

SITE DEVELOPMENT PLAN

GREEN HEDGES SCHOOL

ATTACHMENT 09

Sheet List Table

Sheet Number	Sheet Title
C-001	COVERSHEET
C-002	GENERAL NOTES AND LEGEND
C-003	EXISTING CONDITIONS PLAN
C-004	EXISTING CONDITIONS PLAN
C-005	EXISTING TREE SURVEY - TREE PRESERVATION
C-006	TREE INVENTORY
C-007	INVASIVE SPECIES MGT PLAN
C-008	TREE PROTECTION NOTES & DETAILS
C-009	OVERALL LAYOUT PLAN
C-009A	SETBACK PLAN
C-009B	SETBACK PLAN
C-010	EXISTING SITE BOUNDARY CONDITIONS
C-011	CIRCULATION PLAN - EXISTING
C-012	LOT COVERAGE - EXISTING
C-013	DEMOLITION PLAN PHASE I
C-014	DEMOLITION PLAN PHASE I
C-015	SITE AND UTILITY PLAN PHASE I
C-016	SITE AND UTILITY PLAN PHASE I
C-017	PRE-DEVELOPMENT LAND COVER & DRAINAGE AREA MAP PHASE I
C-018	POST-DEVELOPMENT LAND COVER & DRAINAGE AREA MAP PHASE I
C-019	WATER QUALITY COMPUTATIONS PHASE I
C-020	WATER QUALITY COMPUTATIONS PHASE I
C-021	WATER QUANTITY COMPUTATIONS PHASE I
C-022	PROPOSED LANDSCAPE PLAN - PHASE I
C-023	TREE CANOPY CALCULATIONS - PHASE I
C-024	LOT COVERAGE PHASE I
C-025	CIRCULATION PLAN PHASE I
C-026	DEMOLITION PLAN PHASE II
C-027	DEMOLITION PLAN PHASE II
C-028	SITE AND UTILITY PLAN PHASE II
C-029	SITE AND UTILITY PLAN PHASE II
C-030	PRE-DEVELOPMENT LAND COVER & DRAINAGE AREA MAP PHASE II
C-031	POST-DEVELOPMENT LAND COVER & DRAINAGE AREA MAP PHASE II
C-032	WATER QUALITY COMPUTATIONS PHASE II
C-033	WATER QUALITY COMPUTATIONS PHASE II
C-034	WATER QUANTITY COMPUTATIONS PHASE II
C-035	PROPOSED LANDSCAPE PLAN - PHASE II
C-036	TREE CANOPY CALCULATIONS - PHASE II
C-037	LOT COVERAGE PHASE II
C-038	CIRCULATION PLAN - ULTIMATE
C-039	ULTIMATE SITE AND UTILITY PLAN
C-040	ULTIMATE SITE AND UTILITY PLAN
C-041	ULTIMATE GRADING PLAN
C-042	ULTIMATE GRADING PLAN
C-043	SITE DISTANCE PLAN AND PROFILE
C-044	FIRE LANE MARKING AND SIGNAGE PLAN
C-045	FIRE LANE MARKING AND SIGNAGE PLAN
C-046	EROSION AND SEDIMENT CONTROL NARRATIVE
C-047	EROSION AND SEDIMENT CONTROL DETAILS
C-048	EROSION AND SEDIMENT CONTROL EXISTING
C-049	EROSION AND SEDIMENT CONTROL EXISTING
C-050	EROSION AND SEDIMENT CONTROL ULTIMATE
C-051	EROSION AND SEDIMENT CONTROL ULTIMATE

TAX MAP #: 038-3-((21))-0008A & 038-3-((11))-0007

415 WINDOVER AVENUE, NW
VIENNA PLAN #: PF 11-06

TOWN OF VIENNA, VIRGINIA

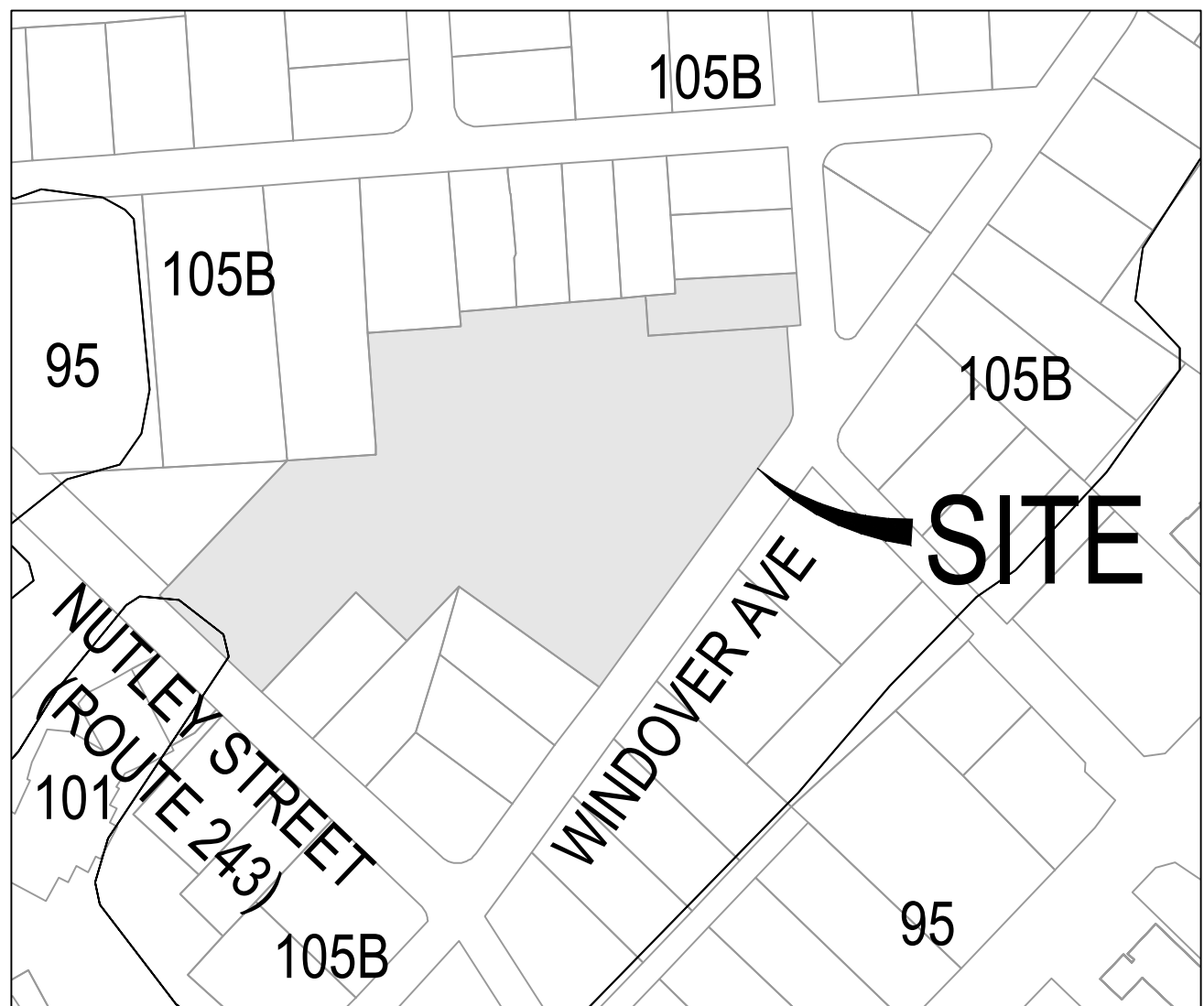
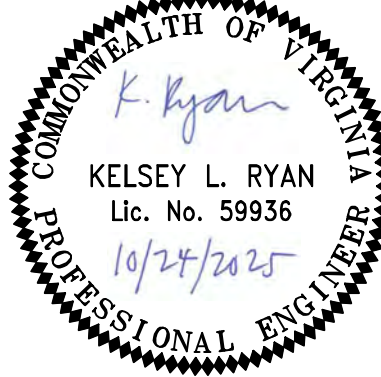
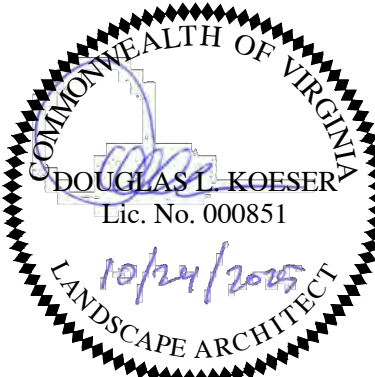
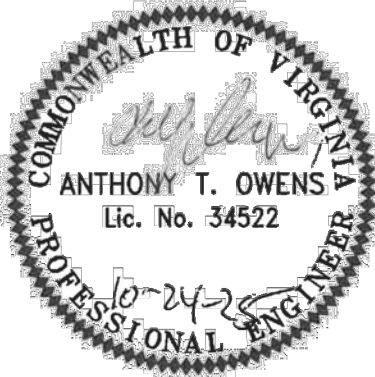
OWNER/DEVELOPER
GREEN HEDGES SCHOOL, INC.
C/O PETER BARRETT, HEAD OF SCHOOL 415 WINDOVER
AVENUE, NW
VIENNA, VIRGINIA 22180



GORDON

•ENGINEERS•LAND PLANNERS•LANDSCAPE ARCHITECTS•SURVEYORS
4501 DALY DRIVE, SUITE 200
CHANTILLY, VA 20151
(703) 263-1900

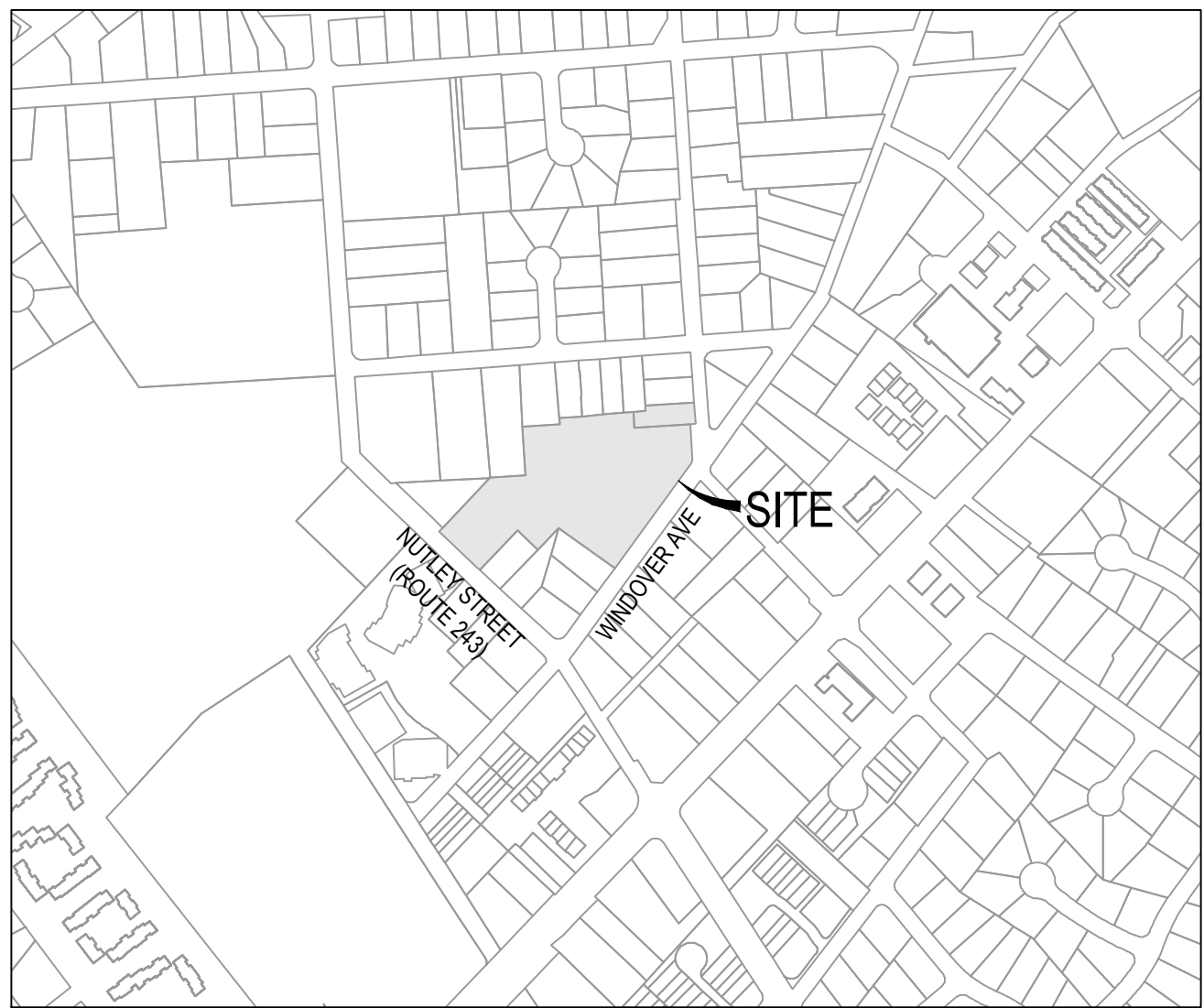
PROJECT MANAGER: ANTHONY OWENS P.E
PROJECT ENGINEER: HUNTER BARRY



SOILS MAP

SCALE: NOT TO SCALE

SOIL ID NUMBERS	SOIL SERIES NAME	FOUNDATION SUPPORT	SOIL DRAINAGE	EROSION POTENTIAL	PROBLEM CLASS
105B	WHEATON-GENELG COMPLEX	GOOD	GOOD	HIGH	IVB
101	URBAN LAND -WHEATON COMPLEX	GOOD	FAIR	HIGH	IVB



VICINITY MAP

SCALE: 1"=500'

PROGRAMMING AND PLANNING
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
SURVEY AND MAPPING
SECURITY CONSULTING

Gordon
4501 Daly Drive
Chantilly, VA 20151
Phone: 703-263-1900
www.gordon.us.com

REVISIONS	
NUMBER	DESCRIPTION

SUR: E.ERICKSON	DES: A.OWENS
DRW: H.BARRY	CHK: A.SARANT

SEAL:

COVERSHEET
**GREEN HEDGES SCHOOL
SITE DEVELOPMENT PLAN**
TOWN OF VIENNA, VIRGINIA
TOWN OF VIENNA

HORIZ: 1" = 500'
SCALE: VERT: N/A
DATE: 10/24/25
PLAN: GREEN HEDGES SCHOOL
JOB: GORDON 2356-0501
CADD: 2356-0501-C-0101.DWG
NCS: 2356-0501-C-0101
NUMBER: C-001oFC-051

Gordon

- THIS PHASED PROJECT INCLUDES THE EXPANSION OF KILMER HALL, THE CONSTRUCTION OF AN ADDITIONAL ACADEMIC BUILDING, INSTALLATION OF RECREATION FIELDS, CONSTRUCTION OF THE HALF SECTION OF THE WINDOW AVENUE ALONG THE SITE FRONTAGE TO MEET TOWN STANDARDS, DEMOLITION OF THE RICE ARTS BUILDING, INSTALLATION OF UPGRADED PLAYGROUND EQUIPMENT, INSTALLATION OF UPGRADE DUMPSTER ENCLOSURE, AND CONSTRUCTION OF VARIOUS SIDEWALK/TRAIL/PARKING AREAS INTERNAL TO THE PROPERTY. THIS PLAN DOES NOT REPRESENT A CONSTRUCTION PLAN AND SHOULD BE USED FOR INFORMATIONAL PURPOSES ONLY. A SEPARATE SITE PLAN WILL BE PREPARED AND APPROVED BY THE TOWN TO BE USED FOR CONSTRUCTION
2. THE PROPERTY IS LOCATED IN FAIRFAX COUNTY, IDENTIFIED AS TAX MAP 38-3-W (21)) LOT 0008A AND 38-3-((11)) LOT 0007 AND IS ZONED R-12.5.
3. THE PROPERTY BOUNDARY CONSISTS OF 4.3 ACRES
4. DISTURBED AREA FOR THE PROJECT IS 3.32 ACRES
5. THIS TOPOGRAPHIC MAPPING SURVEY WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF, NICOLAE SOARE FROM AN ACTUAL GROUND SURVEY MADE UNDER MY SUPERVISION; THAT THE ORIGINAL DATA WAS OBTAINED ON AUGUST 21, 2020 AUGMENTED ON MAY 7, 2021 AND MARCH 26, 2025 THROUGH APRIL 7, 2025.
6. HORIZONTAL DATUM: STATE PLANE COORDINATE SYSTEM OF 1983, VIRGINIA NORTH ZONE, NAD 1983, U.S. SURVEY FOOT. VERTICAL DATUM IS NGVD 1929.
7. TO THE BEST OF OUR KNOWLEDGE AND BELIEF, THERE IS NO EVIDENCE OF ANY GRAVE, OBJECT OR STRUCTURE MARKING A PLACE OF BURIAL ON THIS PROPERTY.
8. TO THE BEST OF OUR KNOWLEDGE AND BELIEF, THERE IS NO EVIDENCE OF ANY HISTORIC SITES ON THIS PROPERTY
9. GORDON DOES NOT CERTIFY TO THE LOCATION OF OR THE EXISTENCE OF ANY EXISTING UNDERGROUND UTILITIES. THE EXISTING UNDERGROUND UTILITIES SHOWN HEREON ARE BASED UPON AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL UTILITIES BEFORE COMMENCING WORK AND FOR ANY DAMAGES WHICH OCCUR BY HIS FAILURE TO LOCATE OR PRESERVE THESE UNDERGROUND UTILITIES. IF DURING CONSTRUCTION OPERATIONS THE CONTRACTOR SHOULD ENCOUNTER UTILITIES OTHER THAN THOSE SHOWN ON THE PLAN, HE SHALL IMMEDIATELY NOTIFY THE ENGINEER AND TAKE NECESSARY AND PROPER STEPS TO PROTECT THE FACILITY AND INSURE THE CONTINUANCE OF SERVICE. IF NECESSARY, THE SITE PLAN WILL BE MODIFIED TO ELIMINATE THE CONFLICT AT THE DEVELOPER'S EXPENSE.
10. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO CURRENT FAIRFAX COUNTY, WINFAX WATER, AND THE TOWN OF VIENNA STANDARDS AND SPECIFICATIONS.
11. ALL PROPOSED GRADES AS SHOWN HEREIN ARE FINISHED GRADE UNLESS NOTED ON THE PLAN.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE OWNER AND THE ENGINEER OF ANY CHANGES OR CONDITIONS ATTACHED TO PERMITS OBTAINED FROM ANY AUTHORITY ISSUING PERMITS.
13. ALL LAND, ON OR OFF SITE, WHICH IS DISTURBED BY THIS DEVELOPMENT, AND WHICH IS NOT BUILT UPON OR SURFACED, SHALL BE ADEQUATELY STABILIZED TO CONTROL EROSION AND SEDIMENTATION.
14. THE CONTRACTOR SHALL PROVIDE ADEQUATE MEANS OF CLEANING TRUCKS AND/OR OTHER EQUIPMENT OF MUD PRIOR TO ENTERING THE RIGHT-OF-WAY, AND IT IS THE CONTRACTORS RESPONSIBILITY TO CLEAN STREETS OF MUD AND/OR ALLAY DUST AND TO TAKE WHATEVER MEASURES NECESSARY TO ENSURE THAT THE STREETS ARE KEPT IN A CLEAN AND DUST FREE CONDITION AT ALL TIMES.
15. THE CONTRACTOR SHALL NOTIFY OPERATORS WHO MAINTAIN EXISTING UNDERGROUND UTILITY LINES IN THE AREA OF PROPOSED EXCAVATION OR BLASTING AT LEAST TWO (2) WORKING DAYS, BUT NOT MORE THAN TEN (10) WORKING DAYS PRIOR TO COMMENCEMENT OF EXCAVATION OR DEMOLITION. CONTRACTOR SHALL CONTACT "MISS UTILITY" AT 811 PRIOR TO COMMENCEMENT OF ANY EXCAVATION.
16. THE CLIENT, CONTRACTOR, AND/OR SURVEYOR SHALL BE RESPONSIBLE FOR NOTIFYING GORDON OF ANY CONDITIONS FOUND IN THE FIELD THAT VARY FROM WHAT IS SHOWN ON THE PLANS. OBSERVATIONS REGARDING APPARENT INCONSISTENCIES IN THE PLANS SHALL BE BROUGHT TO GORDON'S ATTENTION FOR VERIFICATION PRIOR TO STAKEOUT.
17. EXISTING AND PROPOSED SANITARY SEWER CLEAN OUT TOPS SHALL BE SET FLUSH WITH PROPOSED FINISHED GRADE AND BE ABLE TO WITHSTAND VEHICULAR TRAFFIC (AS REQUIRED).
18. ALL ADA ACCESSIBILITY IMPROVEMENTS PROPOSED/SHOWN ON THIS PLAN, INCLUDING BUT NOT LIMITED TO HANDICAPPED PARKING SPACES, AISLES, ROUTES AND SLOPES SHALL COMPLY WITH THE 2010 ADA STANDARD FOR ACCESSIBLE DESIGN AND THE 2012 USBC. FINISHED CONSTRUCTION OF RAMP AND RAMP LANDINGS SHALL NOT EXCEED A CROSS-SLOPE OF 2.08%, LONGITUDINAL SLOPE (PATH OF TRAVEL) OF RAMPS SHALL NOT EXCEED 8.33% AND SHALL BE NO LONGER THAN 30 FEET. THE LANDINGS SHALL NOT EXCEED 2.08% IN ANY DIRECTION.
19. CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH PERFORMANCE OF ITS WORK AND THE WORK OF ITS SUBCONTRACTORS. GORDON SHALL NOT HAVE CONTROL, OVER, CHARGE OF, OR RESPONSIBILITY FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK.
20. MAINTAIN A MINIMUM VERTICAL CLEARANCE OF ONE (1) FOOT SIX (6) INCHES BETWEEN CROSSINGS OF ALL UTILITY LINES UNLESS OTHERWISE NOTED.
21. APPROVAL OF THIS PLAN SHALL IN NO WAY GRANT PERMISSION BY THE APPROVING JURISDICTION FOR THE CONTRACTOR TO TRESPASS ON OFF-SITE PROPERTIES.
22. WHERE THE ORDINANCES DIFFER BETWEEN LOCAL, STATE, AND FEDERAL REQUIREMENTS, THE MOST RESTRICTIVE SHALL APPLY.

1. PRIOR TO START OF DEMOLITION ACTIVITIES, CONDUCT PRE CONSTRUCTION/DEMOLITION MEETING ON SITE WITH OWNER, TOWN SITE INSPECTOR AND CONTRACTOR. TO REVIEW METHODS AND PROCEDURES RELATED TO SITE DEMOLITION INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:
 - A) INSPECT AND DISCUSS CONDITION OF CONSTRUCTION TO BE DEMOLISHED.
 - B) REVIEW AND FINALIZE DEMOLITION SCHEDULE AND VERIFY AVAILABILITY OF DEMOLITION PERSONNEL, EQUIPMENT, AND FACILITIES NEEDED TO MAKE PROGRESS AND AVOID DELAYS.
 - C) REVIEW AND FINALIZE PROTECTION REQUIREMENTS.
 - D) INSTALL STAGE I EROSION AND SEDIMENT CONTROLS.
2. CONTRACTOR SHALL COORDINATE PEDESTRIAN ACCESS WITH GREEN HEDGES TO MINIMIZE DISRUPTION DURING CONSTRUCTION, AND MAINTAIN ACCESS TO EXISTING WALKWAYS & FACILITIES. DO NOT CLOSE OR OBSTRUCT WALKWAYS WITHOUT WRITTEN PERMISSION FROM OWNER OR AUTHORITIES HAVING JURISDICTION.
3. LOCATE, IDENTIFY, DISCONNECT, SEAL OR CAP OFF ALL EXISTING UTILITIES SERVING THE AREA TO BE DEMOLISHED. ARRANGE TO SHUT OFF EXISTING SERVICE UTILITIES WITH THE APPROPRIATE UTILITY COMPANY AND GREEN HEDGES. DO NOT START DEMOLITION WORK UNTIL UTILITY DISCONNECTING, SEALING OR REMOVAL HAS BEEN COMPLETED.
4. PROMPTLY REPAIR DAMAGE TO ADJACENT EXISTING SITE IMPROVEMENTS IF CAUSE BY SITE DEMOLITION.
5. PROTECT EXISTING SITE IMPROVEMENTS, APPURTENANCES, AND LANDSCAPING TO REMAIN.
6. WHERE REQUIRED ERECT TREE PROTECTION FENCING AROUND DRIP LINE OF INDIVIDUAL TREES, OR AROUND PERIMETER DRIP LINE OF GROUPS OF TREE, OR AT THE BACK OF EXISTING CURB OF EXISTING LANDSCAPE CURB ISLANDS FOR EACH PHASE.
7. PROVIDE TEMPORARY BARRICADES AND OTHER PROTECTION MEASURES REQUIRED TO PROVIDE SAFE PEDESTRIAN ACCESS AND PREVENT INJURY AND DAMAGE TO EXISTING FACILITIES TO REMAIN.
8. PROVIDE PROTECTION TO ENSURE SAFE PASSAGE OF PEOPLE AROUND DEMOLITION AREA AND TO AND FROM PORTIONS OF EXISTING PARKING AREAS.
9. MAINTAIN SITE ACCESS. DO NOT CLOSE OR OBSTRUCT STREETS, TRAVEL WAYS AND WALKWAYS. PROVIDE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC WAYS.
10. ALL TREE PROTECTION DEVICES AND PERIMETER EROSION AND SEDIMENT CONTROL MEASURES MUST BE INSTALLED PRIOR TO THE START OF DEMOLITION OPERATIONS FOR EACH PHASE.
11. ALL DEMOLISHED MATERIALS SHALL BE REMOVED FORM THE SITE AND DISPOSED OF PROPERLY.
12. CONTRACTOR SHALL CONDUCT DEMOLITION OPERATIONS IN ACCORDANCE WITH LOCAL, COUNTY, STATE AND FEDERAL SAFETY STANDARDS.

GENERAL

THE DEMOLITION PLAN IS A GENERAL GUIDE OF WHAT ITEMS NEED TO DEMOLISHED AND OR SALVAGED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY ALL ITEMS THAT REQUIRED DEMOLITION AND OR SALVAGING TO COMPLETE THE PROPOSED CONSTRUCTION. IT IS STRONGLY ENCOURAGE TO CONSTRUCT THE ENTRANCE ROADS AND ENTRANCES AND AREAS OF SCHOOL CIRCULATION DURING NON SCHOOL OPERATIONS, OVER THE SUMMER AND DURING BREAKS

1. CONTRACTOR TO ABANDON EXISTING UNDERGROUND UTILITIES IN PLACE WHEREVER POSSIBLE.
2. CONTRACTOR TO CONFIRM TERMINATION OF SERVICE WITH UTILITY COMPANIES PRIOR TO BEGINNING EXCAVATION.

CONCRETE

1. REMOVAL OF CONCRETE PADS, STOOPS, STEPS, ETC., SHALL INCLUDE CONCRETE, STEEL REINFORCEMENT, GRAVEL BASE.

CONCRETE SIDE WALK AND PAVERS AND ASPHALT

1. REMOVAL/DEMOLITION OF CONCRETE SIDEWALKS SHALL INCLUDE CONCRETE, STEEL REINFORCEMENT AND BASE MATERIAL TO THE NEAREST JOINT
2. REMOVAL OF ASPHALT SHALL INCLUDE ASPHALT AND BASE MATERIAL.

1. WATER SERVICE SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION

1. REMOVAL OF EXISTING FENCING ON THE SITE SHALL INCLUDE THE POLES OR POSTS AND CAPS, CONCRETE FOOTINGS OR FOUNDATIONS, WIRE MESH, TIES AND GATES AS NOTED ON THE PLANS.

1. CONTRACTOR TO COORDINATE WITH ELECTRICAL PLANS AND ELECTRICAL SERVICE PROVIDER FOR ANY RELOCATION OF UNDERGROUND ELECTRIC LINES.

1. CONTRACTOR TO COORDINATE WITH THE UTILITY SERVICE PROVIDER FOR THE RELOCATION AND OR TERMINATION OF EXISTING UNDERGROUND SERVICE LINES AS REQUIRED.
2. CONTRACTOR TO COORDINATE AND CONFIRM TERMINATION OF UTILITY SERVICE WITH APPROPRIATE SERVICE PROVIDER PRIOR TO EXCAVATION.

1. A PRE-CONSTRUCTION MEETING MUST BE HELD PRIOR TO THE START OF CONSTRUCTION. CALL 703-255-6384 TO SCHEDULE THE PRE-CONSTRUCTION MEETING.
2. ALL CONSTRUCTION GENERATED DEBRIS MUST BE HAULED AWAY BY THE CONTRACTOR OR OWNER.
3. PRIOR TO THE REMOVAL OF ANY TOWN TREES (TREES WITHIN THE RIGHT OF WAY), THE APPLICANT OR THEIR REPRESENTATIVE SHALL CONTACT THE TOWN OF VIENNA ARBORIST AT 703-255-6360 TO COORDINATE HAVING THE TOWN ARBORIST ONSITE DURING ALL TOWN TREE REMOVAL.
4. TREE PROTECTION FOR ANY TOWN TREE, AS SHOWN ON PLAN, MUST BE INSTALLED PRIOR TO ANY SITE WORK.
5. IT IS UNLAWFUL TO PERFORM ANY CONSTRUCTION ABOVE FOUNDATION CORNERS PRIOR TO APPROVAL OF SETBACKS. WORK COMPLETED IN VIOLATION OF THIS REQUIREMENT IS SUBJECT TO DEMOLITION.
6. ALL DUMPSTERS/PODS ARE TO BE PLACED ON PRIVATE PROPERTY.
7. FRONT ELEVATION CHECKS ARE REQUIRED.
8. WALL CHECK SURVEYS ARE REQUIRED AND MUST BE SUBMITTED PRIOR TO CONSTRUCTION ABOVE FOUNDATION CORNERS.
9. A CERTIFICATE OF OCCUPANCY IS REQUIRED PRIOR TO OCCUPANCY. ALL REQUIRED DOCUMENTATION AND INSPECTIONS MUST BE SUBMITTED/COMPLETED BEFORE THE TOWN OF VIENNA WILL ISSUE A CERTIFICATE OF OCCUPANCY.
10. EXISTING SANITARY SEWER LATERALS ARE TYPICALLY CAPPED AT OR NEAR THE PROPERTY LINE. THE REUSE OF THE PORTION OF THE EXISTING SANITARY SEWER LATERAL BETWEEN THE TOWN OWNED SEWER MAIN AND THE CAPPED END MAY BE ALLOWED PROVIDING THAT A LICENSED PLUMBER CERTIFIES THAT THE EXISTING PIECE OF PIPE IS GRADED PROPERLY AND IN LIKE NEW CONDITION. THE REUSE OF A PORTION OF THE EXISTING LATERAL DOES NOT IMPLY THAT THE TOWN IS WARRANTING THE CONDITION IN ANY WAY.

BICYCLE PARKING TABULATION

SHORT TERM REQUIRED: $22,780SF + 12690SF = 35,470SF / 2,500SF \text{ PER BIKE SPOT} = 15 \text{ SPACES}$

SHORT TERM PROPOSED: 36 SPACES

LONG TERM: WAIVER TO BE REQUESTED

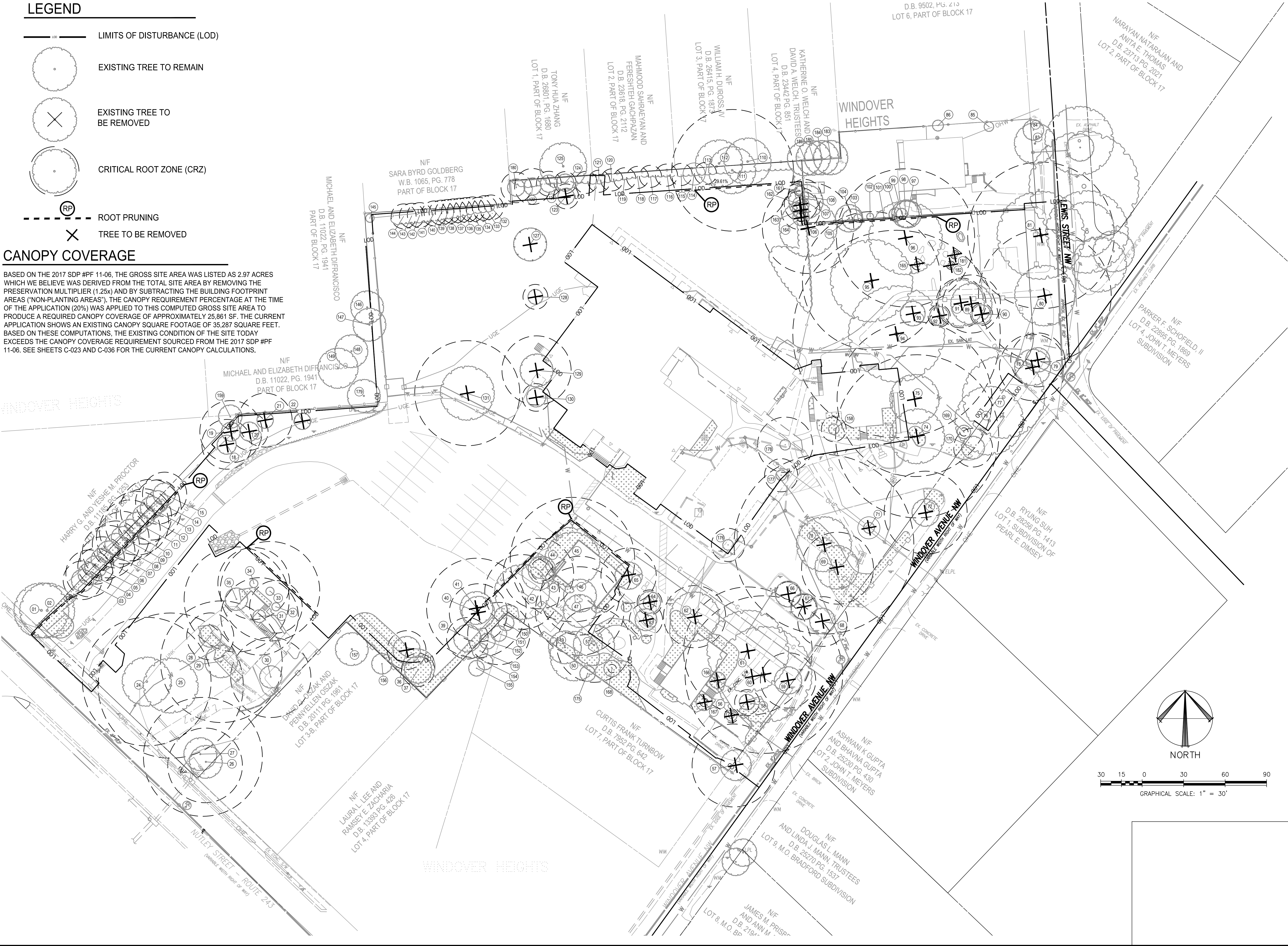


LEGEND

- LOD — LIMITS OF DISTURBANCE (LOD)
- EXISTING TREE TO REMAIN
- EXISTING TREE TO BE REMOVED
- CRITICAL ROOT ZONE (CRZ)
- RP ROOT PRUNING
- × TREE TO BE REMOVED

CANOPY COVERAGE

BASED ON THE 2017 SDP #PF 11-06, THE GROSS SITE AREA WAS LISTED AS 2.97 ACRES WHICH WE BELIEVE WAS DERIVED FROM THE TOTAL SITE AREA BY REMOVING THE PRESERVATION MULTIPLIER (1.25x) AND BY SUBTRACTING THE BUILDING FOOTPRINT AREAS ("NON-PLANTING AREAS"). THE CANOPY REQUIREMENT PERCENTAGE AT THE TIME OF THE APPLICATION (20%) WAS APPLIED TO THIS COMPUTED GROSS SITE AREA TO PRODUCE A REQUIRED CANOPY COVERAGE OF APPROXIMATELY 25,861 SF. THE CURRENT APPLICATION SHOWS AN EXISTING CANOPY SQUARE FOOTAGE OF 35,287 SQUARE FEET. BASED ON THESE COMPUTATIONS, THE EXISTING CONDITION OF THE SITE TODAY EXCEEDS THE CANOPY COVERAGE REQUIREMENT SOURCED FROM THE 2017 SDP #PF 11-06. SEE SHEETS C-023 AND C-036 FOR THE CURRENT CANOPY CALCULATIONS.



