
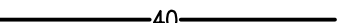

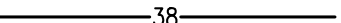



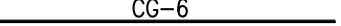










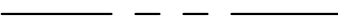


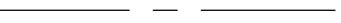


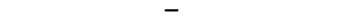



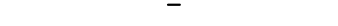

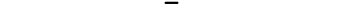

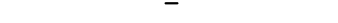

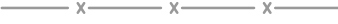


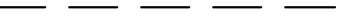

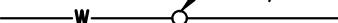














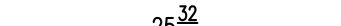

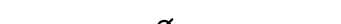





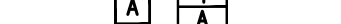












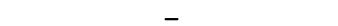







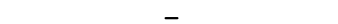



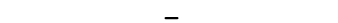



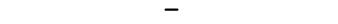






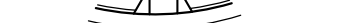





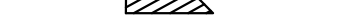







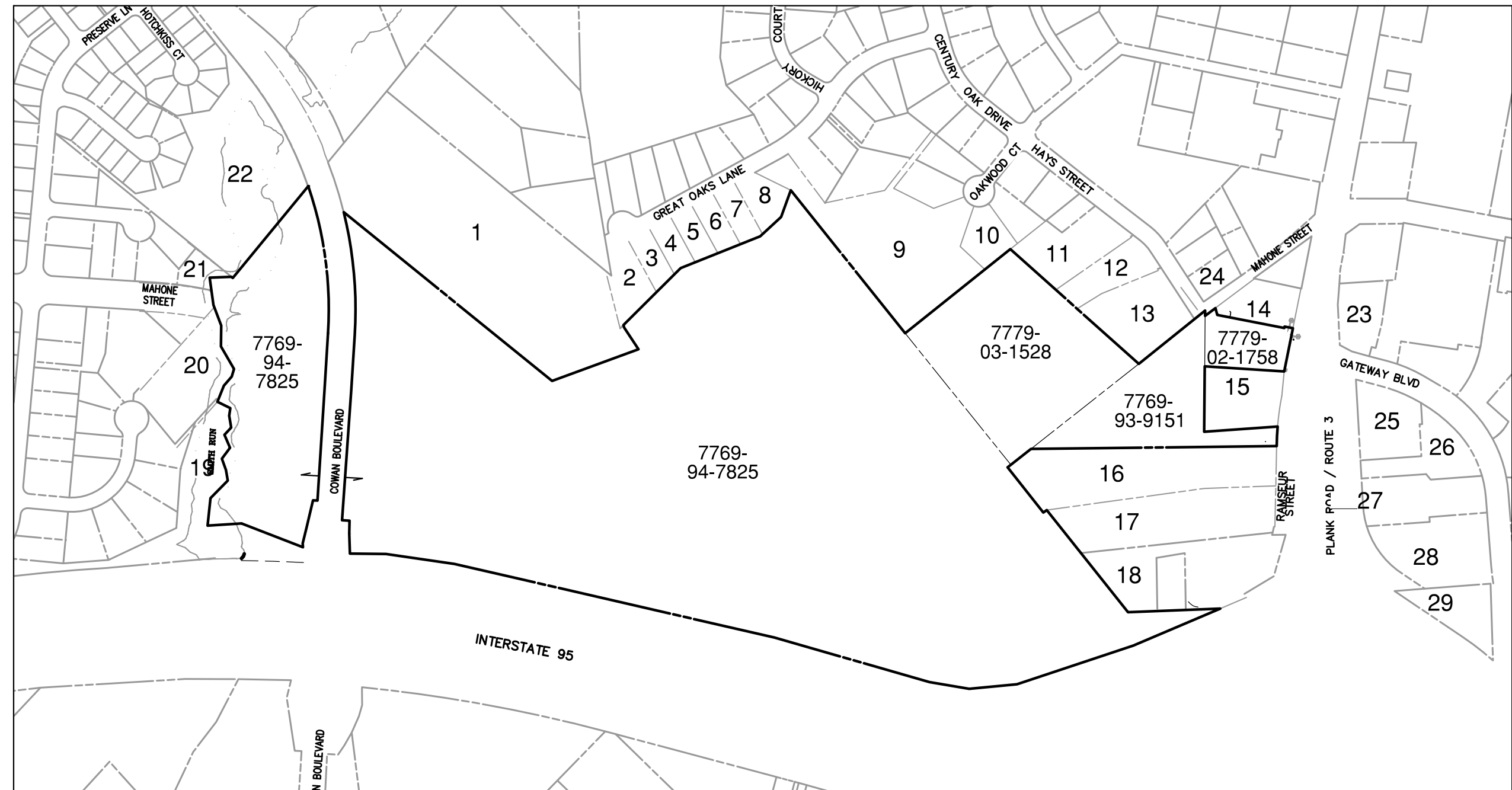


LEGEND

EXISTING	DESCRIPTION	PROPOSED
	INDEX CONTOUR	
	INTERMEDIATE CONTOUR	
	EDGE OF PAVEMENT	
	CURB AND GUTTER	
	TRANSITION FROM CG-6 TO CG-6R	
	PROPOSED HEADER CURB	
	PROPERTY LINE	
	DEPARTING PROPERTY LINE	
	LOT LINE	
	RIGHT-OF-WAY	
	CENTERLINE	
	FLOOD PLAIN	
	CLEARING AND GRADING	
	TREE LINE	
	FLOW LINE OF SWALE	
	STREAM	
	OVERLAND RELIEF PATHWAY	
	FENCE LINE	
	EASEMENT	
	WATER LINE	
	WATER VALVE	
	PROPOSED WATER VALVE	
	REDUCER	
	SANITARY SEWER	
	STORM SEWER	
	CABLE TV	
	ELECTRIC SERVICE	
	TELEPHONE SERVICE	
	GAS LINE	
	SPOT ELEVATION	
	UTILITY POLE	
	SIGN	
	SANITARY SEWER IDENTIFIER	
	STORM DRAIN IDENTIFIER	
	EASEMENT IDENTIFIER	
	WATER METER	
	FIRE HYDRANT	
	PARKING INDICATOR	
	INDICATES THE NUMBER OF TYPICAL PARKING SPACES	
	STREET LIGHT	
	VEHICLES PER DAY (TRAFFIC COUNT)	
	TEST PIT LOCATION	
	RECOMMENDED/REQUIRED	
	CRITICAL SLOPE	
	SLOPES TO BE STABILIZED PURSUANT TO VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK	
	HANDICAP RAMP (CG-12)	
	DENOTES CLEAR SIGHT TRIANGLE	
	TREE	
	BENCHMARK	
	ASPHALT TRAIL	
	CONCRETE SIDEWALK	
	END WALLS	
	END SECTIONS	
	STOP SIGN	
	STREET SIGN	
	OVERHEAD ELECTRIC	
	OVERHEAD TELEPHONE	
	HANDICAP PARKING SPACE (VAN)	
	RIP RAP	
	CROSSWALK	

ADJACENT PROPERTY OWNERS INFORMATION

NOT TO SCALE



UNBUILDABLE LANDS - UDO SECT.72-51.1.A.(1)	
100-YEAR FLOODPLAIN:	0.000 AC
SLOPES >25%:	6.516 AC
QUARRIES, LANDFILLS, ABANDONED MINES, EXCAVATION AREAS:	0.000 AC
UNBUILDABLE SOILS:	0.000 AC
TOTAL UNBUILDBALE LANDS:	6.516 AC
UNBUILDABLE LAND PERCENTAGE:	7.79%
UNBUILDABLE LANDS ACCOUNT FOR LESS THAN 15% OF THE GROSS SITE AREA; NO REDUCTION IN DENSITY IS REQUIRED.	

SITE TABULATION	
ZONING REQUIREMENTS:	
EXISTING ZONING:	PD-MC
PROPOSED ZONING:	I-2
PROPOSED USE:	DATA CENTER
OVERLAY DISTRICTS:	UTILITY, MAJOR
	GATEWAY CORRIDOR OVERLAY
AREA TABULATION	
7769-93-9151	160,801 SF
7769-94-7825	3,119,264 SF
7779-02-1758	50,336 SF
7779-03-1528	311,157 SF
TOTAL GROSS AREA	3,641,559 SF
R.O.W. DEDICATION	472,485 SF
TOTAL NET AREA	3,169,075 SF
DENSITY TABULATION:	
ALLOWED DENSITY:	1.00 FAR
(BASED ON GROSS AREA)	3,641,559 SF
PROPOSED DENSITY:	0.58 FAR
(BASED ON GROSS AREA)	2,100,000 SF
I-2 BULK REGULATIONS:	
MINIMUM LOT AREA REQUIRED:	20,000 SF
MINIMUM LOT WIDTH REQUIRED:	100 FT.
MAXIMUM BUILDING HEIGHT:	50 FT.
	90 FT. WITH SUP
PROPOSED BUILDING HEIGHT:	90 FT.
BUILDING SETBACKS	
(ALL BUILDING SETBACKS PER TECHNOLOGY OVERLAY DISTRICT STANDARDS)	
ADJACENT TO RESIDENTIAL ZONING DISTRICT:	200 FT.
ADJACENT TO PLANNED DEVELOPMENT ZONING DISTRICT:	150 FT.
ADJACENT TO COMMERCIAL OR INDUSTRIAL ZONING DISTRICT:	100 FT.
ADJACENT TO PUBLIC STREET:	25 FT.
SUBSTATION SETBACKS	
ALL LOT LINES*:	100 FT.
*NOTE: SETBACK FROM SUBSTATION TO INTERNAL LOT LINES WITHIN PROPOSED DEVELOPMENT IS PROPOSED TO BE 0 FEET.	
OPEN SPACE TABULATION:	
MINIMUM REQUIRED OPEN SPACE:	20%
(TECHNOLOGY OVERLAY DISTRICT STANDARD)	16.72 AC.
TOTAL OPEN SPACE PROVIDED:	23.45%
	19.61 AC.
PARKING TABULATION:	
DATA CENTER	
4 FOR THE FIRST 4,000 SF + 1 PER EVERY ADDITIONAL 6,000 SF	
GROSS SQUARE FEET:	2,100,000 SF
PARKING SPACES REQUIRED:	354 SPCS.
PROPOSED PARKING	
PARKING SPACES PROVIDED:	220 SPCS.

