



ARCHITECTURAL REVIEW BOARD MEETING AGENDA

Town Council Chambers
765 Lynn Street, Herndon, VA 20170
Wednesday, December 6, 2023 | 7:30 p.m.

1. Call to Order

2. Public Hearing

- a. **APPLICATION FOR AN ALTERATION, ARB #23-016**, to consider an application for a new housing development at 1155 Herndon Parkway, Herndon, Virginia, located on the southwest side of Herndon Parkway between Elden Street and Early Fall Court. The subject property is further identified as Fairfax County Tax Map 0161 27 A, is zoned PD-R, Planned Development-Residential and consists of 283,675 square feet of land. Owner: Stanley Martin Homes LLC. Applicant/Agent: Tim Shriner. **(Continued from the October 18 and November 15, 2023, regular meetings.)**

3. Comments

- a. Comments from the Staff Members
- b. Comments from the Board Members

4. Adjournment



MEMORANDUM

To: Chair Blaker-Glass and Members of the Architectural Review Board

From: Tamsin Himes, Lead Planner / Design and Development 

Date: December 6, 2023

Subject: ARB #23-016 1155 Herndon Parkway, Herndon Virginia

This staff memo is an addendum to the staff report for ARB #23-016 provided to the Board prior to the October 4th work session and subsequent staff memos provided to the board prior to the October 18th public hearing and the November 1st work session, and the November 15th public hearing.

Following the November 1st work session, staff met with the applicant. The applicant indicated their intention to provide the following materials to the Board prior to the December meetings:

- Perspective renderings that include an example of each design option for both townhouses and two-over-two structures.
- Elevation renderings for all design options. This should include clarification regarding the number of elevation designs this application is seeking approval for.
- Specifications sheets and materials information for the retaining walls that are integrated into the development.
- Updated designs taking into account the board's feedback regarding the cornice/false parapet elements.
- Drawings in plan that call out the measurements for the alternating recessed or pulled forward facades.
- Site plan indicating where the applicant has addressed the board's comments regarding a brick water table feature.

The applicant has provided the following materials which are included as attachments to this memo: updated "3D" elevation drawings for both townhouses and 2-over-2 dwellings, color palette updates, and images and specifications for the retaining walls. The last document included is labeled Park Place Auxiliary Info and includes a site plan indicating where watertables are being used on the buildings, line drawings for all four townhouse design options, all three 2-over-2 design options, and drawings that show a modification to the cornice / parapet feature.

Review Criteria

Members of the Board expressed a desire for a refresh on the standards or guidelines the ARB is tasked to use when reviewing applications. The following are provisions set out in the Zoning Ordinance that the ARB should use to assess whether or not a project is appropriate:

ARB purpose, Town of Herndon Zoning Ordinance Section 7.4:1.(c) Architectural Control Districts:

“Board of architectural review; purposes. The purpose of the board shall be to ensure that all buildings and landscaping erected in the designated architectural control districts conform to accepted architectural standards for permanent buildings, as contrasted with engineering standards designed to satisfy safety requirements only, and exhibit external characteristics as to material, texture, color, lighting, dimensions, line and mass of demonstrated architectural and aesthetic durability; and to prevent the erection in such district of buildings the external characteristics of which are designed to serve as advertisements or commercial displays or buildings which in terms of material, texture, color, dimension, lighting, line or mass exhibit characteristics likely to deteriorate rapidly or to be of short term architectural or aesthetic acceptability, be plainly offensive to human sensibilities or otherwise constitute a reasonably foreseeable detriment to the community.”

Design Criteria, Town of Herndon Zoning Ordinance Section 58-96.- Design criteria:

“The board of architectural review and, on appeal, the town council shall use the following standards and criteria in considering applications filed under this article:

- (1) Whether or not the proposed architectural design is suitable for a good suburban community in terms of external architectural features, including signs subject to public view, general design and arrangement, texture, color, line, mass, dimension, material and lighting.*
- (2) Whether or not the proposed structure, building or improvement is compatible with existing well-designed structures, acceptable to the board, in the vicinity and in the town as a whole.*
- (3) Whether or not, and to what extent, the proposed structure, building or improvement would promote the general welfare and protect the public health, safety and morals by tending to maintain or augment the town's tax base as a whole, generating business activity, maintaining and creating employment opportunity, preserving historical sites and*

structures and making the town a more attractive and desirable place in which to live.

(4) Whether or not proposed freestanding buildings use the same or architecturally harmonious materials, color, texture and treatment for all exterior walls; and in the case of partially freestanding buildings, whether or not the same or architecturally harmonious materials, color, texture and treatment are used on all portions of all exterior walls exposed to public view.

(5) Whether or not the combination of architectural elements proposed for a structure, building or improvement, in terms of design, line, mass, dimension, color, material, texture, lighting, landscaping and roofline and height conform to accepted architectural principles for permanent buildings as contrasted with engineering standards designed to satisfy safety requirements only; and exhibit external characteristics of demonstrated architecture and aesthetic durability.

(6) Whether or not, in terms of design, material, texture, color, lighting, landscaping, dimension, line, mass or roof line and height, the proposed structure, building or improvement is designed to serve primarily as an advertisement or commercial display, exhibits exterior characteristics likely to deteriorate rapidly, would be of temporary or short-term architectural or aesthetic acceptability, would be plainly offensive to human sensibilities or would otherwise constitute a reasonable foreseeable detriment to the community.”

Staff Comments

1. Perspective Renderings. As discussed in previous ARB meetings, for a project of this type and size, a full design review requires perspective renderings for both types of buildings. These perspective rendering should show each façade option at least once in the sample sticks rendered. The perspective renderings should be placed in the context of the development from strategic and identified viewsheds both internal to the site and as viewed external from the site. Gutters, downspouts, and conductors should also be included on the perspective renderings. While not included in the re-submission materials provided by the applicant, staff’s understanding is that the applicant intends to provide these perspective renderings by Monday, December 4th. If provided by that day, staff will have time to review and provide an analysis to the Board by the work session on Wednesday, December 6th.
2. Elevation Drawings. Attachments #1, #2, and #3 include elevation line drawings and color elevation drawings of four townhouse designs and three 2-over-2 structure designs. Staff understands that these constitute all design options that will be a part of the Park Place development. This is a very limited number of designs for a development that consists of 55 townhomes and 56 two-over-two units. Though the total number will be broken up into sticks or rows of three to

nine groups, this presents serious concerns regarding the level of repetition this will dictate within the development. Staff recommends including one or two more design options for townhouses and the same for the 2-over-2 structures, and encourages the Board to discuss ways to ensure as little repetition as possible such as requiring no more than two of the same design within one row, or no two adjacent properties can be of the same design. In the past, the ARB has added similar conditions of approval to applications of this type.

3. Water Table Treatment. At the November work session, the Board and applicant discussed that side elevations of both types of structures and how they tend to read flat and broad, although there are several windows and one side of each row will have an attached utility shed. This is mitigated in part by the use of high brick water tables used on “high visibility” corners. Staff and the Board recommended use of a low water table on side elevations which were not considered high-visibility to provide a visual base for the building and add variety to the blank facades. The applicant has provided a site plan identifying “high-visibility” corners and “semi-high-visibility” corners (Attachment #3). High-visibility corners retain the high brick watertable and the “semi-high-visibility” corners feature a lower brick water table. The remaining side facades retain the original design with no watertable feature. Staff is encouraged about the added use of brick watertables but would support this feature throughout the development on all side facades.
4. Cornice / Partial Parapet. The applicant included in the updated materials an altered cornice design aimed at addressing the Board’s comments regarding the stylistic and architectural incongruity between the gable and the narrow partial parapet or cornice. The altered design can be found on page two of Attachment #3.

The cornice or parapet is altered by removing one ridge of molding from the cornice, otherwise retaining the size, shape, and design. Staff believes that the alteration does not address the concern expressed by staff and the Board and notes that the designs do not address feedback regarding townhouse Elevation T also where the false parapet / cornice ends a short distance on either side leaving a narrow strip of lap siding on either side and requiring that the windows on this level are misaligned with the lower two levels. These items have been the subject of several discussions between the applicant and the Board, and between the applicant and staff.

The Board is tasked with determining “*Whether or not the combination of architectural elements proposed for a structure, building or improvement, in terms of design, line, mass, dimension, color, material, texture, lighting, landscaping and roofline and height conform to accepted architectural principles. . .and exhibit external characteristics of demonstrated architecture and aesthetic durability.*” Staff does not believe the designs that include these features as proposed meet this criteria and is not likely to recommend approval as

currently proposed. Staff has asked in the past for the applicant to submit images of completed developments where this design element or a similar design element has been used successfully. This would be helpful for the Board and staff to understand the design and how it has been successfully used elsewhere.

Staff suggest that the following options, among others, could be considered to address these concerns:

- Flatten the roof, or if the side gable must be retained, extend the flat cornice or parapet across the whole frontage to give the illusion of a flat roof.
 - Alter the flat cornices into front facing gables to integrate stylistically with the side gable design.
5. Retaining Walls. The applicant has provided specification sheets and example images for the four retaining walls that will be located throughout the development. While retaining wall dimensions and location are determined by code requirements and are outside the ARB's purview, the treatment of retaining walls is a matter the Board should consider. Staff believes that the information provided by the applicant is sufficient and that the materials meet the Design Criteria set out in the Town of Herndon Zoning Ordinance.
 6. Material Specifications. Staff is requesting a full package of materials specifications for all exterior materials – this includes cladding types, roofing materials, trim, gutter systems, windows, doors and all other materials, fixtures or visible components. Some specifications sheets have been submitted previously, for garage doors for example, but a complete package has not been submitted.
 7. Façade Offsets. In previous staff memos and discussions staff requested drawings that call out the measurements for the alternating recessed or pulled forward facades. While the alternating facades are shown in the site plan, it would be helpful to have the measurements called out as requested in the architectural drawings.

As there have been multiple updates and changes to this case, staff will be working with the applicant to finalize a single complete application package so that all materials to be approved are consolidated prior to the December public hearing. Staff is withholding a recommendation at this time pending further information from the applicant.

Attachments:

- 1) Park Place 2-over-2 3D
- 2) Park Place Townhouse 3D
- 3) Park Place Auxiliary Info
- 4) Park Place Color Palettes
- 5) Retaining Wall Documents
- 6) Retaining Wall Example Images

SCHEME 1
ELEVATION B1

SCHEME 1
ELEVATION A1

SCHEME 3
ELEVATION C1



LEFT SIDE ELEVATION B1



FRONT ELEVATIONS



RIGHT SIDE ELEVATION C1
HIGH IMPACT LOT



REAR ELEVATIONS

THESE ELEVATIONS PER LOT
REFELCT PRE-SALE SELECTIONS
AND MAY VARY BASED ON FINAL
BUYER SELECTIONS.

SCHEME 3
ELEVATION C1



LEFT SIDE ELEVATION C1
HIGH IMPACT LOT

SCHEME 2
ELEVATION A1



FRONT ELEVATIONS

SCHEME 2
ELEVATION B1



RIGHT SIDE ELEVATION B1
HIGH IMPACT LOT



REAR ELEVATIONS

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REFELCT PRE-SALE SELECTIONS
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BUYER SELECTIONS.