PROGRAMMING AND PLANNING
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
SURVEY AND MAPPING
SECURITY CONSULTING

Gordon

4501 Daly Drive
Chantilly, VA 20151
Phone: 703-263-1900
www.gordon.us.com

REVISIONS	
NUMBER	DESCRIPTION

SUR: GORDON	DES: D. KOESER
DRW: J. WEST	CHK: D. KOESER

COMMONWEALTH OF VIRGINIA

DOUGLAS L. KOESER
Lic. No. 000851
10/31/2025

LANDSCAPE ARCHITECT

SEAL:

EXISTING TREE SURVEY – TREE PRESERVATION

**GREEN HEDGES SCHOOL
SITE DEVELOPMENT PLAN**

TOWN OF VIENNA, VIRGINIA
TOWN OF VIENNA

HORIZ: 1" = 30'
SCALE: VERT: N/A

DATE: 10/31/25

PLAN: GREEN HEDGES SCHOOL

JOB: GORDON 2356-0501

CADD: 2356-0501-L-EC-101

NCS: EXISTING TREE SURVEY – TREE PRESERVATION

NUMBER: C-005 of C-051

Gordon

TREE NO.	BOTANICAL NAME	COMMON NAME	D.B.H. (in.)*	CRZ	SPECIMEN	CONDITION	TO BE REMOVED	COMMENTS
100	Thuja occidentalis	Northern white-cedar	8	12		Good		
101	Thuja occidentalis	Northern white-cedar	8	12		Good		
102	Thuja occidentalis	Northern white-cedar	8	12		Good		
103	Thuja occidentalis	Northern white-cedar	12	18		Good		
104	Thuja occidentalis	Northern white-cedar	8	12		Good		
105	Thuja occidentalis	Northern white-cedar	15	23		Good		
106	Sassafras albidum	Sassafras	22	33		Fair	Remove	
107	Acer rubrum	Red maple	38	57	✓	Good		
108	Cornus florida	Flowering dogwood	6	9		Good		
109	Ilex burfordii	Burford holly	6	9		Good		Near Trees 124 and 125
110	Prunus serotina	Black cherry	16	24		Fair-Poor		Off-site; Near fence
111	Prunus serotina	Black cherry	29	44		Good	Remove	
112	Acer platanoides	Norway maple	16	24		Good		Off-site; Near fence
113	Ilex burfordii	Burford holly	5	8		Good		Along northern boundary
114	Ilex burfordii	Burford holly	5	8		Good		Along northern boundary
115	Ilex burfordii	Burford holly	5	8		Good		Along northern boundary
116	Ilex burfordii	Burford holly	5	8		Good		Along northern boundary
117	Ilex burfordii	Burford holly	5	8		Good		Along northern boundary
118	Ilex burfordii	Burford holly	5	8		Good		Along northern boundary
119	Ilex burfordii	Burford holly	5	8		Good		Along northern boundary
120	Ilex burfordii	Burford holly	5	8		Good		Along northern boundary
121	Ilex burfordii	Burford holly	5	8		Good	Remove	Along northern boundary
122	Ilex burfordii	Burford holly	7	13		Good		Multi-stem {5,3,3}
123	Magnolia grandiflora	Southern magnolia	6	9		Good	Remove	
124	Ilex burfordii	Burford holly	5	8		Good		On-site near fenceline
125	Juglans nigra	Black walnut	27	41		Good		Off-site
126	Ilex burfordii	Burford holly	9	14		Good		On-site near fenceline
127	Platanus hybrida x acerifolia	London plane tree	8	12		Fair	Remove	Girdling roots
128	Quercus bicolor	Swamp white oak	6	9		Poor	Remove	deadwood throughout
129	Acer palmatum	Japanese maple	13	25		Good	Remove	Multi-trunk (8,6,6,5) @ 1.5' height
130	Lagerstroemia indica	Crape Myrtle	5	10		Fair	Remove	Multi-stem {3,3,3}
131	Acer saccharinum	Silver maple	25	38		Fair	Remove	
132	Ilex burfordii	Burford holly	6	9		Good		
133	Ilex burfordii	Burford holly	6	9		Good		
134	Ilex burfordii	Burford holly	6	9		Good		
135	Ilex burfordii	Burford holly	6	9		Good		
136	Ilex burfordii	Burford holly	6	9		Good		
137	Ilex burfordii	Burford holly	6	9		Good		
138	Ilex burfordii	Burford holly	6	9		Good		
139	Ilex burfordii	Burford holly	6	9		Good		
140	Ilex burfordii	Burford holly	6	9		Good		
141	Ilex burfordii	Burford holly	6	9		Good		
142	Ilex burfordii	Burford holly	6	9		Good		
143	Ilex burfordii	Burford holly	6	9		Good		
144	Ilex burfordii	Burford holly	6	9		Good		
145	Quercus rubra	Northern red oak	2	3		Fair		
146	Morus alba	White mulberry	10	15		Fair		Off-site
147	Acer platanoides	Norway maple	9	14		Good		Off-site
148	Juniperus virginiana	Eastern redcedar	12	18		Good		Off-site
149	Morus alba	White mulberry	22	33		Fair		Off-site
150	Ilex opaca	American holly	6	9		Good		Off-site
151	Pinus virginiana	Virginia pine	15	23		Good		Off-site
152	Pinus virginiana	Virginia pine	10	15		Good		Off-site
153	Acer rubrum	Red maple	15	23		Good		Off-site, Narrow
154	Acer rubrum	Red maple	12	18		Good		Off-site
155	Pinus virginiana	Virginia pine	15	23		Good		Off-site
156	Magnolia virginiana	Sweetbay magnolia	16	32		Good		Off-site; Multi-trunk (12", 10", 5")
157	Betula nigra	River birch	19	38		Good		Off-site; Multi-trunk (12", 11", 10")
158	Magnolia lilliflora	Lily magnolia	6	9		Good		Near Kilmer House
159	Ulmus rubra	Slippery elm	9	14		Fair-Poor		Off-site: Poor form and structure; (near trees 19 & 20)
161	Lagerstroemia indica	Crape Myrtle	5	10		Good	Remove	Multi-trunk {3, 2, 2, 2, 1}
162	Lagerstroemia indica	Crape Myrtle	6	12		Good	Remove	Multi-trunk {4, 3, 3}
163	Lagerstroemia indica	Crape Myrtle	7	14		Good	Remove	Multi-trunk {4, 3, 3, 3}
164	Acer rubrum	Red maple	2	3		Good	Remove	Newly planted: Near gate
165	Cercis canadensis	Eastern redbud	3	5		Good		
166	Cercis canadensis	Eastern redbud	4	6		Good	Remove	
167	Aesculus pavia	Red buckeye	2	3		Good	Remove	
168	Quercus rubra	Northern red oak	2	3		Good		
169	Acer rubrum	Red maple	2	3		Good	Remove	Newly planted: Near Windover Avenue
170	Pinus thunbergii	Japanese black pine	9	14		Good	Remove	Near Windover Avenue
175	Cornus florida	Flowering dogwood	9	14		Good		
176	Lagerstroemia indica	Crape Myrtle	6	12		Fair		Multi-trunk {3,3,3,3,1}, narrow
177	Lagerstroemia indica	Crape Myrtle	6	12		Fair		Multi-trunk {4,3,3,1}
178	Lagerstroemia indica	Crape Myrtle	10	20		Good		Multi-trunk {4,4,4,4,3}
179	Salix matsudana	Corkscrew willow	16	24		Good		Off-site
180	Ilex burfordii	Burford holly	5	10		Good		Multi-stem {4,3,2}; at corner
181	Asimina triloba	Pawpaw	2	3		Good		
182	Asimina triloba	Pawpaw	2	3		Good		
183	Thuja occidentalis	Northern white-cedar	10	15		Good		Off Site
184	Thuja occidentalis	Northern white-cedar	15	23		Good		Off Site
185	Thuja occidentalis	Northern white-cedar	17	26		Good		Off Site
186	Thuja occidentalis	Northern white-cedar	16	24		Good		Off Site

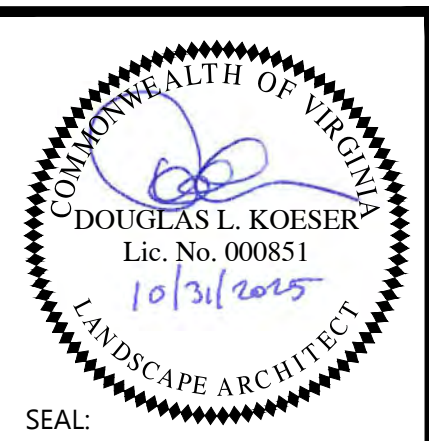
10/24/2025

 **Gordon**
4501 Daly Drive
Chantilly, VA 20151
Phone: 703-263-1900
www.gordon.us.com

PROGRAMMING AND PLANNING
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
SURVEY AND MAPPING
SECURITY CONSULTING

[illegible]

SUR:	DES:
GORDON	D. KOESER
DRW:	CHK:
D. KOESER	A.SARANT



TREE INVENTORY

GREEN HEDGES SCHOOL SITE DEVELOPMENT PLAN

TOWN OF VIENNA, VIRGINIA
TOWN OF VIENNA

HORIZ:	N/A
SCALE: VERT:	N/A
DATE:	10/31/25
PLAN:	GREEN HEDGES SCHOOL
JOB:	GORDON 2356-0501
CADD:	2356-0501-L-TP01
NCS:	TREE INVENTORY
NUMBER:	C-006 OF C-051



TREE PRESERVATION NOTES

THE FOLLOWING TREE PROTECTION PRACTICES ARE TO BE FOLLOWED FROM THE LATEST VERSION OF THE TOWN OF VIENNA TREE PRESERVATION & PLANTING GUIDE.

1.

BEFORE ANY GRADING, DEMOLITION, INSTALLATION OF TREE PRESERVATION MEASURES, OR OTHER DISTURBANCE, INCLUDING TREE REMOVAL, A PRECONSTRUCTION MEETING SHALL BE HELD WITH THE TOWN OF VIENNA URBAN FORESTER. THE APPLICANT SHALL STAKE CLEARING LIMITS ONSITE TO FACILITATE A LOCATION FOR TRENCHING AND FENCING INSTALLATIONFORTREE PROTECTION.
2.

TREE PROTECTION MEASURES SHALL BE INSTALLED AS SHOWN ON THE APPROVED PLAN BEFORE ANY SITE WORK INCLUDING DEMOLITION, GRADING, AND TREE REMOVAL. NO CHANGES SHALL BE MADE TO THE APPROVED TREE PRESERVATION PLAN UNLESS APPROVED BY THE TOWN OF VIENNA URBAN FORESTER.
3.

WHEN APPLICABLE, TRENCHLESS SILT FENCE SHALL BE USED FOR EROSION AND SEDIMENT CONTROL TO BETTER PROTECT AND PRESERVE TREES THAT MAY BE IMPACTED BY CONSTRUCTION ACTIVITIES.
4.

ROOT PRUNING REQUIREMENTS: UNLESS OTHERWISE INSTRUCTED BY THE TOWN OF VIENNA URBAN FORESTER, ROOT PRUNING SHALL BE PERFORMED WHEN LIMITS OF DISTURBANCE FALL WITHIN THE CRITICAL ROOT ZONE OF TREES TO BE RETAINED. THE ROOT PRUNING TRENCH SHALL BE EXCAVATED TO A MINIMUM DEPTH OF TWELVE (12) INCHES AT THE LOCATIONS SHOWN ON THE APPROVED SITE PLAN. A VERTICAL TRENCHING MACHINE, VIBRATORY PLOW, OR SUPERSONIC AIR TOOL ARE ALL ACCEPTABLE TOOLS FOR ROOT PRUNING. ALL ROOTS GREATER THAN ONE (1) INCH IN DIAMETER, ON THE SIDE OF THE TRENCH CLOSEST TO THE TREE TRUNK SHALL BE CUT OR CLEANLY SEVERED WITH HAND PRUNERS, LOPPERS, HANDSAW, OR OTHER APPROPRIATE TOOL THAT CAN CLEANLY SEVER THE ROOT.
5.

REMOVAL OF TREES, PER THE APPROVED PLAN, INSIDE A TREE PRESERVATION AREA SHALL BE PERFORMED, BY HAND, WITHOUT GROUND DISTURBANCE, OR DISTURBANCE TO NEARBY PRESERVED TREES. TREES IN THESE AREAS SHALL BE CUT FLUSH TO THE GROUND, WITHOUT STUMP GRINDING UNLESS APPROVED BY THE TOWN OF VIENNA URBAN FORESTER.
6.

DO NOT REMOVE TREES FROM OTHER PROPERTIES, CO-OWNED TREES OR TOWN RIGHTS-OF-WAY WITHOUT WRITTEN PERMISSION OF THE OWNERS. WRITTEN PERMISSION SHOULD BE OBTAINED AND SUBMITTED WITH PROJECT DOCUMENTATION.
7.

ANY PRUNING OR REMOVAL OF TOWN-OWNED TREES DURING THE CONSTRUCTION PROCESS SHALL BE PRE-APPROVED BY THE TOWN OF VIENNA URBAN FORESTER.
8.

TREE PROTECTION FENCING SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION.
9.

TREE PROTECTION AREAS SHALL BE KEPT FREE FROM SOIL, VEHICLES, EQUIPMENT, AND THE STORAGE OF CONSTRUCTION MATERIALS. THIS PERIOD EXTENDS THROUGH THE ENTIRETY OF THE PROJECT INCLUDING FINAL GRADING AND LANDSCAPING ACTIVITIES.
10.

THE USE OF HEAVY EQUIPMENT IS STRICTLY PROHIBITED WITHIN TREE PRESERVATION AREAS, FOR THE REMOVAL OF UNWANTED TREES, STRUCTURES, PADS, GRADING, SODDING, ETC.
11.

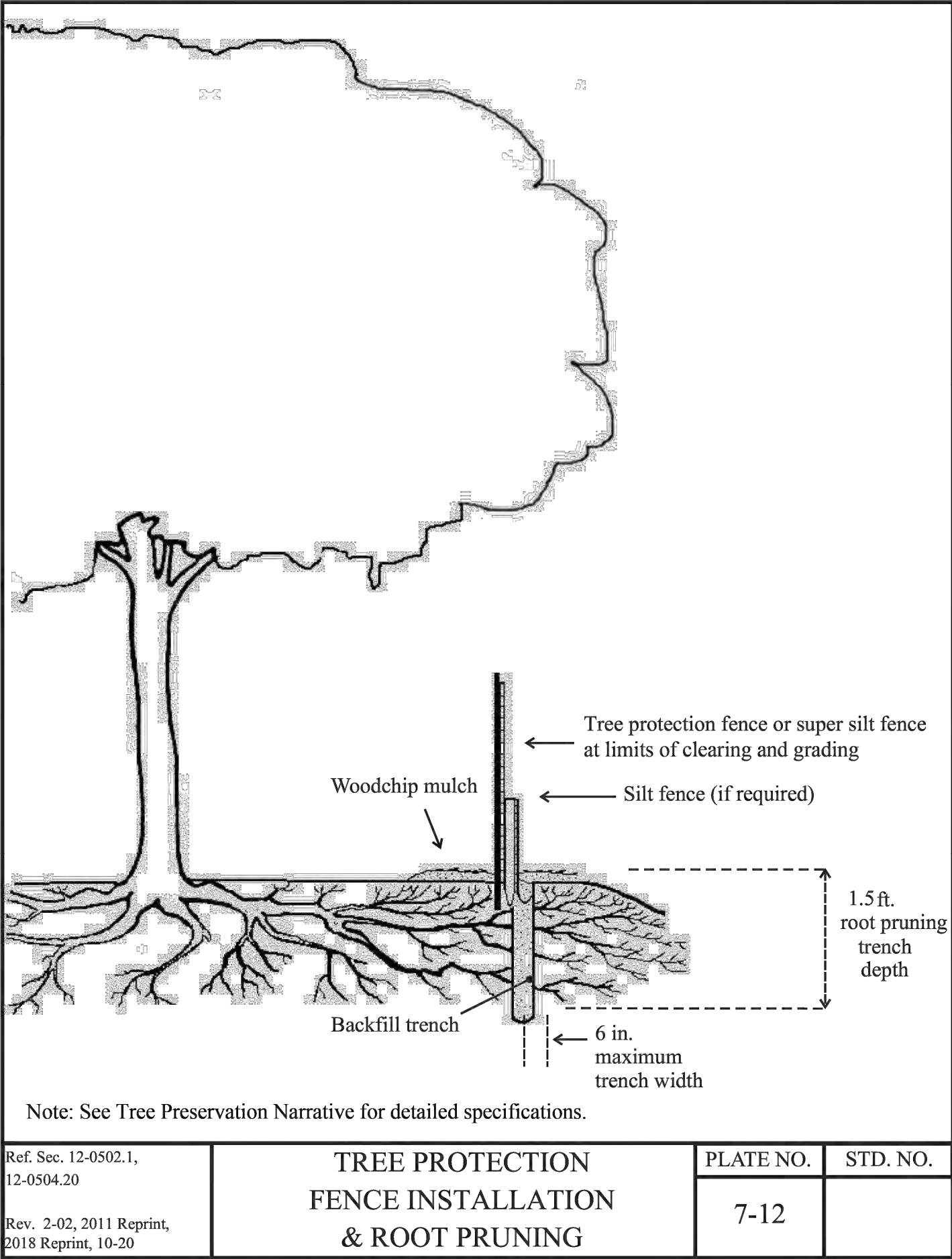
ALL TREE PRUNING SHALL BE DONE FOLLOWING CUIRRENT AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) A300 PRUNING STANDARDS. PRUNING TO REMOVE MORE THAN 10% OF THE TOTAL FOLIAGE, FOR TREES BEING PRESERVED FOR CANOPY COVERAGE CREDIT, SHALL BE COMMUNICATED AND APPROVED BY THE TOWN OF VIENNA URBAN FORESTER BEFORE THE PRUNING.
12.

TREE PROTECTION AREAS SHALL HAVE NON-NATIVE INVASIVE VINES REMOVED OR SEVERED AND TREATED (UNDER VIRGINIA'S PESTICIDE APPLICATION LAWS) TO PREVENT THEIR REGROWTH, AS DEEMED NECESSARY BY THE VIENNA URBAN FORESTER. THE GOAL IS TO ENSURE THE SURVIVAL OF THE TREES BEING USED FOR TREE CANOPY COVERAGE REQUIREMENT.
13.

REMOVAL OF ANY TREE PRESERVATION MEASURE SHALL BE APPROVED BY THE TOWN OF VIENNA URBAN FORESTER IN WRITING PRIOR TO REMOVAL OF ANY TREE PRESERVATION MEASURES.
14.

IF A VIOLATION OF THE APPROVED TREE PRESERVATION PLAN OCCURS, INCLUDING ENCROACHMENT OR EVIDENCE OF ENCROACHMENT INTO A TREE PRESERVATION AREA, THE APPLICANT SHALL BE REQUIRED TO SUBMIT A MITIGATION PLAN TO THE TOWN OF VIENNA URBAN FORESTER. THIS PLAN SHALL LIST REMEDIAL MEASURES AND THE TIME WITHIN WHICH SUCH MEASURES SHALL BE COMPLETED BY THE APPLICANT TO ENSURE THE CONTINUED PRESERVATION OF THE EXISTING TREES. THIS MAY INCLUDE AN ASSESSMENT AND REPORT BY A QUALIFIED ARBORIST.

FAIRFAX COUNTY PUBLIC FACILITIES MANUAL



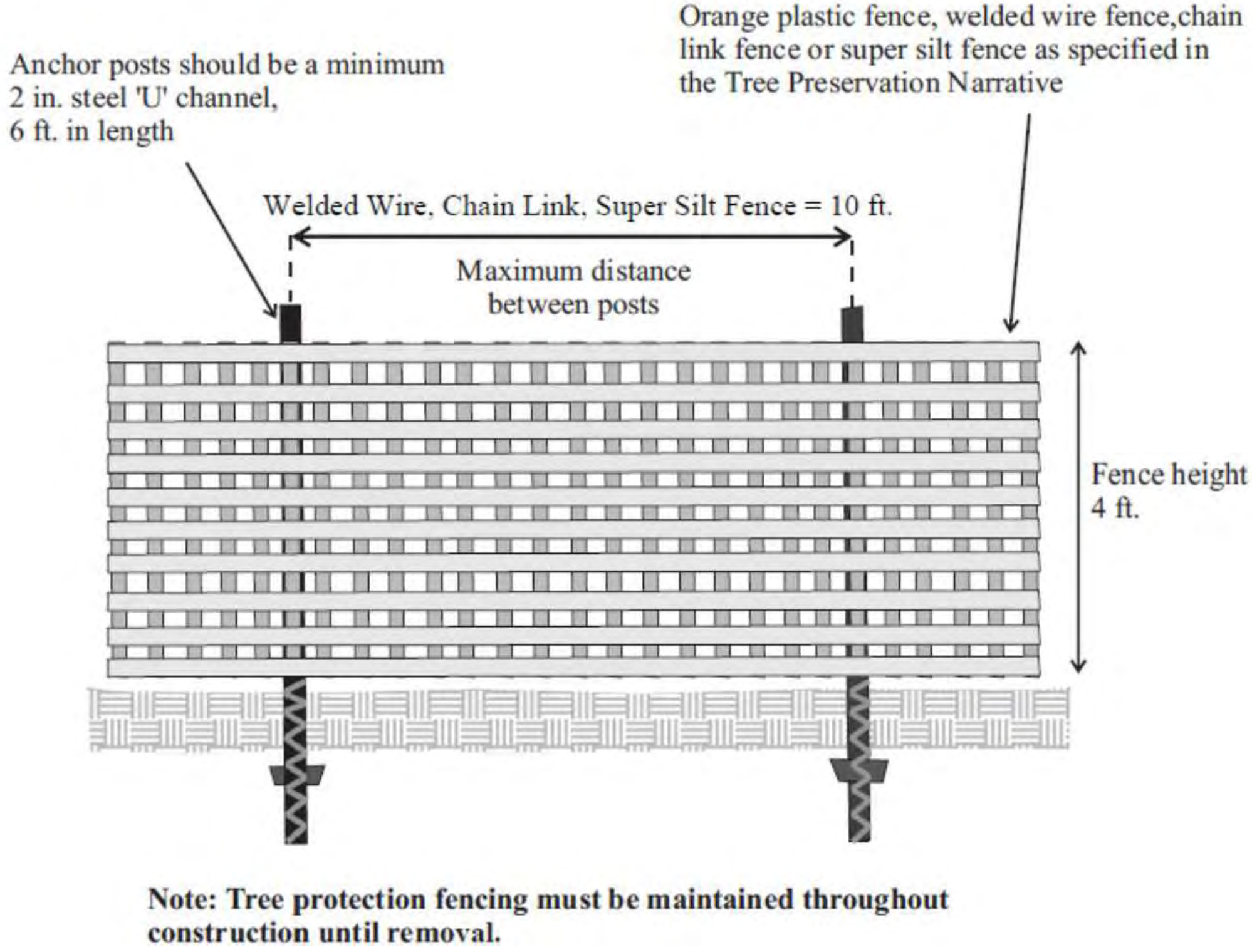
ROOT PRUNING DETAIL

SECTION

NOT TO SCALE

TREE CONSERVATION NARRATIVE

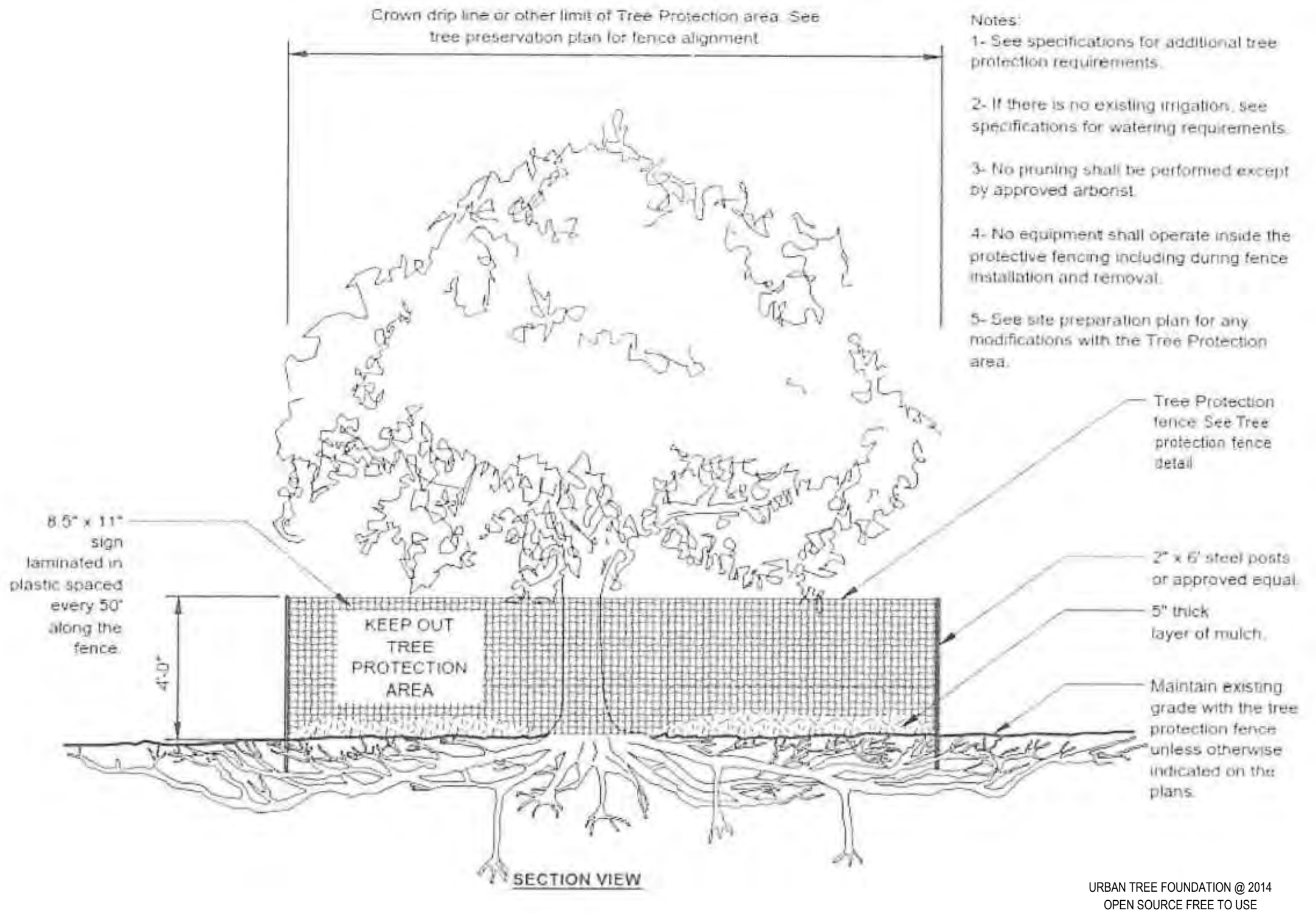
SITE VISITS OCCURRED ON JULY 11, 2023 AND SEPTEMBER 16, 2025 BY CERTIFIED ARBORIST, DOUG KOESER, PLA, ISA. SEE TREE INVENTORY FOR ADDITIONAL INFORMATION. THE PRIMARY PRESERVATION METHODS ARE TREE PROTECTION FENCING AND ROOT PRUNING ALONG THE LIMITS OF DISTURBANCE. SEE THIS SHEET FOR DETAILS.



TREE PROTECTION FENCE INSTALLATION

SOURCE: PFM 6-12

NOT TO SCALE



TREE PROTECTION

SECTION

NOT TO SCALE

10/24/2025

DOUG KOESER, PLA, ISA #MA4521-A

PROGRAMMING AND PLANNING
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
SURVEY AND MAPPING
SECURITY CONSULTING

Gordon

4501 Daly Drive
Chantilly, VA 20151
Phone: 703-263-1900
www.gordon.us.com

REVISIONS			
	NUMBER	DATE	DESCRIPTION

SUR:	DES:
GORDON	D. KOESER
DRW:	CHK:
D. KOESER	S. PETERSON

COMMONWEALTH OF VIRGINIA

DOUGLAS L. KOESER

Lic. No. 000851

10/31/2025

LANDSCAPE ARCHITECT

SEAL:

TREE PROTECTION NOTES & DETAILS

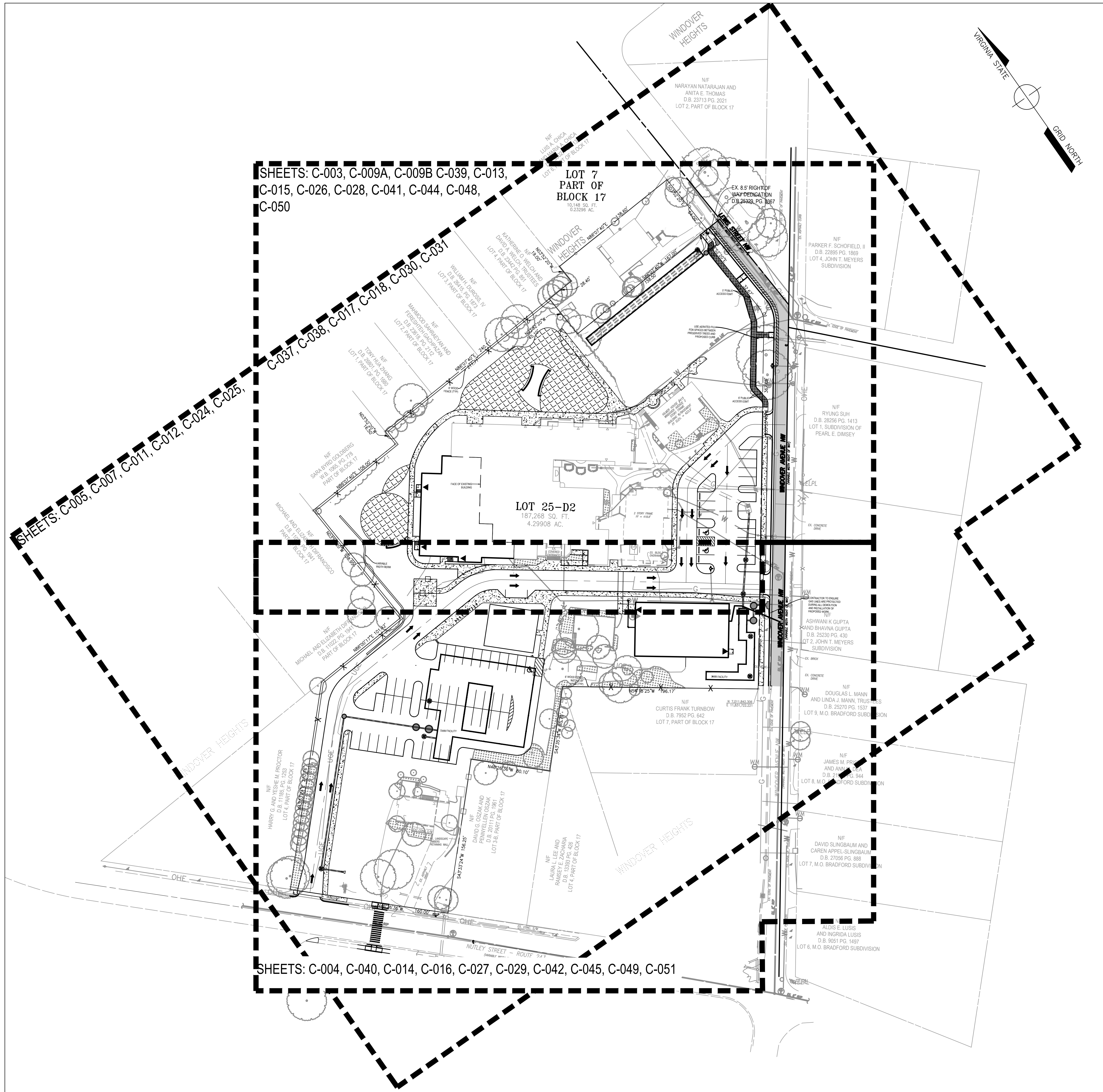
GREEN HEDGES SCHOOL
SITE DEVELOPMENT PLAN

TOWN OF VIENNA, VIRGINIA
TOWN OF VIENNA

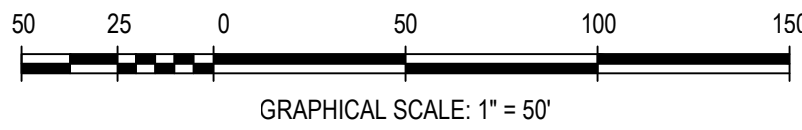
HORIZ:	N/A
SCALE: VERT:	N/A
DATE:	10/31/25
PLAN:	GREEN HEDGES SCHOOL
JOB:	GORDON 2356-0501
CADD:	2356-0501-L-TP01
NCS:	TREE PROTECTION NOTES & DETAILS
NUMBER:	C-0080FC-051

Gordon

© 2024 GORDON ENGINEERING AND PLANNING. ALL RIGHTS RESERVED. THIS DOCUMENT IS THE PROPERTY OF GORDON ENGINEERING AND PLANNING. NO PART OF THIS DOCUMENT MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING FROM GORDON ENGINEERING AND PLANNING.



- GENERAL NOTES:
- REFERENCE THIS SHEET FOR THE ORIENTATION OF ALL PLAN VIEWS HEREIN ONLY. ALL OTHER ITEMS SHOWN ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

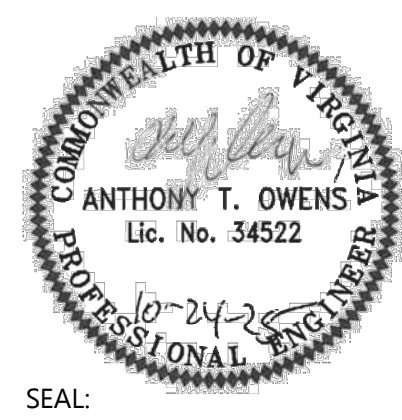


OVERALL LAYOUT PLAN

GREEN HEDGES SCHOOL SITE DEVELOPMENT PLAN

TOWN OF VIENNA, VIRGINIA
TOWN OF VIENNA

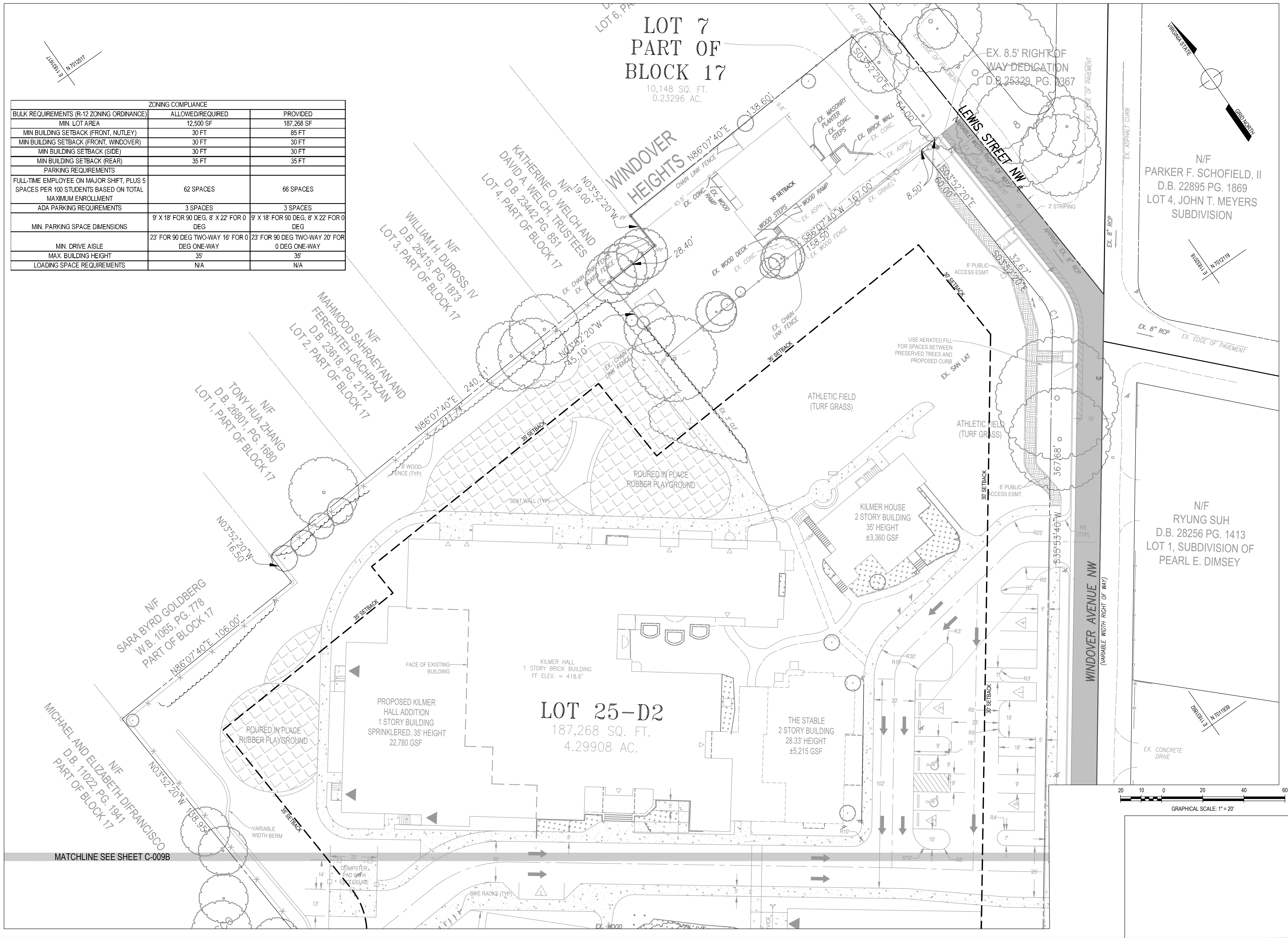
HORIZ: 1" = 50'
SCALE: VERT: N/A
DATE: 10/24/25
PLAN: GREEN HEDGES SCHOOL
JOB: GORDON 2356-0501
CADD: 2356-0501-C-003.DWG
NCS: 2356-0501-C-003
NUMBER: C-0090FC-051



SUR: E.ERICKSON
DES: A.OWENS
DRW: H.BARRY
CHK: A.SARANT

REVISIONS	DESCRIPTION	NUMBER	DATE

ZONING COMPLIANCE		
BULK REQUIREMENTS (R-12 ZONING ORDINANCE)	ALLOWED/REQUIRED	PROVIDED
MIN. LOT AREA	12,500 SF	187,268 SF
MIN BUILDING SETBACK (FRONT, NUTLEY)	30 FT	85 FT
MIN BUILDING SETBACK (FRONT, WINDOVER)	30 FT	30 FT
MIN BUILDING SETBACK (SIDE)	30 FT	30 FT
MIN BUILDING SETBACK (REAR)	35 FT	35 FT
PARKING REQUIREMENTS		
FULL-TIME EMPLOYEE ON MAJOR SHIFT, PLUS 5 SPACES PER 100 STUDENTS BASED ON TOTAL MAXIMUM ENROLLMENT	62 SPACES	66 SPACES
ADA PARKING REQUIREMENTS	3 SPACES	3 SPACES
MIN. PARKING SPACE DIMENSIONS	9' X 18' FOR 90 DEG, 8' X 22' FOR 0 DEG	9' X 18' FOR 90 DEG, 8' X 22' FOR 0 DEG
MIN. DRIVE AISLE	23' FOR 90 DEG TWO-WAY 16' FOR 0 DEG ONE-WAY	23' FOR 90 DEG TWO-WAY 20' FOR 0 DEG ONE-WAY
MAX. BUILDING HEIGHT	35'	35'
LOADING SPACE REQUIREMENTS	N/A	N/A



PROGRAMMING AND PLANNING
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
SURVEY AND MAPPING
SECURITY CONSULTING

Gordon
4501 Daly Drive
Chantilly, VA 20151
Phone: 703-263-1900
www.gordon.us.com

REVISIONS	
NUMBER	DATE

SUR: E.ERICKSON	DES: A.AOWENS
DRW: H.BARRY	CHK: A.SARANT

COMMONWEALTH OF VIRGINIA
ANTHONY T. OWENS
Lic. No. 34522
PROFESSIONAL ENGINEER

SEAL:

SETBACK PLAN

**GREEN HEDGES SCHOOL
SITE DEVELOPMENT PLAN**

TOWN OF VIENNA, VIRGINIA
TOWN OF VIENNA

HORIZ: 1" = 20'
SCALE: VERT: N/A

DATE: 10/24/25

PLAN: GREEN HEDGES SCHOOL

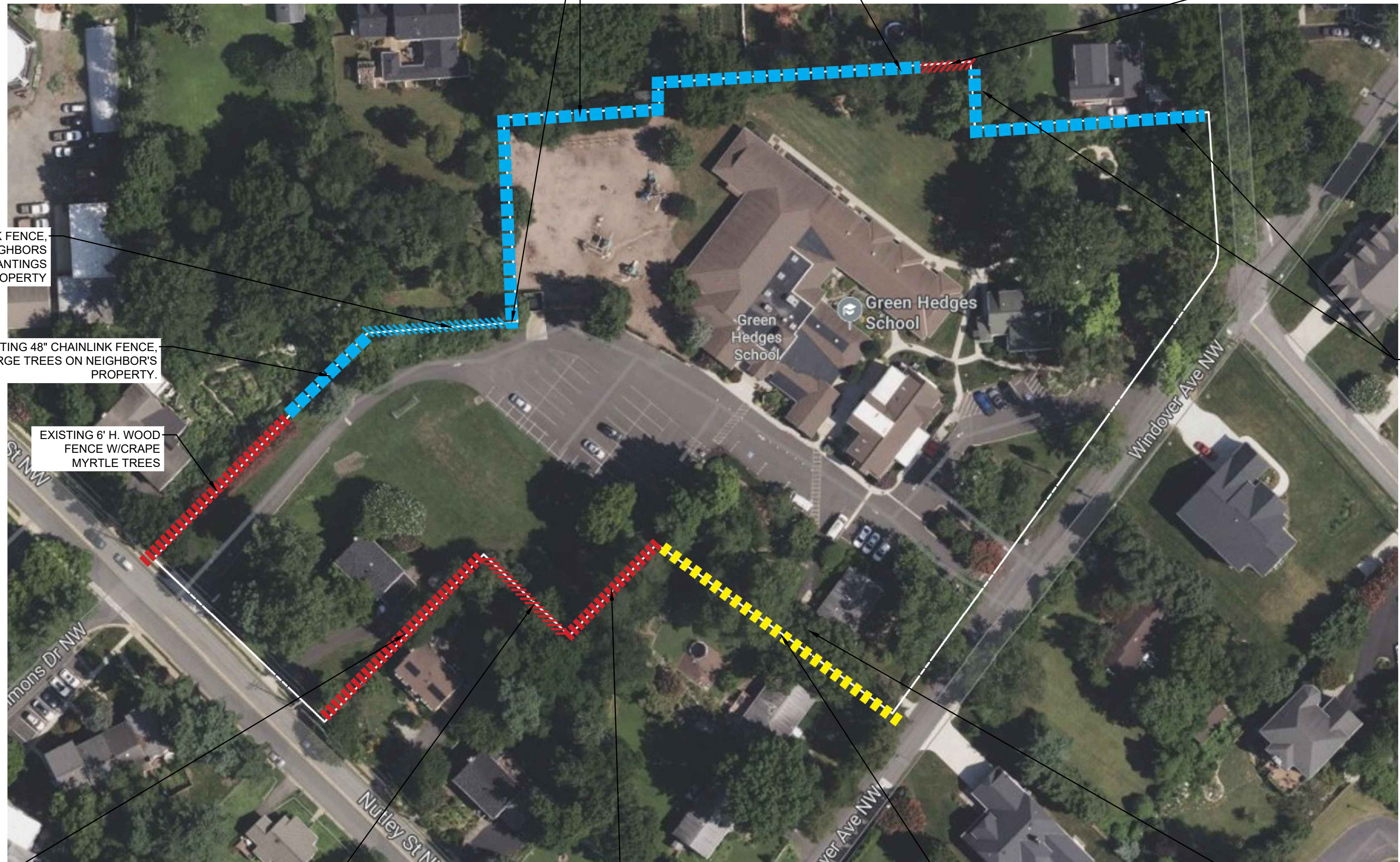
JOB: GORDON 2356-0501

CADD: 2356-0501-C-00C-104.DWG

NCS: 2356-0501-C-00C-104

NUMBER: C-009A OF C-051

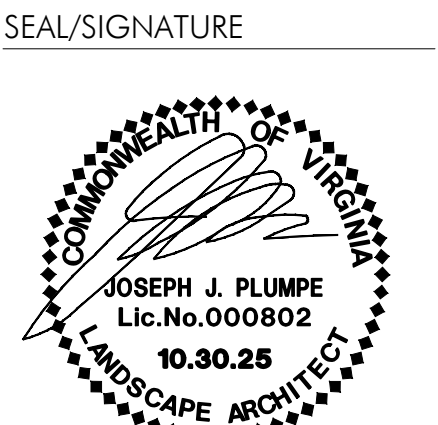
Gordon



GREEN HEDGES SCHOOL
415 WINDOVER AVE NW
VIENNA, VA
TOWN OF VIENNA

CLIENT
GREEN HEDGES SCHOOL -
THE STONE HOUSE GROUP

Studio39
LANDSCAPE ARCHITECTURE, P.C.
5810 KINGSTOWNE CENTER DRIVE
SUITE 120, #769
ALEXANDRIA, VA 22315-5711
703.719.6500 | STUDIO39.COM

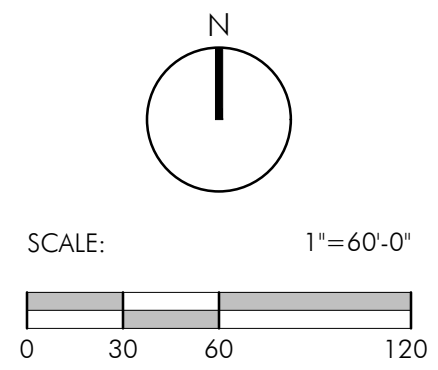


ISSUE DATE
LANDSCAPE PLAN 07.25.2025
LANDSCAPE PLAN 10.30.2025

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, ARE THE PROPERTY OF STUDIO39 LANDSCAPE ARCHITECTURE, P.C. AND IS NOT TO BE COPIED AND/OR USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF STUDIO39 LANDSCAPE ARCHITECTURE, P.C.
© STUDIO39 LANDSCAPE ARCHITECTURE, P.C.