ADJACENT PROPERTIES							
#	GPIN	Name	Property Address	Zoning	Use	Inst#	DB/PG
1	7779-05-5551	City of Fredericksburg	None Assigned	R2	Vacant	2008-97	
2	7779-04-3995	Charles F & Aquilina Breeden	1119 Great Oaks Lane	R2	Dwelling	2016-948	
3	7779-04-4877	Mark S. & Kara M. Coppess	1117 Great Oaks Lane	R2	Dwelling	2004-2832	
4	7779-04-5719	Gary F. & Elizabeth G. Forjan	1115 Great Oaks Lane	R2	Dwelling	2004-890	
5	7779-04-5752	Moridzadeh Marjan Tr	1113 Great Oaks Lane	R2	Dwelling	2013-2220	
6	7779-04-5684	Anthony S. & Tammy M. Savage	1111 Great Oaks Lane	R2	Dwelling	2007-3074	
7	7779-04-6526	Bradley S & Trinette Steigleder	1109 Great Oaks Lane	R2	Dwelling	2006-3425	
8	7779-04-6488	Virginia Whitticar	1107 Great Oaks Lane	R2	Dwelling	2013-2631	
9	7779-04-4091	Great Oaks Homeowners Association of Fredericksburg Inc	None Assigned	R2	Vacant	2006-676	
10	7779-03-5750	Joseph Akira Yoshimura	1005 Oakwood Court	R2	Dwelling	202102129	
11	7779-03-5401	Julius M & Mildred J Jones Estate	2203 Hays Street	R2	Dwelling		271/403
12	7779-03-4216	Newton Family Trust	2205 Hays Street	R2	Dwelling	202002234	
13	7779-03-2174	Lawrence I & Hye S Thuotte	2207 Hays Street	R2	Dwelling	2005-1884	
14	7779-02-3711	D&A Universal LLC	2301 Plank Road	CH	Commercial	2015-2238	
15	7769-92-9789	The Goodwash LLC	2305 Plank Road	CH	Commercial	202300445	
16	7769-93-7122	ESS Prisa III Owner LLC c/o Extra Space Storage INC	2403 Plank Road	CH	Commercial	2005-2951	
17	7769-93-5150	ESS Prisa III Owner LLC c/o Extra Space Storage INC	None Assigned	CH	Commercial	2005-2951	
18	7769-92-3876	Arec 14 LLC	2411 Plank Road	CH	Commercial	2011-2074	
19	7769-96-4560	Preserve at Smith Run Homeowners Association	None Assigned	R2	Vacant	2012-712	
20	7779-06-0521	Christopher M. Hallberg II	1014 Jills Place	R2	Dwelling	2018-79	
21	7779-06-4427	Preserve at Smith Run Homeowners Association	None Assigned	R2	Vacant	2012-712	
22	7779-17-4436	Preserve at Smith Run Homeowners Association	None Assigned	R8	Vacant	2012-712	
23	7779-02-2378	Ansari LLC A Virginia Ltd Liability Co	2306 Plank Road	CH	Vacant	2017-309	
24	7779-02-4818	Frederick & Sue Hwee	2210 Hays Street	CT	Dwelling	2002-2300	
25	7769-92-8284	US Gateway Store LLC	2390 Plank Road	CH	Commercial	2008-1550	
26	7769-92-7057	Sanchez Fernando TR & Giordano Mirian E TR	2386 Plank Road	CH	Commercial	2016-3039	
27	7769-92-6214	Five Hands LLC	2388 Plank Road	CH	Commercial	2015-915	
28	7769-92-3095	KAL LLC & Enela Corner LLC	2384 Plank Road	CH	Commercial	2004-3268	
29	7769-92-2021	KAL LLC	1200 Gateway Boulevard	CH	Commercial	2012-2609	

NOTES:

1. THE AREA TO BE REZONED CONSISTS OF ±83.5987 ACRES AND INCLUDES THE FOLLOWING PARCELS:

APPLICATION PROPERTY INFORMATION					
GPIN	OWNER	INSTRUMENT NO.	EXISTING ZONING	PROPOSED ZONING	AREA (AC)
7769-93-9151	HYLTON VENTURE LLC	DB 274, PG 604	PD-MC	PD-MU	3.6915
7769-94-7825	HYLTON VENTURE LLC	2004-1771	PD-MC	PD-MU	71.6085
7779-02-1758	HYLTON VENTURE LLC	DB 528, PG 54	PD-MC	PD-MU	1.1556
7779-03-1528	HYLTON VENTURE LLC	2003-3746	PD-MC	PD-MU	7.1432
TOTAL AREA:					83.5987
2. THE SUBJECT PROPERTY IS CURRENTLY VACANT AND ZONED PD-MC, PLANNED DEVELOPMENT-MEDICAL CENTER. THIS APPLICATION PROPOSES REZONING THE SUBJECT PROPERTY TO I-2, GENERAL INDUSTRIAL.					
3. BOUNDARY INFORMATION SHOWN WAS OBTAINED FROM "PLAT SHOWING ALTA/NSPS LAND TITLE SURVEY ON THE LANDS OF HYLTON VENTURE, L.L.C.", DATED JANUARY 29, 2024. THE HORIZONTAL DATUM IS NAD83. ADDITIONAL PROPERTY INFORMATION WAS DERIVED FROM CITY OF FREDERICKSBURG GIS DATA. A TITLE REPORT HAS NOT BEEN PROVIDED THEREFORE ALL EASEMENTS AND ENCUMBRANCES MAY NOT BE SHOWN.					
4. TOPOGRAPHY SHOWN IN THIS PLAN WAS OBTAINED FROM AN AERIAL SURVEY OF THE PROPERTY CONDUCTED BY MCKENZIE SNYDER, INC. IN APRIL 2019. SUPPLEMENTAL FIELD RUN TOPOGRAPHY WAS PREPARED BY BOWMAN CONSULTING GROUP, LTD. IN AUGUST AND SEPTEMBER 2019. THE CONTOUR INTERVAL IS 2 FEET. THE VERTICAL DATUM IS NAVD88.					
5. THERE ARE NO KNOWN CEMETERIES OR HISTORIC STRUCTURES LOCATED ON THE SUBJECT PROPERTY.					
6. A PORTION OF THE SITE LIES WITHIN SPECIAL FLOOD HAZARD AREA ZONE "A" (AREAS DETERMINED TO HAVE A 1% ANNUAL CHANCE OF FLOODING) AND ZONE "X" (AREAS OF MINIMAL FLOOD HAZARD). AS SHOWN ON FEMA FLOOD INSURANCE RATE MAPS FOR THE CITY OF FREDERICKSBURG, VIRGINIA, COMMUNITY-PANEL NUMBER 51006500360; EFFECTIVE DATE 04/05/2023 AND COMMUNITY-PANEL NUMBER 5100650020D; EFFECTIVE DATE 04/05/2023.					
7. THE SITE IS LOCATED WITHIN THE CHESAPEAKE BAY OVERLAY DISTRICT WITH PORTIONS OF THE SITE IDENTIFIED AS RMA AND RPA.					
8. WETLANDS AND WATERS OF THE US DELINEATION (USAGE CONFIRMATION NO. NAO-2018-02101) WAS PREPARED BY THIS FIRM. PERENNIAL FLOW AND RPA DETERMINATION WAS PREPARED BY THIS FIRM.					
9. THE SITE IS LOCATED IN HUB ZONE TRACT 5, THE ROUTE 3/GATEWAY BOULEVARD TECHNOLOGY ZONE (PORTION), TRAFFIC ANALYSIS ZONE 327, COWAN BOULEVARD GATEWAY OVERLAY DISTRICT (PORTION), AND THE PLANK ROAD/ROUTE 3 SMALL AREA PLAN.					
10. THERE ARE DATA CENTER AND UTILITY, MAJOR USES PROPOSED ON THIS SITE.					
11. THE PROPOSED SITE WILL BE SERVED BY PUBLIC WATER AND SEWER MAINTAINED BY THE CITY OF FREDERICKSBURG.					
12. THE PROPOSED SITE WILL CONTAIN PRIVATE ROADS MAINTAINED BY THE PROPERTY OWNERS; AND PUBLIC STREETS TO BE MAINTAINED BY THE CITY OF FREDERICKSBURG.					
13. THE STREETS SHALL BE DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 72-52 OF THE UDO.					
14. STORMWATER MANAGEMENT FACILITY(S) AND OPEN SPACE SHALL BE MAINTAINED BY THE PROPERTY OWNER(S).					
15. EROSION CONTROL FOR THIS SITE WILL BE PROVIDED THROUGH ONSITE MEASURES IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENTATION CONTROL HANDBOOK.					
16. STORMWATER SHALL BE CONTROLLED THROUGH A STORM DRAINAGE SYSTEM IN ACCORDANCE WITH THE VASWMH.					
17. WASTE COLLECTION SERVICES SHALL BE PRIVATELY CONTRACTED.					
18. STREET LIGHTING SHALL BE PROVIDED ALONG GATEWAY BOULEVARD AND WITHIN EACH PHASE OF DEVELOPMENT AS REQUIRED BY SECTION 72-58 OF THE UDO.					
19. ALL SIGNAGE SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 72-59 OF THE UDO.					
20. DIMENSIONS, AREAS, BUILDING SQUARE FOOTAGES, AND LAYOUT ARE APPROXIMATE IN NATURE AND SUBJECT TO CHANGE WITH FINAL ENGINEERING.					