ELEVATION B1

ELEVATION A1

ELEVATION C1

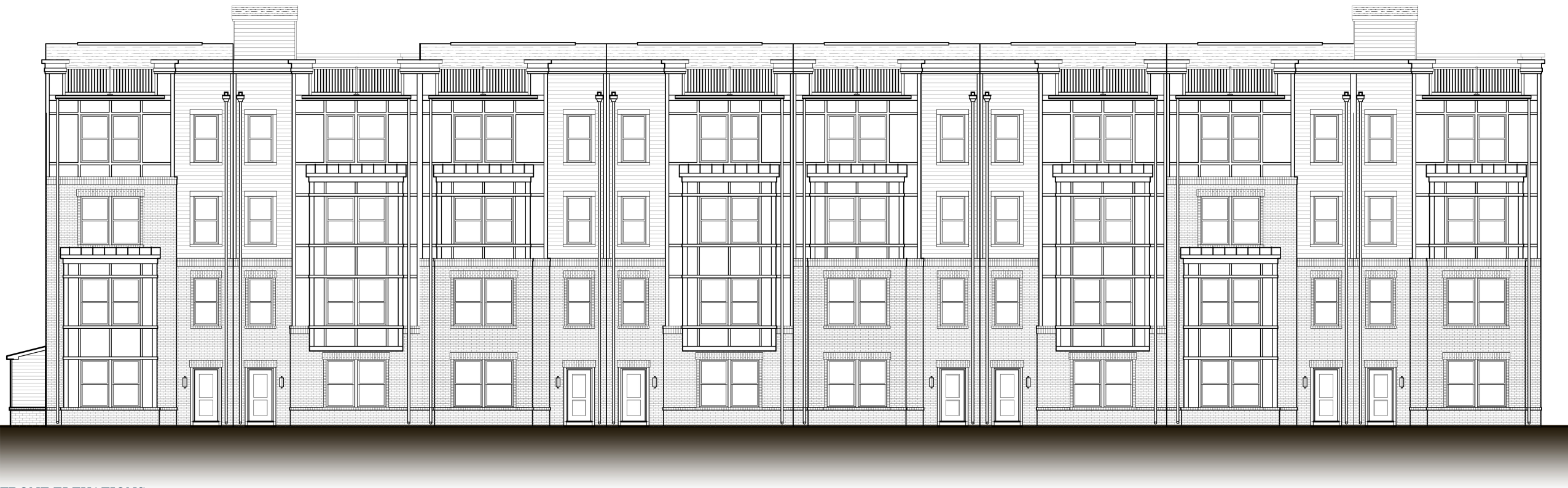
ELEVATION A1

ELEVATION C1

ELEVATION A1

ELEVATION B1

ELEVATION C1



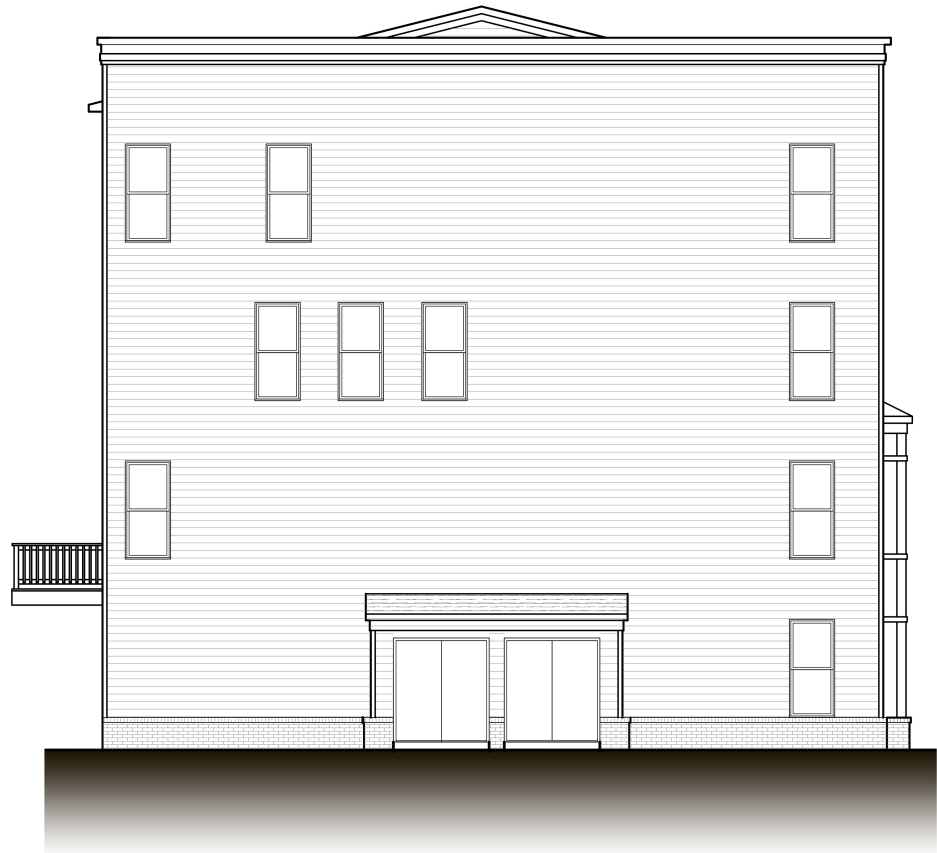
FRONT ELEVATIONS



REAR ELEVATIONS

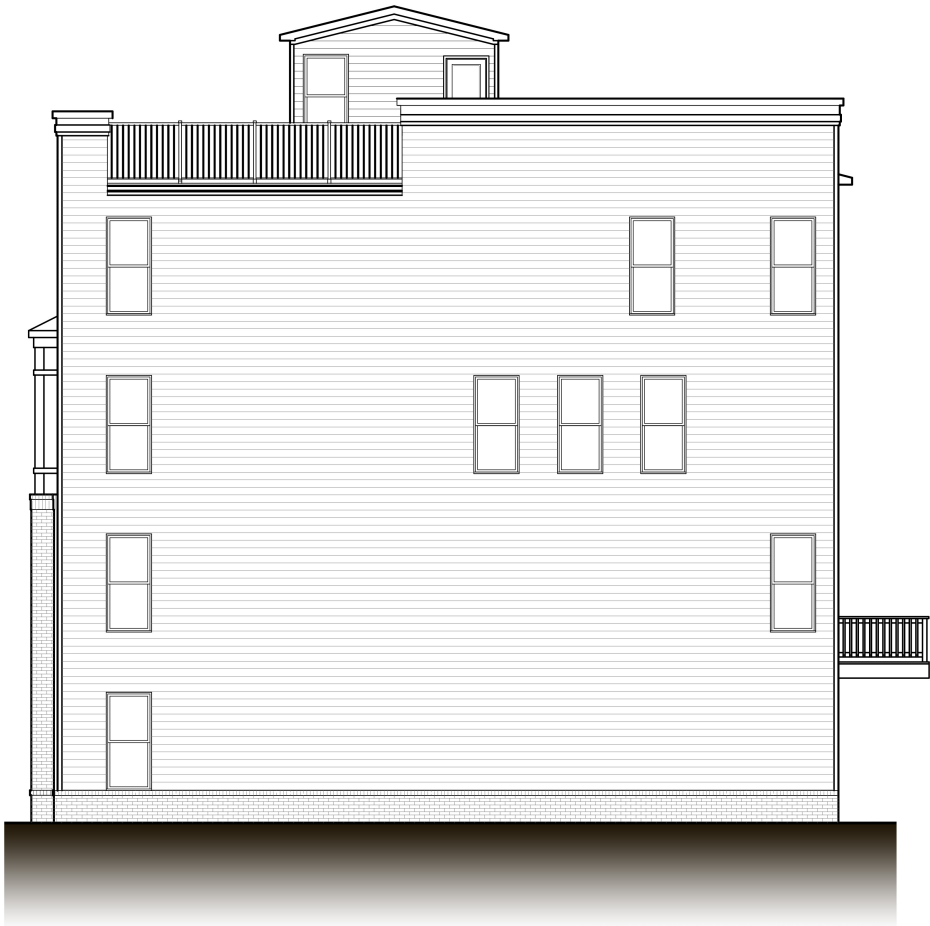
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REFELCT PRE-SALE SELECTIONS
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BUYER SELECTIONS.

ELEVATION B1



LEFT SIDE ELEVATION B1

ELEVATION C1



RIGHT SIDE ELEVATION C1

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BUYER SELECTIONS.

ELEVATION B1

ELEVATION A1

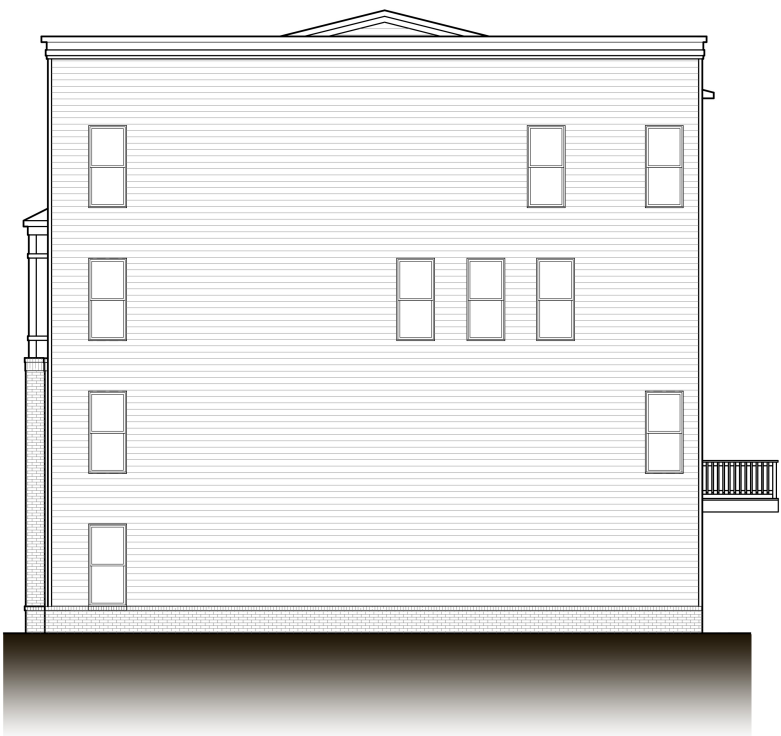
ELEVATION C1



LEFT SIDE ELEVATION B1



FRONT ELEVATIONS



RIGHT SIDE ELEVATION C1



REAR ELEVATIONS

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BUYER SELECTIONS.

ELEVATION B1

ELEVATION A1

ELEVATION B1

ELEVATION C1



LEFT SIDE ELEVATION B1



FRONT ELEVATIONS



RIGHT SIDE ELEVATION C1



REAR ELEVATIONS

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BUYER SELECTIONS.

ELEVATION C1

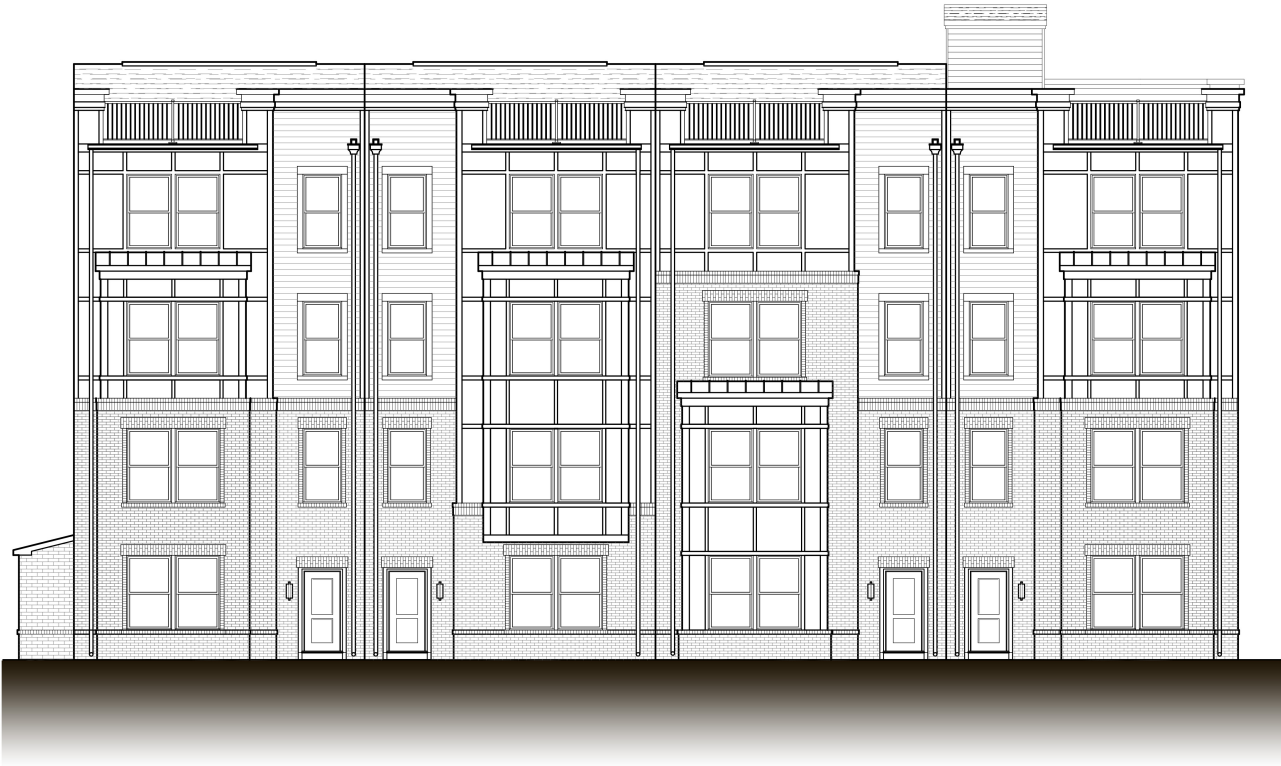
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ELEVATION B1

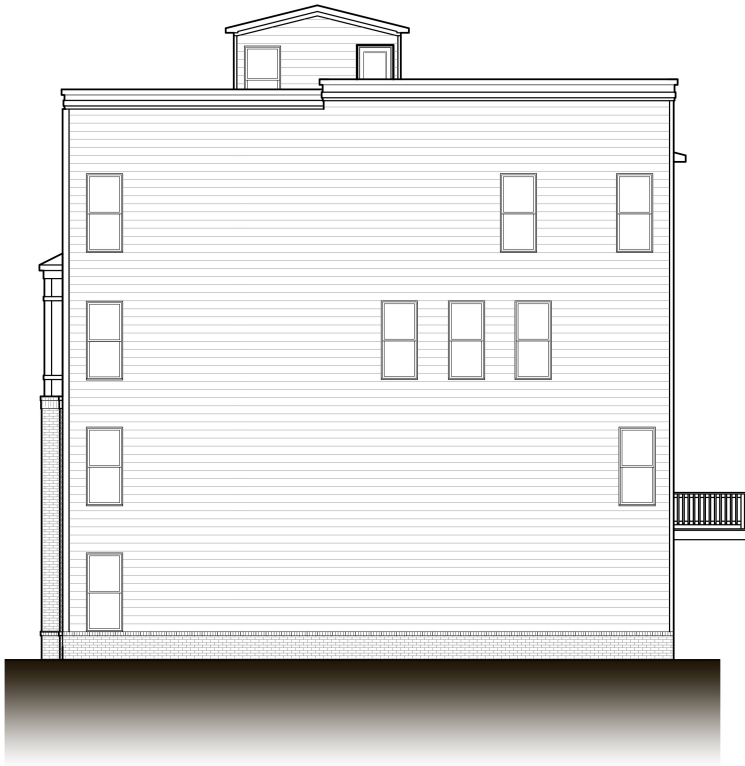
ELEVATION C1



LEFT SIDE ELEVATION C1
HIGH IMPACT LOT



FRONT ELEVATIONS



RIGHT SIDE ELEVATION C1



REAR ELEVATIONS

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BUYER SELECTIONS.

ELEVATION C1

ELEVATION A1

ELEVATION B1



LEFT SIDE ELEVATION C1
HIGH IMPACT LOT



FRONT ELEVATIONS

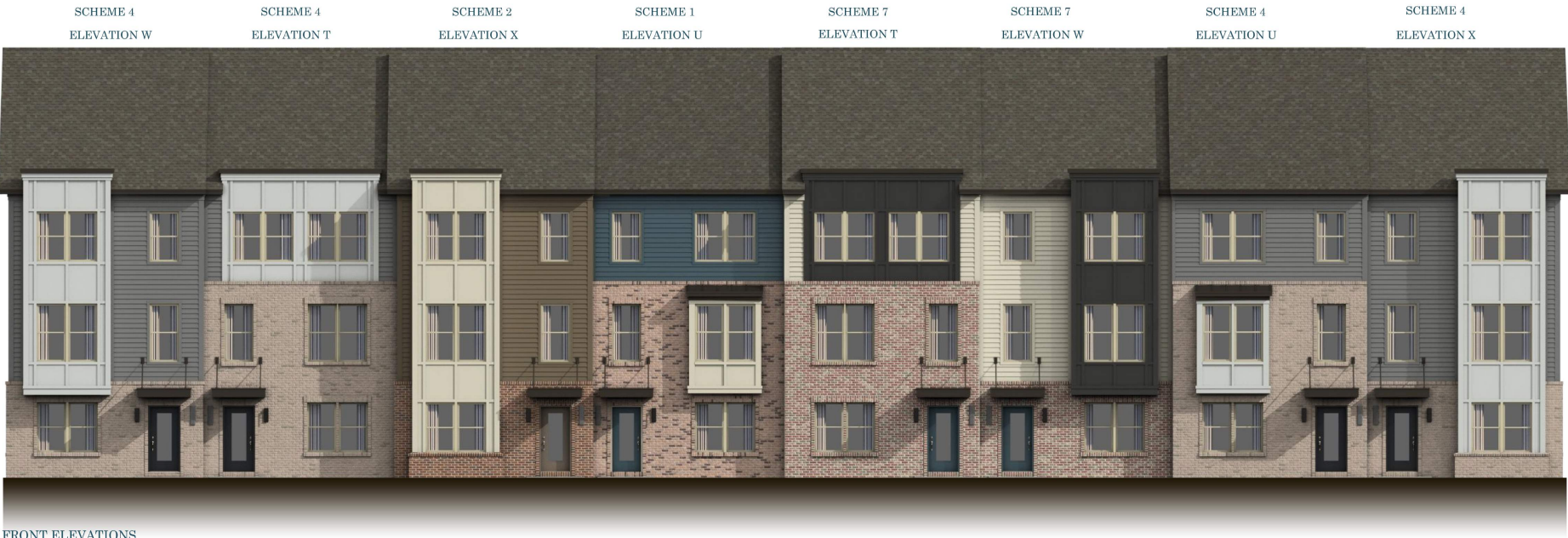


RIGHT SIDE ELEVATION B1
HIGH IMPACT LOT



REAR ELEVATIONS

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BUYER SELECTIONS.