PROJECT NUMBER: 25009
CONTACT: JOSEPH PLUMPE
DRAWN: YJ
APPROVED/CHECKED: JP

ORIENTATION AND SCALE



SHEET TITLE
**EXISTING SITE
BOUNDARY
CONDITIONS**

SHEET NUMBER

C-010

SITE DEVELOPMENT PLAN

415 WINDOVER AVE NW
VIENNA, VA
TOWN OF VIENNA

GREEN HEDGES SCHOOL -
THE STONE HOUSE GROUP

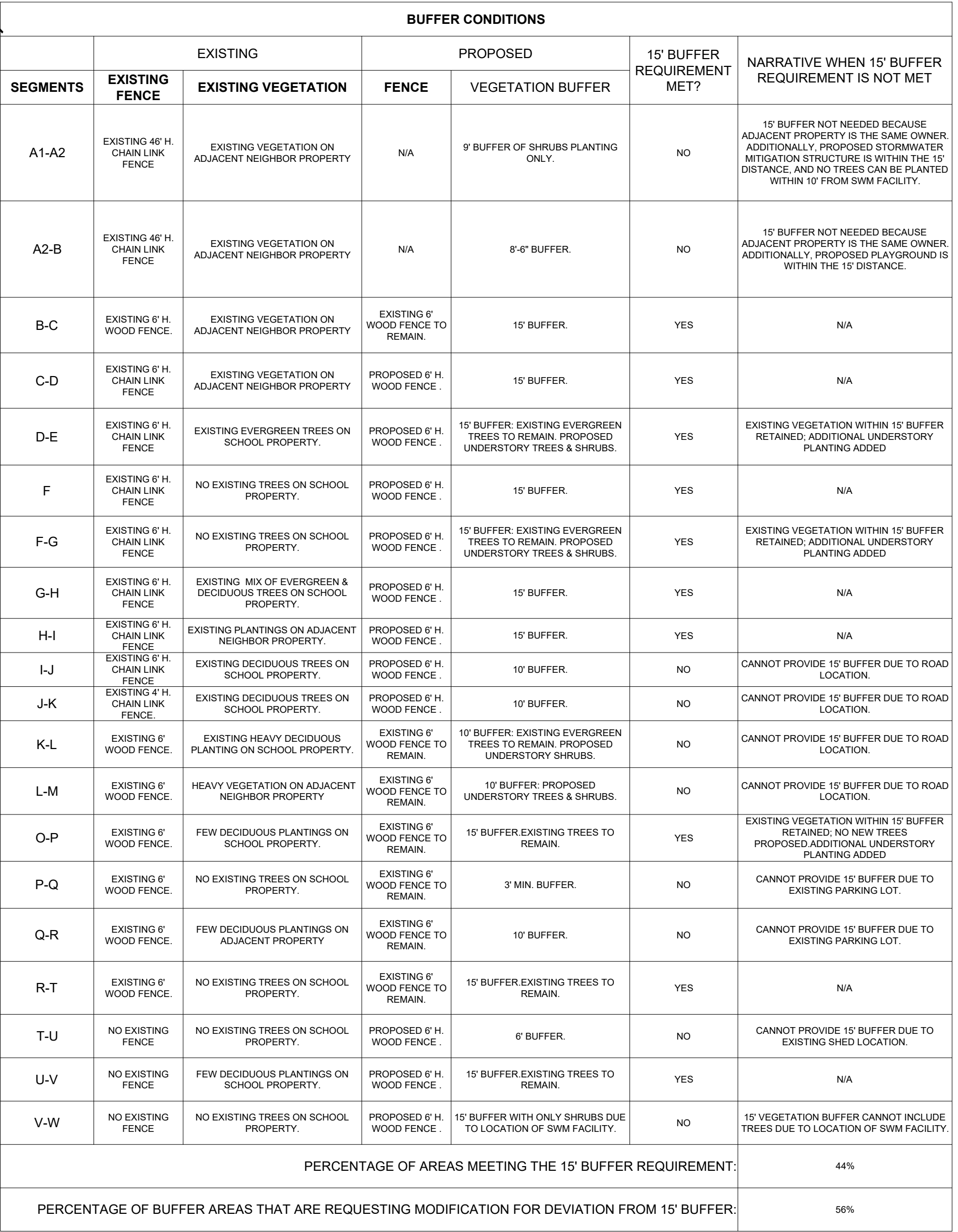
5810 KINGSTOWNE CENTER DRIVE
SUITE 120, #769
ALEXANDRIA, VA 22315-5711
703.719.6500 | STUDIO39.COM

LANDSCAPE PLAN 07.25.2025

PROJECT NUMBER: 25009
CONTACT: JOSEPH PLUMPE
DRAWN: YJ
APPROVED/CHECKED: JP

C-010A

SITE DEVELOPMENT PLAN



PLAN

SITE BUFFER - KEY PLAN

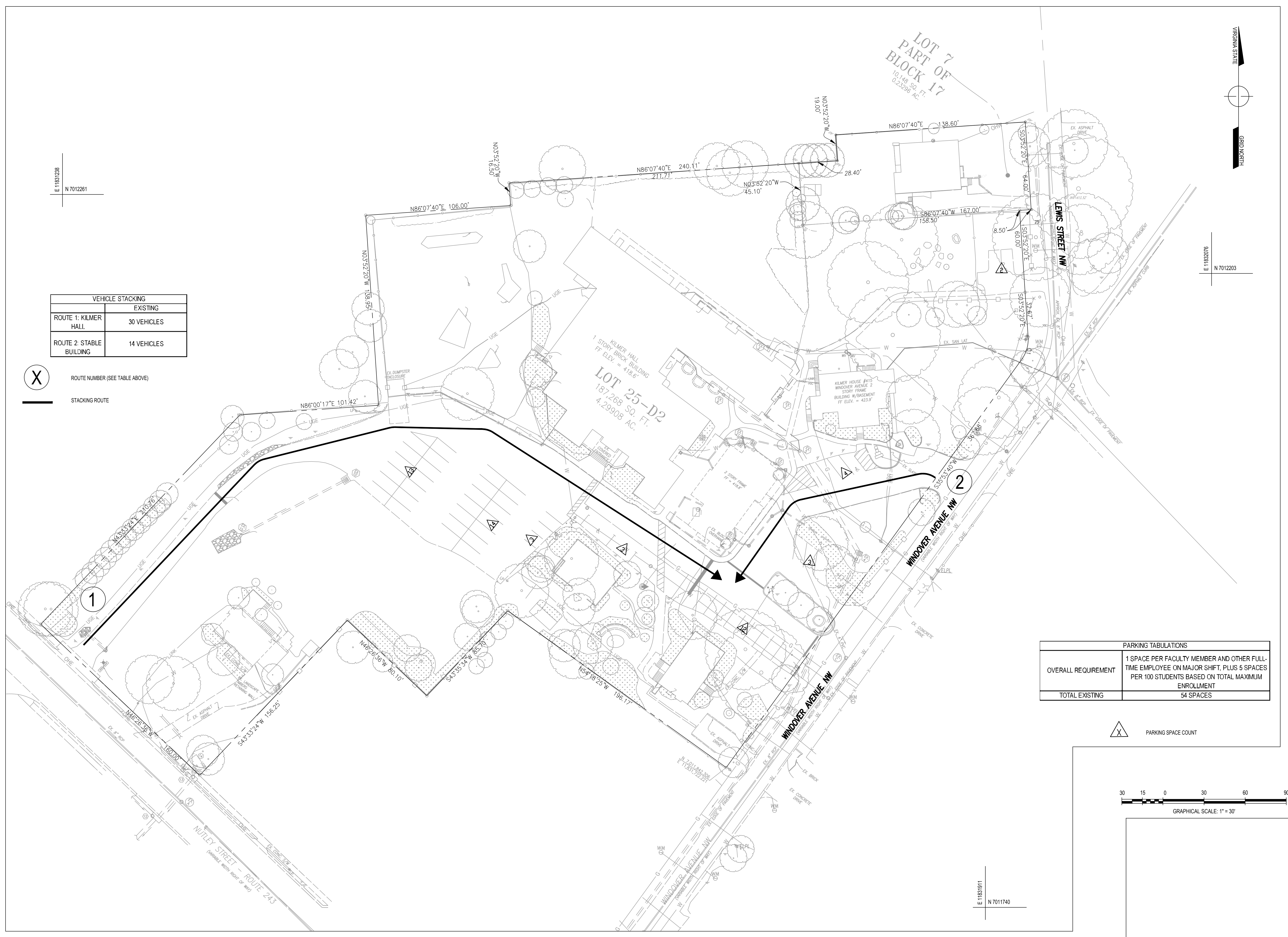
Scale: 1"=40'-0"

 EXISTING TREES TO REMAIN.
PROPOSED UNDERSTORY SHRUBS
FOR ADDITIONAL BUFFER

 PROPOSED NEW BUFFER WITH NEW CANOPY TREES, UNDERSTORY TREES & SHRUBS



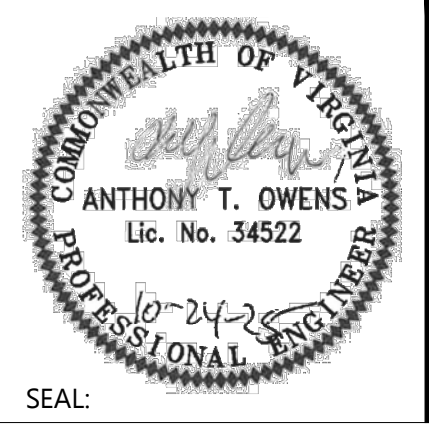
PROPOSED
SHRUBS FOR
BUFFER



VEHICLE STACKING	
	EXISTING
ROUTE 1: KILMER HALL	30 VEHICLES
ROUTE 2: STABLE BUILDING	14 VEHICLES

[illegible]

SUR: E.ERICKSON	DES: A.OWENS
DRW: H.BARRY	CHK: A.SARANT



CIRCULATION PLAN - EXISTING

GREEN HEDGES SCHOOL
SITE DEVELOPMENT PLAN

TOWN OF VIENNA, VIRGINIA
TOWN OF VIENNA

HORIZ: 1' = 30'	
SCALE: VERT:	N/A
DATE: 11/3/25	
PLAN: GREEN HEDGES SCHOOL	
JOB: GORDON 2356-0501	
CADD: 2356-0801-C-CS-104.DWG	
NCS: 2356-0801-C-CS-104	
NUMBER: C-011 OF C-051	



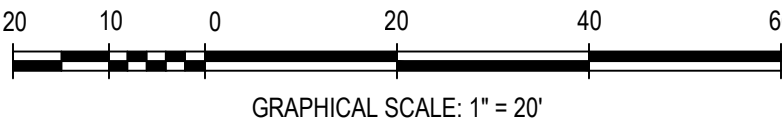
LEGEND

EXISTING

- EXISTING BUILDING
- PATIO TERRACE
- WOOD DECK
- PARKING/DRIVEWAY

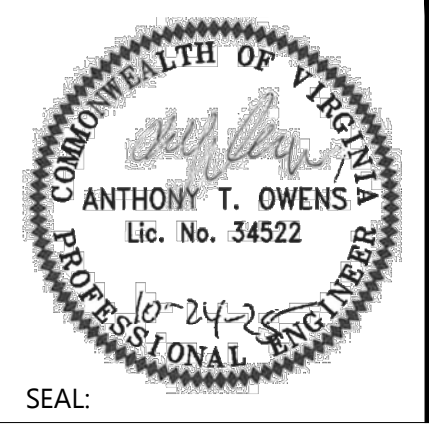


LOT COVERAGE - EXISTING		
LOT AREA	SQUARE FOOTAGE	ACRES
PARCEL 008A	187,268	4.30
TOTAL	187,268	4.30
MATERIAL	SQUARE FOOTAGE	LOT COVERAGE
EXISTING DRIVEWAY	35,310	19%
EXISTING PATIO TERRACE	2,509	1.3%
EX. BUILDING	23,518	12.6%
EX. DECK	234	0.1%
TOTAL	61,571	32.9%



REVISIONS	
DESCRIPTION	DATE

SUR: E.ERICKSON	DES: A.OWENS
DRW: H.BARRY	CHK: A.SARANT



LOT COVERAGE - EXISTING

GREEN HEDGES SCHOOL SITE DEVELOPMENT PLAN

TOWN OF VIENNA, VIRGINIA
TOWN OF VIENNA

HORIZ: 1" = 30'
SCALE: VERT: N/A
DATE: 10/24/25
PLAN: GREEN HEDGES SCHOOL
JOB: GORDON 2356-0501
CADD: 2356-0501-C-00-112.DWG
NCS: 2356-0501-C-00-112
NUMBER: C-0120FC-051



PROGRAMMING AND PLANNING
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
SURVEY AND MAPPING
SECURITY CONSULTING

Gordon

4501 Daly Drive
Chantilly, VA 20151
Phone: 703-263-1900
www.gordon.us.com

NOTES:

1. CONFIRM WITH DEMOLITION ANNOTATIONS AND SITE AND UTILITY LAYOUT PLAN. NOTIFY ENGINEER OF ANY CONFLICTS BETWEEN PLANS. ITEMS IN BOLD ARE TO BE DEMOLISHED AND REMOVED.

NOTES:

1. CONFIRM WITH DEMOLITION ANNOTATIONS AND SITE AND UTILITY LAYOUT PLAN. NOTIFY ENGINEER OF ANY CONFLICTS BETWEEN PLANS. ITEMS IN BOLD ARE TO BE DEMOLISHED AND REMOVED.

[] BRACKETS DENOTES APPROXIMATE LINEAR LOCATION FOR ITEMS TO BE DEMOLISHED AND REMOVED. CONTRACTOR SHALL REMOVE AND DEMOLISH ITEMS TO THE NEAREST CONSTRUCTION JOINT IN A CLEAN AND UNIFORM WORKMANSHIP MANNER.

X REMOVAL OF NON-LINEAR ITEM OR TREE

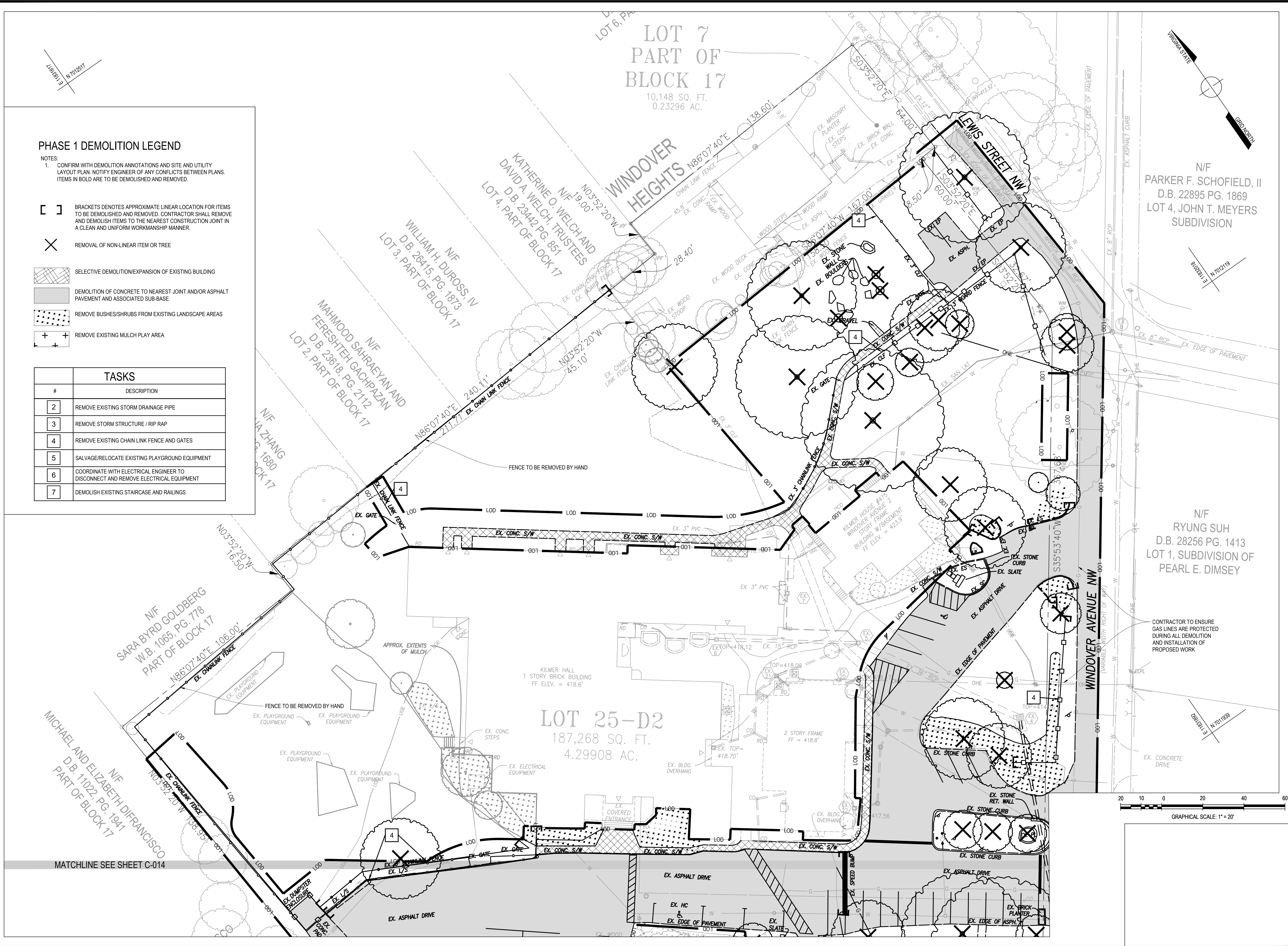
 SELECTIVE DEMOLITION/EXPANSION OF EXISTING BUILDING

	DEMOLITION OF CONCRETE TO NEAREST JOINT AND/OR ASPHALT PAVEMENT AND ASSOCIATED SUB-BASE
--	---

 REMOVE BUSHES/SHRUBS FROM EXISTING LANDSCAPE AREAS

+ + REMOVE EXISTING MULCH PLAY AREA

TASKS	
#	DESCRIPTION
2	REMOVE EXISTING STORM DRAINAGE PIPE
3	REMOVE STORM STRUCTURE / RIP RAP
4	REMOVE EXISTING CHAIN LINK FENCE AND GATES
5	SALVAGE/RELOCATE EXISTING PLAYGROUND EQUIPMENT
6	COORDINATE WITH ELECTRICAL ENGINEER TO DISCONNECT AND REMOVE ELECTRICAL EQUIPMENT
7	DEMOLISH EXISTING STAIRCASE AND RAILINGS



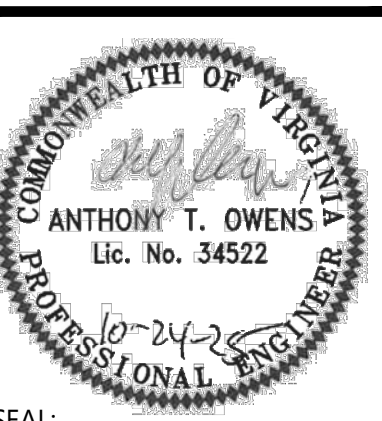
PROGRAMMING AND PLANNING
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
SURVEY AND MAPPING
SECURITY CONSULTING

rdon
4501 Daly Drive
Chantilly, VA 20151
Phone: 703-263-1900
www.gordon.us.com

				REVISIONS
--	--	--	--	-----------

[illegible]

NR:	DES:
ERICKSON	A.OWENS
RW:	CHK:
BARRY	A.SARANT

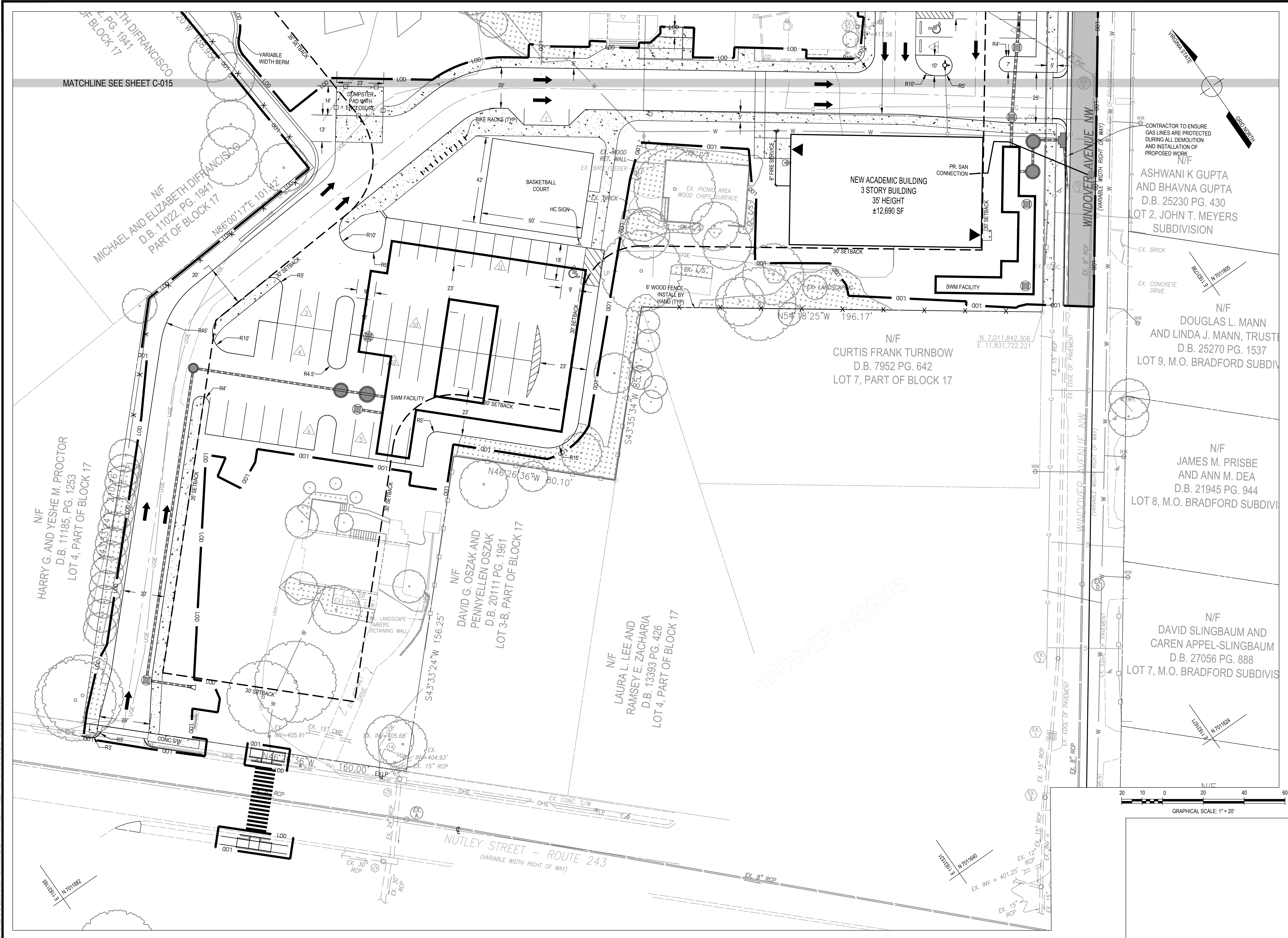


**HEDGES SOCIETY FOR
DEVELOPMENT**

TOWN OF VIENNA, VIRGINIA
TOWN OF VIENNA

HORIZ:	1' = 20'
SCALE: VERT:	N/A
DATE:	10/24/25
PLAN:	GREEN HEDGES SCHOOL
JOB:	GORDON 2356-0501
ADD:	2356-0501-C-CD-101-PH1.DWG
CS:	2356-0501-C-CD-101-PH1
NUMBER:	C-013 OF C-051

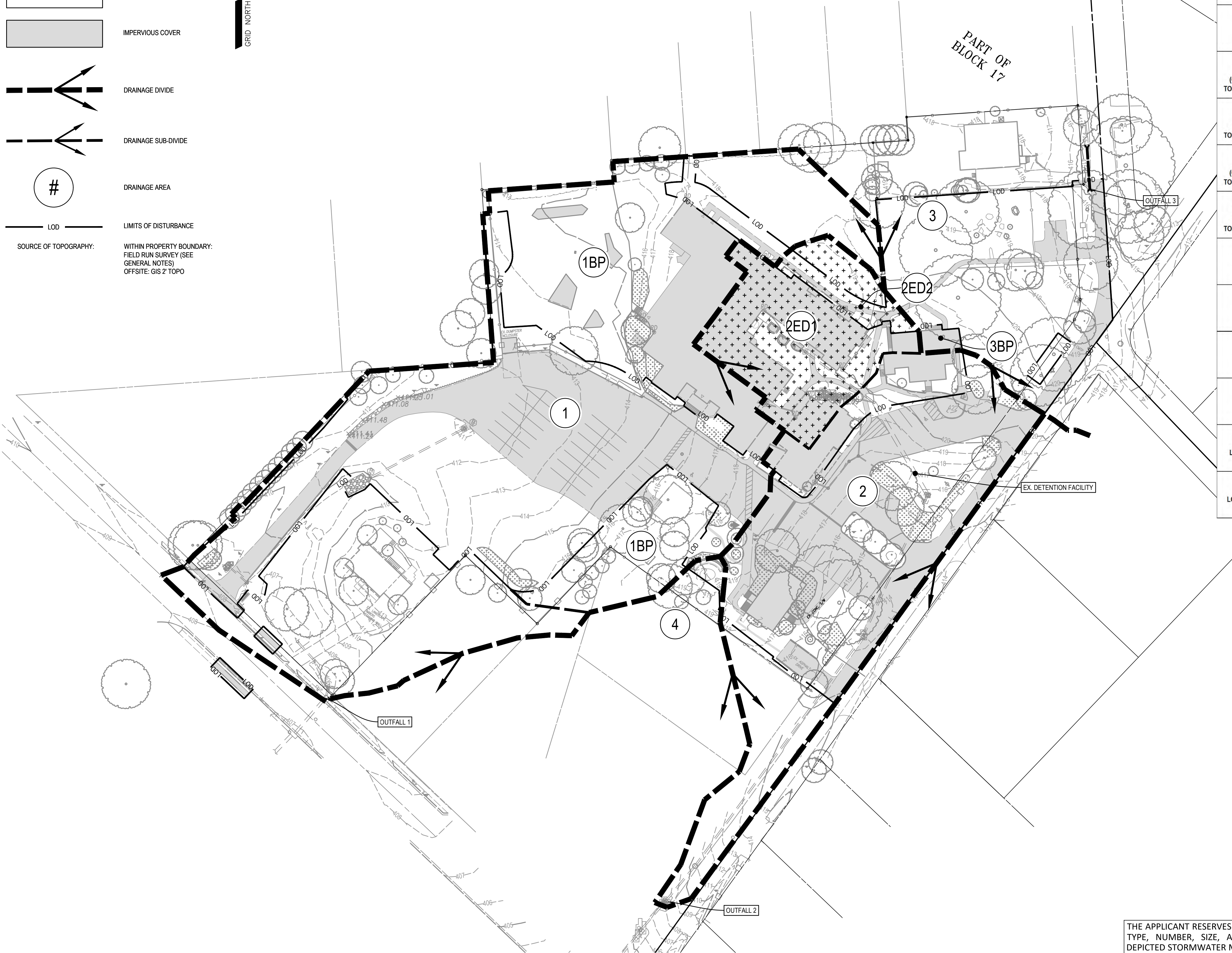
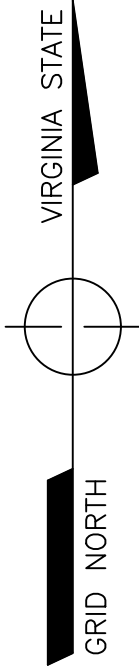
 **Gordon**



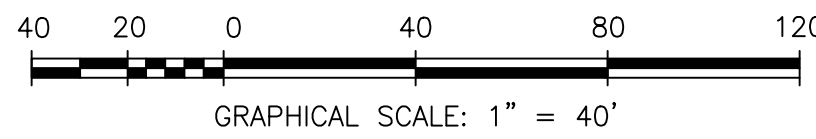
Copyright 2025 Gordon Engineering, Inc. All rights reserved. This drawing is the property of Gordon Engineering, Inc. and is not to be reproduced or transmitted in any form or by any means electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without prior written permission from Gordon Engineering, Inc.

LEGEND

SYMBOL	DESCRIPTION
	FOREST/OPEN SPACE (SEE SCHOOL NOTE BELOW)
	MANAGED TURF
	IMPERVIOUS COVER
	DRAINAGE DIVIDE
	DRAINAGE SUB-DIVIDE
	DRAINAGE AREA
	LIMITS OF DISTURBANCE
SOURCE OF TOPOGRAPHY: WITHIN PROPERTY BOUNDARY: FIELD RUN SURVEY (SEE GENERAL NOTES) OFFSITE: GIS 2' TOPO	



PRE-DEVELOPMENT RCN COMPUTATION - PHASE 1					
SUB-AREA	LAND COVER DESCRIPTION	HSG (D)		TOTAL AREA (AC)	PRODUCT AREA x RCN
		AREA (AC)	RCN		
1	FOREST	0.00	77	0.00	0.00
	MIXED OPEN	0.00	79	0.00	0.00
	MANAGED TURF	0.70	80	0.70	56.01
	IMPERVIOUS	0.54	98	0.54	53.07
	Total			1.24	109.08
1BP	FOREST	0.00	77	0.00	0.00
	MIXED OPEN	0.00	79	0.00	0.00
	MANAGED TURF	0.78	80	0.78	62.22
	IMPERVIOUS	0.26	98	0.26	25.46
	Total			1.04	87.67
2	FOREST	0.00	77	0.00	0.00
	MIXED OPEN	0.00	79	0.00	0.00
	MANAGED TURF	0.27	80	0.27	21.45
	IMPERVIOUS	0.50	98	0.50	49.22
	Total			0.77	70.66
2ED1 QUALITY (OUTSIDE LOD, TO EX DETENTION)	FOREST	0.00	77	0.00	0.00
	MIXED OPEN	0.00	79	0.00	0.00
	MANAGED TURF	0.12	80	0.12	9.57
	IMPERVIOUS	0.23	98	0.23	22.81
	Total			0.35	32.38
2ED2 QUALITY (INSIDE LOD, TO EX DETENTION)	FOREST	0.00	77	0.00	0.00
	MIXED OPEN	0.00	79	0.00	0.00
	MANAGED TURF	0.03	80	0.03	2.67
	IMPERVIOUS	0.01	98	0.01	1.24
	Total			0.05	3.91
2ED1 QUANTITY (OUTSIDE LOD, TO EX DETENTION)	FOREST	0.35	77	0.35	27.13
	MIXED OPEN	0.00	79	0.00	0.00
	MANAGED TURF	0.00	80	0.00	0.00
	IMPERVIOUS	0.00	98	0.00	0.00
	Total			0.35	27.13
2ED2 QUANTITY (INSIDE LOD, TO EX DETENTION)	FOREST	0.05	77	0.05	3.54
	MIXED OPEN	0.00	79	0.00	0.00
	MANAGED TURF	0.00	80	0.00	0.00
	IMPERVIOUS	0.00	98	0.00	0.00
	Total			0.05	3.54
2BP	FOREST	0.00	77	0.00	0.00
	MIXED OPEN	0.00	79	0.00	0.00
	MANAGED TURF	0.04	80	0.04	3.36
	IMPERVIOUS	0.09	98	0.09	8.62
	Total			0.13	11.98
3	FOREST	0.00	77	0.00	0.00
	MIXED OPEN	0.00	79	0.00	0.00
	MANAGED TURF	0.46	80	0.46	36.89
	IMPERVIOUS	0.09	98	0.09	8.91
	Total			0.55	45.80
3BP	FOREST	0.00	77	0.00	0.00
	MIXED OPEN	0.00	79	0.00	0.00
	MANAGED TURF	0.00	80	0.00	0.02
	IMPERVIOUS	0.01	98	0.01	1.41
	Total			0.01	1.43
4	FOREST	0.00	77	0.00	0.00
	MIXED OPEN	0.00	79	0.00	0.00
	MANAGED TURF	0.01	80	0.01	0.91
	IMPERVIOUS	0.00	98	0.00	0.14
	Total			0.01	1.05
TOTAL LOD (QUALITY)	FOREST	0.00	77	0.00	0.00
	MIXED OPEN	0.00	79	0.00	0.00
	MANAGED TURF	1.47	80	1.47	117.93
	IMPERVIOUS	1.15	98	1.15	112.58
	Total			2.62	230.50
TOTAL LOD (QUANTITY)	FOREST	0.05	77	0.05	3.54
	MIXED OPEN	0.00	79	0.00	0.00
	MANAGED TURF	1.44	80	1.44	115.26
	IMPERVIOUS	1.14	98	1.14	111.34
	Total			2.62	230.14



THE APPLICANT RESERVES THE RIGHT TO VARY THE TYPE, NUMBER, SIZE, AND LOCATION OF THE DEPICTED STORMWATER MANAGEMENT FACILITIES ON THIS APPLICATION WITH FINAL ENGINEERING SUCH THAT THE QUALITY AND QUANTITY REQUIREMENTS ARE STILL MET FOR EACH PHASE.

PROGRAMMING AND PLANNING
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
SURVEY AND MAPPING
SECURITY CONSULTING

Gordon

4501 Daly Drive
Chantilly, VA 20151
Phone: 703-263-1900
www.gordon.us.com

REVISIONS		DESCRIPTION	NUMBER	DATE
NO.	DATE			

SUR: E. ERICKSON	DES: K. RYAN
DRW: C. LETCHWORTH	CHK: K. RYAN

SEAL:

PRE-DEVELOPMENT LAND COVER & DRAINAGE AREA MAP PHASE I

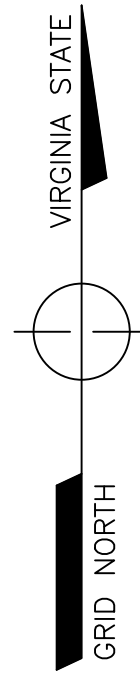
**GREEN HEDGES SCHOOL
SITE DEVELOPMENT PLAN**

TOWN OF VIENNA, VIRGINIA
TOWN OF VIENNA

HORIZ: 1" = 40'
SCALE: VERT: N/A
DATE: 10/23/25
PLAN: GREEN HEDGES SCHOOL
JOB: GORDON 2356-0501
CADD: 2356-0501-C-01-101-PH1.DWG
NCS: 2356-0501-C-01-101-PH1
NUMBER: C-0170FC-051

Gordon

SYMBOL	DESCRIPTION
	FOREST/OPEN SPACE (SEE SCHOOL NOTE BELOW)
	MANAGED TURF
	IMPERVIOUS COVER
	DRAINAGE DIVIDE
	DRAINAGE SUB-DIVIDE
	DRAINAGE AREA
	LIMITS OF DISTURBANCE
SOURCE OF TOPOGRAPHY:	WITHIN PROPERTY BOUNDARY FIELD RUN SURVEY (SEE GENERAL NOTES) OFFSITE: GIS 2 TOPO



SWM FACILITY SIZING COMPUTATION		
SUB-AREA	LAND COVER DESCRIPTION	BMP AREAS (AC)
FACILITY #2 (MTD) TOTAL	MIXED OPEN	0.00
	MANAGED TURF	0.20
	IMPERVIOUS/GRAVEL	0.56
	TOTAL	0.76
FACILITY #4 (MTD) TOTAL	MIXED OPEN	0.00
	MANAGED TURF	0.15
	IMPERVIOUS/GRAVEL	0.42
	TOTAL	0.57
TOTAL	MIXED OPEN	0.00
	MANAGED TURF	0.35
	IMPERVIOUS/GRAVEL	0.98

TOTAL	MIXED OPEN	0.00
	MANAGED TURF	0.35
	IMPERVIOUS/GRAVEL	0.98

TOTAL	MIXED OPEN	0.00
	MANAGED TURF	0.35
	IMPERVIOUS/GRAVEL	0.98

TOTAL	MIXED OPEN	0.00
	MANAGED TURF	0.35
	IMPERVIOUS/GRAVEL	0.98

POST-DEVELOPMENT RCN COMPUTATION - PHASE 1						
SUB-AREA	LAND COVER DESCRIPTION	HSG (D)		TOTAL AREA (AC)	PRODUCT AREA x RCN	SUB-AREA RCN
		AREA (AC)	RCN (Adjusted ¹)			
1D	FOREST	0.00	77	0.00	0.00	93
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.20	80	0.20	16.00	
	IMPERVIOUS	0.56	98	0.56	55.00	
	Total			0.76	71.00	
1BP	FOREST/OPEN SPACE	0.00		0.00	0.00	84
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.82	80	0.82	65.97	
	IMPERVIOUS	0.26	98	0.26	25.13	
	Total			1.08	91.10	
1UD	FOREST/OPEN SPACE	0.00	77	0.00	0.00	91
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.18	80	0.18	14.46	
	IMPERVIOUS	0.29	98	0.29	28.88	
	Total			0.48	43.34	
1 TOTAL (LOD)	FOREST/OPEN SPACE	0.00	77	0.00	0.00	92
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.38	80	0.38	30.46	
	IMPERVIOUS	0.86	98	0.86	83.88	
	Total			1.24	114.34	
2D	FOREST/OPEN SPACE	0.00	77	0.00	0.00	93
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.15	80	0.15	11.91	
	IMPERVIOUS	0.42	98	0.42	41.48	
	Total			0.57	53.39	
2ED1	FOREST/OPEN SPACE	0.00	77	0.00	0.00	92
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.12	80	0.12	9.38	
	IMPERVIOUS	0.23	98	0.23	22.61	
	Total			0.35	31.99	
2ED2 (LOD)	FOREST/OPEN SPACE	0.00	77	0.00	0.00	87
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.02	80	0.02	1.95	
	IMPERVIOUS	0.02	98	0.02	1.70	
	Total			0.04	3.65	
2BP	FOREST/OPEN SPACE	0.00	77	0.00	0.00	92
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.04	80	0.04	3.15	
	IMPERVIOUS	0.09	98	0.09	8.61	
	Total			0.13	11.76	
2UD	FOREST/OPEN SPACE	0.00	77	0.00	0.00	93
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.07	80	0.07	5.59	
	IMPERVIOUS	0.16	98	0.16	15.65	
	Total			0.23	21.25	
2 TOTAL (LOD)	FOREST/OPEN SPACE	0.00	77	0.00	0.00	93
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.24	80	0.24	19.46	
	IMPERVIOUS	0.60	98	0.60	58.83	
	Total			0.84	78.29	
3D	FOREST/OPEN SPACE	0.00	77	0.00	0.00	80
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.21	80	0.21	16.92	
	IMPERVIOUS	0.01	98	0.01	0.51	
	Total			0.22	17.43	
3BP	FOREST/OPEN SPACE	0.00	77	0.00	0.00	98
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.00	80	0.00	0.00	
	IMPERVIOUS	0.01	98	0.01	1.13	
	Total			0.01	1.13	
3UD	FOREST/OPEN SPACE	0.00	77	0.00	0.00	86
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.22	80	0.22	17.66	
	IMPERVIOUS	0.10	98	0.10	9.75	
	Total			0.32	27.41	
3 TOTAL (LOD)	FOREST/OPEN SPACE	0.00	77	0.00	0.00	84
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.43	80	0.43	34.58	
	IMPERVIOUS	0.10	98	0.10	10.26	
	Total			0.54	44.84	
4	FOREST/OPEN SPACE	0.00	77	0.00	0.00	80
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.01	80	0.01	0.44	
	IMPERVIOUS	0.00	98	0.00	0.00	
	Total			0.01	0.44	
TOTAL (LOD) (1D+1UD+2D+2ED2+2UD+3D+3UD+4D)	FOREST/OPEN SPACE	0.00	77	0.00	0.00	91
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	1.06	80	1.06	84.94	
	IMPERVIOUS	1.56	98	1.56	152.97	
	Total			2.62	237.91	

(1) MANAGED TURF AREAS UTILIZE ADJUSTED POST-DEVELOPMENT CURVE NUMBERS PER SEC. A.32.D.1. OF THE VIRGINIA SWM HANDBOOK

DETAINED (D) = AREAS WITHIN THE LOD THAT DRAIN TO A SWM FACILITY

UNDETAINED (UD) = AREAS WITHIN THE LOD THAT DO NOT DRAIN TO A SWM FACILITY

BYPASS (BP) = AREAS OUTSIDE THE LOD THAT DRAIN TO A SWM FACILITY

EXTENDED DETENTION (ED) = AREAS THAT DRAINED TO THE EXISTING EXTENDED DETENTION FACILITY

THE APPLICANT RESERVES THE RIGHT TO VARY THE TYPE, NUMBER, SIZE, AND LOCATION OF THE DEPICTED STORMWATER MANAGEMENT FACILITIES ON THIS APPLICATION WITH FINAL ENGINEERING SUCH THAT THE QUALITY AND QUANTITY REQUIREMENTS ARE STILL MET FOR EACH PHASE.