PROPOSED DEVELOPMENT PROGRAM							
LAND BAY	GROSS AREA (AC)	ROW DEDICATION (AC)	NET AREA (AC)	NON-RESIDENTIAL			LAND USE
				DATA CENTER (SF)	GROSS DESNSITY	NET DESNSITY	
A	3.369	1.666	1.704		0.00 FAR	0.00 FAR	OPEN SPACE
B	6.265	1.248	5.016		0.00 FAR	0.00 FAR	OPEN SPACE
C	7.008	2.334	4.674		0.00 FAR	0.00 FAR	OPEN SPACE/STORMWATER MANAGEMENT
D	1.918	1.314	0.604		0.00 FAR	0.00 FAR	OPEN SPACE
E	47.185	2.523	44.662	2,100,000	1.02 FAR	1.08 FAR	DATA CENTER
F	9.269	0.787	8.483		0.00 FAR	0.00 FAR	SUBSTATION
G	6.366	0.433	5.933		0.00 FAR	0.00 FAR	OPEN SPACE/STORMWATER MANAGEMENT
H	2.218	0.542	1.676		0.00 FAR	0.00 FAR	OPEN SPACE/STORMWATER MANAGEMENT
TOTAL	83.599	10.847	72.752	2,100,000	0.58 FAR	0.66 FAR	



- NOTES**
1. WETLAND DELINEATION (USACE CONFIRMATION NO. NAO-2018-02101), PERENNIAL FLOW DETERMINATION, AND RPA DETERMINATION WERE PREPARED BY THIS FIRM.
 2. A MEMORANDUM OF AGREEMENT (MOA) BETWEEN THE OWNER, THE U.S. ARMY CORPS OF ENGINEERS, AND THE VIRGINIA DEPARTMENT OF HISTORIC RESOURCES (DHR) REGARDING THE ARCHAEOLOGICAL SITES SHOWN HEREON WAS EXECUTED 9/20/2021. DATA RECOVERY HAS BEEN COMPLETED AND DHR HAS APPROVED THE FIELD MEMO PER LETTER DATED 8/4/2022. THE ARCHAEOLOGICAL DATA RECOVERY OF SITES 44SP0783 AND 44SP0784 REPORT PREPARED BY DOVETAIL CULTURAL RESOURCES GROUP, DATED 02/2024, WAS APPROVED BY DHR ON 03/07/2024.
 3. THIS PLAN IS SUBJECT TO MINOR REVISION WITH FINAL ENGINEERING.
 4. SEE SHEET 2 NOTES FOR ADDITIONAL INFORMATION INCLUDING ADJACENT PROPERTY OWNERS.

LEGEND

18B SOILS TYPE

18B DENOTES SLOPES GREATER THAN 25%

18B DENOTES EXISTING POND

18B DENOTES EXISTING WETLANDS

18B DENOTES EXISTING STREAMS

18B DENOTES RPA

150 75 0 150 300
GRAPHIC SCALE
1" = 150'

18B

SOILS
SOILS INFORMATION FROM THE USDA WEB SOILS SURVEY.

MAP SYMBOL	SOIL NAME
1B	ABELL SAND LOAM, 2 TO 7 PERCENT SLOPES
4D2	APPLING-WEDOWEE SANDY LOAMS, 15 TO 25 PERCENT SLOPES
17D	DYSTROCHREPTS-UDULTS COMPLEX, MODERATELY STEEP
17E	DYSTROCHREPTS-UDULTS COMPLEX, STEEP
18B	EMPORIA SANDY LOAM, 2 TO 7 PERCENT SLOPES
18C	EMPORIA SANDY LOAM, 7 TO 15 PERCENT SLOPES
21B	FACEVILLE-VARINA COMPLEX, 2 TO 7 PERCENT SLOPES
21C2	FACEVILLE-VARINA COMPLEX, 7 TO 15 PERCENT SLOPES
23	FLUVAQUENTS-UDIFLUVENTS COMPLEX
27E	LOUISBURG SANDY LOAM, 25 TO 50 PERCENT SLOPES
36B	SAVANNAH SANDY LOAM, 2 TO 7 PERCENT SLOPES
45B	UDORTHENTS-UDIFLUVENTS COMPLEX
46	URBAN LAND-UDULTS COMPLEX
W	WATER

EASEMENT LEGEND

EX. CONSTRUCTION EASEMENT
D.B. 193, PG. 155

EX. VIRGINIA ELECTRIC AND POWER COMPANY EASEMENT
(APPROXIMATE CENTERLINE, NO WIDTH SPECIFIED)
D.B. 149, PG. 94

EX. 15' VIRGINIA ELECTRIC AND POWER COMPANY EASEMENT
(APPROXIMATE LOCATION)
D.B. 267, PG. 43

EX. INGRESS, EGRESS, AND ACCESS EASEMENT
D.B. 596, PG. 661*

EX. 30' AND VARIABLE WIDTH INGRESS/EGRESS EASEMENT
D.B. 225, PG. 277

EX. 30' INGRESS/EGRESS EASEMENT
D.B. 499, PG. 475*

EX. RETENTION POND EASEMENT
D.B. 222, PG. 24

EX. 20' SANITARY SEWER EASEMENT
D.B. 292, PG. 152

EX. SIGN EASEMENT AREA
D.B. 596, PG. 661*

EX. SIGN EASEMENT
D.B. 596, PG. 661*

EX. 15' STORM SEWER EASEMENT
D.B. 225, PG. 277

EX. DRAINAGE EASEMENT
INSTR. #02000104

EX. CHESAPEAKE AND POTOMAC TELEPHONE COMPANY EASEMENT
(APPROXIMATE CENTERLINE, NO WIDTH SPECIFIED)
D.B. 201, PG. 138*

EX. 12' CHESAPEAKE AND POTOMAC TELEPHONE COMPANY EASEMENT
D.B. 414, PG. 523*

EX. 12' CHESAPEAKE AND POTOMAC TELEPHONE COMPANY EASEMENT
D.B. 598, PG. 154*

EX. TEMPORARY CONSTRUCTION EASEMENT
D.B. 292, PG. 152

* RECORDED IN SPOTSYLVANIA COUNTY

Bowman

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Fredericksburg, Virginia 22401
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ENVIRONMENTAL ANALYSIS & EXISTING CONDITIONS PLAN
1500 GATEWAY
GENERAL DEVELOPMENT PLAN

