

# VICTORY DRIVE GENERALIZED DEVELOPMENT PLAN TOWN OF HERNDON, VIRGINIA

DECEMBER 8, 2021  
APRIL 25, 2022  
JULY 28, 2022

**PROJECT TEAM:**

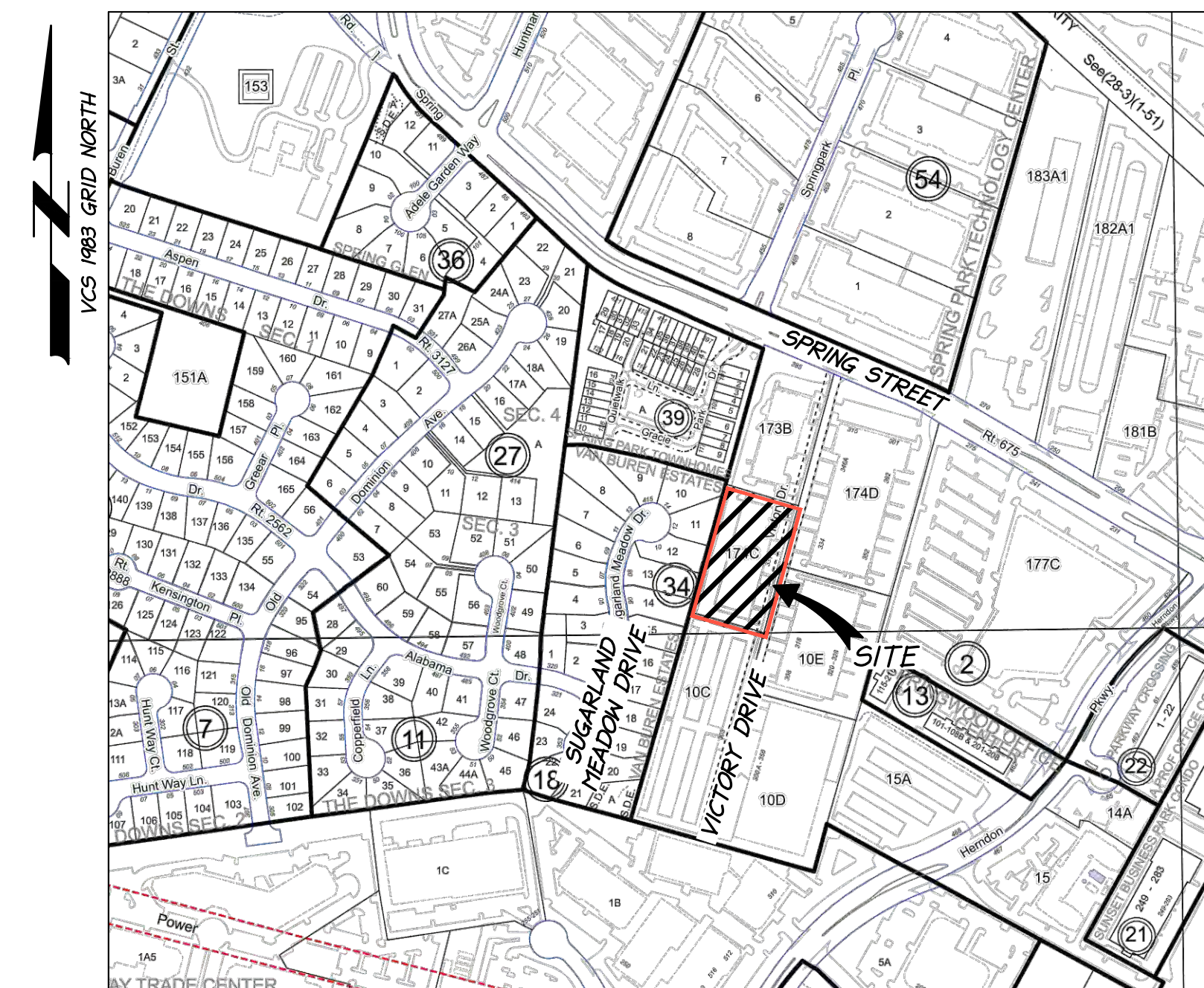
**DEVELOPER/APPLICANT:**  
PARCEL 5 PARTNERS LLC,  
C/O KENWOOD MANAGEMENT CO.  
5272 RIVER ROAD, SUITE 360  
BETHESDA MD 20816  
(301) 656-7790  
CONTACT: MR. PHIL ACKLEY

**CIVIL ENGINEER:**  
LAND DESIGN CONSULTANTS, INC.  
4585 DAISY REID AVENUE, SUITE 201  
WOODBRIDGE, VA 22192  
(703) 680-4585  
CONTACT: MR. MATT MARSHALL, L.S., AICP

**ARCHITECT:**  
BWD ARCHITECTS, INC.  
800 WEST BROAD STREET, SUITE 400  
FALLS CHURCH, VA 22046  
(703) 356-6771  
CONTACT: MR. JACK WILBERN

**LAND USE ATTORNEY:**  
WALSH COLUCCI LUBELEY & WALSH  
2200 CLARENDON BLVD., SUITE 1300  
ARLINGTON, VA 22201  
(703) 528-4700  
CONTACT: MS. ELIZABETH BAKER

PROPOSED SITE TABULATIONS			
REQUIRED		PROPOSED	
APPROX. AREA OF INDUSTRIAL PARK	+/- 16.2 Ac.	SITE AREA:	+/- 1.78 Ac. (77,390 SF)
		AREA OF DEDICATION:	0.0 Ac. (0 SF)
		SITE AREA AFTER DEDICATION	+/- 1.78 Ac. (77,390 SF)
		USE:	SELF-SERVICE STORAGE (Section 78-71.16)
EXISTING ZONE:	PD-B	ZONE:	PD-B
MIN. DISTRICT SIZE:	2.0 Ac.	DISTRICT SIZE:	N/A
MAX. DENSITY:	F.A.R. 0.4 (Conditionally can be up to 0.8, Section 78-510.1(b)) NOTE: F.A.R. EXCLUSIVE OF CELLAR AREA	DENSITY:	FAR +/- .77
MAX. BUILDING HEIGHT	45 FEET	BUILDING HEIGHT:	+/- 24 FEET
NUMBER OF FLOORS:	N/A	NUMBER OF FLOORS:	2 FLOORS + CELLAR
BUILDING LOT COVERAGE:		F.A.R. AREA:	60,732 SF
		CELLAR AREA:	30,366 SF
		TOTAL AREA:	91,098 SF
MIN. SETBACKS:		MIN. SETBACKS:	
FRONT:	None	FRONT:	N/A
SIDE:	Adjacent to residential equal to height	SIDE:	N/A
REAR:	Adjacent to residential equal to height	REAR:	+/- 24 FEET
LOT COVERAGE:		LOT COVERAGE:	
EXISTING PERVIOUS AREA:	+/- 0.17 Ac.	PERVIOUS AREA:	+/- 0.34 Ac.
EXISTING IMPERVIOUS AREA:	+/- 1.61 Ac.	IMPERVIOUS AREA:	+/- 1.44 Ac.
BUILDING LOT COVERAGE:		BUILDING LOT COVERAGE:	
MIN. OPEN SPACE:	20% (15,478 SF)	OPEN SPACE:	+/-24% (+/-18,381 SF)
MIN. OPEN SPACE FOR RECREATION:	N/A	RECREATION OPEN SPACE:	N/A
PARKING:	9 SPACES**	PARKING:	10 SPACES
LOADING SPACES:	2 SPACES	LOADING SPACES:	2 SPACES
ADA ACCESSIBLE SPACES:	1 SPACE (1 VAN ACCESSIBLE)	ADA ACCESSIBLE SPACES:	2 SPACES (2 VAN ACCESSIBLE)
PARKING PROVIDED NOT ATTRIBUTED TO USE:	N/A	SUPPLEMENTAL PARKING FOR BUSINESS PARK:	24 SPACES*



VICINITY MAP  
SCALE: 1" = 400'

**PARKING NARRATIVE \*\***

THE REQUIRED PARKING PROVIDED ON THE TABULATIONS HEREIN WAS COMPUTED UTILIZING THE ITE PARKING GENERATION RATES, MINI-WARHOUSE 151, IN ACCORDANCE WITH SECTION 78-100.3(b) OF THE ZONING ORDINANCE. THE REQUIRED PARKING RATE UTILIZES THE ABOVE GRADE AREA OF 60,732 G.S.F.

THE EXISTING BUILDING PROVIDED 67 PARKING SPACES. THE EXISTING BUILDING IS A WAREHOUSE AND THEREFORE, 30 PARKING SPACES WERE REQUIRED. AS A RESULT OF THE DEMOLITION OF THE EXISTING USE, THE APPLICANT PROPOSES 34 PARKING SPACES, WHICH IS 26 PARKING SPACES GREATER THAN WHAT IS RECOMMENDED BY THE ITE. THE RECOMMENDATION BY ITE IS,

$$P(SPACES) = 0.07 * X / (1000 GFA) + 2.32 = 0.07 * (91,098) / 1000 + 2.32 = 9 SPACES$$

THIS APPLICATION IS DESIGNATING OR ATTRIBUTING 10 OF THE PROPOSED 35 PARKING SPACES TO THE PROPOSED USE. THE REMAINING 24 PARKING SPACES WILL BE UTILIZED BY THE INDUSTRIAL PARK.

THE CUMULATIVE PARKING TABULATIONS PROVIDED ON THE APPROVED G.D.P., SEE SHEET 8 HEREIN, STATED THAT THE REQUIRED PARKING FOR INDUSTRIAL PARK IS 284 PARKING SPACES AND THE PROVIDED IS 347 PARKING SPACES.

**SHEET INDEX**

- COVER SHEET
- EXISTING CONDITION PLAN
- G.D.P.
- TREE INVENTORY
- LANDSCAPE PLAN
- SWM - NOTES & NARRATIVE
- SWM - VRRM SPREADSHEET
- APPROVED G.D.P.
- ARCHITECTURAL ELEVATIONS & DETAILS

**MODIFICATION REQUEST**

(DESIGNATE EACH SECTION OF THE ZONING ORDINANCE, PUBLIC FACILITIES MANUAL OR SUBDIVISION ORDINANCE FROM WHICH A WAIVER IS REQUESTED. PLEASE NOTE THAT A LETTER OF JUSTIFICATION FOR EACH WAIVER MUST ACCOMPANY THE INITIAL PLAN SUBMISSION.)

FEE = \$200.00 PER REQUEST

WAIVER FROM SECTION: (78-50.5(F)(4)B) OF = \$200.00

WAIVER FROM SECTION: (78-110.4(E)(3)A) OF = \$200.00

NUMBER OF REQUESTS: 2 X \$200.00 = \$400.00

DATE FEE COLLECTED (Official Use Only):

**EXISTING CONDITIONS SURVEY NOTES**

1. HORIZONTAL DATUM VCS 83  
VERTICAL DATUM NGVD29

2. UTILITY INFORMATION, AS SHOWN ON THIS PLAN, IS TAKEN FROM THE RECORDS AND/OR FIELD SURVEY COMPLETED BY COUNTY RECORDS DATED \_\_\_\_\_; AND CANNOT BE GUARANTEED. FOR EXACT LOCATIONS OF EXISTING UNDERGROUND UTILITIES, NOTIFY "MISS UTILITY" AT 1-800-552-7001, 72 HOURS BEFORE THE START OF ANY EXCAVATION OR CONSTRUCTION.

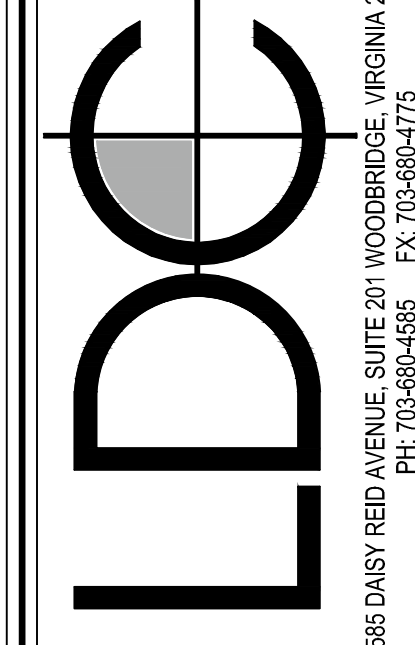
3. LOCATION AND DEPTH OF ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR/ENGINEER SHOULD DIG TEST PITS BY HAND AT ALL UTILITY CROSSINGS TO VERIFY EXACT LOCATION.

TOWN PLAN #: ZMA #21-02

TOWN OF HERNDON, VIRGINIA  
COVER SHEET

SUBDIVISION OR SITE PLAN NAME	VICTORY DRIVE		
OWNER, ADDRESS, INCLUDE ZIP CODE AND TELEPHONE NUMBER	PARCEL 5 PARTNERS LLC, C/O KENWOOD MANAGEMENT CO. 5272 RIVER ROAD, SUITE 360, BETHESDA MD 20816, 301-656-7790		
DEVELOPER, ADDRESS, INCLUDE ZIP CODE AND TELEPHONE NUMBER	PARCEL 5 PARTNERS LLC, C/O KENWOOD MANAGEMENT CO. 5272 RIVER ROAD, SUITE 360, BETHESDA MD 20816, 301-656-7790		
CERTIFIED ENGINEER, ARCHITECT OR SURVEYOR SUBMITTING PLAN, ADDRESS, INCLUDE ZIP CODE AND TELEPHONE NUMBER	MATT MARSHALL L.S., LDC LC, 4585 DAISY REID AVENUE, SUITE 201, WOODBRIDGE, VIRGINIA 22192 703-680-4585		
FAIRFAX COUNTY TAX MAP NUMBER	0162 - 02 - 174C	EXISTING ZONING	PD - B
TOTAL AREA	77,390 SF OR 1.7766 ACRES	PROPOSED ZONING	PD - B
REVISED:	JULY 2014		

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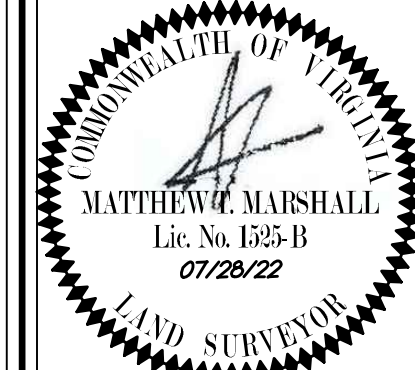


COVER SHEET

VICTORY DRIVE

DATE	APPROVED BY:	REVISION	DESCRIPTION
07/28/22	[Signature]	1	ADDRESS SECOND SUBMISSION CORRECTS ADDRESS FIRST SUBMISSION CORRECTS
04/25/22	[Signature]	2	

I HEREBY CERTIFY THAT OTHER THAN THE REVISIONS SHOWN HEREON, NO OTHER CHANGES HAVE BEEN MADE.