FRONT ELEVATIONS



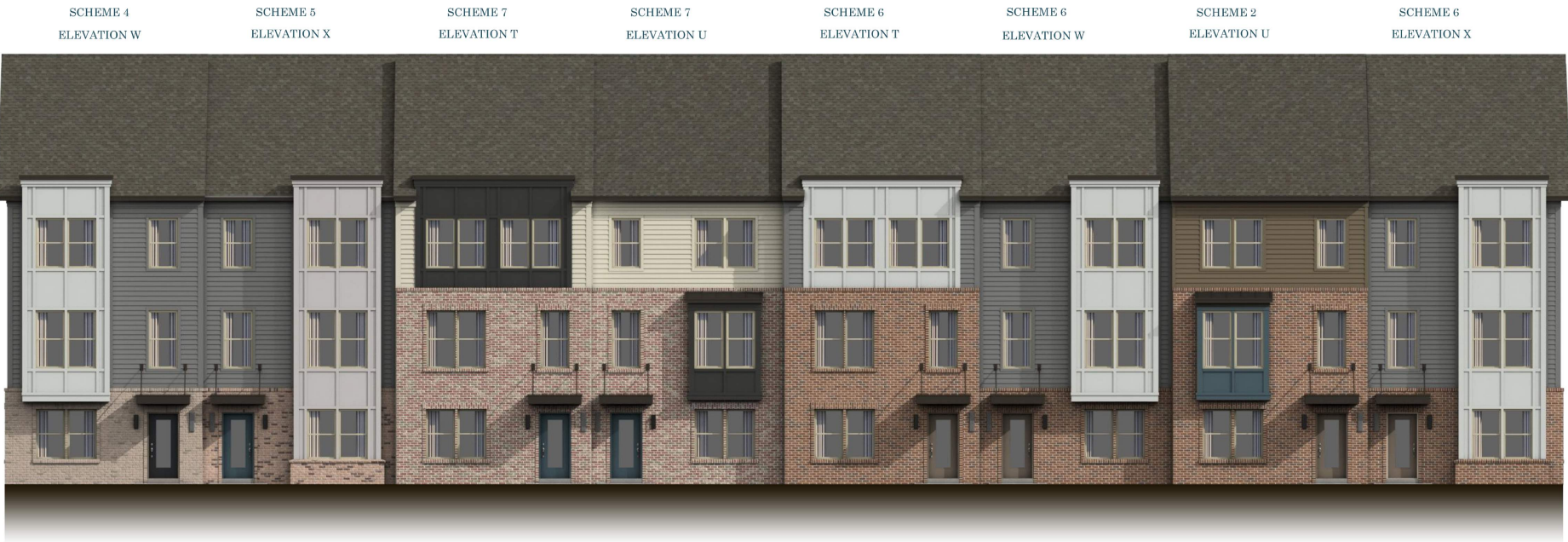
REAR ELEVATIONS



LEFT SIDE ELEVATION W
SCHEME 4



RIGHT SIDE ELEVATION X
SCHEME 4



FRONT ELEVATIONS



REAR ELEVATIONS



LEFT SIDE ELEVATION W
HIGH IMPACT LOT
SCHEME 4



RIGHT SIDE ELEVATION X
HIGH IMPACT LOT
SCHEME 6

ELEVATIONS W

ELEVATIONS T

ELEVATIONS X

ELEVATIONS U

ELEVATIONS T

ELEVATIONS W

ELEVATIONS U

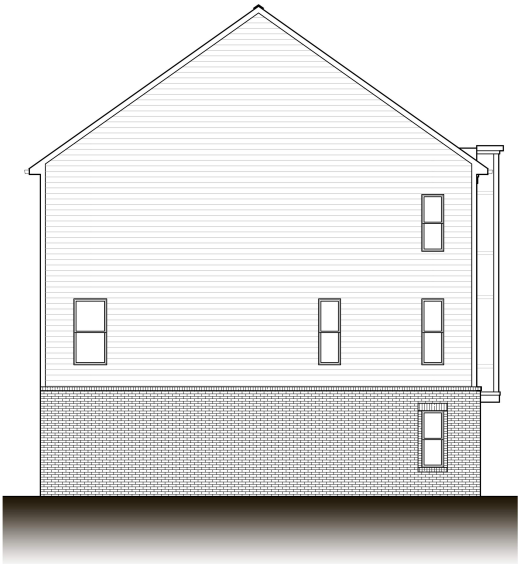
ELEVATIONS X



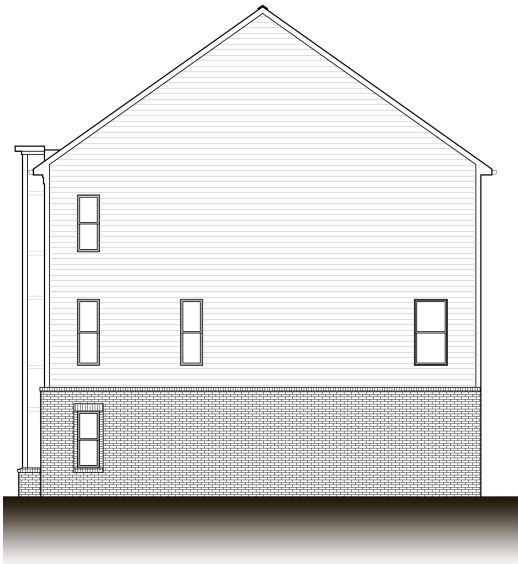
FRONT ELEVATIONS



REAR ELEVATIONS



LEFT SIDE ELEVATION W
HIGH IMPACT LOT



RIGHT SIDE ELEVATION X
HIGH IMPACT LOT

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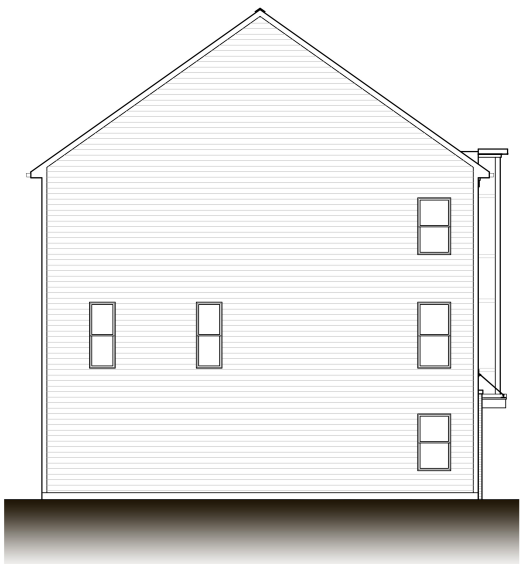
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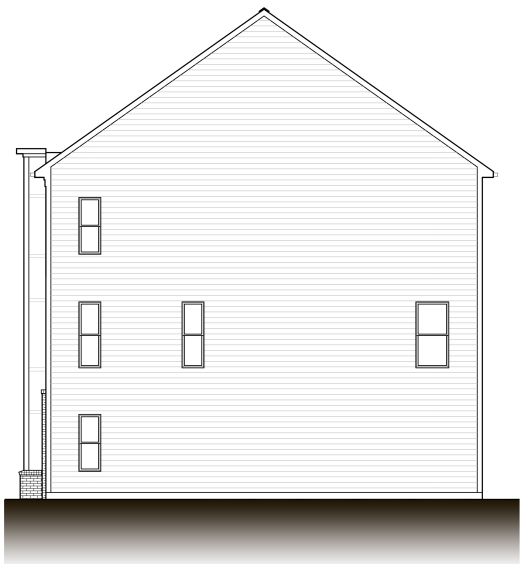
FRONT ELEVATIONS



REAR ELEVATIONS



LEFT SIDE ELEVATION W



RIGHT SIDE ELEVATION X

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BUYER SELECTIONS.

ELEVATIONS W

ELEVATIONS T

ELEVATIONS W

ELEVATIONS U

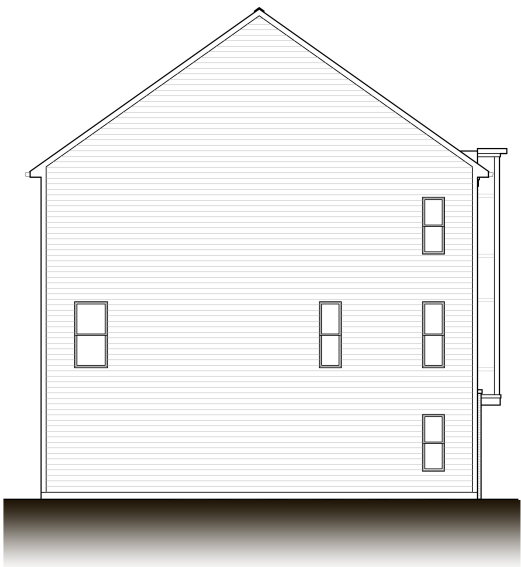
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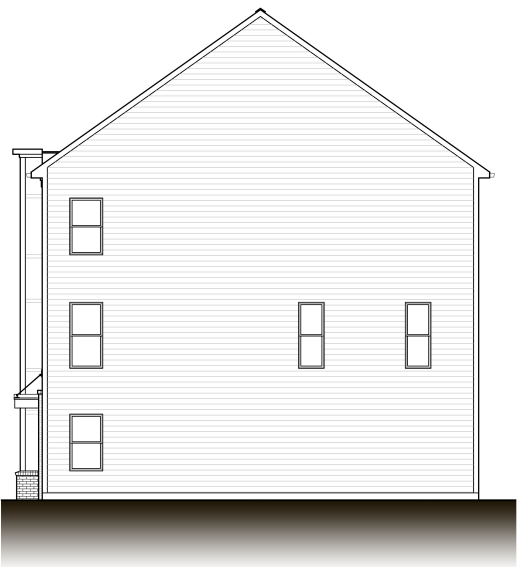
FRONT ELEVATIONS



REAR ELEVATIONS



LEFT SIDE ELEVATION W



RIGHT SIDE ELEVATION X

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ELEVATIONS W

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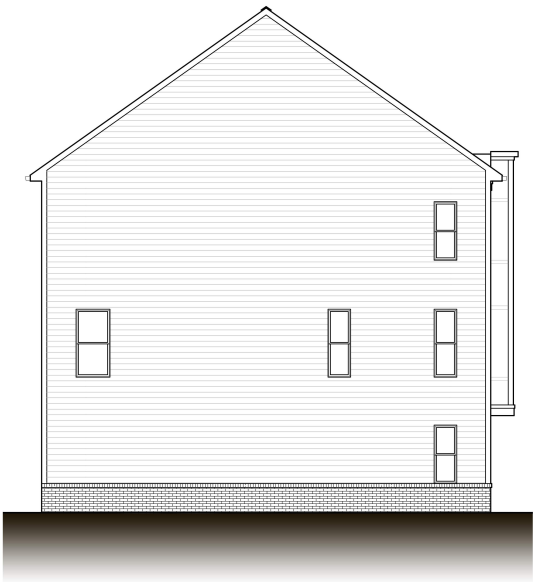
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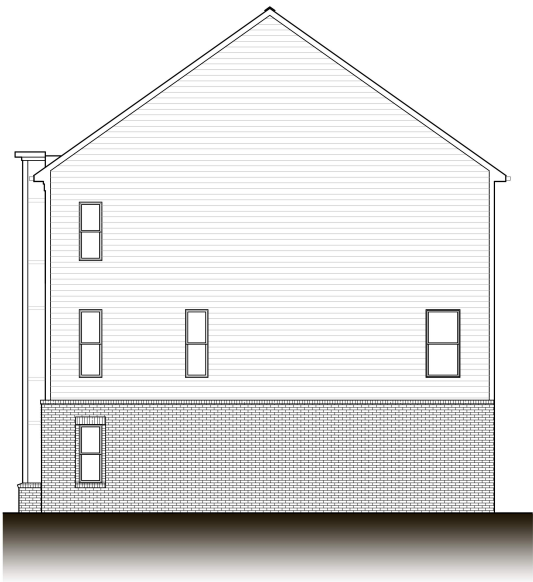
FRONT ELEVATIONS



REAR ELEVATIONS



LEFT SIDE ELEVATION W



RIGHT SIDE ELEVATION X
HIGH IMPACT LOT

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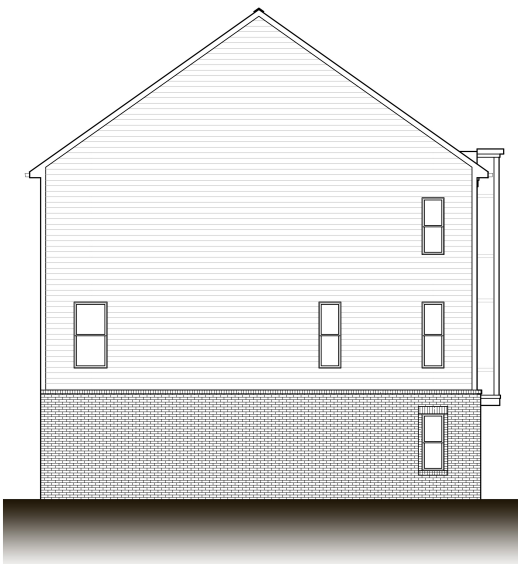
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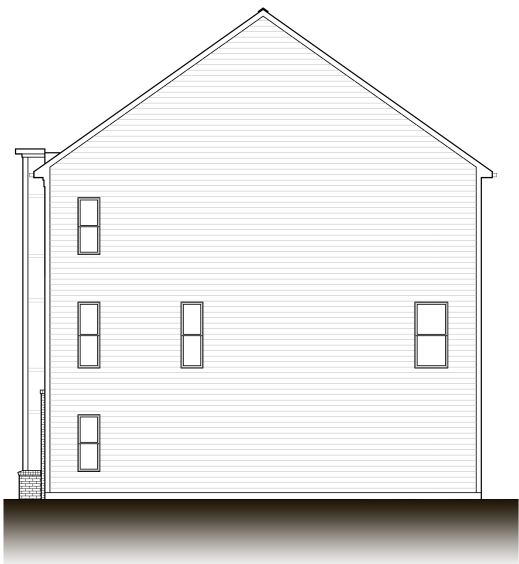
FRONT ELEVATIONS



REAR ELEVATIONS



LEFT SIDE ELEVATION W
HIGH IMPACT LOT



RIGHT SIDE ELEVATION X

THESE ELEVATIONS PER LOT
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BUYER SELECTIONS.