CITY OF FREDERICKSBURG, VIRGINIA
WARD 1

CITY PROJECT NUMBER

COMMONWEALTH OF VIRGINIA
WILLIAM E. DUNCANSON JR.
Lic. No. 055205
04/11/25
PROFESSIONAL ENGINEER

PLAN STATUS
10/11/24 1st SUBMISSION
12/12/24 CITY COMMENTS
04/11/25 2nd SUBMISSION

DATE	DESCRIPTION
WED DESIGN	EV DRAWN
WED CHKD	CHKD

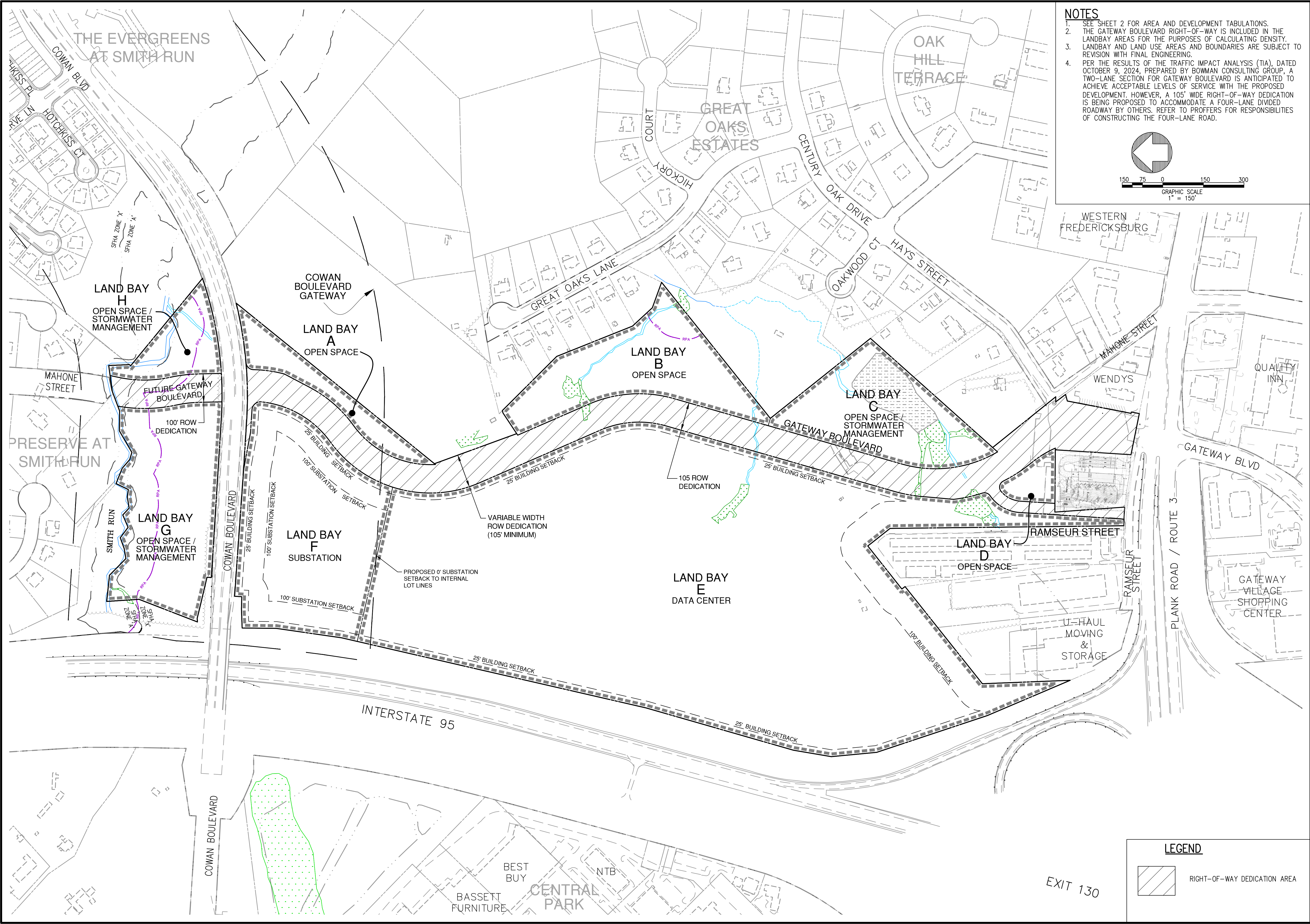
SCALE H: 1"=150'
V: N/A

JOB No. 100144-04-002

DATE : OCTOBER 11, 2024

FILE No. 100144-D-ZP-005

SHEET 3 OF 9



NOTES

1. SEE SHEET 2 FOR AREA AND DEVELOPMENT TABULATIONS.

2. THE GATEWAY BOULEVARD RIGHT-OF-WAY IS INCLUDED IN THE LANDBAY AREAS FOR THE PURPOSES OF CALCULATING DENSITY.

3. LANDBAY AND LAND USE AREAS AND BOUNDARIES ARE SUBJECT TO REVISION WITH FINAL ENGINEERING.

4. PER THE RESULTS OF THE TRAFFIC IMPACT ANALYSIS (TIA), DATED OCTOBER 9, 2024, PREPARED BY BOWMAN CONSULTING GROUP, A TWO-LANE SECTION FOR GATEWAY BOULEVARD IS ANTICIPATED TO ACHIEVE ACCEPTABLE LEVELS OF SERVICE WITH THE PROPOSED DEVELOPMENT. HOWEVER, A 105' WIDE RIGHT-OF-WAY DEDICATION IS BEING PROPOSED TO ACCOMMODATE A FOUR-LANE DIVIDED ROADWAY BY OTHERS. REFER TO PROFFERS FOR RESPONSIBILITIES OF CONSTRUCTING THE FOUR-LANE ROAD.

150 75 0 150 300

GRAPHIC SCALE
1" = 150'

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SCHEMATIC LAND USE / LAND BAYS PLAN
1500 GATEWAY
GENERAL DEVELOPMENT PLAN
CITY OF FREDERICKSBURG, VIRGINIA
WARD 1

CITY PROJECT NUMBER

COMMONWEALTH OF VIRGINIA

WILLIAM E. DUNCANSON JR.
Lic. No. 055205
04/11/25
PROFESSIONAL ENGINEER

PLAN STATUS

10/11/24 1st SUBMISSION

12/12/24 CITY COMMENTS

04/11/25 2nd SUBMISSION

DATE DESCRIPTION

WED EV WED

DESIGN DRAWN CHKD

SCALE H: 1"=150'

V: N/A

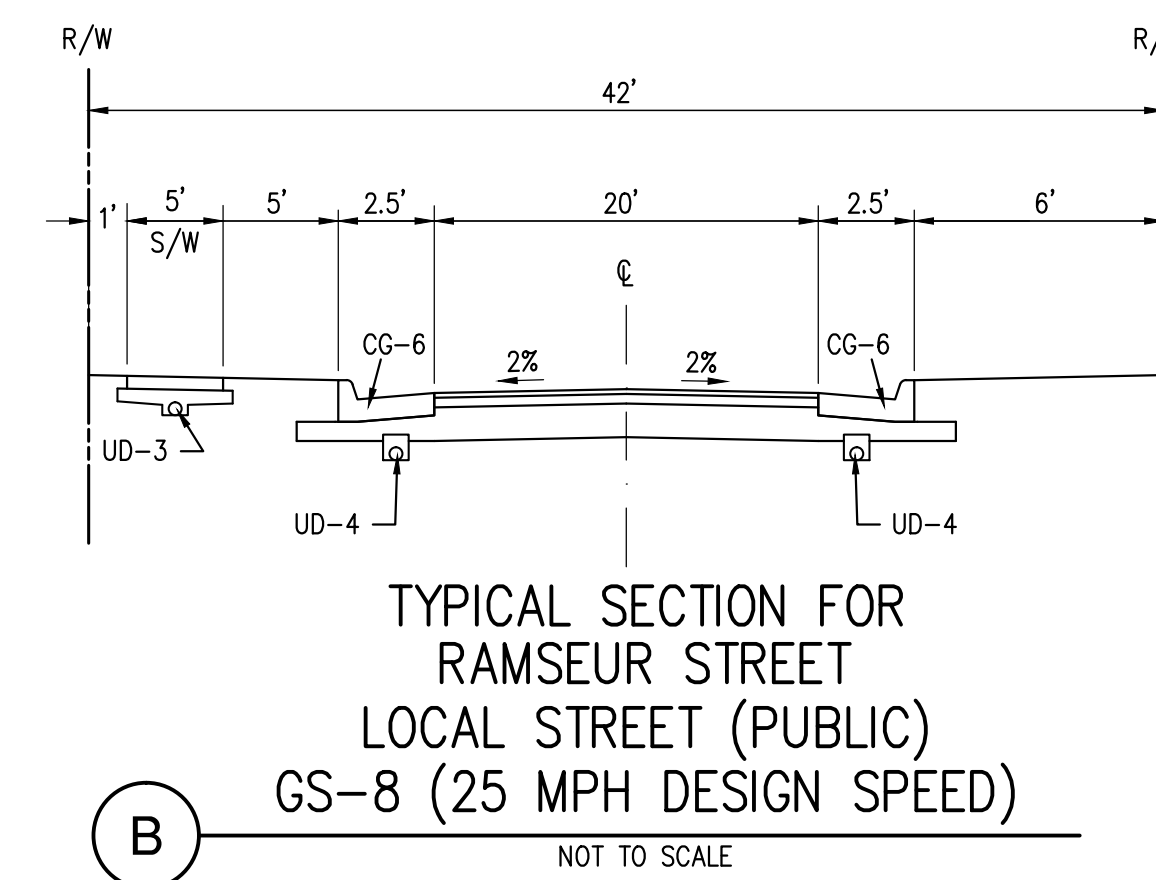
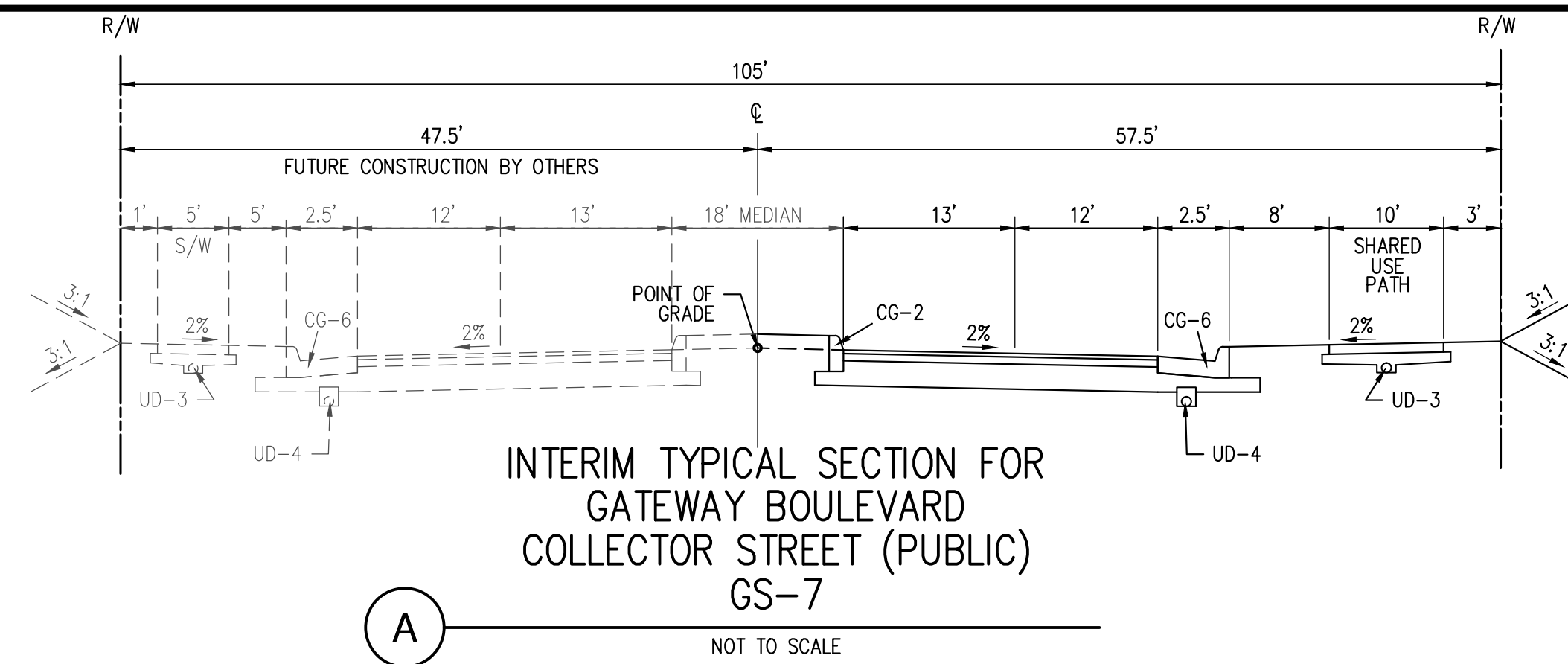
JOB No. 100144-04-002