SCALE:  
AS SHOWN

SHEET 1 of 13

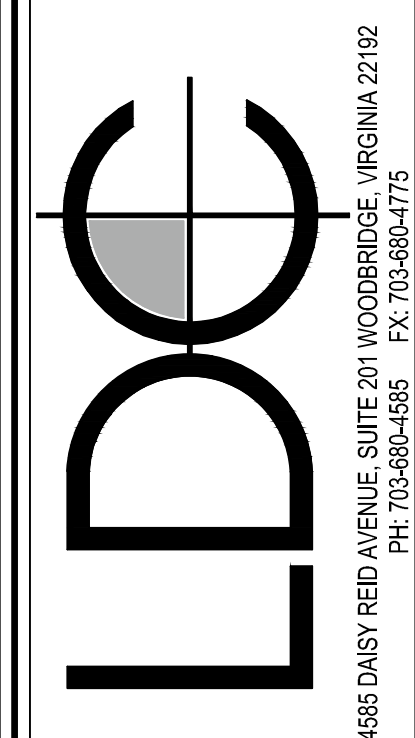
DATE: DECEMBER, 2021  
DRAFT: CHECK: MTT1  
FILE NUMBER: 21074-1-0

**NOTES:**

1. THE PROPERTY DELINEATED ON THIS PLAT IS LOCATED ON FAIRFAX COUNTY CADASTRAL MAP No. 16-2 ((2)) PARCEL 174C AND IS CURRENTLY ZONED PD-B.
2. THE PROPERTIES SHOWN HEREON ARE CURRENTLY IN THE NAME OF PARCEL 5 PARTNERS, LLC, BY DEED RECORDED IN DEED BOOK 24481 AT PAGE 1965, AMONG THE LAND RECORDS OF FAIRFAX COUNTY, VIRGINIA.
3. THE PROPERTY LINES SHOWN HEREON ARE BASED ON BOUNDARY SURVEY BY THIS FIRM PERFORMED ON AUGUST 3, 2021.
4. THIS PLAT WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT, THEREFORE ALL ENCUMBRANCES TO THE PROPERTY MAY NOT BE SHOWN.
5. THE PROPERTY SHOWN HEREON LIES WITHIN A ZONE "X", AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS DELINEATED ON FLOOD INSURANCE RATE MAP No. 51059C01010E, PANEL 110 OF 450, WITH AN EFFECTIVE DATE OF SEPTEMBER 17, 2010.
6. THE PLAT OF THE PROPERTY SHOWN HEREON IS REFERENCED TO THE VIRGINIA COORDINATE SYSTEM OF 1983 (VCS 83), NORTH ZONE, US SURVEY FOOT UNITS AS COMPUTED FROM A FIELD RUN BOUNDARY AND HORIZONTAL CONTROL SURVEY THAT TIES THIS BOUNDARY TO FAIRFAX COUNTY MONUMENT WAG12(HV8698). THE COMBINED GRID AND ELEVATION FACTOR IS 0.999954027.
7. THIS TOPOGRAPHIC SURVEY ON THE PROPERTY KNOWN AS PARCEL 5, HERNDON INDUSTRIAL VENTURE SUBDIVISION, WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF KEVIN D. VAUGHN, FROM AN ACTUAL GROUND SURVEY MADE UNDER HIS SUPERVISION; THE ORIGINAL DATA WAS OBTAINED ON AUGUST 3, 2021; AND THAT THIS PLAT MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED THIS PLAT MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED. THE VERTICAL DATUM IS NGVD29. THE CONTOUR INTERVAL IS ONE(1) FOOT.
8. THERE ARE NO KNOWN SCENIC ASSETS OR NATURAL FEATURES DESERVING OF PROTECTION OR PRESERVATION.
9. THIS PROPERTY IS OUTSIDE ANY MAPPED RESOURCE PROTECTION AREA.
10. THERE ARE NO KNOWN OR MAPPED CEMETERY OR BURIAL SITES ON THE PROPERTY.

**LEGEND**

- IPF IRON PIPE FOUND
- IPS IRON PIPE SET
- MNS MAG NAIL SET
- MNF MAG NAIL FOUND
- B/W BAY WINDOW
- E.P. EDGE OF PAVEMENT
- CONC. CONCRETE
- ⊗ AIR CONDITIONER
- CLEANOUT
- ⊙ GAS METER
- ⊕ GAS VALVE
- ☆ LAMP POST
- ⊞ MAILBOX
- ⊙ SANITARY MANHOLE
- ⊖ SIGN
- ⊞ TELEPHONE PEDESTAL
- ⊙ UTILITY POLE
- ⊗ WATER VALVE
- ⊙ WATER METER
- ⊙ WELL
- OH- OVERHEAD UTILITY
- TREELINE

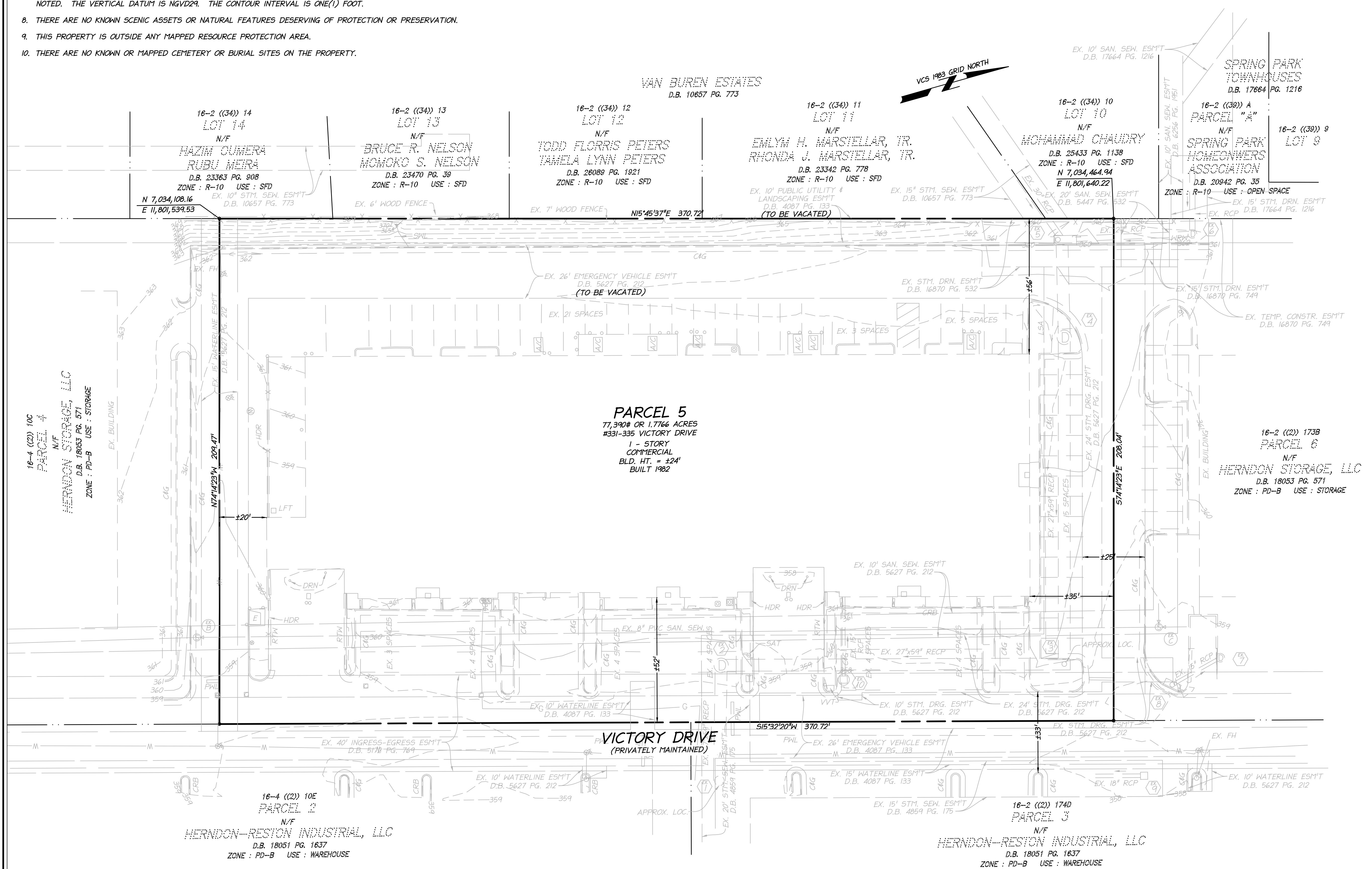


EXISTING  
CONDITION  
PLAN

VICTORY DRIVE

4685 DASHY REED AVENUE SUITE 201 WOODBRIDGE, VIRGINIA 22192  
PH: 703-680-4555 EX: 703-680-4755

TOWN OF HERNDON, VIRGINIA



NO.	DATE	DESCRIPTION	REVISION BY	APPROVED BY:	DATE
1	07/20/22	ADDRESS SECOND SUBMISSION (OPENING)			
2	07/20/22	ADDRESS FIRST SUBMISSION (OPENING)			

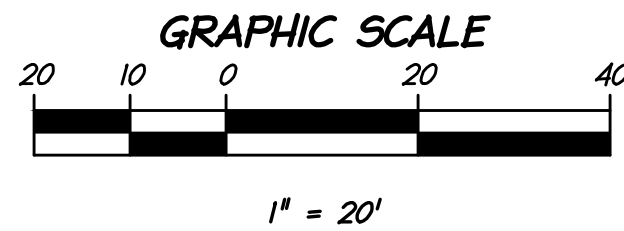
I HEREBY CERTIFY THAT OTHER THAN THE REVISIONS SHOWN HEREON, NO OTHER CHANGES HAVE BEEN MADE.



SCALE:  
1" = 20'

SHEET 2 OF 13

DATE: DECEMBER, 2021  
DRAFT: WOR CHECK: MTM  
FILE NUMBER: 21074-1-0

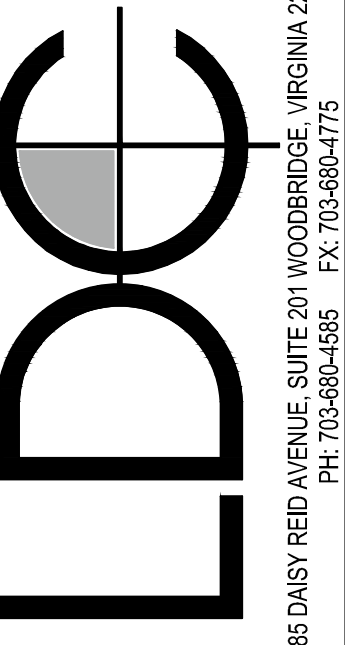


**PARKING LEGEND**

- A.D.A. ACCESSIBLE SPACE
- LOADING SPACE
- PARKING PROVIDED NOT ATTRIBUTED TO USE

**NOTES:**

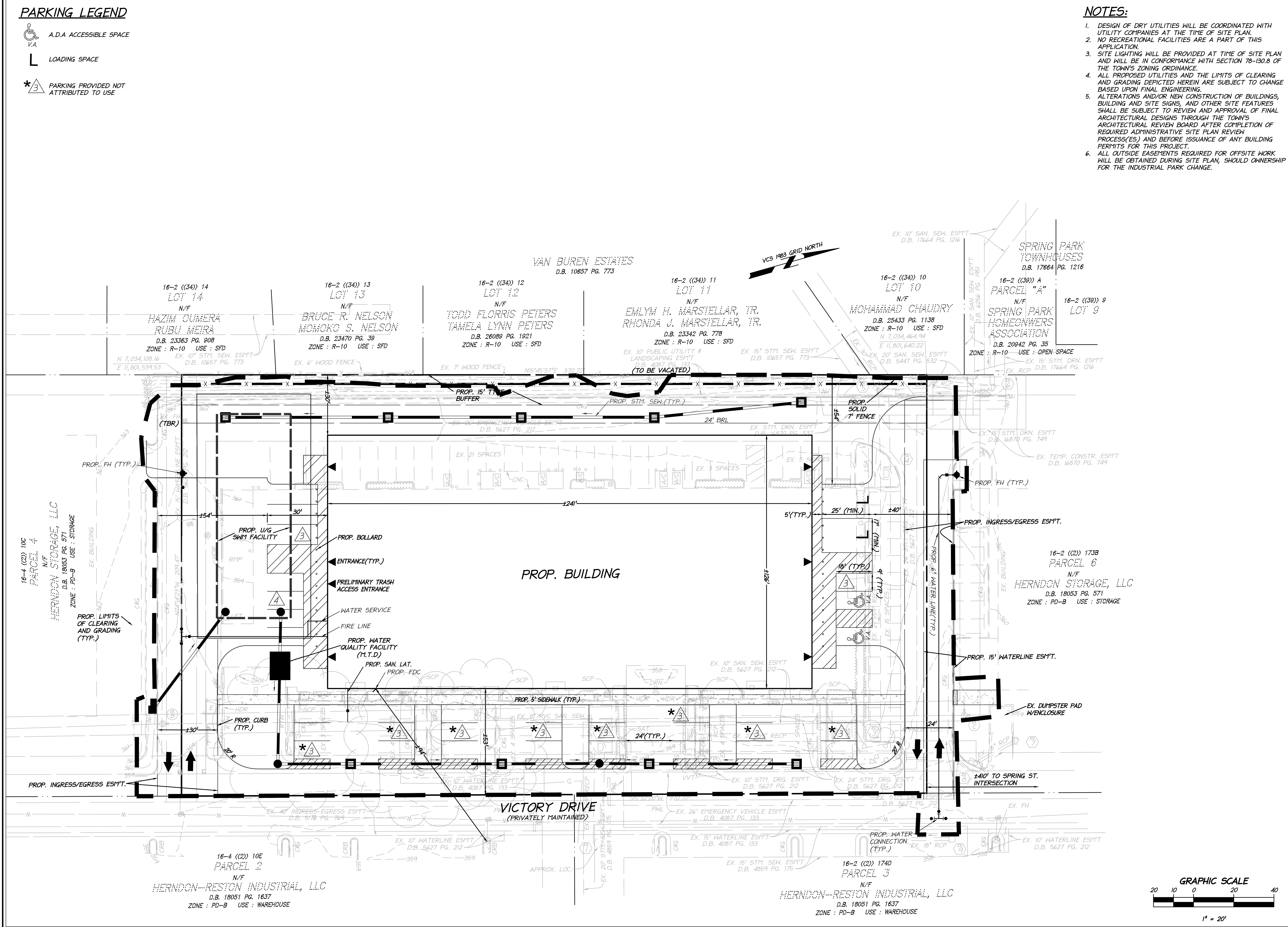
1. DESIGN OF DRY UTILITIES WILL BE COORDINATED WITH UTILITY COMPANIES AT THE TIME OF SITE PLAN.
2. NO RECREATIONAL FACILITIES ARE A PART OF THIS APPLICATION.
3. SITE LIGHTING WILL BE PROVIDED AT TIME OF SITE PLAN AND WILL BE IN CONFORMANCE WITH SECTION 78-130.8 OF THE TOWN'S ZONING ORDINANCE.
4. ALL PROPOSED UTILITIES AND THE LIMITS OF CLEARING AND GRADING DEPICTED HEREIN ARE SUBJECT TO CHANGE BASED UPON FINAL ENGINEERING.
5. ALTERATIONS AND/OR NEW CONSTRUCTION OF BUILDINGS, BUILDING AND SITE SIGNS, AND OTHER SITE FEATURES SHALL BE SUBJECT TO REVIEW AND APPROVAL OF FINAL ARCHITECTURAL DESIGNS THROUGH THE TOWN'S ARCHITECTURAL REVIEW BOARD AFTER COMPLETION OF REQUIRED ADMINISTRATIVE SITE PLAN REVIEW PROCESS(ES) AND BEFORE ISSUANCE OF ANY BUILDING PERMITS FOR THIS PROJECT.
6. ALL OUTSIDE EASEMENTS REQUIRED FOR OFFSITE WORK WILL BE OBTAINED DURING SITE PLAN, SHOULD OWNERSHIP FOR THE INDUSTRIAL PARK CHANGE.