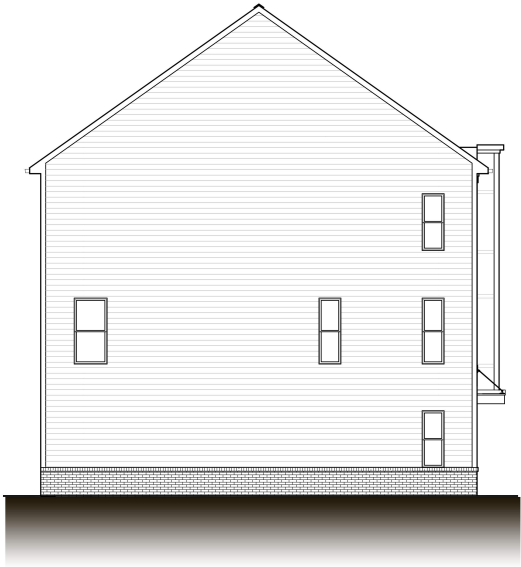
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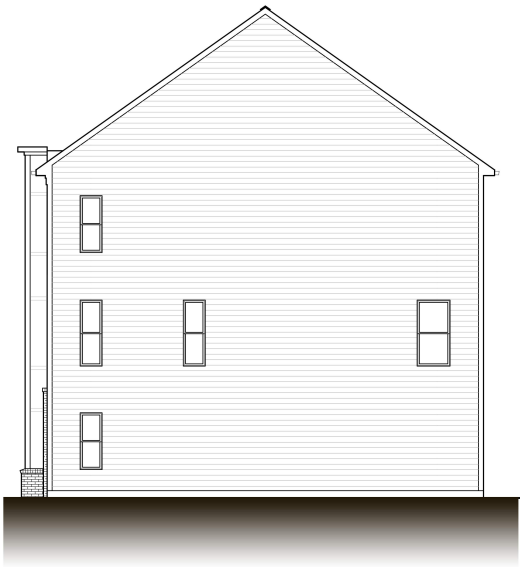
FRONT ELEVATIONS



REAR ELEVATIONS



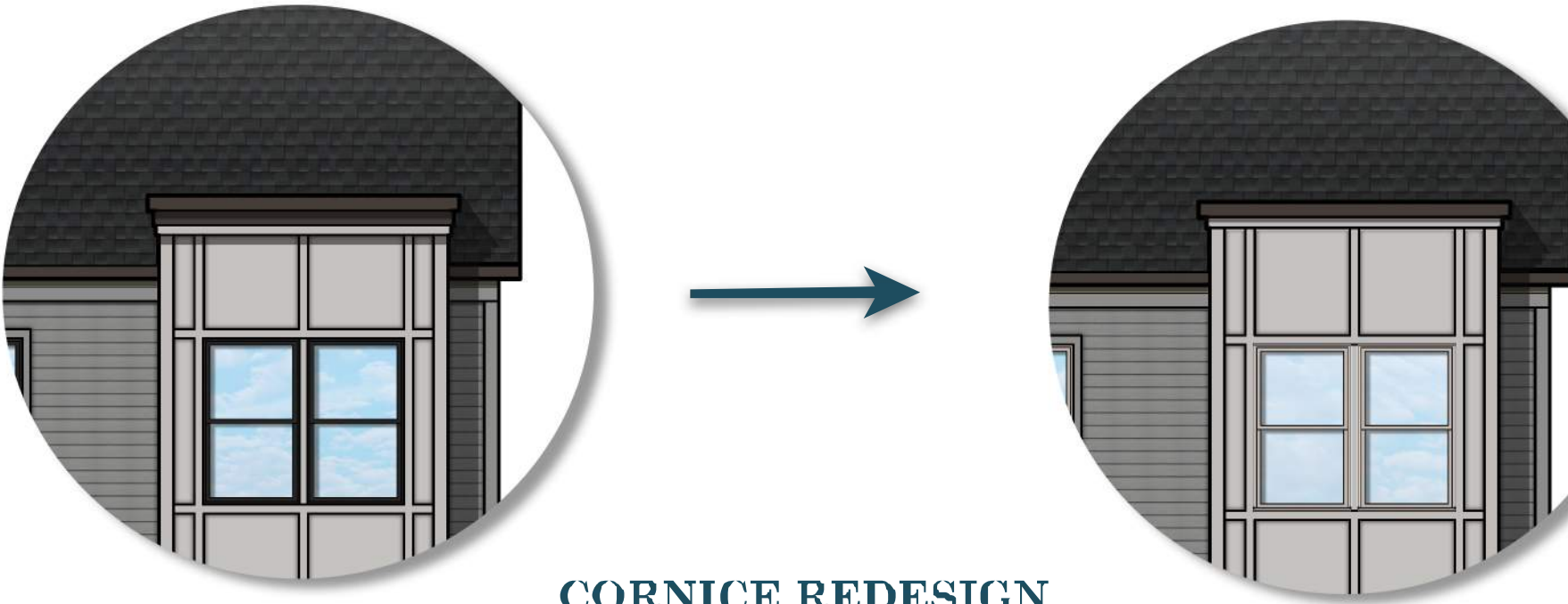
LEFT SIDE ELEVATION W



RIGHT SIDE ELEVATION X

THESE ELEVATIONS PER LOT
REFELCT PRE-SALE SELECTIONS
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BUYER SELECTIONS.

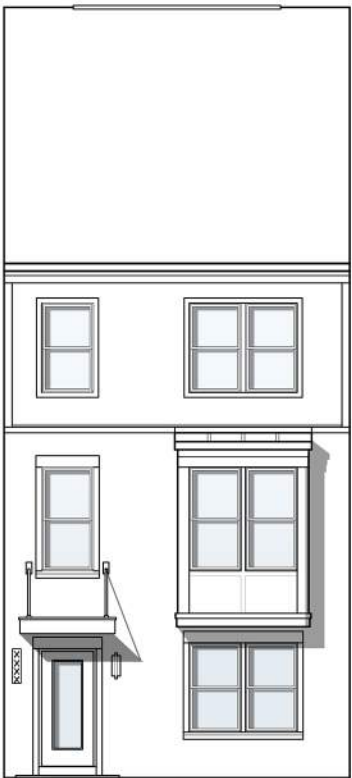
SMH DESIGNATED
SEMI-HIGH IMPACT
(LOW WATERTABLE)



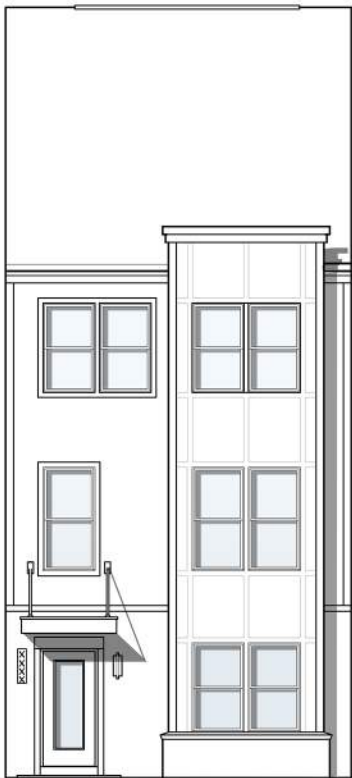
REDESIGNED CORNICE APPLIES ON ALL TOWNHOME ELEVATION TYPES T,U,W,X



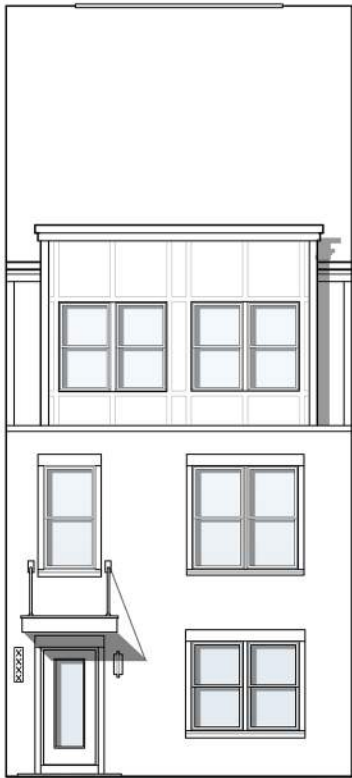
ALL AVAILABLE PARK PLACE ELEVATIONS



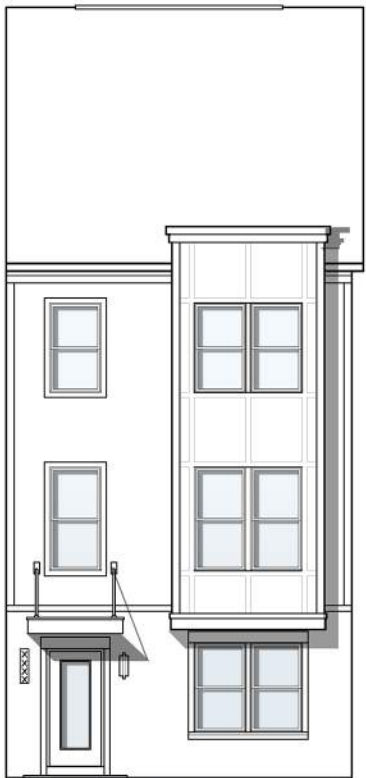
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ELEVATION W



ELEVATION X

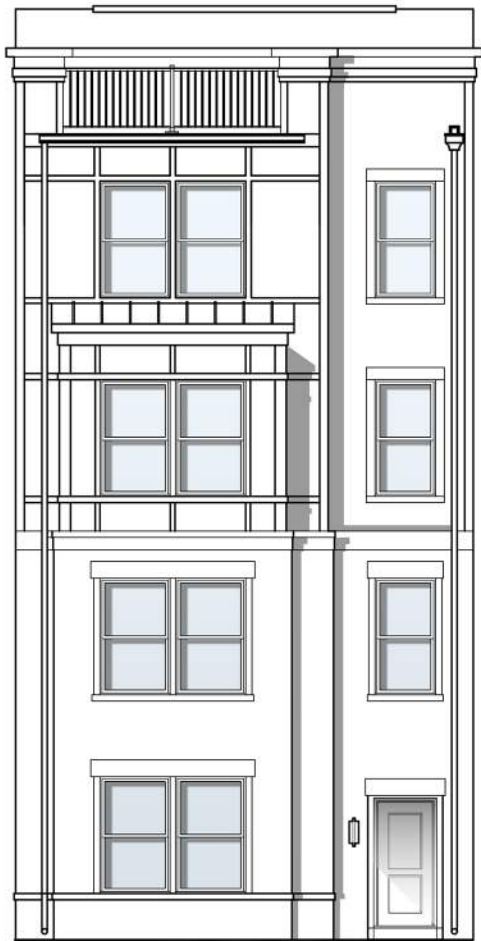
PARK PLACE TOWNHOME ELEVATIONS



ELEVATION A1



ELEVATION B1



ELEVATION C1

PARK PLACE 2 OVER 2 CONDO ELEVATIONS

SCHEME 1

SCHEME 2

SCHEME 3

SCHEME 4

SCHEME 5

SCHEME 6

SCHEME 7

GENERAL SHALE
BRICK COLOR



COLONY POINTE



OLD MILL



BLUE RIDGE REGENT



BLUE RIDGE REGENT



COLONY POINTE



OLD MILL



SPALDING TUDOR

HARDIE
HORIZONTAL
SIDING



EVENING BLUE



TIMBER BARK



GRAY SLATE



GRAY SLATE



GRAY SLATE



GRAY SLATE



COBBLESTONE

HARDIE
PANEL
COLOR



COBBLESTONE



COBBLESTONE



COBBLESTONE



PEARL GRAY



PEARL GRAY



LIGHT MIST



IRON GRAY

HARDIE
BAY
COLOR



COBBLESTONE



EVENING BLUE



GRAY SLATE



LIGHT MIST



PEARL GRAY



LIGHT MIST



IRON GRAY

McCORMICK
PAINTS
FRONT DOOR
COLOR



Williamsburg
227



Mckinney Stone
475



Black
200



Black
200



Williamsburg
227



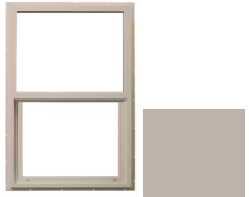
Mckinney Stone
475



Williamsburg
227

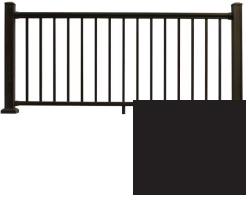
FOR ALL
BUILDING
SCHEMES

WINDOW COLOR



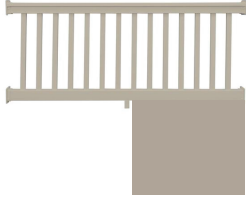
CLAY

FRONT RAILING COLOR



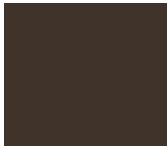
BLACK

REAR RAILING COLOR



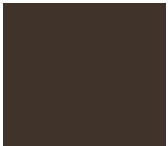
ALMOND

CORNICE COLOR



MUSKET BROWN

GUTTER &
DOWNSPOUT
COLOR



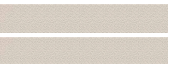
MUSKET BROWN

CANOPY COLOR



DARK BRONZE

BRICK MORTAR
COLOR



ROANOKE GRAY

FOR ALL
BUILDING
SCHEMES

GARAGE DOOR COLOR

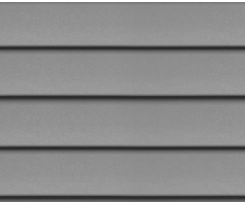


DESERT TAN

REAR & SIDES VINYL SIDING



FLINT



PEWTER

PARK PLACE
HERNDON, VA

CONCRETE CANTILEVER RETAINING WALL DESIGN

Park Place -Retaining Wall Design
Town of Herndon, Virginia

RETAINING WALLS #1, 2, 3, & 4

DESIGN PREPARED FOR:

STANLEY MARTIN HOMES
14200 Park Meadow Drive, Suite 100 N
Chantilly, VA 20151

SHEET INDEX

S1- COVER SHEET

S2- GENERAL NOTES

S3- SITE PLAN

S4- WALL #1 - PLAN & PROFILE

S5- WALL #2 - PLAN & PROFILE

S6- WALL #2 - PROFILE - ELEVATION

S7- WALL #2 - CONCRETE WALL PROFILE

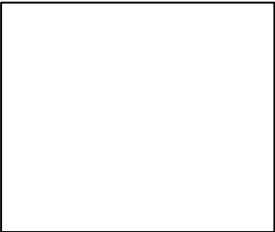
S8- WALL #3 - PLAN & PROFILE

S9- WALL #4 - PLAN & PROFILE

S10- WALL SECTION A-A

S11- TYPICAL DETAILS

REVISIONS	DATE
	6/22/2023
	10/27/2023
	11/13/2023



GEOTECHNICAL SOLUTION, INC.