 **Gordon**

CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
SURVEY AND MAPPING
SECURITY CONSULTING

4501 Daly Drive
Chantilly, VA 20151
Phone: 703-263-1900
www.gordon.us.com

REVISION					
					2 C P C C C D
					P P C
					C S I I

MR: ERICKSON	DES: K.RYAN
MR: LETCHWORTH	CHK: K.RYAN

COMMONWEALTH OF VIRGINIA
K. Ryan
KELSEY L. RYAN
Lic. No. 59936
10/24/2025
PROFESSIONAL ENGINEER

GREEN HEDGES SCHOOL SITE DEVELOPMENT PLAN

TOWN OF VIENNA, VIRGINIA
TOWN OF VIENNA

HORIZ: 1' = 40'
SCALE: VERT: N/A
DATE: 10/24/25
PLAN: GREEN HEDGES SCHOOL
JOB: GORDON 2356-0501
ADD: 2356-0501-C-CJ-111-PH1.DWG
CS: 2356-0501-C-CJ-111-PH1
NUMBER: C-018 OF C-05



Gordon

C:\PROJECTS\N202308\GREEN HEDGES SCHOOL\06811 PLANS\0362-0681-C-03-121-9911.DWG, 15/25/2025 3:47 PM, ju VERT DATE: 16/05/2025
COPYRIGHT 2025. NO REPRODUCTION OR USE OF THIS DRAWING IS ALLOWED IN PART OR IN WHOLE BY ANY PROCESS WITHOUT PRIOR WRITTEN AUTHORIZATION FROM GORDONUS, LLC (GORDON)

Drainage Area A

VRRM 4.1, 2024

Drainage Area A Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv	Composite Loading P
Forest (acres)					0.00	0.00	0.00
Mixed Open (acres)					0.00	0.00	0.00
Managed Turf (acres)				0.38	0.38	0.25	0.85
Impervious Cover (acres)				0.86	0.86	0.95	0.86
				Total	1.24		

CLEAR BMP AREAS

Total Phosphorus Available for Removal in D.A. A (lb/yr)

Post Development Treatment Volume in D.A. A (ft³)

Stormwater Best Management Practices (RR = Runoff Reduction)

--Select from dropdown lists--

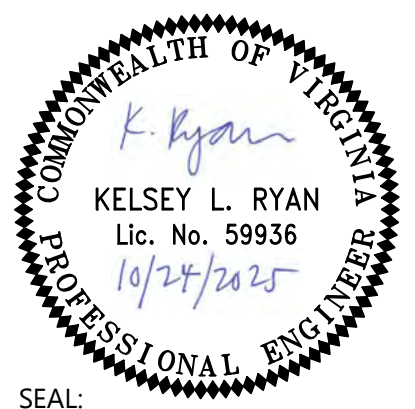
Practice	Runoff Reduction Credit (%)	Mixed Open Credit Area (acres)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft³)	Runoff Reduction (ft³)	Remaining Runoff Volume (ft³)	Total BMP Treatment Volume (ft³)	Phosphorus Removal Efficiency (%)	Phosphorus Load from Upstream Practices (lb)	Untreated Phosphorus Load to Practice (lb)	Phosphorus Removed By Practice (lb)	Remaining Phosphorus Load (lb)	Downstream Practice to be Employed
16. Manufactured Treatment Devices (no RR)														
16.b. Manufactured Treatment Device-Filtering	0		0.38	0.86	0	0	3,311	3,311	65	0.00	1.06	0.69	0.37	

Composite Loading N
0.00
0.00
9.01
12.33

Nitrogen Removal Efficiency (%)	Nitrogen Load from Upstream Practices (lbs)	Untreated Nitrogen Load to Practice (lbs)	Nitrogen Removed By Practice (lbs)	Remaining Nitrogen Load (lbs)
16. Manufactured BMP (no RR)				
0	0.00	14.03	0.00	14.03

[illegible]

SUR:	DES:
E.ERICKSON	K.HAYNER
DRW:	CHK:
C.LETCHWORTH	K.RYAN



A

WATER QUALITY COMPLIANCE

Site Results (Water Quality Compliance) VRRM 4.1, 2024

Area Checks	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	AREA CHECK
FOREST (ac)	0.00	0.00	0.00	0.00	0.00	OK.
MIXED OPEN (ac)	0.00	0.00	0.00	0.00	0.00	OK.
MIXED OPEN AREA TREATED(ac)	0.00	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA (ac)	0.38	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA TREATED (ac)	0.38	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER (ac)	0.86	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER TREATED (ac)	0.86	0.00	0.00	0.00	0.00	OK.
AREA CHECK	OK.	OK.	OK.	OK.	OK.	

Site Treatment Volume (ft³)

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 ³)	0	0	0	0	0	0
TP LOAD AVAILABLE FOR REMOVAL (lb/yr)	1.06	0.00	0.00	0.00	0.00	1.06
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.69	0.00	0.00	0.00	0.00	0.69
TP LOAD REMAINING (lb/yr)	0.37	0.00	0.00	0.00	0.00	0.37

NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)

Total Phosphorus

FINAL POST-DEVELOPMENT TP LOAD (lb/yr)	2.24
TP LOAD REDUCTION REQUIRED (lb/yr)	0.62
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.69
TP LOAD REMAINING (lb/yr):	1.55

REMAINING TP LOAD REDUCTION REQUIRED (lb/yr):

**** TARGET TP REDUCTION EXCEEDED BY 0.07 LB/YEAR ****

Total Nitrogen (For Information Purposes)

POST-DEVELOPMENT LOAD (lb/yr)	28.79
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	0.00
REMAINING POST-DEVELOPMENT NITROGEN LOAD (lb/yr)	28.79

THE APPLICANT RESERVES THE RIGHT TO UTILIZE OFFSITE COMPLIANCE OPTIONS (PURCHASE OF NUTRIENT CREDITS) FOR THE REMAINING PHOSPHORUS REMOVAL REQUIREMENTS

B

WATER QUALITY COMPLIANCE SUMMARY

THE APPLICANT RESERVES THE RIGHT TO VARY THE TYPE, NUMBER, SIZE, AND LOCATION OF THE DEPICTED STORMWATER MANAGEMENT FACILITIES ON THIS APPLICATION WITH FINAL ENGINEERING SUCH THAT THE QUALITY AND QUANTITY REQUIREMENTS ARE STILL MET FOR EACH PHASE.

WATER QUALITY COMPUTATIONS PHASE I

GREEN HEDGES SCHOOL SITE DEVELOPMENT PLAN

TOWN OF VIENNA, VIRGINIA
TOWN OF VIENNA

HORIZ:	N/A
SCALE:	VERT: N/A
DATE: 10/23/25	
PLAN: GREEN HEDGES SCHOOL	
JOB:	GORDON 2356-0501
CADD:	2356-0501-C-C-121-PH1.DWG
NCS:	2356-0501-C-C-121-PH1
NUMBER: C-020 OF C-051	



WATER QUANTITY COMPUTATIONS - PHASE 1

1-Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	2.614	1	727	6,892	-----	-----	-----	OUTFALL 1 (PRE)
2	SCS Runoff	1.971	1	727	5,384	-----	-----	-----	1D
3	SCS Runoff	1.865	1	727	4,891	-----	-----	-----	18P
4	Combine	3.837	1	727	10,276	2, 3	-----	-----	POND 1 INFLOW
5	Reservoir	0.765	1	751	10,251	4	409.21	4,215	POND 1 OUTFLOW
6	Reservoir	0.047	1	1442	177	4	410.20	10,123	POND 1 OUTFLOW (10YR)
7	SCS Runoff	1.153	1	727	3,090	-----	-----	-----	1UD
8	Combine	1.678	1	728	13,342	5, 7	-----	-----	OUTFALL 1 (POST)
9	Combine	1.153	1	727	3,268	6, 7,	-----	-----	OUTFALL 1 (POST-10YR)
11	SCS Runoff	1.924	1	727	5,202	-----	-----	-----	OUTFALL 2 (PRE)
12	SCS Runoff	0.452	1	727	1,223	-----	-----	-----	2ED (PRE)
13	SCS Runoff	1.479	1	727	4,038	-----	-----	-----	2D
14	SCS Runoff	0.937	1	727	2,511	-----	-----	-----	2ED
15	SCS Runoff	0.325	1	727	878	-----	-----	-----	2BP
16	Combine	2.740	1	727	7,428	13, 14, 15	-----	-----	POND 2 INFLOW
17	Reservoir	0.000	1	n/a	0	16	409.75	7,428	POND 2 OUTFLOW
18	Reservoir	1.129	1	734	7,007	16	102.14	1,796	POND 2 OUTFLOW (10YR)
19	SCS Runoff	0.597	1	727	1,630	-----	-----	-----	2UD
20	Combine	0.597	1	727	1,630	17, 19	-----	-----	OUTFALL 2 (POST)
21	Combine	1.595	1	728	8,637	18, 19,	-----	-----	OUTFALL 2 (POST-10YR)
23	SCS Runoff	0.900	1	727	2,362	-----	-----	-----	OUTFALL 3 (PRE)
24	SCS Runoff	0.302	1	727	801	-----	-----	-----	3D
25	SCS Runoff	0.030	1	727	89	-----	-----	-----	3BP
26	Combine	0.332	1	727	891	24, 25	-----	-----	POND 3 INFLOW
27	Reservoir	0.142	1	734	887	26	100.27	226	POND 3 OUTFLOW
28	Reservoir	0.190	1	732	813	26	100.80	234	POND 3 OUTFLOW (10YR)
29	SCS Runoff	0.613	1	727	1,608	-----	-----	-----	3UD
30	Combine	0.701	1	728	2,494	27, 29	-----	-----	OUTFALL 3 (POST)
31	Combine	0.690	1	727	2,421	28, 29,	-----	-----	OUTFALL 3 (POST-10YR)
33	SCS Runoff	0.015	1	727	41	-----	-----	-----	SHEETFLOW 4 (PRE)
34	SCS Runoff	0.014	1	727	36	-----	-----	-----	SHEETFLOW 4 (POST)
2356-0501 Quantity-PH1.gpw			Return Period: 1 Year			Thursday, 10 / 23 / 2025			

WATER QUANTITY COMPLIANCE (OUTFALL 1) - PHASE 1

	CHANNEL PROTECTION	
	1-year	
	PRE	POST
LOD AREA (acre) =	1.24	1.24
P (in)	2.62	2.62
CN ⁽¹⁾	88	92
S=1000/CN-10	1.36	0.87
0.2S	0.27	0.17
RV=(P-0.2S) ² /(P-0.2S)+S (in)	1.48	1.80

(1) PRE CN on Sheet C-017; POST CN on Sheet C-018

(2) $Q_{\text{Allowable}} \leq \text{I.F.} \cdot (Q_{\text{pre-development}} \cdot RV_{\text{pre-development}} \cdot \text{Area}_{\text{pre-development}}) / (RV_{\text{Developed}} \cdot \text{Area}_{\text{developed}})$

(3) $Q_{\text{Allowable}} \leq Q_{\text{pre-development}}$

CHANNEL PROTECTION (1-YR)		0.8
$Q_{\text{pre-development}}$ (cfs) for LOD		2.61
$Q_{\text{allowable}}$ (cfs) for LOD ⁽²⁾		1.72
Total Pre-development Bypass Flow (cfs)		1.87
$Q_{\text{allowable}}$ (cfs) + Bypass Flow (cfs)		3.59
$Q_{\text{allowable}}$ (cfs) for Outfall		
$Q_{\text{post Development}}$ (cfs) for Outfall		1.68

	FLOOD PROTECTION	
	10-year	
	PRE	POST
LOD AREA (acre) =	1.24	1.24
P (in)	4.87	4.87
CN ⁽¹⁾	88	92
S=1000/CN-10	1.36	0.87
0.2S	0.27	0.17
RV=(P-0.2S) ² /(P-0.2S)+S (in)	3.55	3.96

FLOOD PROTECTION (10-YR)		
$Q_{pre-development}$ (cfs) for LOD		6.01
$Q_{Allowable}$ (cfs) for LOD ⁽³⁾		6.01
Total Pre-development Bypass Flow (cfs)		4.57
$Q_{Allowable}$ (cfs) + Bypass Flow (cfs)		
$Q_{Allowable}$ (cfs) for Outfall		10.59
$Q_{Post Development}$ (cfs) for Outfall		3.94

WATER QUANTITY COMPLIANCE (OUTFALL 3) - PHASE 1

	CHANNEL PROTECTION	
	1-year	
	PRE	POST
LOD AREA (acre) =	0.55	0.54
P (in)	2.62	2.62
CN ⁽¹⁾	83	84
S=1000/CN-10	2.05	1.90
0.2S	0.41	0.38
RV=(P-0.2S) ² /(P-0.2S)+S (in)	1.15	1.21

(1) PRE CN on Sheet C-017; POST CN on Sheet C-018

(2) $Q_{\text{Allowable}} \leq \text{I.F.} \cdot (Q_{\text{pre-development}} \cdot RV_{\text{pre-development}} \cdot \text{Area}_{\text{pre-development}}) / (RV_{\text{Developed}} \cdot \text{Area}_{\text{developed}})$

(3) $Q_{\text{Allowable}} \leq Q_{\text{pre-development}}$

IF		0.9
CHANNEL PROTECTION (1-YR)		
$Q_{pre-development}$ (cfs) for LOD		0.90
$Q_{Allowable}$ (cfs) for LOD ⁽²⁾		0.78
Total Pre-development Bypass Flow (cfs)		0.03
$Q_{Allowable}$ (cfs) + Bypass Flow (cfs)		0.81
$Q_{Allowable}$ (cfs) for Outfall		
$Q_{Post Development}$ (cfs) for Outfall		0.70

	FLOOD PROTECTION	
	10-year	
	PRE	POST
LOD AREA (acre) =	0.55	0.54
P (in)	4.87	4.87
CN ⁽¹⁾	83	84
S=1000/CN-10	2.05	1.90
0.41	0.38	
3.06	3.15	

FLOOD PROTECTION (10-YR)		
$Q_{\text{pre-development}}$ (cfs) for LOD		2.36
$Q_{\text{Allowable}}$ (cfs) for LOD ⁽³⁾		2.36
Total Pre-development Bypass Flow (cfs)		0.06
$Q_{\text{Allowable}}$ (cfs) + Bypass Flow (cfs)		2.42
$Q_{\text{Allowable}}$ (cfs) for Outfall		2.42
$Q_{\text{Post Development}}$ (cfs) for Outfall		2.28

2-Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	3.438	1	727	9,145	-----	-----	-----	OUTFALL 1 (PRE)
2	SCS Runoff	2.481	1	727	6,876	-----	-----	-----	1D
3	SCS Runoff	2.552	1	727	6,700	-----	-----	-----	18P
4	Combine	5.033	1	727	13,576	2, 3	-----	-----	POND 1 INFLOW
5	Reservoir	1.250	1	742	13,551	4	409.40	5,371	POND 1 OUTFLOW
6	Reservoir	0.193	1	872	3,478	4	410.22	10,204	POND 1 OUTFLOW (10YR)
7	SCS Runoff	1.476	1	727	4,007	-----	-----	-----	1UD
8	Combine	2.223	1	728	17,558	5, 7	-----	-----	OUTFALL 1 (POST)
9	Combine	1.476	1	727	7,485	6, 7,	-----	-----	OUTFALL 1 (POST-10YR)
11	SCS Runoff	2.442	1	727	6,693	-----	-----	-----	OUTFALL 2 (PRE)
12	SCS Runoff	0.673	1	727	1,783	-----	-----	-----	2ED (PRE)
13	SCS Runoff	1.861	1	727	5,157	-----	-----	-----	2D
14	SCS Runoff	1.199	1	727	3,256	-----	-----	-----	2ED
15	SCS Runoff	0.412	1	727	1,130	-----	-----	-----	2BP
16	Combine	3.473	1	727	9,543	13, 14, 15	-----	-----	POND 2 INFLOW
17	Reservoir	0.000	1	n/a	0	16	410.11	9,543	POND 2 OUTFLOW
18	Reservoir	1.322	1	734	9,123	16	102.76	2,315	POND 2 OUTFLOW (10YR)
19	SCS Runoff	0.751	1	727	2,081	-----	-----	-----	2UD
20	Combine	0.751	1	727	2,081	17, 19	-----	-----	OUTFALL 2 (POST)
21	Combine	1.912	1	728	11,204	18, 19,	-----	-----	OUTFALL 2 (POST-10YR)
23	SCS Runoff	1.244	1	727	3,263	-----	-----	-----	OUTFALL 3 (PRE)
24	SCS Runoff	0.432	1	727	1,136	-----	-----	-----	3D
25	SCS Runoff	0.036	1	727	110	-----	-----	-----	3BP
26	Combine	0.469	1	727	1,246	24, 25	-----	-----	POND 3 INFLOW
27	Reservoir	0.232	1	733	1,242	26	100.36	304	POND 3 OUTFLOW
28	Reservoir	0.377	1	730	1,168	26	100.86	269	POND 3 OUTFLOW (10YR)
29	SCS Runoff	0.821	1	727	2,167	-----	-----	-----	3UD
30	Combine	0.984	1	728	3,409	27, 29	-----	-----	OUTFALL 3 (POST)
31	Combine	1.132	1	728	3,335	28, 29,	-----	-----	OUTFALL 3 (POST-10YR)
33	SCS Runoff	0.022	1	727	57	-----	-----	-----	SHEETFLOW 4 (PRE)
34	SCS Runoff	0.020	1	727	52	-----	-----	-----	SHEETFLOW 4 (POST)
2356-0501 Quantity-PH1.gpw			Return Period: 2 Year			Thursday, 10 / 23 / 2025			

WATER QUANTITY COMPLIANCE (OUTFALL 2) - PHASE 1

	CHANNEL PROTECTION	
	1-year	
	PRE	POST
LOD AREA (acre) =	0.82	0.84
P (in)	2.62	2.62
CN ⁽¹⁾	90	93
S=1000/CN-10	1.11	0.75
0.2S	0.22	0.15
RV=(P-0.2S) ² /(P-0.2S)+S (in)	1.64	1.89

(1) PRE CN on Sheet C-017; POST CN on Sheet C-018

(2) $Q_{\text{Allowable}} \leq \text{I.F.} \cdot (Q_{\text{pre-development}} \cdot RV_{\text{pre-development}} \cdot \text{Area}_{\text{pre-development}}) / (RV_{\text{Developed}} \cdot \text{Area}_{\text{developed}})$

(3) $Q_{\text{Allowable}} \leq Q_{\text{pre-development}}$

IF		0.9
CHANNEL PROTECTION (1-YR)		
$Q_{\text{pre-development}}$ (cfs) for LOD		2.38
$Q_{\text{Allowable}}$ (cfs) for LOD ⁽²⁾		1.81
Total Pre-development Bypass Flow (cfs)		0.33
$Q_{\text{Allowable}}$ (cfs) + Bypass Flow (cfs)		2.13
$Q_{\text{Allowable}}$ (cfs) for Outfall		
$Q_{\text{Post Development}}$ (cfs) for Outfall		0.60

WATER QUANTITY COMPLIANCE (SUB-AREA 4) - PHASE 1

	CHANNEL PROTECTION	
	1-year	
	PRE	POST
LOD AREA (acre) =	0.01	0.01
P (in)	2.62	2.62
CN ⁽¹⁾	82	80
S=1000/CN-10	2.20	2.50
0.2S	0.44	0.50
RV=(P-0.2S) ² /(P-0.2S)+S (in)	1.09	0.97

10-YR:

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	6.014	1	727	16,458	-----	-----	-----	OUTFALL 1 (PRE)
2	SCS Runoff	4.041	1	727	11,580	-----	-----	-----	1D
3	SCS Runoff	4.764	1	727	12,742	-----	-----	-----	1BP
4	Combine	8.805	1	727	24,322	2, 3	-----	-----	POND 1 INFLOW
5	Reservoir	3.175	1	735	24,293	4	409.94	8,573	POND 1 OUTFLOW
6	Reservoir	2.722	1	736	14,224	4	410.50	11,895	POND 1 OUTFLOW (10YR)
7	SCS Runoff	2.470	1	727	6,929	-----	-----	-----	1UD
8	Combine	4.702	1	728	31,221	5, 7	-----	-----	OUTFALL 1 (POST)
9	Combine	3.936	1	731	21,152	6, 7,	-----	-----	OUTFALL 1 (POST-10YR)
11	SCS Runoff	4.031	1	727	11,421	-----	-----	-----	OUTFALL 2 (PRE)
12	SCS Runoff	1.435	1	727	3,765	-----	-----	-----	2ED (PRE)
13	SCS Runoff	3.031	1	727	8,685	-----	-----	-----	2D
14	SCS Runoff	2.007	1	727	5,629	-----	-----	-----	2ED
15	SCS Runoff	0.680	1	727	1,928	-----	-----	-----	2BP
16	Combine	5.718	1	727	16,243	13, 14, 15	-----	-----	POND 2 INFLOW
17	Reservoir	0.639	1	764	6,144	16	410.26	10,447	POND 2 OUTFLOW
18	Reservoir	4.095	1	731	15,823	16	103.79	3,186	POND 2 OUTFLOW (10YR)
19	SCS Runoff	1.223	1	727	3,504	-----	-----	-----	2UD
20	Combine	1.223	1	727	9,649	17, 19	-----	-----	OUTFALL 2 (POST)
21	Combine	5.075	1	729	19,327	18, 19,	-----	-----	OUTFALL 2 (POST-10YR)
23	SCS Runoff	2.363	1	727	6,293	-----	-----	-----	OUTFALL 3 (PRE)
24	SCS Runoff	0.868	1	727	2,289	-----	-----	-----	3D
25	SCS Runoff	0.056	1	727	173	-----	-----	-----	3BP
26	Combine	0.924	1	727	2,463	24, 25	-----	-----	POND 3 INFLOW
27	Reservoir	0.475	1	733	2,459	26	100.65	548	POND 3 OUTFLOW
28	Reservoir	0.853	1	729	2,385	26	100.95	336	POND 3 OUTFLOW (10YR)
29	SCS Runoff	1.483	1	727	4,008	-----	-----	-----	3UD
30	Combine	1.884	1	727	6,467	27, 29	-----	-----	OUTFALL 3 (POST)
31	Combine	2.284	1	727	6,393	28, 29,	-----	-----	OUTFALL 3 (POST-10YR)
33	SCS Runoff	0.042	1	727	111	-----	-----	-----	SHEETFLOW 4 (PRE)
34	SCS Runoff	0.039	1	727	104	-----	-----	-----	SHEETFLOW 4 (POST)
2356-0501 Quantity-PH1.gpw					Return Period: 10 Year			Thursday, 10 / 23 / 2025	



PROPOSED 6' H. WOOD FENCE
TO MATCH EXISTING WOOD FENCE ON SITE



GREEN HEDGES SCHOOL
415 WINDOVER AVE NW
VIENNA, VA
TOWN OF VIENNA

CLIENT
GREEN HEDGES SCHOOL -
THE STONE HOUSE GROUP

Studio39
LANDSCAPE ARCHITECTURE, P.C.
5810 KINGSTOWNE CENTER DRIVE
SUITE 120, #769
ALEXANDRIA, VA 22315-5711
703.719.6500 | STUDIO39.COM

SEAL/SIGNATURE

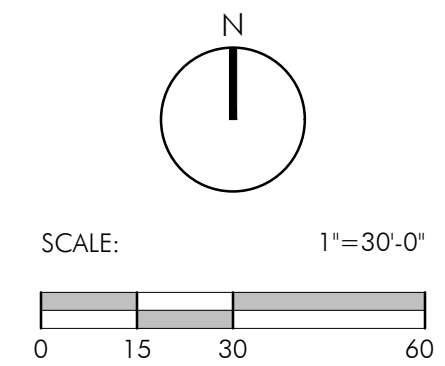
JOSEPH J. PLUMPE
Lic. No. 000802
10.30.25
LANDSCAPE ARCHITECT

ISSUE DATE
LANDSCAPE PLAN 07.25.2025
LANDSCAPE PLAN 10.30.2025

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, ARE AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF STUDIO39 LANDSCAPE ARCHITECTURE, P.C., AND IS NOT TO BE COPIED, REPRODUCED, OR USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF STUDIO39 LANDSCAPE ARCHITECTURE, P.C.
© STUDIO39 LANDSCAPE ARCHITECTURE, P.C.

PROJECT NUMBER: 25009
CONTACT: JOSEPH PLUMPE
DRAWN: YJ
APPROVED/CHECKED: JP

ORIENTATION AND SCALE



SHEET TITLE
**PROPOSED
LANDSCAPE PLAN-
PHASE I**

SHEET NUMBER
C-022

SITE DEVELOPMENT PLAN



PHASE 1- PLANTING SCHEDULE					
KEY	CATEGORY	CALIPER/ HEIGHT	CREDIT	MULTIFAMILY QTY	
				TOTAL	SUBTOTAL
	BOUNDARY OF EXISTING CANOPIES TO REMAIN COUNTED IN TREE CANOPY CALCULATIONS	N/A	11,046 S.F.		
	LARGE CANOPY TREES	2" min. 10'-12'	300	59	17,700
	LARGE CANOPY TREES - HAND PLANTED TO AVOID SITE DISTURBANCE	2" min. 10'-12'	300	22	6,600
	UNDERSTORY PLANTING	2" min. 10'-12'	200	17	3,400
	UNDERSTORY PLANTING - HAND PLANTED TO AVOID SITE DISTURBANCE	2" min. 10'-12'	200	27	5,400
	SHRUBS	N/A	N/A	233	
TOTAL CANOPY COVERAGE					33,100

NOTE: ONLY TREES WITHIN PROPERTY LINE ARE CALCULATED IN THE TREE CANOPY CALCULATIONS. TREES OFFSITE ARE NOT INCLUDED IN THE TREE CANOPY CALCULATIONS.

PLAN

01 PHASE I - KEY PLAN
C-023 Scale: 1"=60'-0"

PLANTING POOL:

Large Canopy Trees:			
Common	Scientific	Plant size	20-Year Canopy Credit Allowance (CCA)
Name	Name		2.0" Caliper/8' Height
Red Maple	<i>Acer rubrum</i>	3"-3 1/2" Cal., 14'-16' H.	300
River Birch	<i>Betula nigra</i>	3"-3 1/2" Cal., 14'-16' H.	300
Hackberry	<i>Celtis occidentalis</i>	3"-3 1/2" Cal., 14'-16' H.	300
London Planetree	<i>Platanus x acerifolia</i>	3"-3 1/2" Cal., 14'-16' H.	300
Swamp White Oak	<i>Quercus bicolor</i>	3"-3 1/2" Cal., 14'-16' H.	300
Bur Oak	<i>Quercus macrocarpa</i>	3"-3 1/2" Cal., 14'-16' H.	300
Swamp Chestnut	<i>Quercus michauxii</i>	3"-3 1/2" Cal., 14'-16' H.	300
Pin Oak	<i>Quercus palustris</i>	3"-3 1/2" Cal., 14'-16' H.	300
Willow Oak	<i>Quercus phellos</i>	3"-3 1/2" Cal., 14'-16' H.	300
Northern Red Oak	<i>Quercus rubra</i>	3"-3 1/2" Cal., 14'-16' H.	300
Post Oak	<i>Quercus stellata</i>	3"-3 1/2" Cal., 14'-16' H.	300
American Linden	<i>Tilia americana</i>	3"-3 1/2" Cal., 14'-16' H.	300
Japanese Zelkova	<i>Zelkova serrata</i>	3"-3 1/2" Cal., 14'-16' H.	300
Understory Trees:			
Common	Scientific	Plant size	20-Year Canopy Credit Allowance (CCA)
Name	Name		2.0" Caliper/8' Height
Atlas Cedar	<i>Cedrus atlantica</i>	2" Cal., 8' H.	200
Deodar Cedar	<i>Cedrus deodara</i>	2" Cal., 8' H.	200
Eastern Redbud	<i>Cercis canadensis</i>	2" Cal., 8' H.	200
Yellowwood	<i>Cladrastis kentuckia</i>	2" Cal., 8' H.	200
Nellie Stevens holly	<i>Ilex x 'Nellie Stevens'</i>	2" Cal., 8' H.	200
Crape myrtle	<i>Lagerstroemia indica</i>	2" Cal., 8' H.	200
Saucer Magnolia	<i>Magnolia soulangiana</i>	2" Cal., 8' H.	200
Star Magnolia	<i>Magnolia stellata</i>	2" Cal., 8' H.	200
Kwansan cherry	<i>Prunus serrulata</i>	2" Cal., 8' H.	200

Shrubs:	
Common	Scientific
Name	Name
Wax Myrtle	<i>Morella cerifera</i>)
Inkberry Holly	<i>Ilex glabra</i>
Winterberry Holly	<i>Ilex verticillata</i>
American Holly	<i>Ilex opaca</i>
Virginia Sweetspire	<i>Itea virginica</i>
Fragrant Sumac	<i>Rhus aromatica</i>
Arrowwood Viburnum	<i>Viburnum dentatum</i>
Buttonbush	<i>Cephalanthus occidentalis</i>

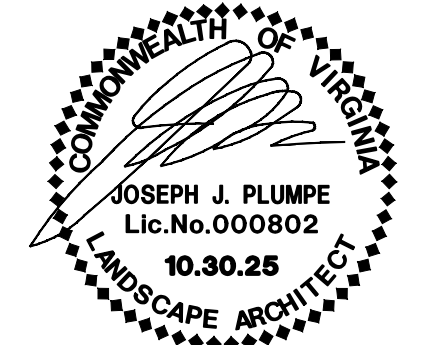
Canopy Coverage Analysis		
Instructions: Cells shaded green are for user inputs. For issues contact TOV Urban Forester.		
Row	Project Address and/or Munis #:	
A1	Gross site area sq. ft.	187,268
A2	Pre-development canopy coverage sq. ft.	35,287
A3	Percentage of gross site area covered by existing tree canopy (A2/A1)	18.8%
A4	Zone	RS-12.5
A5	Percentage of 20-year Tree Canopy required for site (see zoning chart)	25%
A6	Minimum 20-year Tree Canopy required for site sq. ft. (A1xA5)	46,817
A7	Tree Preservation Target (minimum tree canopy area required via tree preservation) sq. ft. (A3xA6)	8,822
A8	Tree canopy that will be provided through tree preservation sq. ft.	11,046
A10	Has the Tree Preservation Target minimum been met? (A8> or =A7)	Yes
A11	If No, then submit a request to deviate from the Tree Preservation Target. Including a site-specific explanation of why the Tree Preservation Target cannot be met. Provide sheet number where deviation request is located.	Narrative
B1	Canopy from retained trees that qualify for credit sq. ft. (A8)	11,046
B2	Tree Preservation multiplier 1.25 (B1x0.25)	2,762
B3	Forest Communities multiplier 1.5 (B1x0.5) (see 17-1003(d))	0
B4	Total preserved canopy including multipliers sq. ft. (B1+B2+B3)	13,808
C1	Canopy area that must be met with tree planting (A6-B4)	33,010
C2	Tree Canopy area to be met through tree planting with multipliers (See Sheet Planting Plan:N1)	33,100
D1	Total canopy area provided through tree preservation sq. ft. (B4)	13,808
D2	Total canopy area provided through tree planting sq. ft (C2)	33,100
D3	Total 20 year canopy coverage provided (D1+D2)	46,908
D4	Total minimum 20 year canopy coverage required (A6)	46,817
D5	Are canopy coverage requirements met?	Yes
D6	If No, then submit a request to contribute to the Tree Fund to cover the unmet portion of the required minimum tree canopy coverage.	Narrative

GREEN HEDGES SCHOOL
415 WINDOVER AVE NW
VIENNA, VA
TOWN OF VIENNA

CLIENT
GREEN HEDGES SCHOOL -
THE STONE HOUSE GROUP

STUDIO39
LANDSCAPE ARCHITECTURE, P.C.
5810 KINGSTOWNE CENTER DRIVE
SUITE 120, #769
ALEXANDRIA, VA 22315-5711
703.719.6500 | STUDIO39.COM

SEAL/SIGNATURE

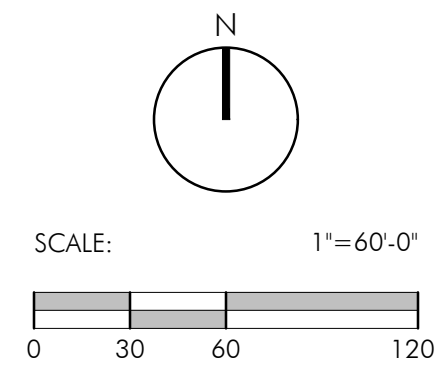


ISSUE DATE
LANDSCAPE PLAN 07.25.2025
LANDSCAPE PLAN 10.30.2025

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, ARE THE PROPERTY OF STUDIO39 LANDSCAPE ARCHITECTURE, P.C. AND IS NOT TO BE COPIED, REPRODUCED, OR USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF STUDIO39 LANDSCAPE ARCHITECTURE, P.C.

PROJECT NUMBER: 25009
CONTACT: JOSEPH PLUMPE
DRAWN: YJ
APPROVED/CHECKED: JP

ORIENTATION AND SCALE



SHEET TITLE
TREE CANOPY CALCULATIONS-
PHASE I

SHEET NUMBER

C-023

SITE DEVELOPMENT PLAN

EXISTING

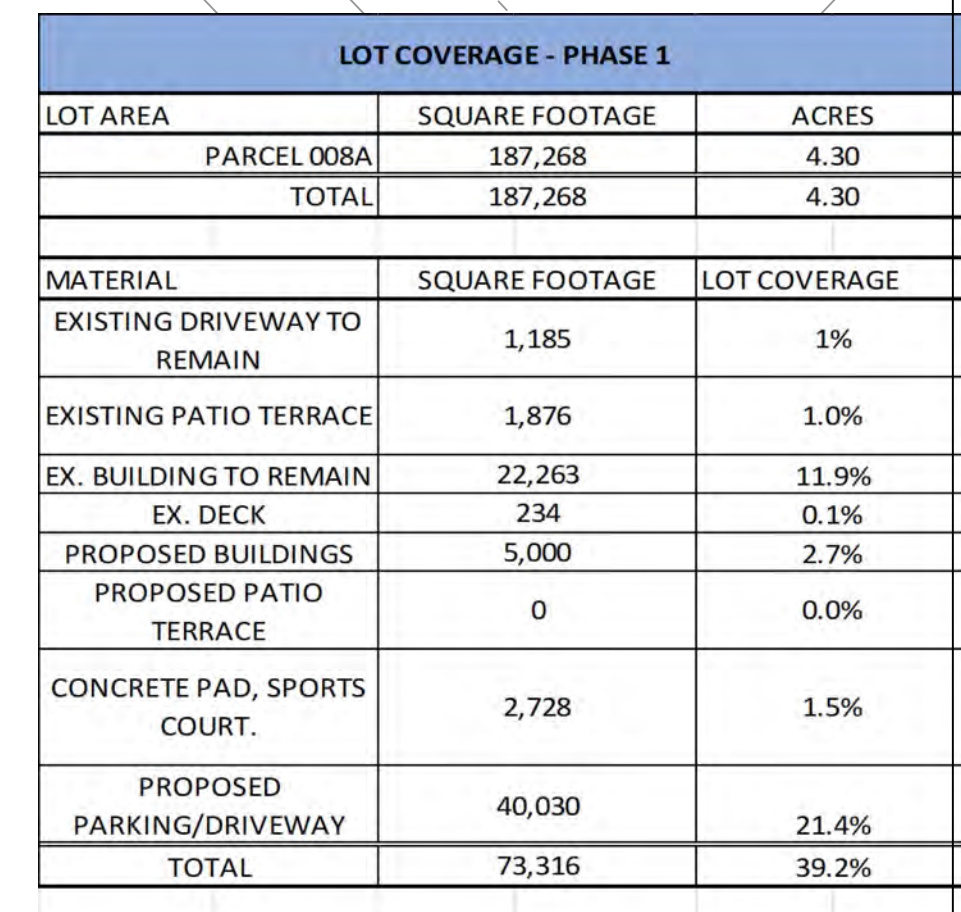
EXISTING BUILDING

PATIO TERRACE

WOOD DECK

PARKING/DRIVEWAY

 PROPOSED BUILDINGS
 PARKING/DRIVEWAY
 CONCRETE PAD

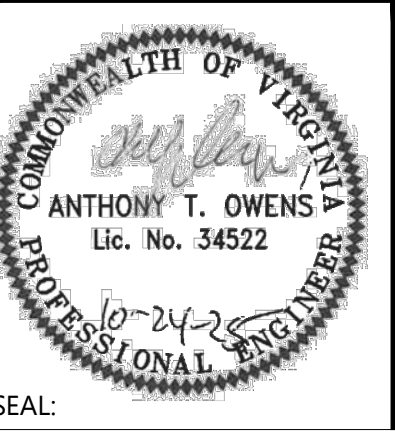


Gordon
4501 Daly Drive
Chantilly, VA 20151
Phone: 703-263-1900
www.gordon.us.com

CIVIL ENGINEERING
PROGRAMMING AND PLANNING
LANDSCAPE ARCHITECTURE
SURVEY AND MAPPING
SECURITY CONSULTING

[illegible]

MR: ERICKSON	DES: A.OWENS
MR: BARRY	CHK: A.SARANT



LOT COVERED BY TRACT 1

**GREEN HEDGES SCHOOL
SITE DEVELOPMENT PLAN**

TOWN OF VIENNA, VIRGINIA
TOWN OF VIENNA

HORIZ:	1' = 30'
SCALE: VERT:	N/A
DATE:	10/24/25
PLAN:	GREEN HEDGES SCHOOL
DOB:	GORDON 2356-0501
ADD:	2356-0501-C-GC-112-PH1.DWG
CS:	2356-0501-C-GC-112-PH1
JM:	C-0240FC-051

 **Gordon**

© 2025 GORDON GREEN HEDGES SCHOOL SITE DEVELOPMENT. ALL RIGHTS RESERVED. NO REPRODUCTION OR USE OF THIS DRAWING IS ALLOWED IN WHOLE OR IN PART WITHOUT WRITTEN AUTHORIZATION FROM GORDONUS LLC OR GORDON.