G.D.P.

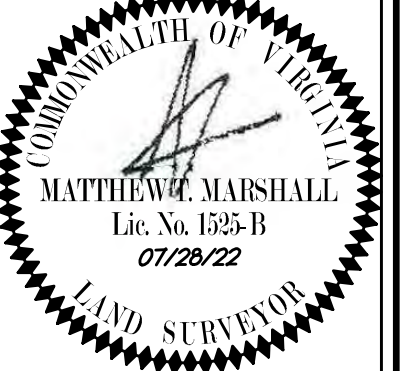
VICTORY DRIVE

TOWN OF HERNDON, VIRGINIA



NO.	DATE	DESCRIPTION	REVISION BY	APPROVED BY:	DATE
1	07/20/22	ADDRESS SECOND SUBMISSION (OPENIS)			
2	07/20/22	ADDRESS FIRST SUBMISSION (OPENIS)			

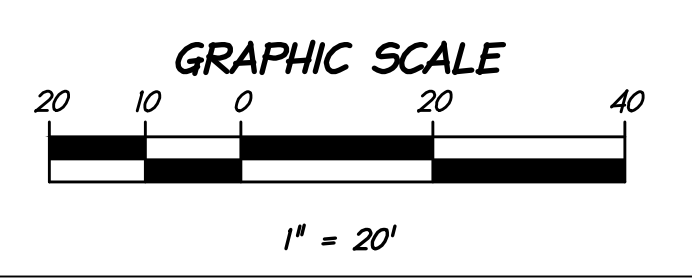
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SCALE:  
1" = 20'

SHEET 3 of 13

DATE: DECEMBER, 2021  
DRAFT: WOR CHECK: MTM  
FILE NUMBER: 21074-1-0



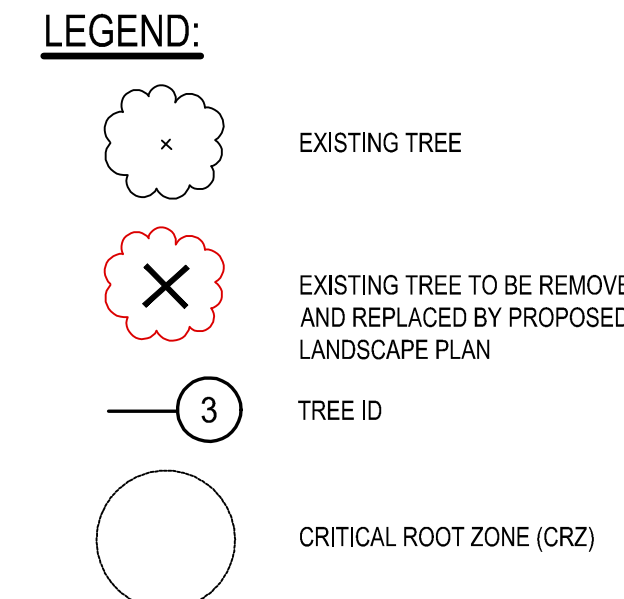
NO.	DATE	DESCRIPTION	REVISION BY	APPROVED BY:

I HEREBY CERTIFY THAT OTHER THAN THE REVISIONS SHOWN HEREON, NO OTHER CHANGES HAVE BEEN MADE.

SCALE:  
1" = 20'

SHEET 4 OF 13

DATE: DECEMBER, 2021  
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 WOR MTM  
 FILE NUMBER:  
 21074-1-0

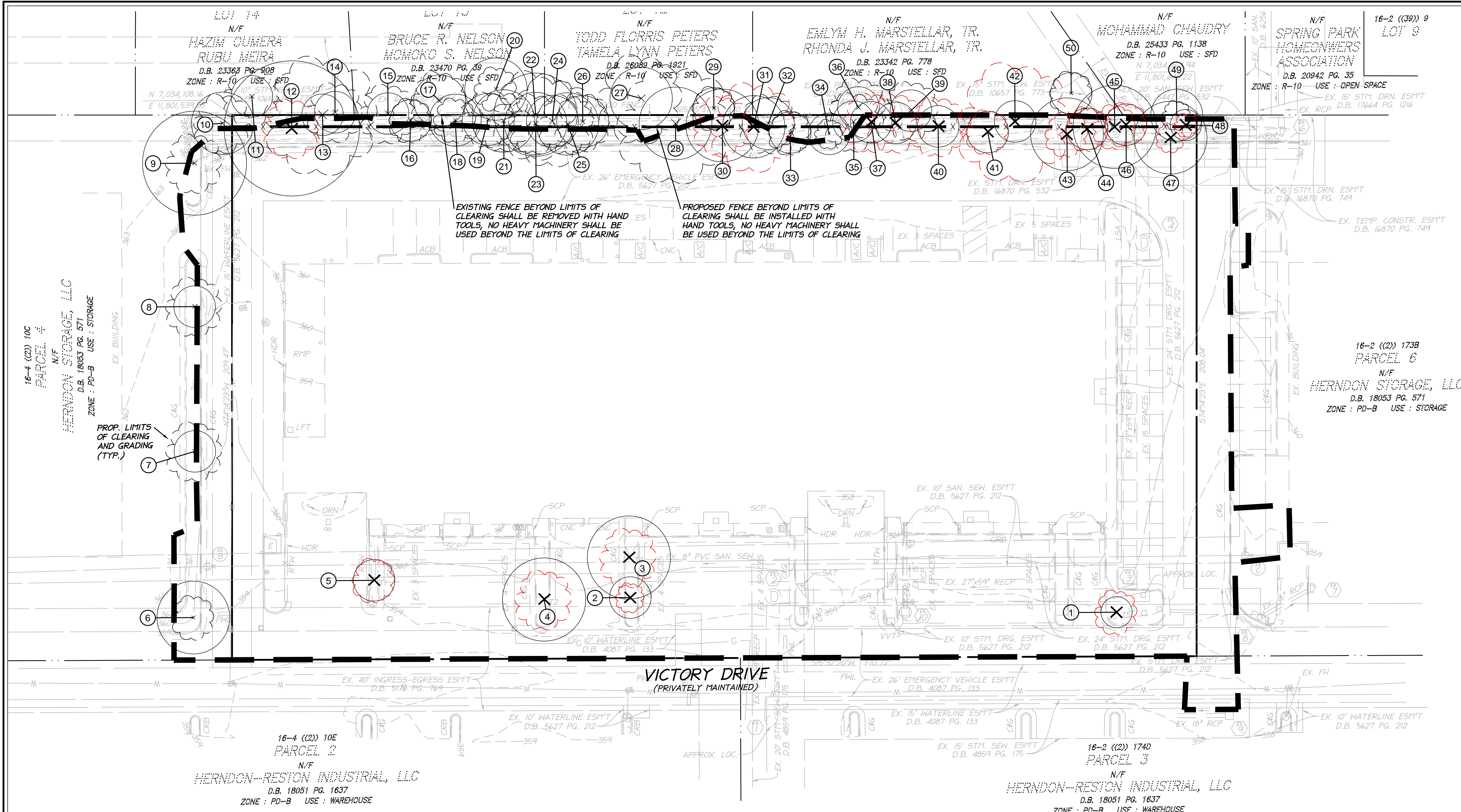


**TREE PRESERVATION NARRATIVE:**

IN ACCORDANCE WITH ZONING ORDINANCE 78-III, THE SITE HAS BEEN DESIGNED TO MAXIMIZE TREE PRESERVATION ALONG THE WESTERN BOUNDARY OF THE SITE. THIS IS BEING FACILITATED THROUGH THE USE OF A 7' FENCE IN PLACE OF THE 6' MASONRY WALL REQUIRED PER 78-110.4(E)(3)A. REMOVAL OF THE EXISTING FENCE AND INSTALLATION OF THE PROPOSED FENCE WITHIN TREE PROTECTION ZONES SHALL BE DONE USING HAND TOOLS, NO HEAVY MACHINERY SHALL BE PERMITTED WITHIN TREE PROTECTION ZONES.

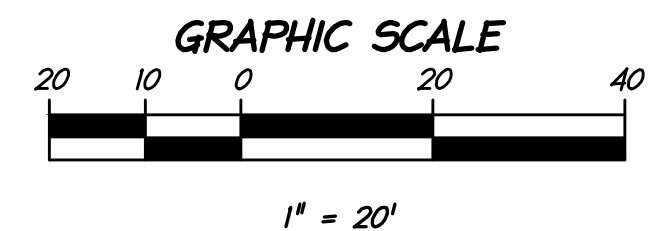
EXCEPTING THAT CONSTRUCTION ACTIVITIES RELATED TO THE FENCE IN THE MANOR DESCRIBED ABOVE SHALL BE PERMITTED, TREE PROTECTION MEASURES SHALL COMPLY WITH 78-III.3, INCLUDING PROTECTIVE FENCING, SIGNAGE, AND MULCHING.

EXACT LIMITS OF CLEARING AND GRADING SHALL BE DETERMINED AT TIME OF SITE PLAN. ONSITE TREES SHALL BE PRESERVED TO THE EXTENT FEASIBLE. IN ALL SCENARIOS, OFFSITE AND JOINTLY OWNED TREES SHALL BE PRESERVED. AS EXACT QUANTITY PRESERVED MAY CHANGE AT TIME OF SITE PLAN, PRESERVED TREES ARE COUNTED TOWARD LANDSCAPE REQUIREMENTS AT A 1:1 BASIS WITH THIS PLAN. TREE PRESERVATION CREDIT MULTIPLIERS PER 78-III.4(B) MAY BE APPLIED AT TIME OF SITE PLAN FOR TREES ACTUALLY PRESERVED.