DATE : OCTOBER 11, 2024

FILE No. 100144-D-ZP-005

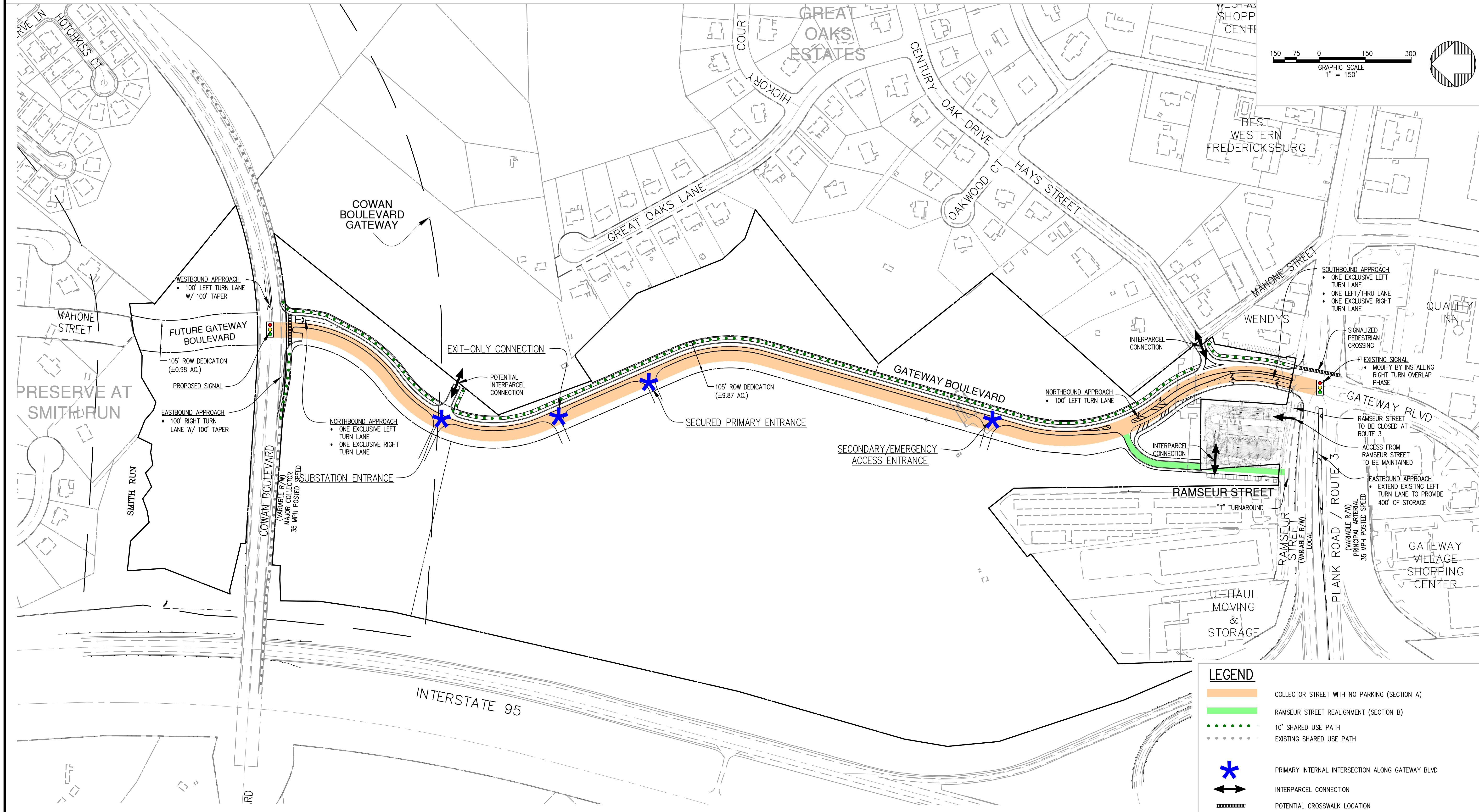
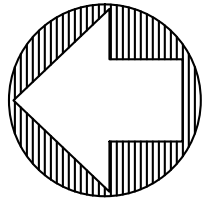
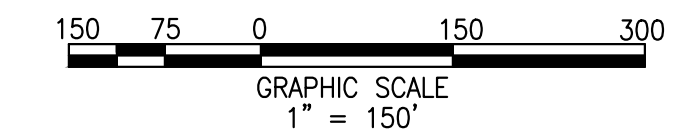
SHEET 4 OF 9

Cad file name : V:\100144 - Hylton Property\100144-04-002 (ENG)\Engineering\Engineering Plans\100144-D-ZP-005\004-100144-ZP-005-LAND USE-LAND BAYS.dwg



- NOTES

1. REFER TO THE TRAFFIC IMPACT ANALYSIS (TIA), DATED OCTOBER 9, 2024, PREPARED BY BOWMAN CONSULTING GROUP FOR TRIP GENERATION AND DISTRIBUTION.
2. PER THE RESULTS OF THE TIA, A TWO-LANE SECTION FOR GATEWAY BOULEVARD IS ANTICIPATED TO ACHIEVE ACCEPTABLE LEVELS OF SERVICE WITH THE PROPOSED DEVELOPMENT. REFER TO PROFFERS FOR RESPONSIBILITIES OF CONSTRUCTING FOUR-LANE ROAD.
3. INTERSECTION IMPROVEMENTS SHOWN AT GATEWAY BLVD/PLANK ROAD, GATEWAY BLVD/COWAN BLVD, AND GATEWAY BLVD/RAMSEUR ST. WERE OBTAINED FROM THE RESULTS OF THE TIA.
4. LAND BAY ACCESS LOCATIONS ARE PRELIMINARY AND SUBJECT TO CHANGE. ALL ACCESS LOCATION SHALL BE IN CONFORMANCE WITH THE REQUIREMENTS OF THE CITY OF VDOT'S (ACCESS) OF THE CITY'S UDO APPENDIX C OF VDOT'S ROAD DESIGN MANUAL (ACCESS MANAGEMENT DESIGN STANDARDS FOR ENTRANCE AND INTERSECTIONS) UNLESS MODIFIED OR WAIVED.
5. INTERNAL PARKING LOT DESIGN AND CONFIGURATION WILL BE IN ACCORDANCE WITH SECTION 72-53 OF THE UDO.
6. A 10' SHARED USE PATH HAS BEEN PROVIDED ALONG THE EASTERN SIDE OF GATEWAY BOULEVARD, CONNECTING PLANK ROAD (ROUTE 3) WITH THE EXISTING TRAIL ALONG COWAN BOULEVARD.
7. SIGNALIZED PEDESTRIAN CROSSWALKS WILL BE PROVIDED WITH TRAFFIC SIGNAL DESIGN PLANS AT THE INTERSECTIONS OF GATEWAY BLVD/PLANK RD AND GATEWAY BLVD/COWAN BLVD AS REQUIRED BY THE CITY OF FREDERICKSBURG AND VDOT.