THIS SHEET WAS LEFT
BLANK INTENTIONALLY



PROGRAMMING AND PLANNING

CIVIL ENGINEERING

LANDSCAPE ARCHITECTURE

SURVEY AND MAPPING

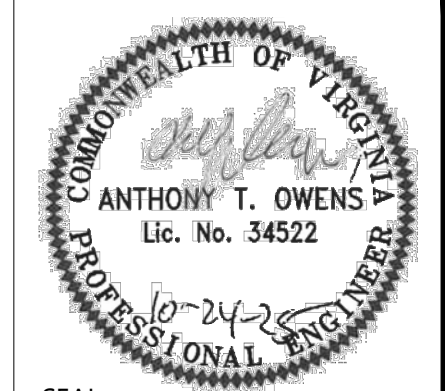
SECURITY CONSULTING

Gordon

4501 Daly Drive
Chantilly, VA 20151
Phone: 703-263-1900
www.gordon.us.com

REVISIONS				
NUMBER	DATE	DESCRIPTION		

SUR: E.ERICKSON	DES: A.OWENS
DRW: H.BARRY	CHK: A.SARANT



SEAL:

CIRCULATION PLAN PHASE I

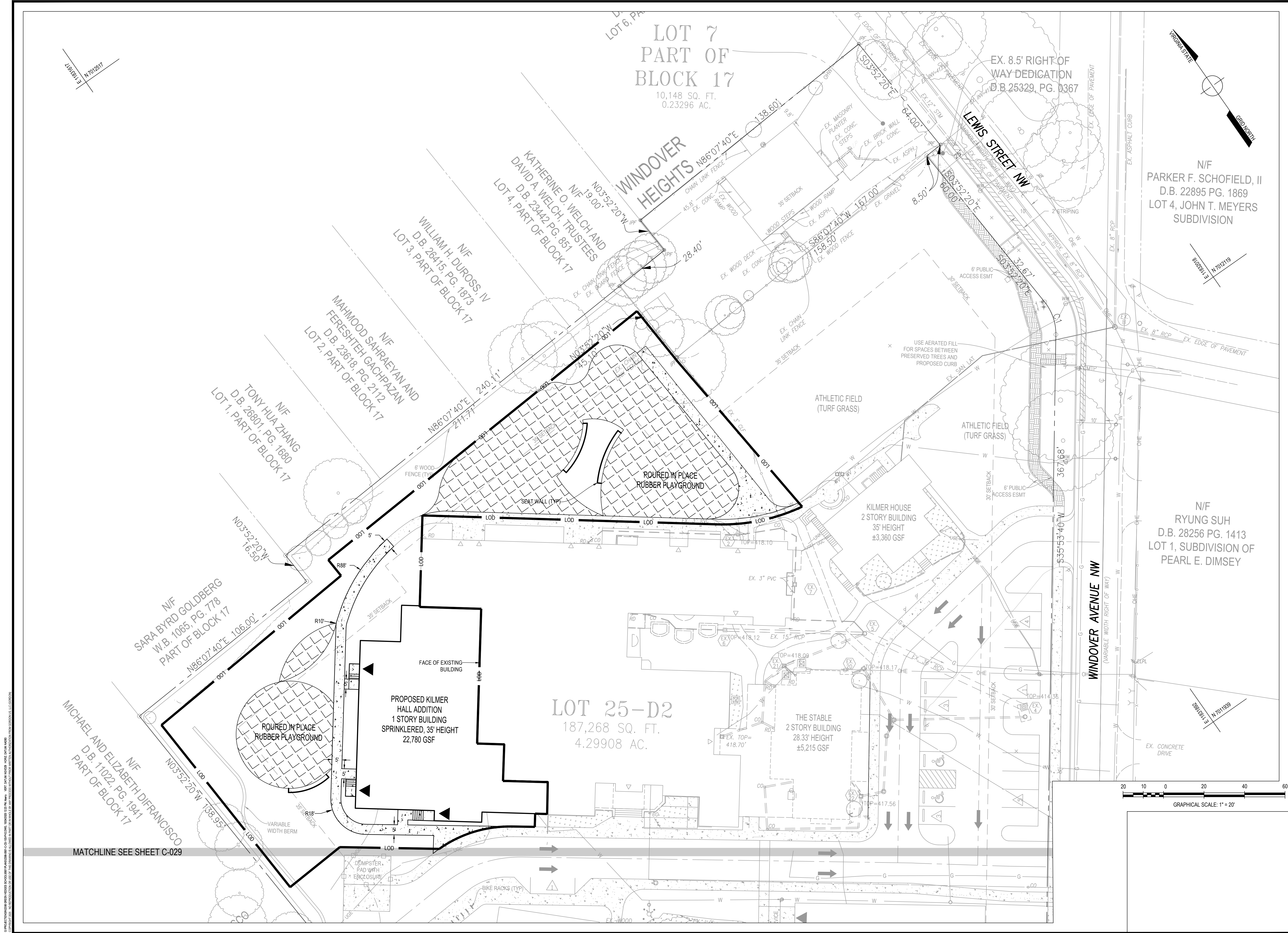
GREEN HEDGES SCHOOL
SITE DEVELOPMENT PLAN

TOWN OF VIENNA, VIRGINIA
TOWN OF VIENNA

HORIZ: 1" = 30'
SCALE: VERT: N/A
DATE: 10/24/25
PLAN: GREEN HEDGES SCHOOL
JOB: GORDON 2356-0501
CADD: 2356-0501-C-CS-104-PH1.DWG
NCS: 2356-0501-C-CS-104-PH1
NUMBER: C-0250FC-051



Gordon



PROGRAMMING AND PLANNING

CIVIL ENGINEERING

LANDSCAPE ARCHITECTURE

SURVEY AND MAPPING

SECURITY CONSULTING

Gordon

4501 Daly Drive

Chantilly, VA 20151

Phone: 703-263-1900

www.gordon.us.com

REVISIONS

NUMBER	DATE	DESCRIPTION

SUR: E.ERICKSON

DES: A.AOWENS

DRW: H.BARRY

CHK: A.SARANT

COMMONWEALTH OF VIRGINIA

ANTHONY T. OWENS

Lic. No. 34522

PROFESSIONAL ENGINEER

SEAL:

SITE AND UTILITY PLAN PHASE II

GREEN HEDGES SCHOOL

SITE DEVELOPMENT PLAN

TOWN OF VIENNA, VIRGINIA

TOWN OF VIENNA

HORIZ: 1" = 20'

SCALE: VERT: N/A

DATE: 10/24/25

PLAN: GREEN HEDGES SCHOOL

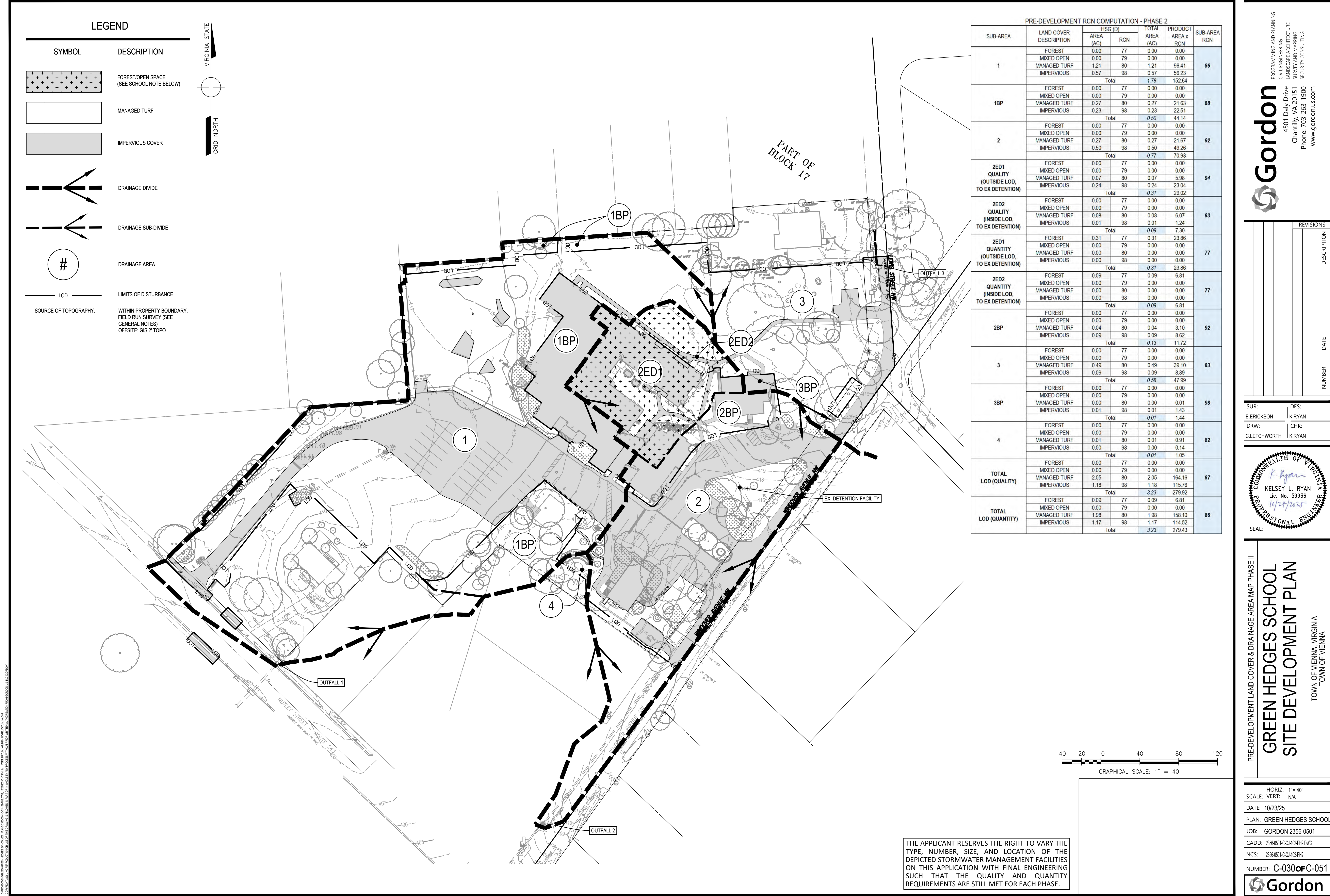
JOB: GORDON 2356-0501

CADD: 2356-0501-C-05-103-PH2.DWG

NCS: 2356-0501-C-05-103-PH2

NUMBER: C-0280FC-051

Gordon



LEGEND

SYMBOL

DESCRIPTION

FOREST/OPEN SPACE
(SEE SCHOOL NOTE BELOW)

MANAGED TURF

IMPERVIOUS COVER

DRAINAGE DIVIDE

DRAINAGE SUB-DIVIDE

#

DRAINAGE AREA

LOD

LIMITS OF DISTURBANCE

SOURCE OF TOPOGRAPHY:

WITHIN PROPERTY BOUNDARY:
FIELD RUN SURVEY (SEE
GENERAL NOTES)
OFFSITE: GIS 2 TOPO

VIRGINIA STATE
GRID NORTH

PRE-DEVELOPMENT RCN COMPUTATION - PHASE 2						
SUB-AREA	LAND COVER DESCRIPTION	AREA (AC)	RCN	TOTAL AREA (AC)	PRODUCT AREA x RCN	SUB-AREA RCN
1	FOREST	0.00	77	0.00	0.00	86
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	1.21	80	1.21	96.41	
	IMPERVIOUS	0.57	98	0.57	56.23	
	Total			1.78	152.64	
1BP	FOREST	0.00	77	0.00	0.00	88
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.27	80	0.27	21.63	
	IMPERVIOUS	0.23	98	0.23	22.51	
	Total			0.50	44.14	
2	FOREST	0.00	77	0.00	0.00	92
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.27	80	0.27	21.67	
	IMPERVIOUS	0.50	98	0.50	49.26	
	Total			0.77	70.93	
2ED1 QUALITY (OUTSIDE LOD, TO EX DETENTION)	FOREST	0.00	77	0.00	0.00	94
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.07	80	0.07	5.98	
	IMPERVIOUS	0.24	98	0.24	23.04	
	Total			0.31	29.02	
2ED2 QUALITY (INSIDE LOD, TO EX DETENTION)	FOREST	0.00	77	0.00	0.00	83
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.08	80	0.08	6.07	
	IMPERVIOUS	0.01	98	0.01	1.24	
	Total			0.09	7.30	
2ED1 QUANTITY (OUTSIDE LOD, TO EX DETENTION)	FOREST	0.31	77	0.31	23.86	77
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.00	80	0.00	0.00	
	IMPERVIOUS	0.00	98	0.00	0.00	
	Total			0.31	23.86	
2ED2 QUANTITY (INSIDE LOD, TO EX DETENTION)	FOREST	0.09	77	0.09	6.81	77
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.00	80	0.00	0.00	
	IMPERVIOUS	0.00	98	0.00	0.00	
	Total			0.09	6.81	
2BP	FOREST	0.00	77	0.00	0.00	92
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.04	80	0.04	3.10	
	IMPERVIOUS	0.09	98	0.09	8.82	
	Total			0.13	11.72	
3	FOREST	0.00	77	0.00	0.00	83
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.49	80	0.49	39.10	
	IMPERVIOUS	0.09	98	0.09	8.89	
	Total			0.58	47.99	
3BP	FOREST	0.00	77	0.00	0.00	98
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.00	80	0.00	0.01	
	IMPERVIOUS	0.01	98	0.01	1.43	
	Total			0.01	1.44	
4	FOREST	0.00	77	0.00	0.00	82
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.01	80	0.01	0.91	
	IMPERVIOUS	0.00	98	0.00	0.14	
	Total			0.01	1.05	
TOTAL LOD (QUALITY)	FOREST	0.00	77	0.00	0.00	87
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	2.05	80	2.05	164.16	
	IMPERVIOUS	1.18	98	1.18	115.76	
	Total			3.23	279.92	
TOTAL LOD (QUANTITY)	FOREST	0.09	77	0.09	6.81	86
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	1.98	80	1.98	158.10	
	IMPERVIOUS	1.17	98	1.17	114.52	
	Total			3.23	279.43	

THE APPLICANT RESERVES THE RIGHT TO VARY THE TYPE, NUMBER, SIZE, AND LOCATION OF THE DEPICTED STORMWATER MANAGEMENT FACILITIES ON THIS APPLICATION WITH FINAL ENGINEERING SUCH THAT THE QUALITY AND QUANTITY REQUIREMENTS ARE STILL MET FOR EACH PHASE.

PROGRAMMING AND PLANNING
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
SURVEY AND MAPPING
SECURITY CONSULTING

Gordon

4501 Daly Drive
Chantilly, VA 20151
Phone: 703-263-1900
www.gordon.us.com

REVISIONS

NUMBER	DATE	DESCRIPTION

SUR: E. ERICKSON
DRW: C. LETCHWORTH

DES: K. RYAN
CHK: K. RYAN

COMMONWEALTH OF VIRGINIA
K. RYAN
KELSEY L. RYAN
Lic. No. 59936
10/25/2025
PROFESSIONAL ENGINEER

SEAL:

PRE-DEVELOPMENT LAND COVER & DRAINAGE AREA MAP PHASE II

GREEN HEDGES SCHOOL
SITE DEVELOPMENT PLAN

TOWN OF VIENNA, VIRGINIA
TOWN OF VIENNA

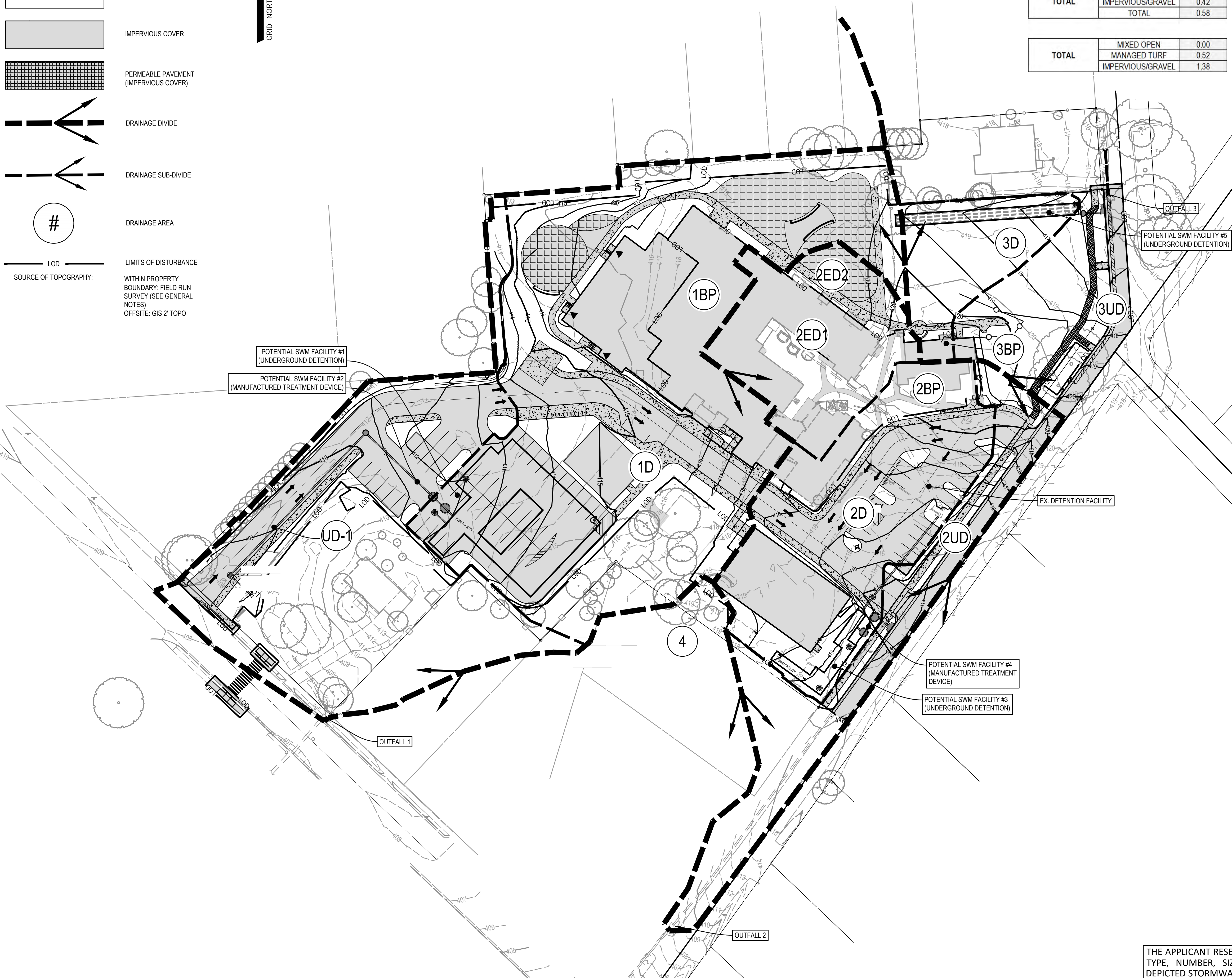
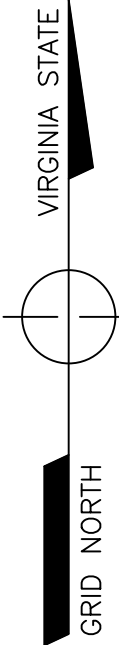
HORIZ: 1" = 40'
SCALE: VERT: N/A

DATE: 10/23/25
PLAN: GREEN HEDGES SCHOOL
JOB: GORDON 2356-0501
CADD: 2356-0501-C-01-102-PH2.DWG
NCS: 2356-0501-C-01-102-PH2
NUMBER: C-0300FC-051

Gordon

LEGEND

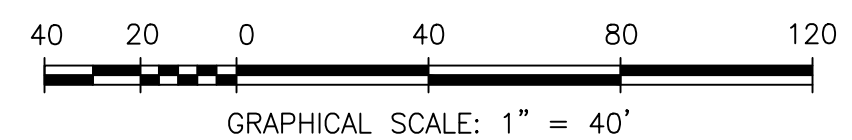
SYMBOL	DESCRIPTION
	FOREST/OPEN SPACE (NONE SHOWN)
	MANAGED TURF
	IMPERVIOUS COVER
	PERMEABLE PAVEMENT (IMPERVIOUS COVER)
	DRAINAGE DIVIDE
	DRAINAGE SUB-DIVIDE
	DRAINAGE AREA
	LIMITS OF DISTURBANCE
SOURCE OF TOPOGRAPHY: WITHIN PROPERTY BOUNDARY: FIELD RUN SURVEY (SEE GENERAL NOTES) OFFSITE: GIS 2' TOPO	



SWM FACILITY SIZING COMPUTATION		
SUB-AREA	LAND COVER DESCRIPTION	BMP AREAS (AC)
FACILITY #2 (MTD) TOTAL	MIXED OPEN	0.00
	MANAGED TURF	0.37
	IMPERVIOUS/GRAVEL	0.96
	TOTAL	1.33
FACILITY #3 (MTD) TOTAL	MIXED OPEN	0.00
	MANAGED TURF	0.15
	IMPERVIOUS/GRAVEL	0.42
	TOTAL	0.58
TOTAL	MIXED OPEN	0.00
	MANAGED TURF	0.52
	IMPERVIOUS/GRAVEL	1.38
	TOTAL	1.90

POST-DEVELOPMENT RCN COMPUTATION - PHASE 2						
SUB-AREA	LAND COVER DESCRIPTION	HSG (D) AREA (AC)	RCN (Adjusted)	TOTAL AREA (AC)	PRODUCT AREA x RCN	SUB-AREA RCN
1D	FOREST	0.00	77	0.00	0.00	93
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.37	80	0.37	29.44	
	IMPERVIOUS	0.96	98	0.96	93.87	
Total		1.33		1.33	123.31	
1BP	FOREST/OPEN SPACE	0.00	77	0.00	0.00	88
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.29	80	0.29	23.01	
	IMPERVIOUS	0.23	98	0.23	22.62	
Total		0.52		0.52	45.63	
1UD	FOREST/OPEN SPACE	0.00	77	0.00	0.00	91
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.18	80	0.18	14.48	
	IMPERVIOUS	0.29	98	0.29	28.88	
Total		0.48		0.48	43.37	
1 TOTAL (LOD)	FOREST/OPEN SPACE	0.00	77	0.00	0.00	93
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.55	80	0.55	43.92	
	IMPERVIOUS	1.25	98	1.25	122.75	
Total		1.80		1.80	166.67	
2D	FOREST/OPEN SPACE	0.00	77	0.00	0.00	93
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.15	80	0.15	12.17	
	IMPERVIOUS	0.42	98	0.42	41.48	
Total		0.58		0.58	53.65	
2ED1	FOREST/OPEN SPACE	0.00	77	0.00	0.00	94
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.08	80	0.08	6.01	
	IMPERVIOUS	0.23	98	0.23	22.58	
Total		0.31		0.31	28.59	
2ED2 (LOD)	FOREST/OPEN SPACE	0.00	77	0.00	0.00	94
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.02	80	0.02	1.59	
	IMPERVIOUS	0.06	98	0.06	6.31	
Total		0.08		0.08	7.90	
2BP	FOREST/OPEN SPACE	0.00	77	0.00	0.00	93
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.04	80	0.04	2.92	
	IMPERVIOUS	0.09	98	0.09	8.57	
Total		0.12		0.12	11.49	
2UD	FOREST/OPEN SPACE	0.00	77	0.00	0.00	93
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.07	80	0.07	5.59	
	IMPERVIOUS	0.16	98	0.16	15.65	
Total		0.23		0.23	21.25	
2 TOTAL (LOD)	FOREST/OPEN SPACE	0.00	77	0.00	0.00	93
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.24	80	0.24	19.36	
	IMPERVIOUS	0.65	98	0.65	63.44	
Total		0.89		0.89	82.80	
3D	FOREST/OPEN SPACE	0.00	77	0.00	0.00	80
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.21	80	0.21	16.92	
	IMPERVIOUS	0.01	98	0.01	0.51	
Total		0.22		0.22	17.43	
3BP	FOREST/OPEN SPACE	0.00	77	0.00	0.00	98
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.00	80	0.00	0.00	
	IMPERVIOUS	0.01	98	0.01	1.13	
Total		0.01		0.01	1.13	
3UD	FOREST/OPEN SPACE	0.00	77	0.00	0.00	86
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.22	80	0.22	17.66	
	IMPERVIOUS	0.10	98	0.10	9.75	
Total		0.32		0.32	27.41	
3 TOTAL (LOD)	FOREST/OPEN SPACE	0.00	77	0.00	0.00	84
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.43	80	0.43	34.58	
	IMPERVIOUS	0.10	98	0.10	10.26	
Total		0.54		0.54	44.84	
4	FOREST/OPEN SPACE	0.00	77	0.00	0.00	80
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	0.01	80	0.01	0.44	
	IMPERVIOUS	0.00	98	0.00	0.00	
Total		0.01		0.01	0.44	
TOTAL (LOD) (1D+1UD+2D+2ED2+2UD+3D+3UD+4D)	FOREST/OPEN SPACE	0.00	77	0.00	0.00	91
	MIXED OPEN	0.00	79	0.00	0.00	
	MANAGED TURF	1.23	80	1.23	98.30	
	IMPERVIOUS	2.00	98	2.00	196.45	
Total		3.23		3.23	294.75	

(1) MANAGED TURF AREAS UTILIZE ADJUSTED POST-DEVELOPMENT CURVE NUMBERS PER SEC. A.3.2.1.D. OF THE VIRGINIA SWM HANDBOOK
DETAINED (D) = AREAS WITHIN THE LOD THAT DRAIN TO A SWM FACILITY
UNDETAINED (UD) = AREAS WITHIN THE LOD THAT DO NOT DRAIN TO A SWM FACILITY
BYPASS (BP) = AREAS OUTSIDE THE LOD THAT DRAIN TO A SWM FACILITY
EXTENDED DETENTION (ED) = AREAS THAT DRAINED TO THE EXISTING EXTENDED DETENTION FACILITY



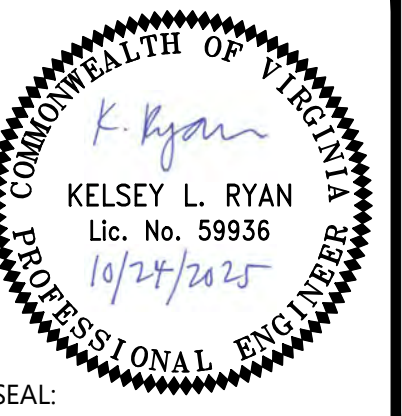
THE APPLICANT RESERVES THE RIGHT TO VARY THE TYPE, NUMBER, SIZE, AND LOCATION OF THE DEPICTED STORMWATER MANAGEMENT FACILITIES ON THIS APPLICATION WITH FINAL ENGINEERING SUCH THAT THE QUALITY AND QUANTITY REQUIREMENTS ARE STILL MET FOR EACH PHASE.

PROGRAMMING AND PLANNING
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
SURVEY AND MAPPING
SECURITY CONSULTING

Gordon
4501 Daly Drive
Chantilly, VA 20151
Phone: 703-263-1900
www.gordon.us.com

REVISIONS	DESCRIPTION	NUMBER	DATE

SUR: E. ERICKSON
DES: K. RYAN
DRW: C. LETCHWORTH
CHK: K. RYAN



POST-DEVELOPMENT LAND COVER & DRAINAGE AREA MAP PHASE II
**GREEN HEDGES SCHOOL
SITE DEVELOPMENT PLAN**
TOWN OF VIENNA, VIRGINIA
TOWN OF VIENNA

HORIZ: 1" = 40'
SCALE: VERT: N/A
DATE: 10/24/25
PLAN: GREEN HEDGES SCHOOL
JOB: GORDON 2356-0501
CADD: 2356-0501-C-01-112-PH2.DWG
NCS: 2356-0501-C-01-112-PH2
NUMBER: C-0310FC-051

Gordon

Project Name: 2356-0501 Green Hedges School - Phase 2
Date: 7/15/2025
Linear Development Project? No

CLEAR ALL
(Ctrl+Shift+R)

data input cells
constant values
calculation cells
final results

Site Information

Post-Development Project (Treatment Volume and Loads)

Enter Total Disturbed Area (acres) → 3.23

Maximum reduction required:	20%
The site's net increase in impervious cover (acres) is:	0.82
Post-Development TP Load Reduction for Site (lb/yr):	0.90

Pre-ReDevelopment Land Cover (acres)	A Soils	B Soils	C Soils	D Soils	Totals
Forest (acres) -- undisturbed, protected forest or reforested land					0.00
Mixed Open (acres) -- undisturbed/frequently maintained grass or shrub land					0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be moved/managed				2.05	2.05
Impervious Cover (acres)				1.18	1.18
					3.23

Post-Development Land Cover (acres)	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed, protected forest or reforested land					0.00
Mixed Open (acres) -- undisturbed/frequently maintained grass or shrub land					0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be moved/managed				1.23	1.23
Impervious Cover (acres)				2.00	2.00
Area Check	OK.	OK.	OK.	OK.	3.23

Post-Development Requirement for Site Area

TP Load Reduction Required (lb/yr) 0.90

Nitrogen Loads (Informational Purposes Only)

Pre-ReDevelopment TN Load (lb/yr) 33.02

Final Post-Development TN Load 35.75

LAND COVER SUMMARY -- PRE-REDEVELOPMENT		
Land Cover Summary-Pre		
Pre-ReDevelopment	Listed	Adjusted ¹
Forest Cover (acres)	0.00	0.00
Weighted Rv(forest)	0.00	0.00
Weighted Loading Rate(forest)	0.00	0.00
% Forest	0%	0%
Mixed Open Cover (acres)	0.00	0.00
Weighted Rv(mixed)	0.00	0.00
Weighted Loading Rate(mixed)	0.00	0.00
% Mixed Open	0%	0%
Managed Turf Cover (acres)	2.05	1.23
Weighted Rv(turf)	0.25	0.25
Weighted Loading Rate(turf)	0.85	0.85
% Managed Turf	63%	51%
Impervious Cover (acres)	1.18	1.18
Rv(impervious)	0.95	0.95
Weighted Loading Rate(impervious)	0.86	0.86
% Impervious	37%	49%
Total Site Area (acres)	3.23	2.41
Site Rv	0.51	0.59

Treatment Volume and Nutrient Load		
Pre-ReDevelopment Treatment Volume (acre-ft)	0.1361	0.1190
Pre-ReDevelopment Treatment Volume (cubic feet)	5,930	5,185
Pre-ReDevelopment TP Load (lb/yr)	2.75	2.05
Pre-ReDevelopment TP Load per acre (lb/acre/yr)	0.85	0.85
Baseline TP Load (lb/yr) (0.26 lb/acre/yr applied to pre-redevelopment area excluding pervious land proposed for new impervious cover)		0.63

¹ Adjusted Land Cover Summary:
Pre ReDevelopment (land cover minus pervious land cover (forest, mixed open or managed turf) acreage proposed for new impervious cover.

Adjusted total acreage is consistent with Post-ReDevelopment acreage (minus acreage of new impervious cover).

Column I shows load reduction requirement for new impervious cover (based on new development load limit, 0.26 lbs/acre/year).

LAND COVER SUMMARY -- POST DEVELOPMENT			
Land Cover Summary-Post (Final)		Land Cover Summary-Post	
Post ReDev. & New Impervious		Post-ReDevelopment	
Forest Cover (acres)	0.00	Forest Cover (acres)	0.00
Weighted Rv(forest)	0.00	Weighted Rv(forest)	0.00
Wgt. Ld. Rate(forest)	0.00	Wgt. Ld. Rate(forest)	0.00
% Forest	0%	% Forest	0%
Mixed Open Cover (acres)	0.00	Mixed Open Cover (acres)	0.00
Weighted Rv(mixed)	0.00	Weighted Rv(mixed)	0.00
Wgt. Ld. Rate(mixed)	0.00	Wgt. Ld. Rate(mixed)	0.00
% Mixed Open	0%	% Mixed Open	0%
Managed Turf Cover (acres)	1.23	Managed Turf Cover (acres)	1.23
Weighted Rv (turf)	0.25	Weighted Rv (turf)	0.25
Wgt. Ld. Rate(turf)	0.85	Wgt. Ld. Rate(turf)	0.85
% Managed Turf	38%	% Managed Turf	51%
Impervious Cover (acres)	2.00	ReDev. Impervious Cover (acres)	1.18
Rv(impervious)	0.95	Rv(impervious)	0.95
Wgt. Ld. Rate(imperv.)	0.86	Wgt. Ld. Rate(imperv.)	0.86
% Impervious	62%	% Impervious	49%
Final Site Area (acres)	3.23	Total ReDev. Site Area (acres)	2.41
Final Post Dev Site Rv	0.68	ReDev Site Rv	0.59

Treatment Volume and Nutrient Load			
Final Post-Development Treatment Volume (acre-ft)	0.1840	Post-ReDevelopment Treatment Volume (acre-ft)	0.1190
Final Post-Development Treatment Volume (cubic feet)	8,013	Post-ReDevelopment Treatment Volume (cubic feet)	5,185
Final Post-Development TP Load (lb/yr)	2.76	Post-ReDevelopment Load (TP) (lb/yr)*	2.05
Final Post-Development TP Load per acre (lb/acre/yr)	0.85	Post-ReDevelopment TP Load per acre (lb/acre/yr)	0.85
		Max. Reduction Required (Below Pre-Development Load)	20%

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

TP Load Reduction Required for New Impervious Area (lb/yr)	0.49
--	------

SITE PHASING

THE SITE WILL BE DEVELOPED IN PHASES, AND TWO (2) PHASES ARE DEPICTED ON THIS APPLICATION. EACH PHASE WILL HAVE AN ASSOCIATED FINAL ENGINEERING APPLICATION TO BE SUBMITTED FOR REVIEW AND APPROVAL BY THE TOWN OF VIENNA. THIS APPLICATION ESTABLISHES A COMMON PLAN OF DEVELOPMENT FOR THE PURPOSES OF STORMWATER MANAGEMENT, SUCH THAT THE PRE-DEVELOPMENT CONDITION FOR EACH PHASE IS THE CURRENT PRE-DEVELOPMENT CONDITION. STORMWATER MANAGEMENT FACILITIES WILL BE PROPOSED ONSITE AS REQUIRED IN EACH PHASE TO PROVIDE A COMPLIANT STORMWATER MANAGEMENT PLAN FOR EACH PHASE. THE APPLICANT RESERVES THE RIGHT TO VARY THE TYPE, NUMBER, SIZE, AND LOCATION OF THE DEPICTED STORMWATER MANAGEMENT FACILITIES ON THIS APPLICATION WITH FINAL ENGINEERING SUCH THAT THE QUALITY AND QUANTITY REQUIREMENTS ARE STILL MET FOR EACH PHASE.

WATER QUALITY NARRATIVE

THE SITE IS DEFINED BY THE LIMITS OF DISTURBANCE OF APPROXIMATELY 2.62 ACRES IN PHASE 1, AND 3.32 ACRES IN PHASE 2.

WATER QUALITY REQUIREMENTS

THE LOD IS SUBJECT TO THE REQUIREMENTS OF SECTION 9VAC25-870-63.2.C OF THE VSMP REGULATIONS, AS ADOPTED BY SECTION 23-17.A OF TOWN OF VIENNA CODE OF ORDINANCES FOR DEVELOPMENT ON PRIOR DEVELOPED LANDS THAT RESULT IN A NET INCREASE IN IMPERVIOUS COVER FROM THE PRE-DEVELOPMENT CONDITION.

SEE REQUIREMENT COMPUTATIONS ON SHEET C-019 FOR PHASE 1, AND SHEET C-032 FOR PHASE 2.

WATER QUALITY COMPLIANCE

WATER QUALITY COMPLIANCE IS ANTICIPATED TO BE ACHIEVED THROUGH THE USE OF THE FOLLOWING PRACTICES:

PHASE 1:

- MANUFACTURED TREATMENT DEVICE (MTD) - AN MTD IS ANTICIPATED DOWNSTREAM OF THE PROPOSED DETENTION FACILITIES #1 & #4. THE MTD IS ANTICIPATED TO BE A 65% EFFICIENCY FILTERING PRACTICE.
- PURCHASE OF NUTRIENT CREDITS:
 - PER SECTION 124.1-4-5 OF THE FAIRFAX COUNTY STORMWATER MANAGEMENT ORDINANCE, STORMWATER OFFSITE COMPLIANCE OPTIONS MAY BE UTILIZED TO MEET THE REQUIRED PHOSPHORUS NUTRIENT REDUCTIONS. PER SECTION SECTION 124.1-4-5.B.1, THE SITE QUALIFIES WITH A SITE DISTURBANCE LESS THAN FIVE (5) ACRES.
 - THE SITE IS LOCATED WITHIN THE ACCOTINK CREEK WATERSHED (020700100402) AND MIDDLE POTOMAC-ANACOSTIA-OCOQUAN WATERSHED (0207-0010). THE NUTRIENT CREDIT ELIGIBILITY HAS BEEN EVALUATED PER THE REQUIREMENTS OF SECTION 9VAC25-900-91. THE FIRST ASSESSED RECEIVING WATER IS ACCOTINK CREEK AND IT HAS NOT BEEN ASSESSED FOR AN APPLICABLE IMPAIRMENT. THEREFORE, THE PURCHASE OF NUTRIENT CREDITS IS NOT SUBJECT TO THE HIERARCHY ESTABLISHED IN SECTION 9VAC25-900. CREDITS ARE AVAILABLE FROM THE 0207-0008, 0207-0010, 0207-0011 WATERSHED, AND A NUTRIENT CREDIT AVAILABILITY LETTER HAS BEEN PROVIDED ON THIS SHEET FROM A BANK IN THAT WATERSHED.
 - PER DEQ GUIDANCE MEMO 21-2007, NUTRIENT BANK SERVICES ARE BASED ON THE DATE OF THE NUTRIENT CREDIT AVAILABILITY LETTER ON THE SUBMITTED STORMWATER MANAGEMENT PLANS FOR REVIEW. SHOULD THE NUTRIENT CREDIT AMOUNT INCREASE ABOVE THE AVAILABILITY LETTER, OR NUTRIENT CREDITS BE SECURED FROM AN ALTERNATE BANK, A NEW NUTRIENT CREDIT AVAILABILITY LETTER AND EVALUATION FOR CONFORMANCE WITH THE REQUIREMENTS OF SECTION 9VAC25-900-91 SHALL BE CONDUCTED. NUTRIENT CREDITS SHALL BE SECURED PRIOR TO OBTAINING COVERAGE UNDER THE DEQ CONSTRUCTION GENERAL PERMIT, ISSUANCE OF A LAND DISTURBANCE PERMIT, AND ANY SITE DISTURBANCE.

PHASE 2:

- NO ADDITIONAL SWM FACILITIES ARE ANTICIPATED TO BE PROPOSED IN PHASE 2.

SEE COMPLIANCE COMPUTATIONS ON SHEET C-020 FOR PHASE 1, AND SHEET C-033 FOR PHASE 2.

PROGRAMMING AND PLANNING
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
SURVEY AND MAPPING
SECURITY CONSULTING

Gordon

4501 Daly Drive
Chantilly, VA 20151
Phone: 703-263-1900
www.gordon.us.com

REVISIONS		DESCRIPTION	DATE	NUMBER

SUR: E.ERICKSON	DES: K.KRYAN
DRW: C.LETCHWORTH	CHK: K.KRYAN

COMMONWEALTH OF VIRGINIA
K. RYAN
KELSEY L. RYAN
Lic. No. 59936
10/25/2025
PROFESSIONAL ENGINEER

SEAL:

WATER QUALITY COMPUTATIONS PHASE II

GREEN HEDGES SCHOOL
SITE DEVELOPMENT PLAN

TOWN OF VIENNA, VIRGINIA
TOWN OF VIENNA

HORIZ: N/A
SCALE: VERT: N/A

DATE: 10/23/25
PLAN: GREEN HEDGES SCHOOL
JOB: GORDON 2356-0501
CADD: 2356-0501-C-01+122-PH2.DWG
NCS: 2356-0501-C-01+122-PH2
NUMBER: C-0320FC-051

Gordon

THE APPLICANT RESERVES THE RIGHT TO VARY THE TYPE, NUMBER, SIZE, AND LOCATION OF THE DEPICTED STORMWATER MANAGEMENT FACILITIES ON THIS APPLICATION WITH FINAL ENGINEERING SUCH THAT THE QUALITY AND QUANTITY REQUIREMENTS ARE STILL MET FOR EACH PHASE.

Drainage Area A

VRRM 4.1, 2024

Drainage Area A Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv	Composite Loading P
Forest (acres)					0.00	0.00	0.00
Mixed Open (acres)					0.00	0.00	0.00
Managed Turf (acres)				0.55	0.55	0.25	0.85
Impervious Cover (acres)				1.25	1.25	0.95	0.86
Total					1.80		

CLEAR BMP AREAS

Total Phosphorus Available for Removal in D.A. A (lb/yr)	1.54
Post Development Treatment Volume in D.A. A (ft³)	4,818

Composite Loading N
0.00
0.00
9.01
12.33

Stormwater Best Management Practices (RR = Runoff Reduction)

--Select from dropdown lists--

Practice	Runoff Reduction Credit (%)	Mixed Open Credit Area (acres)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft³)	Runoff Reduction (ft³)	Remaining Runoff Volume (ft³)	Total BMP Treatment Volume (ft³)	Phosphorus Removal Efficiency (%)	Phosphorus Load from Upstream Practices (lb)	Untreated Phosphorus Load to Practice (lb)	Phosphorus Removed By Practice (lb)	Remaining Phosphorus Load (lb)	Downstream Practice to be Employed
16. Manufactured Treatment Devices (no RR)														
16.b. Manufactured Treatment Device-Filtering	0		0.55	1.25	0	0	4,818	4,818	65	0.00	1.54	1.00	0.54	

Nitrogen Removal Efficiency (%)	Nitrogen Load from Upstream Practices (lbs)	Untreated Nitrogen Load to Practice (lbs)	Nitrogen Removed By Practice (lbs)	Remaining Nitrogen Load (lbs)
16. Manufactured BMP (no RR)				
0	0.00	20.40	0.00	20.40

TOTAL IMPERVIOUS COVER TREATED (ac)	1.25	AREA CHECK: OK.
TOTAL MIXED OPEN TREATED (ac)	0.00	AREA CHECK: OK.
TOTAL MANAGED TURF AREA TREATED (ac)	0.55	AREA CHECK: OK.

