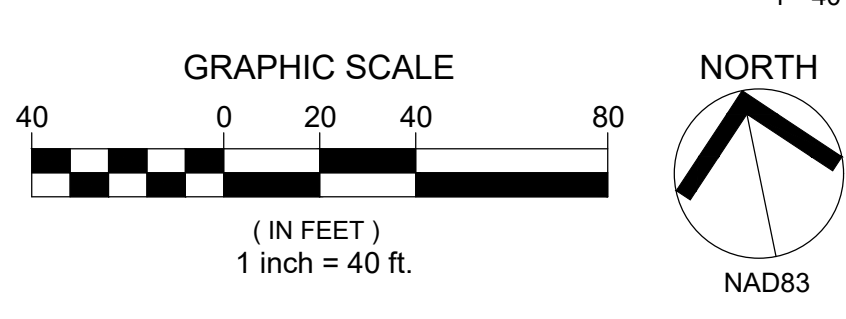


1 STREET TREE PLAN

LANDSCAPE REQUIREMENTS:
 PER 286-512.14
TREES REQUIRED ALONG PROPERTY LINES
 1 TREE PER 50 LF OF PROPERTY LINE ABUTTING PUBLIC RIGHT OF WAY

CONDUIT ROAD: 713 LF
 713/50 = 14.26 = 15 TREES
 REQUIRED: 15 TREES
 PROVIDED: 9 EXISTING TREES TO REMAIN
 6 PROPOSED TREE

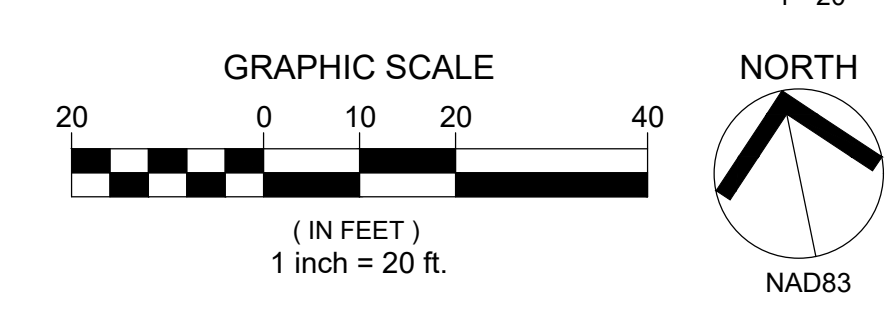
SCHOOL AVENUE: 313 LF
 313/50 = 6.26 = 7 TREES
 REQUIRED: 7 TREES
 PROVIDED: 7 EXISTING TREES TO REMAIN



2 BUILDING LANDSCAPE PLAN

LANDSCAPE REQUIREMENTS:
 PER 286-512.22
LANDSCAPING STANDARDS AROUND BUILDINGS AND STRUCTURES
 PROVIDE MIN. 10' WIDTH FOR 5' SIDEWALK AND 5' LANDSCAPE AREA BETWEEN PARKING AREAS AND BUILDINGS.

MINIMUM 10' WIDTH PROVIDED INCLUDING SIDEWALKS AND LANDSCAPE AREAS AROUND ALL SIDES OF THE BUILDING ADDITION.



NOTE
 PLANS FOR COLONIAL HEIGHTS HIGH SCHOOL PREPARED BY AUSTIN BROCKENBROUGH & ASSOCIATES DATED 8/5/1963 PROVIDED FOR REFERENCE AS BACKGROUND IMAGE.

ADDENDUM NO. 2 / JULY 29, 2022

Colonial Heights High School Addendum #2 Pre-Bid Questions

1. Specification 011000 Summary, para 1.08 Security Provisions, A. Background Check: states Comply with Owners requirements for screening service to be used. Please provide additional details on the Owner's screening requirements including whether owner or contractors will be responsible for costs associated with an independent screening service.
Answer: The contractor is not responsible for any screening costs. The Owner requires the contractor to sign and comply with the Certification Crime Against Minors form, included as Appendix C in Addendum 2 (AD 02).
2. Drawings A1.2.1 & A1.2.2 Demolition Plans. Demolition Plan Keynote 27 indicating to strip block filler paint as required per hazardous materials specifications prior to removal of portion of wall. Is this work to be covered under Lump Sum Allowance No. 2?
Answer: Yes, the work is covered under Lump Sum Allowance No. 2.
3. General: What is the existing fire alarm control panel?
Answer: See Addendum 1 Specification 283111 (AD 01) for clarification.
4. Division 27 does not include any specifications for Horizontal Cabling (either copper or fiber). Also, the Electrical Legend (Sheet E0.1) only shows junction boxes and conduit locations for the sections of the Communications Legend that specifically relate to telecommunications cabling. However, Drawings E2.3.1 and E2.3.2 include the statement in the General Notes that "Conduits / Junction Boxes / Wires (Cat6E) of Data / Tele / Wifi System shall be provided by contractor." Is data cabling to be by the contractor or will data cabling be by owner? If data cabling is included in this bid, please provide specifications for the data cabling.
Answer: Contractor shall purchase and install cables of data/Tele/WiFi system. Refer to Specification 271500 - COMMUNICATIONS HORIZONTAL CABLING (AD 01) for additional information.
5. General: Will the Owner remove the existing aluminum ramp in the band classroom and existing chair lift in the choral classroom prior to construction?
Answer: Yes the Owner will remove those items. Not in contractor scope.
6. General: Will the Owner remove existing projectors in work area prior to construction?
Answer: Yes the Owner will remove those items. Not in contractor scope.
7. General: Will the Owner remove the existing security cameras in work area prior to construction?
Answer: Yes the Owner will remove those items. Not in contractor scope.
8. Drawing A1.0.1 Architectural Site Plan. Details 2 and 3 for the new post supported canopies indicate internal gutter and downspout system with storm water to be collected below grade and to see civils for extents. C5.00 Grading & Drainage plan does not pick up the canopy drainage but

