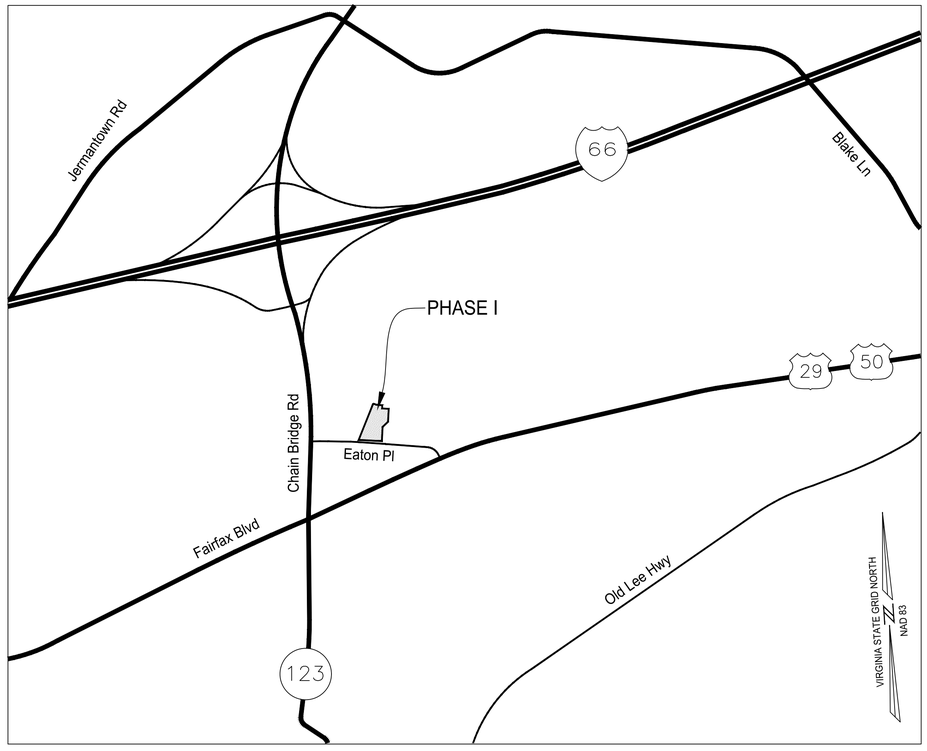
GENERAL DEVELOPMENT PLAN

PHASE I: N29 APARTMENTS

CITY OF FAIRFAX, VIRGINIA

Sheet List Table	
Sheet Number	Sheet Title
P_000	COVER SHEET
PI_100	NOTES
PI_300	EXISTING CONDITIONS PLAN
PI_310	TREE MANAGEMENT PLAN
PI_311	TREE MANAGEMENT NOTES & DETAILS
PI_400	ENTITLEMENT GDP
PI_401	EASEMENT EXHIBIT
PI_402	PEDESTRIAN ACCESS
PI_410	ILLUSTRATIVE BUILDING GRAPHICS
PI_411	CROSS SECTIONS
PI_411B	CROSS SECTIONS
PI_412	GROUND LEVEL PLAN
PI_413	PARKING LEVEL PLAN
PI_414	ROOF LEVEL PLAN
PI_420	GRADING PLAN
PI_421	AVERAGE FINISHED GRADE DIAGRAM
PI_422	STRIPING AND SIGNAGE PLAN
PI_500	BMP NOTES NARRATIVE
PI_501	BMP CALCULATIONS
PI_502	STORMWATER MANAGEMENT PLAN
PI_503	OUTFALL 1 HYDROGRAPHS
PI_504	OUTFALL 2 HYDROGRAPHS
PI_505	HYDROGRAPHS COMBINED
PI_600	SANITARY SEWER ANALYSIS
PI_601	SANITARY SEWER OFF-SITE MAP
PI_800	FIRE SERVICE PLAN
PI_801	TURNING MOVEMENTS - DELIVERY TRUCK
PI_830	SIGHT DISTANCE
PI_831	SIGHT DISTANCE
PI_832	SIGHT DISTANCE
PI_900	OPEN SPACE PLAN
PI_910	LANDSCAPE PLAN
PI_911	STREETSCAPE EXHIBIT
PI_912	ENLARGEMENT PLAN
PI_920	LANDSCAPE DETAILS
PI_950	LIGHTING PLAN
PI_951	LIGHTING DETAILS



VICINITY MAP

SCALE: 1" = 1,000'

PROJECT TEAM:

CONTRACT PURCHASER/ APPLICANT
CAPITAL CITY REAL ESTATE
3000 K STREET, NW SUITE 270
WASHINGTON, DC, 20007

OWNER
WILLOWWOOD OFFICE OWNER LLC
10300 EATON PLACE
FAIRFAX, VA 22030

ATTORNEY
COZEN O'CONNOR
1200 19TH STREET NW, 3RD FLOOR
WASHINGTON, DC 20036

ARCHITECT
hickok cole
301 N STREET NW
WASHINGTON, DC 20002

ENGINEER & LANDSCAPE ARCHITECT
IMEG Corp.
4035 RIDGE TOP ROAD, SUITE 601
FAIRFAX, VA 22030

TRAFFIC ENGINEER
WELLS + ASSOCIATES
1420 SPRING HILL ROAD, SUITE 610
TYSONS, VA 22102

IMEG
4035 Ridge Top Rd, Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
01/12/2024
PROFESSIONAL ENGINEER

N29 APARTMENTS
GENERAL DEVELOPMENT PLAN

CITY OF FAIRFAX, VA

MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-28-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-16-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

PROJECT No.: 21082.002.00
DRAWING No.: 111772
DATE: 2022-07-15
SCALE: 1"= 100'
DESIGN: LBD
DRAWN: ZY
CHECKED: JR

SHEET TITLE:

COVER SHEET

SHEET No.

P_000

GENERAL NOTES:

1. THE SUBJECT PROPERTY IS A PORTION (± 2.97 AC) THAT WILL BE SUBDIVIDED FROM THE FOLLOWING PARCEL AND IS RECORDED IN THE LAND RECORDS OF FAIRFAX CITY, VIRGINIA:

PARCEL ID	*OWNER*	*ADDRESS*	*EXISTING ZONING*	*PARCEL AREA*
47-4-02-02-002	WILLOWWOOD OFFICE OWNER, LLC	10306 EATON PLACE	CR (COMMERCIAL RETAIL)	± 4.49 ACRES

2. THIS GDP SUBMISSION IS AN APPLICATION TO REZONE THE SUBJECT PROPERTY FROM CR (COMMERCIAL RETAIL) TO CU (COMMERCIAL URBAN) DISTRICT. THE DEVELOPMENT PROGRAM ON THE SUBJECT PROPERTY WILL INCLUDE MULTI-FAMILY HOUSING, AND RETAIL. THE REMAINDER OF THE ORIGINAL PARCEL WILL REMAIN ZONED CR AS EXISTING OFFICE USE, AND WILL NOT BE A PART OF THIS APPLICATION.

3. HORIZONTAL DATUM SHOWN HEREON IS REFERENCED TO THE VIRGINIA COORDINATE SYSTEM (VCS) 1983 - NORTH AS ESTABLISHED FROM A CURRENT GPS SURVEY. VERTICAL DATUM SHOWN HEREON IS REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29) (GEOID-18) AS ESTABLISHED FROM A CURRENT GPS SURVEY.

4. THE PHYSICAL IMPROVEMENTS AND TOPOGRAPHY SHOWN HEREON ARE BASED UPON A FIELD SURVEY CONDUCTED BY THIS FIRM BETWEEN THE DATES OF MARCH 22 AND MAY 5, 2022.

5. NO CERTIFICATION HAS BEEN MADE AS TO THE LOCATIONS OF UNDERGROUND UTILITIES SUCH AS, BUT NOT LIMITED TO ELECTRIC, GAS, TELEPHONE, CATV, WATER, SANITARY AND STORM SEWERS.

6. NO GEOTECHNICAL, SUBSURFACE, FIELD REVIEWS, RESEARCH, AGENCY OR GOVERNMENTAL RECORD REVIEWS, OR OTHER INVESTIGATIONS HAVE BEEN MADE FOR THE PURPOSE OF LOCATING, OR DETERMINING THE EXISTENCE OF HAZARDOUS MATERIALS, OR OTHER ENVIRONMENTAL CONCERNS ON SITE IN THE PERFORMANCE OF IMEG CORP. SERVICES FOR THE PROJECT AS SHOWN HEREON.

7. DURING THE PROCESS OF PHYSICAL SURVEY NO INDICATIONS OF A CEMETERY WERE FOUND. NO FURTHER INSPECTION OF THIS PROPERTY HAS BEEN MADE FOR POSSIBLE CEMETERIES.

8. STORM AND SANITARY INVERTS, PIPE SIZES AND MATERIALS HAVE BEEN DETERMINED THROUGH THE USE OF A SEWER VIDEO CAMERA OPERATED BY THIS FIRM ON THE DATE OF APRIL 20th, 2022.

9. THE LIMITS OF THE UNDERGROUND BMP FACILITY SHOWN HERON ARE APPROXIMATE AND BASED OFF OF A PLAN TITLED "WILLOWWOOD PLAZA SITE PLAN PHASE ONE" WITH A REVISION DATE OF NOVEMBER 10th, 1986.

10. THE AREA SHOWN HEREON IS LOCATED ON THE FLOOD INSURANCE RATE MAP (FIRM), NO. 5155240002D, WITH AN EFFECTIVE DATE OF 06/02/2006 AND A REVISION DATE OF 10/11/2019.

    BY GRAPHIC DEPICTION ONLY, THE PROPERTY SHOWN HEREON IS SHOWN IN:

    - FLOOD ZONE "AE" (SPECIAL FLOOD HAZARD AREAS - SHADED), AREAS WITH BASE FLOOD ELEVATION (BFE) OR DEPTH.
    - FLOOD ZONE "X" (OTHER AREAS OF FLOOD HAZARD - SHADED), 0.2% ANNUAL CHANCE FLOOD HAZARD, AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTH LESS THAN ONE FOOT OR WITH DRAINAGE AREAS OF LESS THAN ONE SQUARE MILE.
    - FLOOD ZONE "X" (OTHER AREAS), AREAS DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN.

    A FIELD SURVEY WAS NOT PERFORMED TO DETERMINE THE FLOOD ZONES LISTED HEREON. AN ELEVATION CERTIFICATE MAY BE NEEDED TO VERIFY THIS DETERMINATION OR APPLY FOR A VARIANCE FROM THE FEDERAL EMERGENCY MANAGEMENT AGENCY.

11. THE SUBJECT PROPERTY IS CURRENTLY SERVED BY PUBLIC WATER AND PUBLIC SEWER PROVIDED BY CITY OF FAIRFAX AND FAIRFAX WATER.

12. THIS DEVELOPMENT PROPOSAL IS COMPATIBLE WITH THE EXISTING DEVELOPMENT IN THE VICINITY OF THIS SITE. NO ADVERSE EFFECTS TO NEIGHBORING PROPERTIES ARE ANTICIPATED WITH THIS PROJECT.

13. NOTWITHSTANDING THE IMPROVEMENTS AND TABULATIONS SHOWN ON THIS PLAN, THE APPLICANT RESERVES THE RIGHT TO MAKE MINOR MODIFICATIONS TO THE FINAL DESIGN, TO COMPLY WITH FINAL ENGINEERING AND NEW CRITERIA AND REGULATIONS WHICH MAY BE ADOPTED BY THE CITY OF FAIRFAX SUBSEQUENT TO THE SUBMISSION OF THIS APPLICATION, PROVIDED THAT SUCH MODIFICATIONS ARE SUBSTANTIALLY CONSISTENT WITH THE APPROVED DEVELOPMENT PLAN AND COMMITMENTS AND SUBJECT TO THE DETERMINATIONS OF THE DIRECTOR OF DEVELOPMENT AND PLANNING.

14. THE PROPOSED BUILDING FOOTPRINTS AND SITE IMPROVEMENTS SHOWN HEREIN ARE PRELIMINARY. THE PROPOSED SQUARE FOOTAGE FOR THE PROPOSED BUILDINGS IS APPROXIMATE ONLY AND MAY BE SUBJECT TO MINOR REVISIONS AT THE TIME OF SITE PLAN, SUBJECT TO MARKET CONDITIONS, BUT SUBSTANTIALLY CONSISTENT WITH THE APPROVED DEVELOPMENT PLAN.

15. SITE LIGHTING WITHIN THE PROJECT SITE AREA (I.E. ALONG SIDEWALKS AND PATHWAYS) WILL BE DETERMINED DURING FINAL SITE PLAN REVIEW AND SHALL BE IN GENERAL CONFORMANCE WITH SECTION 4.8 OF THE ZONING ORDINANCE AND SECTION 2.10 OF THE PUBLIC FACILITIES MANUAL.

16. ONSITE STORMWATER MANAGEMENT AND BEST MANAGEMENT PRACTICES SHALL BE PROVIDED AS REQUIRED BY CITY REGULATIONS AT THE TIME OF FINAL SITE PLAN. DETENTION TO PROVIDE THE REQUIRED STORMWATER QUANTITY CONTROLS AND ONSITE BEST MANAGEMENT PRACTICES (BMPs) TO MEET THE STORMWATER QUALITY REQUIREMENTS ARE SHOWN ON SHEETS WITHIN THIS PLAN SET.

17. ALL SIGNAGE WILL BE IN CONFORMANCE WITH SECTION 4.6 OF THE ZONING ORDINANCE.

18. TO THE BEST KNOWLEDGE OF THE ENGINEER AND APPLICANT, THIS DEVELOPMENT PLAN CONFORMS TO ALL APPLICABLE ORDINANCES, REGULATIONS AND ADOPTED STANDARDS, WITH THE FOLLOWING SPECIAL EXCEPTION AND WAIVER REQUESTS:

    A. A SPECIAL EXCEPTION OF THE ZONING ORDINANCE SECTION 3.5.1.D REQUIREMENT OF 75% GROUND FLOOR NONRESIDENTIAL USES.

    B. A SPECIAL EXCEPTION OF THE ZONING ORDINANCE SECTION 3.6.2 REQUIREMENT OF 24 DU/AC MAXIMUM DENSITY.

    C. A SPECIAL EXCEPTION OF THE ZONING ORDINANCE SECTION 3.6.2 REQUIREMENT OF 5 STORY/60 FEET MAXIMUM HEIGHT.

    D. AN ADMINISTRATIVE REDUCTION OF THE ZONING ORDINANCE SECTION 4.2.5(C) SHARED PARKING REDUCTION. A PARKING ANALYSIS SUMMARY AND SHARED PARKING ANALYSIS IS INCLUDED WITH THIS APPLICATION UNDER SEPARATE COVER BY WELLS + ASSOCIATES.

    E. A WAIVER OF PUBLIC FACILITIES MANUAL SECTION 401-01 REQUIREMENT THAT A TYPICAL CURB AND GUTTER STREET BE PROVIDED ON PRIVATE ACCESSWAYS THAT ARE LESS THAN THIRTY (30) FEET FROM FACE OF CURB TO FACE OF CURB (OR EDGE OF PAVEMENT). IN LIEU OF THIS REQUIREMENT, THE APPLICANT PROPOSED 20 FEET PRIVATE ROAD IN CONFORMANCE WITH THE NORTHFAX SMALL AREA PLAN.

    F. A SPECIAL EXCEPTION OF THE ZONING ORDINANCE SECTION 4.4.4 REQUIREMENT OF SIDEWALKS ON BOTH SIDES OF ROAD.

    G. A SPECIAL EXCEPTION OF THE ZONING ORDINANCE SECTION 3.6.2 REQUIREMENT FOR MAXIMUM 15' FRONT YARD AND MINIMUM 10' SIDE YARD.

    H. A SPECIAL EXCEPTION OF THE ZONING ORDINANCE SECTION 4.3.3 REQUIREMENT OF CROSS-ACCESS.

IMEG
4035 Ridge Top Rd, Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
01/12/2024
PROFESSIONAL ENGINEER

N29 APARTMENTS
GENERAL DEVELOPMENT PLAN

CITY OF FAIRFAX, VA

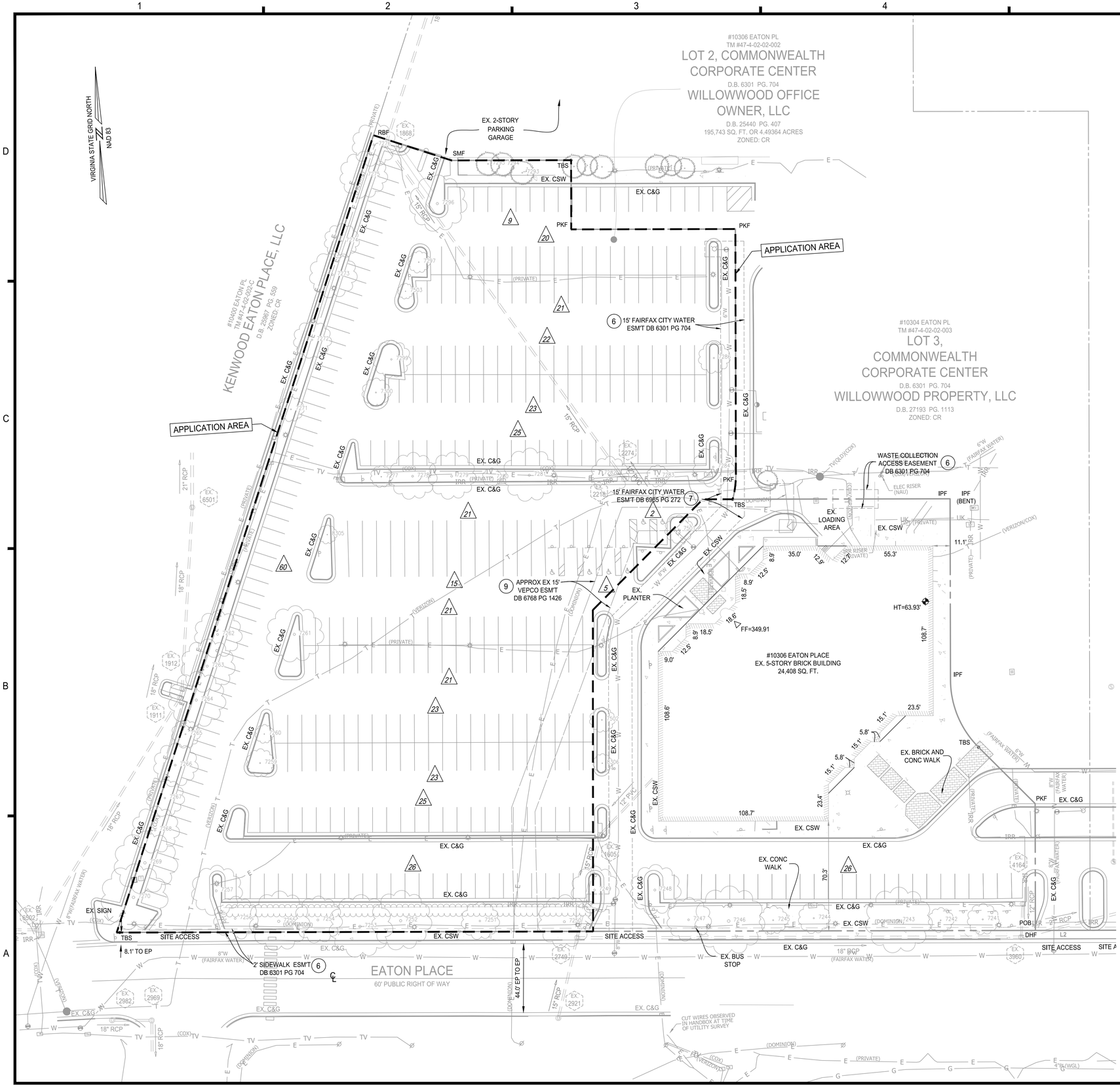
MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-28-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-16-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

PROJECT No.: 21082.002.00
DRAWING No.: 111772
DATE: 2022-07-15
SCALE: N/A
DESIGN: LBD
DRAWN: ZY, CL
CHECKED: JR

SHEET TITLE:

NOTES

SHEET No.
PI_100



LEGEND

Utilities - Storm
- STORM MANHOLE
- STORM CULVERT

Utilities - Sanitary
- SANITARY MANHOLE

Utilities - Water
- WATER VALVE
- WATER METER
- FIRE HYDRANT
- WATER MANHOLE

Utilities - Electric
- LIGHT POLE
- UTILITY POLE
- LAMP POST
- GUY WIRE

Utilities - Communication
- TELEPHONE PEDESTAL/POST

Misc. Structures
- 150.0 SPOT SHOT
- SIGN
- TREE
- BUSH
- FLAG POLE
- UNIDENTIFIED

Abbreviations

EX.	EXISTING
CONC.	CONCRETE
C&G	CURB AND GUTTER
EP	EDGE OF PAVEMENT
IPF	IRON PIPE FOUND
IPS	IRON PIPE SET
RBF	REBAR FOUND
PPF	PINCH PIPE FOUND
CMF	CONCRETE MONUMENT FOUND
NS	NOT SET

Linetypes
- INDEX CONTOUR (5')
- INT. CONTOUR (1')
- FENCE
- OVERHEAD UTILITY WIRE
- VEGETATION LINE
- CABLE TV LINE
- ELECTRIC LINE
- FIBER OPTIC LINE
- TELECOMMUNICATIONS LINE
- WATER LINE
- APPLICATION AREA

NOTE

NUMBER OF EXISTING PARKING SPACES TO BE REMOVED:	361

EXISTING COVERAGE	
EXISTING BUILDING COVERAGE (SF):	0
EXISTING IMPERVIOUS AREA (SF):	109,176
EXISTING OPEN SPACE (SF):	19,955
NOTE: EXISTING BUILDING IS OUTSIDE OF APPLICATION AREA, THEREFORE EXISTING BUILDING COVERAGE IS 0.	

NOTE
1. NO EXISTING OVERHEAD UTILITIES ARE ON SITE.
2. NO NEW UTILITIES WILL BE OVERHEAD.

IMEG
4035 Ridge Top Rd, Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
01/12/2024
PROFESSIONAL ENGINEER

N29 APARTMENTS
GENERAL DEVELOPMENT PLAN

CITY OF FAIRFAX, VA

MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-28-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-16-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

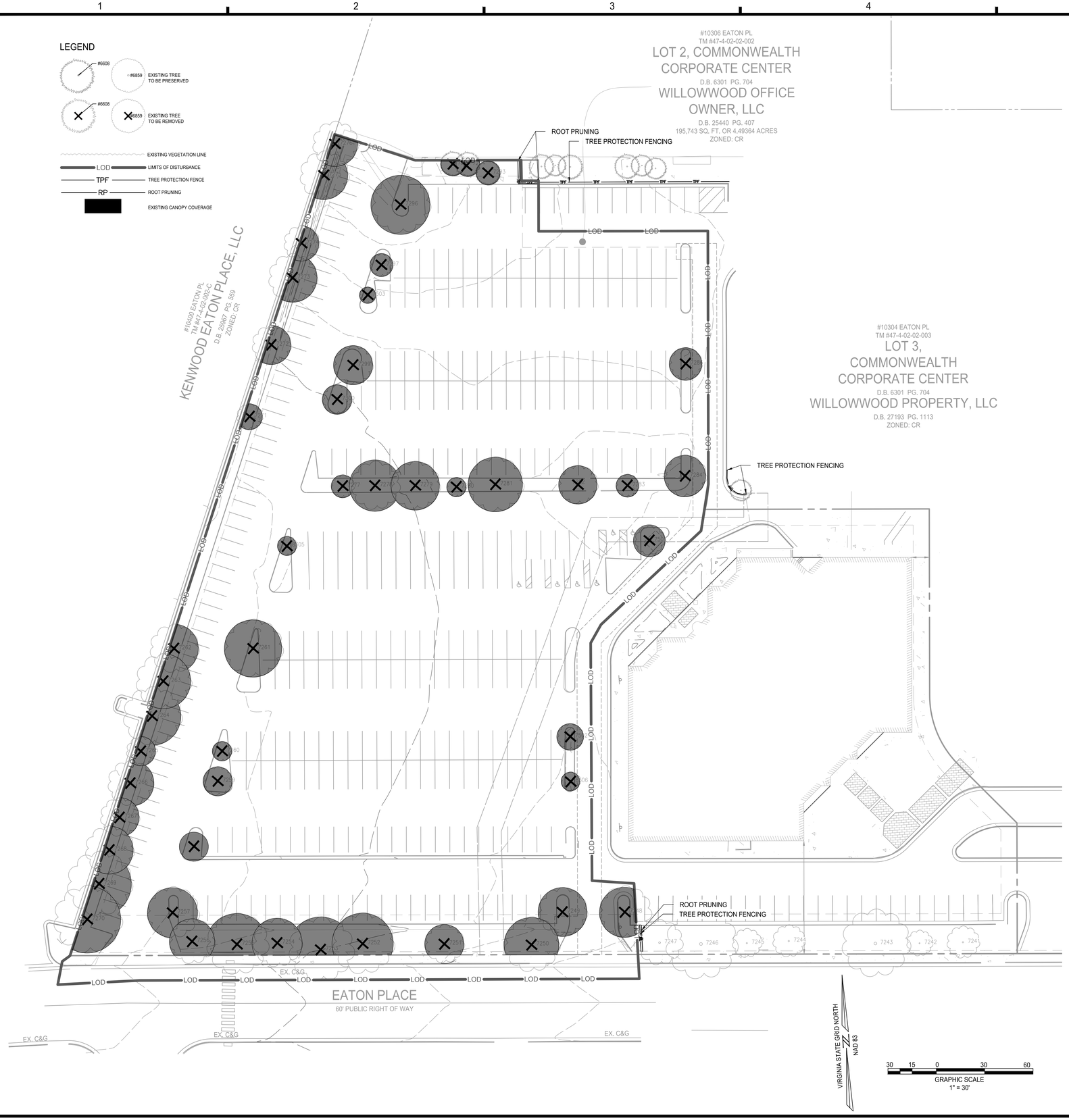
PROJECT No.: 21082.002.00
DRAWING No.: 111772
DATE: 2022-07-15
SCALE: 1" = 30'
DESIGN: LBD
DRAWN: ZY
CHECKED: JR

SHEET TITLE:

EXISTING CONDITIONS PLAN

SHEET No.