3859 Centerview Dr, SUITE 160, CHANTILLY, VA 20151

PHONE: (703)-657-0014

FAX: (703)-657-0666

DESIGNER: S.F.B

DRAWN: S.F.B

SCALE: NA

DATE: NOVEMBER 2023

Park Place -Retaining Walls 1 to 4

Town of Herndon, Virginia

COVER SHEET

JOB NUMBER:

GSI WP-233575

SHEET:

S1

STRUCTURAL NOTES:

SOIL FRICTION ANGLE = 28.0 Deg.
ACTIVE WATER PRESSURE =62.4 PSF/FT
ACTIVE EQUIVALENT FLUID PRESSURE =68.0 PSF/FT
PASSIVE EQUIVALENT FLUID PRESSURE = 250.0 PSF/FT
SOIL WEIGHT = 120 PCF
COEFFICIENT OF FRICTION = 0.4
FACTOR OF SAFETY AGAINST SLIDING = 1.5
FACTOR OF SAFETY AGAINST OVERTURNING =2.0

1. GENERAL

A. ALL CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE PROVISIONS OF THE 2012 IBC, STATE AND LOCAL COUNTY REQUIREMENTS, AND THE FOLLOWING CRITERIA.

2. FOUNDATIONS

A. THE ALLOWABLE SAFE BEARING PRESSURE IS **2500 PSF** BASED ON SOILS REPORT PROVIDED BY GTA DATED 10/2/2018; TO BE VERIFIED BY AN ON-SITE GEOTECHNICAL ENGINEER OR BUILDING OFFICIAL.

B. BOTTOM OF THE FOOTING TO BE AT LEAST 2'-6" BELOW FINISHED GRADE OR TO FROST LINE DETERMINED BY BUILDING OFFICIAL OR AS INDICATED IN THE DESIGN. ALL BUILDING STRATA SHALL BE ADEQUATELY DRAIN BEFORE PLACING CONCRETE. NO EXCAVATION SHALL BE CLOSER THAN AT LEAST A SLOPE OF TWO HORIZONTAL ONE VERTICAL (2 HORIZ. 1 VERT.) TO UNDERSIDE EDGE OF ANY EXISTING FOOTING WITHOUT THE WRITTEN AND CERTIFIED PERMISSION OF A GEOTECHNICAL ENGINEER. STEP FOOTING WITH A RATIO OF TWO HORIZONTAL TO ONE VERTICAL.

C. PROVIDE SHORING AND PROTECTION FOR EXCAVATION BANKS AS NECESSARY TO PREVENT CAVING.

3. CAST-IN-PLACE CONCRETE

A. ALL CONCRETE TO BE MIXED AND PLACED IN ACCORDANCE WITH ACI 318-89 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE".

B. ALL CONCRETE TO BE NORMAL WEIGHT STONE CONCRETE WITH AGGREGATE CONFORMING TO ASTM C33 AND RANGING FROM 3/8" TO 1" IN SIZE.

C. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (F`c) OF **4000 PSI (e.g. VDOT A4)** AT 28 DAYS UNLESS NOTED OTHERWISE AND SHALL BE IN ACCORDANCE WITH SECTION 1904 "DURABILITY REQUIREMENTS AND TABLE 1904.2.2 (2) OF IBC AND SHALL CONTAIN 5-8% AIR ENTRAINMENT IN ACCORDANCE WITH ACI AND TABLE 1904.2.1 OF IBC.

D. CONCRETE STRENGTH SHALL BE TESTED IN ACCORDANCE WITH IBC SECTION 1905 AND THE FOLLOWING CONCRETE STRENGTH ACCEPTANCE CRITERIA.

- THE AVERAGE OF ALL SETS OF THREE CONSECUTIVE STRENGTH TEST RESULTS MUST EQUAL OR EXCEED THE SPECIFIED f`c STRENGTH.
- NO INDIVIDUAL STRENGTH TEST SHALL BE MORE THAN 500 PSI BELOW SPECIFIED f`c.

E. WALL TO HAVE VERTICAL CONTROL JOINTS SPACED AT NO MORE THAN 25'-0" HORIZONTALLY AS REQUIRED.

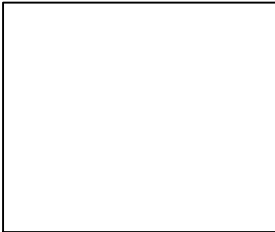
4. REINFORCING STEEL
- A. REINFORCED BARS SHALL CONFORM TO ASTM A-615, GRADE 60.
- B. ALL REINFORCING SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH ACI`s MANUAL OF STANDARD PRACTICE FOR DETAILING CONCRETE STRUCTURES (ACI-318), DETAILS OF REINFORCING SHALL CONFORM TO ACI 318-99AND CRSI STANDARD.
- C. CONCRETE COVER FOR BARS SHALL BE UNLESS SPECIFIED OTHERWISE :
- FOOTING AND OTHER CONCRETE POURED AGAINST EARTH : 3 INCHES
 - FORMED CONCRETE EXPOSED TO EARTH OR WEATHER : 2 INCHES
- D. BARS SHALL BE SECURELY TIED IN PLACE.
5. BACKFILL REQUIREMENTS (IF APPLICABLE)
- A. BACKFILL MATERIAL BEHIND AND IN FRONT OF THE WALL SHALL CLASSIFY AS ML, SM, SC, OR MORE GRANULAR PER ASTM D-2487, WITH A MAXIMUM ROCK FRAGMENT SIZE OF 3 INCHES. THE LIQUID LIMIT AND PLASTICITY INDEX VALUES FOR THE BACKFILL MATERIAL SHALL BE LESS THAN 40 AND 15, RESPECTIVELY. THE BACKFILL SHALL BE COMPACTED TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY PER ASTM D-698 IN STRUCTURAL AREAS. THE USE OF VERY WET OR VERY DRY BACKFILL MATERIALS SHOULD BE AVOIDED. IN ADDITION, THE USE OF HEAVY EQUIPMENT WITHIN 3 FEET OF THE WALL COULD DAMAGE THE WALL, AND SHOULD NOT BE USED.
- B. THE BACKFILL SHALL ONLY BE PLACED WHEN CONCRETE HAS REACHED 75% OF THE 28-DAY DESIGN STRENGTH.
- C. IF VDOT 57 STONE PLACED BEHIND THE WALL AS A BACKFILL MATERIAL, COMPACTION WILL NOT BE REQUIRED.

6. Casing pipe shall be carbon steel, in accordance with ASTM A139, Grade B, and shall have the following minimum wall thickness:

A. Wall thickness:	
DIAMETER	MINIMUM THICKNESS
16 inches to 36 inches	0.375 inches
42 inches and greater	0.50 inches

B. Joints: for casing pipe shall be squared and continuously welded.

REVISIONS	DATE
	6/22/2023
	10/27/2023
	11/13/2023



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DATE: NOVEMBER 2023

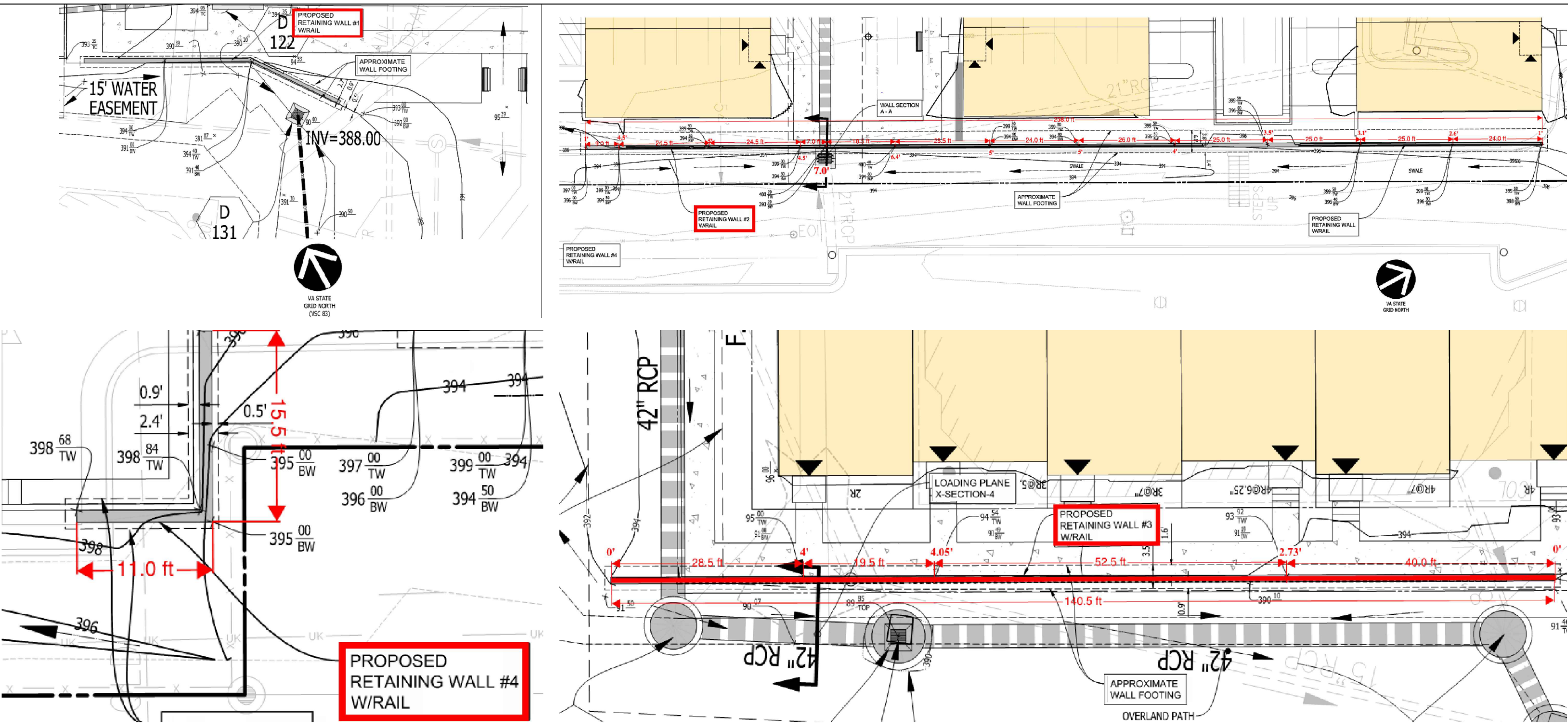
Park Place -Retaining Walls 1 to 4

Town of Herndon, Virginia

GENERAL NOTE

JOB NUMBER:
GSI WP-233575

SHEET:
S2



SITE PLAN PROVIDED BY VIKA VIRGINIA LLC.
DATED 1/25/2023

REVISIONS	DATE
	6/22/2023
	10/27/2023
	11/13/2023



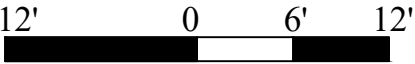
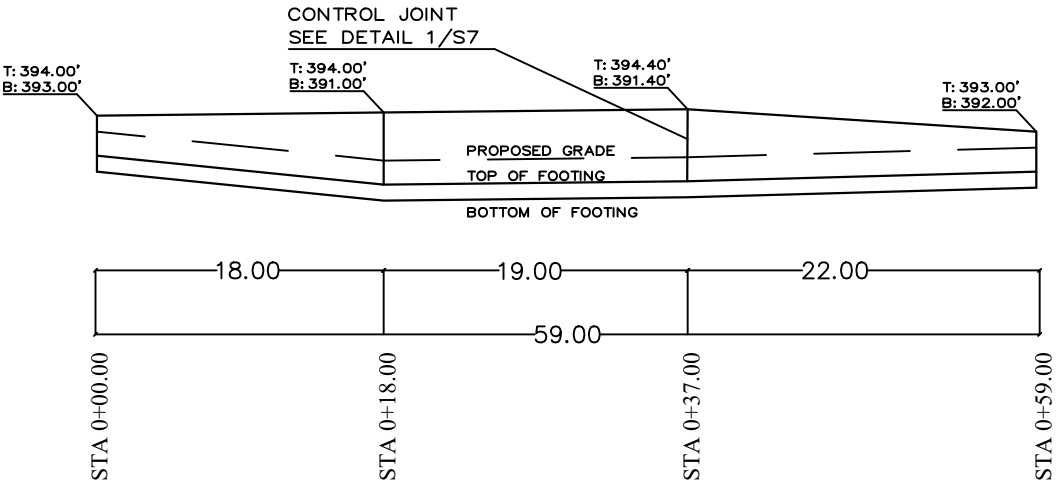
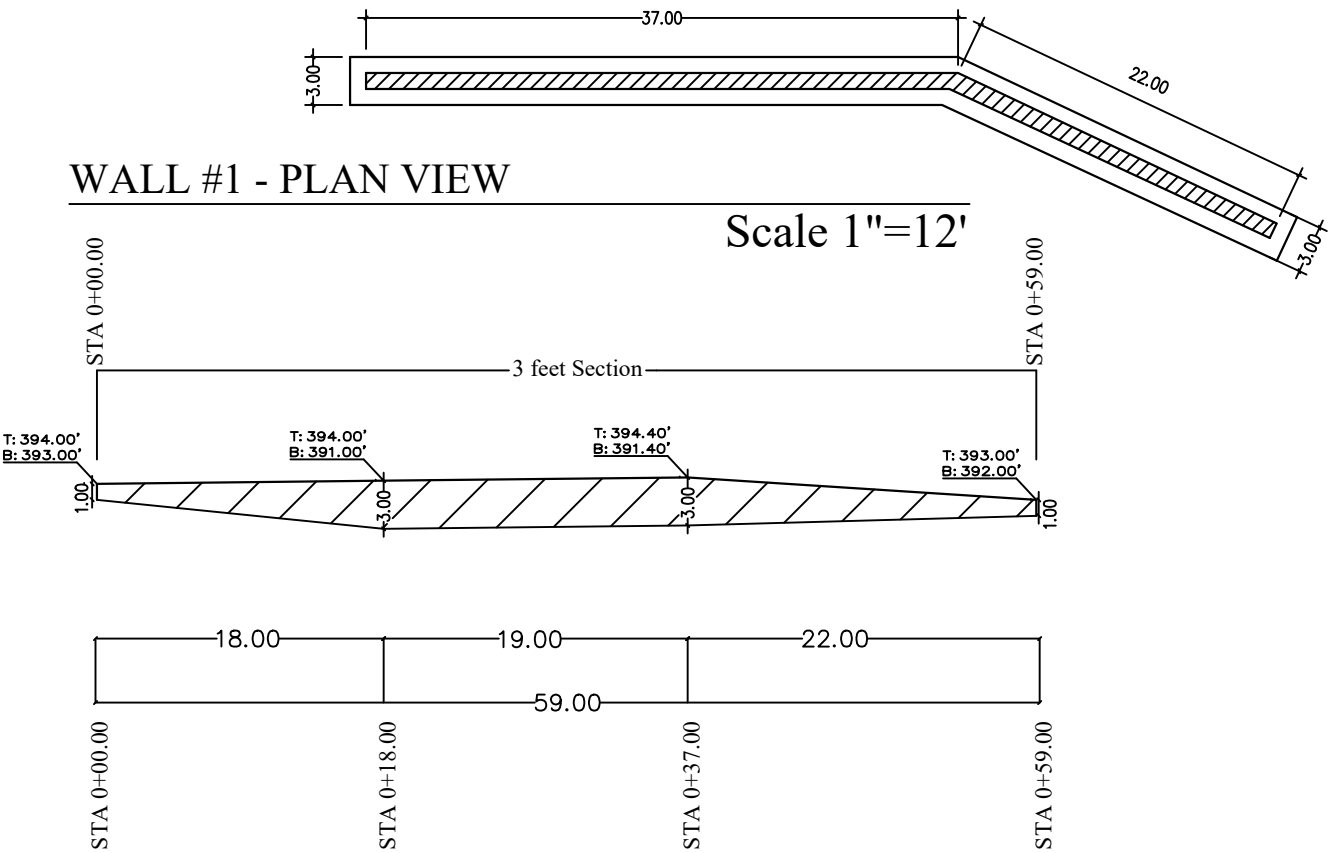
GEOTECHNICAL SOLUTION, INC.
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PHONE: (703)-657-0014
FAX: (703)-657-0666