TOTAL PHOSPHORUS REMOVAL REQUIRED ON SITE (lb/yr)	0.00
---	------

TOTAL PHOSPHORUS AVAILABLE FOR REMOVAL IN D.A. A (lb/yr)	1.54
TOTAL PHOSPHORUS REMOVED WITHOUT RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)	1.00
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)	1.00
TOTAL PHOSPHORUS REMAINING AFTER APPLYING BMP LOAD REDUCTIONS IN D.A. A (lb/yr)	0.54

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

A

WATER QUALITY COMPLIANCE

Site Results (Water Quality Compliance) VRRM 4.1, 2024

Area Checks	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	AREA CHECK
FOREST (ac)	0.00	0.00	0.00	0.00	0.00	OK.
MIXED OPEN (ac)	0.00	0.00	0.00	0.00	0.00	OK.
MIXED OPEN AREA TREATED(ac)	0.00	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA (ac)	0.55	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA TREATED (ac)	0.55	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER (ac)	1.25	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER TREATED (ac)	1.25	0.00	0.00	0.00	0.00	OK.
AREA CHECK	OK.	OK.	OK.	OK.	OK.	

Site Treatment Volume (ft³)	8,013
-----------------------------	-------

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 (ft³)	0	0	0	0	0	0
TP LOAD AVAILABLE FOR REMOVAL (lb/yr)	1.54	0.00	0.00	0.00	0.00	1.54
TP LOAD REDUCTION ACHIEVED (lb/yr)	1.00	0.00	0.00	0.00	0.00	1.00
TP LOAD REMAINING (lb/yr)	0.54	0.00	0.00	0.00	0.00	0.54

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)	2.76
TP LOAD REDUCTION REQUIRED (lb/yr)	0.90
TP LOAD REDUCTION ACHIEVED (lb/yr)	1.00
TP LOAD REMAINING (lb/yr):	1.76
REMAINING TP LOAD REDUCTION REQUIRED (lb/yr):	0.00 **
** TARGET TP REDUCTION EXCEEDED BY 0.1 LB/YEAR **	

Total Nitrogen (For Information Purposes)	
POST-DEVELOPMENT LOAD (lb/yr)	35.75
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	0.00
REMAINING POST-DEVELOPMENT NITROGEN LOAD (lb/yr)	35.75

THE APPLICANT RESERVES THE RIGHT TO UTILIZE OFFSITE COMPLIANCE OPTIONS (PURCHASE OF NUTRIENT CREDITS) FOR THE REMAINING PHOSPHORUS REMOVAL REQUIREMENTS

THE APPLICANT RESERVES THE RIGHT TO VARY THE TYPE, NUMBER, SIZE, AND LOCATION OF THE DEPICTED STORMWATER MANAGEMENT FACILITIES ON THIS APPLICATION WITH FINAL ENGINEERING SUCH THAT THE QUALITY AND QUANTITY REQUIREMENTS ARE STILL MET FOR EACH PHASE.

B

WATER QUALITY COMPLIANCE SUMMARY

PROGRAMMING AND PLANNING
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
SURVEY AND MAPPING
SECURITY CONSULTING

Gordon

4501 Daly Drive
Chantilly, VA 20151
Phone: 703-263-1900
www.gordon.us.com

REVISIONS	
NUMBER	DESCRIPTION

SUR: EERICKSON	DES: KRYAN
DRW: CLETHWORTH	CHK: KRYAN

COMMONWEALTH OF VIRGINIA
K. RYAN
KELSEY L. RYAN
Lic. No. 59936
10/25/2025
PROFESSIONAL ENGINEER

SEAL:

WATER QUALITY COMPUTATIONS PHASE II

GREEN HEDGES SCHOOL
SITE DEVELOPMENT PLAN

TOWN OF VIENNA, VIRGINIA
TOWN OF VIENNA

HORIZ: N/A
SCALE: VERT: N/A
DATE: 10/23/25
PLAN: GREEN HEDGES SCHOOL
JOB: GORDON 2356-0501
CADD: 2356-0501-C-01-122-P&L DWG
NCS: 2356-0501-C-01-122-P&L
NUMBER: C-0330FC-051

Gordon

WATER QUANTITY COMPUTATIONS - PHASE 2

1

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	3.408	1	727	8,943	-----	-----	-----	OUTFALL 1 (PRE)
2	SCS Runoff	3.450	1	727	9,423	-----	-----	-----	1D
3	SCS Runoff	1.096	1	727	2,890	-----	-----	-----	18P
4	Combine	4.546	1	727	12,313	2, 3	-----	-----	POND 1 INFLOW
5	Reservoir	1.079	1	742	12,279	4	409.37	5,050	POND 1 OUTFLOW
6	Reservoir	0.094	1	1019	2,213	4	410.23	10,295	POND 1 OUTFLOW (10YR)
7	SCS Runoff	1.153	1	727	3,090	-----	-----	-----	1UD
8	Combine	1.871	1	728	15,369	5, 7	-----	-----	OUTFALL 1 (POST)
9	Combine	1.153	1	727	5,303	6, 7,	-----	-----	OUTFALL 1 (POST-10YR)
11	SCS Runoff	1.924	1	727	5,202	-----	-----	-----	2 (PRE)
12	SCS Runoff	0.452	1	727	1,223	-----	-----	-----	2ED (PRE)
13	SCS Runoff	1.505	1	727	4,109	-----	-----	-----	2D
14	SCS Runoff	1.047	1	727	2,897	-----	-----	-----	2ED
15	SCS Runoff	0.311	1	727	850	-----	-----	-----	2BP
16	Combine	2.863	1	727	7,856	13, 14, 15	-----	-----	POND 2 INFLOW
17	Reservoir	1.127	1	734	7,852	16	102.13	1,790	POND 2 OUTFLOW
18	Reservoir	1.166	1	734	7,436	16	102.25	1,890	POND 2 OUTFLOW (10YR)
19	SCS Runoff	0.597	1	727	1,630	-----	-----	-----	2UD
20	Combine	1.580	1	728	9,482	17, 19	-----	-----	OUTFALL 2 (POST)
21	Combine	1.629	1	728	9,065	18, 19,	-----	-----	OUTFALL 2 (POST) (10YR)
23	SCS Runoff	0.982	1	727	2,577	-----	-----	-----	OUTFALL 3 (PRE)
24	SCS Runoff	0.302	1	727	801	-----	-----	-----	3D
25	SCS Runoff	0.030	1	727	89	-----	-----	-----	3BP
26	Combine	0.332	1	727	891	24, 25	-----	-----	POND 3 INFLOW
27	Reservoir	0.114	1	736	889	26	100.87	157	POND 3 OUTFLOW
28	Reservoir	0.190	1	732	813	26	100.80	234	POND 3 OUTFLOW (10YR)
29	SCS Runoff	0.613	1	727	1,608	-----	-----	-----	3UD
30	Combine	0.713	1	727	2,497	27, 29	-----	-----	OUTFALL 3 (POST)
31	Combine	0.690	1	727	2,421	28, 29,	-----	-----	OUTFALL 3 (POST) (10YR)
33	SCS Runoff	0.015	1	727	41	-----	-----	-----	SHEETFLOW 4 (PRE)
34	SCS Runoff	0.014	1	727	36	-----	-----	-----	SHEETFLOW 4 (POST)
2356-0501 Quantity-PH2.gpw					Return Period: 1 Year		Thursday, 10 / 23 / 2025		

WATER QUANTITY COMPLIANCE (OUTFALL 1) - PHASE 2

	CHANNEL PROTECTION	
	1-year	POST
LOD AREA (acre) =	1.78	1.8
P (in)	2.62	2.62
CN ⁽¹⁾	86	93
S=1000/CN-10	1.63	0.75
0.2S	0.33	0.15
RV=(P-0.2S) ² /(P-0.2S)+S (in)	1.34	1.89

(1) PRE CN on Sheet C-030; POST CN on Sheet C-031

(2) $Q_{\text{Allowable}} \leq \text{I.F.} * (Q_{\text{pre-development}} * RV_{\text{pre-development}} * A_{\text{Area}_{\text{pre-development}}}) / (RV_{\text{Developed}} * A_{\text{Area}_{\text{developed}}})$

(3) $Q_{\text{Allowable}} \leq Q_{\text{pre-development}}$

IF 0.8	
CHANNEL PROTECTION (1-YR)	
$Q_{\text{pre-development}}$ (cfs) for LOD	3.41
$Q_{\text{Allowable}}$ (cfs) for LOD ⁽²⁾	1.91
Total Pre-development Bypass Flow (cfs)	1.05
$Q_{\text{Allowable}}$ (cfs) + Bypass Flow (cfs)	2.97
$Q_{\text{Allowable}}$ (cfs) for Outfall	
$Q_{\text{Post Development}}$ (cfs) for Outfall	1.87

Hydrograph #

#1

#3

#8

	FLOOD PROTECTION	
	10-year	POST
PRE	1.78	1.8
P (in)	4.87	4.87
86	93	
1.63	0.75	
0.33	0.15	
3.35	3.96	

IF 0.8	
FLOOD PROTECTION (10-YR)	
$Q_{\text{pre-development}}$ (cfs) for LOD	8.25
$Q_{\text{Allowable}}$ (cfs) for LOD ⁽²⁾	8.25
Total Pre-development Bypass Flow (cfs)	2.43
$Q_{\text{Allowable}}$ (cfs) + Bypass Flow (cfs)	10.68
$Q_{\text{Allowable}}$ (cfs) for Outfall	
$Q_{\text{Post Development}}$ (cfs) for Outfall	3.17

Hydrograph #

#1

#3

#9

WATER QUANTITY COMPLIANCE (OUTFALL 3) - PHASE 2

	CHANNEL PROTECTION	
	1-year	POST
LOD AREA (acre) =	0.6	0.54
P (in)	2.62	2.62
CN ⁽¹⁾	83	84
S=1000/CN-10	2.05	1.90
0.2S	0.41	0.38
RV=(P-0.2S) ² /(P-0.2S)+S (in)	1.15	1.21

(1) PRE CN on Sheet C-030; POST CN on Sheet C-031

(2) $Q_{\text{Allowable}} \leq \text{I.F.} * (Q_{\text{pre-development}} * RV_{\text{pre-development}} * A_{\text{Area}_{\text{pre-development}}}) / (RV_{\text{Developed}} * A_{\text{Area}_{\text{developed}}})$

(3) $Q_{\text{Allowable}} \leq Q_{\text{pre-development}}$

IF 0.9	
CHANNEL PROTECTION (1-YR)	
$Q_{\text{pre-development}}$ (cfs) for LOD	0.98
$Q_{\text{Allowable}}$ (cfs) for LOD ⁽²⁾	0.93
Total Pre-development Bypass Flow (cfs)	0.03
$Q_{\text{Allowable}}$ (cfs) + Bypass Flow (cfs)	0.96
$Q_{\text{Allowable}}$ (cfs) for Outfall	
$Q_{\text{Post Development}}$ (cfs) for Outfall	0.71

Hydrograph #

#23

#25

#30

IF 0.9	
FLOOD PROTECTION (10-YR)	
$Q_{\text{pre-development}}$ (cfs) for LOD	2.58
$Q_{\text{Allowable}}$ (cfs) for LOD ⁽²⁾	2.58
Total Pre-development Bypass Flow (cfs)	0.06
$Q_{\text{Allowable}}$ (cfs) + Bypass Flow (cfs)	2.63
$Q_{\text{Allowable}}$ (cfs) for Outfall	
$Q_{\text{Post Development}}$ (cfs) for Outfall	2.28

Hydrograph #

#23

#25

#31

2

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	4.569	1	727	12,054	-----	-----	-----	OUTFALL 1 (PRE)
2	SCS Runoff	4.343	1	727	12,034	-----	-----	-----	1D
3	SCS Runoff	1.442	1	727	3,835	-----	-----	-----	18P
4	Combine	5.784	1	727	15,868	2, 3	-----	-----	POND 1 INFLOW
5	Reservoir	1.545	1	756	15,832	4	409.50	6,214	POND 1 OUTFLOW
6	Reservoir	0.330	1	809	5,768	4	410.32	10,821	POND 1 OUTFLOW (10YR)
7	SCS Runoff	1.476	1	727	4,007	-----	-----	-----	1UD
8	Combine	2.673	1	729	19,839	5, 7	-----	-----	OUTFALL 1 (POST)
9	Combine	1.476	1	727	9,775	6, 7,	-----	-----	OUTFALL 1 (POST-10YR)
11	SCS Runoff	2.442	1	727	6,693	-----	-----	-----	2 (PRE)
12	SCS Runoff	0.673	1	727	1,783	-----	-----	-----	2ED (PRE)
13	SCS Runoff	1.894	1	727	5,248	-----	-----	-----	2D
14	SCS Runoff	1.308	1	727	3,671	-----	-----	-----	2ED
15	SCS Runoff	0.392	1	727	1,086	-----	-----	-----	2BP
16	Combine	3.593	1	727	10,005	13, 14, 15	-----	-----	POND 2 INFLOW
17	Reservoir	1.327	1	734	10,001	16	102.77	2,330	POND 2 OUTFLOW
18	Reservoir	1.357	1	734	9,584	16	102.88	2,416	POND 2 OUTFLOW (10YR)
19	SCS Runoff	0.751	1	727	2,081	-----	-----	-----	2UD
20	Combine	1.907	1	728	12,082	17, 19	-----	-----	OUTFALL 2 (POST)
21	Combine	1.943	1	728	11,665	18, 19,	-----	-----	OUTFALL 2 (POST) (10YR)
23	SCS Runoff	1.357	1	727	3,559	-----	-----	-----	OUTFALL 3 (PRE)
24	SCS Runoff	0.432	1	727	1,136	-----	-----	-----	3D
25	SCS Runoff	0.036	1	727	110	-----	-----	-----	3BP
26	Combine	0.469	1	727	1,246	24, 25	-----	-----	POND 3 INFLOW
27	Reservoir	0.228	1	733	1,244	26	100.80	235	POND 3 OUTFLOW
28	Reservoir	0.377	1	730	1,168	26	100.86	269	POND 3 OUTFLOW (10YR)
29	SCS Runoff	0.821	1	727	2,167	-----	-----	-----	3UD
30	Combine	0.936	1	727	3,411	27, 29	-----	-----	OUTFALL 3 (POST)
31	Combine	1.132	1	728	3,335	28, 29,	-----	-----	OUTFALL 3 (POST) (10YR)
33	SCS Runoff	0.022	1	727	57	-----	-----	-----	SHEETFLOW 4 (PRE)
34	SCS Runoff	0.020	1	727	52	-----	-----	-----	SHEETFLOW 4 (POST)
2356-0501 Quantity-PH2.gpw					Return Period: 2 Year		Thursday, 10 / 23 / 2025		

3

Hydrograph Summary Report

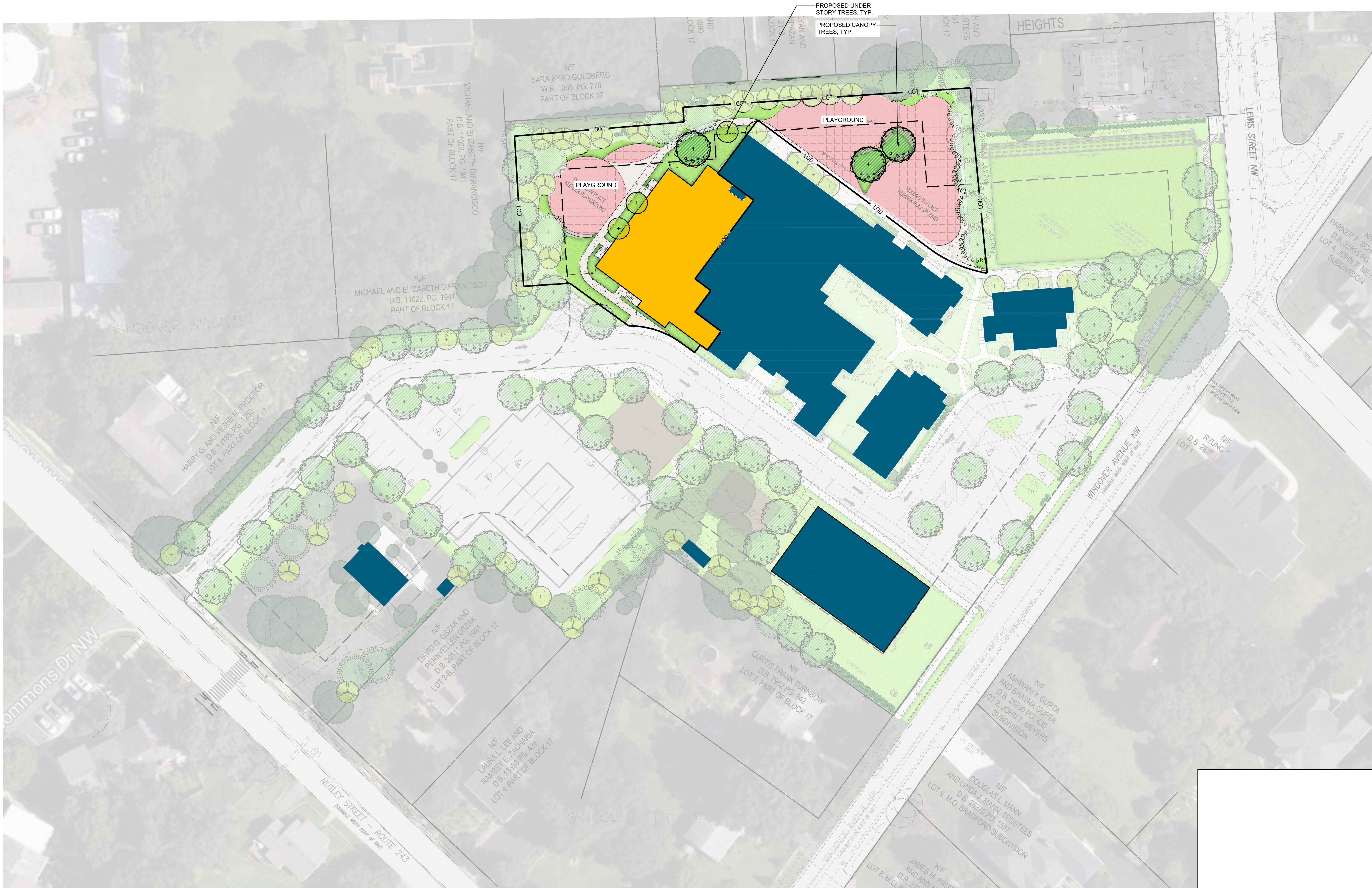
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	8.252	1	727	22,295	-----	-----	-----	OUTFALL 1 (PRE)
2	SCS Runoff	7.072	1	727	20,265	-----	-----	-----	1D
3	SCS Runoff	2.522	1	727	6,902	-----	-----	-----	18P
4	Combine	9.594	1	727	27,167	2, 3	-----	-----	POND 1 INFLOW
5	Reservoir	1.825	1	750	27,127	4	410.35	10,763	POND 1 OUTFLOW
6	Reservoir	1.203	1	757	17,067	4	411.15	15,713	POND 1 OUTFLOW (10YR)
7	SCS Runoff	2.470	1	727	6,929	-----	-----	-----	1UD
8	Combine	4.106	1	727	34,055	5, 7	-----	-----	OUTFALL 1 (POST)
9	Combine	3.133	1	728	23,995	6, 7,	-----	-----	OUTFALL 1 (POST-10YR)
11	SCS Runoff	4.031	1	727	11,421	-----	-----	-----	2 (PRE)
12	SCS Runoff	1.435	1	727	3,765	-----	-----	-----	2ED (PRE)
13	SCS Runoff	3.084	1	727	8,837	-----	-----	-----	2D
14	SCS Runoff	2.103	1	727	6,102	-----	-----	-----	2ED
15	SCS Runoff	0.638	1	727	1,828	-----	-----	-----	2BP
16	Combine	5.825	1	727	16,768	13, 14, 15	-----	-----	POND 2 INFLOW
17	Reservoir	4.152	1	731	16,764	16	103.82	3,211	POND 2 OUTFLOW
18	Reservoir	4.197	1	730	16,348	16	103.85	3,232	POND 2 OUTFLOW (10YR)
19	SCS Runoff	1.223	1	727	3,504	-----	-----	-----	2UD
20	Combine	5.128	1	729	20,269	17, 19	-----	-----	OUTFALL 2 (POST)
21	Combine	5.190	1	729	19,852	18, 19,	-----	-----	OUTFALL 2 (POST) (10YR)
23	SCS Runoff	2.578	1	727	6,866	-----	-----	-----	OUTFALL 3 (PRE)
24	SCS Runoff	0.868	1	727	2,289	-----	-----	-----	3D
25	SCS Runoff	0.056	1	727	173	-----	-----	-----	3BP
26	Combine	0.924	1	727	2,463	24, 25	-----	-----	POND 3 INFLOW
27	Reservoir	0.831	1	729	2,461	26	100.95	333	POND 3 OUTFLOW
28	Reservoir	0.853	1	729	2,385	26	100.95	336	POND 3 OUTFLOW (10YR)
29	SCS Runoff	1.483	1	727	4,008	-----	-----	-----	3UD
30	Combine	2.249	1	728	6,469	27, 29	-----	-----	OUTFALL 3 (POST)
31	Combine	2.284	1	727	6,393	28, 29,	-----	-----	OUTFALL 3 (POST) (10YR)
33	SCS Runoff	0.042	1	727	111	-----	-----	-----	SHEETFLOW 4 (PRE)
34	SCS Runoff	0.039	1	727	104	-----	-----	-----	SHEETFLOW 4 (POST)
2356-0501 Quantity-PH2.gpw					Return Period: 10 Year		Thursday, 10 / 23 / 2025		

SITE PHASING

THE SITE WILL BE DEVELOPED IN PHASES, AND TWO (2) PHASES ARE DEPICTED ON THIS APPLICATION. EACH PHASE WILL HAVE AN ASSOCIATED FINAL ENGINEERING APPLICATION TO BE SUBMITTED FOR REVIEW AND APPROVAL BY THE TOWN OF VIENNA. THIS APPLICATION ESTABLISHES A COMMON PLAN OF DEVELOPMENT FOR THE PURPOSES OF STORMWATER MANAGEMENT, SUCH THAT THE PRE-DEVELOPMENT CONDITION FOR EACH PHASE IS THE CURRENT PRE-DEVELOPMENT CONDITION. STORMWATER MANAGEMENT FACILITIES WILL BE PROPOSED ONSITE AS REQUIRED IN EACH PHASE TO PROVIDE A COMPLIANT STORMWATER MANAGEMENT PLAN FOR EACH PHASE. THE APPLICANT RESERVES THE RIGHT TO VARY THE TYPE, NUMBER, SIZE, AND LOCATION OF THE DEPICTED STORMWATER MANAGEMENT FACILITIES ON THIS APPLICATION WITH FINAL ENGINEERING SUCH THAT THE QUALITY AND QUANTITY REQUIREMENTS ARE STILL MET FOR EACH PHASE.

\\ASP-rs\\file01\\Projects\\2023\\25009 green hedges school\\6.0\\cd\\file\\current phase\\1.02\\PCOP\\TA\\L\\PH2.dwg



GREEN HEDGES SCHOOL
415 WINDOVER AVE NW
VIENNA, VA
TOWN OF VIENNA

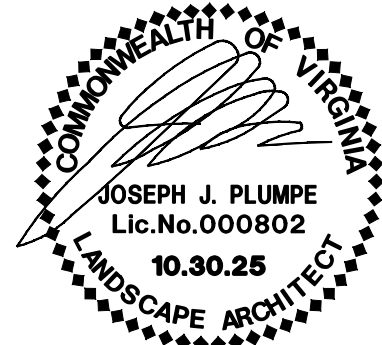
CLIENT

GREEN HEDGES SCHOOL -
THE STONE HOUSE GROUP

Studio39
LANDSCAPE ARCHITECTURE, P.C.

5810 KINGSTOWNE CENTER DRIVE
SUITE 120, #769
ALEXANDRIA, VA 22315-5711
703.719.6500 | STUDIO39.COM

SEAL/SIGNATURE



ISSUE DATE

LANDSCAPE PLAN 07.25.2025
LANDSCAPE PLAN 10.30.2025

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, ARE THE PROPERTY OF STUDIO39 LANDSCAPE ARCHITECTURE, P.C. AND IS NOT TO BE REPRODUCED OR USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF STUDIO39 LANDSCAPE ARCHITECTURE, P.C.

PROJECT NUMBER: 25009
CONTACT: JOSEPH PLUMPE
DRAWN: YJ
APPROVED/CHECKED: JP

ORIENTATION AND SCALE



SHEET TITLE

**PROPOSED
LANDSCAPE PLAN-
PHASE II**

SHEET NUMBER

C-035

SITE DEVELOPMENT PLAN

NOT RELEASED FOR CONSTRUCTION

PHASE II- KEY PLAN

Scale: 1"=60'-0"

PLAN

Large Canopy Trees:

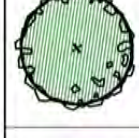
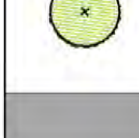
Common	Scientific	Plant size	20-Year Canopy Credit Allowance (CCA)
Name	Name	2.0" Caliper/8' Height	
Red Maple	<i>Acer rubrum</i>	3"-3 1/2" Cal., 14'-16' H.	300
River Birch	<i>Betula nigra</i>	3"-3 1/2" Cal., 14'-16' H.	300
Hackberry	<i>Celtis occidentalis</i>	3"-3 1/2" Cal., 14'-16' H.	300
London Planetree	<i>Platanus x acerifolia</i>	3"-3 1/2" Cal., 14'-16' H.	300
Swamp White Oak	<i>Quercus bicolor</i>	3"-3 1/2" Cal., 14'-16' H.	300
Bur Oak	<i>Quercus macrocarpa</i>	3"-3 1/2" Cal., 14'-16' H.	300
Swamp Chestnut	<i>Quercus michauxii</i>	3"-3 1/2" Cal., 14'-16' H.	300
Pin Oak	<i>Quercus palustris</i>	3"-3 1/2" Cal., 14'-16' H.	300
Willow Oak	<i>Quercus phellos</i>	3"-3 1/2" Cal., 14'-16' H.	300
Northern Red Oak	<i>Quercus rubra</i>	3"-3 1/2" Cal., 14'-16' H.	300
Post Oak	<i>Quercus stellata</i>	3"-3 1/2" Cal., 14'-16' H.	300
American Linden	<i>Tilia americana</i>	3"-3 1/2" Cal., 14'-16' H.	300
Japanese Zelkova	<i>Zelkova serrata</i>	3"-3 1/2" Cal., 14'-16' H.	300

Understory Trees:

Common	Scientific	Plant size	20-Year Canopy Credit Allowance (CCA)
Name	Name	2.0" Caliper/8' Height	
Atlas Cedar	<i>Cedrus atlantica</i>	2" Cal., 8' H.	200
Deodar Cedar	<i>Cedrus deodara</i>	2" Cal., 8' H.	200
Eastern Redbud	<i>Cercis canadensis</i>	2" Cal., 8' H.	200
Yellowwood	<i>Cladrastis kentuckia</i>	2" Cal., 8' H.	200
Nellie Stevens holly	<i>Ilex x 'Nellie Stevens'</i>	2" Cal., 8' H.	200
Crape myrtle	<i>Lagerstroemia indica</i>	2" Cal., 8' H.	200
Saucer Magnolia	<i>Magnolia soulangiana</i>	2" Cal., 8' H.	200
Star Magnolia	<i>Magnolia stellata</i>	2" Cal., 8' H.	200
Kwansan cherry	<i>Prunus serrulata</i>	2" Cal., 8' H.	200

Shrubs:

Common	Scientific
Name	Name
Wax Myrtle	<i>Morella cerifera</i>)
Inkberry Holly	<i>Ilex glabra</i>
Winterberry Holly	<i>Ilex verticillata</i>
American Holly	<i>Ilex opaca</i>
Virginia Sweetspire	<i>Itea virginica</i>
Fragrant Sumac	<i>Rhus aromatica</i>
Arrowwood Viburnum	<i>Viburnum dentatum</i>
Buttonbush	<i>Cephalanthus occidentalis</i>

PHASE 2- ADDITIONAL PLANTING SCHEDULE					
KEY	CATEGORY	CALIPER/ HEIGHT	CREDIT	MULTIFAMILY QTY	
				TOTAL	SUBTOTAL
	BOUNDARY OF EXISTING CANOPIES TO REMAIN COUNTED IN TREE CANOPY CALCULATIONS	N/A	9,928 S.F.		
	LARGE CANOPY TREES	2" min. 10' - 12'	300	3	900
	UNDERSTORY PLANTING	2" min. 10' - 12'	200	3	600
TOTAL CANOPY COVERAGE					1,500

NOTE: ONLY TREES WITHIN PROPERTY LINE ARE CALCULATED IN THE TREE CANOPY CALCULATIONS. TREES OFFSITE ARE NOT INCLUDED IN THE TREE CANOPY CALCULATIONS.

BOUNDARY OF EXISTING TREES, COUNTED IN TREE CANOPY CALCULATIONS, TYP.

Canopy Coverage Analysis

Instructions: Cells shaded green are for user inputs. For issues contact TOV Urban Forester.

Row	Project Address and/or Munis #:	
A1	Gross site area sq. ft.	187,268
A2	Pre-development canopy coverage sq. ft.	35,287
A3	Percentage of gross site area covered by existing tree canopy (A2/A1)	18.8%
A4	Zone	RS-12.5
A5	Percentage of 20-year Tree Canopy required for site (see zoning chart)	25%
A6	Minimum 20-year Tree Canopy required for site sq. ft. (A1xA5)	46,817
A7	Tree Preservation Target (minimum tree canopy area required via tree preservation) sq. ft. (A3xA6)	8,822
A8	Tree canopy that will be provided through tree preservation sq. ft.	9,928
A10	Has the Tree Preservation Target minimum been met? (A8> or =A7)	Yes

A11	If No, then submit a request to deviate from the Tree Preservation Target. Including a site-specific explanation of why the Tree Preservation Target cannot be met. Provide sheet number where deviation request is located.	Narrative
-----	--	-----------

B1	Canopy from retained trees that qualify for credit sq. ft. (A8)	9,928
	Multipliers - if the tree qualifies, may use both tree preservation multipliers. Canopy credits will only be given to trees with trunks that are fully located on the development site.	
B2	Tree Preservation multiplier 1.25 (B1x0.25)	2,482
B3	Forest Communities multiplier 1.5 (B1x0.5) (see 17-1003(d))	0
B4	Total preserved canopy including multipliers sq. ft. (B1+B2+B3)	12,410

C1	Canopy area that must be met with tree planting (A6-B4)	34,407
C2	Tree Canopy area to be met through tree planting with multipliers (See Sheet Planting Plan:N1)	34,600

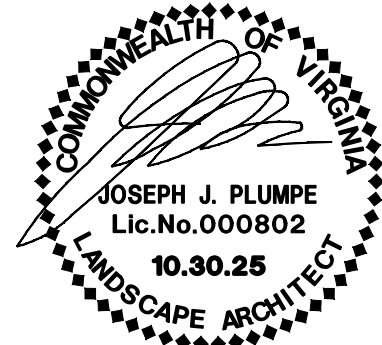
D1	Total canopy area provided through tree preservation sq. ft. (B4)	12,410
D2	Total canopy area provided through tree planting sq. ft (C2)	34,600
D3	Total 20 year canopy coverage provided (D1+D2)	47,010
D4	Total minimum 20 year canopy coverage required (A6)	46,817
D5	Are canopy coverage requirements met?	Yes
D6	If No, then submit a request to contribute to the Tree Fund to cover the unmet portion of the required minimum tree canopy coverage.	Narrative

GREEN HEDGES SCHOOL
415 WINDOVER AVE NW
VIENNA, VA
TOWN OF VIENNA

CLIENT
GREEN HEDGES SCHOOL -
THE STONE HOUSE GROUP

STUDIO39
LANDSCAPE ARCHITECTURE, P.C.
5810 KINGSTOWNE CENTER DRIVE
SUITE 120, #769
ALEXANDRIA, VA 22315-5711
703.719.6500 | STUDIO39.COM

SEAL/SIGNATURE



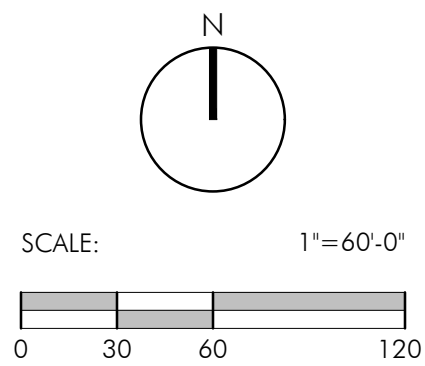
ISSUE DATE

LANDSCAPE PLAN 07.25.2025
LANDSCAPE PLAN 10.30.2025

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, ARE THE PROPERTY OF STUDIO39 LANDSCAPE ARCHITECTURE, P.C. AND IS NOT TO BE COPIED, REPRODUCED, OR USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF STUDIO39 LANDSCAPE ARCHITECTURE, P.C.

PROJECT NUMBER: 25009
CONTACT: JOSEPH PLUMPE
DRAWN: YJ
APPROVED/CHECKED: JP

ORIENTATION AND SCALE



SHEET TITLE

TREE CANOPY
CALCULATIONS-
PHASE II

SHEET NUMBER

C-036

SITE DEVELOPMENT PLAN

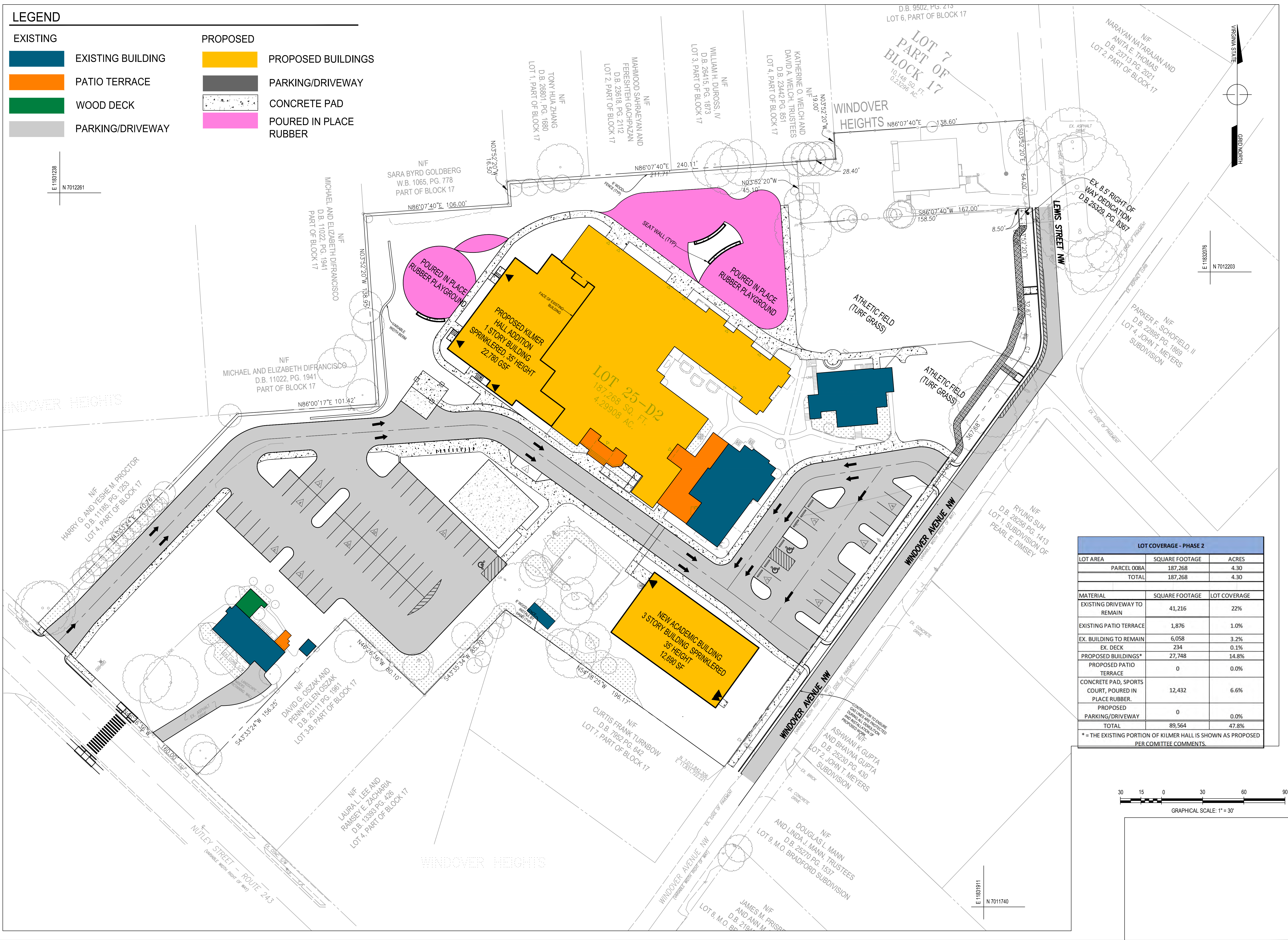
LEGEND

EXISTING

- EXISTING BUILDING
PATIO TERRACE
WOOD DECK
PARKING/DRIVEWAY

PROPOSED

- PROPOSED BUILDINGS
PARKING/DRIVEWAY
CONCRETE PAD
POURED IN PLACE RUBBER



LOT COVERAGE - PHASE 2		
LOT AREA	SQUARE FOOTAGE	ACRES
PARCEL 008A	187,268	4.30
TOTAL	187,268	4.30
MATERIAL		
EXISTING DRIVEWAY TO REMAIN	SQUARE FOOTAGE	LOT COVERAGE
EXISTING DRIVEWAY TO REMAIN	41,216	22%
EXISTING PATIO TERRACE	1,876	1.0%
EX. BUILDING TO REMAIN	6,058	3.2%
EX. DECK	234	0.1%
PROPOSED BUILDINGS*	27,748	14.8%
PROPOSED PATIO TERRACE	0	0.0%
CONCRETE PAD, SPORTS COURT, POURED IN PLACE RUBBER.	12,432	6.6%
PROPOSED PARKING/DRIVEWAY	0	0.0%
TOTAL	89,564	47.8%
* = THE EXISTING PORTION OF KILMER HALL IS SHOWN AS PROPOSED PER COMMITTEE COMMENTS.		