PI_300



TREE PRESERVATION SCHEDULE

TREE #	BOTANICAL NAME	COMMON NAME	TRUNK DIAMETER (INCHES) / CRITICAL ROOT ZONE RADIUS (FEET)	SURVEYED DRIPLINE RADIUS (FEET)	CONDITION RATING	PROCEDURE
7241	*ACER RUBRUM*	RED MAPLE	9	10	73	PRESERVE
7242	*ACER RUBRUM*	RED MAPLE	7	8	74	PRESERVE
7243	*ACER RUBRUM*	RED MAPLE	14	21	63	PRESERVE
7244	*ACER RUBRUM*	RED MAPLE	10	10	70	PRESERVE
7245	*ACER RUBRUM*	RED MAPLE	9	9	75	PRESERVE
7246	*ACER RUBRUM*	RED MAPLE	17	22	55	PRESERVE
7247	*ACER RUBRUM*	RED MAPLE	12	14	56	PRESERVE
7248	*ACER RUBRUM*	RED MAPLE	11	16	50	REMOVE
7249	*ACER RUBRUM*	RED MAPLE	18	15	50	REMOVE
7250	*ACER RUBRUM*	RED MAPLE	12	17	50	REMOVE
7251	*ACER RUBRUM*	RED MAPLE	14	12	35	REMOVE
7252	*ACER RUBRUM*	RED MAPLE	15	19	67	REMOVE
7253	*ACER RUBRUM*	RED MAPLE	15	20	63	REMOVE
7254	*ACER RUBRUM*	RED MAPLE	10	15	60	REMOVE
7255	*ACER RUBRUM*	RED MAPLE	13	19	63	REMOVE
7256	*ACER RUBRUM*	RED MAPLE	9	14	65	REMOVE
7257	*ACER RUBRUM*	RED MAPLE	11	16	65	REMOVE
7258	*ULMUS AMERICANA*	AMERICAN ELM	9	10	75	REMOVE
7259	*ULMUS AMERICANA*	AMERICAN ELM	9	9	75	REMOVE
7260	*ULMUS AMERICANA*	AMERICAN ELM	9	6	75	REMOVE
7261	*QUERCUS PHELLOS*	WILLOW OAK	18	18	74	REMOVE
7262	*QUERCUS PALUSTRIS*	PIN OAK	15	15	70	REMOVE
7263	*QUERCUS PALUSTRIS*	PIN OAK	13	17	70	REMOVE
7264	*QUERCUS PALUSTRIS*	PIN OAK	15	18	68	REMOVE
7265	*QUERCUS PALUSTRIS*	PIN OAK	13	9	30	REMOVE
7266	*QUERCUS PALUSTRIS*	PIN OAK	15	14	30	REMOVE
7267	*QUERCUS PALUSTRIS*	PIN OAK	14	12	50	REMOVE
7268	*QUERCUS PALUSTRIS*	PIN OAK	13	15	74	REMOVE
7269	*QUERCUS PALUSTRIS*	PIN OAK	18	20	73	REMOVE
7270	*QUERCUS PALUSTRIS*	PIN OAK	16	21	67	REMOVE
7271	*ULMUS AMERICANA*	AMERICAN ELM	9	8	73	REMOVE
7272	*QUERCUS PALUSTRIS*	PIN OAK	15	12	50	REMOVE
7273	*QUERCUS PALUSTRIS*	PIN OAK	12	15	50	REMOVE
7274	*QUERCUS PALUSTRIS*	PIN OAK	9	11	65	REMOVE
7275	*QUERCUS PALUSTRIS*	PIN OAK	12	15	30	REMOVE
7276	*QUERCUS PALUSTRIS*	PIN OAK	10	14	73	REMOVE
7277	*ULMUS AMERICANA*	AMERICAN ELM	8	7	73	REMOVE
7278	*ACER SACCHARUM*	SUGAR MAPLE	16	15	68	REMOVE
7279	*ACER SACCHARUM*	SUGAR MAPLE	11	15	68	REMOVE
7280	*ULMUS AMERICANA*	AMERICAN ELM	7	6	75	REMOVE
7281	*ACER SACCHARUM*	SUGAR MAPLE	14	17	50	REMOVE
7282	*ACER SACCHARUM*	SUGAR MAPLE	10	12	70	REMOVE
7283	*ULMUS AMERICANA*	AMERICAN ELM	8	7	75	REMOVE
7284	*ACER RUBRUM*	RED MAPLE	9	13	74	REMOVE
7286	*ULMUS AMERICANA*	AMERICAN ELM	6	10	72	REMOVE
7293	*THUJA SPP.*	ARBORVITAE	12	8	73	REMOVE
7294	*THUJA SPP.*	ARBORVITAE	10	8	73	REMOVE
7295	*THUJA SPP.*	ARBORVITAE	10	8	73	REMOVE
7296	*QUERCUS PHELLOS*	WILLOW OAK	11	18	75	REMOVE
7297	*ULMUS AMERICANA*	AMERICAN ELM	9	7	75	REMOVE
7299	*ULMUS AMERICANA*	AMERICAN ELM	9	12	75	REMOVE
7300	*ULMUS AMERICANA*	AMERICAN ELM	11	9	73	REMOVE
7501	*ULMUS AMERICANA*	AMERICAN ELM	10	9	75	REMOVE
7502	*ULMUS AMERICANA*	AMERICAN ELM	7	8	74	REMOVE
7503	*ULMUS AMERICANA*	AMERICAN ELM	7	5	75	REMOVE
8305	*ZELKOVA SERRATA*	JAPANESE ZELKOVA	5	5	75	REMOVE
8306	*ULMUS AMERICANA*	AMERICAN ELM	5	5	30	REMOVE

NOTE: THE CONDITION RATING WAS BASED ON THE GUIDE FOR PLANT APPRAISAL, 10TH EDITION ID AUTHORED BY THE COUNCIL OF TREE AND LANDSCAPE APPRAISERS (CTLA), PUBLISHED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE, AND ENDORSED BY THE MAJOR ARBORICULTURE AND HORTICULTURE ORGANIZATIONS, THIS GUIDE REPRESENTS A CRITICAL RESOURCE FOR SOUND PLANT VALUATION.

SUMMARY OF TREE REMOVAL	
NUMBER OF EXISTING TREES REMOVED:	50
TREE PROTECTION AREA (SF):	0
NOTES: 7 TREES (NUMBERED 7241, 7242,7243,7244,7245,7246, 7247, AND 7285) WILL REMAIN SINCE THEY ARE LOCATED OUTSIDE THE PROPERTY BOUNDRY AND WILL NOT BE IMPACTED.	

NOTE: THE TOTAL EXISTING TREE CANOPY COVERAGE IS 20,076 SF

IMEG
4035 Ridge Top Rd, Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
01/12/2024
PROFESSIONAL ENGINEER

N29 APARTMENTS
GENERAL DEVELOPMENT PLAN

CITY OF FAIRFAX, VA

MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-28-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-16-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

PROJECT No.: 21082.002.00
DRAWING No.: 111772
DATE: 2022-07-15
SCALE: 1" = 30'
DESIGN: LBD
DRAWN: AH
CHECKED: JM

SHEET TITLE:

TREE MANAGEMENT PLAN

SHEET No.

PI_310

1. PROJECT NOTES

1.1. THE REQUIREMENTS OF THE CITY OF FAIRFAX ZONING ORDINANCE AND PUBLIC FACILITIES MANUAL SHALL BE FOLLOWED.
1.2. ALL TREE PRESERVATION ACTIVITIES SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF AN ISA CERTIFIED ARBORIST.
1.3. ALL TREE WORK PERFORMED SHALL MEET OR EXCEED THE MOST RECENT INDUSTRY STANDARDS, AS PUBLISHED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA).

2. PRE-CONSTRUCTION

2.1. PRIOR TO THE PRE-CONSTRUCTION MEETING, THE CONTRACTOR SHALL HAVE THE LIMITS OF CLEARING AND GRADING CLEARLY MARKED IN THE FIELD WITH FLAGGING. THESE LIMITS SHALL NOT EXCEED THOSE SHOWN ON THE APPROVED PLANS.
2.2. AFTER LIMITS HAVE BEEN STAKED, THE CONTRACTOR SHALL REQUEST A PRE-CONSTRUCTION MEETING WITH CITY OF FAIRFAX AND PROJECT ARBORIST.
2.3. DURING THE PRE-CONSTRUCTION MEETING, THE LIMITS MAY BE ADJUSTED TO BETTER PRESERVE OR REMOVE TREES IMPACTED BY CONSTRUCTION ACTIVITIES.

3. INSTALLATION OF TREE PROTECTION MEASURES

3.1. ROOT PRUNING: PRIOR TO CONSTRUCTION, ROOT PRUNING SHALL BE COMPLETED AT THE LIMITS. ROOT PRUNING SHALL BE TO THE DEPTH OF EIGHTEEN (18) TO TWENTY-FOUR (24) INCHES AND SHALL BE ACCOMPLISHED BY USING A TRENCHER, VIBRATING PLOW OR BY HAND. TRENCH SHOULD BE IMMEDIATELY BACKFILLED WITH REMOVED SOIL. WHEN EXCAVATING ALL TREE ROOTS GREATER THAN 1 INCH IN DIAMETER THAT ARE EXPOSED AND/OR DAMAGED SHALL BE TRIMMED CLEANLY, AND COVERED WITH ORGANIC MULCH, TOPSOIL, OR OTHER SUITABLE MATERIAL TO PREVENT THE EXPOSED ROOTS FROM DRYING OUT.
3.2. TREE PROTECTION FENCING: IMMEDIATELY FOLLOWING ROOT PRUNING, TREE PROTECTION FENCING SHALL BE COMPLETED AT THE LIMITS. TREE PROTECTION FENCING SHALL BE INSTALLED PER TREE PRESERVATION PLAN AND SHALL CONSIST OF EITHER OF THE FOLLOWING MATERIALS:

3.2.1. FOURTEEN (14) GAUGE WELDED WIRE MESH THAT IS A MINIMUM OF FOUR (4) FOOT TALL. THE MESH SHALL BE ATTACHED TO SIX (6) FOOT TALL, TWO-INCH (2") STEEL U-CHANNEL ANCHOR POSTS DRIVEN EIGHTEEN (18) INCHES INTO THE GROUND. THE POSTS SHALL BE PLACED NO FURTHER THAN TEN (10) FEET APART.
3.2.2. SUPER SILT FENCE

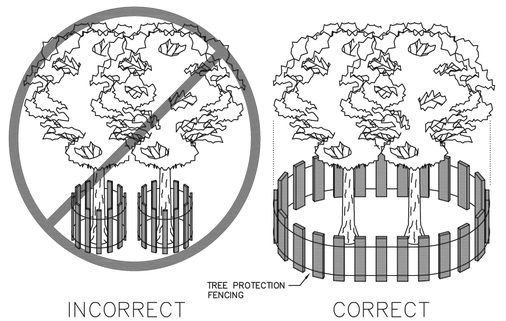
3.3. TREE PROTECTION SIGNAGE: BILINGUAL SIGNS STATING "TREE PRESERVATION AREA - KEEP OUT" SHALL BE AFFIXED TO THE TREE PRESERVATION FENCE AT LEAST EVERY 50 FEET IMMEDIATELY FOLLOWING TREE PROTECTION FENCING INSTALLATION.
3.4. CITY OF FAIRFAX SHALL BE NOTIFIED AND GIVEN THE OPPORTUNITY TO INSPECT THE SITE TO ASSURE THAT ALL TREE PROTECTION DEVICES HAVE BEEN CORRECTLY INSTALLED. IF IT IS DETERMINED THAT THE FENCING HAS NOT BEEN INSTALLED CORRECTLY, NO CONSTRUCTION ACTIVITIES SHALL OCCUR UNTIL THE FENCING IS INSTALLED CORRECTLY, AS DETERMINED BY CITY OF FAIRFAX .
3.5. TREES BEING REMOVED SHALL NOT BE FELLED, PUSHED OR PULLED INTO TREE PRESERVATION AREAS. EQUIPMENT OPERATORS SHALL NOT CLEAN ANY PART OF THEIR EQUIPMENT BY SLAMMING AGAINST THE TRUNKS OF TREES TO BE RETAINED.
3.6. TREES ON THE EDGE OF THE LIMITS OF CLEARING AND GRADING SHALL BE CUT DOWN BY HAND WITH A CHAIN SAW. REMAINING STUMPS SHALL EITHER BE LEFT IN PLACE OR GROUND DOWN WITH A STUMP GRINDER.
3.7. TREES INDICATED WILL BE MULCHED WITH WOOD CHIPS GENERATED FROM ON SITE CLEARING OR TREE REMOVAL AND PRUNING OPERATIONS WHEN POSSIBLE. SHREDDED HARDWOOD MULCH FROM OFFSITE MAY BE UTILIZED IF APPROVED BY PROJECT ARBORIST. MULCH SHALL BE SPREAD IN A UNIFORM DEPTH OF THREE (3") INCHES BY HAND. MULCH SHALL BE PLACED IN AREAS AS INDICATED ON APPROVED PLANS.

4. CONSTRUCTION

4.1. DURING CLEARING AND GRADING OPERATIONS AND THROUGHOUT CONSTRUCTION, NO ACTIVITY SHALL BE PERMITTED IN TREE SAVE AREAS WITHOUT AUTHORIZATION FROM OWNER, ARBORIST, OR CITY OF FAIRFAX . PRECLUDED ACTIVITIES INCLUDE:

4.1.1. FELLING OF TREES INTO PRESERVATION AREAS OR OPERATION OF HEAVY MACHINERY IN SAVE AREAS TO FELL TREES ON THE PERIMETER OF PRESERVATION AREAS.
4.1.2. OPERATION OF HEAVY EQUIPMENT OR MACHINERY OF ANY KIND IN PRESERVATION AREAS FOR ANY PURPOSE.
4.1.3. PLACEMENT OF EXCESS SOIL, FILL, OR MATERIALS OF ANY KIND IN PRESERVATION AREAS.
4.1.4. PLACEMENT OF ANY CONSTRUCTION MATERIALS OF ANY KIND IN PRESERVATION AREAS.
4.1.5. PARKING OR STORING EQUIPMENT OR VEHICLES IN PRESERVATION AREAS.
4.1.6. DUMPING CHEMICALS OR CONCRETE WASHOUT IN PRESERVATION AREAS.
4.1.7. BURNING OF ANY MATERIAL OR DEBRIS IN PRESERVATION AREAS OR WITHIN 200 FEET OF PRESERVATION AREAS.
4.1.8. TRENCHING, GRADING, EXCAVATING FOR ANY PURPOSE IN PRESERVATION AREAS.

4.2. ALL EXISTING TRASH AND/OR DEBRIS ON SITE SHALL BE REMOVED AT THE TIME OF DISTURBANCE. INDIVIDUAL TREES AND FORESTED AREAS DESIGNATED TO BE PRESERVED SHALL BE PROTECTED AND MANAGED TO ENSURE TREE SURVIVAL DURING ALL PHASES OF DEMOLITION, CLEARING AND GRADING, AND CONSTRUCTION. IN ADDITION TO PROTECTING TREES, ALL UNDERSTORY PLANTS, LEAF LITTER AND SOIL CONDITIONS FOUND IN FORESTED AREAS DESIGNATED TO BE LEFT PRESERVED SHALL BE PROTECTED.
4.3. TREES TO REMAIN LOCATED ALONG THE LIMITS OF CLEARING AND GRADING SHALL BE PRUNED DURING CLEARING OPERATIONS TO AVOID MECHANICAL DAMAGE. THIS SHALL BE ADMINISTRATED UNDER THE SUPERVISION OF AN ISA CERTIFIED ARBORIST.
4.4. ANY DAMAGE INFLICTED TO THE ABOVE OR BELOW-GROUND PORTIONS OF THE TREES SHOWED TO BE PRESERVED SHALL BE REPAIRED IMMEDIATELY PER ISA STANDARDS.
4.5. ALL PRUNING SHALL CONFORM TO THE LATEST EDITION OF ANSI A300 (PART 1) PRUNING STANDARDS. DISEASED LIMBS SHALL BE REMOVED OR TREATED AT THE DISCRETION OF THE ARBORIST. WHILE PRUNING, THE ARBORIST SHALL MAKE NOTE OF ANY CONDITIONS WHICH AFFECT THE HEALTH OR CONDITION OF THE TREE AND RECOMMEND CORRECTIVE TREATMENT FOR THESE CONDITIONS. VINE REMOVAL SHALL BE INCLUDED IN ALL PRUNING ACTIVITIES. UNDER NO CIRCUMSTANCES SHALL THE INTERIOR OF TREES BE STRIPPED OF FOLIAGE, SUCKERS, EPICORMIC BRANCHING, OR OTHER LIVE GROWTH. INTERIOR GROWTH MAY BE THINNED AS NECESSARY TO REMOVE BRANCHES DAMAGED DURING OPERATIONS. DEBRIS FROM PRUNING SHALL BE CHIPPED AND DEPOSITED INTO THE TREE SAVE AREA AND SPREAD BY HAND TO A UNIFORM THICKNESS OR BE REMOVED FROM SITE.



BARRIER INSTALLED AT THE DRIP LINE OF TREE BRANCHES

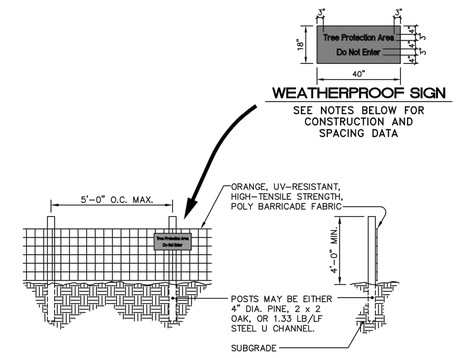
NOTES:

1. Precautions shall be taken to prevent and minimize damage to trees. In such cases repair any damage to crown, trunk or root system immediately.
   A. Repair roots by cleanly cutting off the damaged areas. Spread ~~peat moss~~ or moist topsoil over exposed roots.
   B. Repair damage to bark by trimming around the damaged area as shown in Detail 8.10. Taper the cut to provide drainage.
   C. Cut off damaged tree limbs above the tree collar at the trunk or main branch. Use three separate cuts as shown in Detail 8.10 to avoid peeling bark from healthy areas of tree.

Department of Public Works, 10455 Armstrong Street, Fairfax, VA 22030-3630 | CITY of FAIRFAX, USE WITH THE FAIRFAX STANDARD SPECIFICATIONS ONLY | Voice (703) 385-7810, FAX (703) 591-5727, www.fairfaxva.gov

STANDARD TREE PROTECTION DETAIL

SCALE: Not To Scale | DETAIL # 8.09
REVISION DATE: December 2016 | SHEET # 1 of 2



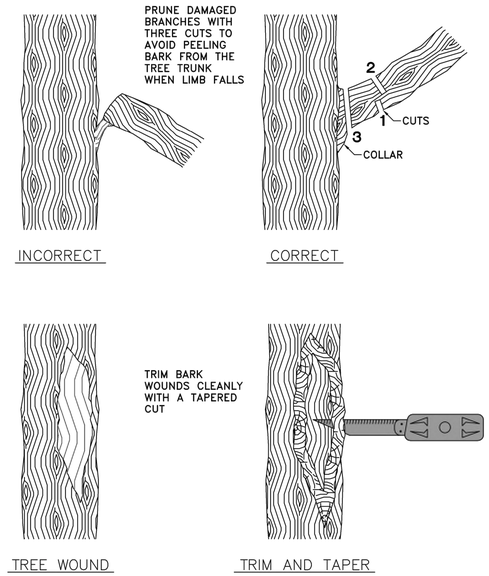
NOTES:

1. Install tree protection fence and signage prior to calling for the initial on site inspection by the City of Fairfax inspector.
2. Warning signs shall be made of durable, weatherproof material.
3. Letters shall be 3" high minimum, clearly legible and spaced as detailed.
4. Signs shall be placed no greater than 75' on center or as approved.
5. For tree protection areas less than 200' in perimeter, provide no less than three signs per protected area.
6. Attach signs securely to fence posts and fabric.
7. Maintain tree protection fence throughout duration of project.
8. Additional signs may be required by City of Fairfax inspections based on actual field conditions.
9. No activity shall occur within the protected area including material storage, stockpiling, parking or any activity that may compact the ground or damage the trees.
10. The City reserves the right to require a 4' to 6' height chain link fencing for identified trees, such as specimen or champion trees, to maximize the protection of the tree and its critical root zone.

Department of Public Works, 10455 Armstrong Street, Fairfax, VA 22030-3630 | CITY of FAIRFAX, USE WITH THE FAIRFAX STANDARD SPECIFICATIONS ONLY | Voice (703) 385-7810, FAX (703) 591-5727, www.fairfaxva.gov

STANDARD TREE PROTECTION DETAIL

SCALE: Not To Scale | DETAIL # 8.09
REVISION DATE: December 2016 | SHEET # 2 of 2



Department of Public Works, 10455 Armstrong Street, Fairfax, VA 22030-3630 | CITY of FAIRFAX, USE WITH THE FAIRFAX STANDARD SPECIFICATIONS ONLY | Voice (703) 385-7810, FAX (703) 591-5727, www.fairfaxva.gov

TREE SURGERY DETAIL

SCALE: Not To Scale | DETAIL # 8.10
REVISION DATE: December 2016 | SHEET # 1 of 1

IMEG
4035 Ridge Top Rd, Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
01/12/2024
PROFESSIONAL ENGINEER

N29 APARTMENTS
GENERAL DEVELOPMENT PLAN

CITY OF FAIRFAX, VA

MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-28-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-16-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

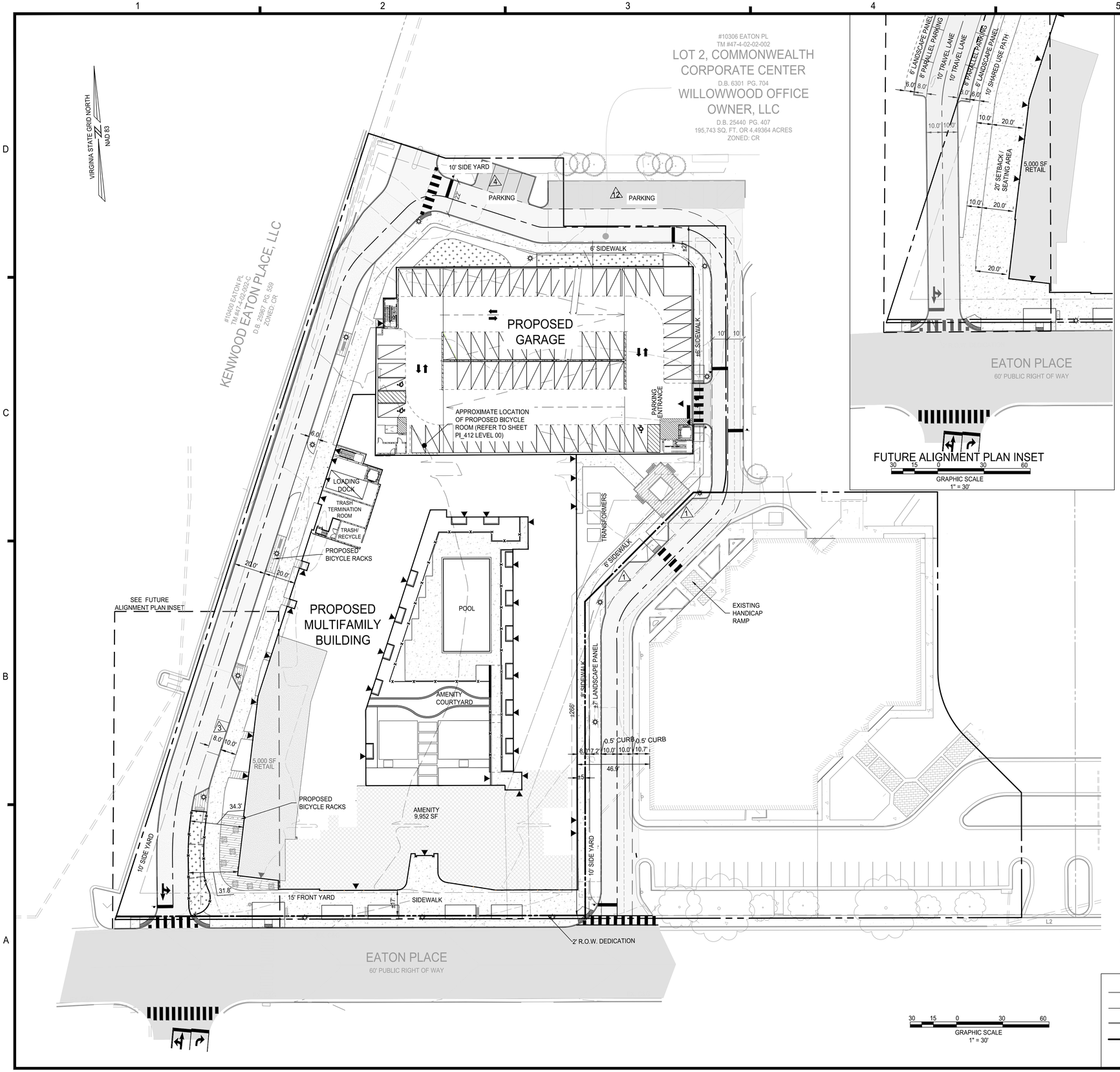
PROJECT No.: 21082.002.00
DRAWING No.: 111772
DATE: 2022-07-15
SCALE: N/A
DESIGN: LBD
DRAWN: AH
CHECKED: JM

SHEET TITLE:

TREE MANAGEMENT NOTES & DETAILS

SHEET No.

PI_311



PROPOSED TABULATIONS FOR DEVELOPMENT PROGRAM

SUBJECT PROPERTY AREA
REQUIRED: 30,000 SF MINIMUM (CU-COMMERCIAL URBAN)
PROVIDED: GROSS SITE AREA: ±129,130.81 SF (±2.96 AC)
DEDICATION AREA: ±609.86 SF (±0.014 AC)
NET: ±128,520.95 SF (±2.96 AC)

LOT WIDTH
REQUIRED: NO REQUIREMENT
PROVIDED: 300 FEET

YARDS
REQUIRED: FRONT YARD MAXIMUM: 15 FEET
FRONT YARD MINIMUM: 0 FEET
SIDE YARD MINIMUM: 10 FEET
INTERIOR & NOT ADJACENT TO A RESIDENTIAL DISTRICT
REAR YARD MINIMUM: 0 FEET
NOT ADJACENT TO A RESIDENTIAL DISTRICT

PROVIDED: FRONT YARD: ±17 FEET
SIDE YARD: ±5 FEET
REAR YARD: ±27 FEET

BUILD-TO LINE
REQUIRED: 50%
PROVIDED: ±86%

DENSITY: RESIDENTIAL
REQUIRED: 24 DU/AC MAXIMUM
PROVIDED: 87.8 DU/AC - SPECIAL EXCEPTION REQUESTED

FLOOR AREA: NON-RESIDENTIAL
REQUIRED: NO REQUIREMENT
PROVIDED: RETAIL 5,000 SF
COMMON AREA 9,952 SF

HEIGHT
REQUIRED: 5 STORIES/60 FEET MAXIMUM
PROVIDED: 7 STORIES/81 FEET OF MULTI-FAMILY - SPECIAL EXCEPTION REQUESTED
9 STORIES/87.1 FEET OF PARKING GARAGE

LOT COVERAGE
REQUIRED: 100% MAXIMUM
PROVIDED: ±87% (±112,083 SF)

BUILDING COVERAGE
REQUIRED: 80% MAXIMUM
PROVIDED: ±50% (±64,825 SF)

OFF-STREET PARKING
REQUIRED:

- MULTI-FAMILY - 260 TOTAL UNITS
  - 164 1 BEDROOM UNITS (1.5 SPACES PER UNIT) x 90% CU DISTRICT ADJUSTMENT FACTOR — 221 SPACES
  - 96 2 & 3 BEDROOM UNITS (2.0 SPACES PER UNIT) x 90% CU DISTRICT ADJUSTMENT FACTOR — 173 SPACES
- RETAIL
  - 5,000 SF 1 SPACE PER 200 SQ. FT. OF FLOOR AREA x 90% CU DISTRICT ADJUSTMENT FACTOR — 23 SPACES
- 2 EXISTING OFF-SITE OFFICE BUILDING REQUIRE 379 PARKING SPACES BASED ON THE EXISTING SUPPLY AND CITY CONFORMANCE DETERMINATION.