DESIGNER: S.F.B
DRAWN: S.F.B
SCALE: NTS
DATE: NOVEMBER 2023

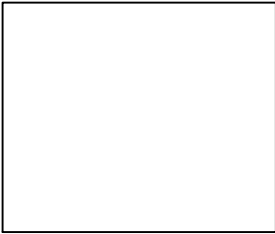
Park Place -Retaining Walls 1 to 4
Town of Herndon, Virginia
SITE PLAN

JOB NUMBER:
GSI WP-233575
SHEET: **S3**

THE ELEVATIONS AND DIMENSIONS SHALL BE VERIFIED BY CIVIL ENGINEER PRIOR TO CONSTRUCTION



REVISIONS	DATE
	6/22/2023
	10/27/2023
	11/13/2023



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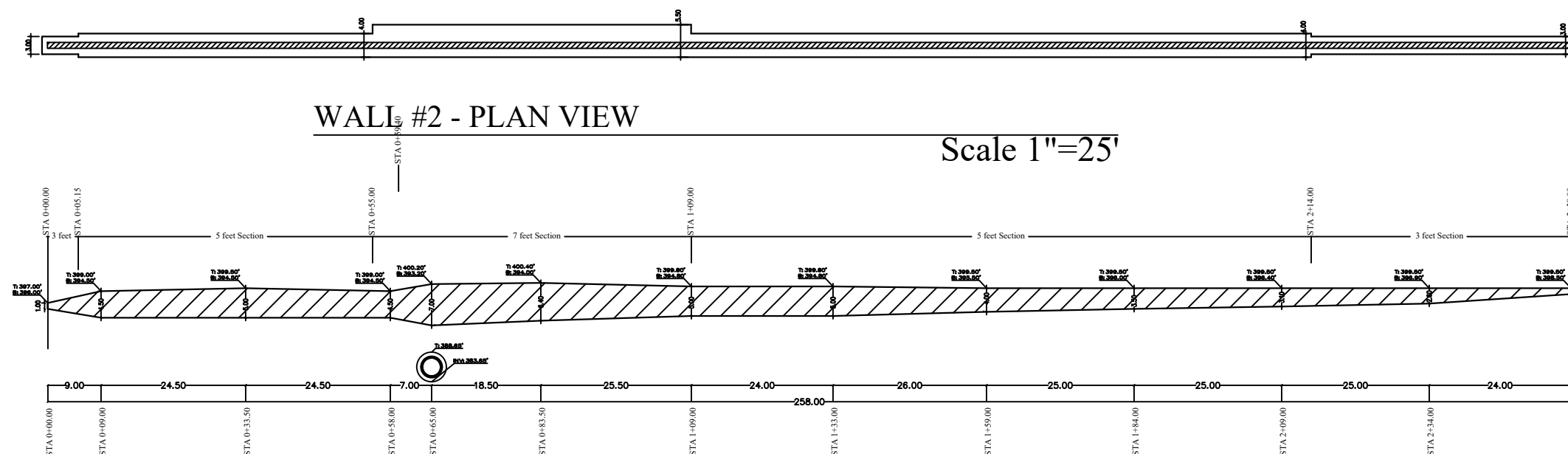
GEOTECHNICAL SOLUTION, INC.
3859 Centerview Dr, SUITE 160, CHANTILLY, VA 20151
PHONE: (703)-657-0014
FAX: (703)-657-0666

DESIGNER: S.F.B
DRAWN: S.F.B
SCALE: 1"=12'
DATE: NOVEMBER 2023

Park Place -Retaining Walls 1 to 4
Town of Herndon, Virginia
WALL #1 - PLAN & PROFILE

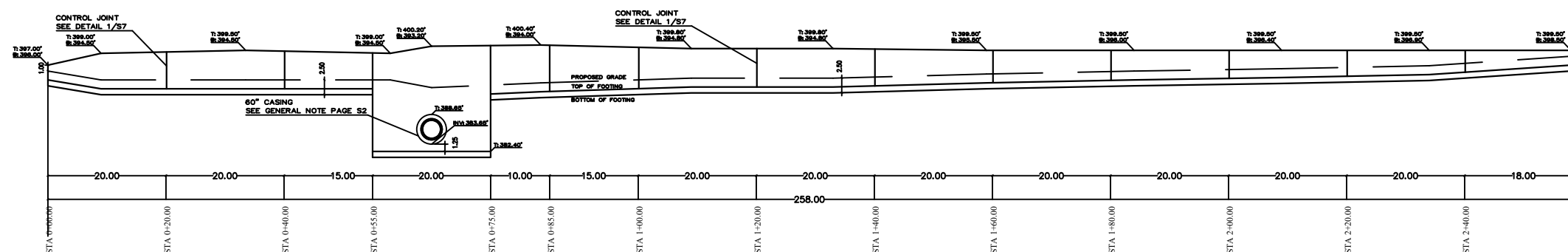
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GSI WP-233575
SHEET: **S4**

THE ELEVATIONS AND DIMENSIONS SHALL BE VERIFIED BY CIVIL ENGINEER PRIOR TO CONSTRUCTION



WALL #2 -PROFILE - ELEVATIONS

Scale 1"=25'



WALL #2 - CONCRETE WALL PROFILE

Scale 1"=25'

REVISIONS	DATE
	6/22/2023
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SCALE: 1"=25'
DATE: NOVEMBER 2023

Park Place -Retaining Walls 1 to 4

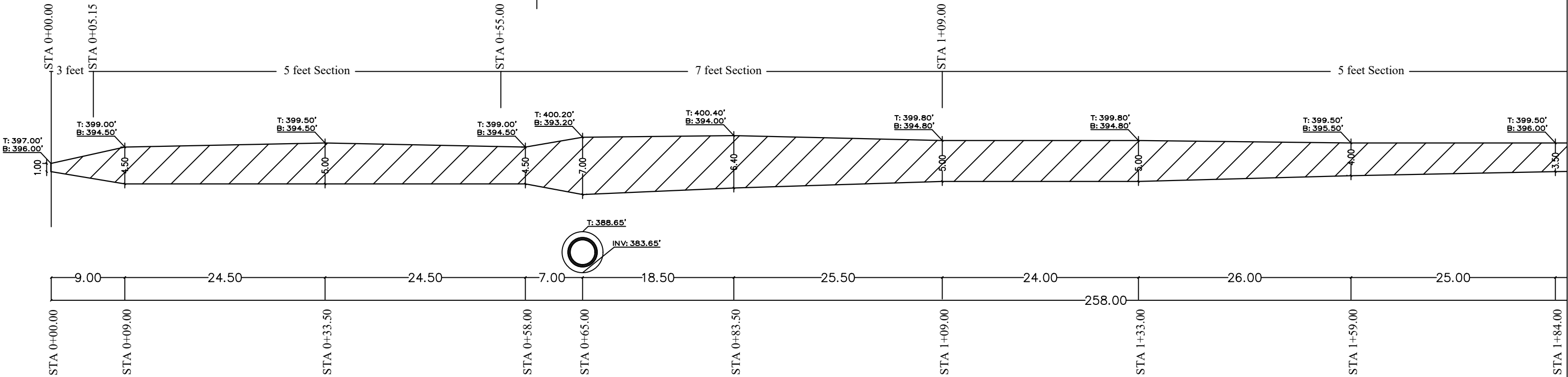
Town of Herndon, Virginia

WALL #2 - PLAN & PROFILE

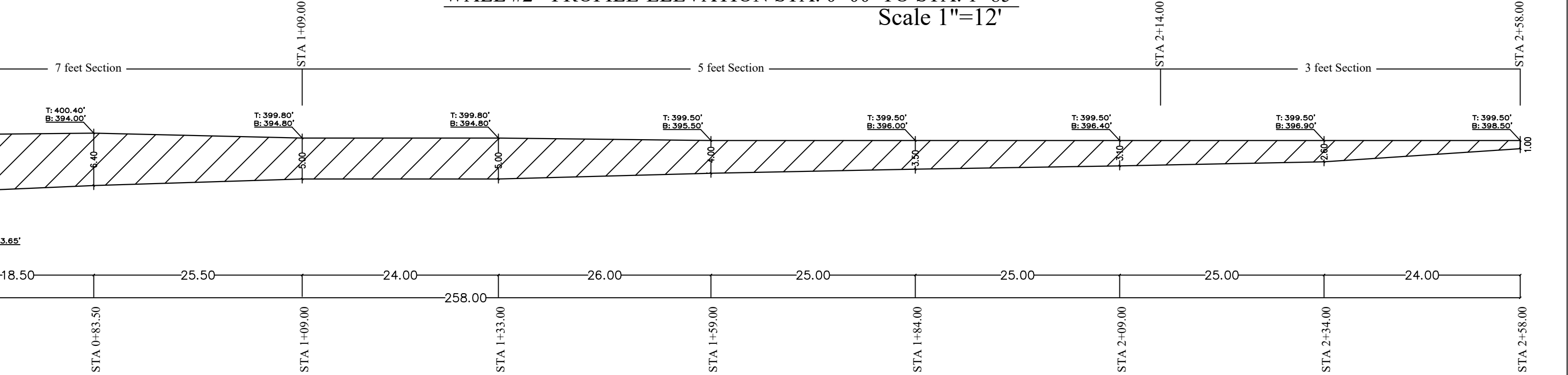
JOB NUMBER:
GSI WP-233575

SHEET: S5

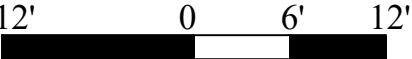
THE ELEVATIONS AND DIMENSIONS SHALL BE VERIFIED BY CIVIL ENGINEER PRIOR TO CONSTRUCTION



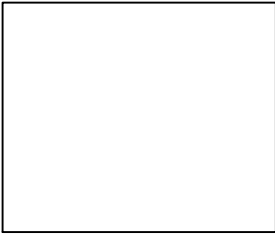
WALL #2 - PROFILE-ELEVATION STA. 0+00 TO STA. 1+85
Scale 1"=12'



WALL #2 - PROFILE - ELEVATION- STA. 0+80 TO STA. 2+58
Scale 1"=12'



REVISIONS	DATE
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	10/27/2023
	11/13/2023



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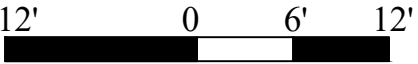
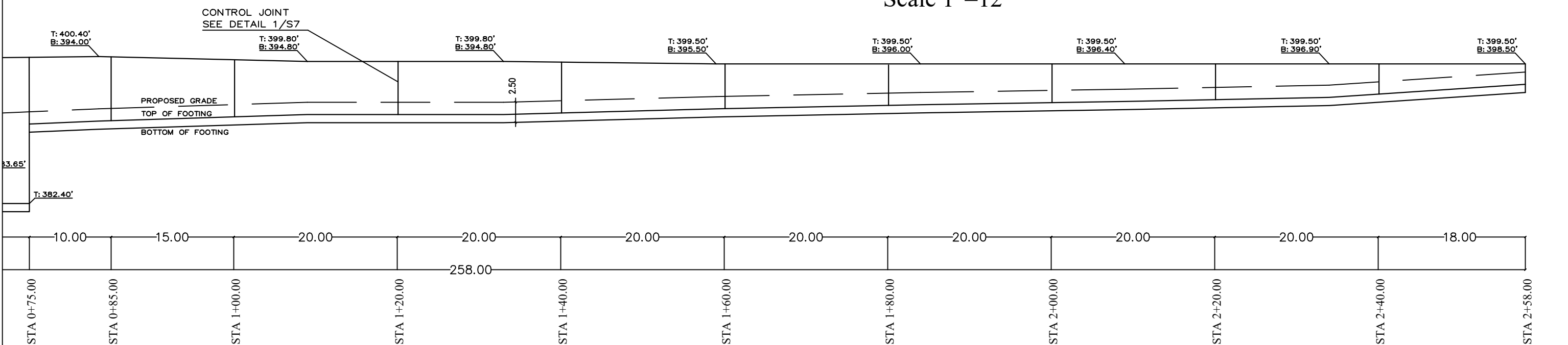
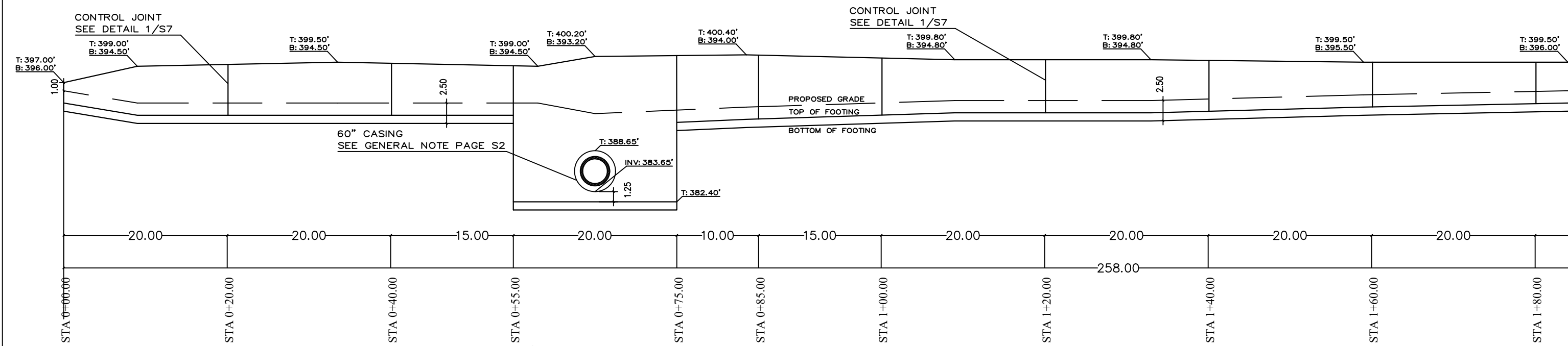
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PHONE: (703)-657-0014
FAX: (703)-657-0666

DESIGNER: S.F.B
DRAWN: S.F.B
SCALE: 1"=12'
DATE: NOVEMBER 2023

Park Place -Retaining Walls 1 to 4
Town of Herndon, Virginia
WALL #2 - PROFILE

JOB NUMBER:
GSI WP-233575
SHEET: **S6**

THE ELEVATIONS AND DIMENSIONS SHALL BE VERIFIED BY CIVIL ENGINEER PRIOR TO CONSTRUCTION



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	11/13/2023

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FAX: (703)-657-0666

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DRAWN: S.F.B

SCALE: 1"=12'