PROGRAMMING AND PLANNING
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
SURVEY AND MAPPING
SECURITY CONSULTING

Gordon

4501 Daly Drive
Chantilly, VA 20151
Phone: 703-263-1900
www.gordon.us.com

REVISIONS	DESCRIPTION	NUMBER	DATE

SUR: E.ERICKSON	DES: A.AOWENS
DRW: H.BARRY	CHK: A.SARANT

COMMONWEALTH OF VIRGINIA
ANTHONY T. OWENS
Lic. No. 34522
PROFESSIONAL ENGINEER
10-24-2025
SEAL:

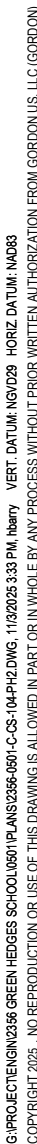
LOT COVERAGE PHASE II

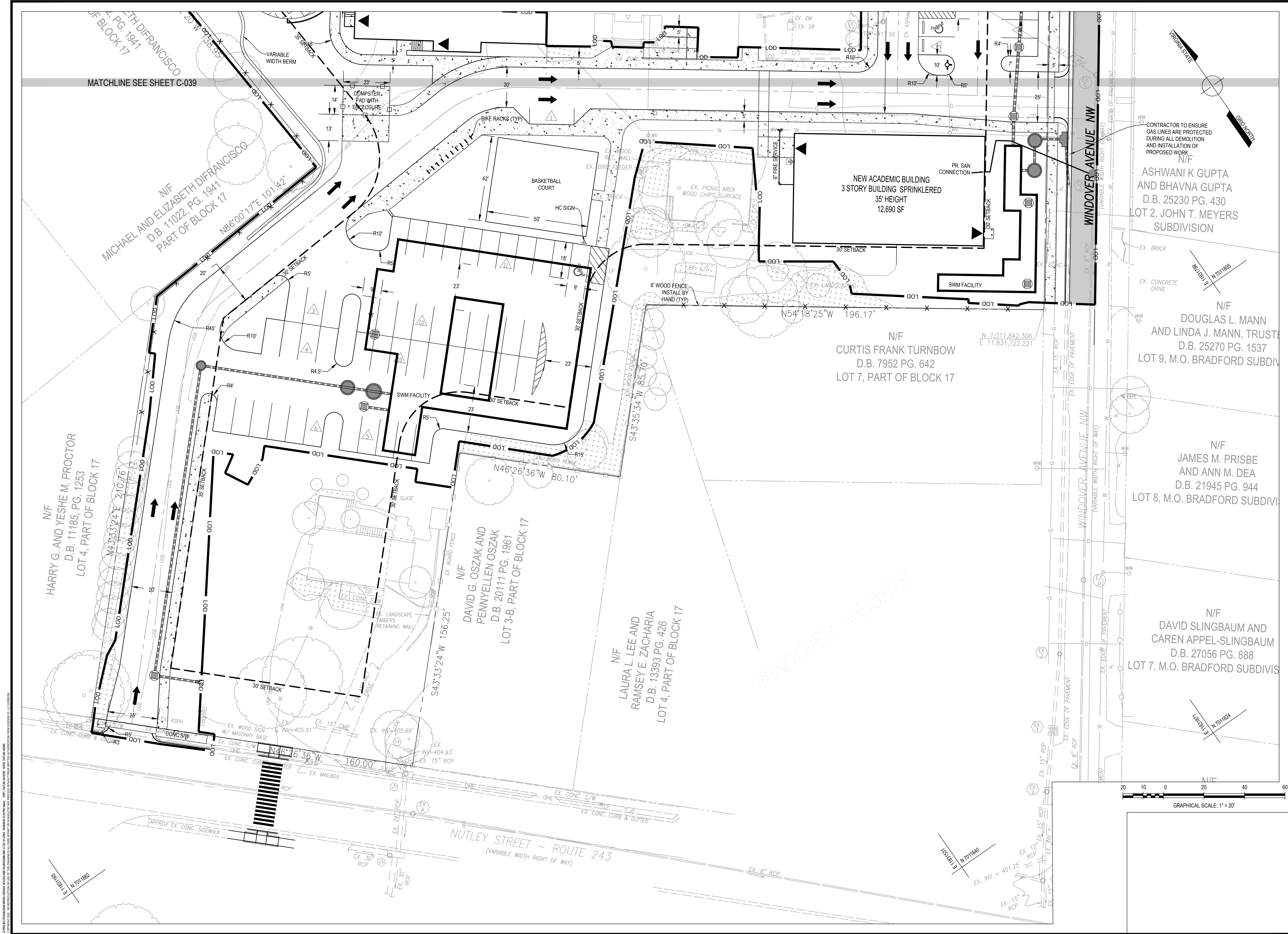
**GREEN HEDGES SCHOOL
SITE DEVELOPMENT PLAN**

TOWN OF VIENNA, VIRGINIA
TOWN OF VIENNA

HORIZ: 1" = 30'
SCALE: VERT: N/A
DATE: 10/24/25
PLAN: GREEN HEDGES SCHOOL
JOB: GORDON 2356-0501
CADD: 2356-0501-C-03-112-PH2.DWG
NCS: 2356-0501-C-03-112-PH2
NUMBER: C-0370FC-051

Gordon





PROGRAMMING AND PLANNING
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
SURVEY AND MAPPING
SECURITY CONSULTING

Gordon

4501 Daly Drive
Chantilly, VA 20151
Phone: 703-263-1900
www.gordon.us.com

REVISIONS

NUMBER	DATE	DESCRIPTION

SUR: E.ERICKSON
DRW: H.BARRY

DES: A.AOWENS
CHK: A.SARANT

COMMONWEALTH OF VIRGINIA
ANTHONY T. OWENS
Lic. No. 34522
10-24-25
PROFESSIONAL ENGINEER

SEAL:

ULTIMATE SITE AND UTILITY PLAN

**GREEN HEDGES SCHOOL
SITE DEVELOPMENT PLAN**

TOWN OF VIENNA, VIRGINIA
TOWN OF VIENNA

HORIZ: 1" = 20'
SCALE: VERT: N/A

DATE: 10/24/25

PLAN: GREEN HEDGES SCHOOL

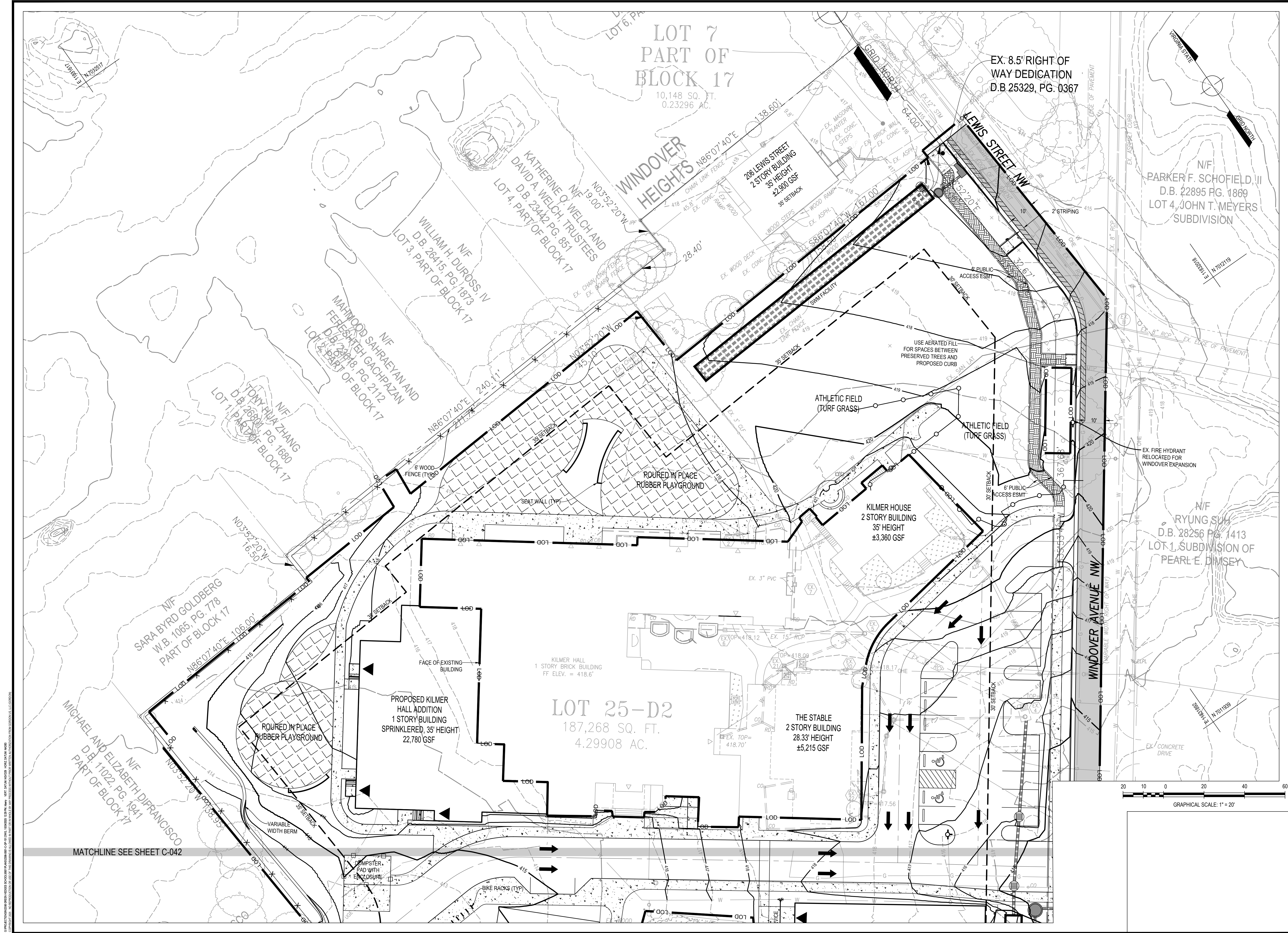
JOB: GORDON 2356-0501

CADD: 2356-0501-C-05-101.DWG

NCS: 2356-0501-C-05-101

NUMBER: C-0400FC-051

Gordon



PROGRAMMING AND PLANNING

CIVIL ENGINEERING

LANDSCAPE ARCHITECTURE

SURVEY AND MAPPING

SECURITY CONSULTING

Gordon

4501 Daly Drive

Chantilly, VA 20151

Phone: 703-263-1900

www.gordon.us.com

REVISIONS	
NUMBER	DATE

SUR:	DES:
E.ERICKSON	A.AOWENS
DRW:	CHK:
H.BARRY	A.SARANT

COMMONWEALTH OF VIRGINIA

ANTHONY T. OWENS A

Lic. No. 34522

10-24-20

PROFESSIONAL ENGINEER

SEAL:

ULTIMATE GRADING PLAN

GREEN HEDGES SCHOOL

SITE DEVELOPMENT PLAN

TOWN OF VIENNA, VIRGINIA

TOWN OF VIENNA

HORIZ: 1" = 20'

SCALE: VERT: N/A

DATE: 10/24/25

PLAN: GREEN HEDGES SCHOOL

JOB: GORDON 2356-0501

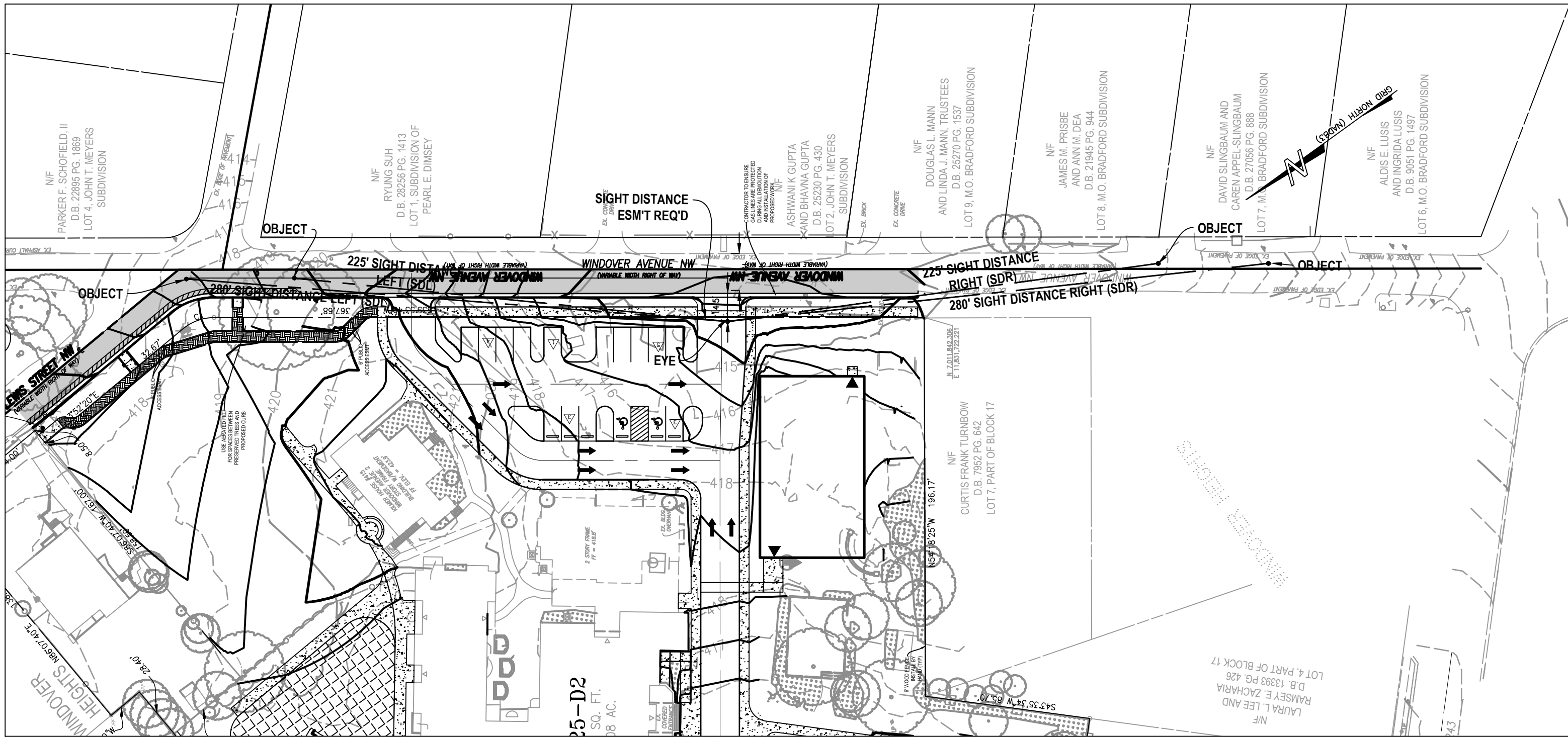
CADD: 2356-0501-C-GR-101.DWG

NCS: 2356-0501-C-GR-101

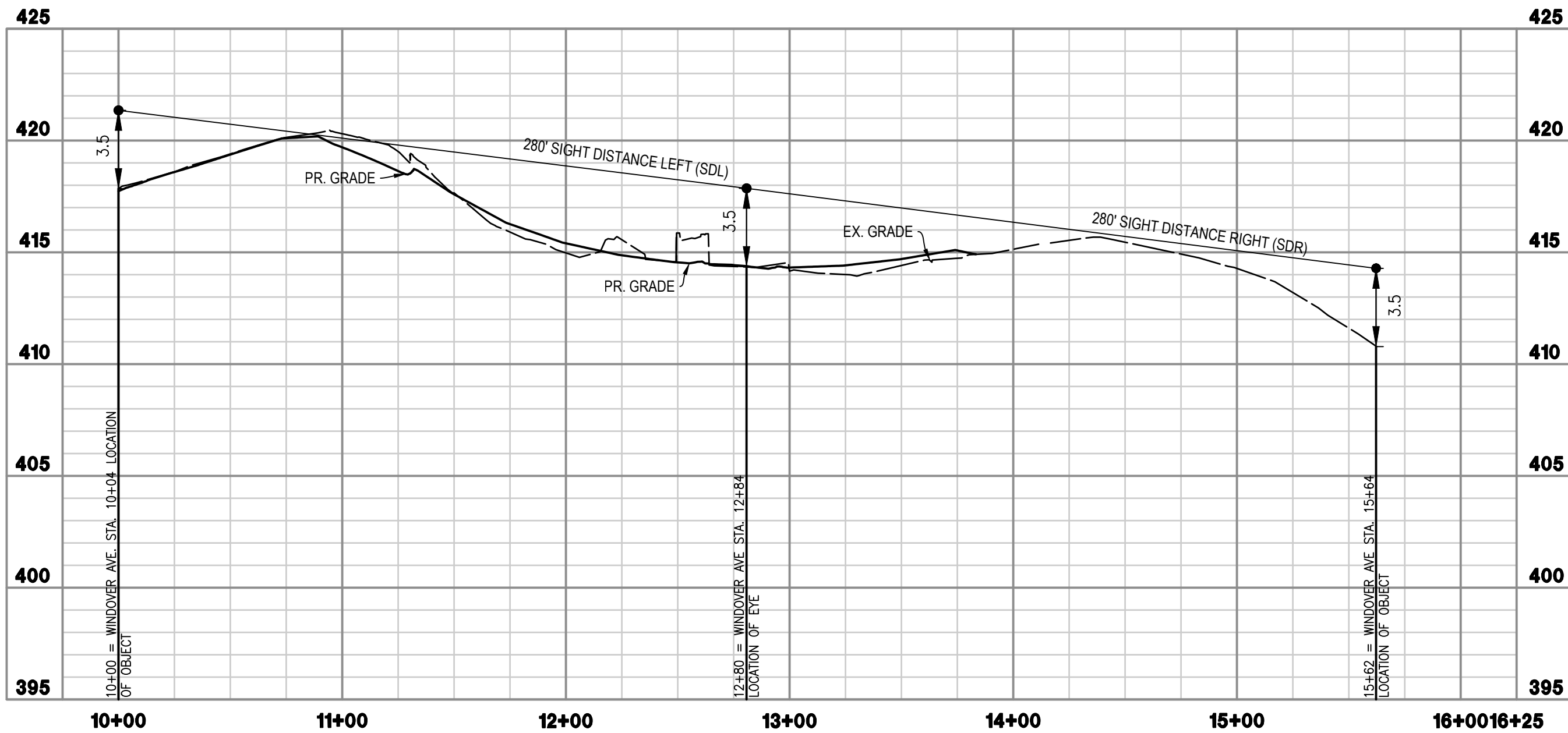
NUMBER: C-041oFC-051

Gordon

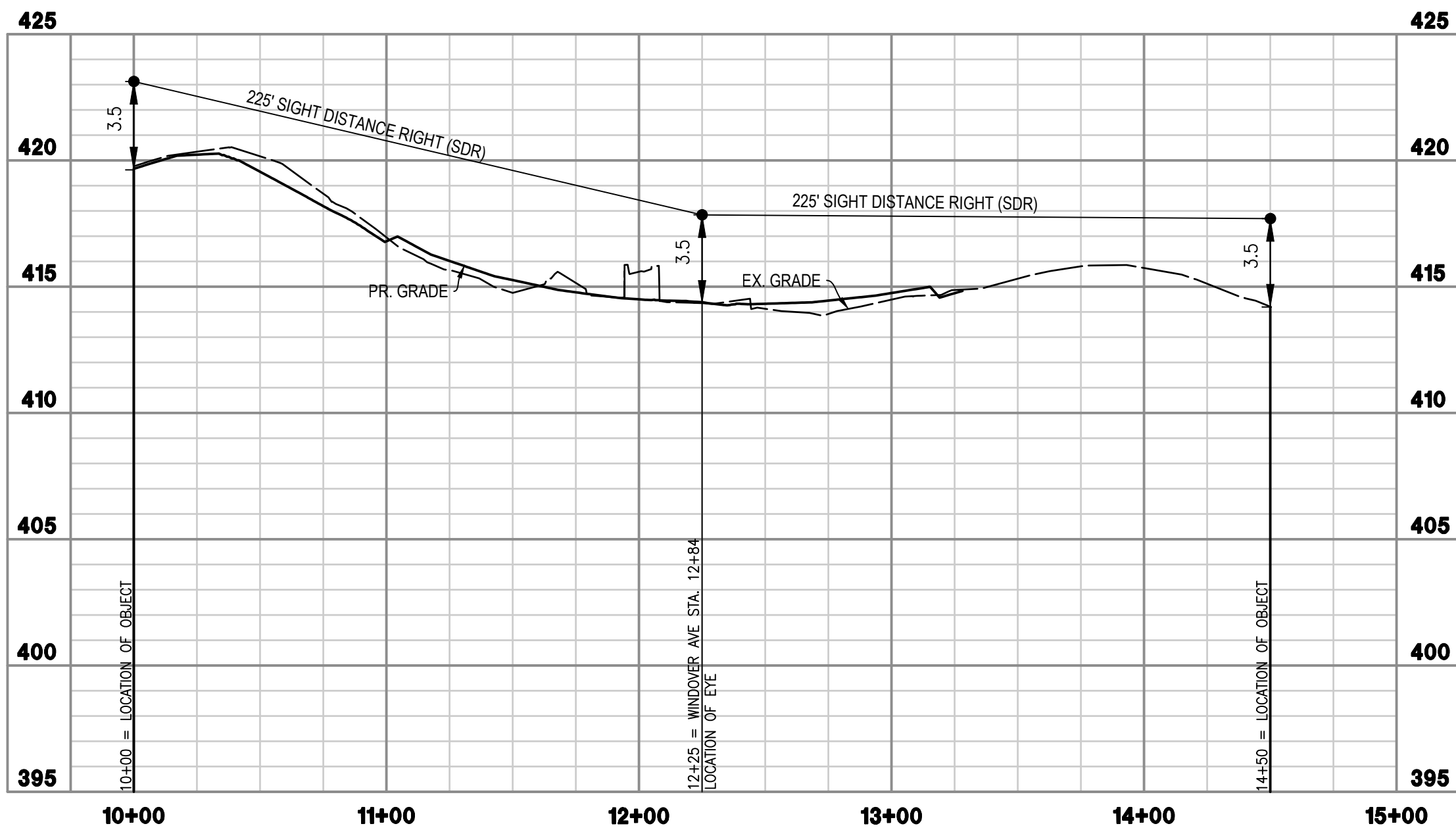
© 2025 GORDON GREEN HEDGES SCHOOL SITE DEVELOPMENT PLAN. ALL RIGHTS RESERVED. NO REPRODUCTION OR USE OF THIS DRAWING IS ALLOWED IN PART OR IN WHOLE BY ANY PROCESS WITHOUT PRIOR WRITTEN AUTHORIZATION FROM GORDON LUS CONSULTING.



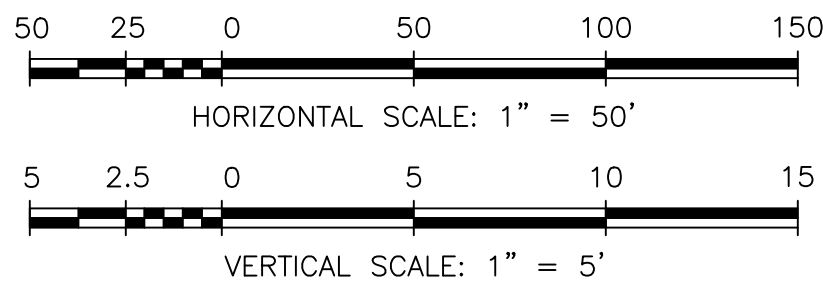
1 WINDOVER AVENUE SIGHT DISTANCE PLAN
SCALE: H: 1"=50'



2 WINDOVER AVENUE SIGHT DISTANCE PROFILE - 25 MPH
SCALE: H: 1"=50'; V: 1"=5'



3 WINDOVER AVENUE SIGHT DISTANCE PROFILE - 20 MPH
SCALE: H: 1"=50'; V: 1"=5'

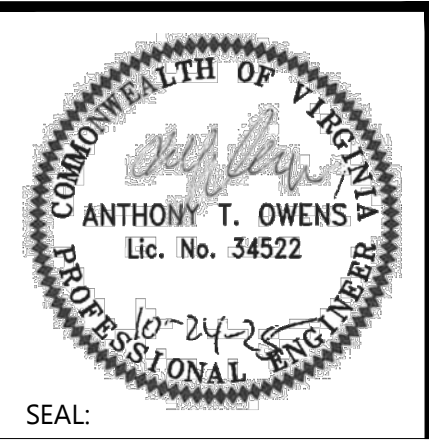


- NOTES:
1. POSTED SPEED IS 25 MPH.
 2. DESIGN SPEED IS ASSUMED AS 25 MPH. 25 MPH SIGHT DISTANCE AS SHOWN PROVIDES <6 INCHES OF VERTICAL CLEARANCE OF SIGHT ALONG THE LINE OF SIGHT. A SEPARATE SIGHT DISTANCE PROFILE IS PREPARED WITH A 20 MPH DESIGN SPEED IDENTIFYING A MORE CLEAR LINE OF SIGHT ALONG WINDOVER AVE.
 3. TYPE OF ROADWAY CONSIDERED IS A 2 LANE MAJOR ROADWAY FOR SIGHT DISTANCE PURPOSES.
 4. LOCATION OF EYE IS SHOWN AS 14.5 FEET BEHIND EDGE OF PAVEMENT.

Gordon
PROGRAMMING AND PLANNING
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
SURVEY AND MAPPING
SECURITY CONSULTING
4501 Daly Drive
Chantilly, VA 20151
Phone: 703-263-1900
www.gordon.us.com

REVISIONS	
NUMBER	DESCRIPTION

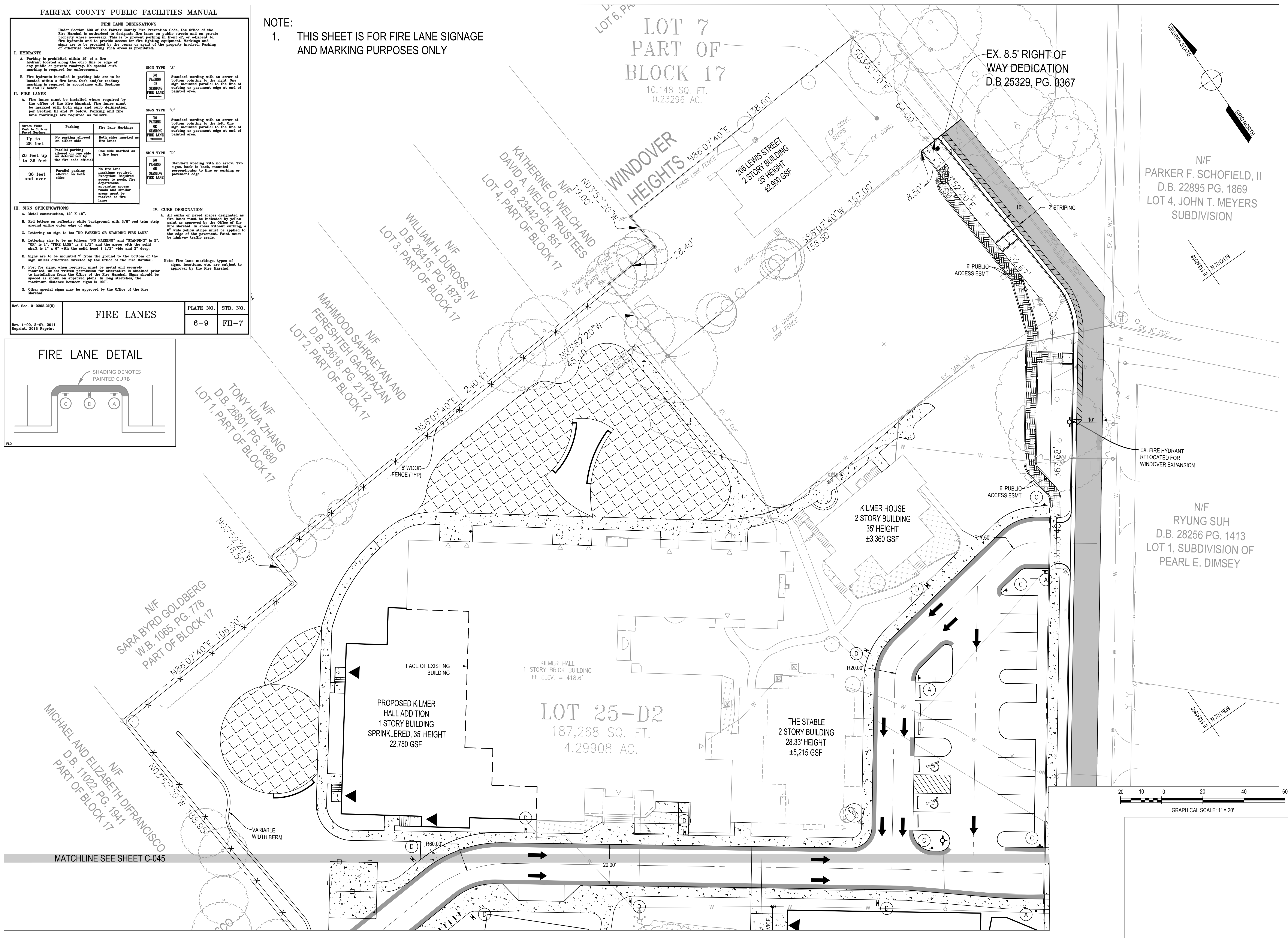
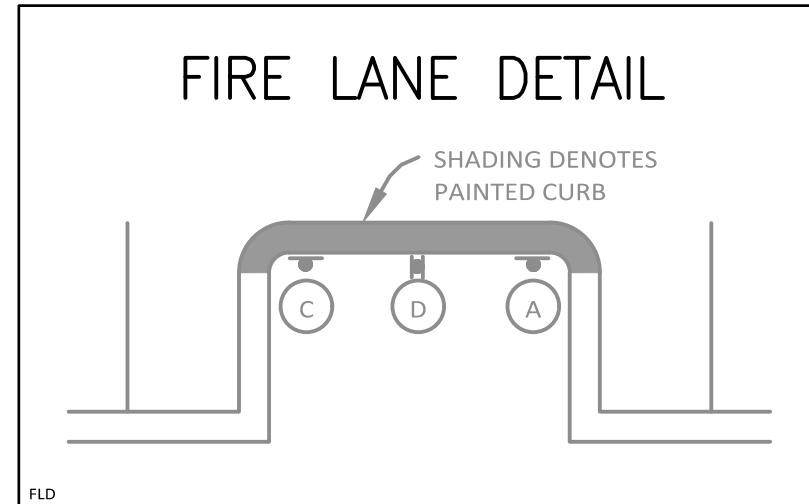
SUR:	DES:
E.ERICKSON	A.OWENS
DRW:	CHK:
H.BARRY	A.SARANT



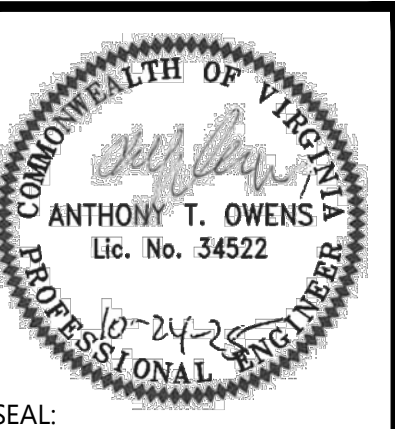
SITE DISTANCE PLAN AND PROFILE
**GREEN HEDGES SCHOOL
SITE DEVELOPMENT PLAN**
TOWN OF VIENNA, VIRGINIA
TOWN OF VIENNA

HORIZ: 1" = 50'
SCALE: VERT: 1" = 5'
DATE: 10/24/25
PLAN: GREEN HEDGES SCHOOL
JOB: GORDON 2356-0501
CADD: 2356-0501-C-01-101.DWG
NCS: 2356-0501-C-01-101
NUMBER: C-043oFC-051
Gordon

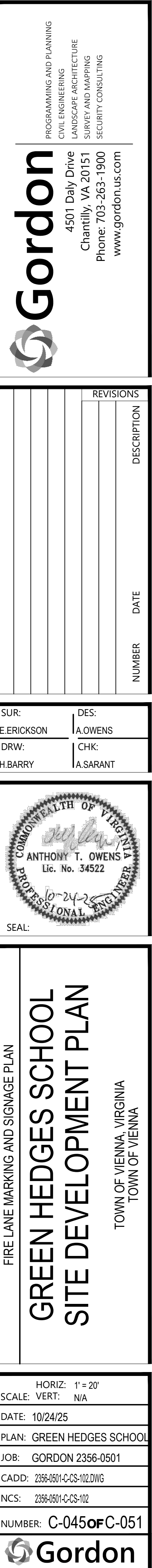
1. THIS SHEET IS FOR FIRE LANE SIGNAGE
AND MARKING PURPOSES ONLY

[illegible]

UR:	DES:
ERICKSON	A.OWENS
RW:	CHK:
BARRY	A.SARANT



HORIZ:	1' = 20'
SCALE: VERT:	N/A
DATE:	10/24/25
DRAWN BY:	GREEN HEDGES SCHOOL
PHONE:	GORDON 2356-0501
ADDRESS:	2356-0501-C-CS-102.DWG
PROJECT:	2356-0501-C-CS-102
PROJECT NUMBER:	C-044 OF C-051



1. A PRE-CONSTRUCTION MEETING MUST BE HELD PRIOR TO THE START OF CONSTRUCTION. CALL 703-255-6384 TO SCHEDULE THE PRE-CONSTRUCTION MEETING.
2. ALL CONSTRUCTION GENERATED DEBRIS MUST BE HAUL AWAY BY THE CONTRACTOR OR OWNER.
3. PRIOR TO THE REMOVAL OF ANY TOWN TREES (TREES WITHIN THE RIGHT OF WAY), THE APPLICANT OR THEIR REPRESENTATIVE SHALL CONTACT THE TOWN OF VIENNA ARBORIST AT 703-255-6380 TO COORDINATE HAVING THE TOWN ARBORIST ONSITE DURING ALL TOWN TREE REMOVAL.
4. TREE PROTECTION FOR ANY TOWN TREE, AS SHOWN ON PLAN, MUST BE INSTALLED PRIOR TO ANY SITE WORK.
5. IT IS UNLAWFUL TO PERFORM ANY CONSTRUCTION ABOVE FOUNDATION CORNERS PRIOR TO APPROVAL OF SETBACKS. WORK COMPLETED IN VIOLATION OF THIS REQUIREMENT IS SUBJECT TO DEMOLITION.
6. ALL DUMPSTERS/PODS ARE TO BE PLACED ON PRIVATE PROPERTY.
7. FRONT ELEVATION CHECKS ARE REQUIRED.
8. WALL CHECK SURVEYS ARE REQUIRED AND MUST BE SUBMITTED PRIOR TO CONSTRUCTION ABOVE FOUNDATION CORNERS.
9. A CERTIFICATE OF OCCUPANCY IS REQUIRED PRIOR TO OCCUPANCY. ALL REQUIRED DOCUMENTATION AND INSPECTIONS MUST BE SUBMITTED/COMPLETED BEFORE THE TOWN OF VIENNA WILL ISSUE A CERTIFICATE OF OCCUPANCY.
10. EXISTING SANITARY SEWER LATERALS ARE TYPICALLY CAPPED AT OR NEAR THE PROPERTY LINE. THE REUSE OF THE PORTION OF THE EXISTING SANITARY SEWER LATERAL BETWEEN THE TOWN OWNED SEWER MAIN AND THE CAPPED END MAY BE ALLOWED PROVIDING THAT A LICENSED PLUMBER CERTIFIES THAT THE EXISTING PIECE OF PIPE IS GRADED PROPERLY AND IN LIKE NEW CONDITION. THE REUSE OF A PORTION OF THE EXISTING LATERAL DOES NOT IMPLY THAT THE TOWN IS WARRANTING THE CONDITION IN ANY WAY.

NO.	SYMBOL	KEY	DESCRIPTION
C-SCM-03	CE		TEMPORARY GRAVEL CONSTRUCTION ENTRANCE
C-PCM-04	SF		SILT FENCE
C-PCM-04-5	SSF		SUPER SILT FENCE
C-SCM-04	IP		STORM DRAIN INLET PROTECTION
C-SSM-09	TS		TEMPORARY SEEDING
C-SSM-10	PS		PERMANENT SEEDING
	ILCG		INITIAL LIMITS OF CLEARING & GRADING
			LIMITS OF DISTURBANCE
C-SSM-01	TP		TREE PROTECTION FENCING
			DRAINAGE DIVIDES
			OVERLAND RELIEF

 CRITICAL SLOPE - CRITICAL SLOPE TO BE SEEDED, MULCHED, AND TACKED WITHIN 14 DAYS AFTER START OF GRADING, OR SODDED AND PEGGED WITHIN 14 DAYS AFTER START

1. DEVICES SHOWN IN PLAN ARE TO BE CONSIDERED MINIMUM EROSION AND SEDIMENT CONTROLS. ADDITIONAL CONTROLS MAY BE NECESSARY DUE TO CONTRACTOR PHASING, SITE INSPECTOR REQUESTS, OR OTHER UNANTICIPATED CONDITIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ADDITIONAL DEVICES TO THOSE SHOWN IN ORDER TO CONTROL EROSION AND SEDIMENTATION.

2. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED ACCORDING TO THE STANDARDS AND SPECIFICATIONS IN THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.

3. THE CONTRACTOR IS TO PROVIDE ADEQUATE MEANS OF ALLYING DUST AS NECESSARY BY APPLYING EITHER MOISTURE, CALCIUM CHLORIDE OR BOTH MATERIALS ALONG THOSE SECTIONS OF THE PROJECT ADJACENT TO PUBLIC ACCESS.

4. APPLY PERMANENT VEGETATION (SODDING) WITH SOIL PREPARATION, AMENDMENTS AND SOD APPROPRIATE TO THE TIME OF YEAR IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS AS PROJECTED IN SECTION 3.32 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.

5. NO UNPROTECTED, DISTURBED AREA SHALL DRAIN TO ROADWAY PAVEMENTS SUCH THAT THE SUBBASE, BASE OR WEARING SURFACE ARE CONTAMINATED BY SILT TRAPPED AT LOW POINT OR INLETS.

(MS-1) PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE LEFT DORMANT FOR MORE THAN ONE YEAR.

(MS-2) DURING CONSTRUCTION OF THE PROJECT STOCKPILES OR BORROW AREAS SHALL BE STABILIZED OR PROTECT WITH SEDIMENT TRAPPING MEASURES. THE APPLICANT IS RESPONSIBLE FOR TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCK PILES AND BORROW AREAS. THE GRADING/EXCAVATION CONTRACTOR FOR THE SUBJECT SITE IS REQUIRED TO NOTIFY, IN WRITING, THE ASSIGNED SITE INSPECTOR REGARDING ANY EXCESS MATERIAL PROPOSED TO BE HAULED OFFSITE PRIOR TO HAULING. THE NOTIFICATION MUST INDICATE THE QUANTITY OF MATERIAL TO BE MOVED OFFSITE, IDENTIFICATION OF THE RECEIVING SITE WHERE THE EXCESS WILL BE TAKEN, AND ALL INFORMATION NECESSARY TO SHOW THAT SUCH RECEIVING SITE HAS BEEN PROPERLY PERMITTED AND HAS E&S CONTROLS INSTALLED.

(MS-3) A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL GROUND COVER IS ACHIEVED THAT IS UNIFORM, MATURE ENOUGH TO SURVIVE AND WILL INHIBIT EROSION.

(MS-7) CUT AND FILL SLOPES SHALL BE CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. THE USE OF SURFACE ROUGHENING TECHNIQUES SHALL BE EMPLOYED. SLOPES THAT ARE FOUND TO BE ERODING EXCESSIVELY WITHIN ONE YEAR OF PERMANENT STABILIZATION SHALL BE PROVIDED WITH ADDITIONAL SLOPE STABILIZING MEASURES UNTIL THE PROBLEM IS CORRECTED AS DIRECTED BY THE SITE INSPECTOR.

ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE STABILIZED WITH SEEDING IMMEDIATELY FOLLOWING FINISH GRADING. THE PLANTING SOIL MUST HAVE ENOUGH FINE GRADED SOIL, FAVORABLE pH, SUFFICIENT PORE SPACE, SUFFICIENT DEPTH AND FREE FROM TOXIC AMOUNTS OF HARMFUL MATERIALS OR EXCESSIVE QUANTITIES OF ROOT STONES AND SHALL BE APPLIED WITH STD & SPEC 3.30. AFTER SEED IS IN PLACE, IT MUST BE PROTECTED WITH A MULCH TO HOLD MOISTURE AND MODIFY TEMPERATURE EXTREMES, AND TO PREVENT EROSION WHILE SEEDLINGS ARE GROWING.

1. NO DISTURBED AREA WHICH IS NOT ACTIVELY BEING WORKED SHALL REMAIN DENuded FOR MORE THAN 7 CALENDAR DAYS UNLESS OTHERWISE AUTHORIZED BY THE DIRECTOR.
2. ALL EKS CONTROL MEASURES APPROVED WITH THE PHASE I EKS PLAN SHALL BE PLACED AS THE FIRST STEP IN GRADING.
3. ALL STORM AND SANITARY SEWER LINES NOT IN STREETS SHALL BE SEEDED AND MULCHED WITHIN 7 DAYS AFTER BACKFILL. NO MORE THAN 500' SHALL BE OPEN AT ANY ONE TIME.
4. ELECTRIC POWER, TELEPHONE AND GAS SUPPLY TRENCHES SHALL BE COMPACTED, SEEDED AND MULCHED WITHIN 7 DAYS AFTER BACKFILL.
5. ALL TEMPORARY EARTH BERMS, DIVERSIONS AND SEDIMENT CONTROL DAMS SHALL BE SEEDED AND MULCHED FOR TEMPORARY VEGETATIVE COVER IMMEDIATELY (AS SOON AS POSSIBLE BUT NO LATER THAN 48 HRS) AFTER COMPLETION OF GRADING. STRAW OR HAY MULCH IS REQUIRED. SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UP-SLOPE LAND DISTURBANCE TAKES PLACE PER (MS-4) MINIMUM STANDARDS. STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION (MS-5)
6. DURING CONSTRUCTION ALL STORM SEWER INLETS SHALL BE PROTECTED BY SEDIMENT TRAPS, MAINTAINED AND MODIFIED DURING CONSTRUCTION PROGRESS AS REQUIRED.
7. ANY DISTURBED AREA NOT COVERED BY NOTE NUMBER 1 OF THIS SECTION AND NOT PAVED, SODDED OR BUILT UPON BY NOVEMBER 1, OR DISTURBED AFTER THAT DATE, SHALL BE MULCHED IMMEDIATELY WITH HAY OR STRAW MULCH AT THE RATE OF 2 TONS/ACRE AND OVER SEEDED BY APRIL 15.
8. AT THE COMPLETION OF ANY PROJECT, CONSTRUCTION AND PRIOR TO BOND RELEASE, ALL TEMPORARY SEDIMENT CONTROLS SHALL BE REMOVED AND ALL DENuded AREAS SHALL BE STABILIZED.
9. DURING CONSTRUCTION OF THE PROJECT, SOIL BORROW AREAS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES.
10. (MS-10) ALL STORM SEWER INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED.
11. SO THAT SEDIMENT-ADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.
11. ALL SOIL THAT IS BROUGHT TO THE SITE SHALL BE FROM AN APPROVED (i.e. PERMITTED) LOCATION. ALL SOIL REMOVED FROM THE SITE WILL BE TAKEN TO AN APPROVED (i.e. PERMITTED) LOCATION.
12. CONTRACTOR TO ENSURE ANY CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME OR SLOPE DRAIN STRUCTURE AS REQUIRED OR DIRECTED BY THE SITE INSPECTOR (MS-8). ADDITIONALLY THE CONTRACTOR SHALL PROVIDE ADEQUATE DRAINAGE PROTECTION WHENEVER WATER SEEPS FROM A SLOPE FACE AS REQUIRED DURING CONSTRUCTION OPERATIONS (MS-9).