796 PARKING SPACES
REQUIRED. TOTAL FOR ALL USES - ADMINISTRATIVE REDUCTION REQUESTED

PROVIDED:
676 SPACES, GARAGE PHASE I
10 SPACES, PROPOSED SURFACE
26 SPACES, EXISTING SURFACE PHASE I
712 PARKING SPACES PROVIDED

NOTE: REFER TO THE WILLOWWOOD PLAZA PARKING REDUCTION REQUEST MEMORANDUM, DATED JANUARY 12, 2024, BY WELLS AND ASSOCIATES, UNDER SEPARATE COVER.

PROPOSED LOADING
REQUIRED: MULTI-FAMILY/RETAIL MIXED-USE BUILDING OVER 50 UNITS 1 SPACE
PROVIDED: 1 SPACE

PROPOSED BICYCLE PARKING
REQUIRED: 20 SPACES
PROVIDED: 23 SPACES IN GARAGE AND 12 SPACES ALONG WESTERN ROAD

NOTE:
THE PROJECT WILL INCORPORATE 16 RESIDENTIAL UNITS THAT ARE IN COMPLIANCE WITH ALL ZONING REQUIREMENTS FOR AFFORDABLE DWELLING UNITS. THE 16 AFFORDABLE DWELLING UNITS WILL RANGE IN SIZE FROM 1 BEDROOM TO 2 BEDROOMS. THE GDP DOES NOT INCORPORATE FLOOR PLANS FOR THE RESIDENTIAL BUILDING. AS SUCH, THE LOCATION OF EACH AFFORDABLE DWELLING UNIT WILL BE FINALIZED AT THE TIME OF FINAL DESIGN.

NOTE
1. FINAL STREETLIGHT LOCATIONS WILL BE DETERMINED WITH FINAL ENGINEERING AND PHOTOMETRIC ANALYSIS.
2. NO NEW UTILITIES WILL BE OVERHEAD.

LEGEND
PROPOSED BUILDING
PROPOSED SIDEWALK
PROPOSED CURB
PROPERTY LINE
STREETLIGHT

IMEG
4035 Ridge Top Rd, Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
01/12/2024
PROFESSIONAL ENGINEER

N29 APARTMENTS
GENERAL DEVELOPMENT PLAN

CITY OF FAIRFAX, VA

MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-28-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-18-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

PROJECT No.: 21082.002.00
DRAWING No.: 111772
DATE: 2022-07-15
SCALE: 1" = 30'
DESIGN: ZY
DRAWN: ZY
CHECKED: JR

SHEET TITLE:

ENTITLEMENT GDP

SHEET No.
PI_400

VIRGINIA STATE GRID NORTH
NAD 83

#10306 EATON PL
TM #47-4-02-02-002
LOT 2, COMMONWEALTH CORPORATE CENTER
D.B. 6301 PG. 704
WILLOWWOOD OFFICE OWNER, LLC
D.B. 25440 PG. 407
195,743 SQ. FT. OR 4.49364 ACRES
ZONED: CR

CONNECTION TO OFFSITE FUTURE GEORGE SYNDER TRAIL

#10400 EATON PL
TM #47-4-02-02-002-C
D.B. 25087 PG. 559
ZONED: CR
KENWOOD EATON PLACE, LLC

PROP. EVE EASEMENT WIDTH VARIES

PROPOSED GARAGE

PROP. 10' WATER EASEMENT

15' FAIRFAX CITY WATER ESM'T DB 6301 PG 704

15' FAIRFAX CITY WATER ESM'T DB 6965 PG 272

PROPOSED MULTIFAMILY BUILDING

APPROX EX 15' VEPCO ESM'T DB 6768 PG 1426

PROP. 10' WATER EASEMENT

PROP. 10' SAN. EASEMENT

EX. 10' SAN. ESMT

L2

EATON PLACE
60' PUBLIC RIGHT OF WAY

LEGEND

PROP. ACCESS EASEMENT

30 15 0 30 60
GRAPHIC SCALE
1" = 30'

IMEG
4035 Ridge Top Rd, Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
01/12/2024
PROFESSIONAL ENGINEER

N29 APARTMENTS
GENERAL DEVELOPMENT PLAN

CITY OF FAIRFAX, VA

MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-28-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-16-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

PROJECT No.: 21082.002.00
DRAWING No.: 111772
DATE: 2022-07-15
SCALE: 1" = 30'
DESIGN: LBD,ZY
DRAWN: ZY
CHECKED: JR

SHEET TITLE:

EASEMENT EXHIBIT

SHEET No.
PI_401

#10306 EATON PL
TM #47-4-02-02-002
LOT 2, COMMONWEALTH CORPORATE CENTER
D.B. 6301 PG. 704
WILLOWWOOD OFFICE OWNER, LLC
D.B. 25440 PG. 407
195,743 SQ. FT. OR 4.49364 ACRES
ZONED: CR

VIRGINIA STATE GRID NORTH
NAD 83

#10400 EATON PL
TM #47-4-02-002-C
D.B. 23987 PG. 599
ZONED: CR
KENWOOD EATON PLACE, LLC

CROSSSWALK
6' SIDEWALK
PROPOSED GARAGE
±6' SIDEWALK
PARKING ENTRANCE
TRANSFORMERS
CROSSSWALK
6' SIDEWALK
8' SIDEWALK
±7' LANDSCAPE PANEL
0.5' CURB
0.5' CURB
8.0'
7.2'
10.0'
10.0'
10.7'
46.9'
6.0'
20.0'
20.0'
PROPOSED MULTIFAMILY BUILDING
8.0'
10.0'
5,000 SF RETAIL
34.3'
31.8'
CROSSSWALK
2' R.O.W. DEDICATION
L2
EATON PLACE
60' PUBLIC RIGHT OF WAY

30 15 0 30 60
GRAPHIC SCALE
1" = 30'

IMEG
4035 Ridge Top Rd, Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
01/12/2024
PROFESSIONAL ENGINEER

N29 APARTMENTS
GENERAL DEVELOPMENT PLAN

CITY OF FAIRFAX, VA

MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-28-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-16-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

PROJECT No.: 21082.002.00
DRAWING No.: 111772
DATE: 2022-07-15
SCALE: 1" = 30'
DESIGN: ZY
DRAWN: ZY
CHECKED: JR

SHEET TITLE:

PEDESTRIAN ACCESS

SHEET No.
PI_402

1) 3D VIEW 1

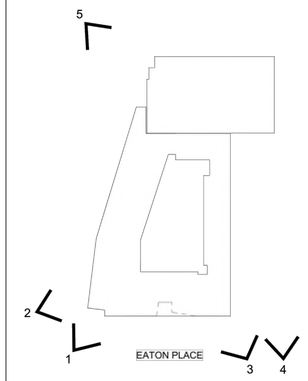
3) 3D VIEW 3

2) 3D VIEW 2

4) 3D VIEW 4

5) 3D VIEW 5

KEY PLAN



NOTE: THE GRAPHICS, SHOWN ON THIS SHEET, ARE CONCEPTUAL IN NATURE AND ILLUSTRATE THE GENERAL CHARACTER OF THE BUILDINGS AND PROJECT SITE. THESE DRAWINGS ARE NOT INTENDED TO REPRESENT FINAL BUILDING DESIGN OR TO BE INTERPRETED AS A COMMITMENT TO FINAL DESIGN OF THE PROJECT. FINAL DESIGN WILL BE DETERMINED AT THE TIME OF FINAL SITE PLAN SUBMISSION.

IMEG
4035 Ridge Top Rd, Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
01/12/2024
PROFESSIONAL ENGINEER

N2
GENERA

MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-26-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-16-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

PROJECT No.: 21082.002.00
DRAWING No.: 111772
DATE: 2022-07-15
SCALE: NOT TO SCALE
DESIGN: QN
DRAWN: QN
CHECKED: JM

SHEET TITLE:

ILLUSTRATIVE BUILDING GRAPHICS

SHEET No.

PI_410

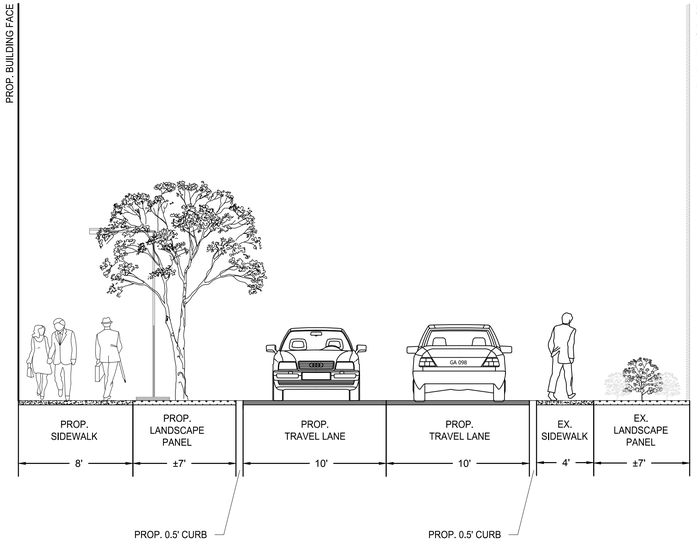
hickok cole

D

A

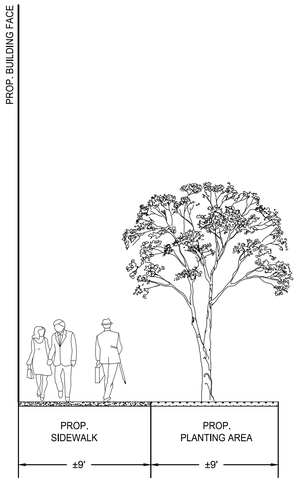
KEY PLAN

ED PR
ED PR
ED PR
ED PR
ED PR
ION



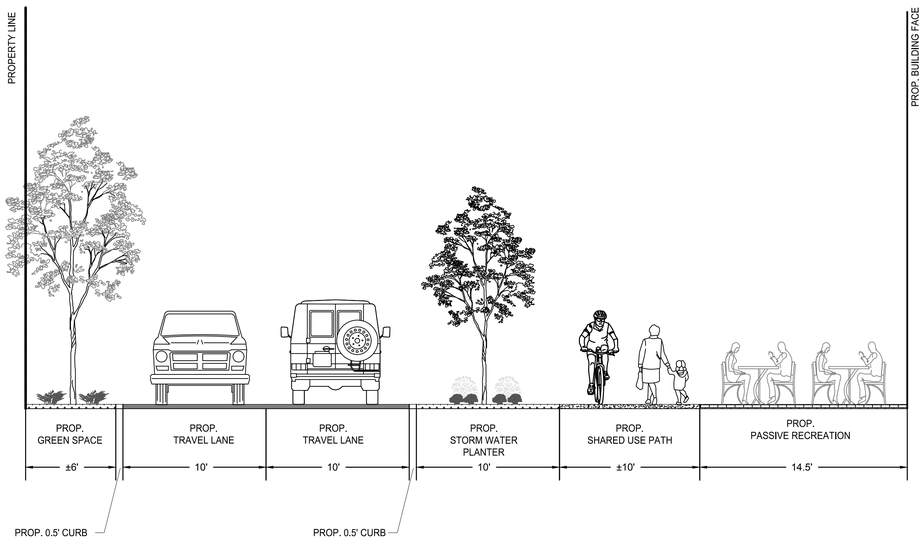
CROSS SECTION 1

5 2.5 0 5 10
GRAPHIC SCALE
1" = 5'



CROSS SECTION 2

5 2.5 0 5 10
GRAPHIC SCALE
1" = 5'



CROSS SECTION 3

5 2.5 0 5 10
GRAPHIC SCALE
1" = 5'

CROSS SECTION KEY

600 300 0 600 1200
GRAPHIC SCALE
1" = 600'

IMEG
4035 Ridge Top Rd, Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
01/12/2024
PROFESSIONAL ENGINEER

N29 APARTMENTS
GENERAL DEVELOPMENT PLAN
CITY OF FAIRFAX, VA

MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-28-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-16-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

PROJECT No.: 21082.002.00
DRAWING No.: 111772
DATE: 2023-04-13
SCALE: AS NOTED
DESIGN: QN
DRAWN: QN
CHECKED: JM

SHEET TITLE:

CROSS SECTIONS

SHEET No.

PI_411B

[redacted]

PARKING GARAGE LEGEND

LEVEL 01

30 15 0 30 60
GRAPHIC SCALE
1" = 30'

IMEG
4035 Ridge Top Rd, Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
01/12/2024
PROFESSIONAL ENGINEER

N29 APARTMENTS
GENERAL DEVELOPMENT PLAN

CITY OF FAIRFAX, VA

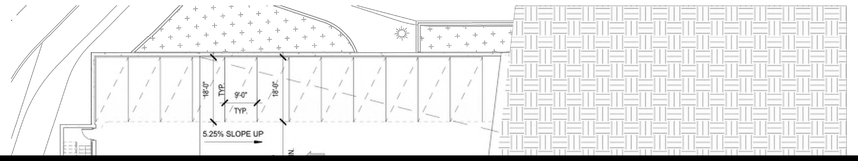
MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-28-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-16-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

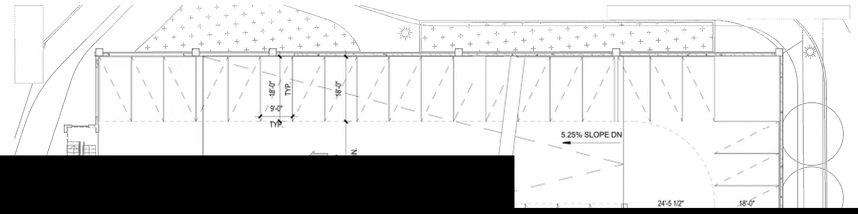
PROJECT No.: 21082.002.00
DRAWING No.: 111772
DATE: 2022-07-15
SCALE: AS NOTED
DESIGN: QN
DRAWN: QN
CHECKED: JM

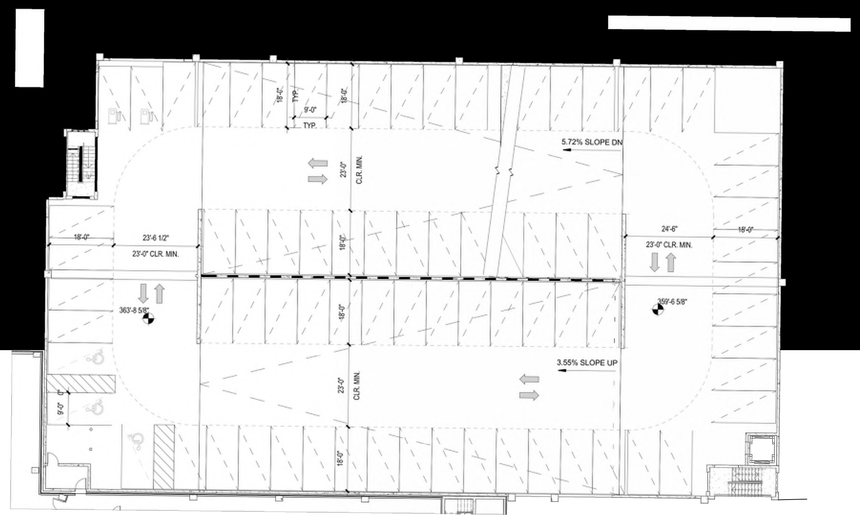
SHEET TITLE:

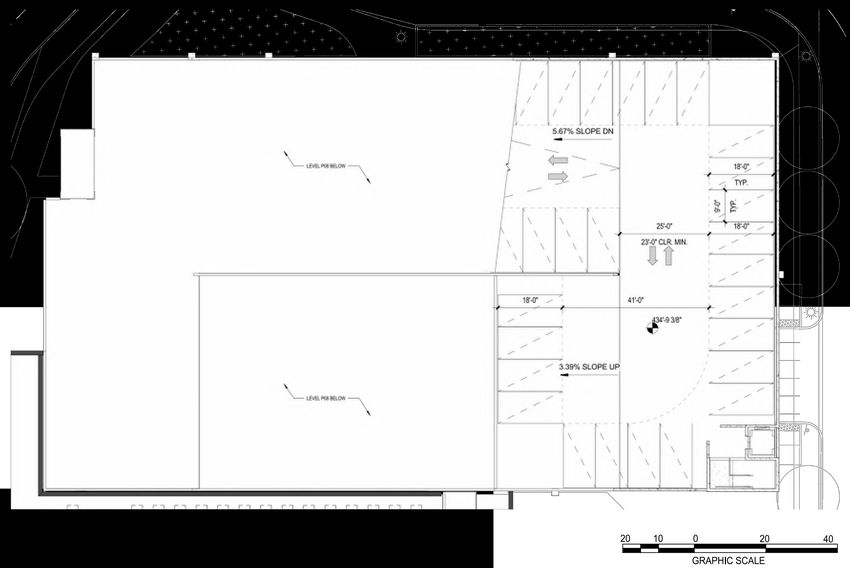
GROUND LEVEL PLAN

SHEET No.
PI_412









IMEG
4035 Ridge Top Rd, Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
01/12/2024
PROFESSIONAL ENGINEER

N29 APARTMENTS
GENERAL DEVELOPMENT PLAN

CITY OF FAIRFAX, VA

MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-28-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-16-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

PROJECT No.: 21082.002.00
DRAWING No.: 111772
DATE: 2022-07-15
SCALE: AS NOTED
DESIGN: QN
DRAWN: QN
CHECKED: JM

SHEET TITLE:

PARKING LEVEL PLAN

SHEET No.
PI_413

25 12.5 0 25 50
GRAPHIC SCALE
1" = 25'

IMEG
4035 Ridge Top Rd, Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
01/12/2024
PROFESSIONAL ENGINEER

N29 APARTMENTS
GENERAL DEVELOPMENT PLAN

CITY OF FAIRFAX, VA

MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-28-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-16-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

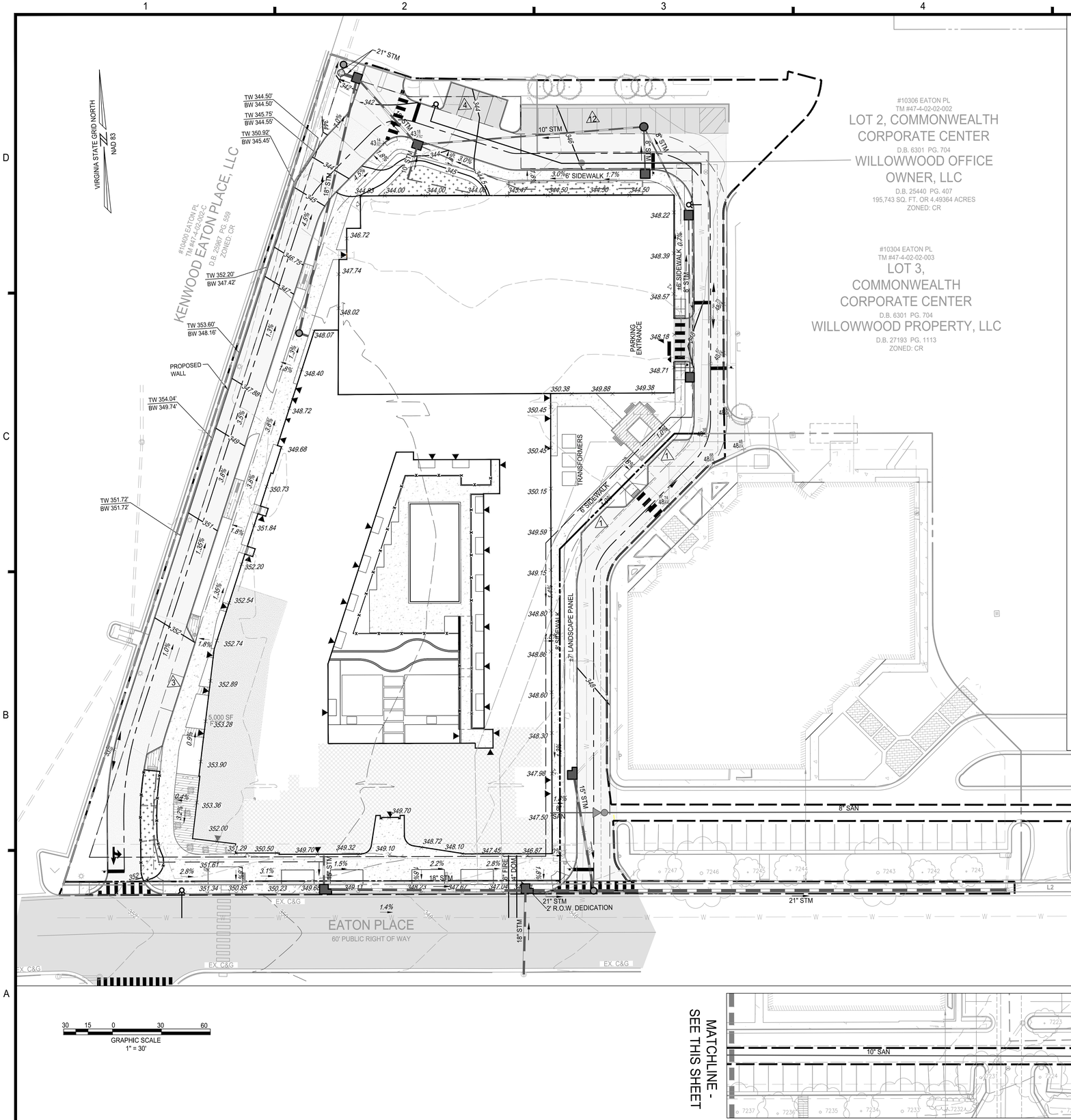
PROJECT No.: 21082.002.00
DRAWING No.: 111772
DATE: 2022-07-15
SCALE: 1" = 25'
DESIGN: QN
DRAWN: QN
CHECKED: JM

SHEET TITLE:

ROOF LEVEL PLAN

SHEET No.
PI_414

p:\Projects\21082.willowwood\002000\111772.mdp\PI_414 ROOF LEVEL PLAN.dwg, 1/16/2024 3:36:51 PM, Jana Morgan,



LEGEND

LIMITS OF DISTURBANCE

IMEG
4035 Ridge Top Rd. Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
01/12/2024
PROFESSIONAL ENGINEER

N29 APARTMENTS
GENERAL DEVELOPMENT PLAN

CITY OF FAIRFAX, VA

MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-28-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-16-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

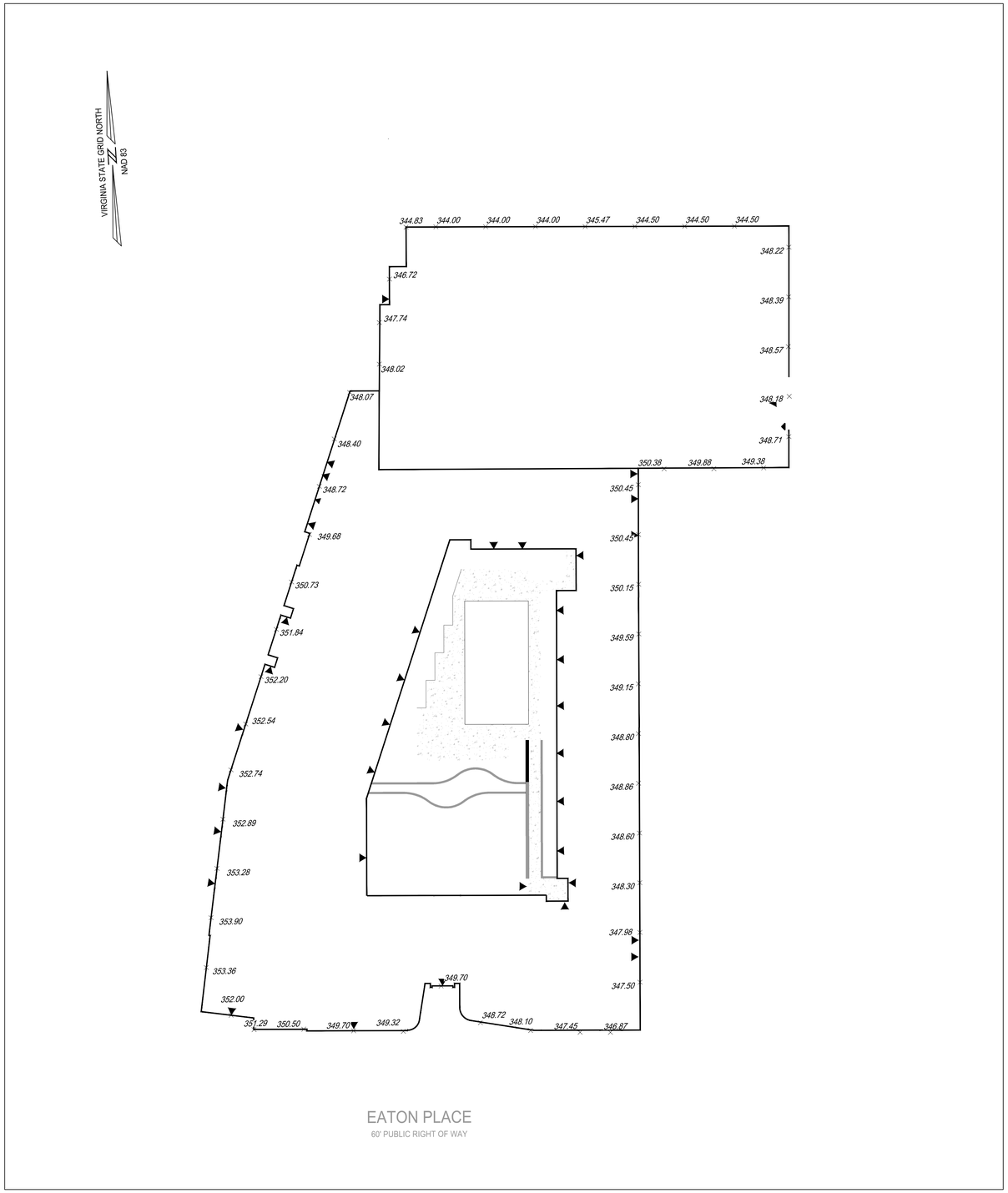
PROJECT No.: 21082.002.00
DRAWING No.: 111772
DATE: 2022-07-15
SCALE: 1" = 30'
DESIGN: JH
DRAWN: YH
CHECKED: JH

SHEET TITLE:

GRADING PLAN

SHEET No.