COLONIAL HEIGHTS HIGH SCHOOL RENOVATION/ADDITION
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ADDENDUM NO. 2 / JULY 29, 2022

does show roof drainage through gutters and downspouts splashing on the ground with overland flow across the site. Please provide plan for canopy stormwater drainage.

Answer: See Addendum 2 sheet C4.00 (AD 02) for clarification.

9. Specification 122400: 2.02.B.3.c. specifies, "Spline." BOD WT Shade does not offer this. May we exclude? 2.02.B.6.c. specifies, "Pocket with Prewired Raceway." BOD WT Shade does not offer this. May we exclude? 2.04.C.2.a. specifies, "Wall Control Finish." Standard is white. Is white acceptable?

Answer: See Addendum 2 Specification 122400 (AD 02) for clarification.

10. Specification 122400: Drawings takeoff - Please confirm this is the full extent of scope for 122400. There is this limited requirement for 122400 compared to the amount of windows in the project.

Answer: Refer to Addendum 2 sheet A3.1.1 (AD 02) and Bid Set sheet A9.1.2 for full scope of new manual and new motorized shades. The reason for relatively limited 122400 scope is because the existing exterior windows and their associated roller shades are in good condition and are not being replaced.

11. Specification 075400: Paragraph 2.01A. Will Versico be an acceptable roofing system manufacturer? It is a subsidiary of Carlisle.

Answer: Substitution requests will not be considered until after award of contract.

12. Specification 075400: Paragraph 3.04. The specs state that the tapered roofing insulation goes over top of the HD cover board, is this correct?

Answer: No, that is not the intent. The cover board shall go over all insulation per roof assemblies.

13. Specification 075400: Paragraph 2.07. What is the product that the insulation seams get taped with? Are we to follow 072102.04A for Reinforced Polyethylene Film Tape?

Answer: Insulation Joint Tape can be found at Paragraph 2.08C, and should be type recommended by manufacturer.

14. Drawings A5.1.2 and A5.1.3: The wall sections on A5.1.2 and parapet details 5, 6, and 7 on A5.1.3 indicated rigid insulation and plywood behind and on top of the parapet. Is the intent for this insulation and plywood to be Hunter Xci type panels or can the insulation and plywood be separate?

Answer: The insulation and plywood are separate layers.

15. Drawomg A5.1.1: Per wall section keynote 18, the rigid insulation is noted to be 3" minimum. What exact thickness should be included?

Answer: 3"

16. Specification 116143 Article 2.04 Curtain Track paragraph A2a specifies Model 280 track. Model 280 track cannot accommodate the required curves as shown. Manufacturer suggest ADC #173 if steel channel type track is desired or ADC #142-R if an aluminum I-Beam style track is desired. Please advise.

COLONIAL HEIGHTS HIGH SCHOOL RENOVATION/ADDITION
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Answer: See Addendum 2 Specification 116143 (AD 02) for clarification.

17. Specification 116143 Article 2.04 Curtain Track paragraph D specifies a 1-1/2" Schedule 40 track stiffener with curves to match the track layout. Section 2.06A2 specifies the track be hung directly from the pipe grid battens with manufacturer's recommended clamps. Manufacturer suggests suspending directly from grid battens as this will maximize the curtain height with a grid height of 8'-0" AFF. Please advise.

Answer: See Addendum 2 Specification 116143 (AD 02) for clarification.

18. Specification 116143 Article 2.04 Curtain Track paragraph G1 specifies a manual walk-along operation. Article 2.04H2 specifies pulleys for cord operated track. Manufacturer suggests manual walk-along operation. Please advise.

Answer: See Addendum 2 Specification 116143 (AD 02) for clarification.

19. Specification 116143, Article 2.07 Accessories paragraph F specifies grade 80 chain. 2.07F1 specifies grade 30 chain. Grade 80 chain is not used in for dead-hung supports due to the size and shape of its links. 1/4" Grade 30 chain is typically used to suspend dead-hung items over a stage as it greatly exceeds the minimum safety factors required for static loads. Please advise.

Answer: See Addendum 2 Specification 116143 (AD 02) for clarification.