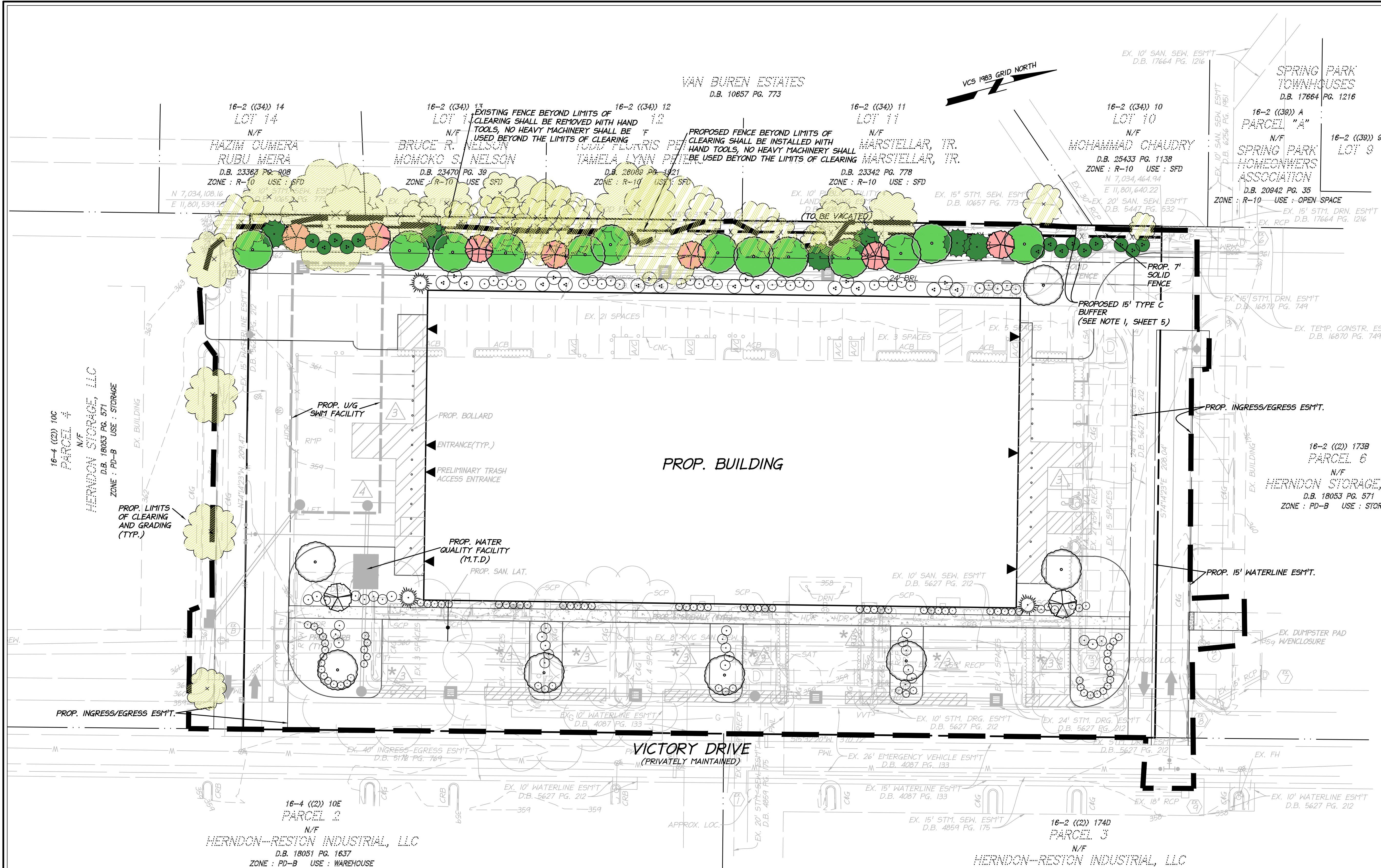
TREE INVENTORY															
Plan#	Species	Size	Critical Root Zone	Condition	Canopy Position	Crown Density	Crown Spread	Activities					Problems/ Comments	Action To Be Taken	
								Root Prune	Mulch	Fertilize	Remove Vines	Treat Pests			Remove Tree
Common Name	Scientific Name	DBH	Radius (ft)	%		%	Average Canopy Spread (ft)								
1	Serviceberry	Amerlancher sp.	8	6	70	Suppressed	70	15						Decay in Trunk; Within development area	Remove
2	Japanese cherry	Prunus serrulata	12	12	50	Suppressed	65	10						Decay in Trunk; Within development area	Remove
3	Japanese cherry	Prunus serrulata	8,8	16	70	Suppressed	75	20						Within development area	Remove
4	Littleleaf linden	Tilia cordata	16	16	75	Intermediate	80	20						Within development area	Remove
5	Littleleaf linden	Tilia cordata	8	8	70	Intermediate	75	15						Within development area	Remove
6	Serviceberry	Amerlancher sp.	14	14	70	Suppressed	70	15	x					Offsite; Adjacent curb to be replaced	To Remain
7	Littleleaf linden	Tilia cordata	8	8	70	Intermediate	65	20	x					Offsite; Adjacent curb to be replaced	To Remain
8	Red oak	Quercus rubra	8	8	50	Intermediate	50	20	x					Offsite; In decline; Adjacent curb to be replaced	To Remain
9	Red oak	Quercus rubra	10,10	20	70	Intermediate	70	20	x					Offsite; Adjacent curb to be replaced	To Remain
10	White pine	Pinus strobus	12	12	70	Dominant	80	20	x					Offsite	To Remain
11	Red oak	Quercus rubra	8	8	80	Intermediate	85	20	x					Offsite	To Remain
12	Callery pear	Pyrus calleryana	6,10,10	26	75	Suppressed	80	20				x		Invasive; Located directly in path of proposed fence	Remove
13	Black locust	Robinia pseudoacacia	8	8	60	Intermediate	65	40	x					Jointly owned; Vines	To Remain
14	Black locust	Robinia pseudoacacia	8	8	60	Intermediate	65	20	x					Offsite	To Remain
15	Black locust	Robinia pseudoacacia	8	8	60	Intermediate	65	20	x					Jointly owned	To Remain
16	Black locust	Robinia pseudoacacia	8	8	60	Intermediate	70	15	x						To Remain
17	Red Maple	Acer rubrum	10	10	80	Intermediate	85	20	x					Offsite	To Remain
18	White pine	Pinus strobus	10	10	70	Dominant	80	15	x						To Remain
19	White pine	Pinus strobus	10	10	70	Dominant	80	20	x						To Remain
20	Silver Maple	Acer saccharinum	12	12	80	Intermediate	90	15	x					Offsite	To Remain
21	White pine	Pinus strobus	12	12	70	Dominant	80	20	x					Vines	To Remain
22	Black locust	Robinia pseudoacacia	16	16	60	Dominant	70	30	x					Jointly owned; Vines	To Remain
23	White pine	Pinus strobus	12	12	65	Dominant	70	20	x					Vines	To Remain
24	White pine	Pinus strobus	10	10	65	Dominant	75	30	x					Vines	To Remain
25	White pine	Pinus strobus	12	12	65	Intermediate	75	20	x					Vines	To Remain

TREE INVENTORY															
Plan#	Species	Size	Critical Root Zone	Condition	Canopy Position	Crown Density	Crown Spread	Activities					Problems/ Comments	Action To Be Taken	
								Root Prune	Mulch	Fertilize	Remove Vines	Treat Pests			Remove Tree
Common Name	Scientific Name	DBH	Radius (ft)	%		%	Average Canopy Spread (ft)								
26	White pine	Pinus strobus	10	10	65	Intermediate	75	20						Vines	To Remain
27	Red Maple	Acer rubrum	12	12	75	Intermediate	80	30	x					Offsite	To Remain
28	White pine	Pinus strobus	14	14	75	Dominant	90	40	x					Vines	To Remain
29	Arbortae	Thuja sp.	8	8	80	Intermediate	85	15	x					Offsite	To Remain
30	White pine	Pinus strobus	14	14	70	Dominant	70	20				x		Vines; Located directly in path of proposed fence	Remove
31	White pine	Pinus strobus	12	12	75	Dominant	75	30				x		Vines; Located directly in path of proposed fence	Remove
32	White pine	Pinus strobus	10	10	60	Intermediate	65	20	x					Vines	To Remain
33	Atlas Cedar	Cedrus atlantica	8	8	70	Intermediate	80	15	x					Vines	To Remain
34	Atlas Cedar	Cedrus atlantica	8	8	65	Intermediate	65	10	x					Vines	To Remain
35	Black locust	Robinia pseudoacacia	8	8	75	Intermediate	80	20	x						To Remain
36	Japanese cherry	Prunus serrulata	8	8	80	Intermediate	75	20	x					Offsite	To Remain
37	Black locust	Robinia pseudoacacia	8	8	75	Intermediate	75	20				x		Within area to be regraded	Remove
38	Black locust	Robinia pseudoacacia	8	8	75	Intermediate	75	20				x		Within area to be regraded	Remove
39	Japanese cherry	Prunus serrulata	8	8	70	Suppressed	75	20	x					Offsite	To Remain
40	White pine	Pinus strobus	8	8	60	Intermediate	60	20				x		Within area to be regraded; Located directly in path of proposed fence	Remove
41	Atlas Cedar	Cedrus atlantica	8	8	60	Intermediate	65	15	x					Within area to be regraded	Remove
42	White pine	Pinus strobus	14	14	80	Dominant	90	40	x					Within area to be regraded	Remove
43	Atlas Cedar	Cedrus atlantica	6	6	60	Suppressed	70	15	x					Within area to be regraded	Remove
44	Atlas Cedar	Cedrus atlantica	8	8	65	Intermediate	70	15	x					Within area to be regraded	Remove
45	Arbortae	Thuja sp.	8,8	16	70	Intermediate	85	15	x					Within area to be regraded; Located directly in path of proposed fence	Remove
46	Arbortae	Thuja sp.	8	8	60	Intermediate	65	15	x					Within area to be regraded	Remove
47	Arbortae	Thuja sp.	8,6	14	60	Intermediate	65	10	x					Within area to be regraded	Remove
48	Arbortae	Thuja sp.	6	6	40	Suppressed	50	8	x					Leaning; Within area to be regraded	Remove
49	Red cedar	Juniperus virginiana	10	10	50	Suppressed	50	10				x		Jointly owned	To Remain
50	Arbortae	Thuja sp.	8	8	80	Intermediate	90	15						Offsite	To Remain



**LEGEND:**

- LARGE DECIDUOUS TREE  
CAT. 4 - (2-2.5' Cal.)
- COMPACT DECIDUOUS TREE  
CAT. 2 - (1-1.5' Cal.)
- COMPACT EVERGREEN TREE  
CAT. 2 - (7-8' Ht. (100 SF))
- EVERGREEN SHRUBS
- DECIDUOUS SHRUBS
- EXISTING DECIDUOUS TREE TO REMAIN
- EXISTING EVERGREEN TREE TO REMAIN



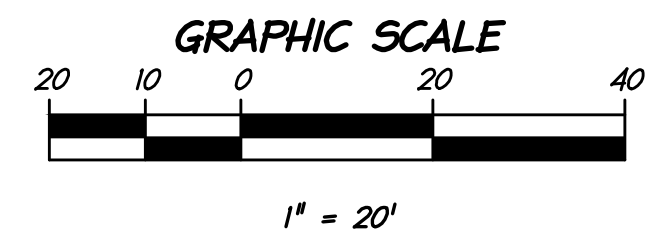
PERIMETER BUFFER LANDSCAPE STRIP (Sec. 78-110.4(e))	
Zone	PD-B
Adjacent Use:	Residential (R-10)
Buffer Type	C-15
Linear Feet of Buffer	371 LF
<b>Required</b>	
Evergreen Trees (1 Tree/ 25 LF)	15 Trees
Canopy Deciduous Trees (1 Tree/ 25 LF)	15 Trees
Understory Deciduous Trees (1 Tree/ 50 LF)	7 Trees
Barrier	6' Wall
<b>Provided</b>	
Evergreen Trees	16 Trees
Canopy Deciduous Trees	15 Trees
Understory Deciduous Trees	7 Trees
Shrubs	14 Shrubs
Barrier	7' Solid Fence
Note: Provided Trees include 10 preserved onsite Existing Evergreen Trees and 2 preserved onsite Deciduous Canopy Trees.	

PARKING AREA LANDSCAPE (Sec. 78-110.5)	
Number of Parking Spaces	35 Spaces
<b>Required</b>	
Trees (1 Tree/ 8 Spaces) (10% Max Understory Trees)	4 Trees
<b>Provided</b>	
Evergreen Trees	5 Trees
Canopy Deciduous Trees	5 Trees
Understory Deciduous Trees	2 Trees

INTERIOR LANDSCAPE (Sec. 78-110.3(a))	
Zone	PD-B
Use:	BUSINESS USES
Site Area:	1.78 Ac.
Outer Building Perimeter:	734 LF
<b>Required</b>	
Evergreen Trees (10 Tree/ 1 Ac.)	18 Trees
Canopy Deciduous Trees (16 Tree/ 1 Ac.)	28 Trees
Shrubs (1 Shrub/ 5 LF Building Perimeter)	147 Shrubs
<b>Provided</b>	
Evergreen Trees	19 Trees
Canopy Deciduous Trees	22 Trees
Flowering Ornamental Trees/Understory Deciduous Trees	9 Trees
Evergreen Shrubs	98(54%) Shrubs
Deciduous Shrubs	84(46%) Shrubs
Notes:	
1. Provided Trees include 10 preserved onsite Existing Evergreen Trees and 2 preserved onsite Deciduous Canopy Trees.	
2. Flowering ornamental trees may be used to meet 25% of the deciduous tree requirement per 78-110.3.b.2.	

**GENERAL NOTES:**

- THE APPLICANT REQUEST A MODIFICATION OF THE BUFFER REQUIREMENTS (78-110.4(E)(3)A) TO ALLOW THE USE OF A 7' SOLID FENCE IN LIEU OF A 6' MASONRY WALL.
- ALL PROPOSED TREE PLANTINGS WILL BE LOCATED A MINIMUM OF 3 FEET FROM ANY RESTRICTIVE BARRIER AND FROM ANY PROPERTY LINE.
- LANDSCAPING PROVIDED WILL BE NATIVE TO THE MIDDLE ATLANTIC REGION TO THE EXTENT FEASIBLE, AND WILL ALLOW FOR IMPROVED CULTIVARS FOR IMPROVED DROUGHT AND DISEASE RESISTANCE AND WILL BE NON-INVASIVE AS DETERMINED BY THE TOWN ARBORIST.
- EXACT LIMITS OF CLEARING AND GRADING SHALL BE DETERMINED AT TIME OF SITE PLAN. ONSITE TREES SHALL BE PRESERVED TO THE EXTENT FEASIBLE. IN ALL SCENARIOS, OFFSITE AND JOINTLY OWNED TREES SHALL BE PRESERVED. AS EXACT QUANTITY PRESERVED MAY CHANGE AT TIME OF SITE PLAN, PRESERVED TREES ARE COUNTED TOWARD LANDSCAPE REQUIREMENTS AT A 1:1 BASIS WITH THIS PLAN. TREE PRESERVATION CREDIT MULTIPLIERS PER 78-111.4(B) MAY BE APPLIED AT TIME OF SITE PLAN FOR TREES ACTUALLY PRESERVED.



NO.	DATE	DESCRIPTION	REVISION BY	APPROVED BY:	DATE
1	10/20/21	ADDRESS SECOND SUBMISSION COMMENTS			
2	11/23/21	ADDRESS FIRST SUBMISSION COMMENTS			

I HEREBY CERTIFY THAT OTHER THAN THE REVISIONS SHOWN HEREON, NO OTHER CHANGES HAVE BEEN MADE.

SCALE:  
1" = 20'

SHEET 5 of 13

DATE: DECEMBER, 2021  
 DRAFT: CHECK:  
 WOR MTM  
 FILE NUMBER:  
 21074-1-0

**OUTFALL NARRATIVE**

THE SUBJECT PROPERTY IS LOCATED WITHIN THE SUGARLAND RUN WATERSHED. THE SUBJECT PROPERTY MAINTAINS ONE OUTFALL. THE SUBJECT PROPERTY OUTFALL DRAINS TOWARDS AN EXISTING STORMWATER SYSTEM. THERE ARE NO RPA OR FLOODPLAIN AREAS ON THE SUBJECT PROPERTY. THERE ARE NO DOWNSTREAM IMPOUNDMENTS IN THE INFLUENCE AREA OF THE SUBJECT PROPERTY AND NO BATHYMETRIC SURVEYS OR NOTIFICATIONS ARE REQUIRED.

THE SUBJECT PROPERTY SHALL PROVIDE AN UNDERGROUND DETENTION FACILITY TO ADDRESS THE INCREASE IN RUNOFF WHICH WILL OCCUR AS A RESULT OF THE DEVELOPMENT OF THE SUBJECT PROPERTY (SEE VRRM SPREADSHEET & SWM COMPUTATIONS). THE POST-DEVELOPMENT RUNOFF FROM THE SUBJECT PROPERTY OUTFALLS TO THE EXISTING STORMWATER SYSTEM. THE LAYOUT OF THE SITE HAS BEEN DESIGNED TO MINIMIZE THE IMPACTS TO DOWNSTREAM PROPERTIES. THE INTENT SHALL BE TO MAINTAIN THE EXISTING DRAINAGE PATTERNS AND DO NOT HAVE A NEGATIVE IMPACT ON ADJACENT PROPERTIES ESPECIALLY TO ENVIRONMENT SENSITIVE AREAS SUCH AS PUBLIC PARKS.