PI_420



	AFG
1	344.83
2	344.00
3	344.00
4	344.00
5	345.47
6	344.50
7	344.50
8	344.50
9	348.22
10	348.39
11	348.57
12	348.18
13	348.71
14	349.38
15	349.88
16	350.38
17	350.45
18	350.45
19	350.15
20	349.59
21	349.15
22	348.80
23	348.86
24	348.60
25	348.30
26	347.98
27	347.50
28	346.87
29	347.45
30	348.10
31	348.72
32	349.70
33	349.32
34	349.70
35	350.50
36	351.29
37	352.00
38	353.36
39	353.90
40	353.28
41	352.89
42	352.74
43	352.54
44	352.20
45	351.84
46	350.73
47	349.68
48	348.72
49	348.40
50	348.07
51	348.07
52	347.74
53	346.72
AFG=	348.90

30 15 0 30 60
GRAPHIC SCALE
1" = 30'

IMEG
4035 Ridge Top Rd, Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
01/12/2024
PROFESSIONAL ENGINEER

N29 APARTMENTS
GENERAL DEVELOPMENT PLAN

CITY OF FAIRFAX, VA

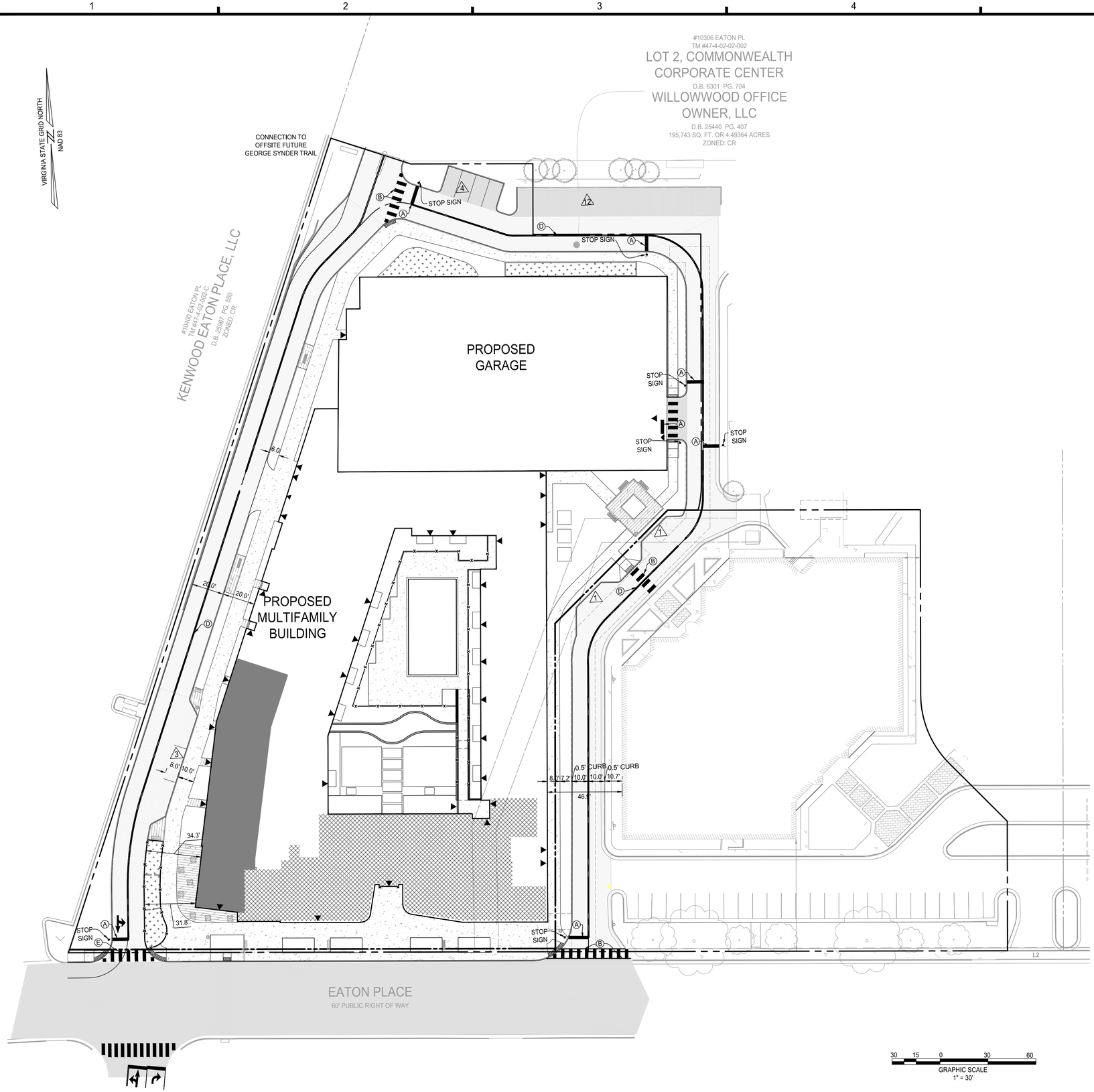
MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-28-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-16-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

PROJECT No.: 21082.002.00
DRAWING No.: 111772
DATE: 2022-07-15
SCALE: 1" = 30'
DESIGN: JH
DRAWN: YH
CHECKED: JH

SHEET TITLE:

AVERAGE FINISHED GRADE DIAGRAM

SHEET No.
PI_421



PAVEMENT MARKING LEGEND

- (A) STOP LINE, SOLID WHITE, 12" WIDTH
- (B) CROSSWALK, SOLID WHITE, 12" WIDTH
- (C) LANE LINE, WHITE, 4" WIDTH, 10' LINE SEGMENTS SEPARATED BY 30' GAPS
- (D) DOUBLE LANE LINES, SOLID YELLOW, 4" WIDTH
- (E) CROSSWALK, SOLID WHITE, 24" WIDTH

SIGN LEGEND

R1-1
30"x30"

1. METAL CONSTRUCTION.
2. WHITE LEGEND AND BORDER ON A RED BACKGROUND
3. SIGN TO BE MOUNTED 7' FROM THE GROUND TO THE BOTTOM OF THE SIGN.
4. POST SHALL BE METAL AND SECURELY MOUNTED.
5. AT INTERSECTIONS WHERE ALL APPROACHES ARE CONTROLLED BY STOP SIGNS, AN ALL WAY SUPPLEMENT PLAQUE SHALL BE MOUNTED BELOW EACH STOP SIGN. THE ALL WAY PLAQUE SHALL HAVE A WHITE LEGEND AND BORDER ON A RED BACKGROUND.

IMEG
4035 Ridge Top Rd, Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
01/12/2024
PROFESSIONAL ENGINEER

N29 APARTMENTS
GENERAL DEVELOPMENT PLAN

CITY OF FAIRFAX, VA

MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-28-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-16-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

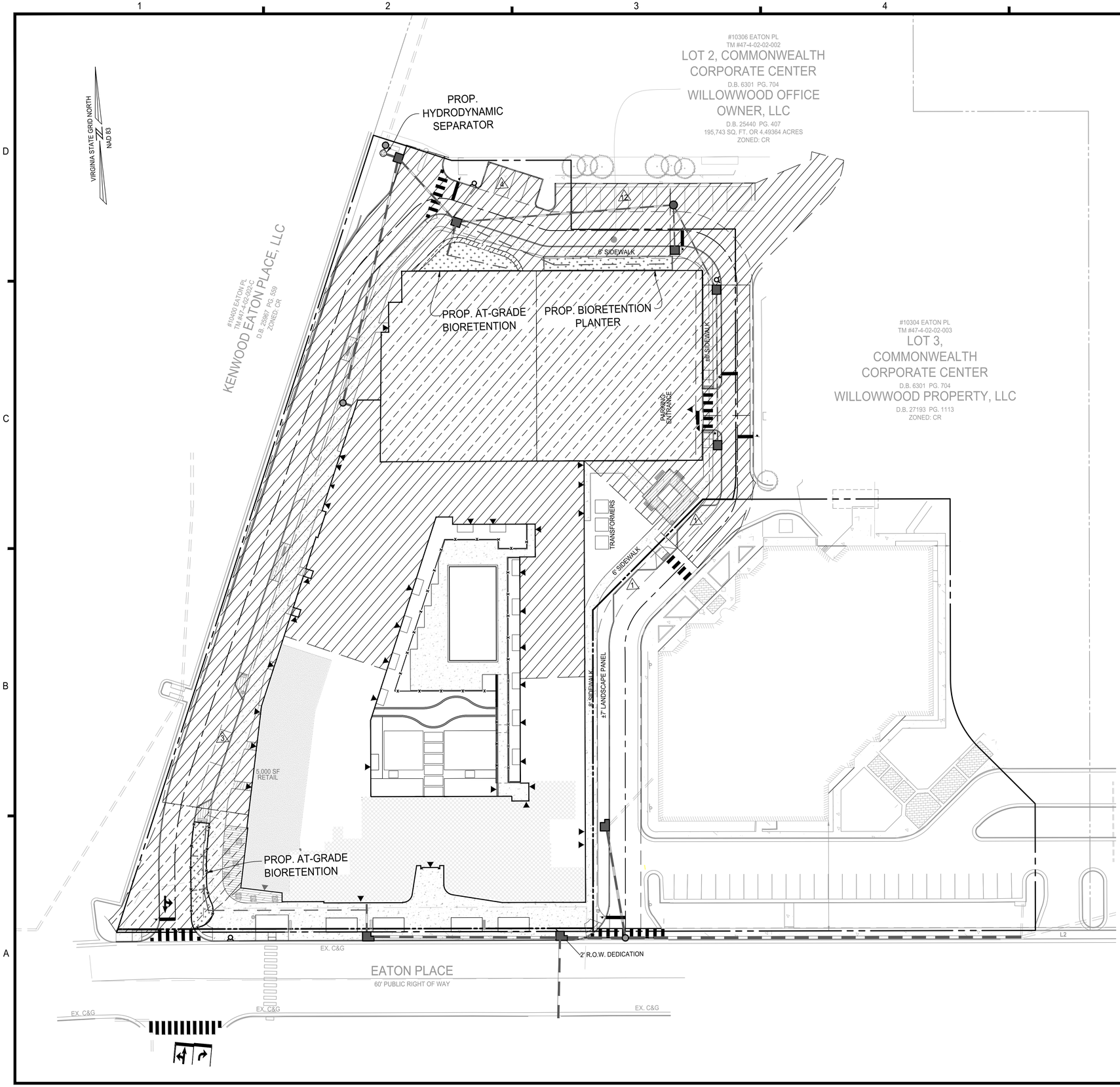
PROJECT No.: 21082.002.00
DRAWING No.: 111772
DATE: 2022-07-15
SCALE: 1" = 30'
DESIGN: LBD,ZY
DRAWN: ZY
CHECKED: JR

SHEET TITLE:

STRIPING AND SIGNAGE PLAN

SHEET No.

PI_422



STORMWATER MANAGEMENT & BEST MANAGEMENT PRACTICE (SWM/BMP) NARRATIVE

ADEQUATE OUTFALL
THE EXISTING SITE DISCHARGES RUNOFF TO ACCOTINK CREEK THAT IS ADJACENT TO THE SITE.

SWM
WATER QUANTITY FOR THIS PROJECT WILL BE PROVIDED IN ACCORDANCE WITH STATE CODE 9VAC25-870-66-WATER QUANTITY AND THE CITY OF FAIRFAX STORMWATER ORDINANCE.

THE WATER QUANTITY REQUIREMENTS WILL BE MET BY A REDUCTION IN IMPERVIOUS AND RUNOFF REDUCING BMP METHODS. THE STORMWATER TO OUTFALL 1 WILL THEN BE DIRECTED NORTH OF THE SITE, INTO ACCOTINK CREEK, AND STORMWATER TO OUTFALL 2 WILL BE DIRECTED TO THE EXISTING CMP DETENTION STRUCTURE AT THE EAST OF THE SITE, AND ULTIMATELY TO THE TRIPLE BOX CULVERT AND INTO ACCOTINK CREEK WHERE IT DOES NOT CAUSE EROSION TO THE SYSTEM FOR THE TWO-YEAR STORM (CHANNEL PROTECTION) AND CONFINES THE STORMWATER RUNOFF DURING A 10-YEAR STORM (FLOOD PROTECTION). FOR THE 100-YEAR STORM, THE RUNOFF WILL STILL UTILIZE THE EXISTING CMP SYSTEM TO PROVIDE THE REQUIRED DETENTION FOR THE SITE.

BMP
THIS PROJECT WILL USE THE VIRGINIA RUNOFF REDUCTION METHOD (VRRM) REDEVELOPMENT TO MEET THE STATE, PART IIB CRITERIA (9VAC25-870-65) AND CITY WATER QUALITY DESIGN CRITERIA. THE PROJECT SITE AREA FOR WATER QUALITY CALCULATIONS WILL INCLUDE ALL AREA WITHIN THE LIMITS OF CLEARING AND GRADING. TO MEET WATER QUALITY DESIGN CRITERIA AND PHOSPHORUS REMOVAL, BIORETENTION AND PROPRIETARY BMP FACILITIES WILL BE USED. THESE PROPRIETARY FACILITIES MAY INCLUDE; HYDRODYNAMIC SEPARATORS AND/OR STORMFILTERS. ADDITIONAL PROPRIETARY AND NON-PROPRIETARY BMP FACILITIES MAY BE USED AS THE DESIGN OF THE SITE DEVELOPS FURTHER. PRELIMINARY LOCATIONS ARE SHOWN ON THE DEVELOPMENT PLAN.

NOTE:
LOCATIONS AND SIZING OF SWM/BMP FACILITIES SHOWN ARE BASED ON A PRELIMINARY STUDY TO ENSURE COMPLIANCE WITH STATE AND CITY REQUIREMENTS; THE LOCATION AND TYPE OF FACILITY IS SUBJECT TO CHANGE WITH FINAL DESIGN.

AREA DRAINING TO BIORETENTION

AREA DRAINING TO HYDRODYNAMIC SEPARATOR

30 15 0 30 60
GRAPHIC SCALE
1" = 30'

IMEG
4035 Ridge Top Rd, Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
01/12/2024
PROFESSIONAL ENGINEER

N29 APARTMENTS
GENERAL DEVELOPMENT PLAN

CITY OF FAIRFAX, VA

MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-28-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-16-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

PROJECT No.: 21082.002.00
DRAWING No.: 111772
DATE: 2022-07-15
SCALE: 1"=30'
DESIGN: JH
DRAWN: YH
CHECKED: JH

SHEET TITLE:

BMP NOTES NARRATIVE

SHEET No.
PI_500

DEQ Virginia Runoff Reduction Method Re-Development Compliance Spreadsheet - Version 3.0

○ 2011 BMP Standards and Specifications ⊙ 2013 Draft BMP Standards and Specifications

Project Name: Willowwood - Phase 1
Date: 4/19/2023
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)* → 3.70

Maximum reduction required:	*20%*
The site's net increase in impervious cover (acres) is:	*0*
Post-Development TP Load Reduction for Site (lb/yr):	*1.01*

Check:
BMP Design Specifications List: 2013 Draft Stds & Specs
Linear project? No
Land cover areas entered correctly? ✓
Total disturbed area entered? ✓

Pre-ReDevelopment Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed, protected forest/open space or reforested					0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be				0.31	0.31
Impervious Cover (acres)				2.65	2.65
					2.96

Post-Development Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed, protected forest/open space or reforested					0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be				0.42	0.42
Impervious Cover (acres)				2.54	2.54
Area Check	OK.	OK.	OK.	OK.	2.96

Constants

Annual Rainfall (inches)	43
Target Rainfall Event (inches)	1.00
Total Phosphorus (TP) EMC (mg/L)	0.26
Total Nitrogen (TN) EMC (mg/L)	1.86
Target TP Load (lb/acre/yr)	0.41
Pj (unitless correction factor)	0.90

Runoff Coefficients (Rv)

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

LAND COVER SUMMARY -- PRE-REDEVELOPMENT

Land Cover Summary-Pre		
Pre-ReDevelopment	**Listed**	**Adjusted[1]**
Forest/Open Space Cover (acres)	0.00	0.00
Weighted Rv(forest)	0.00	0.00
% Forest	0%	0%
Managed Turf Cover (acres)	0.31	0.31
Weighted Rv(turf)	0.25	0.25
% Managed Turf	10%	10%
Impervious Cover (acres)	2.65	2.65
Rv(impervious)	0.95	0.95
% Impervious	90%	90%
Total Site Area (acres)	**2.96**	**2.96**
Site Rv	**0.88**	**0.88**
Treatment Volume and Nutrient Load		
Pre-ReDevelopment Treatment Volume (acre-ft)	0.2163	0.2163
Pre-ReDevelopment Treatment Volume (cubic feet)	9,420	9,420
Pre-ReDevelopment TP Load (lb/yr)	**5.92**	**5.92**
Pre-ReDevelopment TP Load per acre (lb/acre/yr)	2.00	2.00
Baseline TP Load (lb/yr) (**0.41 lbs/acre/yr** applied to pre-redevelopment area excluding pervious land proposed for new impervious cover)		*1.21*

LAND COVER SUMMARY -- POST DEVELOPMENT

Land Cover Summary-Post (Final)	
Post ReDev. & New Impervious	
Forest/Open Space Cover (acres)	0.00
Weighted Rv(forest)	0.00
% Forest	0%
Managed Turf Cover (acres)	0.42
Weighted Rv (turf)	0.25
% Managed Turf	14%
Impervious Cover (acres)	2.54
Rv(impervious)	0.95
% Impervious	86%
Final Site Area (acres)	**2.96**
Final Post Dev Site Rv	**0.85**
Treatment Volume and Nutrient Load	
Final Post-Development Treatment Volume (acre-ft)	0.2098
Final Post-Development Treatment Volume (cubic feet)	9,140
Final Post-Development TP Load (lb/acre/yr)	**5.74**
Final Post-Development TP Load per acre (lb/acre/yr)	1.94

Land Cover Summary-Post	
Post-ReDevelopment	
Forest/Open Space Cover (acres)	0.00
Weighted Rv(forest)	0.00
% Forest	0%
Managed Turf Cover (acres)	0.42
Weighted Rv (turf)	0.25
% Managed Turf	14%
ReDev. Impervious Cover (acres)	2.54
Rv(impervious)	0.95
% Impervious	86%
Total ReDev. Site Area (acres)	**2.96**
ReDev Site Rv	**0.85**
Treatment Volume and Nutrient Load	
Post-ReDevelopment Treatment Volume (acre-ft)	0.2098
Post-ReDevelopment Treatment Volume (cubic feet)	9,140
Post-ReDevelopment Load (TP) (lb/yr)*	**5.74**
Post-ReDevelopment TP Load per acre (lb/acre/yr)	1.94
Max. Reduction Required (Below Pre-ReDevelopment Load)	**20%**
TP Load Reduction Required for Redeveloped Area (lb/yr)	**1.01**

Land Cover Summary-Post	
Post-Development New Impervious	
New Impervious Cover (acres)	0.00
Rv(impervious)	--
Post-Development Treatment Volume (acre-ft)	--
Post-Development Treatment Volume (cubic feet)	--
Post-Development TP Load (lb/yr)	--
TP Load Reduction Required for New Impervious Area (lb/yr)	**0**

[1] *Adjusted Land Cover Summary:*
Pre ReDevelopment land cover minus pervious land cover (forest/open space or managed turf) acreage proposed for new impervious cover.

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

Column I shows load reduction requriement for new impervious cover (based on new development load limit, 0.41 lbs/acre/year).

Post-Development Requirement for Site Area

TP Load Reduction Required (lb/yr)	**1.01**

Nitrogen Loads (Informational Purposes Only)

Pre-ReDevelopment TN Load (lb/yr)	42.34
Final Post-Development TN Load (Post-ReDevelopment & New Impervious) (lb/yr)	41.08

Drainage Area A

Drainage Area A Land Cover (acres)

CLEAR BMP AREAS

	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv
Forest/Open Space (acres)					0.00	0.00
Managed Turf (acres)				0.12	0.12	0.25
Impervious Cover (acres)				1.76	1.76	0.95
				Total	1.87	

Total Phosphorus Available for Removal in D.A. A (lb/yr) 3.87
Post Development Treatment Volume in D.A. A (ft^3) 6,161

Stormwater Best Management Practices (RR = Runoff Reduction) --Select from dropdown lists-

Practice	Runoff Reduction Credit (%)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft^3)	Runoff Reduction (ft^3)	Remaining Runoff Volume (ft^3)	Total BMP Treatment Volume (ft^3)	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
2. Rooftop Disconnection (RR)													
2.i. To Stormwater Planter, Urban Bioretention (Spec #9, Appendix A)	40		0.30	0	408	612	1,021	25	0.00	0.64	0.35	0.29	14.a. MTD - Hydrodynamic
6. Bioretention (RR)													
6.a. Bioretention #1 or Micro-Bioretention #1 or Urban Bioretention (Spec #9)	40	0.01	0.27	0	375	562	937	25	0.00	0.59	0.32	0.26	14.a. MTD - Hydrodynamic
14. Manufactured Treatment Devices (no RR)													
14.a. Manufactured Treatment Device-Hydrodynamic	0	0.11	1.19	1,174	0	5,378	5,378	20	0.55	2.64	0.64	2.55	

Drainage Area B

Drainage Area A Land Cover (acres)

CLEAR BMP AREAS

	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv
Forest/Open Space (acres)					0.00	0.00
Managed Turf (acres)				0.01	0.01	0.25
Impervious Cover (acres)				0.11	0.11	0.95
				Total	0.12	

Total Phosphorus Available for Removal in D.A. B (lb/yr) 0.24
Post Development Treatment Volume in D.A. B (ft^3) 388

6. Bioretention (RR)													
6.a. Bioretention #1 or Micro-Bioretention #1 or Urban Bioretention (Spec #9)	40	0.01	0.11	0	155	233	388	25	0.00	0.24	0.13	0.11	

Site Results (Water Quality Compliance)

Area Checks	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	AREA CHECK
FOREST/OPEN SPACE (ac)	0.00	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER (ac)	1.76	0.11	0.00	0.00	0.00	OK.
IMPERVIOUS COVER TREATED (ac)	1.76	0.11	0.00	0.00	0.00	OK.
MANAGED TURF AREA (ac)	0.12	0.01	0.00	0.00	0.00	OK.
MANAGED TURF AREA TREATED (ac)	0.12	0.01	0.00	0.00	0.00	OK.
AREA CHECK	OK.	OK.	OK.	OK.	OK.	

Site Treatment Volume (ft^3) 9,140

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)	783	155	0	0	0	938
TP LOAD AVAILABLE FOR REMOVAL (lb/yr)	3.87	0.24	0.00	0.00	0.00	4.11
TP LOAD REDUCTION ACHIEVED (lb/yr)	1.31	0.13	0.00	0.00	0.00	1.45
TP LOAD REMAINING (lb/yr)	2.56	0.11	0.00	0.00	0.00	2.67
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	5.62	1.12	0.00	0.00	0.00	6.74

Total Phosphorus

FINAL POST-DEVELOPMENT TP LOAD (lb/yr)	5.74
TP LOAD REDUCTION REQUIRED (lb/yr)	1.01
TP LOAD REDUCTION ACHIEVED (lb/yr)	1.45
TP LOAD REMAINING (lb/yr):	4.30
REMAINING TP LOAD REDUCTION REQUIRED (lb/yr):	0.00 **

** TARGET TP REDUCTION EXCEEDED BY 0.44 LB/YEAR **

Total Nitrogen (For Information Purposes)

POST-DEVELOPMENT LOAD (lb/yr)	41.08
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	6.74
REMAINING POST-DEVELOPMENT NITROGEN LOAD (lb/yr)	34.34

NOTE:
REMAINING RUNOFF VOLUME FROM DRAINAGE AREA A WILL FLOW OUT TO OUTFALL 1, NORTH OF THE SITE INTO ACCOTINK CREEK.