DATE: NOVEMBER 2023

Park Place -Retaining Walls 1 to 4

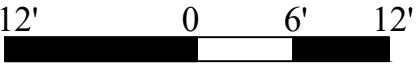
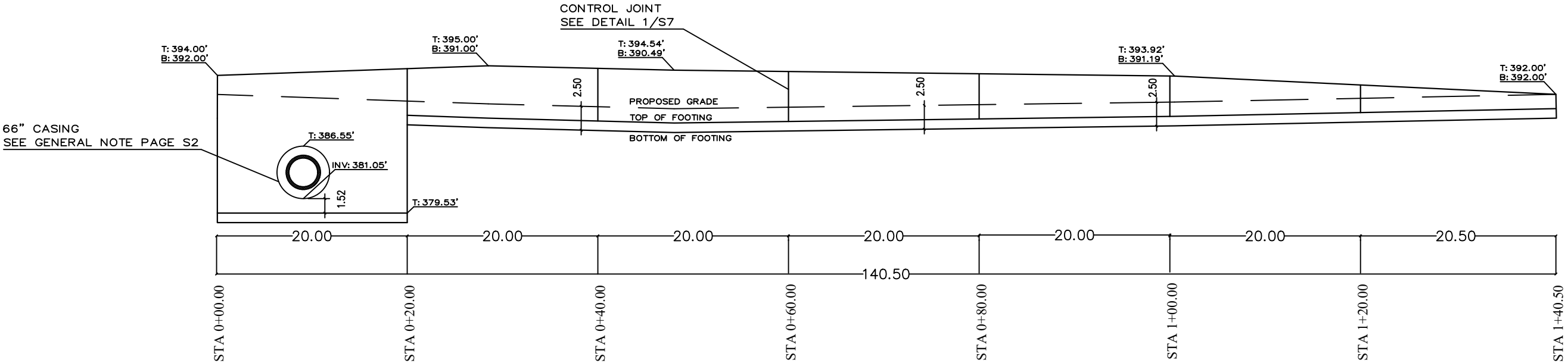
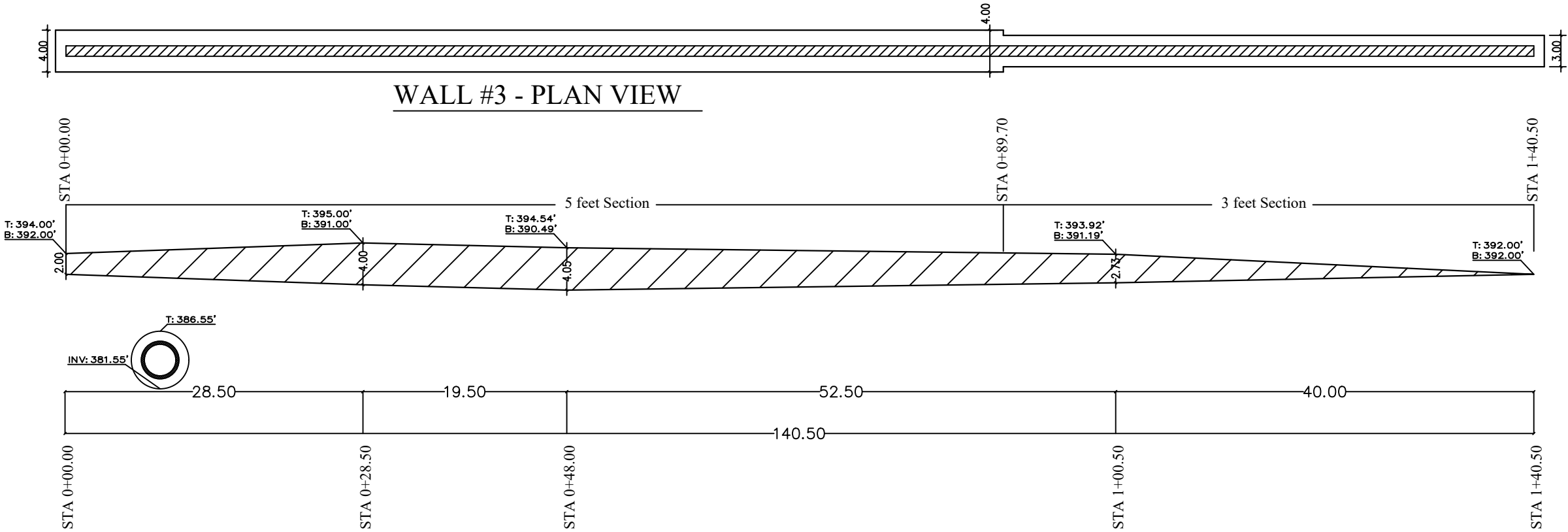
Town of Herndon, Virginia

WALL #2 - CONTROL JOINTS

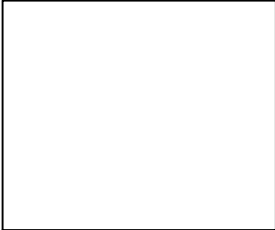
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GSI WP-233575

SHEET:
S7

THE ELEVATIONS AND DIMENSIONS SHALL BE VERIFIED BY CIVIL ENGINEER PRIOR TO CONSTRUCTION



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	10/27/2023
	11/13/2023



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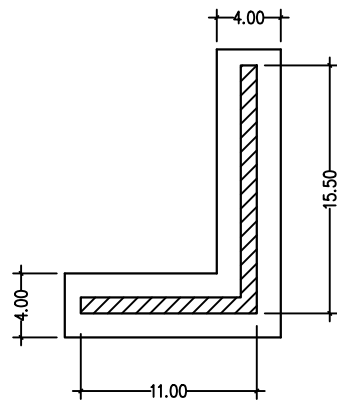
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DESIGNER: S.F.B
DRAWN: S.F.B
SCALE: 1"=12'
DATE: NOVEMBER 2023

Park Place -Retaining Walls 1 to 4
Town of Herndon, Virginia
WALL #3 - PLAN & PROFILE

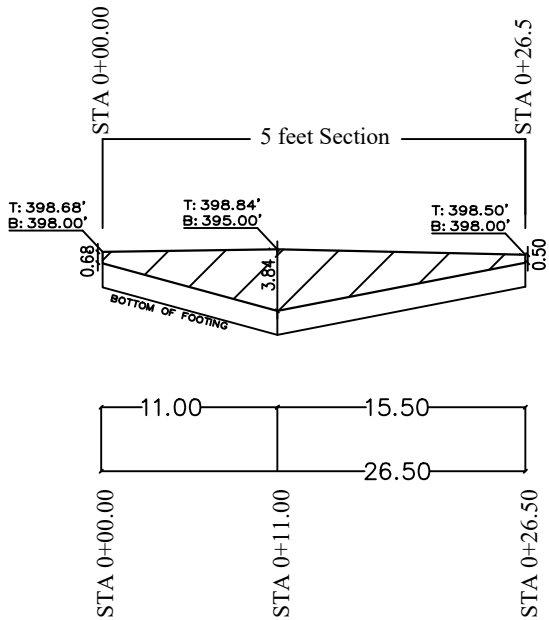
JOB NUMBER:
GSI WP-233575
SHEET: **S8**

THE ELEVATIONS AND DIMENSIONS SHALL BE VERIFIED BY CIVIL ENGINEER PRIOR TO CONSTRUCTION



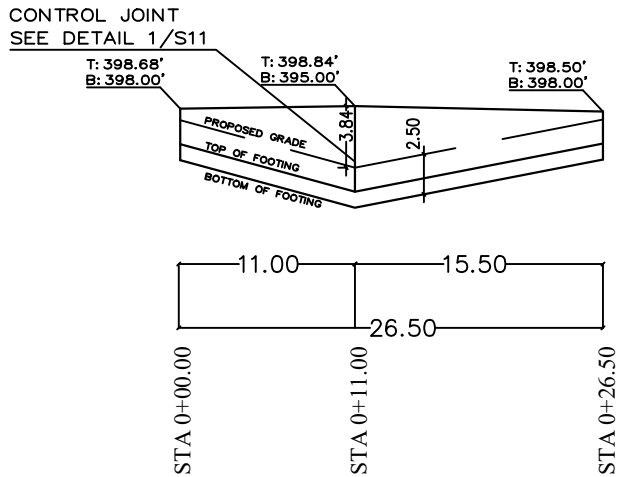
WALL #4 - PLAN VIEW

Scale 1"=12'



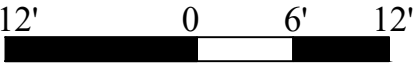
WALL #4 - PROFILE - ELEVATIONS

Scale 1"=12'

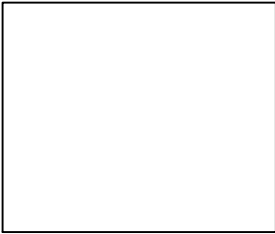


WALL #4 - CONTROL JOINTS

Scale 1"=12'



REVISIONS	DATE
	6/22/2023
	10/27/2023
	11/13/2023

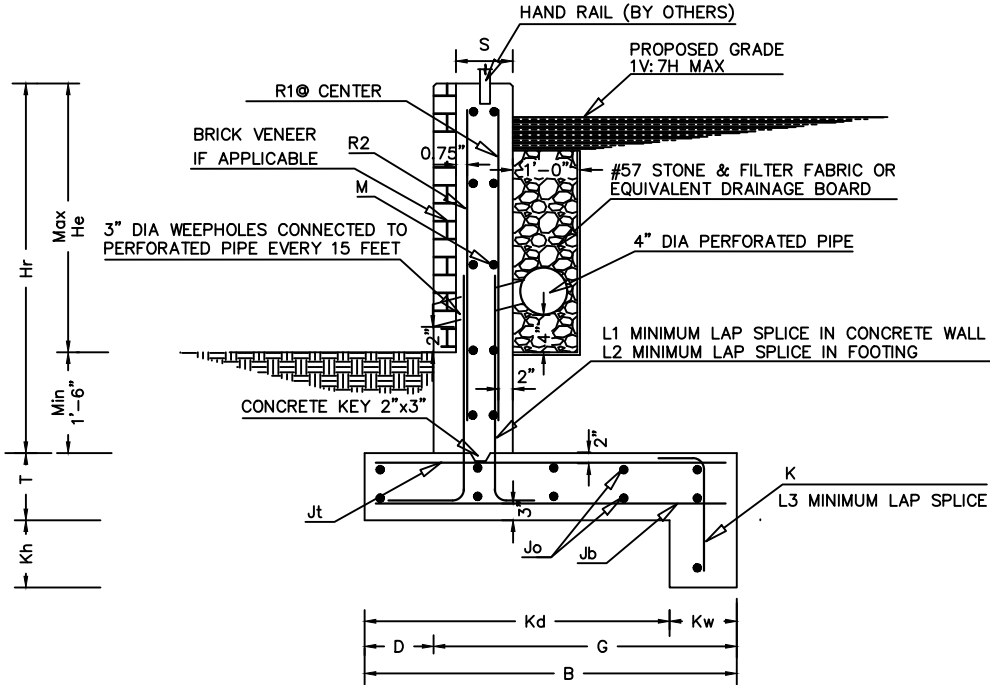


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SCALE: 1"=12'
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Park Place -Retaining Walls 1 to 4
Town of Herndon, Virginia
WALL #4 - PLAN & PROFILE

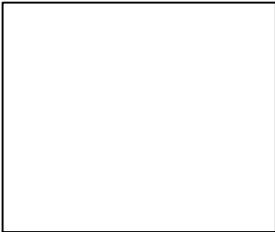
JOB NUMBER:
GSI WP-233575
SHEET: **S9**



TYPICAL SECTION A-A

WALL DIMENSIONS			FOOTING DIMENSIONS							WALL HEIGHT	REINFORCEMENT										
RETAINED HEIGHT MIN (FT)	EXPOSED HEIGHT MAX (FT)	STEM WIDTH (FT)	TOTAL FOOTING WIDTH (FT)	TOE WIDTH (FT)	HEEL WIDTH (FT)	FOOTING THICKNESS (FT)	KEY HEIGHT (FT)	KEY WIDTH (FT)	KEY DISTANCE (FT)	RETAINED HEIGHT MIN (FT)	EXPOSED HEIGHT MAX (FT)	STEM VERTICAL REINF. - INNER	STEM VERTICAL REINF. - OUTER	STEM HORIZ. REINFORCING	FOOTING MAIN REINF. TOP FACE	FOOTING MAIN REINF. BOTTOM	FOOTING HORIZ. REINF.	FOOTING KEY. REINFORCING	LAP SPLICE IN WALL STEM.	LAP SPLICE IN FOOTING.	LAP SPLICE IN KEY
He	Hr	S	B	D	G	T	Kh	Kw	Kd	He	Hr	R1	R2	M	Jt	Jb	Jo	K	L1	L2	L3
3'-0"	4'-6"	10"	3'-0"	1'-0"	2'-0"	12"	-	-	-	3'-0"	4'-6"	#5@16"	-	#4@16"	#5@14"	#5@14"	#4@16"	-	20"	10"	-
5'-0"	6'-6"	12"	4'-0"	1'-6"	2'-6"	12"	-	-	-	5'-0"	6'-6"	#5@12"	-	#4@16"	#5@12"	#5@12"	#4@16"	-	20"	10"	-
7'-0"	8'-0"	12"	5'-6"	1'-6"	4'-0"	12"	-	-	-	7'-0"	8'-0"	#6@12"	-	#4@16"	#6@12"	#6@12"	#4@16"	-	24"	14"	-

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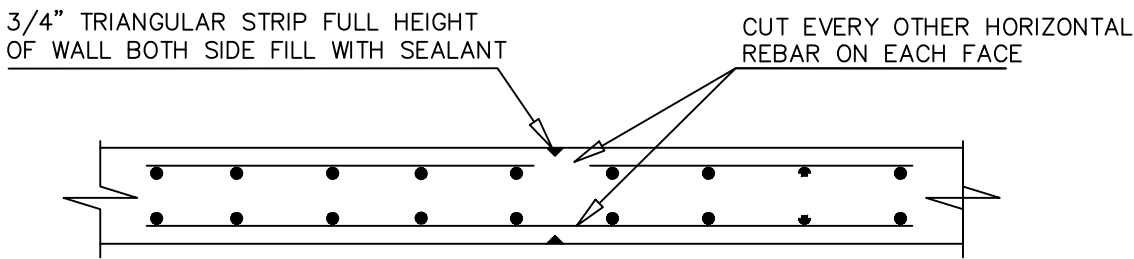
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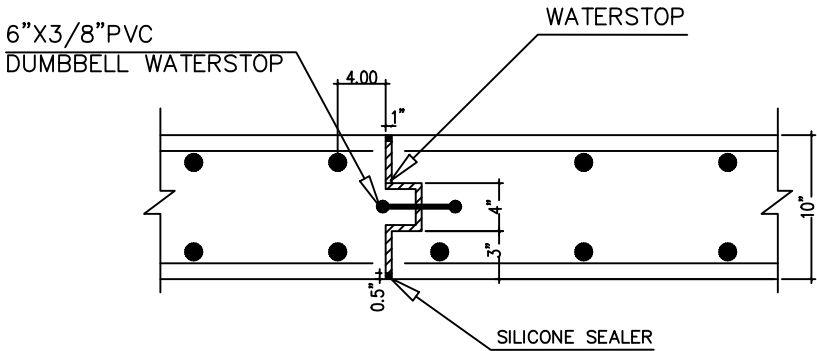
DESIGNER: S.F.B
DRAWN: S.F.B
SCALE: NTS
DATE: NOVEMBER 2023