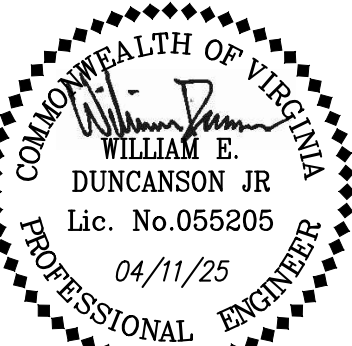
TRANSPORTATION ANALYSIS & ACCESS PLAN

1500 GATEWAY

GENERAL DEVELOPMENT PLAN

WARD 1
CITY OF FREDERICKSBURG, VIRGINIA

CITY PROJECT NUMBER

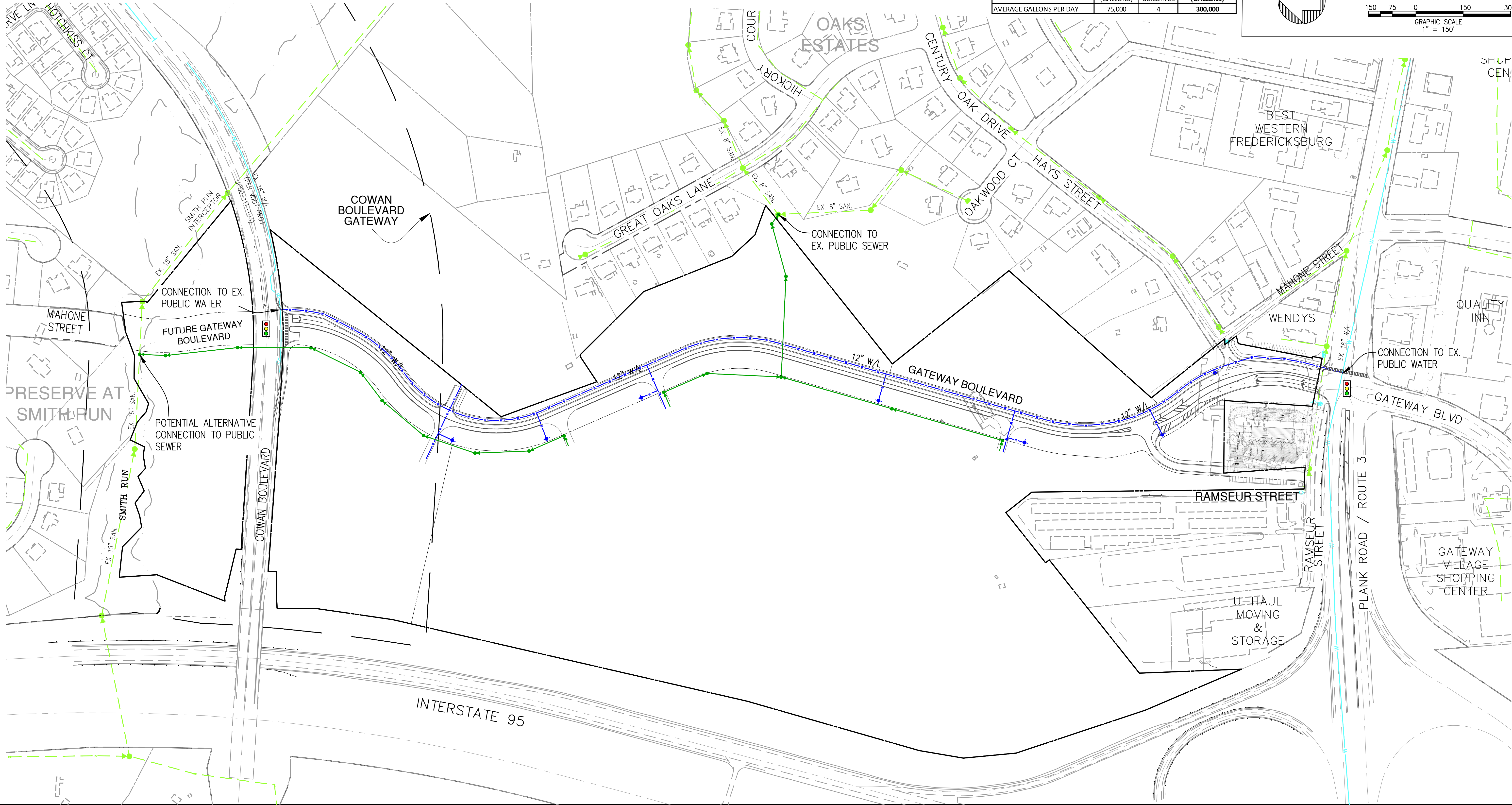


PLAN STATUS

10/11/24	1st SUBMISSION
12/12/24	CITY COMMENTS
04/11/25	2nd SUBMISSION

DATE	DESCRIPTION	
WED DESIGN	EV DRAWN	WED CHKD
SCALE	H: 1"=150' V: N/A	
JOB No. 100144-04-002		
DATE : OCTOBER 11, 2024		
FILE No. 100144-D-ZP-005		
<div style="display: flex; justify-content: space-between; align-items: center;"> SHEET 5 OF 9 </div>		

SHEET 5 OF 9



ESTIMATED WATER DEMAND			
DEMAND	UNIT FLOW PER BUILDING (GALLONS)	NO. OF BUILDINGS	TOTAL CONSUMPTION (GALLONS)
AVERAGE GALLONS PER DAY*	75,000	4	300,000

*During peak usage periods

Notes:
1. The data center campus is proposed to be cooled by central air handler units which draw 100% outside air and condition the air with wetted media through "direct evaporation cooling" which drops the outside air temperatures to within the exterior wet bulb conditions. The units sequencing will use unconditioned air from the outside whenever the temperature drops below the supply discharge set point. The majority of the year the units run dry and do not use water. During the peak summer months—as temperatures rise—the air handler units will use the water held in storage tanks for direct evaporation cooling. The proposed city water supply will make up the water at the tanks as the levels drop.

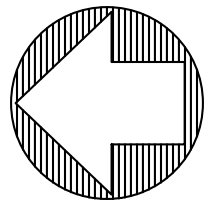
ESTIMATED SEWER DEMAND			
DEMAND	UNIT FLOW PER BUILDING (GALLONS)	NO. OF BUILDINGS	TOTAL CONSUMPTION (GALLONS)
AVERAGE GALLONS PER DAY	75,000	4	300,000

NOTES

1. A 12" WATER MAIN ALONG GATEWAY BOULEVARD IS PROPOSED TO CONNECT THE EXISTING 16" WATER MAINS LOCATED ALONG PLANK ROAD (ROUTE 3) AND COWAN BOULEVARD.
2. INTERNAL LOOPING OF WATERLINES WILL BE PROVIDED WITHIN THE LAND BAYS TO ENHANCE WATER QUALITY AND TO PROVIDE FIRE FLOW.
3. WATER NETWORK ANALYSES WILL BE PROVIDED WITH THE SITE PLANS FOR EACH LAND BAY TO DETERMINE WATERLINE SIZE.
4. UTILITY LAYOUT WITHIN THE LAND BAYS WILL BE DETERMINED WITH THE SITE PLANS FOR EACH LAND BAY.

LEGEND

- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER
- EXISTING WATERLINE
- PROPOSED WATERLINE
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT



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CONCEPTUAL UTILITY PLAN
1500 GATEWAY
GENERAL DEVELOPMENT PLAN
CITY OF FREDERICKSBURG, VIRGINIA

WARD 1

CITY PROJECT NUMBER	
PLAN STATUS	
10/11/24	1st SUBMISSION
12/12/24	CITY COMMENTS
04/11/25	2nd SUBMISSION

DATE	DESCRIPTION	
WED DESIGN	EV DRAWN	WED CHKD
SCALE	H: 1"=150'	V: N/A
JOB No. 100144-04-002		
DATE : OCTOBER 11, 2024		
FILE No. 100144-D-ZP-005		

Total Rainfall = 43 inches

[Print](#)

	A soils	B Soils	C Soils	D Soils	Totals	% of Total
Forest/Open (acres)	0.00	5.48	0.17	1.92	7.57	9
Managed Turf (acres)	0.00	20.09	1.13	2.76	23.98	29
Impervious Cover (acres)	0.00	50.44	1.00	0.60	52.04	62
					83.59	100

Site Rv	0.65
Treatment Volume (ft ³)	198,422
TP Load (lb/yr)	124.67
TN Load (lb/yr)	891.86

Total TP Load Reduction Required (lb/yr)	90.40
---	-------

Total Runoff Volume Reduction (ft ³)	0
Total TP Load Reduction Achieved (lb/yr)	69.19
Total TN Load Reduction Achieved (lb/yr)	239.22
Remaining Post Development TP Load (lb/yr)	55.48
Remaining TP Load Reduction (lb/yr) Required	21.21

	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	Total
Forest/Open (acres)	0.83	0.00	0.00	0.00	0.00	0.83
Managed Turf (acres)	23.96	0.00	0.00	0.00	0.00	23.96
Impervious Cover (acres)	48.24	0.00	0.00	0.00	0.00	48.24
Total Area (acres)	73.03	0.00	0.00	0.00	0.00	73.03

	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	Total
TP Load Reduced (lb/yr)	69.19	0.00	0.00	0.00	0.00	69.19
TN Load Reduced (lb/yr)	239.22	0.00	0.00	0.00	0.00	239.22

	A Soils	B Soils	C Soils	D Soils	Total	% of Total
Forest/Open (acres)	0.00	0.62	0.17	0.04	0.83	1
Managed Turf (acres)	0.00	20.01	1.31	2.64	23.96	33
Impervious Cover (acres)	0.00	46.82	0.82	0.60	48.24	66
					73.03	

Practice	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	BMP Treatment Volume (ft ³)	TP Load from Upstream Practices (lbs)	Untreated TP Load to Practice (lbs)	TP Removed (lb/yr)	TP Remaining (lb/yr)	Downstream Treatment to be Employed
13.a. Wet Pond #1 (Spec #14)	10	18.24	177,605.16	40.37	44.18	42.28	42.28	
14.b. Manufactured Treatment Device-Filtering	5	30	107,204.84	0.00	67.28	26.91	40.37	13.a. Wet Pond #1

Total Impervious Cover Treated (acres)	48.24
Total Turf Area Treated (acres)	15.00
Total TP Load Reduction Achieved in D.A. (lb/yr)	69.19
Total TN Load Reduction Achieved in D.A. (lb/yr)	239.22

THE SUBJECT PROPERTY WILL ULTIMATELY BE DEVELOPED AS AN INDUSTRIAL PROJECT, CONSISTING OF DATA CENTERS AND SUBSTATIONS ALONG WITH THE REQUIRED INFRASTRUCTURE TO SERVE THE USES. THE PORTION OF THE SITE SOUTH OF COWAN BOULEVARD GENERALLY DRAINS TO THE EAST WITH RUNOFF DISCHARGING FROM THE SITE THROUGH VARIOUS NATURAL CHANNELS. THE PORTION OF THE SITE NORTH OF COWAN BOULEVARD GENERALLY DRAINS TO THE NORTH INTO SMITH RUN, WHICH ULTIMATELY LEAVES THE SITE AT THE NORTHEAST CORNER OF THE PROPERTY. IT IS ANTICIPATED THAT TWO SWM PONDS WILL BE REQUIRED TO PROVIDE WATER QUANTITY CONTROL. ONE POND WILL RETROFIT THE EXISTING POND LOCATED IN THE SOUTHERN PORTION OF THE SITE TO PROVIDE SWM TREATMENT. A NEW POND IS PLANNED ON THE NORTH SIDE OF COWAN BOULEVARD. STORMWATER RUNOFF WILL BE COLLECTED WITHIN A CLOSED CONDUIT SYSTEM ALONG GATEWAY BOULEVARD AND THROUGHOUT THE LAND BAYS.

IT IS ANTICIPATED THAT THIS SITE WILL BE DEVELOPED IN PHASES. CONCEPTUAL DRAINAGE AREA CALCULATIONS AND ASSUMED LAND COVERS ARE PRESENTED IN THE CALCULATIONS ON THIS SHEET. THESE CALCULATIONS ARE CONCEPTUAL IN NATURE AND SUBJECT TO CHANGE WITH FINAL ENGINEERING. THE OVERALL SWM CALCULATIONS SHALL BE UPDATED WITH EACH PHASE'S RESPECTIVE SITE PLAN TO ENSURE VSPM REGULATIONS ARE SATISFIED.

THE PROJECT WILL BE DESIGNED IN ACCORDANCE WITH PART IIB OF THE VSMP REGULATIONS. A CONCEPTUAL SWM DESIGN APPROACH IS PRESENTED BELOW.