REMAINING RUNOFF VOLUME FROM DRAINAGE AREA B WILL FLOW OUT TO OUTFALL 2 , INTO THE EXISTING CMP DETENTION STRUCTURE AT THE EAST OF THE SITE, AND ULTIMATELY TO THE TRIPLE BOX CULVERT AND INTO ACCOTINK CREEK

BIORETENTION SIZING CHART

At-Grade Bioretention (West)	
Impervious DA (AC)	0.270
Managed DA (AC)	0.010
Total DA (AC)	0.28
Treatment Volume (CF)	938
Minimum Area (SF)	615
Actual Area (SF)	732
Upstream BMP	None
Downstream BMP	None
Phosphorus Removal %	25%
Phosphorus Removed	0.32

Bioretention Planter (East)	
Impervious DA (AC)	0.296
Managed DA (AC)	0
Total DA (AC)	0.296
Treatment Volume (CF)	1021
Minimum Area (SF)	669
Actual Area (SF)	673
Upstream BMP	None
Downstream BMP	None
Phosphorus Removal %	25%
Phosphorus Removed	0.35

At-Grade Bioretention (Entrance)	
Impervious DA (AC)	0.110
Managed DA (AC)	0.010
Total DA (AC)	0.12
Treatment Volume (CF)	414
Minimum Area (SF)	267
Actual Area (SF)	668
Upstream BMP	None
Downstream BMP	None
Phosphorus Removal %	25%
Phosphorus Removed	0.13

At-Grade Bio Storage Depth (West)	
0.5' Ponding (1.0 Vr)	
2.5' Soil (0.25 Vr)	
1' Stone (0.4 Vr)	
Storage Depth	1.525

Bio Planter Storage Depth	
0.5' Ponding (1.0 Vr)	
2.5' Soil (0.25 Vr)	
1' Stone (0.4 Vr)	
Storage Depth	1.525

At-Grade Bio Storage Depth (Entrance)	
3" Ponding (1.0 Vr)	
4.0' Soil (0.25 Vr)	
0.75' Stone (0.4 Vr)	
Storage Depth	1.55

IMEG
4035 Ridge Top Rd, Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
01/12/2024
PROFESSIONAL ENGINEER

N29 APARTMENTS
GENERAL DEVELOPMENT PLAN

CITY OF FAIRFAX, VA

MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-28-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-16-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

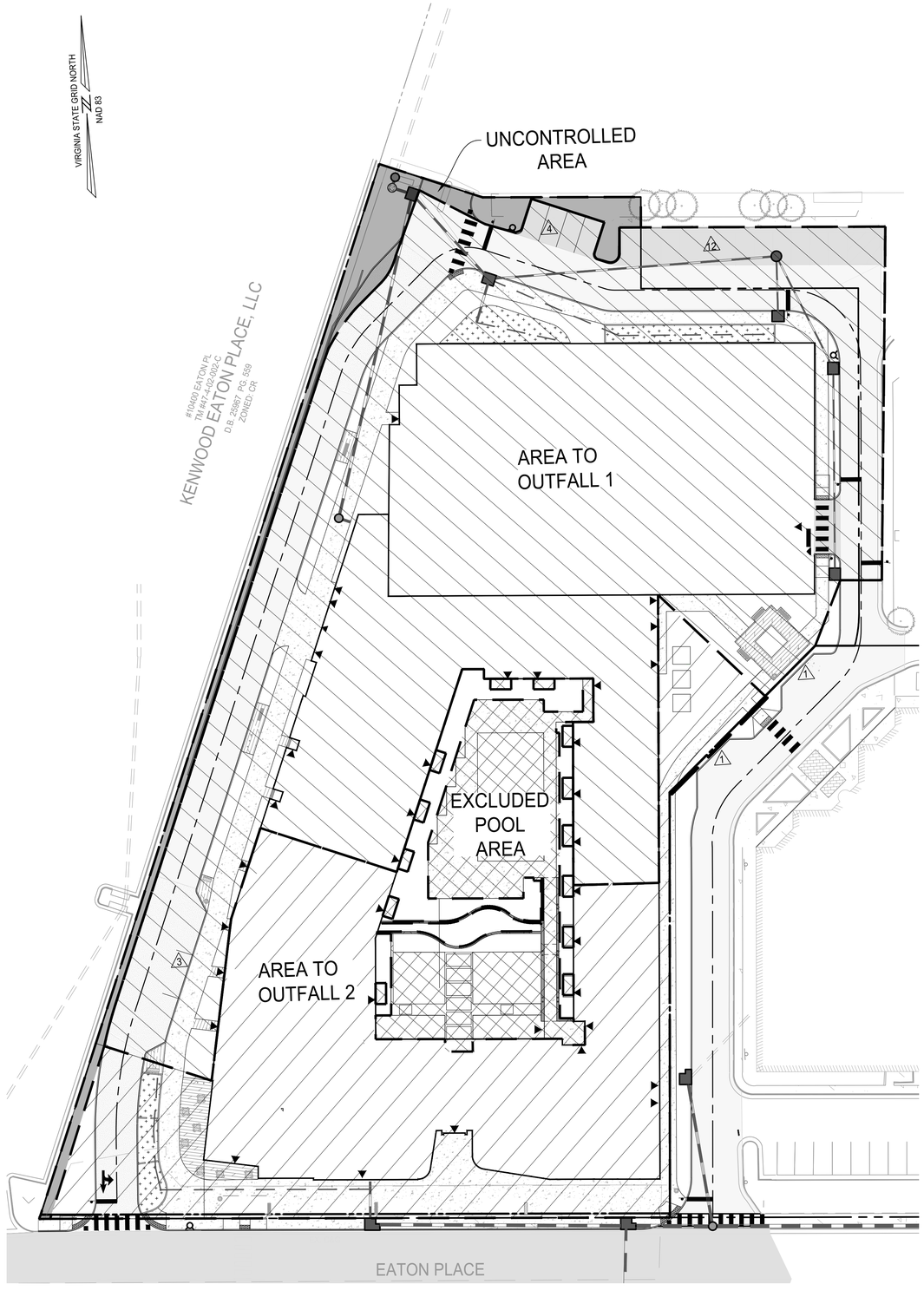
PROJECT No.: 21082.002.00
DRAWING No.: 111772
DATE: 2022-07-15
SCALE: N/A
DESIGN: JH
DRAWN: YH
CHECKED: JH

SHEET TITLE:

BMP CALCULATIONS

SHEET No.

PI_501



LEGEND

OUTFALL AREA 1

OUTFALL AREA 2

POOL AREA EXCLUDED

POST-DEVELOPED

OUTFALL (1-YR)

		DA	IMP (D)	TURF (D)
Bioretention & HDS	DA-A/ Outfall 1	1.87	1.76	0.12
	CN ave.	**96**	VRRM - See this sheet	
Untreated	Outfall 2	0.98	0.66	0.29
	CN ave.	**98**	98	80
Untreated	Uncontrolled	0.10	0.00	0.09
	CN	**72**	98	80
	Total Area	2.96		
	CN ave.	**96**		

OUTFALL (2&10-YR)

		DA	IMP (D)	TURF (D)
Bioretention & HDS	DA-A/ Outfall 1	1.87	1.76	0.12
	CN ave.	**96**	VRRM - See this sheet	
Untreated	Outfall 2	0.98	0.66	0.29
	CN ave.	**98**	98	80
Untreated	Uncontrolled	0.10	0.00	0.09
	CN	**72**	98	80
	Total Area	2.96		
	CN ave.	**96**		

*POOL AREA AND AREA DRAINING WITH THE POOL TO THE SANITARY SYSTEM OF 0.22 AC HAVE BEEN REMOVED FROM THE POST-DEV AREA

Phase I

	On-Site			
	Q1	RV1	Q10	RV10
Pre	5.30	16,731	9.97	32,435
Post	4.36	14,969	9.03	30,542

Channel Protection (1-Year Storm)

Qdev < IF (Qpre*Rvpre)/Rvdev

< 0.8 (5.301 * 16731)/ 14969

4.36 < 4.74

Detention required: -0.38 CFS

Flood Protection (10-Year Storm)

Q10 post < (Qpre*Rvpre)/Rvdev

9.025 < 10.59113

Detention required: -1.57 CFS

	On-Site	
	Q2	RV2
Pre	6.45	20,564
Post	5.46	18,755

Channel Protection (2-Year Storm)

Qdev < IF (Qpre*Rvpre)/Rvdev

< 0.80 (6.447 * 20564)/ 18755

5.46 < 5.66

Detention required: -0.20 CFS

*SEE HYDROGRAPHS ON SHEET PI_503 AND PI_504.

Drainage Area Curve Numbers and Runoff Depths*

Curve numbers (CN, CNadj) and runoff depths ($RV_{Developed}$) are computed with and without reduction practices.

Drainage Area A		A Soils	B Soils	C Soils	D Soils
Forest/Open Space -- undisturbed, protected forest/open space or reforested land	Area (acres)	0.00	0.00	0.00	0.00
	CN	30	55	70	77
Managed Turf -- disturbed, graded for yards or other turf to be mowed/managed	Area (acres)	0.00	0.00	0.00	0.12
	CN	39	61	74	80
Impervious Cover	Area (acres)	0.00	0.00	0.00	1.76
	CN	98	98	98	98
					$CN_{(D.A.\ A)}$
					97

	Total Area (acres):	1.87
	Runoff Reduction Volume (ft^3):	783

	1-year storm	2-year storm	10-year storm
$RV_{Developed}$ *(watershed-inch)* with no Runoff Reduction*	2.36	2.86	4.85
$RV_{Developed}$ *(watershed-inch)* with Runoff Reduction*	2.25	2.74	4.73
Adjusted CN*	**96**	**96**	**96**

See Notes above

Drainage Area B		A Soils	B Soils	C Soils	D Soils
Forest/Open Space -- undisturbed, protected forest/open space or reforested land	Area (acres)	0.00	0.00	0.00	0.00
	CN	30	55	70	77
Managed Turf -- disturbed, graded for yards or other turf to be mowed/managed	Area (acres)	0.00	0.00	0.00	0.01
	CN	39	61	74	80
Impervious Cover	Area (acres)	0.00	0.00	0.00	0.11
	CN	98	98	98	98
					$CN_{(D.A.\ B)}$
					97

	Total Area (acres):	0.12
	Runoff Reduction Volume (ft^3):	155

	1-year storm	2-year storm	10-year storm
$RV_{Developed}$ *(watershed-inch)* with no Runoff Reduction*	2.36	2.86	4.85
$RV_{Developed}$ *(watershed-inch)* with Runoff Reduction*	2.00	2.50	4.49
Adjusted CN*	**93**	**93**	**94**

30 15 0 30 60

GRAPHIC SCALE
1" = 30'

IMEG
4035 Ridge Top Rd, Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
01/12/2024
PROFESSIONAL ENGINEER

N29 APARTMENTS
GENERAL DEVELOPMENT PLAN

CITY OF FAIRFAX, VA

MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-28-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-18-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

PROJECT No.: 21082.002.00
DRAWING No.: 111772
DATE: 2022-07-15
SCALE: 1" = 30'
DESIGN: JH
DRAWN: YH
CHECKED: JH

SHEET TITLE:

STORMWATER MANAGEMENT PLAN

SHEET No.

PI_502

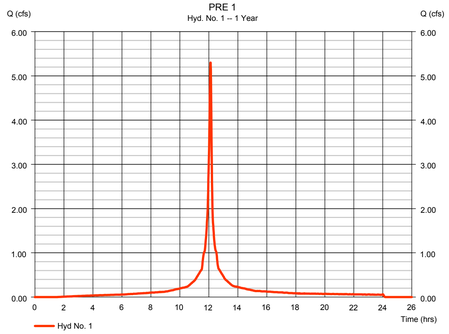
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022 — Friday, 10 / 13 / 2023

Hyd. No. 1

PRE 1

Hydrograph type	= SCS Runoff	Peak discharge	= 5.301 cfs
Storm frequency	= 1 yrs	Time to peak	= 12.12 hrs
Time interval	= 1 min	Hyd. volume	= 16,731 cuft
Drainage area	= 1.870 ac	Curve number	= 98
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 2.62 in	Distribution	= Custom
Storm duration	= 24Hr_Dist-1	Shape factor	= 484



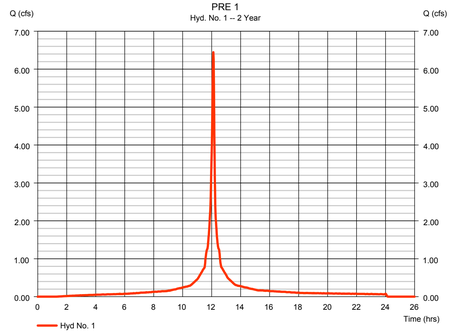
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022 — Friday, 10 / 13 / 2023

Hyd. No. 1

PRE 1

Hydrograph type	= SCS Runoff	Peak discharge	= 6.447 cfs
Storm frequency	= 2 yrs	Time to peak	= 12.12 hrs
Time interval	= 1 min	Hyd. volume	= 20,564 cuft
Drainage area	= 1.870 ac	Curve number	= 98
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.17 in	Distribution	= Custom
Storm duration	= 24Hr_Dist-1	Shape factor	= 484



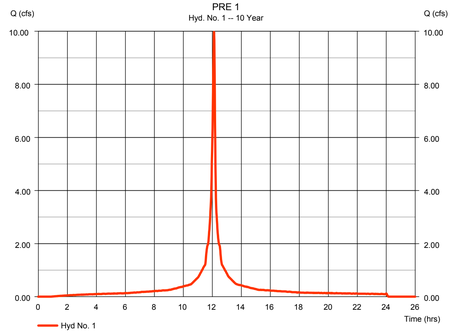
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022 — Friday, 10 / 13 / 2023

Hyd. No. 1

PRE 1

Hydrograph type	= SCS Runoff	Peak discharge	= 9.973 cfs
Storm frequency	= 10 yrs	Time to peak	= 12.12 hrs
Time interval	= 1 min	Hyd. volume	= 32,435 cuft
Drainage area	= 1.870 ac	Curve number	= 98
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.87 in	Distribution	= Custom
Storm duration	= 24Hr_Dist-1	Shape factor	= 484



Hydrograph Report

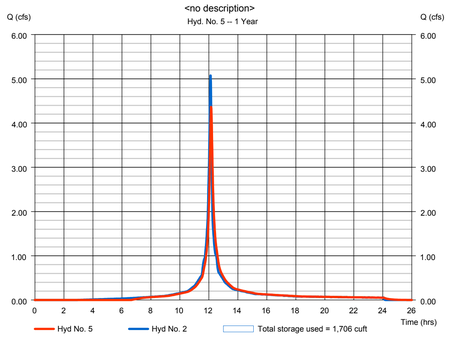
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022 — Friday, 10 / 13 / 2023

Hyd. No. 5

<no description>

Hydrograph type	= Reservoir	Peak discharge	= 4.364 cfs
Storm frequency	= 1 yrs	Time to peak	= 12.15 hrs
Time interval	= 1 min	Hyd. volume	= 14,969 cuft
Inflow hyd. No.	= 2 - POST 1	Max. Elevation	= 13.04 ft
Reservoir name	= BMP	Max. Storage	= 1,706 cuft

Storage Indication method used.



Hydrograph Report

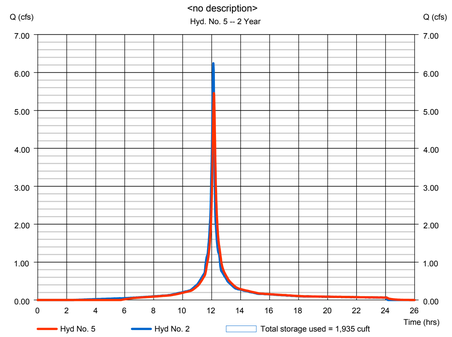
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022 — Friday, 10 / 13 / 2023

Hyd. No. 5

<no description>

Hydrograph type	= Reservoir	Peak discharge	= 5.456 cfs
Storm frequency	= 2 yrs	Time to peak	= 12.15 hrs
Time interval	= 1 min	Hyd. volume	= 18,755 cuft
Inflow hyd. No.	= 2 - POST 1	Max. Elevation	= 13.44 ft
Reservoir name	= BMP	Max. Storage	= 1,935 cuft

Storage Indication method used.



Hydrograph Report

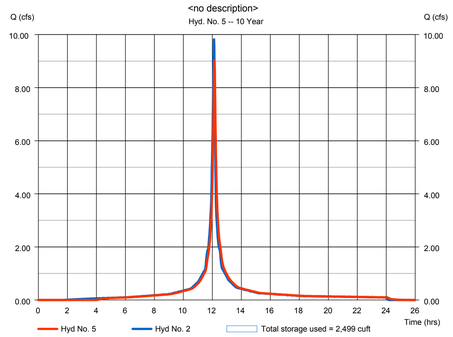
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022 — Friday, 10 / 13 / 2023

Hyd. No. 5

<no description>

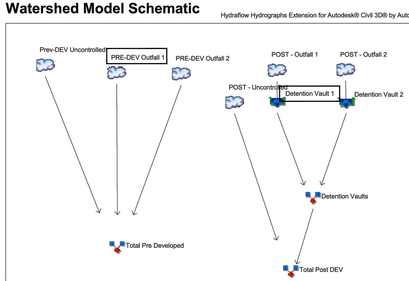
Hydrograph type	= Reservoir	Peak discharge	= 9.025 cfs
Storm frequency	= 10 yrs	Time to peak	= 12.15 hrs
Time interval	= 1 min	Hyd. volume	= 30,542 cuft
Inflow hyd. No.	= 2 - POST 1	Max. Elevation	= 14.45 ft
Reservoir name	= BMP	Max. Storage	= 2,499 cuft

Storage Indication method used.



Watershed Model Schematic

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022



Legend

Hyd.	Origin	Description
1	SCS Runoff	PRE-DEV Outfall 1
2	SCS Runoff	POST - Outfall 1
3	SCS Runoff	POST - Outfall 2
4	SCS Runoff	POST - Uncontrolled
5	SCS Runoff	PRE-DEV Outfall 2
6	Reservoir	Detention Vault 1
7	Reservoir	Detention Vault 2
8	Combine	Detention Vaults
9	Combine	Total Post DEV
10	SCS Runoff	Prev-DEV Uncontrolled
11	Combine	Total Pre Developed

Project: SWM - Phase 2.gpw | Monday, 10 / 16 / 2023

IMEG
4035 Ridge Top Rd, Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
01/12/2024
PROFESSIONAL ENGINEER

N29 APARTMENTS
GENERAL DEVELOPMENT PLAN

CITY OF FAIRFAX, VA

MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-28-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-16-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

PROJECT No.: 21082.002.00
DRAWING No.: 111772
DATE: 2022-07-15
SCALE: NOT TO SCALE
DESIGN: JH
DRAWN: YH
CHECKED: JH

SHEET TITLE:

OUTFALL 1
HYDROGRAPHS

SHEET No.

PI_503

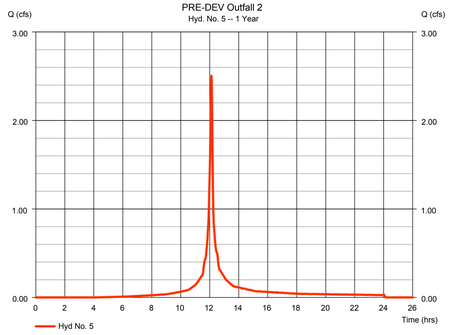
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022 — Monday, 10 / 16 / 2023

Hyd. No. 5

PRE-DEV Outfall 2

Hydrograph type	= SCS Runoff	Peak discharge	= 2.504 cfs
Storm frequency	= 1 yrs	Time to peak	= 12.12 hrs
Time interval	= 1 min	Hyd. volume	= 7,279 cuft
Drainage area	= 0.980 ac	Curve number	= 94
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 2.62 in	Distribution	= Custom
Storm duration	= 24Hr_Dist-1	Shape factor	= 484



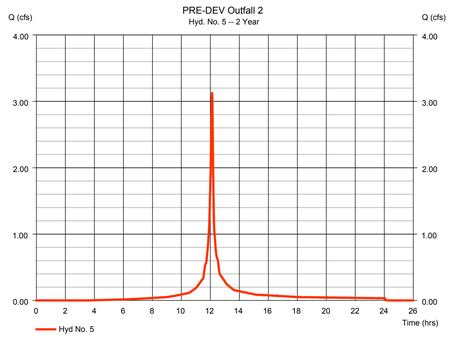
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022 — Monday, 10 / 16 / 2023

Hyd. No. 5

PRE-DEV Outfall 2

Hydrograph type	= SCS Runoff	Peak discharge	= 3.127 cfs
Storm frequency	= 2 yrs	Time to peak	= 12.12 hrs
Time interval	= 1 min	Hyd. volume	= 9,225 cuft
Drainage area	= 0.980 ac	Curve number	= 94
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.17 in	Distribution	= Custom
Storm duration	= 24Hr_Dist-1	Shape factor	= 484



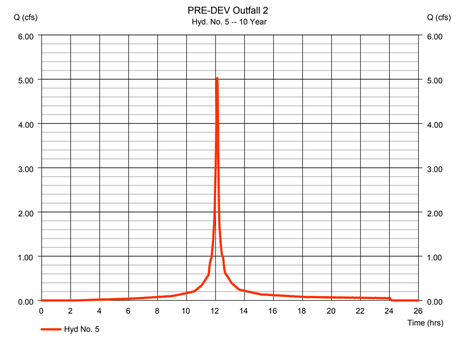
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022 — Monday, 10 / 16 / 2023

Hyd. No. 5

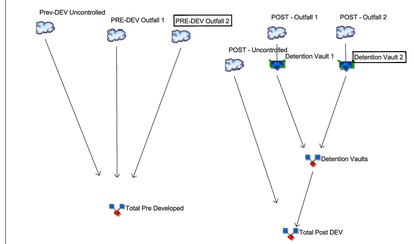
PRE-DEV Outfall 2

Hydrograph type	= SCS Runoff	Peak discharge	= 5.029 cfs
Storm frequency	= 10 yrs	Time to peak	= 12.12 hrs
Time interval	= 1 min	Hyd. volume	= 15,334 cuft
Drainage area	= 0.980 ac	Curve number	= 94
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.87 in	Distribution	= Custom
Storm duration	= 24Hr_Dist-1	Shape factor	= 484



Watershed Model Schematic

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022



Legend

Hyd.	Origin	Description
1	SCS Runoff	PRE-DEV Outfall 1
2	SCS Runoff	POST - Outfall 1
3	SCS Runoff	POST - Outfall 2
4	SCS Runoff	POST - Uncontrolled
5	SCS Runoff	PRE-DEV Outfall 2
6	Reservoir	Detention Vault 1
7	Reservoir	Detention Vault 2
8	Combine	Detention Vaults
9	Combine	Total Post DEV
10	SCS Runoff	Prev-DEV Uncontrolled
11	Combine	Total Pre Developed

Project: SWM - Phase 2.gpw — Monday, 10 / 16 / 2023

Hydrograph Report

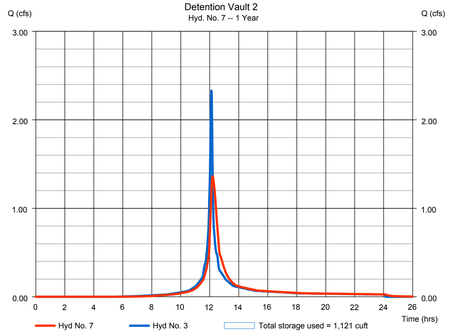
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022 — Monday, 10 / 16 / 2023

Hyd. No. 7

Detention Vault 2

Hydrograph type	= Reservoir	Peak discharge	= 1.361 cfs
Storm frequency	= 1 yrs	Time to peak	= 12.20 hrs
Time interval	= 1 min	Hyd. volume	= 6,616 cuft
Inflow hyd. No.	= 3 - POST - Outfall 2	Max. Elevation	= 101.41 ft
Reservoir name	= Detention Vault 2	Max. Storage	= 1,121 cuft

Storage Indication method used.



Hydrograph Report

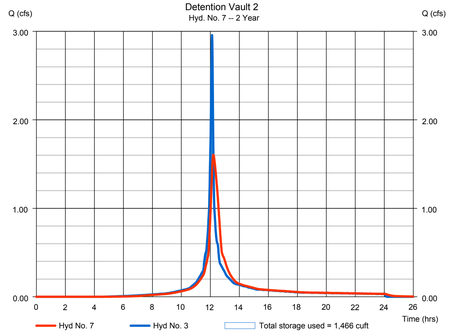
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022 — Monday, 10 / 16 / 2023

Hyd. No. 7

Detention Vault 2

Hydrograph type	= Reservoir	Peak discharge	= 1.604 cfs
Storm frequency	= 2 yrs	Time to peak	= 12.22 hrs
Time interval	= 1 min	Hyd. volume	= 8,514 cuft
Inflow hyd. No.	= 3 - POST - Outfall 2	Max. Elevation	= 101.85 ft
Reservoir name	= Detention Vault 2	Max. Storage	= 1,466 cuft

Storage Indication method used.



Hydrograph Report

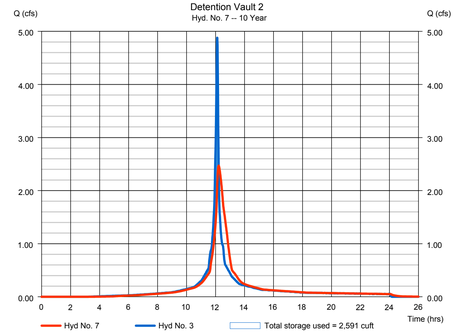
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022 — Monday, 10 / 16 / 2023

Hyd. No. 7

Detention Vault 2

Hydrograph type	= Reservoir	Peak discharge	= 2.470 cfs
Storm frequency	= 10 yrs	Time to peak	= 12.22 hrs
Time interval	= 1 min	Hyd. volume	= 14,532 cuft
Inflow hyd. No.	= 3 - POST - Outfall 2	Max. Elevation	= 103.26 ft
Reservoir name	= Detention Vault 2	Max. Storage	= 2,591 cuft

Storage Indication method used.