OUTFALL #1: OUTFALL #1 DISCHARGES FROM THE SUBJECT PROPERTY AS CONCENTRATED FLOW THROUGH THE EXISTING STORMWATER CONVEYANCE SYSTEM. CHANNEL AND FLOOD PROTECTION FOR THE SUBJECT PROPERTY SHALL BE MET BY THE PROPOSED UNDERGROUND DETENTION FACILITY AND BY ANALYZING THE CAPACITY OF THE EXISTING DOWNSTREAM SYSTEM. THE PROPOSED DISCHARGE FROM THE SITE WILL BE REDUCED FROM THE EXISTING DISCHARGE PER THE CALCULATED REDUCTION PERCENTAGES. DETAILED COMPUTATIONS WILL BE PROVIDED AT THE TIME OF THE SUBDIVISION PLAN.

THE OUTFALL WILL BE ANALYZED DOWNSTREAM THROUGH THE EXISTING PIPE SYSTEM FOR CAPACITY TO CARRY THE REDUCED OUTFLOW. THE CURRENT CONDITIONS OF THE SITE ARE CARRIED BY THE SAME OUTFALL. THE OUTFALL, AN ELLIPTICAL 27"x89" PIPE ALSO CARRIES THE OFF-SITE FLOW FROM THE VAN BUREN ESTATES & SPRINGPARK PLACE TOWNHOMES. PART OF THE OFF-SITE FLOW WILL BE ACCOUNTED FOR IN THE PROPOSED SYSTEM. THE DEVELOPMENT OF THE SUBJECT PROPERTY WILL NOT ADVERSELY IMPACT DOWNSTREAM PROPERTIES.

THE TOTAL AREA DISTURBED WILL BE 1.95 ACRES. OUTFALL #1 WILL CONVEY 1.78 ACRES OF ONSITE DEVELOPMENT AREA (0.69 ACRES OF UNCONTROLLED AREA AND 1.09 OF CONTROLLED AREA) AND 0.54 ACRES OF OFFSITE AREA. AS A RESULT OF THE PROPOSED UNDERGROUND SWM FACILITY, DETENTION OF THE ONE, TWO AND TEN YEAR STORM EVENT WILL BE PROVIDED. REQUIREMENTS FOR CHANNEL & FLOOD PROTECTION HAVE BEEN MET AS OUTLINED IN THE TOWN OF HERNDON STORMWATER MANAGEMENT. STORAGE OF THE APPROPRIATE 1-YEAR, 2-YEAR, & 10-YEAR 24 HOUR STORM VOLUMES WILL BE PROVIDED IN THE PROPOSED UNDERGROUND FACILITY. THE DISCHARGE FROM THE SITE DURING THE 1-YR STORM SHALL BE REDUCED BY THE REQUIRED PROPORTIONAL IMPROVEMENT AMOUNT, THEREFORE, IT IS THE ENGINEER'S OPINION BASED ON THE INFORMATION PROVIDED HEREON AND ON THE REQUIREMENTS SET FORTH IN THE PUBLIC FACILITIES MANUAL, ALL OUTFALLS ARE ADEQUATE.

**STORMWATER MANAGEMENT NARRATIVE**

THE STORMWATER MANAGEMENT REQUIREMENTS FOR THE SUBJECT PROPERTY SHALL BE SATISFIED VIA THE CONSTRUCTION OF AN UNDERGROUND DETENTION FACILITY AND A WATER QUALITY FACILITIES (MANUFACTURED TREATMENT DEVICES).

THE TOTAL PROPERTY AREA IS 1.78 ACRES AND 0.19 ACRES OF OUTSIDE DISTURBED AREA. THE TOTAL DISTURBED AREA IS 1.95 ACRES OF WHICH APPROXIMATELY 1.09 AC WILL BE DETAINED BY AN UNDERGROUND STORMWATER MANAGEMENT FACILITY. THE WATER QUALITY FACILITY IS ALSO DESIGNED TO TREAT THE ONSITE CONTRIBUTING AREA ONLY. THE UPSTREAM, OFFSITE AREA WILL DRAIN THROUGH THE PROPOSED SYSTEM AS DESCRIBED BELOW.

THE UNDERGROUND DETENTION FACILITY SHALL BE DESIGNED TO PROVIDE DETENTION FOR THE 1, 2 & 10 YEAR STORM EVENTS. CHANNEL AND FLOOD PROTECTION REQUIREMENTS WILL BE MET BY THE REDUCTIONS IN RUNOFF FROM THE DEVELOPMENT AREA DURING THE 1, 2 & 10 YEAR STORMS (SEE OUTFALL ANALYSIS), WHILE THE WATER QUALITY UNITS WILL BE MET THROUGH THE USE OF A PROPRIETARY METHODS. THE FINAL DESIGN OF THE SWM CONTROLS ARE SUBJECT TO FINAL ENGINEERING. ALL MAINTENANCE SHALL BE CONDUCTED IN ACCORDANCE WITH THE REQUIREMENTS FOR THE FACILITY.

THE SITE CURRENTLY HAS SEVERAL EXISTING STRUCTURES, SOME PAVED SURFACES AND TREES.

THE FACILITIES SHALL BE MAINTAINED BY THE OWNER AND THE MAINTENANCE SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS. RUNOFF FLOW RATES AND RELEASE RATES WILL BE SUBJECT TO FINAL ENGINEERING DURING SITE PLAN SUBMISSION.

**STORMWATER MANAGEMENT INFORMATION**

TYPE OF FACILITY = UNDERGROUND DETENTION w/FILTERS (STONE & CHAMBER/Vault STORAGE OR EQUIVALENT) AND M.T.D

FACILITY MAINTENANCE = PRIVATE

U.G.D. #1  
 APPROXIMATE REQUIRED 10-YEAR VOLUME = ±4,500 C.F.  
 APPROXIMATE PROPOSED VOLUME = ±12,000 C.F.  
 APPROXIMATE SURFACE AREA = ±3,600 S.F.  
 APPROXIMATE FINISHED GRADE = ±360.0  
 APPROXIMATE GRADE U.G.D.#1 BOTTOM = ±364.50 (INVERT)  
 M.T.D  
 TOTAL TREATMENT AREA = ±1.09 AC. (NO OFFSITE TREATMENT PROPOSED)

**POST-DEVELOPMENT (CONDITIONS) SUBJECT PROPERTY**

$Q_1 = ±4.77$  CFS →  $Q_1$  ALLOW = ±4.00 CFS  
 $Q_2 = ±5.87$  CFS →  $Q_2$  ALLOW = ±5.87 CFS  
 $Q_{10} = ±9.23$  CFS →  $Q_{10}$  ALLOW = ±9.23 CFS

**POST-DEVELOPMENT (UNCONTROLLED) SUBJECT PROPERTY**

$Q_1 = ±1.01$  CFS  
 $Q_2 = ±1.41$  CFS  
 $Q_{10} = ±2.72$  CFS

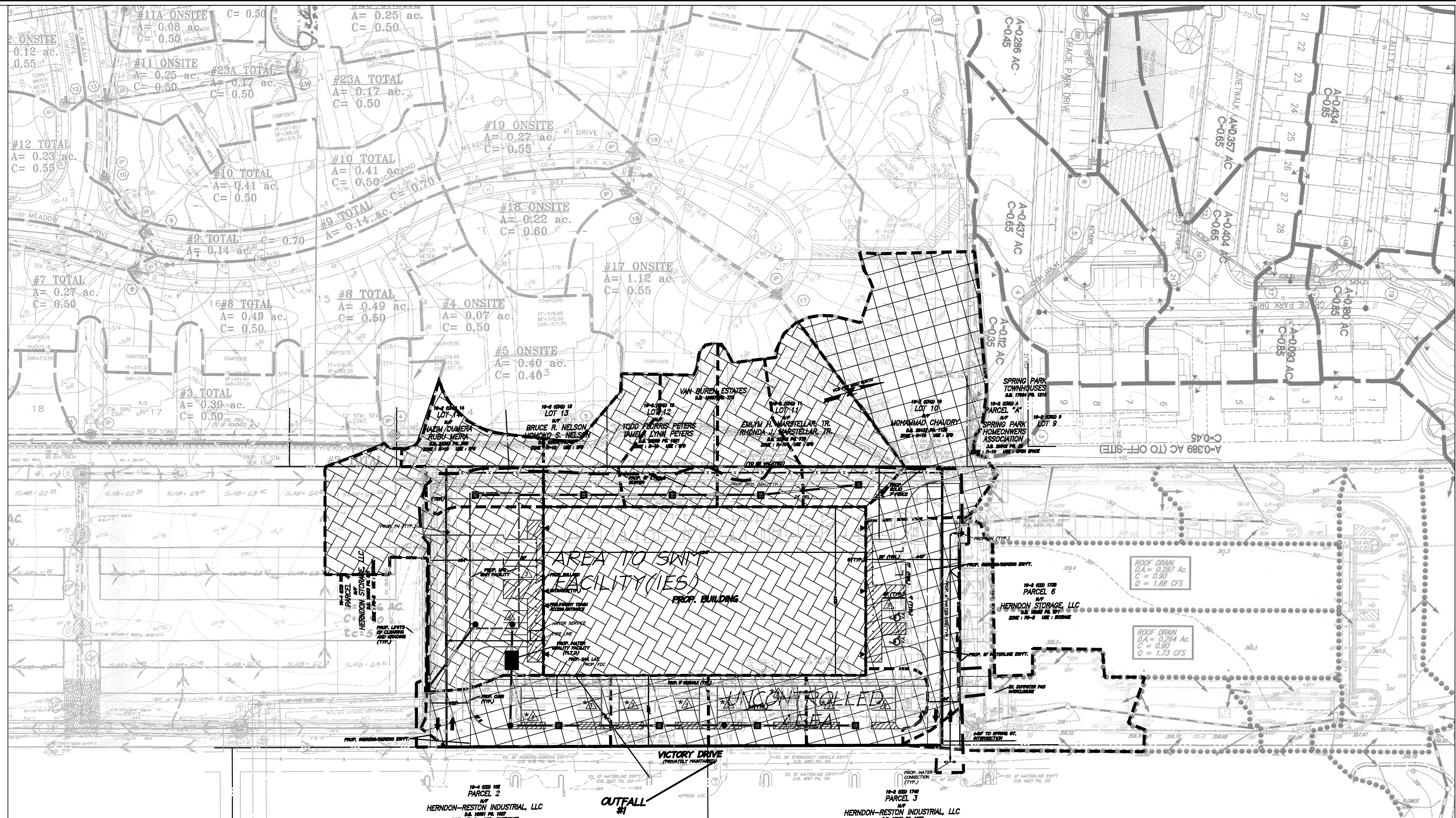
**OFFSITE RUNOFF TO PROPOSED SWM FACILITY**

$Q_1 = ±0.88$  CFS  
 $Q_2 = ±1.20$  CFS  
 $Q_{10} = ±2.23$  CFS

**POST-DEVELOPED ALLOWABLE RELEASE RATES**

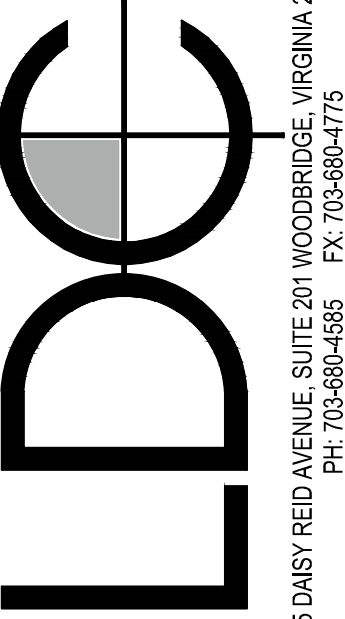
$Q$  ALLOWABLE =  $Q$  (Post developed Cond) -  $Q$  (Onsite Uncontrolled) +  $Q$  (Offsite Controlled)

$Q_1$  ALLOW = (±4.00 CFS) - (±1.01 CFS) + (±0.88 CFS) = ±3.87 CFS  
 $Q_2$  ALLOW = (±5.87 CFS) - (±1.41 CFS) + (±1.20 CFS) = ±5.66 CFS  
 $Q$  ALLOW = (±9.23 CFS) - (±2.72 CFS) + (±2.23 CFS) = ±8.74 CFS



**STORMWATER MANAGEMENT NARRATIVE**

- THE SWM SYSTEM AND BMP PRACTICES PROPOSED ON THE PLAN WILL MEET ALL STATE AND LOCAL TOWN OF HERNDON REQUIREMENTS. HERNDON SELF STORAGE, 331 VICTORY DRIVE COMMENT LETTER (2ND SUBMISSION) JULY 22, 2022 PAGE 3
- ALL SWM QUALITY AND QUANTITY REQUIREMENTS FOR THE PROJECT (INCLUDING REQUIREMENTS GENERATED BY OFFSITE DISTURBED AREAS) WILL BE MET ON SITE.
- ALL PROPOSED SWM FACILITIES WILL BE PROVIDED ON SITE AND WILL BE PRIVATELY MAINTAINED.
- SWM COMPUTATIONS ON THE GDP ARE FOR INFORMATION ONLY AND THE TOWN'S REVIEW OF THE COMPUTATIONS IS PRELIMINARY.



STORMWATER MANAGEMENT NOTES & NARRATIVE

VICTORY DRIVE

TOWN OF HERNDON, VIRGINIA

NO.	DATE	REVISION	APPROVED BY:	DATE
1	07/28/22	ADDRESS SECOND SUBMISSION (REVISED)		
2	08/02/22	ADDRESS FIRST SUBMISSION (REVISED)		

I HEREBY CERTIFY THAT OTHER THAN THE REVISIONS SHOWN HEREON, NO OTHER CHANGES HAVE BEEN MADE.