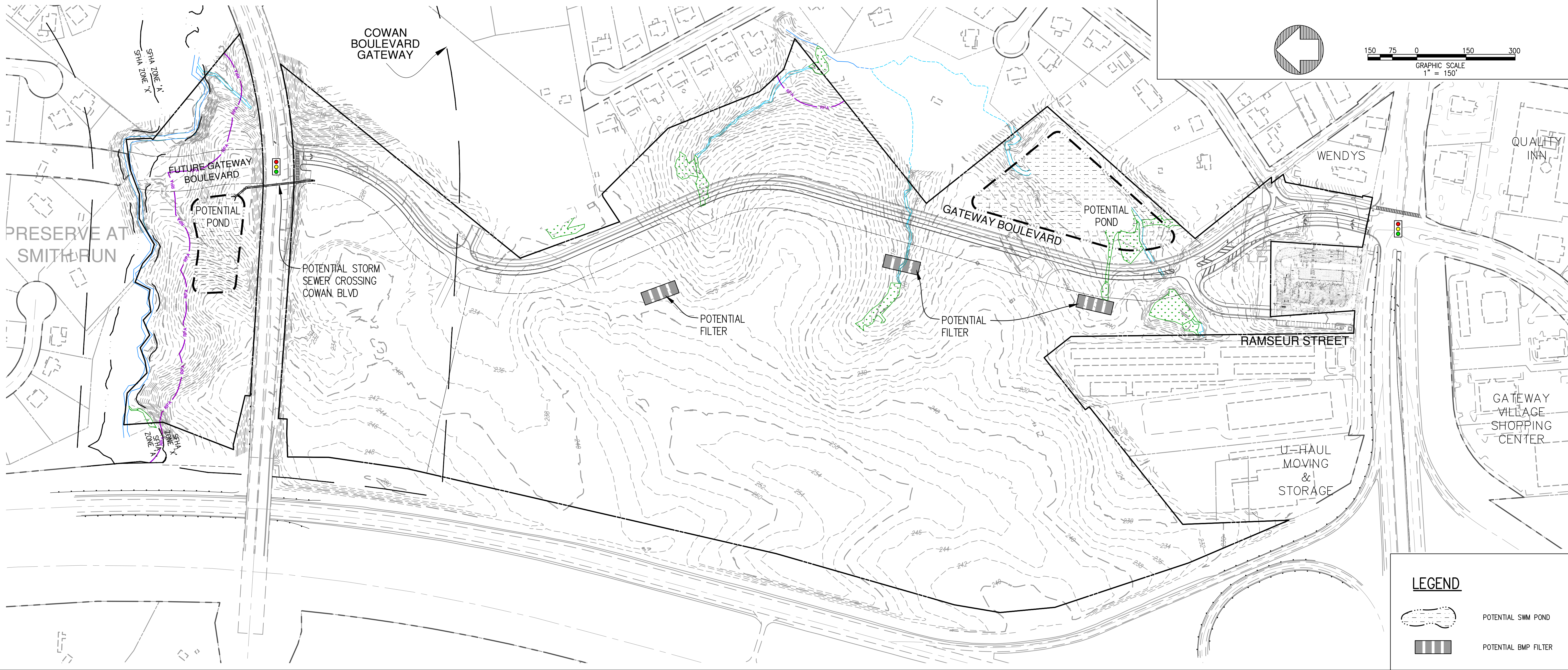
RUNOFF LEAVES THE SITE VIA NATURAL CHANNELS. THEREFORE, THE POST-DEVELOPED 1-YEAR PEAK FLOWRATE FROM THE SITE SHALL BE LESS THAN OR EQUAL TO THE ALLOWABLE PEAK FLOWRATE AS DETERMINED BY THE ENERGY BALANCE EQUATION. THE NATURAL CHANNELS WHERE RUNOFF LEAVES THE SITE WILL BE ANALYZED FOR LOCALIZED FLOODING WITH THE SITE PLANS AS DEVELOPMENT OCCURS. IF LOCALIZED FLOODING IS PRESENT, THEN THE POST-DEVELOPED 10-YEAR PEAK FLOWRATE WILL BE DETERMINED TO A LEVEL BELOW THE PRE-DEVELOPED 10-YEAR PEAK FLOW RATE.

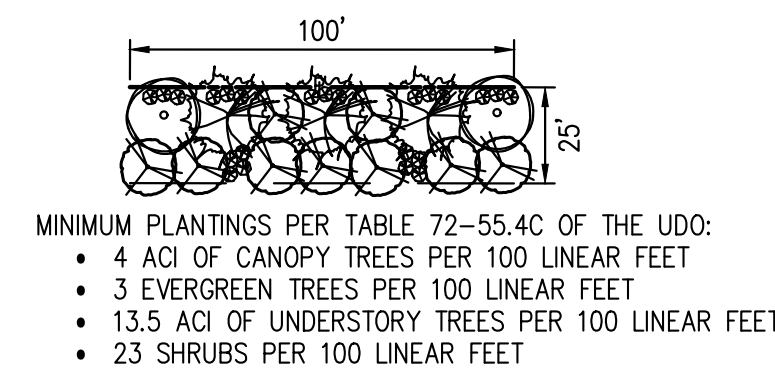
THE CONCEPTUAL SWM PONDS WILL BE ADEQUATELY SIZED AND DESIGNED WITH THE SITE PLANS TO DETAIN ENOUGH RUNOFF FROM THE 1-YEAR AND 10-YEAR STORMS TO SATISFY THE CHANNEL AND FLOOD PROTECTION REQUIREMENTS OF THE VSMP REGULATIONS





THE PROPOSED DEVELOPMENT SITE LIES ENTIRELY WITHIN THE WATERSHED OF THE CITY OWNED/MAINTAINED POND 'D', LOCATED TO THE EAST OF THIS SITE ALONG SMITH RUN BETWEEN BLACK OAK COURT AND THE CITY'S POLICE STATION, THROUGH RECENT R&H MODELING PERFORMED BY TIMMONS GROUP ON BEHALF OF THE CITY, IT HAS BEEN DETERMINED THAT THIS POND 'D' PROVIDES LESS THAN 1" OF FREEBOARD FOR THE 100-YR STORM EVENT. THEREFORE, THIS PROPOSED SITE SHALL BE DESIGNED TO PROVIDE ATTENUATION OF THE 100-YR STORM TO PRE-DEVELOPED LEVELS SO THE DEVELOPMENT OF THIS SITE DOES NOT CREATE NEW, OR EXACERBATE ANY EXISTING, NEGATIVE IMPACTS ON THE EXISTING, OFFSITE POND.

CONCEPTUAL LAND COVERS AND AREAS WERE INPUT INTO THE VIRGINIA RUNOFF REDUCTION METHOD (VRRM) SPREADSHEET TO DETERMINE THE POTENTIAL PHOSPHOROUS LOAD REDUCTION. PER THE VRRM, THE TOTAL PHOSPHOROUS LOAD REDUCTION REQUIRED BASED ON THESE ASSUMED LAND COVERS IS 90.40 LB/YR. IT IS ANTICIPATED THAT TWO LEVEL 1 WET POND AND MULTIPLE MANUFACTURED TREATMENT DEVICES WILL BE UTILIZED TO PROVIDE THE PHOSPHOROUS LOAD REDUCTION. BASED ON THE CONCEPTUAL DRAINAGE AREAS TO THESE BMP FACILITIES, THE TOTAL PHOSPHOROUS LOAD REDUCTION ACHIEVED IS ANTICIPATED TO BE 69.19 LB/YR, WHICH IS GREATER THAN 75% OF THE PHOSPHOROUS LOAD REDUCTION REQUIRED. ADDITIONAL BMP MEASURES MAY BE IMPLEMENTED TO FURTHER REDUCE THE PHOSPHOROUS LOAD, OR THE REMAINING 21.21 LB/YR OF PHOSPHOROUS LOAD REDUCTION REQUIRED MAY BE PURCHASED IN THE FORM OF OFFSITE NUTRIENT CREDITS.