IMEG
4035 Ridge Top Rd, Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
01/12/2024
PROFESSIONAL ENGINEER

N29 APARTMENTS
GENERAL DEVELOPMENT PLAN

CITY OF FAIRFAX, VA

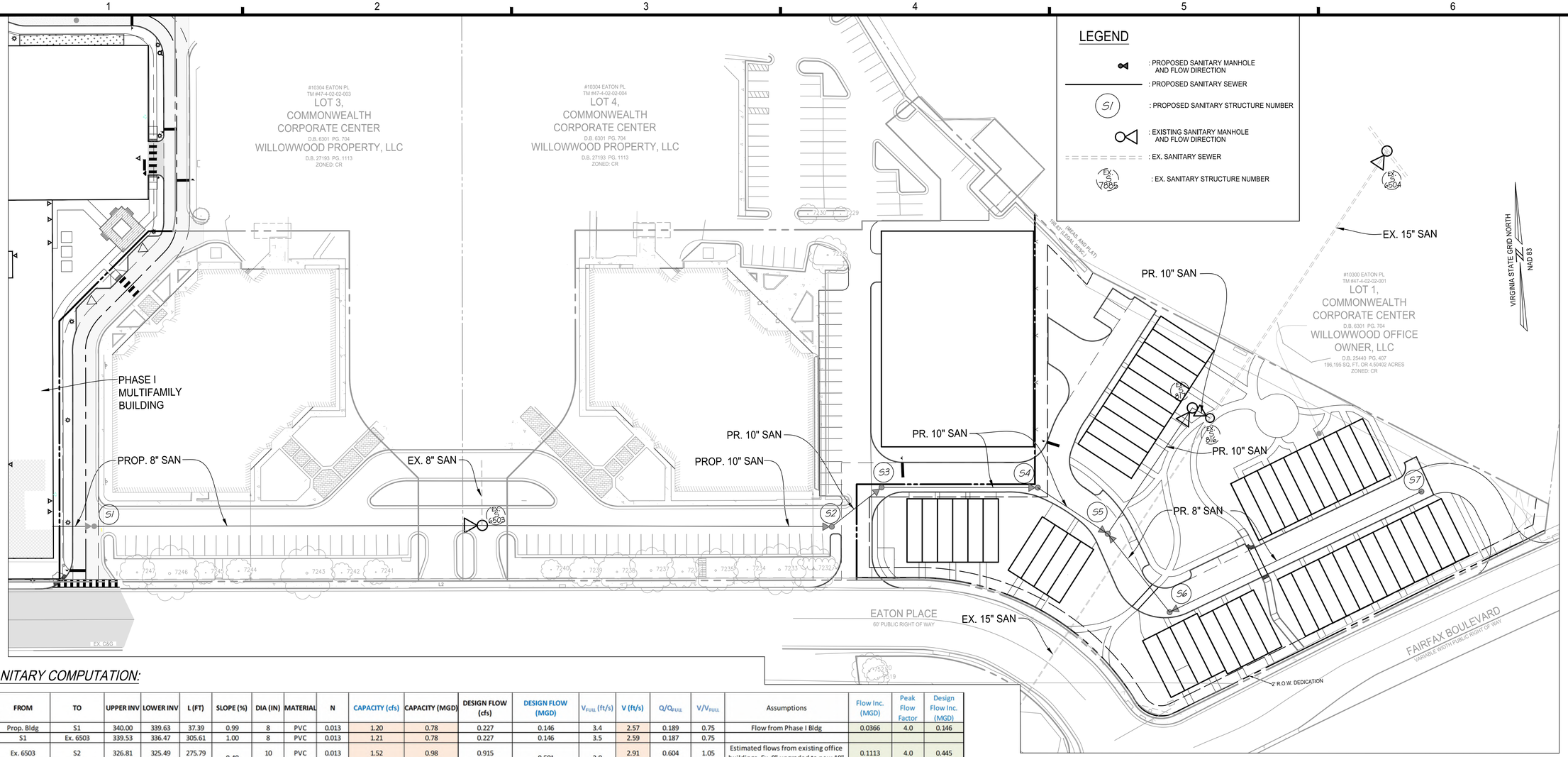
MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-26-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-16-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

PROJECT No.: 21082.002.00
DRAWING No.: 111772
DATE: 2022-07-15
SCALE: NOT TO SCALE
DESIGN: JH
DRAWN: YH
CHECKED: JH

SHEET TITLE:

OUTFALL 2
HYDROGRAPHS

SHEET No.
PI_504



SANITARY COMPUTATION:

FROM	TO	UPPER INV	LOWER INV	L (FT)	SLOPE (%)	DIA (IN)	MATERIAL	N	CAPACITY (cfs)	CAPACITY (MGD)	DESIGN FLOW (cfs)	DESIGN FLOW (MGD)	V_{FULL} (ft/s)	V (ft/s)	Q/Q_{FULL}	V/V_{FULL}	Assumptions	Flow Inc. (MGD)	Peak Flow Factor	Design Flow Inc. (MGD)
Prop. Bldg	S1	340.00	339.63	37.39	0.99	8	PVC	0.013	1.20	0.78	0.227	0.146	3.4	2.57	0.189	0.75	Flow from Phase I Bldg	0.0366	4.0	0.146
S1	Ex. 6503	339.53	336.47	305.61	1.00	8	PVC	0.013	1.21	0.78	0.227	0.146	3.5	2.59	0.187	0.75				
Ex. 6503	S2	326.81	325.49	275.79	0.48	10	PVC	0.013	1.52	0.98	0.915	0.591	2.8	2.91	0.604	1.05	Estimated flows from existing office buildings. Ex. 8" upgraded to new 10"	0.1113	4.0	0.445
S2	S3	325.48	325.24	49.97	0.48	10	PVC	0.013	1.52	0.98	0.915	0.591	2.8	2.87	0.603	1.03				
S3	S4	325.23	324.64	123.12	0.48	10	PVC	0.013	1.52	0.98	0.926	0.599	2.8	2.91	0.611	1.05	Flows from Phase II Res. Units	0.0018	4.0	0.007
S4	S5	324.63	324.32	65.74	0.47	10	PVC	0.013	1.50	0.97	0.934	0.603	2.8	2.89	0.621	1.05	Flows from Phase II Res. Units	0.0012	4.0	0.005
S7	S6	330.00	327.80	220.08	1.00	8	PVC	0.013	1.21	0.78	0.052	0.034	3.5	1.71	0.043	0.50	Flows from Phase II Res. Units	0.0084	4.0	0.034
S6	S5	327.70	326.91	78.69	1.00	8	PVC	0.013	1.21	0.78	0.056	0.036	3.5	1.72	0.046	0.50	Flows from Phase II Res. Units	0.0006	4.000	0.002
S5	Ex. 817	324.22	323.64	119.56	0.49	10	PVC	0.013	1.53	0.99	1.082	0.699	2.8	3.03	0.709	1.08	Flows from Phase II Res. Units	0.0150	4.0	0.060
Ex. 817	Ex. 816	323.60	323.38	16.04	1.37	10	PVC	0.013	2.57	1.66	1.082	0.699	4.7	4.44	0.422	0.94	Ex. 8" upgraded to new 10"			
Ex. 816	Ex. 6504	316.55	314.97	252.63	0.63	15	RCP	0.013	5.11	3.30	3.371	2.178	4.2	4.41	0.660	1.06	Estimated offsite sanitary flows	0.3698	4.0	1.479

Notes:
1. See contributing sewage flow estimates below.
2. Peaking factor of 4.0 used.
3. Existing office building areas obtained from City of Fairfax Real Estate Assessment Databas
4. See Sanitary Sewer Off-Site Map sheet for offsite flow estimates.

Contributing Sewage Flow Estimate (Existing)

Discharge Facility (Ex. Office Buildings)	SF	Estimated Flow (gpd/1000 SF)	Total Incremetal Flow (gpd)	Sanitary From	Sanitary To
10300 Eaton Pl	138,860	200	27,772	Ex. 6503	Ex. 3168
10302 Eaton Pl	142,648	200	28,530	Ex. 6503	Ex. 3168
10304 Eaton Pl	135,942	200	27,188	Ex. 6503	Ex. 3168
10306 Eaton Pl	138,860	200	27,772	Ex. 6503	Ex. 3168
Total SF	556,310	Estimated Cumulative Existing Flow	111,262	Ex. 6503	Ex. 3168

PHASE I

Contributing Sewage Flow Estimate (Proposed)

Discharge Facility	No. of Units	No. of People	Area (SF)	Design Flow (gpd/person) (gpd/1000SF)	Total Incremetal Flow (gpd)	Total Cummulative Flow (gpd)	Sanitary From	Sanitary To
Retail			5000	200	1,000	1,000		
Multifamily	260	356		100	35,600	35,600		
Total					36,600		S1	Ex. 6503

PHASE II

Contributing Sewage Flow Estimate (Proposed)

Discharge Facility	# of Units	No. of People	Design Flow (gpd/person)	Total Incremetal Flow (gpd)	Total Cummulative Flow (gpd)	Sanitary From	Sanitary To
Phase II Res.	6	18	100	1,800	1,800	S3	S4
Phase II Res.	4	12	100	1,200	3,000	S4	S5
Phase II Res.	28	84	100	8,400	8,400	S7	S6
Phase II Res.	2	6	100	600	9,000	S6	S5
Phase II Res.	10	30	100	3,000	15,000	S5	S817

SANITARY SEWER ANALYSIS

THE PURPOSE OF THIS ANALYSIS IS TO DEMONSTRATE THE CAPACITY AND HYDRAULIC ADEQUACY OF THE DOWN STREAM SANITARY SEWER MAIN.

EXISTING CONDITIONS:
CURRENTLY, THE EXISTING SITE CONSISTS OF AN EXISTING ASPHALT PARKING LOT WITH NO EXISTING SANITARY SEWER MAIN ON SITE.

THE UPSTREAM FOR THIS SEWER-SHED IS SHOWN ON SHEET PI_601, WEST OF THE SITE, AND ON THIS SHEET FROM EXISTING OFFICE BUILDINGS, DESIGNATED AS ESTIMATED FLOW.

PHASE I

PROPOSED CONDITIONS:
NEW LATERALS AND SANITARY MAIN WILL BE CONSTRUCTED ON-SITE AND CONNECT TO THE EXISTING MANHOLE S6503.

CAPACITY AND HYDRAULIC ANALYSIS:
THE SANITARY SEWER WAS ANALYZED FROM THE ON-SITE 8-INCH SEWER TO EXISTING MANHOLE S816.

THE VOLUME OF FLOW USED IN THIS ANALYSIS HAS BEEN COMPUTED IN ACCORDANCE WITH STATE CODE 9VAC25-790-460 AND 9VAC25-790-310. SEE COMPUTATIONS ON THIS SHEET.

PHASE II

PROPOSED CONDITIONS:
EXISTING 10" SANITARY SEWER WILL BE REMOVED AND RELOCATED FOR THE CONSTRUCTION OF PROPOSED TONWHOMES. PROPOSED 10" SANITARY SEWER NETWORK WILL CONNECT TO THE EXISTING 10" SANITARY WHICH CONNECTS TO EXISTING MANHOLE S817.

CAPACITY AND HYDRAULIC ANALYSIS:
THE SANITARY SEWER WAS ANALYZED FROM THE EX. 8-INCH SEWER TO FROM THE PHASE I DEVELOPMENT TO EXISTING MANHOLE S816.

THE VOLUME OF FLOW USED IN THIS ANALYSIS HAS BEEN COMPUTED IN ACCORDANCE WITH STATE CODE 9VAC25-790-460 AND 9VAC25-790-310. SEE COMPUTATIONS ON THIS SHEET.

CONCLUSION:
IT IS OUR CONCLUSION THAT THE EXISTING DOWNSTREAM 8-INCH SEWERS NOTED IN THE SANITARY COMPUTATION CHART NEED TO BE UPGRADED TO 10-INCH PIPES TO MEET CAPACITY AND HYDRAULIC ADEQUACY OF THE ADDED REDEVELOPMENT FLOWS.

GRAPHIC SCALE
1"=40'
40 20 0 40 80

IMEG
4035 Ridge Top Rd, Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
01/12/2024
PROFESSIONAL ENGINEER

N29 APARTMENTS
GENERAL DEVELOPMENT PLAN

CITY OF FAIRFAX, VA

MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-28-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-16-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

PROJECT No.: 21082.002.00
DRAWING No.: ---
DATE: 2022-07-15
SCALE: 1" = 30'
DESIGN: JH
DRAWN: YH
CHECKED: JH

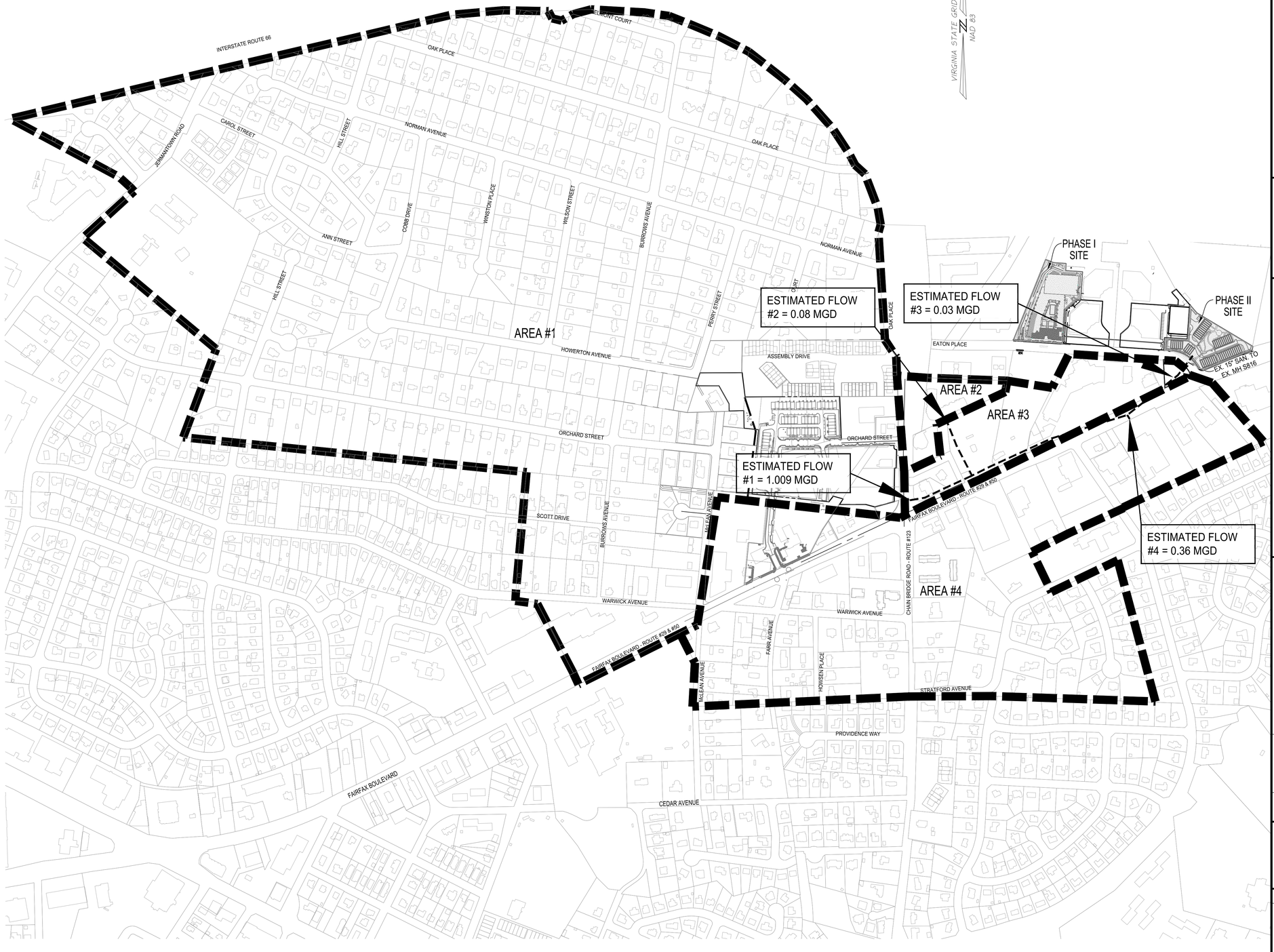
SHEET TITLE:

SANITARY SEWER ANALYSIS

SHEET No.
PI_600

p:\Projects\21082 willowwood\003200\111772 mdp\PI_600 SANITARY SEWER ANALYSIS.dwg, 1/16/2024 3:41:54 PM, Jana Morgan,

OFFSITE SANITARY FLOW ESTIMATES:
AREA #1 FLOW ESTIMATES: FROM NORTHFAX WEST PUBLIC IMPROVEMENT PLAN (SP-20-00300) TOTAL PEAK FLOW = 1.009 MGD
AREA #2 EXISTING DEVELOPMENT ESTIMATES: HOTEL= 152 ROOMS FLOW ESTIMATES: 152 UNITS x 130 GPD/UNIT = 19,760 GPD TOTAL FLOW = 19,760 GPD TOTAL PEAK FLOW = 79,040 GPD = 0.08 MGD
AREA #3 EXISTING DEVELOPMENT ESTIMATES: OFFICE/RETAIL = 41,161 SF FLOW ESTIMATES: 41,161 SF OFFICE/RETAIL x 200 GPD/1000 SF = 8,232 GPD TOTAL FLOW = 8,232 GPD TOTAL PEAK FLOW = 32,929 GPD = 0.03 MGD
AREA #4 EXISTING DEVELOPMENT ESTIMATES: RESIDENTIAL= 63 DWELLING UNITS OFFICE/RETAIL = 344,446 SF FLOW ESTIMATES: 63 UNITS x 350 GPD/UNIT = 22,050 GPD 344,446 SF OFFICE/RETAIL x 200 GPD/1000 SF = 68,889 GPD TOTAL FLOW = 90,939 GPD TOTAL PEAK FLOW = 363,757 GPD = 0.36 MGD



NOTES:
1. SEE SHEET PI_600 FOR SANITARY SEWER ANALYSIS.
2. SEE THIS SHEET FOR EXISTING FLOW ESTIMATES.
3. A PEAK FACTOR OF 4.0 WAS USED FOR ALL OFFSITE SANITARY FLOWS.

300 150 0 300 600
HORIZONTAL GRAPHIC SCALE
1" = 300'

IMEG
4035 Ridge Top Rd, Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
01/12/2024
PROFESSIONAL ENGINEER

N29 APARTMENTS
GENERAL DEVELOPMENT PLAN

CITY OF FAIRFAX, VA

MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-28-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-16-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

PROJECT No.: 21082.002.00
DRAWING No.: ---
DATE: 2022-07-15
SCALE: 1"=300'
DESIGN: LBD,ZY
DRAWN: ZY
CHECKED: LBD

SHEET TITLE:

SANITARY SEWER OFF-SITE MAP

SHEET No.
PI_601

MULTIFAMILY BUILDING:

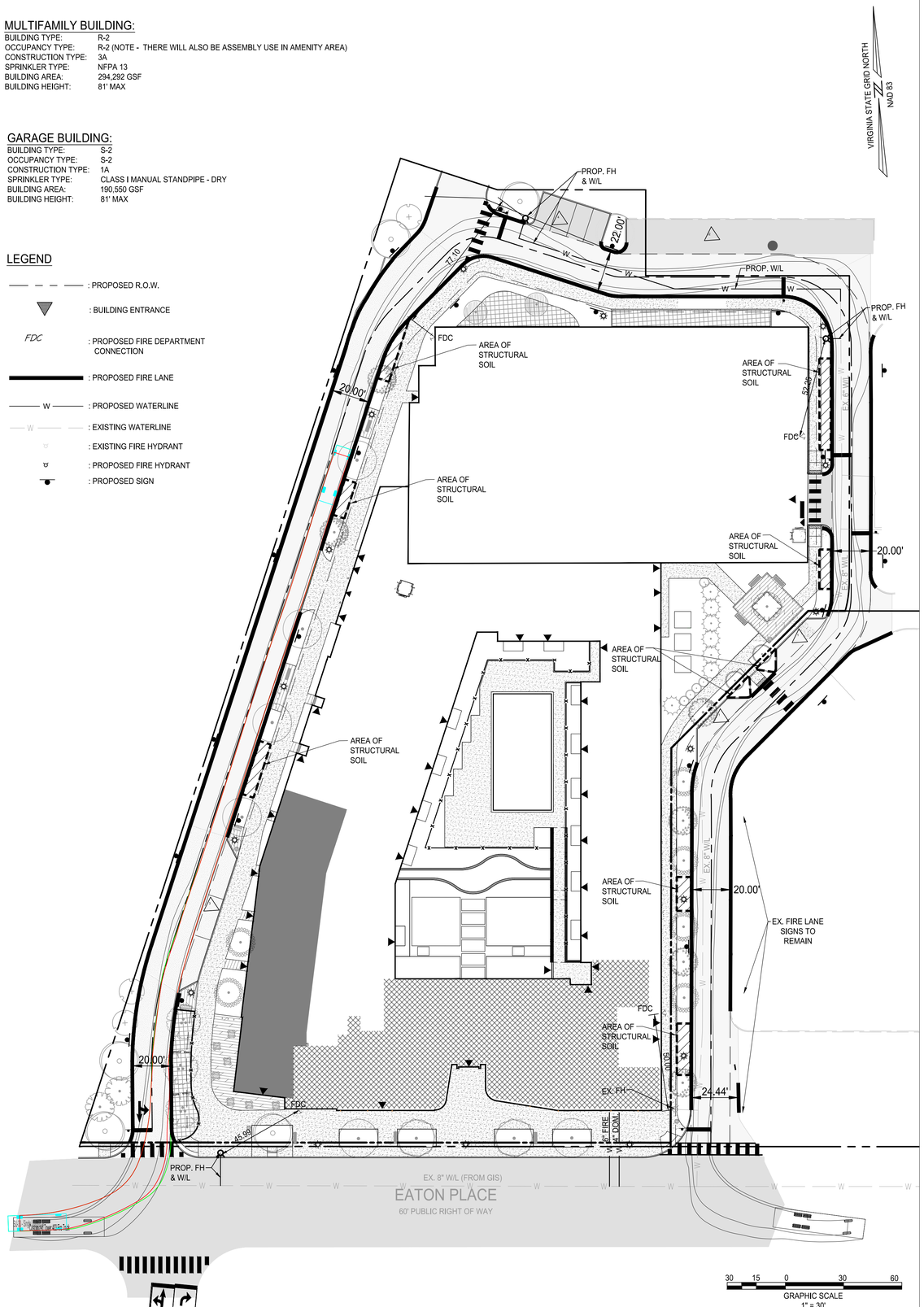
BUILDING TYPE:	R-2
OCCUPANCY TYPE:	R-2 (NOTE - THERE WILL ALSO BE ASSEMBLY USE IN AMENITY AREA)
CONSTRUCTION TYPE:	3A
SPRINKLER TYPE:	NFPA 13
BUILDING AREA:	294,292 GSF
BUILDING HEIGHT:	81' MAX

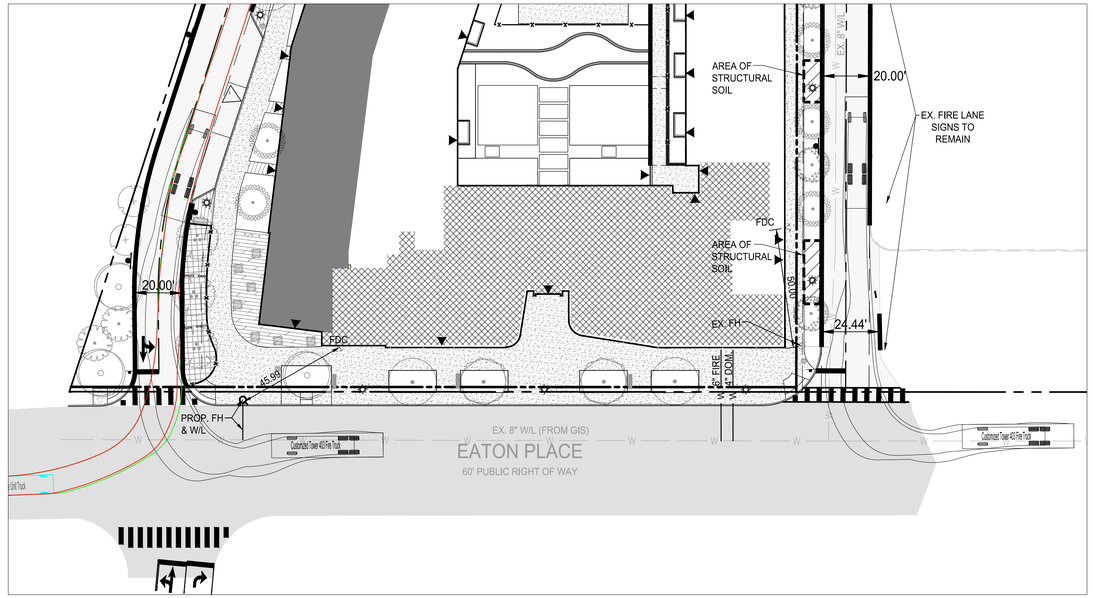
GARAGE BUILDING:

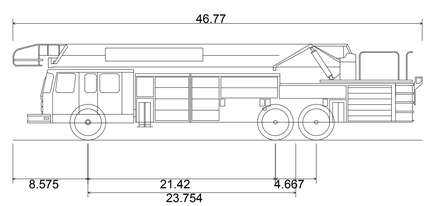
BUILDING TYPE:	S-2
OCCUPANCY TYPE:	S-2
CONSTRUCTION TYPE:	1A
SPRINKLER TYPE:	CLASS I MANUAL STANDPIPE - DRY
BUILDING AREA:	190,550 GSF
BUILDING HEIGHT:	81' MAX

LEGEND

- : PROPOSED R.O.W.
- : BUILDING ENTRANCE
- FDC : PROPOSED FIRE DEPARTMENT CONNECTION
- : PROPOSED FIRE LANE
- W : PROPOSED WATERLINE
- W : EXISTING WATERLINE
- : EXISTING FIRE HYDRANT
- : PROPOSED FIRE HYDRANT
- : PROPOSED SIGN







Customized Tower 403 Fire Truck	
Overall Length	46.770ft
Overall Width	10.160ft
Wall to Wall Turning Radius	45.000ft

NOTE:

NO LOADING, DELIVERY, OR REFUSE TRUCKS WILL BE LARGER THAN THE FIRE TRUCK.

SIGN AND STRIPING NOTES:

MINIMUM SPECIFICATIONS

Fire lanes shall have a minimum unobstructed width of 20 feet.
Fire lanes shall have a minimum unobstructed vertical clearance of 13 feet 6 inches.

Aerial Fire Apparatus Fire Lane
- Shall have a minimum unobstructed width of 26 feet.
- Shall be located a minimum of 15 feet from the building and positioned along one entire side of the building – as approved by the Fire Marshal.
- Overhead utility lines shall not be located over an Aerial Fire Apparatus Fire Lane or between the lane and the building.

Fire lanes shall be compacted/treated to support emergency vehicles. Compacted/treated to support emergency vehicles shall mean capable of supporting H-20 loading in all weather conditions.

SIGNS

Metal construction, dimensions 12 inches by 18 inches. Red lettering on a reflective white background with three-eighth's inch red trim strip around the entire outer edge of the sign. Signs shall be mounted with the top of the sign 7 feet above grade.
Lettering size:
"NO PARKING" – 2 inches
"OR" – 1 inch
"STANDING" – 2 inches
"FIRE LANE" – 2 ½ inches
Arrows 1-inch solid red. Spacing between words to be uniform.