SCALE: 1" = 50'

SHEET 6 of 13

DATE: DECEMBER, 2021  
 DRAFT: WOR CHECK: MTM  
 FILE NUMBER: 21074-1-0

Project Name: **331 VICTORY DRIVE**  
 Date: **9/13/2021**  
 Linear Development Project? **No**

**CLEAR ALL** (ctrl+Shift+H)  
**data input cells**  
**constant values**  
**calculation cells**  
**final results**

**Site Information**

**Post-Development Project (Treatment Volume and Loads)**

Enter Total Disturbed Area (acres) → **1.95**

Check:  
 BMP Design Specifications List: 2011 Stds & Specs  
 Linear project? **No**  
 Land cover areas entered correctly? **✓**  
 Total disturbed area entered? **✓**

Maximum reduction required: **20%**  
 The site's net increase in impervious cover (acres) is: **0**  
 Post-Development TP Load Reduction for Site (lb/yr): **0.41**

Pre-ReDevelopment Land Cover (acres)	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed, protected forest/open space or reforested					0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be				0.17	0.17
Impervious Cover (acres)				1.78	1.78
					1.95

Post-Development Land Cover (acres)	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed, protected forest/open space or reforested					0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be				0.41	0.41
Impervious Cover (acres)				1.54	1.54
Area Check	OK.	OK.	OK.	OK.	1.95

Constants	Value
Annual Rainfall (inches)	43
Target Rainfall Event (inches)	1.00
Total Phosphorus (TP) EMC (mg/L)	0.26
Total Nitrogen (TN) EMC (mg/L)	1.86
Target TP Load (lb/acre/yr)	0.41
F <sub>p</sub> (unitless correction factor)	0.90

Runoff Coefficients (Rv)	A Soils	B Soils	C Soils	D Soils
Forest/Open Space	0.02	0.03	0.04	0.05
Managed Turf	0.15	0.20	0.22	0.25
Impervious Cover	0.95	0.95	0.95	0.95

**LAND COVER SUMMARY -- PRE-REDEVELOPMENT**

Land Cover Summary-Pre	Listed	Adjusted <sup>1</sup>
Forest/Open Space Cover (acres)	0.00	0.00
Weighted Rv(forest)	0.00	0.00
% Forest	0%	0%
Managed Turf Cover (acres)	0.17	0.17
Weighted Rv(turf)	0.25	0.25
% Managed Turf	9%	9%
Impervious Cover (acres)	1.78	1.78
Rv(impervious)	0.95	0.95
% Impervious	91%	91%
Total Site Area (acres)	1.95	1.95
Site Rv	0.89	0.89

**LAND COVER SUMMARY -- POST DEVELOPMENT**

Land Cover Summary-Post (Final)	Post-Development New Impervious
Forest/Open Space Cover (acres)	0.00
Weighted Rv(forest)	0.00
% Forest	0%
Managed Turf Cover (acres)	0.41
Weighted Rv(turf)	0.25
% Managed Turf	21%
Impervious Cover (acres)	1.54
Rv(impervious)	0.95
% Impervious	79%
Total Re-Dev. Site Area (acres)	1.95
Re-Dev Site Rv	0.80
Final Post Dev Site Rv	0.80

**Treatment Volume and Nutrient Load**

Pre-Re-Development	Post-Development	Final Post-Development
Pre-Re-Development Treatment Volume (acre-ft)	0.1445	0.1305
Pre-Re-Development Treatment Volume (cubic feet)	6,293	5,683
Pre-Re-Development TP Load (lb/yr)	3.95	3.57
Pre-Re-Development TP Load per acre (lb/acre/yr)	2.03	1.83
Baseline TP Load (lb/yr) (0.41 lb/acre/yr applied to pre-development area including pervious land proposed for new impervious cover)		0.80

<sup>1</sup> Adjusted Land Cover Summary: Pre-Re-Development land cover minus pervious land cover (forest/open space or managed turf) acreage proposed for new impervious cover.  
 Adjusted total acreage is consistent with Post-Re-Development acreage (minus acreage of new impervious cover).  
 Column 3 shows load reduction requirement for new impervious cover (based on new development load limit, 0.41 lbs/acre/year).

**Post-Development Requirement for Site Area**

TP Load Reduction Required (lb/yr)	0.41
------------------------------------	------

**Nitrogen Loads (Informational Purposes Only)**

Pre-Re-Development TN Load (lb/yr)	28.28	Final Post-Development TN Load (Post-Re-Development & New Impervious) (lb/yr)	25.54
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**Drainage Area A**

Drainage Area A Land Cover (acres)	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv
Forest/Open Space (acres)					0.00	0.00
Managed Turf (acres)				0.41	0.41	0.25
Impervious Cover (acres)				1.54	1.54	0.95
Total					1.95	

**TP Load Reduction Required for Redeveloped Area (lb/yr): 0.41**

**TP Load Reduction Required for New Impervious Area (lb/yr): 0**

Total Phosphorus Available for Removal in D.A. A (lb/yr): 3.57  
 Post-Development Treatment Volume in D.A. A (ft<sup>3</sup>): 5,683

**14. Manufactured Treatment Devices (no RR)**

Device	Flow	Flow Rate	Flow Rate	Flow Rate	Flow Rate	Flow Rate	Flow Rate	Flow Rate	Flow Rate	Flow Rate	Flow Rate	Flow Rate	Flow Rate
14.a. Manufactured Treatment Device-hydrodynamic	0			0	0	0	0	20	0.00	0.00	0.00	0.00	
14.b. Manufactured Treatment Device-Filtration	0	0.29	0.80	0	0	3.022	3.022	40	0.00	1.90	0.76	1.14	
14.c. Manufactured Treatment Device-Genetic	0			0	0	0	0	40	0.00	0.00	0.00	0.00	

**TOTAL IMPERVIOUS COVER TREATED (ac)**: 0.80 **AREA CHECK: OK**  
**TOTAL MANAGED TURF AREA TREATED (ac)**: 0.29 **AREA CHECK: OK**

**TOTAL PHOSPHORUS REMOVAL REQUIRED ON SITE (lb/yr)**: 0.41

**TOTAL PHOSPHORUS AVAILABLE FOR REMOVAL IN D.A. A (lb/yr)**: 3.57  
**TOTAL PHOSPHORUS REMOVED WITHOUT RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)**: 0.76  
**TOTAL PHOSPHORUS REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)**: 0.00  
**TOTAL PHOSPHORUS LOAD REDUCTION ACHIEVED IN D.A. A (lb/yr)**: 0.76  
**TOTAL PHOSPHORUS REMAINING AFTER APPLYING BMP LOAD REDUCTIONS IN D.A. A (lb/yr)**: 2.81

**SEE WATER QUALITY COMPLIANCE TAB FOR SITE COMPLIANCE CALCULATIONS**

**NITROGEN REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)**: 0.00  
**NITROGEN REMOVED WITHOUT RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)**: 0.00  
**TOTAL NITROGEN REMOVED IN D.A. A (lb/yr)**: 0.00

**Runoff Volume and Curve Number Calculations**

Enter design storm rainfall depths (in):

1-year storm	2-year storm	10-year storm
2.62	3.17	4.87

Use NOAA Atlas 14 (<http://hdsc.nws.noaa.gov/hdsc/pfds/>)

**\*Notes (see below):**

[1] The curve numbers and runoff volumes computed in this spreadsheet for each drainage area are limited in their applicability for determining and demonstrating compliance with water quantity requirements. See VRRM User's Guide and Documentation for additional information.

[2] Runoff Volume (RV) for pre- and post-development drainage areas must be in volumetric units (e.g., acre-feet or cubic feet) when using the Energy Balance Equation. Runoff measured in watershed-inches and shown in the spreadsheet as RV(watershed-inch) can only be used in the Energy Balance Equation when the pre- and post-development drainage areas are equal. Otherwise RV(watershed-inch) must be multiplied by the drainage area.

[3] Adjusted CNs are based on runoff reduction volumes as calculated in D.A. tabs. An alternative CN adjustment calculation for Vegetated Roofs is included in BMP specification No. 5.

**Drainage Area Curve Numbers and Runoff Depths\***

*Curve numbers (CN, CNadj) and runoff depths (RV<sub>Developed</sub>) are computed with and without reduction practices.*

Drainage Area A	A Soils	B Soils	C Soils	D Soils	Total Area (acres): 1.95
Forest/Open Space -- undisturbed, protected forest/open space or reforested land	0.00	0.00	0.00	0.00	0.00
Managed Turf -- disturbed, graded for yards or other turf to be mowed/managed	30	55	70	77	77
Impervious Cover	98	98	98	98	98

**CN(D.A.A): 94**

RV <sub>Developed</sub> (watershed-inch) with no Runoff Reduction*	1-year storm	2-year storm	10-year storm
RV <sub>Developed</sub> (watershed-inch) with Runoff Reduction* <td>1.98</td> <td>2.51</td> <td>4.18</td>	1.98	2.51	4.18
Adjusted CN* <td>94</td> <td>94</td> <td>94</td>	94	94	94

**Runoff Reduction Volume (ft<sup>3</sup>): 0**

**Site Results (Water Quality Compliance)**

Area Checks	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	AREA CHECK
FOREST/OPEN SPACE (ac)	0.00	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER (ac)	1.54	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER TREATED (ac)	0.80	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA (ac)	0.41	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA TREATED (ac)	0.29	0.00	0.00	0.00	0.00	OK.
AREA CHECK	OK.	OK.	OK.	OK.	OK.	

**Site Treatment Volume (ft<sup>3</sup>): 5,683**

**Runoff Reduction Volume and TP By Drainage Area**

	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	TOTAL
RUNOFF REDUCTION VOLUME ACHIEVED (ft <sup>3</sup> )	0	0	0	0	0	0
TP LOAD AVAILABLE FOR REMOVAL (lb/yr)	3.57	0.00	0.00	0.00	0.00	3.57
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.76	0.00	0.00	0.00	0.00	0.76
TP LOAD REMAINING (lb/yr)	2.81	0.00	0.00	0.00	0.00	2.81
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	0.00	0.00	0.00	0.00	0.00	0.00

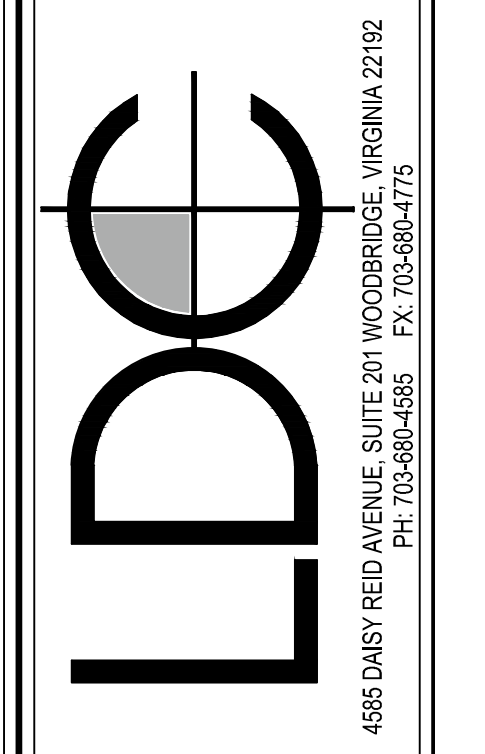
**Total Phosphorus**

FINAL POST-DEVELOPMENT TP LOAD (lb/yr)	3.57
TP LOAD REDUCTION REQUIRED (lb/yr)	0.41
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.76
TP LOAD REMAINING (lb/yr):	2.81
REMAINING TP LOAD REDUCTION REQUIRED (lb/yr):	0.00 **

**\*\* TARGET TP REDUCTION EXCEEDED BY 0.35 LB/YEAR \*\***

**Total Nitrogen (For Informational Purposes)**

POST-DEVELOPMENT LOAD (lb/yr)	25.54
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	0.00
REMAINING POST-DEVELOPMENT NITROGEN LOAD (lb/yr)	25.54



**STORMWATER MANAGEMENT VRRM SPREADSHEET**

**VICTORY DRIVE**

NO.	DATE	REVISION	APPROVED BY:

I HEREBY CERTIFY THAT OTHER THAN THE REVISIONS SHOWN HEREON, NO OTHER CHANGES HAVE BEEN MADE.

**MATTHEW C. MARSHALL**  
 Lic. No. 1525-B  
 07/28/22  
 LAND SURVEYOR

SCALE: N/A

SHEET **7** of **13**

DATE: DECEMBER, 2021  
 DRAFT: WOR CHECK: MTM  
 FILE NUMBER: 21074-1-0

TRUE NORTH

BUILDING #	SITE AREA	TOTAL FLOOR AREA	PARKING REQUIRED	PARKING PROVIDED	ADDITIONAL - See Note #1
BUILDING #1	3.2 AC. ±	76,000 SF	77 SPACES	47 SPACES	-30 SPACES
BUILDING #2	2.4 AC. ±	48,000 SF	48 SPACES	72 SPACES	24 SPACES
BUILDING #3	3.8 AC. ±	65,600 SF	66 SPACES	139 SPACES	73 SPACES
BUILDING #4	2.9 AC. ±	51,500 SF	51 SPACES	8 SPACES	-43 SPACES
BUILDING #5	1.8 AC. ±	60,732 SF	61 SPACES	01 SPACES	-60 SPACES
BUILDING #6	1.9 AC. ±	28,000 SF	28 SPACES	01 SPACES	-27 SPACES
TOTALS	16.2 AC. ±	229,400 SF	206 SPACES	562 SPACES	356 SPACES