FOR SOILS INFORMATION SEE SHEET ###.

THIS PROJECT PROPOSES TO PHASE THE CONSTRUCTION ACROSS 2 MAJOR PHASES. THE PHASING BELOW REPRESENT A GENERIC PLAN FOR ESC PHASING OF EACH PROJECT PHASE. FINAL ENGINEERING OF EROSION AND SEDIMENT PLANS SHALL OCCUR AT TIME OF EACH RESPECTIVE PHASED SITE PLAN.

- 1) FLAG LIMITS OF CONSTRUCTION ACTIVITIES AND INITIAL LIMITS OF CLEARING AND GRADING
- 2) INSTALL PHASE I PERIMETER CONTROLS (CONSTRUCTION ENTRANCE, SUPER SILT FENCE, INLET PROTECTION, TREE PROTECTION)
- 3) INSTALL CONSTRUCTION ENTRANCE
- 4) BEGIN SITE DEMOLITION
- 4) BEGIN EARTHWORK OPERATIONS
- 5) APPLY TEMPORARY SEEDING AS REQUIRED
- 6) INSPECT AND MAINTAIN EROSION CONTROL MEASURES AS REQUIRED

- 1) PERFORM EARTH WORK AND FILLING OPERATIONS
- 2) PERFORM ROUGH GRADING FOR SITE
- 3) BEGIN CONSTRUCTION OF BUILDING
- 4) INSTALL UNDERGROUND UTILITIES
- 5) INSTALL ADDITIONAL EROSION CONTROLS AS REQUIRED
- 6) CONTINUE BUILDING CONSTRUCTION
- 7) FINAL GRADING AND PAVING
- 8) RESTORE AND STABILIZE DISTURBED AREAS WITH PERMANENT SEEDING
- 9) INSPECT AND MAINTAIN EROSION CONTROLS AS REQUIRED
- 10) REMOVE EROSION CONTROL MEASURES WITH THE APPROVAL OF THE SITE INSPECTOR

CONSTRUCTION IS ANTICIPATED TO BEGIN FALL 2025. FINAL COMPLETION OF ALL 2 PHASES IS NOT YET DETERMINED.

THE PURPOSE OF THIS PROJECT IS FOR REPLACEMENT AND EXPANSION TO KILMER HALL, ADD A NEW GYMNASIUM, AND PROVIDE ENHANCED OUTDOOR PLAY AMENITIES AND CLASSROOM LEARNING AREAS. THIS PROJECT PROPOSES TO PHASE THE CONSTRUCTION ACROSS 2 MAJOR PHASES. EACH PROJECT PHASE WILL HAVE A STAND ALONE EROSION AND SEDIMENT CONTROL PROGRAM WITH ESC PHASE I AND II. THE ESC PLANS SHOWN ON THIS DOCUMENT REPRESENT A GENERIC PLAN FOR ESC PHASING OF EACH PROJECT PHASE. FINAL ENGINEERING OF EROSION AND SEDIMENT PLANS SHALL OCCUR AT TIME OF EACH RESPECTIVE PHASE SITE PLAN.

THE RICE ARTS CENTER LOCATED ON WINDOVER AVENUE WILL BE REMOVED. THE EXISTING PROPERTY AREA IS 4.53 ACRES AND THE DISTURBED AREA IS 3.77 ACRES.

CURRENTLY THIS SITE HAS 6 BUILDINGS, AN ASPHALT DRIVE THROUGH THE PROPERTY AND PLAY AREAS. THE SITE SLOPES GENERALLY FROM THE NORTH TO THE SOUTH WITH THE NORTHERN-MOST CORNER OF THE SITE SLOPING TO THE NORTH.

THE SITE IS IN A RESIDENTIAL NEIGHBORHOOD AND SURROUNDED BY SINGLE FAMILY HOMES. THE SITE HAS FRONTAGE ON BOTH NUTLEY STREET AND WINDOVER AVENUE.

GRADING AND CONSTRUCTION ACTIVITIES WITHIN VDOT RIGHT OF WAY WILL BE REQUIRED TO MODIFY THE EXISTING ENTRANCES ALONG NUTLEY STREET AND WINDOVER AVENUE.

THERE ARE NO KNOWN CRITICAL EROSION AREAS ON THIS SITE

SEE STORMWATER MANAGEMENT SHEETS FOR STORMWATER ENHANCEMENTS PROVIDED WITH THIS PROJECT.

AT TIME OF FINAL SITE PLAN, EACH PROJECT PHASE WILL HAVE ITS OWN EROSION AND SEDIMENT CONTROL PLANS (ESC PHASE I & II). THE EROSION AND SEDIMENT CONTROL PROGRAM HAS BEEN PROPOSED IN TWO PHASES WHERE THE PHASE I & II CONTROL FACILITIES SHALL BE INSTALLED BEFORE OTHER CLEARING, GRADING AND CONSTRUCTION STARTS. THE PHASE II CONTROL FACILITIES SHALL BE INSTALLED AS EARTHWORK, FILLING AND ROUGH GRADING OPERATIONS PROCEED. CONTROL MEASURES SHALL BE INSTALLED AS SHOWN ON THE PHASE I, PHASE II PLANS. CONTROLS INSTALLED UNDER THE PHASE I PLAN ARE INTENDED TO REMAIN FOR THE DURATION OF THE PROJECT. ADDITIONAL CONTROLS WILL BE PROVIDED UNDER PHASE II AS NEEDED OR REQUESTED BY THE SITE INSPECTOR.

1. TEMPORARY CONSTRUCTION ENTRANCE (3.02) WITH WASH RACK SHALL BE UTILIZED TO MINIMIZE THE AMOUNT OF SEDIMENT/MUD CARRIED FROM THE SITE ONTO PUBLIC AND PRIVATE ROADS. (M-17) IF SEDIMENT IS TRANSPORTED ONTO A PAVED OR PUBLIC ROAD SURFACE, THE ROAD SURFACE SHALL BE CLEANED THOROUGHLY AT THE END OF EACH WORKING DAY, OR IMMEDIATELY IF PUBLIC SAFETY IS HINDERED IN ANY WAY. SEDIMENT SHALL BE REMOVED FROM ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONSTRUCTION DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER.
2. SILT FENCE (4.6) TO FILL TO THE TOP OF THE EXISTING GRADE BEFORE IT LEAVES THE PROPERTY. SILT FENCE SHOULD BE REPLACED ON A REGULAR BASIS ACCORDING TO MANUFACTURER'S SPECIFICATIONS. ROOT PRUNING SHALL BE USED IN CONJUNCTION WITH SUPER SILT FENCE FOR TREE PROTECTION MEASURES.
3. INLET PROTECTION DEVICES (3.07) TO MINIMIZE SILTATION OF EXISTING STORM SEWER INLETS. SEE NOTE NUMBER 10 UNDER GENERAL AND CONSERVATION NOTES FOR ADDITIONAL INFORMATION REGARDING (M-10) MINIMUM STANDARDS. DUST CONTROL NARRATIVE THE CONTRACTOR SHALL UTILIZE DUST CONTROL MEASURES AS DEFINED IN THE VIRGINIA STATE EROSION AND SEDIMENT CONTROL HANDBOOK (3.39) TO PREVENT SURFACE AND AIR MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES AND REDUCE THE PRESENCE OF AIRBORNE SUBSTANCES WHICH MAY PRESENT HEALTH HAZARDS, TRAFFIC SAFETY PROBLEMS OR HARM ANIMAL OR PLANT LIFE. SPECIFIC TEMPORARY MEASURES MAY INCLUDE BUT ARE NOT LIMITED TO:
 - a. IRRIGATION - SILT SHALL BE SPRINKLED WITH WATER UNTIL THE SURFACE IS WET. REPEAT AS NEEDED. THIS MAY ESPECIALLY APPLY AFTER CONSTRUCTION DURING WINDY DAYS
 - b. SPRAY-ON ADHESIVES - SEE APPROVED SPRAY-ON ADHESIVES, TABLE 39.9-A (THIS SHEET). SPECIFIC PERMANENT MEASURES MAY INCLUDE BUT ARE NOT LIMITED TO:
 - PERMANENT SEEDING - SEE STANDARD 3.32, NOTES BELOW, AND SHEET 011 FOR DETAIL. NOTE: CONTRACTOR SHALL SEEK APPROVAL FROM COUNTY SITE INSPECTOR PRIOR TO INSTALLING FINAL EROSION CONTROLS.

1. ALL PERIMETER CONTROLS INSTALLED WITH PHASE I SHALL TO REMAIN FOR THE DURATION OF THE PROJECT.
2. ADDITIONAL SILT FENCE (3.05) SHALL BE INSTALLED AS REQUIRED TO CONTROL EROSION.
4. INLET PROTECTION DEVICES (3.07) SHALL BE PLACED ON THE STORM SEWER INLETS AS THEY ARE CONSTRUCTED.

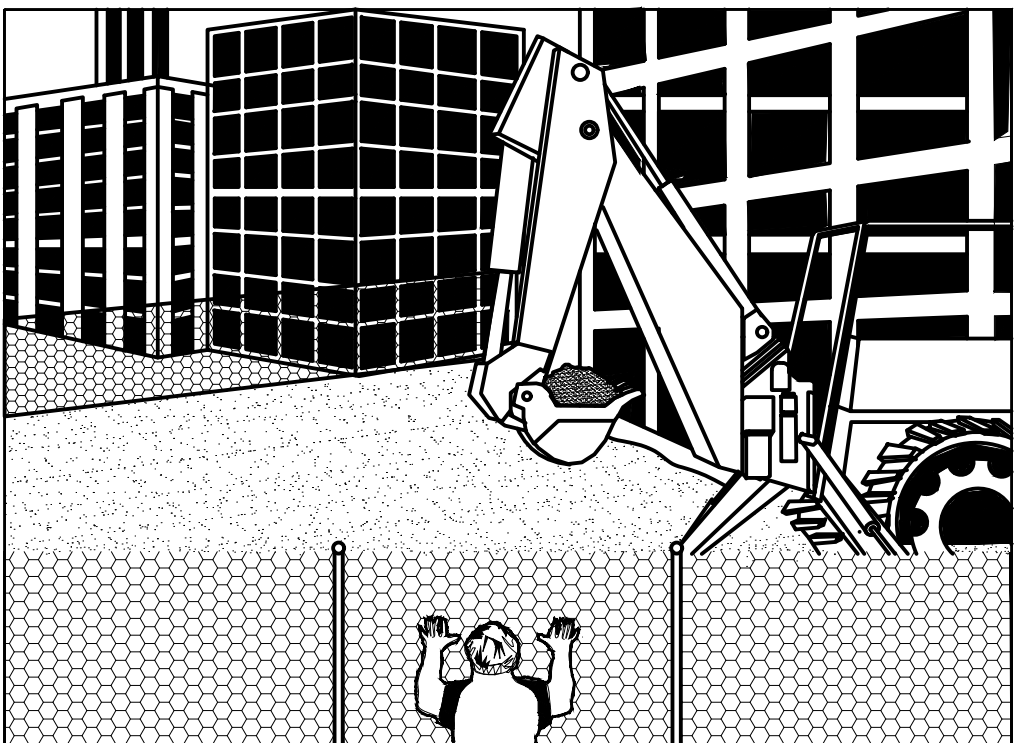
1. TEMPORARY SEEDING (3.31) - NO PERMANENT SEED SHALL REMAIN DENIVED FOR MORE THAN 7 DAYS. TEMPORARY SEEDING MAY BE USED DURING SEASONS WHEN PERMANENT SEEDING IS PROHIBITED. SEEDING SHALL BE PER TABLE 3.31.B OR TABLE 3.31.C OF THE VESCH. LIMING REQUIREMENTS SHALL BE BASED ON TABLE 3.31.A. FERTILIZERS SHALL BE APPLIED AS 800 LBS. PER ACRE. FERTILIZER SHALL BE INCORPORATED INTO TOP 2-4" OF SOIL. SEED SHALL BE APPLIED EVENLY AND SMALL GRAINS SHALL BE PLANTED NO MORE THAN 1" DEEP. SEEDING MADE IN FALL FOR WINTER COVER AND DURING HOT SUMMER MONTHS SHALL BE MULCHED.
2. PERMANENT SEEDING (3.32) - ALL AREAS DENIVED BY THIS CONSTRUCTION SHALL BE STABILIZED WITH APPROPRIATE TURF GRASSES, GROUND COVER, AND/OR OTHER ACCEPTABLE MEASURES. SEEDING SHALL BE PER TABLE 3.32.B OR TABLE 3.32.D AND THE INVASIVE/PEST SPECIES ALTERNATE TABLE (SEE SHEET 011). THE PLANTING SOIL MUST HAVE ENOUGH FINE GRAINED SOIL, SUFFICIENT PORE SPACE, SUFFICIENT DEPTH, AND BE FREE FROM TOXIC OR EXCESSIVE QUANTITIES OF ROOTS AND SHALL BE APPLIED IN ACCORDANCE WITH STANDARD 3.30.

1. ALL MEASURES ARE TO BE INSPECTED DAILY BY THE SITE SUPERINTENDENT OR HIS REPRESENTATIVE. ANY DAMAGED STRUCTURAL MEASURES ARE TO BE REPAIRED BY THE END OF THE DAY.
2. TRAPPED SEDIMENT IS TO BE REMOVED AS REQUIRED TO MAINTAIN EFFICIENCY AND TO BE DISPOSED OF BY SPREADING ON-SITE.
3. CONTROLS MAY BE REMOVED AFTER AREAS ABOVE THEM HAVE BEEN STABILIZED AND WITH APPROVAL OF THE SITE INSPECTOR.

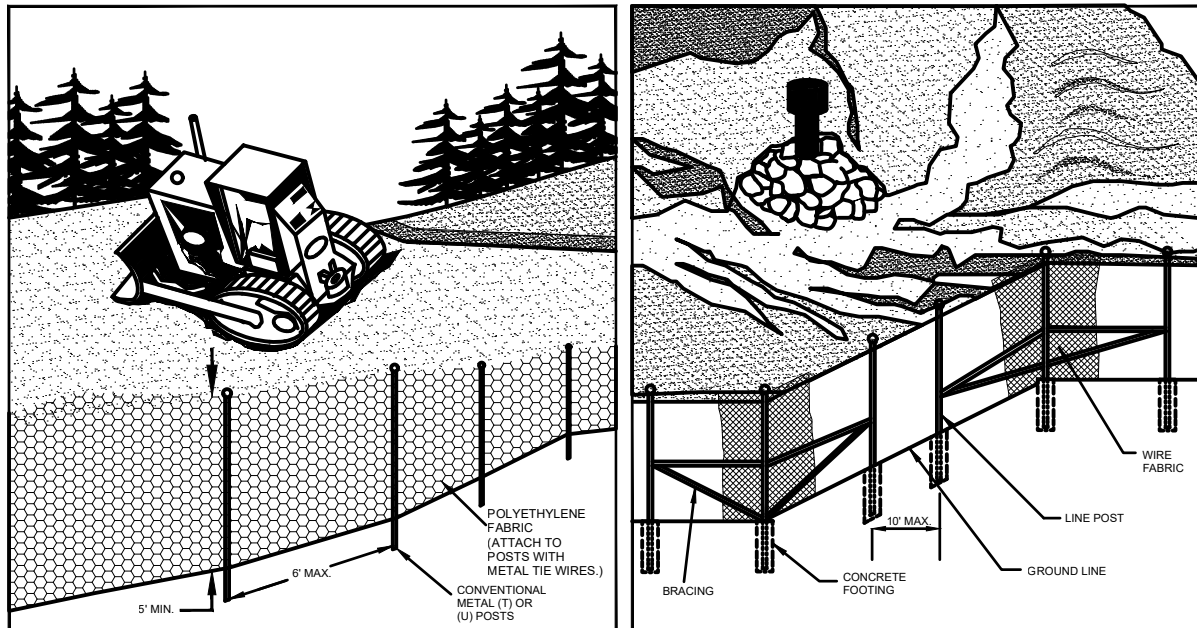
(MIS-18) ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE AUTHORIZED BY THE LOCAL PROGRAM AUTHORITY. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.

SAF

SAFETY FENCE



PERSPECTIVE VIEW



PERSPECTIVE VIEW
PLASTIC FENCE

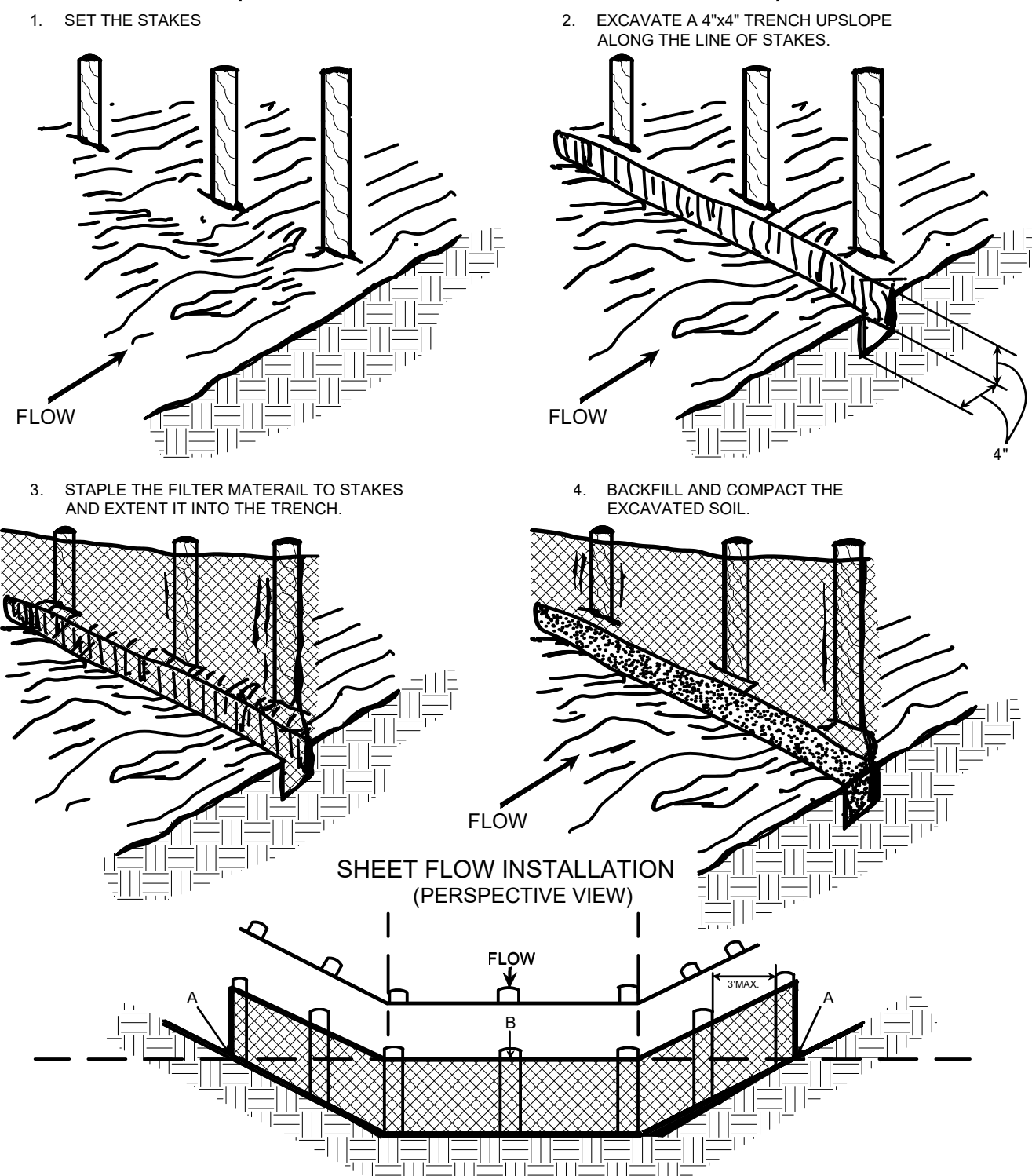
PERSPECTIVE VIEW
METAL FENCE

SOURCE: CONWED PLASTICS
VDOT ROAD AND BRIDGE STANDARDS
VA. DSWC

C-PCM-01-1

SF

CONSTRUCTION OF A SILT FENCE
(WITHOUT WIRE SUPPORT)



SHEET FLOW INSTALLATION
(PERSPECTIVE VIEW)

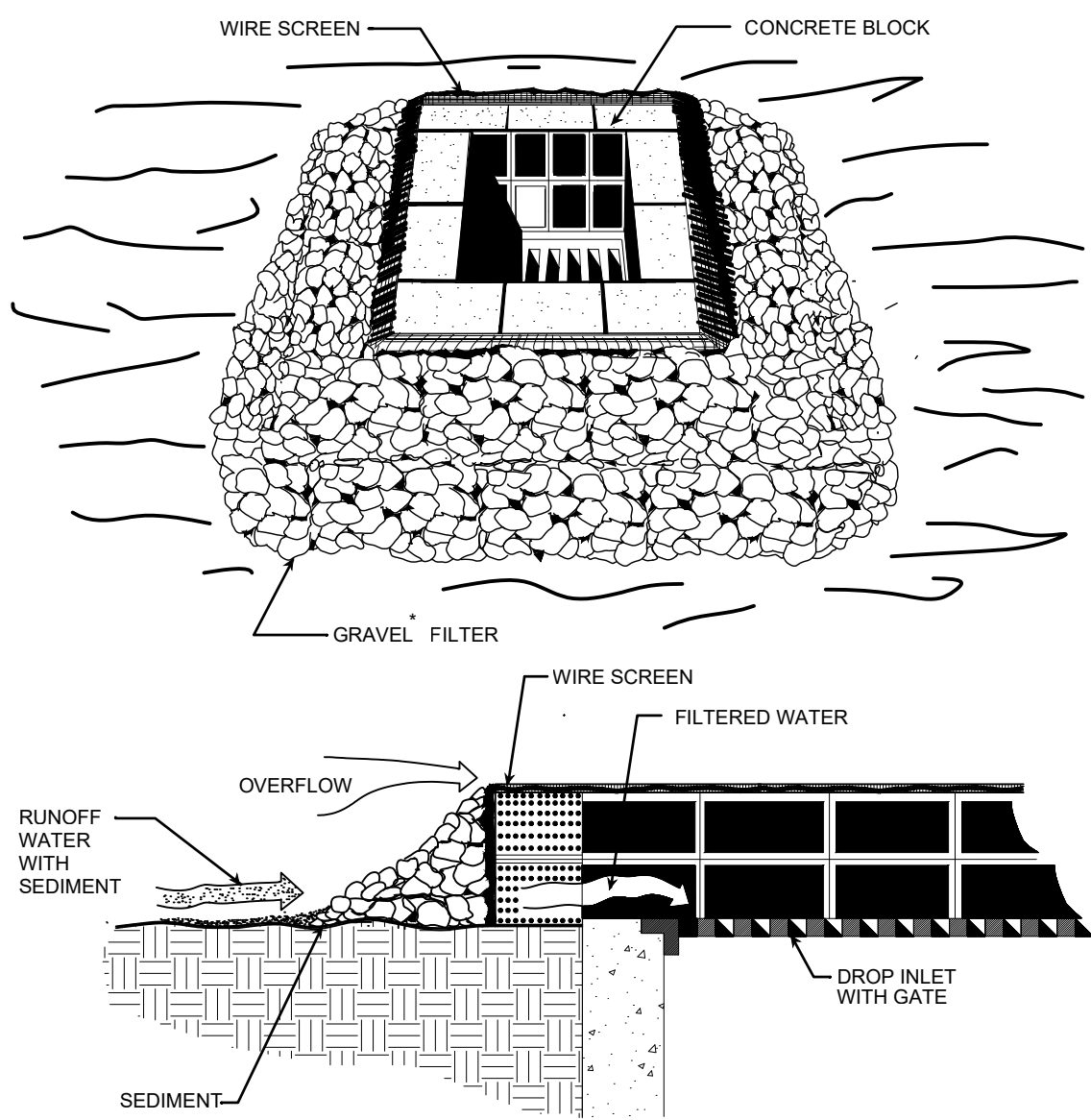
POINTS A SHOULD BE HIGHER THAN POINT B.
DRAINAGEWAY INSTALLATION
(FRONT ELEVATION)

SOURCE: ADAPTED FROM INSTALLATION OF STRAW AND FABRIC FILTER BARRIERS FOR
SEDIMENT CONTROL, SHERWOOD & WYANT

C-PCM-04-2A

IP

BLOCK AND GRAVEL DROP INLET
SEDIMENT FILTER



SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE
HEAVY FLOWS ARE EXPECTED AND WHERE AN OVERFLOW
CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING
AROUND THE STRUCTURE.

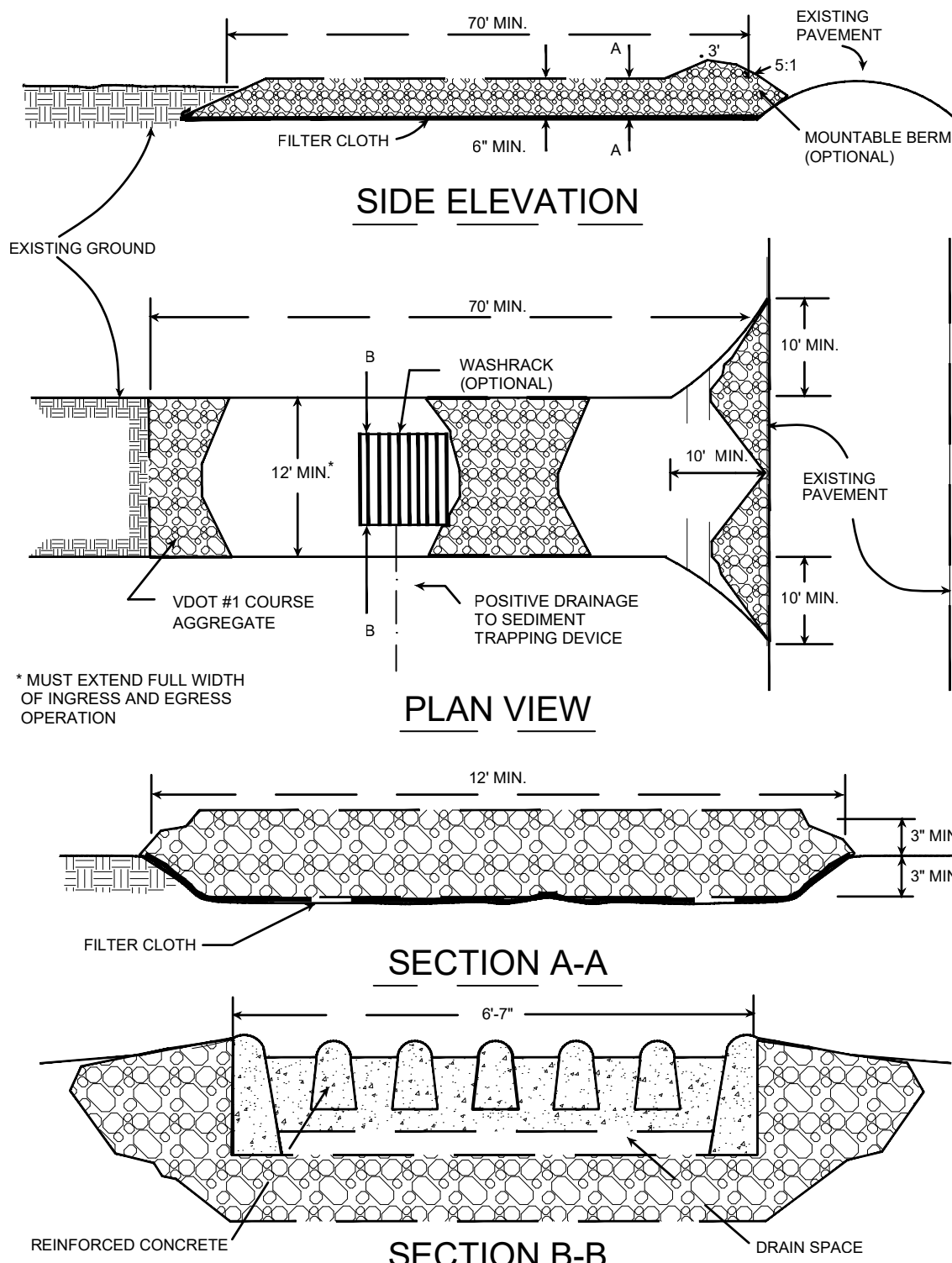
* GRAVEL SHALL BE VDOT #3, #357 OR #5 COARSE AGGREGATE.

SOURCE: VA. DSWC

C-SCM-04-3

CE

STONE CONSTRUCTION ENTRANCE

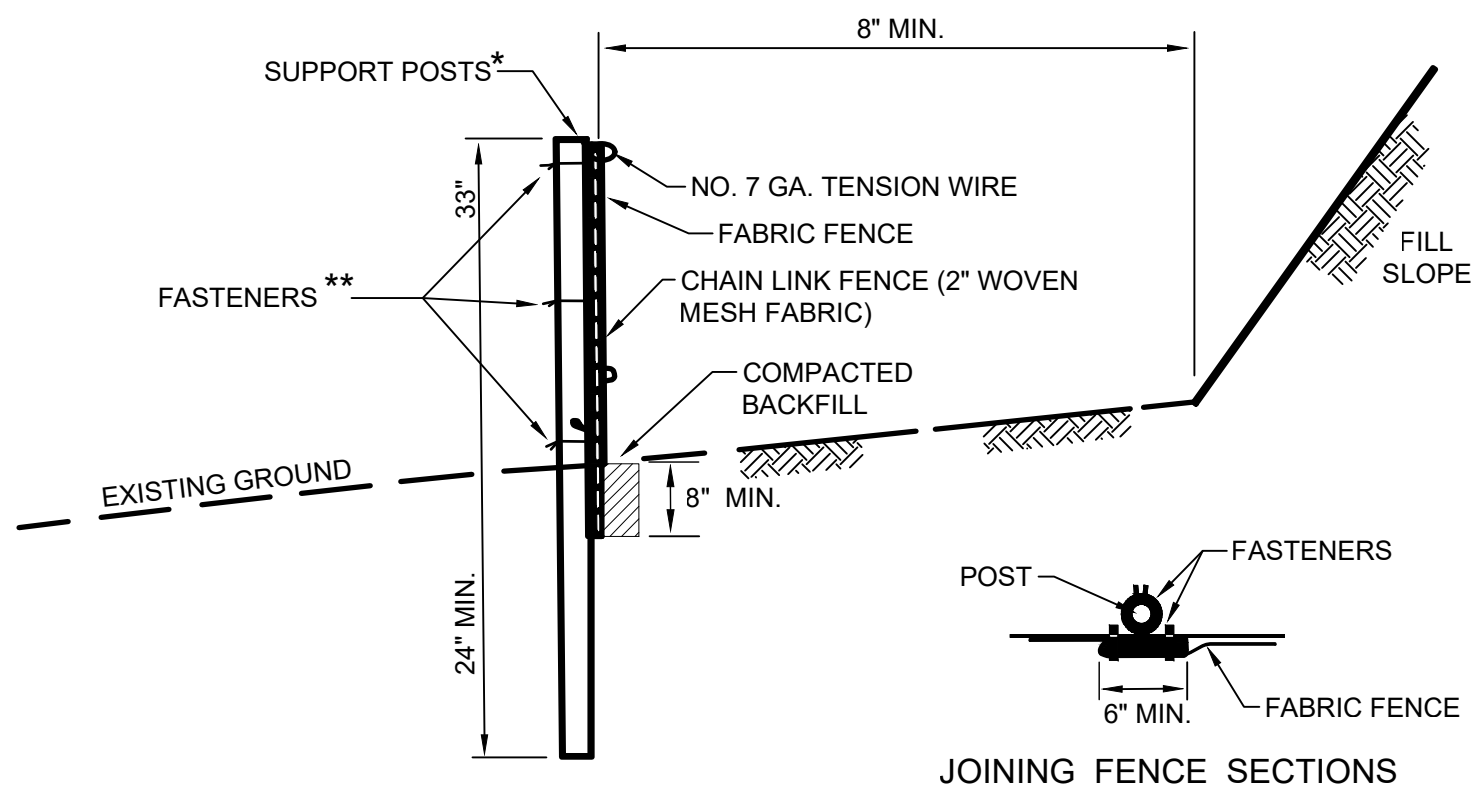


* MUST EXTEND FULL WIDTH
OF INGRESS AND EGRESS
OPERATION

SOURCE: ADAPTED FROM 1983 MARYLAND STANDARDS FOR SOIL EROSION AND
SEDIMENT CONTROL, AND VA. DSWC

C-SCM-03-1

SSF



* POSTS SPACED @ 10' MAX. USE 2 1/2" DIA. HEAVY DUTY GALVANIZED OR ALUMINUM POSTS.

** CHAIN LINK TO POST FASTENERS SPACED @ 14" MAX. USE NO. 9 GA. ALUMINUM WIRE OR NO. 9 GALVANIZED
STEEL PRE-FORMED CLIPS. CHAIN LINK TO TENSION WIRE FASTENERS SPACED @ 60" MAX. USE NO. 13.5 GA.
GALVANIZED STEEL WIRE. FABRIC TO CHAIN FASTENERS SPACED @ 24" MAX C. TO C.

SUPER SILT FENCE INSTALLATION

SOURCE: AAPTED FROM PADEP 2012

C-PCM-04-5

PROGRAMMING AND PLANNING
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
SURVEY AND MAPPING
SECURITY CONSULTING

Gordon

4501 Daly Drive
Chantilly, VA 20151
Phone: 703-263-1900
www.gordon.us.com

REVISIONS		DESCRIPTION	NUMBER	DATE

SUR:	DES:
E.ERICKSON	A.OWENS
DRW:	CHK:
H.BARRY	A.SARANT

COMMONWEALTH OF VIRGINIA
ANTHONY T. OWENS
Lic. No. 34522
10-24-25
PROFESSIONAL ENGINEER
SEAL:

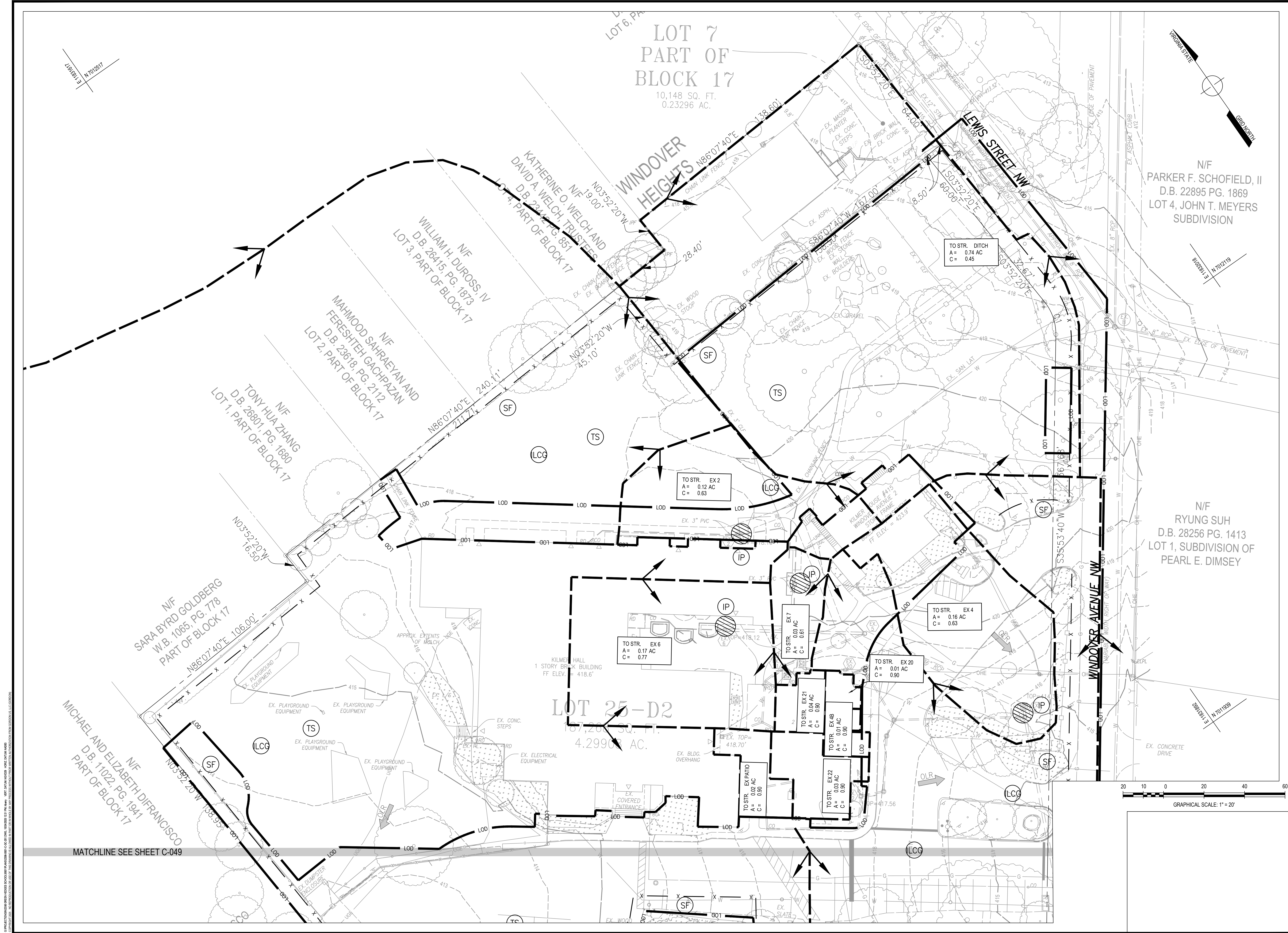
EROSION AND SEDIMENT CONTROL DETAILS

**GREEN HEDGES SCHOOL
SITE DEVELOPMENT PLAN**

TOWN OF VIENNA, VIRGINIA
TOWN OF VIENNA

HORIZ: 1" = 20'
SCALE: VERT: N/A
DATE: 10/24/25
PLAN: GREEN HEDGES SCHOOL
JOB: GORDON 2356-0501
CADD: 2356-0501-C-SC-001.DWG
NCS: 2356-0501-C-SC-001
NUMBER: C-0470FC-051

Gordon



PROGRAMMING AND PLANNING

CIVIL ENGINEERING

LANDSCAPE ARCHITECTURE

SURVEY AND MAPPING

SECURITY CONSULTING

Gordon

4501 Daly Drive

Chantilly, VA 20151

Phone: 703-263-1900

www.gordon.us.com

REVISIONS	
NUMBER	DATE

SUR:	DES:
E.ERICKSON	A.OWENS
DRW:	CHK:
H.BARRY	A.SARANT

COMMONWEALTH OF VIRGINIA

ANTHONY T. OWENS

Lic. No. 34522

PROFESSIONAL ENGINEER

SEAL:

EROSION AND SEDIMENT CONTROL EXISTING

GREEN HEDGES SCHOOL

SITE DEVELOPMENT PLAN

TOWN OF VIENNA, VIRGINIA

TOWN OF VIENNA

HORIZ: 1" = 20'

SCALE: VERT: N/A

DATE: 10/24/25

PLAN: GREEN HEDGES SCHOOL

JOB: GORDON 2356-0501

CADD: 2356-0501-C-049-201.DWG

NCS: 2356-0501-C-049-201

NUMBER: C-048ofC-051

Gordon