STRIPING

Fire Lanes shall be designed with striping on both sides, either curb or road surface.
- 6-inch red traffic paint stripe
- 4-inch white lettering/wording with 3/4-inch stroke stating "NO PARKING FIRE LANE"
- Lettering/wording spaced every 50 feet

IMEG
4035 Ridge Top Rd, Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
01/12/2024
PROFESSIONAL ENGINEER

N29 APARTMENTS
GENERAL DEVELOPMENT PLAN

CITY OF FAIRFAX, VA

MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-26-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-16-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

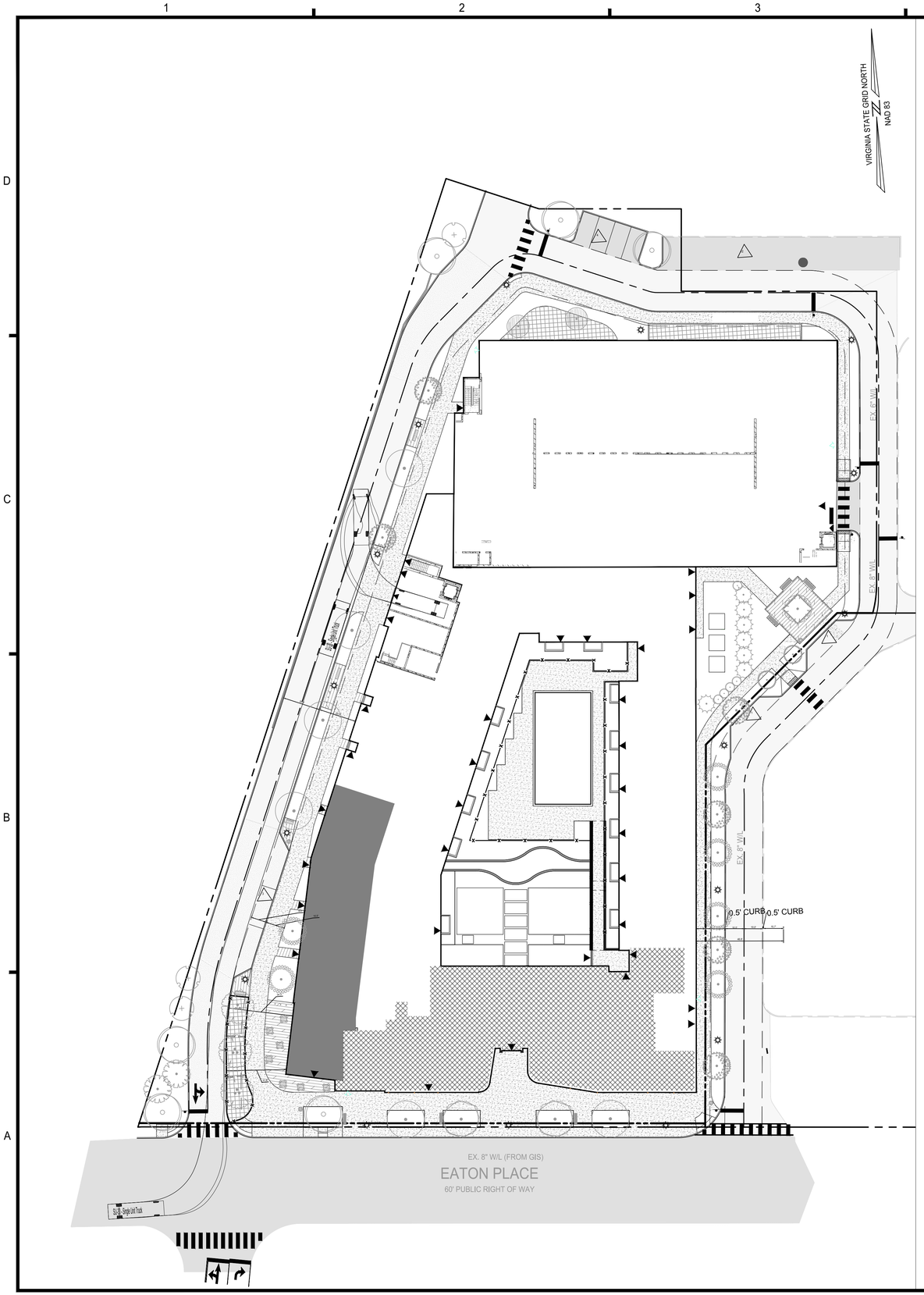
PROJECT No.: 21082.002.00
DRAWING No.: 111772
DATE: 2022-07-15
SCALE: 1" = 30'
DESIGN: JH
DRAWN: YH
CHECKED: JH

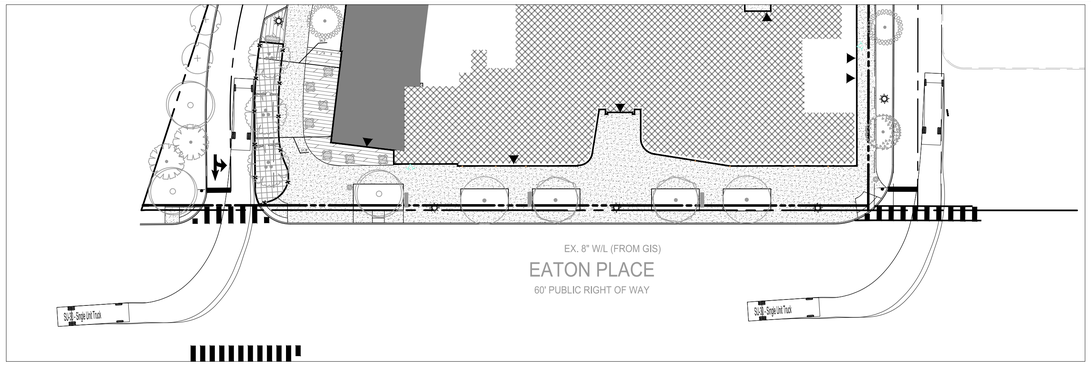
SHEET TITLE:

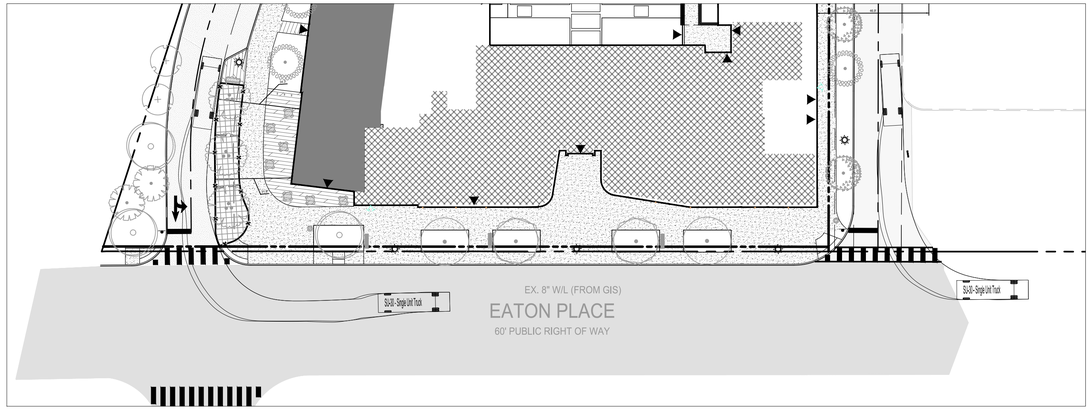
FIRE SERVICE PLAN

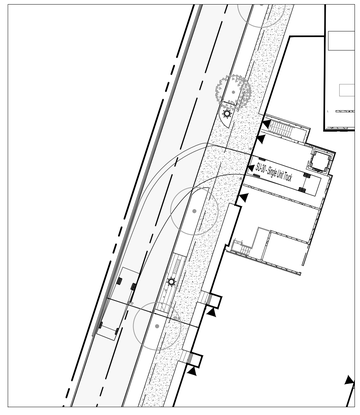
SHEET No.

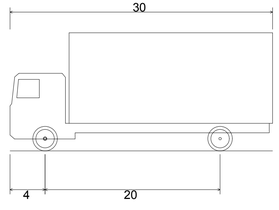
PI_800











SU-30 - Single Unit Truck

Overall Length	30.000ft
Overall Width	8.000ft
Overall Body Height	13.500ft
Min Body Ground Clearance	1.367ft
Track Width	8.000ft
Lock-to-lock time	5.00s
Max Steering Angle (Virtual)	31.80°

NOTE:
NO LOADING, DELIVERY, OR REFUSE TRUCKS WILL BE LARGER THAN THE FIRE TRUCK.

30 15 0 30 60
GRAPHIC SCALE
1" = 30'

IMEG
4035 Ridge Top Rd, Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
01/12/2024
PROFESSIONAL ENGINEER

N29 APARTMENTS
GENERAL DEVELOPMENT PLAN
CITY OF FAIRFAX, VA

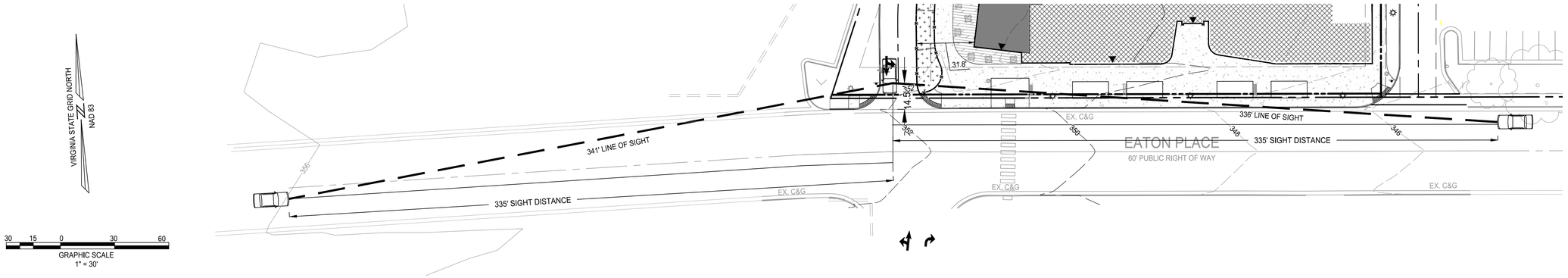
MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-28-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-16-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

PROJECT No.: 21082.002.00
DRAWING No.: 111772
DATE: 2022-07-15
SCALE: 1" = 30'
DESIGN: JH
DRAWN: YH
CHECKED: JH

SHEET TITLE:

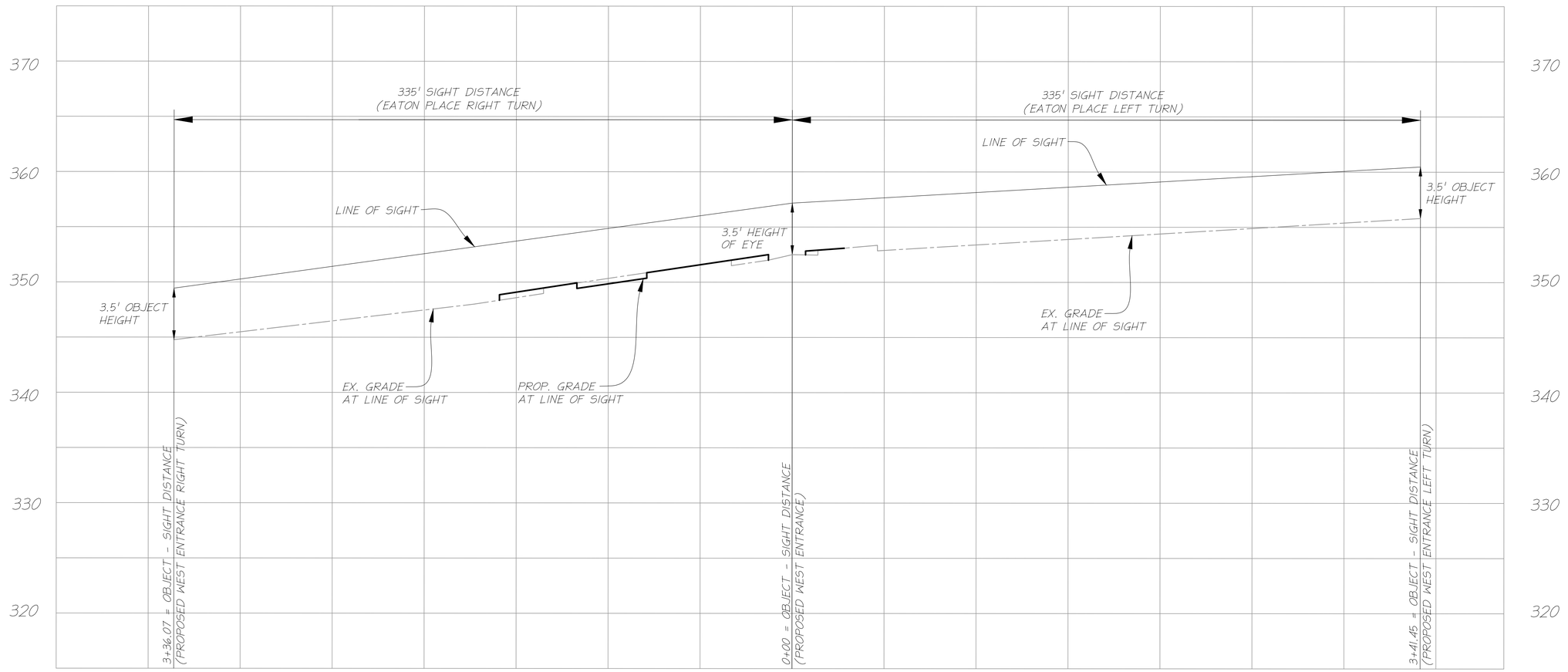
TURNING MOVEMENTS - DELIVERY TRUCK

SHEET No.
PI_801



EATON PLACE SIGHT DISTANCE
WEST ENTRANCE
(VARIABLE WIDTH)

POSTED SPEED: 25 MPH, DESIGN SPEED: 30 MPH



5 2.5 0 5 10
VERTICAL GRAPHIC SCALE
1" = 5'

30 15 0 30 60
HORIZONTAL GRAPHIC SCALE
1" = 30'

IMEG
4035 Ridge Top Rd, Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
01/12/2024
PROFESSIONAL ENGINEER

N29 APARTMENTS
GENERAL DEVELOPMENT PLAN

CITY OF FAIRFAX, VA

MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-28-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-16-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

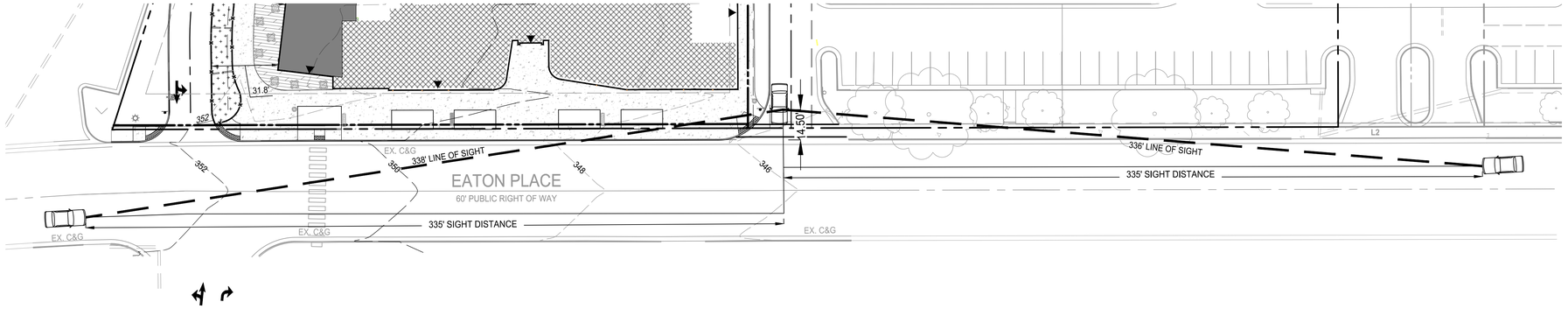
PROJECT No.: 21082.002.00
DRAWING No.: 111772
DATE: 2022-07-15
SCALE: 1" = 30'
DESIGN: JH
DRAWN: YH
CHECKED: JH

SHEET TITLE:

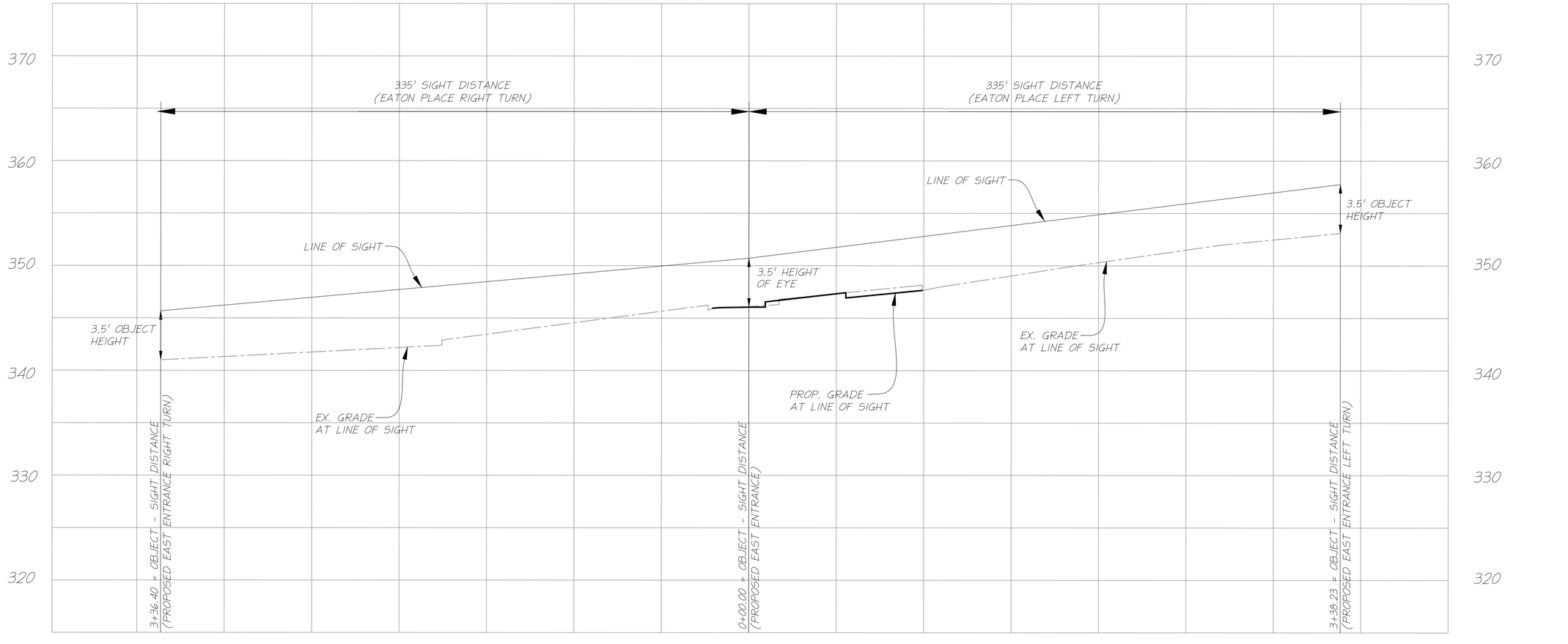
SIGHT DISTANCE

SHEET No.

PI_830



EATON PLACE SIGHT DISTANCE
EAST ENTRANCE
(VARIABLE WIDTH)
POSTED SPEED: 25 MPH, DESIGN SPEED: 30 MPH



VERTICAL GRAPHIC SCALE
1" = 5'

HORIZONTAL GRAPHIC SCALE
1" = 30'

IMEG
4035 Ridge Top Rd, Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
01/12/2024
PROFESSIONAL ENGINEER

N29 APARTMENTS
GENERAL DEVELOPMENT PLAN

CITY OF FAIRFAX, VA

MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-28-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-16-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

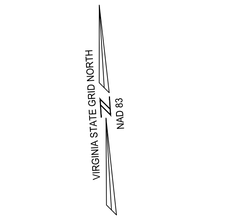
PROJECT No.: 21082.002.00
DRAWING No.: 111772
DATE: 2022-07-15
SCALE: 1" = 30'
DESIGN: JH
DRAWN: YH
CHECKED: JH

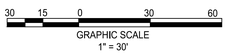
SHEET TITLE:

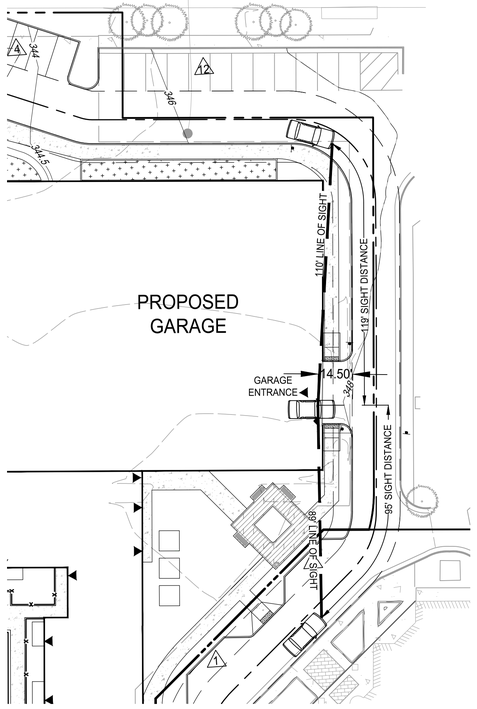
SIGHT DISTANCE

SHEET No.

PI_831







SIGN LEGEND

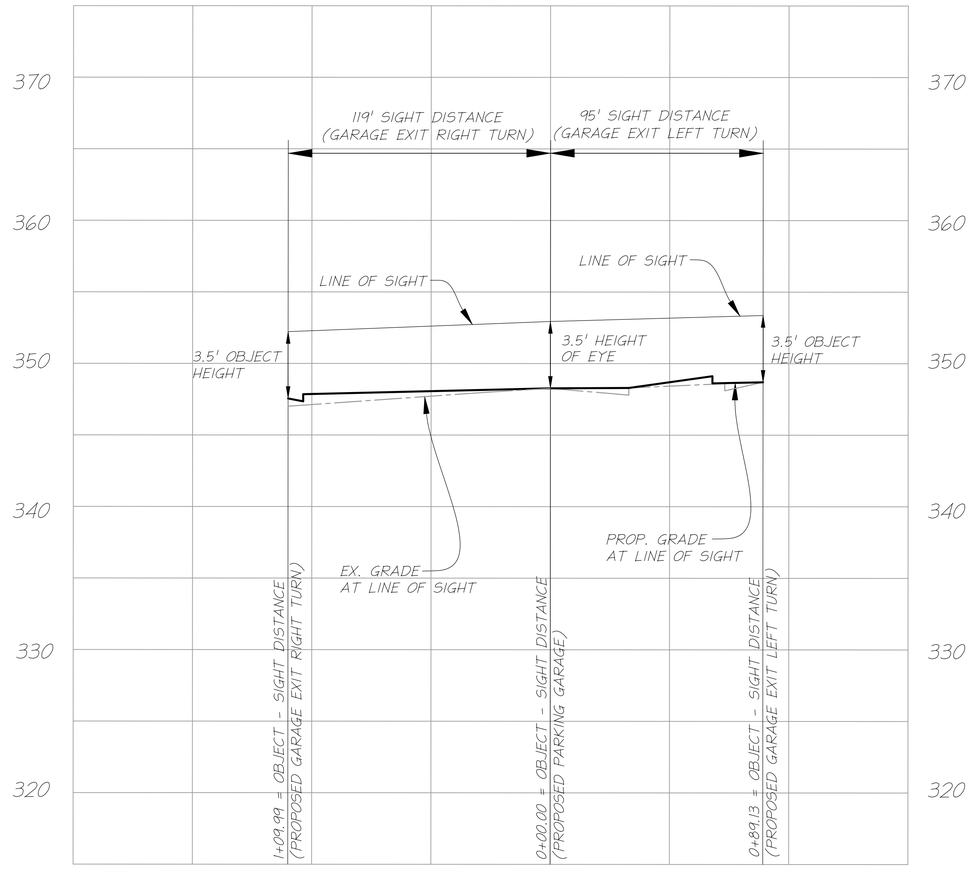
R1-1
30"x30"

1. METAL CONSTRUCTION.
2. WHITE LEGEND AND BORDER ON A RED BACKGROUND
3. SIGN TO BE MOUNTED 7' FROM THE GROUND TO THE BOTTOM OF THE SIGN.
4. POST SHALL BE METAL AND SECURELY MOUNTED.
5. AT INTERSECTIONS WHERE ALL APPROACHES ARE CONTROLLED BY STOP SIGNS, AN ALL WAY SUPPLEMENT PLAQUE SHALL BE MOUNTED BELOW EACH STOP SIGN. THE ALL WAY PLAQUE SHALL HAVE A WHITE LEGEND AND BORDER ON A RED BACKGROUND.

SIGHT DISTANCE
PARKING GARAGE

(VARIABLE WIDTH)

POSTED SPEED: 5 MPH, DESIGN SPEED: 10 MPH



IMEG
4035 Ridge Top Rd, Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
01/12/2024
PROFESSIONAL ENGINEER

N29 APARTMENTS
GENERAL DEVELOPMENT PLAN

CITY OF FAIRFAX, VA

MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-28-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-16-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

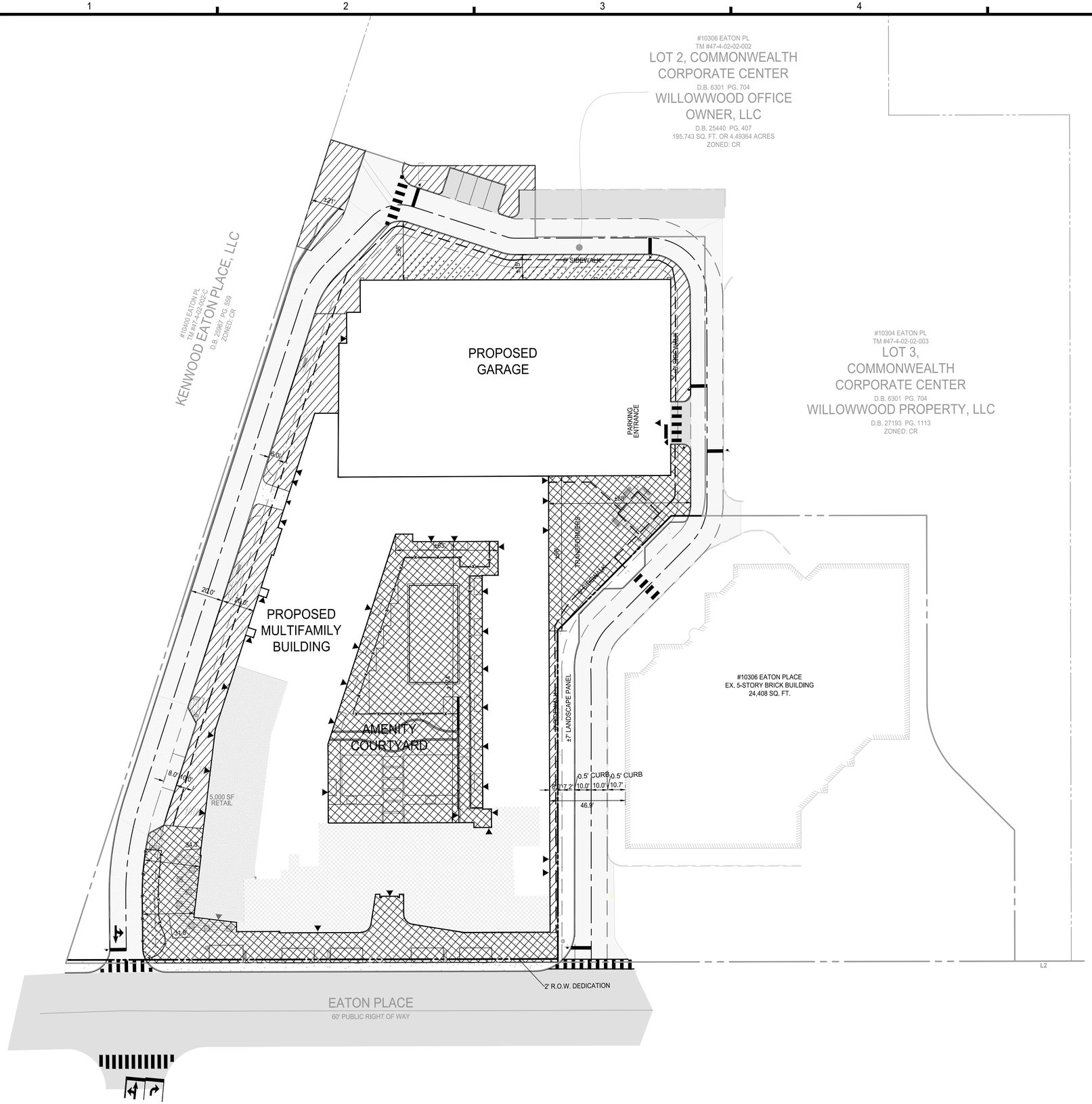
PROJECT No.: 21082.002.00
DRAWING No.: 111772
DATE: 2022-07-15
SCALE: 1" = 30'
DESIGN: JH
DRAWN: YH
CHECKED: JH

SHEET TITLE:

SIGHT DISTANCE

SHEET No.

PI_832



LEGEND & TABULATIONS

PROPOSED SITE AREA: ± 2.96 ac.

OPEN SPACE REQUIRED: NO REQUIREMENT

OPEN SPACE PROVIDED: ± 33% (± 0.98 ac.)