\* SITE AREAS INCLUDE 40' WIDE UNDEVELOPED ROAD TO BE ABANDONED

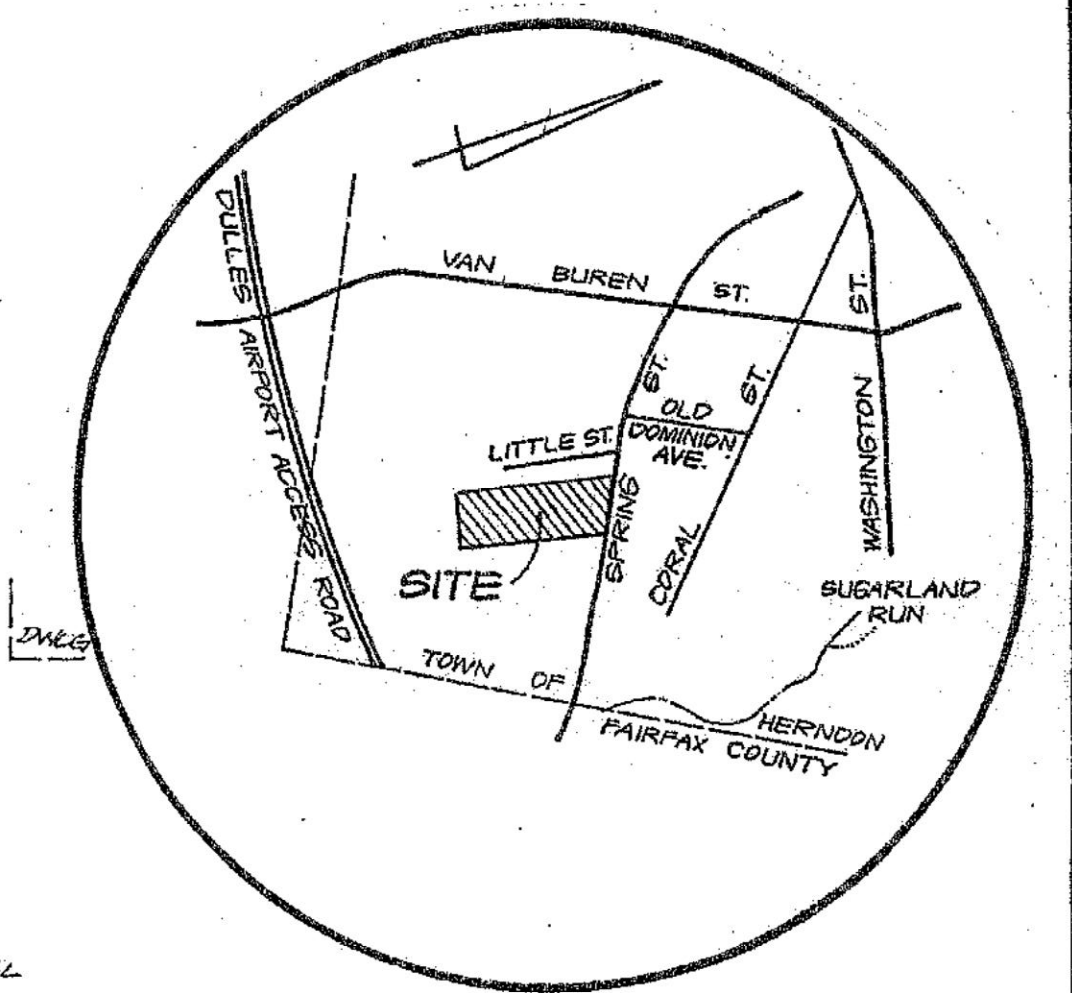
OVERALL TABULATIONS

Building Name	Site Area	Total Floor Area (SF)	F.A.R.	Parking Required	Parking Provided
Building #1	+/- 3.2 Ac.	76800	0.55	77	47
Building #2	+/- 2.6 Ac.	48000	0.42	48	72
Building #3	+/- 3.8 Ac.	65600	0.39	66	139
Building #4	+/- 2.9 Ac.	51500	0.41	8	8
Building #5	+/- 1.8 Ac.	60732	0.77	61	34
Building #6	+/- 1.9 Ac.	24000	0.29	24	47
Totals	+/- 16.2 Ac.	326632	0.46	284	347

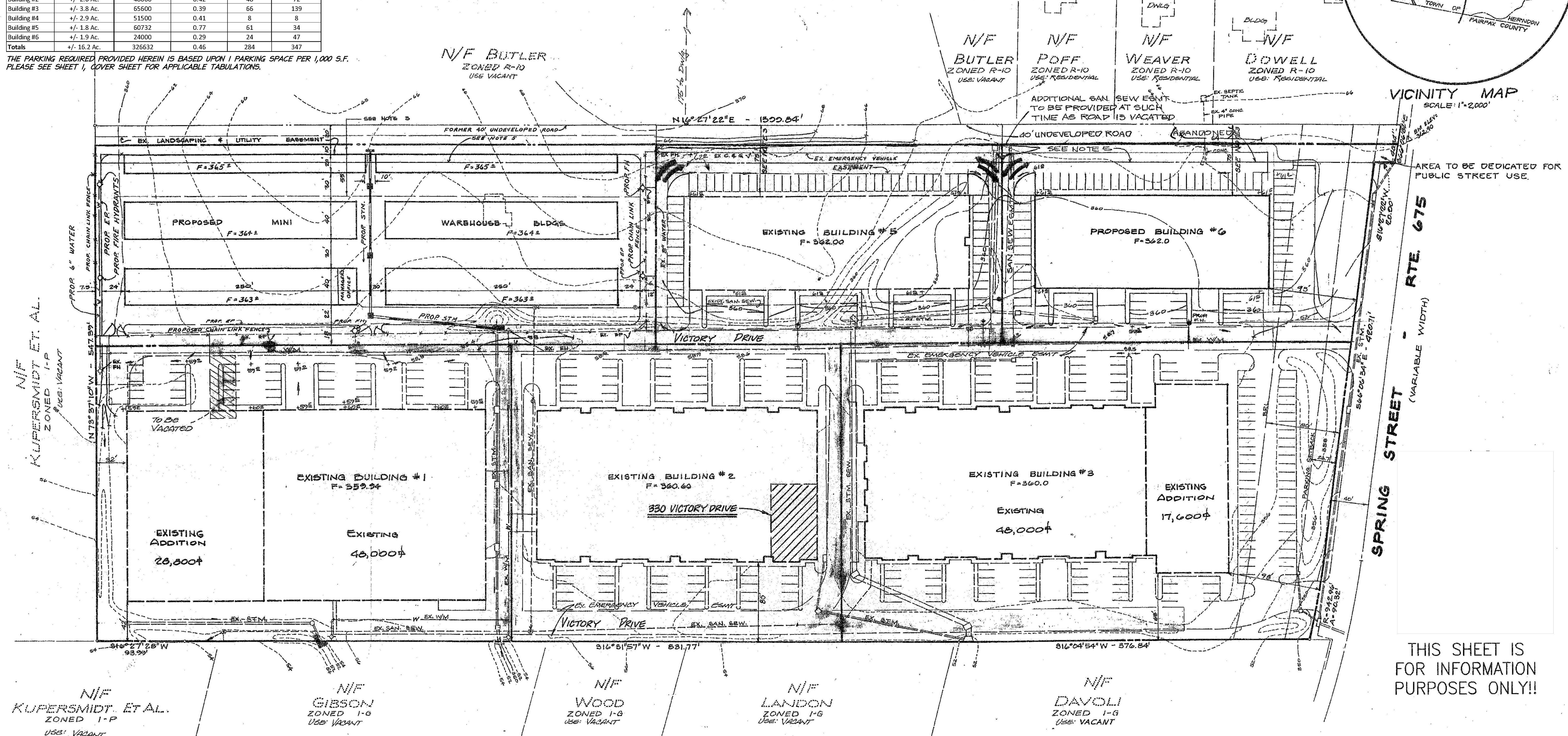
THE PARKING REQUIRED PROVIDED HEREIN IS BASED UPON 1 PARKING SPACE PER 1,000 S.F. PLEASE SEE SHEET 1, COVER SHEET FOR APPLICABLE TABULATIONS.

NOTES:

- ADDITIONAL PARKING TO ACCOMMODATE EXISTING AND FUTURE OFFICE AND COMMERCIAL SPACE
- ALL PARCELS HAVE RECIPROCAL PARKING EASEMENTS.
- ORDINANCE # 73-0-63 ALLOWS FOR SETBACKS AS FOLLOWS:  
PARKING - 11'  
BUILDING - 25'
- BUILDING HEIGHTS: AVERAGE 22'
- 40' R/W WAS EQUALLY DIVIDED BETWEEN EAST/WEST PROPERTY OWNERS WHEN VACATED.



VICINITY MAP SCALE: 1" = 2,000'



AREA TO BE DEDICATED FOR PUBLIC STREET USE.

SPRING STREET (VARIABLE WIDTH) - RTE. 675

THIS SHEET IS FOR INFORMATION PURPOSES ONLY!!

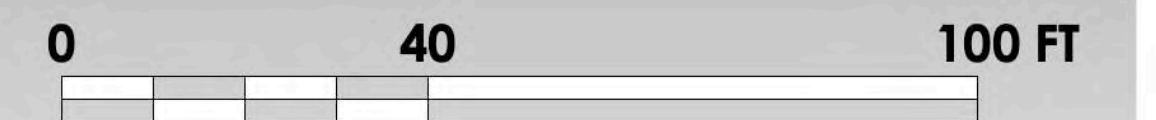
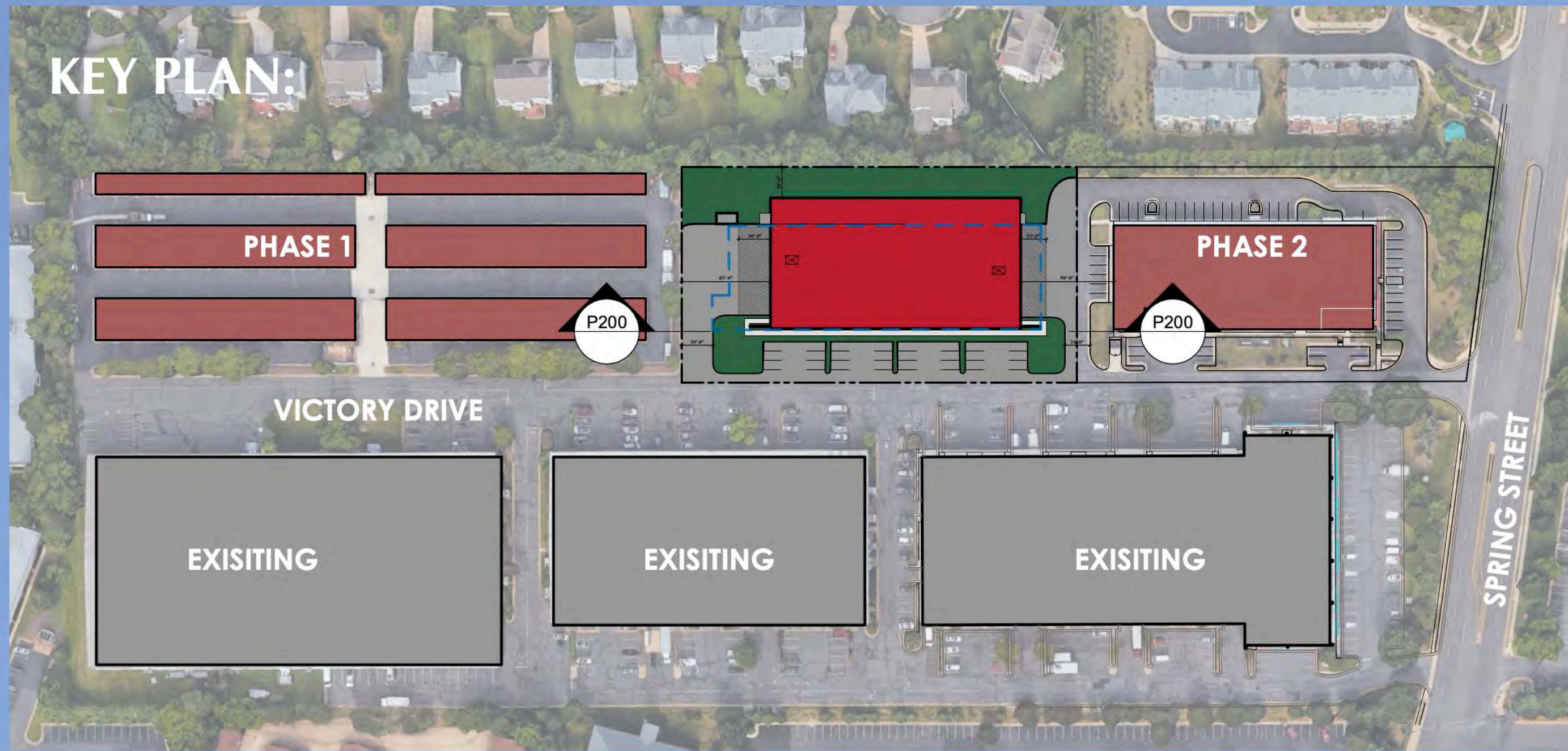
SITE DEVELOPMENT PLAN  
HERNDON INDUSTRIAL VENTURE

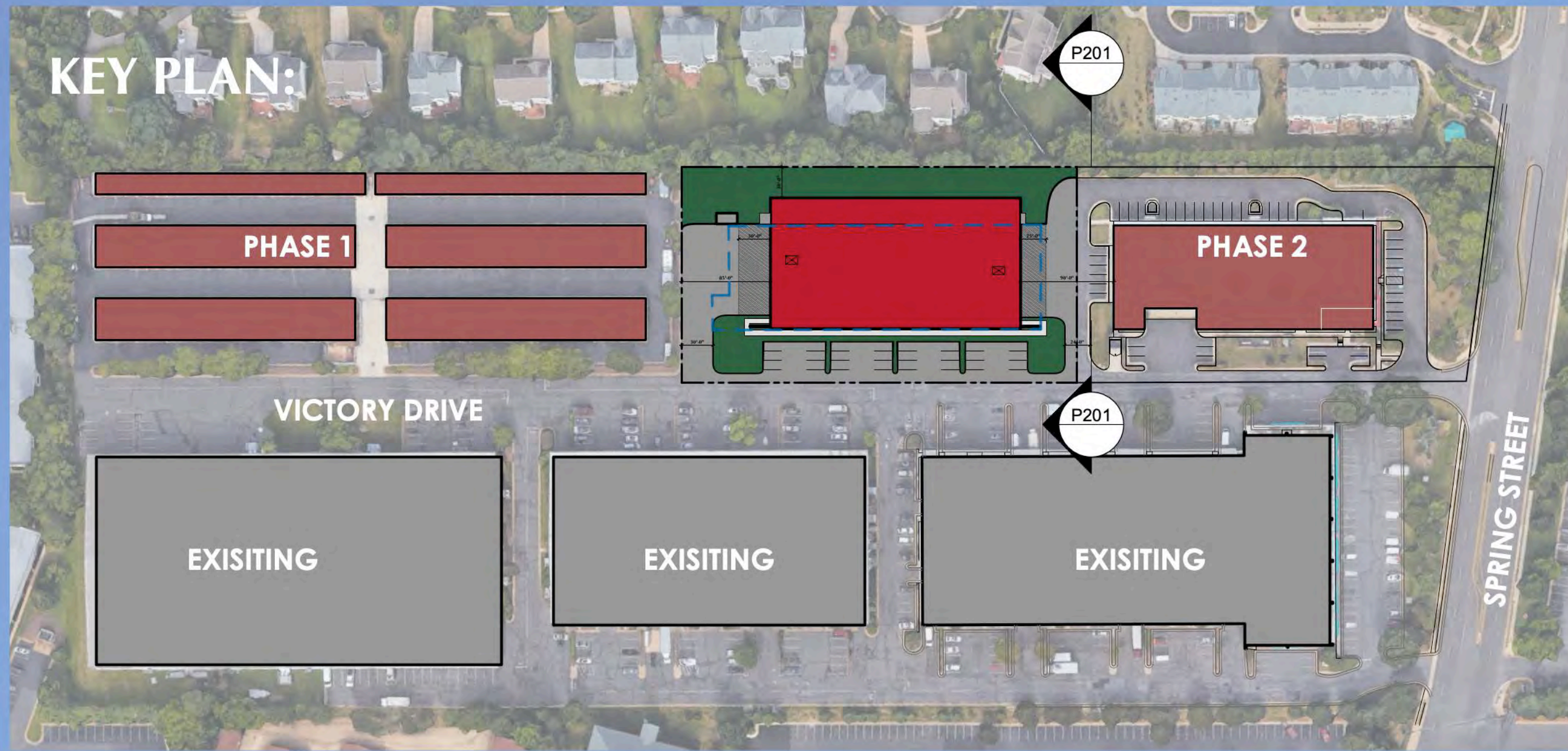
TOWN OF HERNDON  
FAIRFAX COUNTY, VIRGINIA  
SCALE: 1" = 50'  
NOVEMBER, 1978  
REV. 12/27/78  
REV. 1/2/79  
REV. 4/15/79  
REV. 8/6/79  
REV. 8/31/79  
REV. 11/1/83