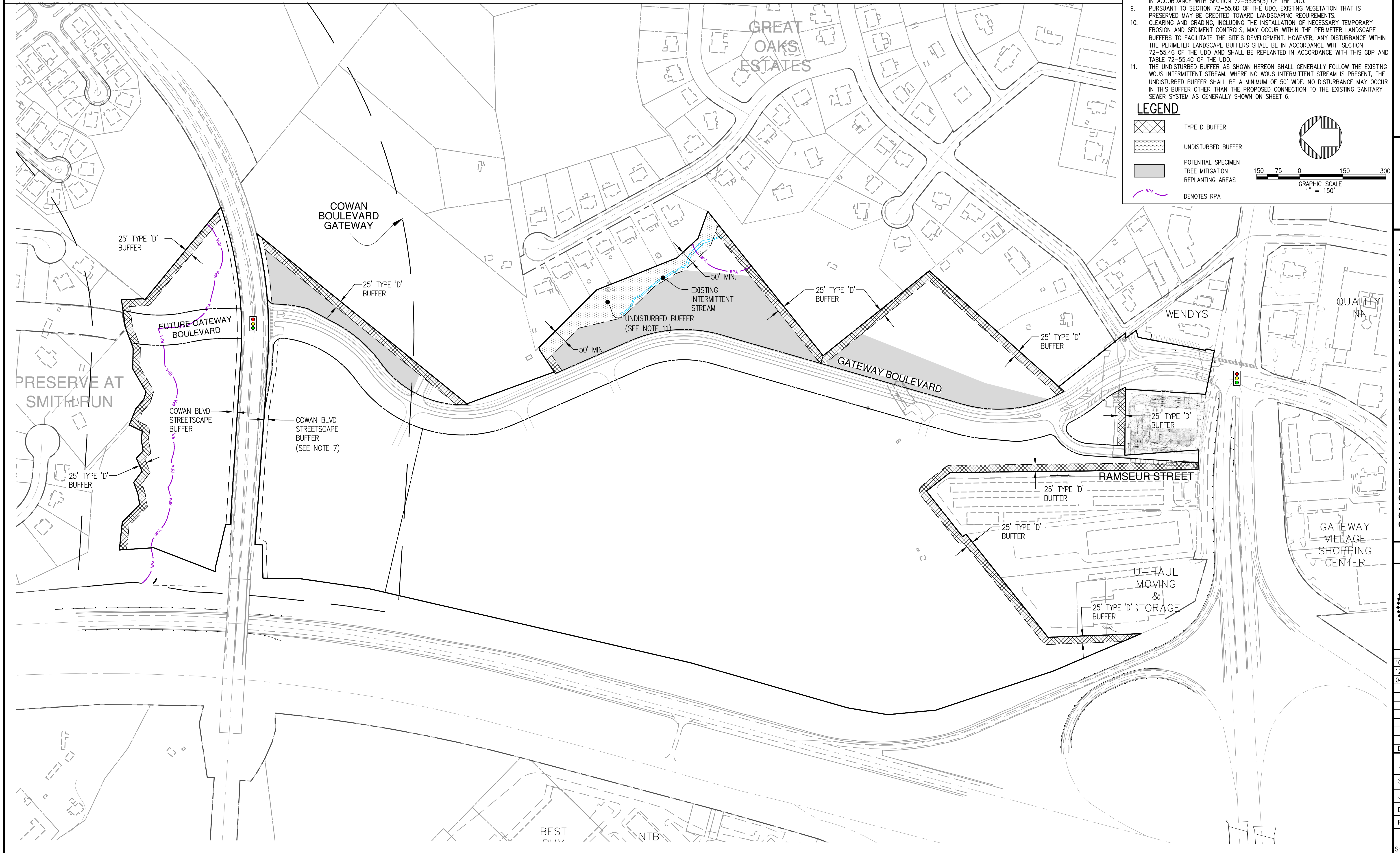
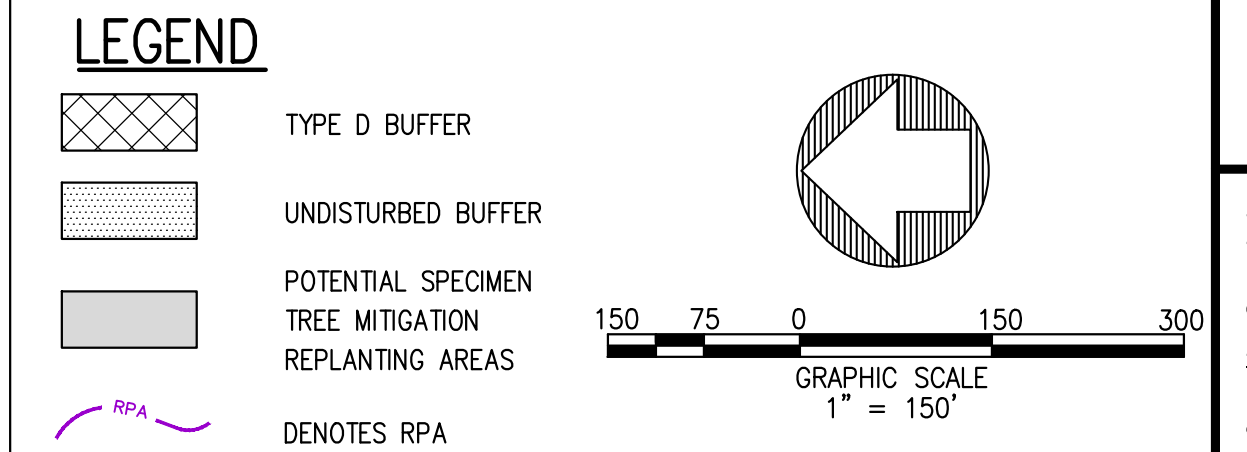
*THE SWM AND BMP APPROACH DESCRIBED HEREIN IS CONCEPTUAL IN NATURE AND IS SUBJECT TO REVISION WITH FINAL ENGINEERING. THE ULTIMATE SWM DESIGN SHALL NOT BE LIMITED TO THE PRACTICES DESCRIBED HEREIN. ADDITIONAL SWM PRACTICES, INCLUDING BUT NOT LIMITED TO UNDERGROUND STORAGE; BIORETENTION; INFILTRATION; AND PERMEABLE PAVEMENT MAY BE UTILIZED TO FULFILL THE REQUIREMENTS SET FORTH IN THE VSPM REGULATIONS.





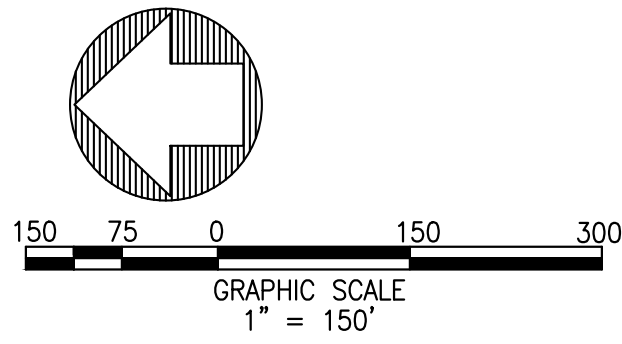
- LEGEND**
-  CANOPY TREE
-  EVERGREEN TREE
-  UNDERSTORY TREE
-  SHRUB
- AS DEPICTED, CANOPY TREES ARE 2.0' CALIPER, UNDERSTORY TREES ARE 1.5' CALIPER, AND SHRUBS ARE 24" IN HEIGHT.

- # NOTES
1. REFER TO SHEET 2 FOR ADJACENT PARCEL USE AND ZONING.
 2. PERIMETER LANDSCAPE BUFFERS SHALL MEET THE PLANTING REQUIREMENTS OF TABLE 72-55.4C OF THE UDO. PURSUANT TO SECTION 72-55.4E OF THE UDO, ONE-HALF OF THE PERIMETER BUFFER IS REQUIRED WHERE ADJACENT TO VACANT LAND.
 3. VEHICULAR USE AREA LANDSCAPING SHALL BE PROVIDED ON ALL FUTURE DEVELOPMENT IN CONFORMANCE WITH SECTION 72-55.2 OF THE UDO.
 4. FOUNDATION PLANTINGS SHALL BE PROVIDED IN CONFORMANCE WITH SECTION 72-55.3 OF THE UDO.
 5. STREET TREES SHALL BE PLANTED ALONG GATEWAY BOULEVARD IN ACCORDANCE WITH SECTION 72-55.6 OF THE UDO.
 6. SCREENING SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 72-55.5 OF THE UDO.
 7. A STREETScape BUFFER SHALL BE PROVIDED ALONG COWAN BOULEVARD IN ACCORDANCE WITH SECTION 72-34.6F(1) OF THE UDO.
 8. ANY SPECIMEN TREES THAT ARE REMOVED DURING CONSTRUCTION SHALL BE MITIGATED IN ACCORDANCE WITH SECTION 72-55.6B(5) OF THE UDO.
 9. PURSUANT TO SECTION 72-55.6D OF THE UDO, EXISTING VEGETATION THAT IS PRESERVED MAY BE CREDITED TOWARD LANDSCAPING REQUIREMENTS.
 10. CLEARING AND GRADING, INCLUDING THE INSTALLATION OF NECESSARY TEMPORARY EROSION AND SEDIMENT CONTROLS, MAY OCCUR WITHIN THE PERIMETER LANDSCAPE BUFFERS TO FACILITATE THE SITE'S DEVELOPMENT. HOWEVER, ANY DISTURBANCE WITHIN THE PERIMETER LANDSCAPE BUFFERS SHALL BE IN ACCORDANCE WITH SECTION 72-55.4C OF THE UDO AND SHALL BE REPLANTED IN ACCORDANCE WITH THIS GDP AND TABLE 72-55.4C OF THE UDO.
 11. THE UNDISTURBED BUFFER AS SHOWN HEREON SHALL GENERALLY FOLLOW THE EXISTING WOUS INTERMITTENT STREAM. WHERE NO WOUS INTERMITTENT STREAM IS PRESENT, THE UNDISTURBED BUFFER SHALL BE A MINIMUM OF 50' WIDE. NO DISTURBANCE MAY OCCUR IN THIS BUFFER OTHER THAN THE PROPOSED CONNECTION TO THE EXISTING SANITARY SEWER SYSTEM AS GENERALLY SHOWN ON SHEET 6.





- NOTES
- SEE SHEET 2 FOR AREA AND DEVELOPMENT TABULATIONS.
 - FINAL LOCATIONS OF ALL ITEMS SHOWN ON THIS SHEET ARE SUBJECT TO ADJUSTMENT AND PURSUANT TO FINAL ENGINEERING TO BE REVIEWED DURING SITE PLAN APPROVAL.

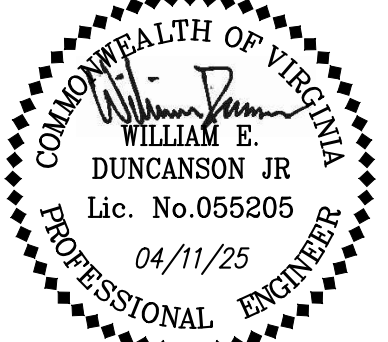


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CONCEPTUAL DEVELOPMENT / ILLUSTRATIVE PLAN
1500 GATEWAY
GENERAL DEVELOPMENT PLAN
CITY OF FREDERICKSBURG, VIRGINIA
WARD 1

CITY PROJECT NUMBER



PLAN STATUS		
10/11/24	1st SUBMISSION	
12/12/24	CITY COMMENTS	
04/11/25	2nd SUBMISSION	

DATE	DESCRIPTION	
WED DESIGN	EV DRAWN	WED CHKD
SCALE	H: 1"=150'	V: N/A
JOB No. 100144-04-002		
DATE : OCTOBER 11, 2024		
FILE No. 100144-D-ZP-005		

SHEET 9 OF 9

- LEGEND**
- DATA CENTER BUILDING & GENERATOR & EQUIPMENT YARD
 - SUBSTATION EQUIPMENT YARD
 - AUXILIARY EQUIPMENT
 - LANDSCAPE BUFFER YARD
 - SWM/BMP FACILITY