Park Place -Retaining Walls 1 to 4
Town of Herndon, Virginia
WALL SECTION - RETAINING WALLS #2 & 3

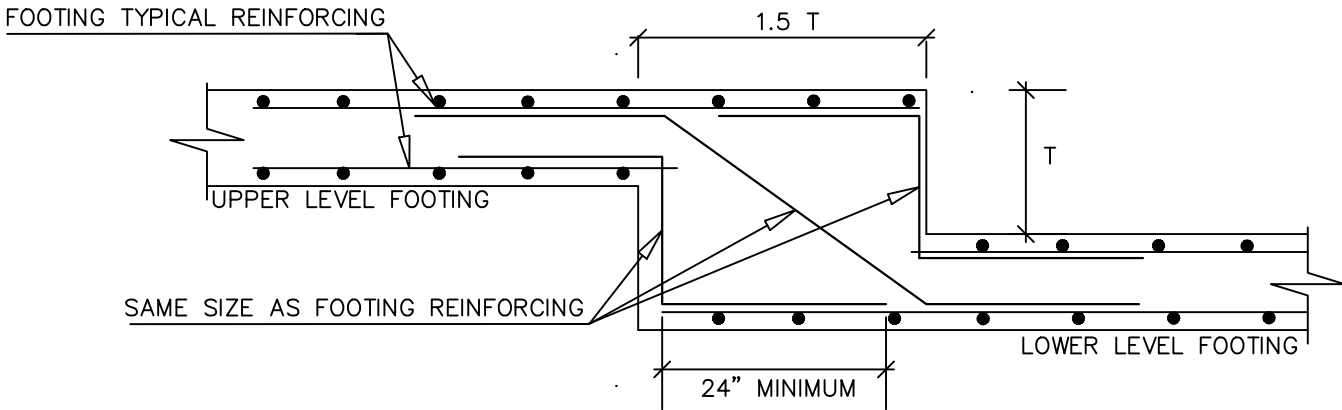
JOB NUMBER:
GSI WP-233575
SHEET: **S10**



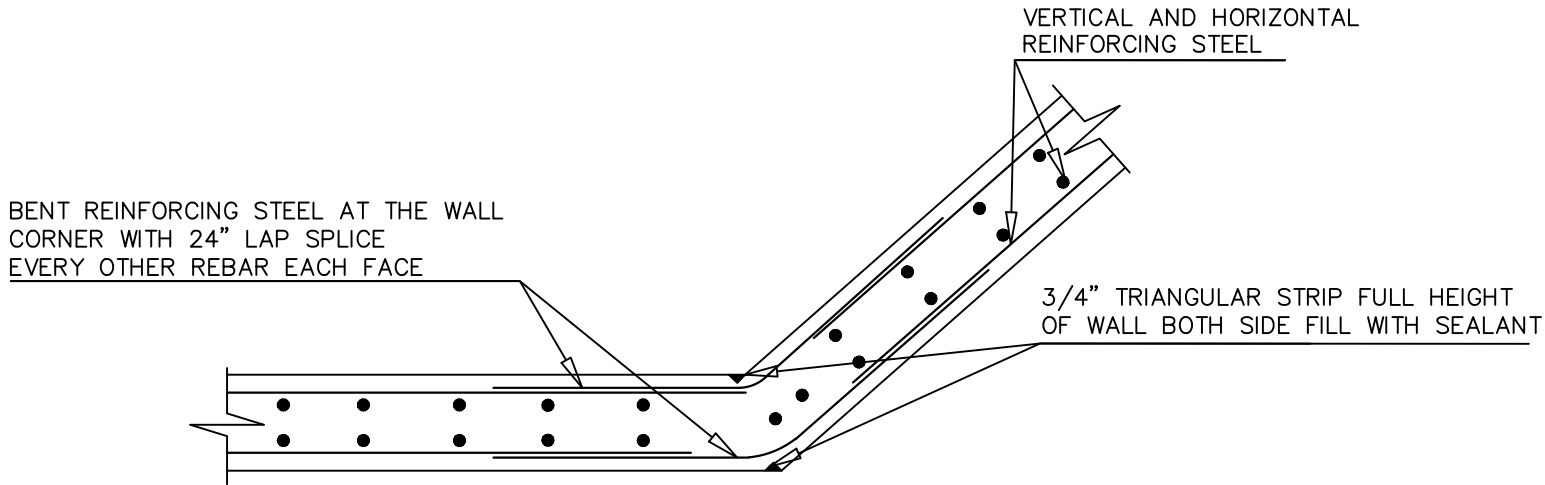
1
S-7 TYPICAL DETAIL - CONTROL JOINT
Scale: NTS



2
S-7 TYPICAL DETAIL - CONSTRUCTION JOINT
Scale: NTS

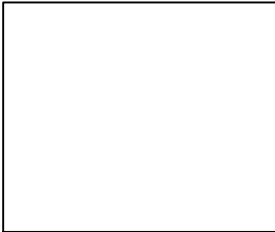


3
S-7 TYPICAL LEVEL UP/ DOWN FOOTING
NOT APPLICABLE
Scale: NTS



4
S-7 TYPICAL DETAIL - CORNER CONNECTION
SCALE: NTS

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Park Place -Retaining Walls 1 to 4
Town of Herndon, Virginia
TYPICAL DETAILS

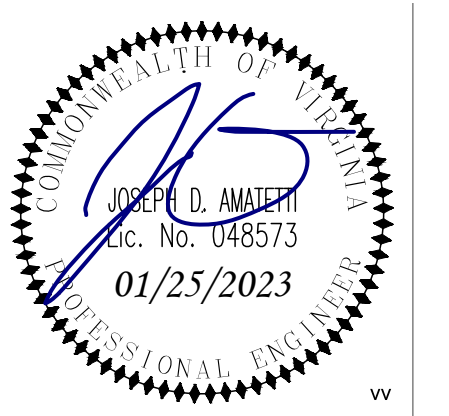
JOB NUMBER:
GSI WP-233575
SHEET: **S11**

Our Site Set on the Future.

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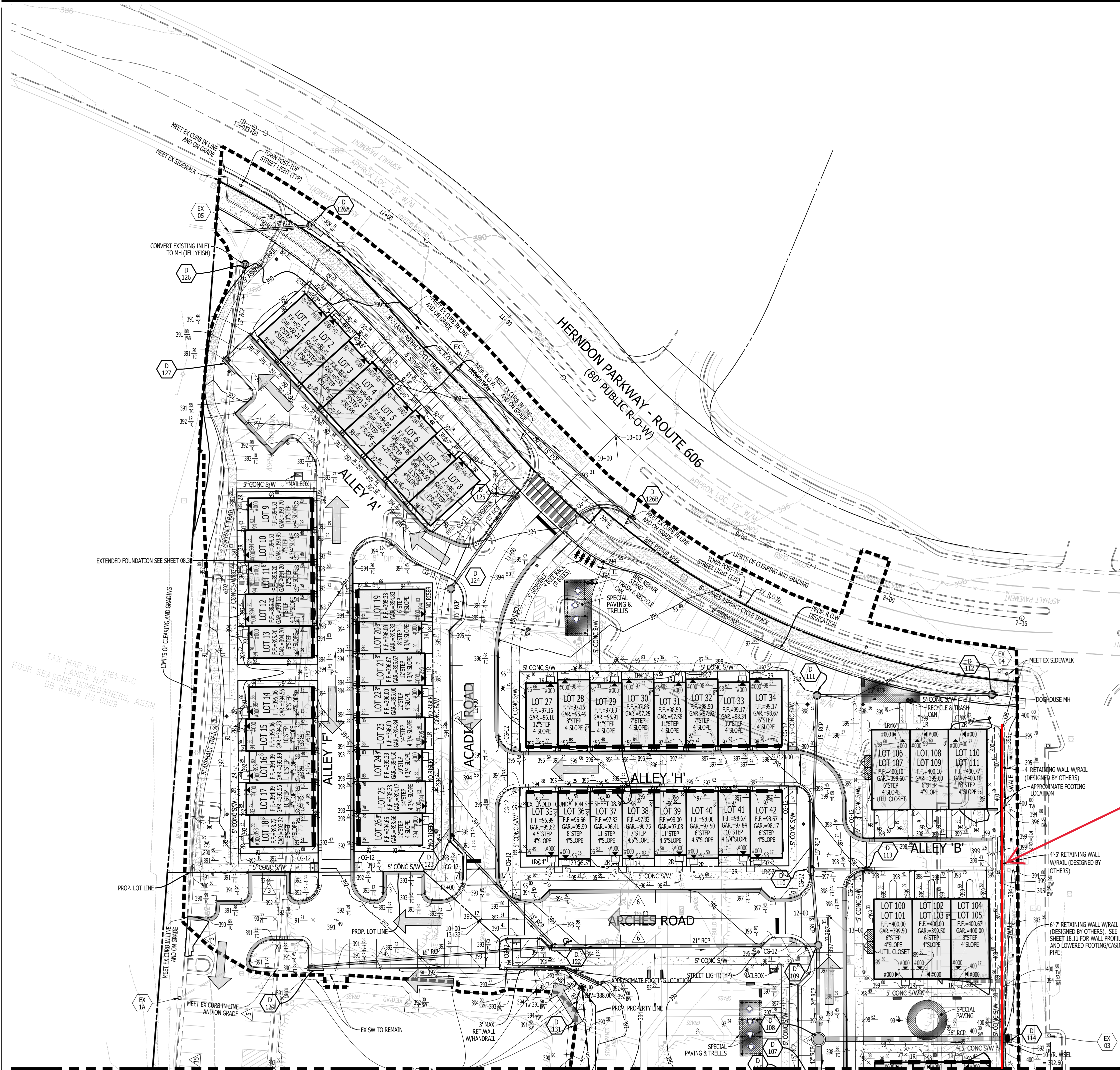
POST-APPROVAL SHEET STATUS	DATE
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 - SPECIALTY PAVERS
SEE SHEETS 17.01 THRU 17.02A FOR DETAILS



GRADING PLAN

06.03



FOR CONTINUATION, SEE A-A ON SHEET 06.04

Our Site Set on the Future.

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PLAN STATUS	DATE
1st. Sub.	02/17/2021
2ND SUBMISSION	06/11/2021
3RD SUBMISSION	11/24/2021
4TH SUBMISSION	04/22/2022
5TH SUBMISSION	09/20/2022
6TH SUBMISSION	01/25/2023

[illegible]

PROFESSIONAL SEAL



PARK PLACE

TOWN OF HERNDON
TP #2103

GRADING PLAN

DRAWN BY:	KY
DESIGNED BY:	JDA
DATE ISSUED:	06/15/2021
DWG. SCALE:	1"=30'
VJKA NO.	VW8011E
SHEET NO.	06.04

[illegible]

Wall #2

Wall #4

Wall #3

OVERLAND RELIEF NARRATIVE:

THERE ARE TWO RELIEF POINTS THAT SERVE THIS SITE. ONE POINT IS AT THE WESTERN PORTION OF THE SITE AND THE OTHER IS AT THE NORTHERN PORTION OF THE SITE. DISCHARGING OFFSITE.

THIS SITE HAS BEEN DESIGNED SUCH THAT IN THE EVENT OF THE 100 YEAR STORM OCCURRING AT A TIME WHEN THE STORM DRAIN INLET SYSTEM WAS INOPERABLE, NO HABITABLE STRUCTURE WOULD BE FLOODED, AND NO IMPACT ON ADJOINING PROPERTIES WOULD OCCUR. ALL AREAS OF THE SITE HAVE POSITIVE DRAINAGE AWAY FROM THE HABITABLE STRUCTURES TO THE ADJACENT ROADWAYS. IN THE EVENT OF THE 100 YEAR STORM, OVERLAND FLOW WILL FOLLOW THE PRIVATE ROADWAYS AND FLOW TOWARDS EITHER STRUCTURE EX-OR STRUCTURE D-127.

WATER WILL POND AT A STRUCTURE EX-01 UNTIL IT REACHES AN ELEVATION OF 388.07, AT WHICH POINT IT WILL SPILL OVER THE CURB AND FLOW OFFSITE. AT ELEVATION 388.07 THERE IS 4.85 FEET OF FREEBOARD BETWEEN THE LOWEST STRUCTURE ELEVATION AND THE LOWEST FIRST FLOOR ELEVATION.

AT STRUCTURE D-127, WATER WILL POND UNTIL IT REACHES AN ELEVATION OF 391.20, AT WHICH POINT IT WILL SPILL OVER THE CURB AND FLOW OFFSITE. AT ELEVATION 391.20 THERE IS 1.04 FEET OF FREEBOARD BETWEEN THE LOWEST STRUCTURE ELEVATION AND THE LOWEST FIRST FLOOR ELEVATION.

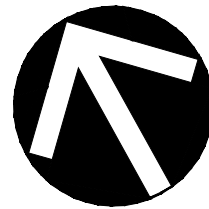
BASED ON THE PROVIDED FREEBOARD OF 4.85 AND 1.04 FEET AT STRUCTURES EX-01 AND D-127, IT IS THE OPINION OF THE SIGNING ENGINEER THAT NO FLOODING OF HABITABLE STRUCTURES OR ADVERSE IMPACT ON ADJOINING PROPERTIES WILL OCCUR IN THE EVENT OF THE 100 YEAR STORM.

OVERLAND RELIEF POINTS

SEE SHEET 06.07 FOR SITE NOTES

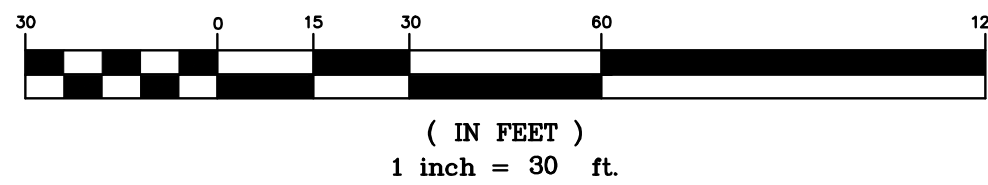
SEE SHEET 06.09 FOR EASEMENT EXHIBIT

SPECIALTY PAVERS
SEE SHEETS 17.01 THRU 17.02A FOR DETAILS



VA STATE
GRID NORTH
(VSC 83)

GRAPHIC SCALE



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