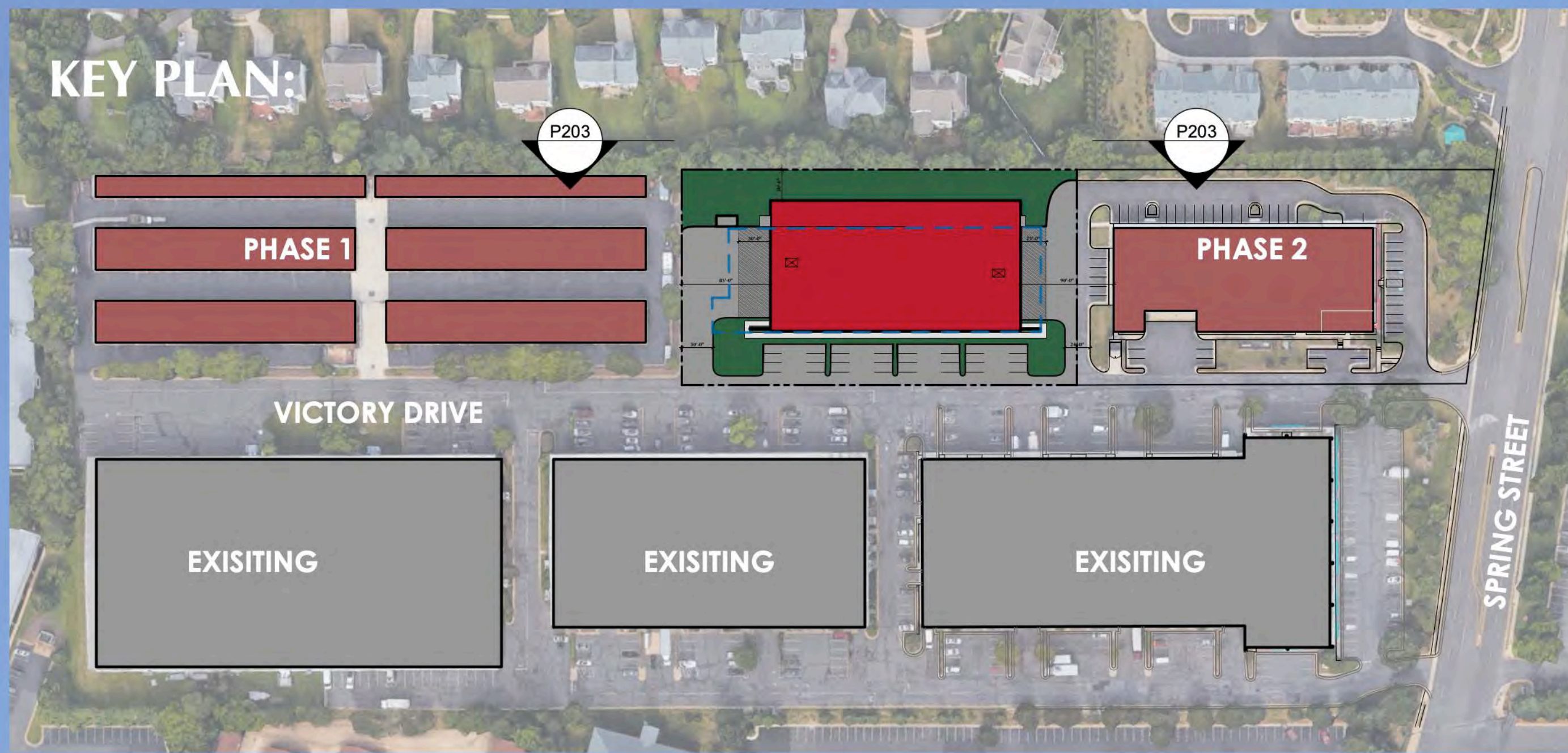


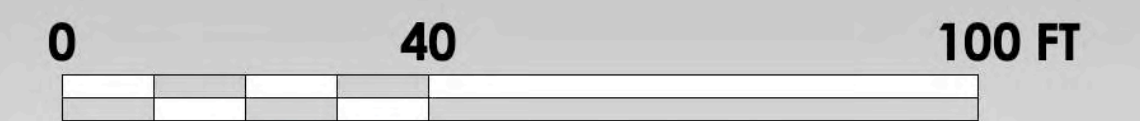
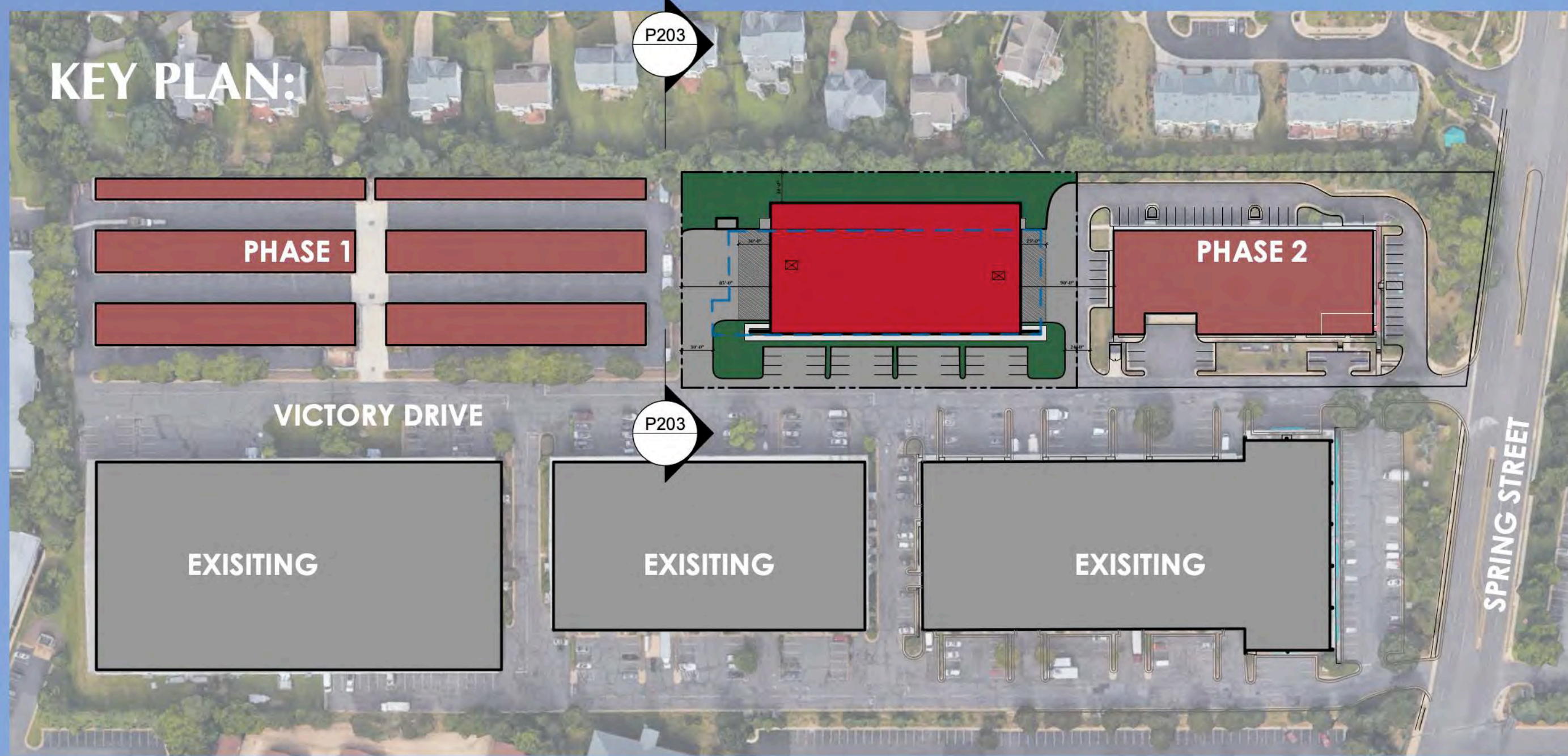
RINKER-DETWILER AND ASSOCIATES, P.C.  
ENGINEERING • SURVEYING • LAND PLANNING  
FAIRFAX, VIRGINIA





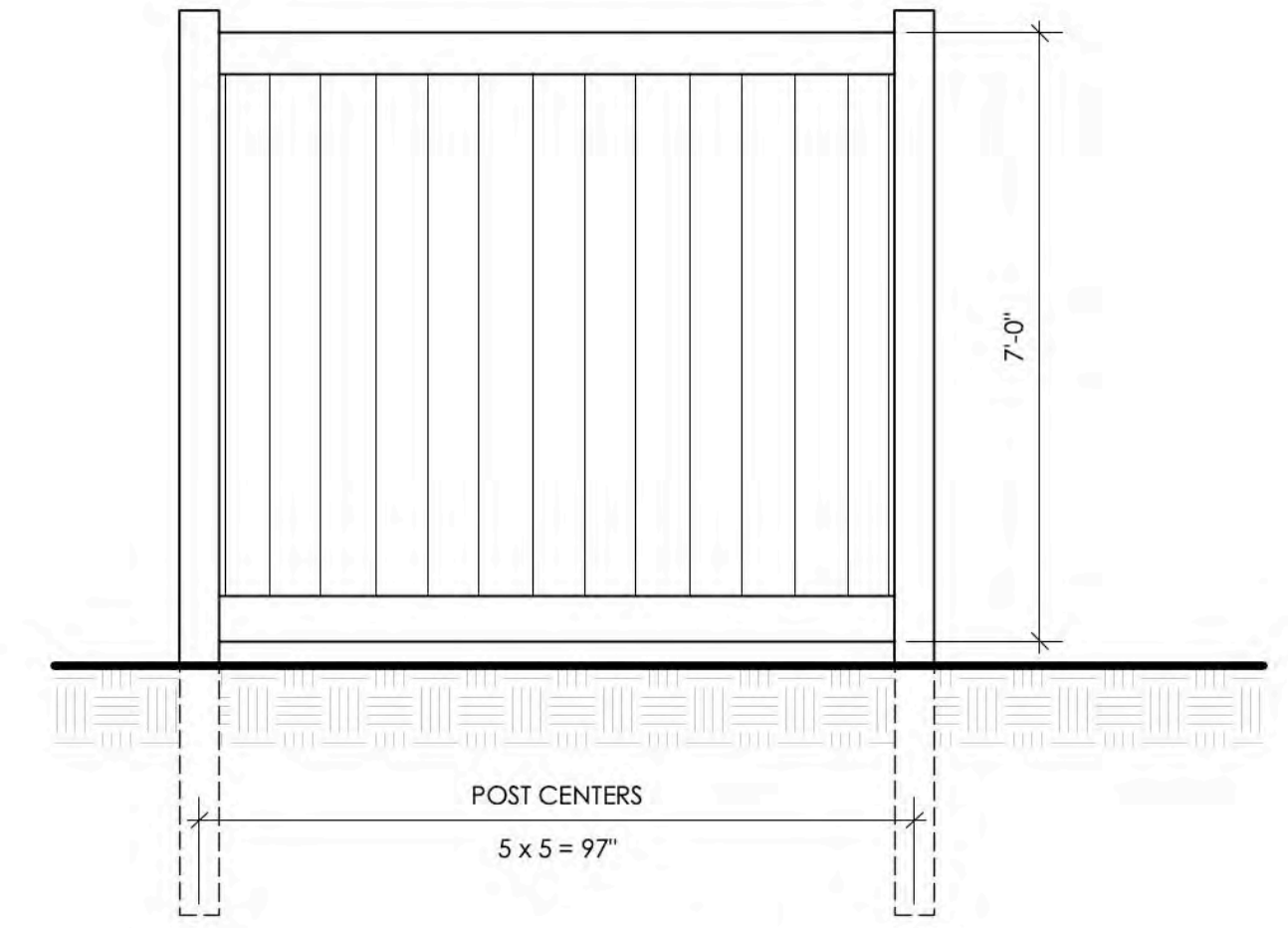




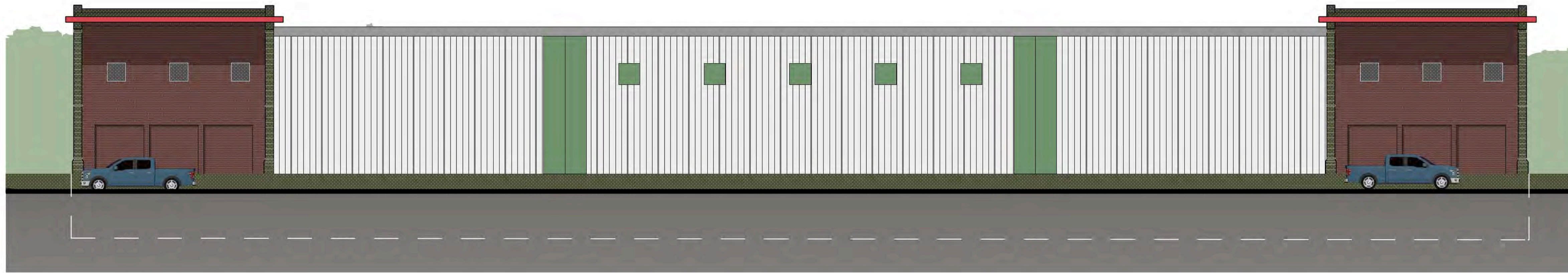




4 Elevation Facing Neighborhood  
P-204



**HIGH QUALITY SOLID PRIVACY FENCE:**  
 Pickets : 7/8" Deep x 7" Wide Pickets  
 Horizontal Rails : 2x6"  
 Posts : 4" sq. , 6" @ Corner Points  
 Post Spacing : 8'-0" OC  
 Height : 7'-0"  
 5 Privacy Fence  
 P-204



3 Elevation Facing Victory Drive  
P-204



1 Elevation Facing Existing Phase 1 Building  
P-204



2 Elevation Facing Existing Phase 2 Building  
P-204