PHASE 1

OPEN SPACE, 50' WIDE OPEN SPACE
21% (± 0.63 ac.)

OPEN SPACE, 0' - 49' WIDE OPEN SPACE
12% (± 0.35 ac.)

PEDESTRIAN CIRCULATION

VIRGINIA STATE GRID NORTH
NAD 83

30 15 0 30 60
GRAPHIC SCALE
1" = 30'

IMEG
4035 Ridge Top Rd, Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
01/12/2024
PROFESSIONAL ENGINEER

N29 APARTMENTS
GENERAL DEVELOPMENT PLAN
CITY OF FAIRFAX, VA

MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-28-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-16-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

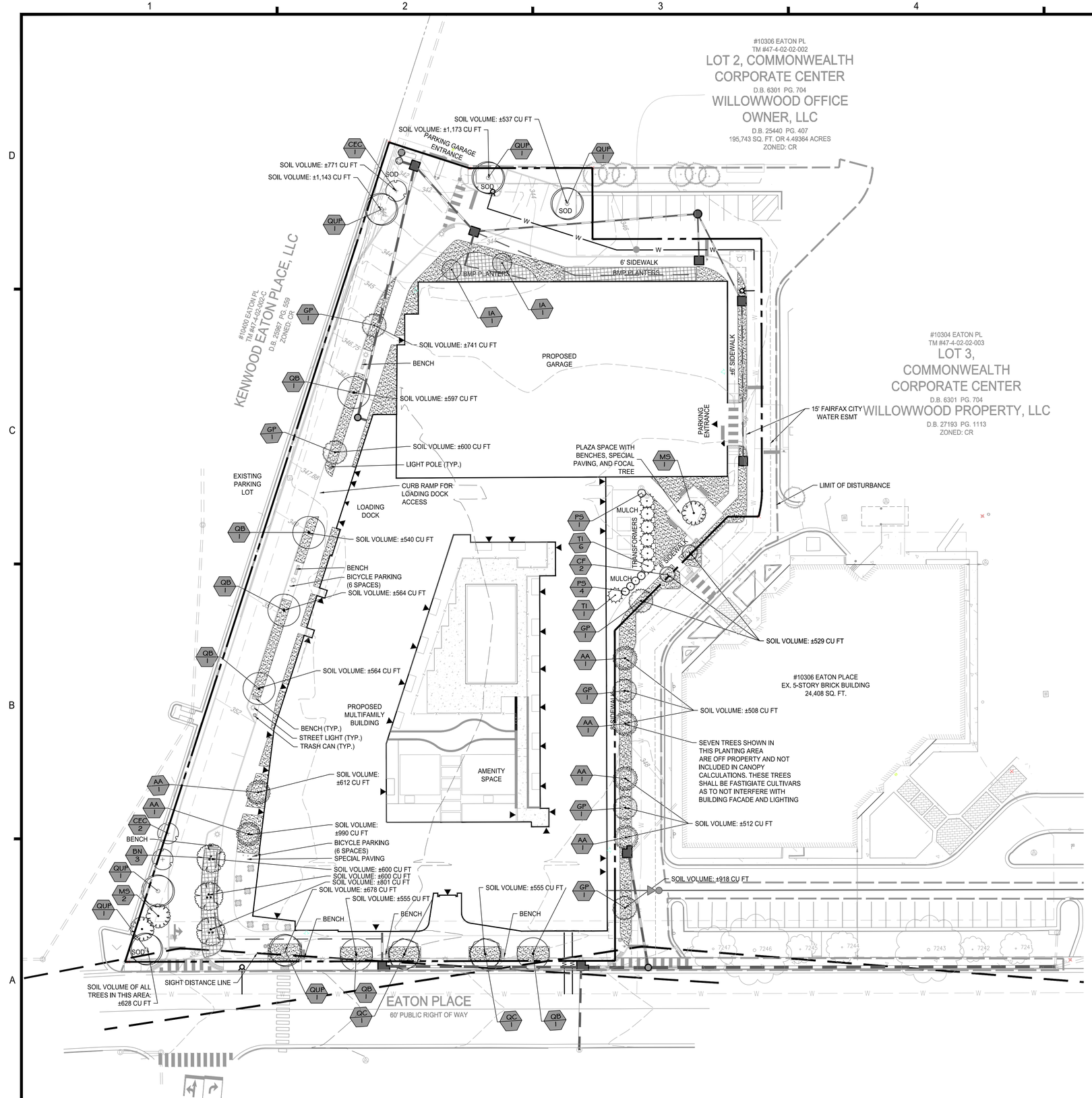
PROJECT No.: 21082.002.00
DRAWING No.: 111772
DATE: 2022-07-15
SCALE: 1" = 30'
DESIGN: ZY
DRAWN: ZY
CHECKED: JR

SHEET TITLE:

OPEN SPACE PLAN

SHEET No.

PI_900



10-YEAR TREE CANOPY CALCULATIONS

TREE CANOPY REQUIRED	
GROSS SITE AREA	129130.81 SF
TREE CANOPY COVERAGE REQUIRED	**NO REQUIREMENT**

TREE CANOPY PROVIDED				
PLANT TYPE	**STOCK SIZE**	**QUANTITY**	**CANOPY PER TREE**	**CANOPY PER TYPE**
CATEGORY IV-DECIDUOUS	3" CALIPER	14	250 SF	3,500 SF
CATEGORY III-DECIDUOUS	3" CALIPER	3	175 SF	525 SF
CATEGORY II-DECIDUOUS	3" CALIPER	8	125 SF	1,000 SF
CATEGORY I-DECIDUOUS	3" CALIPER	5	75 SF	375 SF
CATEGORY II-EVERGREEN	8' HT	2	100 SF	200 SF
CATEGORY I-EVERGREEN	8' HT	7	50 SF	350 SF
SUBTOTAL CANOPY AREA PROVIDED THROUGH TREE PLANTING				5,950 SF
TOTAL CANOPY AREA PROVIDED				5,950 SF
TOTAL CANOPY COVERAGE PROVIDED				**4.6 %**

NOTES
STREET TREES ARE BEING PROVIDED TO EXTENT POSSIBLE AS DISCUSSED WITH CITY STAFF.

AS PER ZONING ORDINANCE §4.5.5.C.1, TRANSITIONAL YARDS ON THE WEST, NORTH AND EAST SIDE ARE NOT REQUIRED.

PLANTING SCHEDULE MAY CHANGE AT TIME OF SITE PLAN, WITH APPROVAL FROM CITY URBAN FORESTER.

FINAL DESIGN MAY VARY BASED ON FINAL ENGINEERING.

UNSPECIFIED PLANTING AREAS (SG) WILL CONSIST OF A MIX OF NATIVE AND NON-NATIVE PLANTS WELL-SUITED FOR THIS REGION. NO INVASIVE PLANTS SHALL BE USED.

PLANT SCHEDULE

TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CANOPY
AA	6	Acer rubrum 'Armstrong'	Armstrong Red Maple	3" Cal.	75 SF
BN	3	Betula nigra `BNMTF` TM	Dura Heat River Birch	3" Cal.	175 SF
CEC	3	Cercis canadensis	Eastern Redbud	3" Cal.	125 SF
CF	2	Cornus florida	Flowering Dogwood	3" Cal.	125 SF
GP	6	Ginkgo biloba `Princeton Sentry`	Princeton Sentry Maidenhair Tree	3" Cal.	75 SF
IA	2	Ilex opaca	American Holly	8` HT	100 SF
MS	3	Magnolia x soulangeana	Saucer Magnolia	3" Cal.	125 SF
QB	6	Quercus bicolor	Swamp White Oak	3" Cal.	250 SF
QC	2	Quercus coccinea	Scarlet Oak	3" Cal.	250 SF
QUP	6	Quercus phellos	Willow Oak	3" Cal.	250 SF
TI	7	Thuja x 'Green Giant'	Green Giant Arborvitae	8` HT	50 SF

SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SIZE
PS	5	Prunus laurocerasus 'Schipkaensis'	Schipka English Laurel	4` HT

GROUND COVERS	CODE	BOTANICAL NAME	COMMON NAME	SIZE
	SG	LOW SHRUBS AND GROUNDCOVERS, TBD		TBD
	SWM	STORMWATER BMP PLANTINGS, TBD		TBD

IMEG
4035 Ridge Top Rd, Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
01/16/2024
CELIA C. MCCANN
Lic. No. 0406002013
LANDSCAPE ARCHITECT

N29 APARTMENTS
GENERAL DEVELOPMENT PLAN
CITY OF FAIRFAX, VA

MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-28-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-16-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

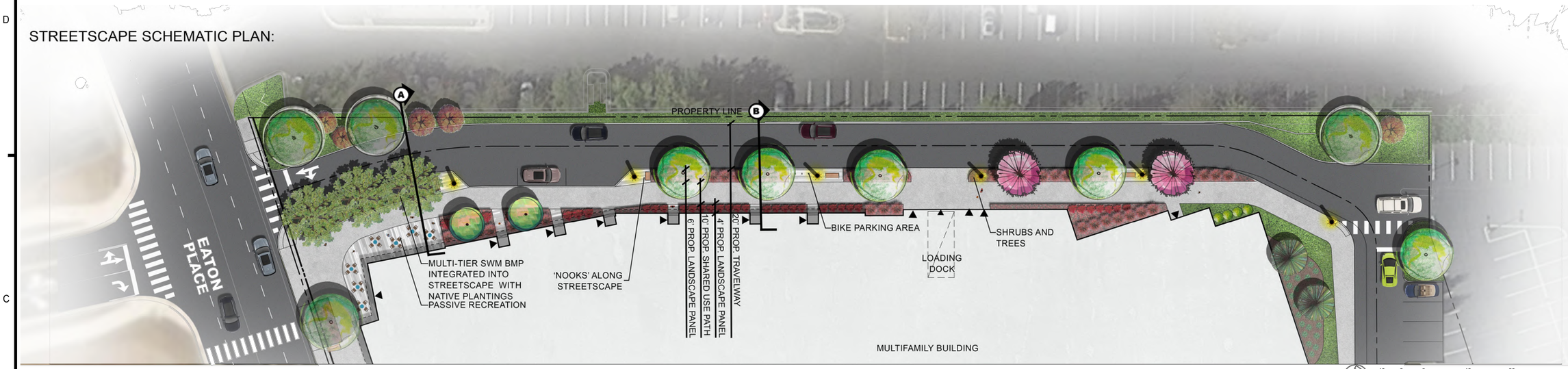
PROJECT No.: 21082.002.00
DRAWING No.: 111772
DATE: 2022-07-15
SCALE: 1" = 30'
DESIGN: CM/ZY
DRAWN: ZY
CHECKED: CM

SHEET TITLE:

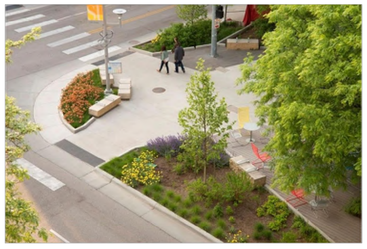
LANDSCAPE PLAN

SHEET No.
PI_910

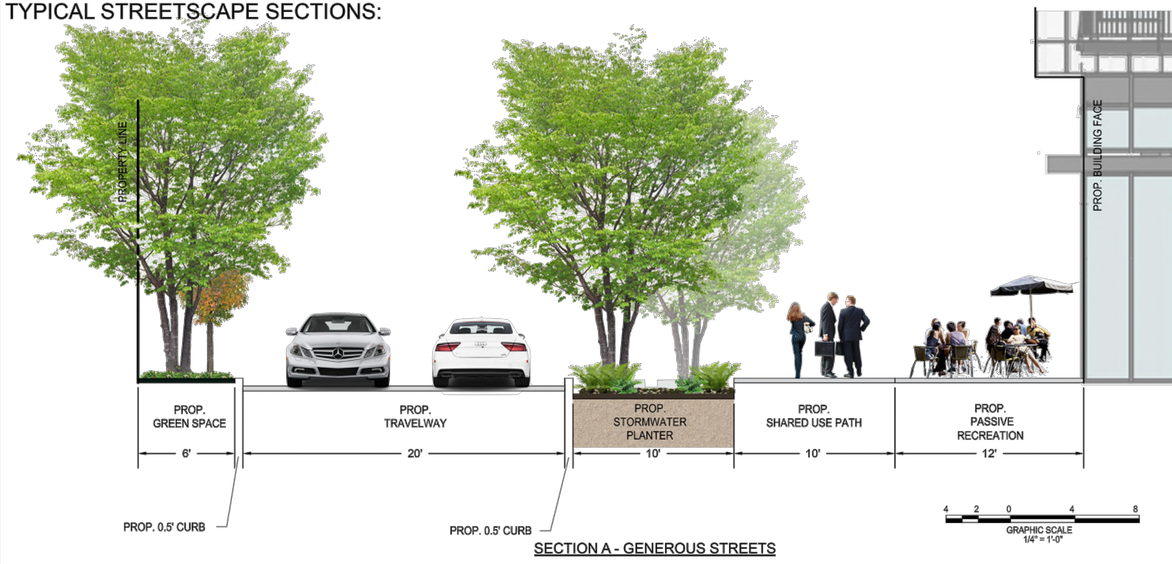
STREETSCAPE SCHEMATIC PLAN:



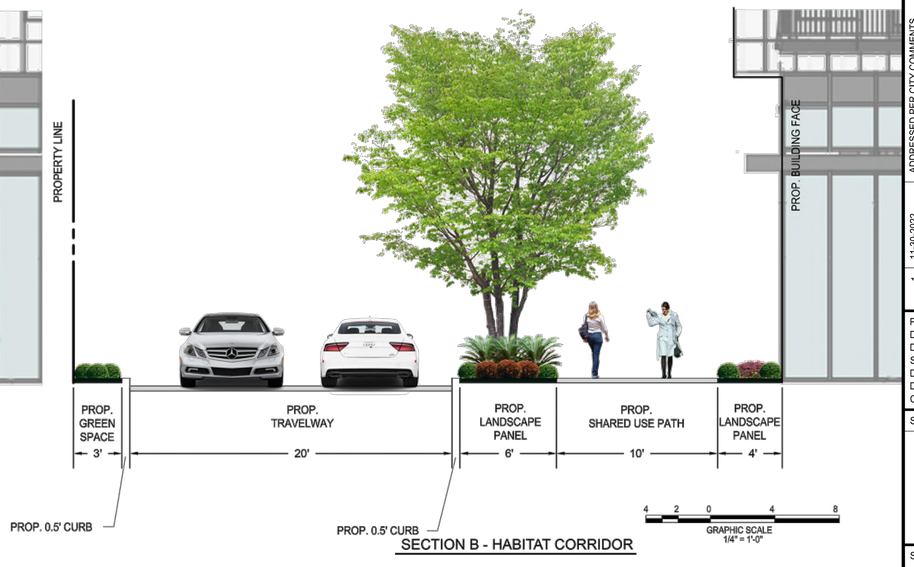
PRECEDENT IMAGERY:



TYPICAL STREETSCAPE SECTIONS:



SECTION A - GENEROUS STREETS



SECTION B - HABITAT CORRIDOR

PLEASE NOTE; ANY INFORMATION SHOWN ON THIS PAGE IS FOR ILLUSTRATIVE PURPOSES ONLY, PROVIDED TO DESCRIBE THE GENERAL CONCEPT OF THE DESIGN. FINAL DESIGN WILL LIKELY VARY FROM WHAT IS SHOWN ABOVE.

IMEG
4035 Ridge Top Rd, Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
01/16/2024
COLIN C. MCCANN
Lic. No. 0406002013
LANDSCAPE ARCHITECT

N29 APARTMENTS
GENERAL DEVELOPMENT PLAN
CITY OF FAIRFAX, VA

MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-28-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-16-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

PROJECT No.: 21082.002.00
DRAWING No.: 111772
DATE: 2022-07-15
SCALE: 1" = 30'
DESIGN: CM/ZY
DRAWN: ZY
CHECKED: CM

SHEET TITLE:

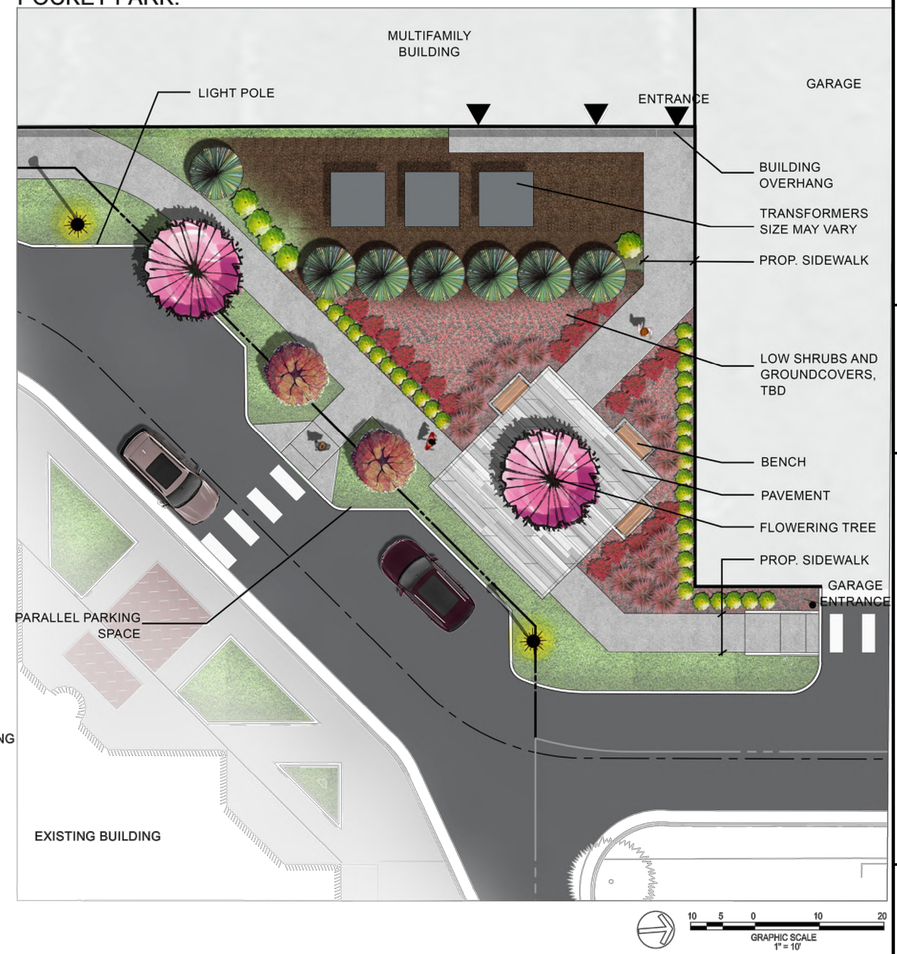
STREETSCAPE EXHIBIT

SHEET No.

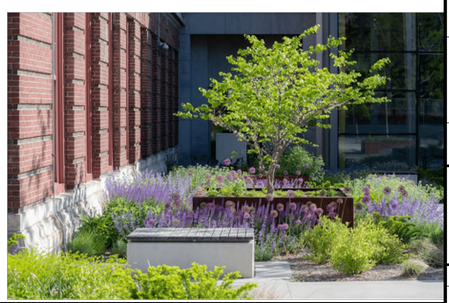
PI_911

CORNER PLAZA AND INTERSECTION ALIGNMENT:

POCKET PARK:



PRECEDENT IMAGERY:



PLEASE NOTE; ANY INFORMATION SHOWN ON THIS PAGE IS FOR ILLUSTRATIVE PURPOSES ONLY, PROVIDED TO DESCRIBE THE GENERAL CONCEPT OF THE DESIGN. FINAL DESIGN WILL LIKELY VARY FROM WHAT IS SHOWN ABOVE.

IMEG
4035 Ridge Top Rd, Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
01/16/2024
CIDLIN C. MCCANN
Lic. No. 0406002013
LANDSCAPE ARCHITECT

N29 APARTMENTS
GENERAL DEVELOPMENT PLAN

CITY OF FAIRFAX, VA

MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-28-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-16-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

PROJECT No.: 21082.002.00
DRAWING No.: 111772
DATE: 2022-07-15
SCALE: 1" = 30'
DESIGN: CM/ZY
DRAWN: ZY
CHECKED: CM

SHEET TITLE:

ENLARGEMENT PLAN

SHEET No.

PI_912

IMEG Corp. General Landscape Specification Summary - Short Form (Rev. 4/19)

Specification: This is a summary of christopher consultants, ltd. general landscape specification. All work shall follow the procedures outlined in the specifications and details contained herein, which are designed to exceed current industry standards. Should there exist a discrepancy between this specification and the included construction details, the written specification shall take precedence.

References: In lieu of providing comprehensive proprietary specifications, the following are referenced to be general default specifications with the following modifications. These modifications and the construction details shown in this plan set shall take precedence over the general referenced specifications.

- "Landscape Specification Guidelines" Landscape Contractors Association of MD, DC, VA - Most current edition.
- "American Standard for Nursery Stock - ANSI Z60.1" by AmericanHort - Most Current Edition
- "TT-77 Recommended Turfgrass Cultivars for Certified Sod Production in Maryland" - Maryland Turfgrass Council
- ""Landscape Architecture/Design Specifications for Compost Use" - US Composting Council

If there are discrepancies or contradictions in specification sections or details, the stricter specification shall take precedence. A Request for Information (RFI) can also be submitted for clarification.

List of Plant Material: The contractor will verify plant quantities prior to bidding and any discrepancies shall be brought to the attention of the Owner's Representative. The Contractor shall furnish and install all plant materials required to complete the work as shown on the drawings. Quantities in the planting schedule shall take precedence over quantities graphically shown on the plan. Substitutions shall not be made without the written approval of the Owner's Representative.

Plant Identification: All trees shall be true to name as on plant schedule or shown on planting plans and shall be correctly labeled individually or in groups by genus, species, variety and cultivar. Labels are to remain intact until site is approved through agency inspection, substantial completion approval, or per Owner's Representative's instruction.

Plant Quality: All plant materials shall conform to the size and form standards set forth in the latest edition of AmericanHort's "American Standard for Nursery Stock - ANSI Z60.1". Above Ground: Trees shall be healthy with the color, shape, size, and distribution of trunk, stems, branches, buds and leaves typical of the plant specified. Any signs of stress, improper handling (wounds or broken branches), insect or disease damage, or dead/distorted branches should not be present. Trees shall have one central leader (unless otherwise specified) and grafts should be fully closed and visible above the soil line. Below Ground: A minimum of 3 structural roots should be reasonably distributed around the trunk (reject a tree with structural roots only on one side), the root crown should not be more than 2 inches below the soil line, the top 2 structural roots should not be more than 3 inches below the soil line when measured 4 inches away from the trunk. The top of the other structural root should not be more than 5 inches below the surface. The root system should be free of potentially stem-girdling or kinked roots above the root collar and main structural roots.

Inspection: Plants are to be inspected upon delivery to contractor by a contractor's representative and/or owner's representative. Trees not presenting proper form, incorrect variety, signs of poor health or over-stress, and girdling roots are to be rejected.

Storage & Transport: Plant materials should be protected from dessication during transport via breathable fabric covering the canopy and by watering rootball/pot thoroughly immediately prior to transport. Plant materials should be installed on day of delivery to site. If that is not possible, a temporary storage area can be constructed on-site. Plants are not to be stored on bare asphalt. If storage area is asphalt, cover bare asphalt with a layer of woodchips. Storage should be in shade, and plants be regularly watered at root-ball level, and spaced so foliage from one plant does not interfere with foliage of another. Tall plant materials are to remain upright during storage. Longer term storage plants are to be heeled-in or stored in mulch to the top of the container/root ball. Plant materials shall not be stored on-site for more than two weeks. Plants stored improperly or for too long may be subject to rejection and replacement dependent on ultimate planting condition.

Planting: Plantings shall be installed in accordance with details and specifications on this sheet. Details and specifications for other specific landscape items, such as tree preservation or erosion control may be found elsewhere in this drawing set on their own respective sheet. For items not specifically addressed by this plan set, refer to the latest edition of the "Landscape Specification Guidelines" developed by the Landscape Contractors Association of MD, DC, and VA. Should there be any ambiuguities or questions, please utilize the formal RFI/Submittal process.

Trees: The planting hole diameter is to be at a minimum three times the diameter of the root ball. The depth of the planting hole shall be dug so that the shoulder of the root ball is level with the existing grade leaving the root flare slightly higher. When planting on a slope, the depth of the hole shall be dug so that the bottom of the root flare is at the level of the existing grade at the sides of the hole. If the planting hole is mechanically dug, the hole is to be scarified by slightly enlarging hole by hand digging the sides and bottom to prevent glazing. The sides of the hole should be vertical or sloping outwards. Holes are not to be dug when soil is saturated. For balled and burlapped trees, the wire root ball cage is to be removed and burlap is to be cut and completely removed from the top and a minimum of 8" to 12" down the side of the root ball. Do not fold burlap down into hole, it must be removed. Any synthetic materials are to be completely removed from the trunk and root ball. Backfill in lifts using the same soil dug to create the hole, being careful not to over-compact the soil. Inoculate backfill soil or rootball with an approved balanced (Endo/Ecto) commercial mycorrhizae application. Do not amend or add fertilizer unless expressly specified to do so or is part of the approved mycorrhizae innoculant product. Do not place any soil on top of root ball. Trees are to be mulched to full depth specified immediately after planting. A ½" layer of approved compost is to be placed under the mulch layer. Do not place mulch against tree trunk.

Staking: Staking (if any) is to be installed per the accompanying details, utilizing tree webbing straps with grommets to prevent wire from coming in contact with the tree. While not preferred, full tree webbing systems are also permissible if approved through submittal, and installed per manufacturer's instructions. Wire is to be tensioned to allow for 1/2 inch of deflection up or down, and tension shall be rechecked and adjusted on a regular basis. Staking is to be removed as soon as possible after one year. GARDEN HOSE IS NOT TO BE UTILIZED FOR STAKING.

Irrigation: For permanent systems, irrigation should be largely installed prior to plant installation to avoid having to disturb planting beds or move plants to accommodate the installation of the irrigation system. For sites with no permanent irrigation system, Trees are to be irrigated until established by the use of temporary water bags through one growing year or until established. Shrubs, perennial beds, and lawns are to be thoroughly hand-watered or by movable temporary irrigation (sprinklers or drip hose) as necessary to reflect local weather conditions. Watering is to be deep into the soil and infrequent, as opposed to light surficial watering performed often.

Shrubs: For container shrubs, the planting hole is to be dug 3 times the width of the intact container. The container is to be completely removed and the sides of the soil/root clump scarified with a sterile sharp knife. They shall be planted so that the top of the soil level of the container is no more than 1.5" above the original grade. For balled and burlapped shrubs, remove as much burlap as possible from the top and sides of the rootball. Do not fold burlap into hole. Plant with the root flare slightly higher than the surrounding grade. Backfill with soil dug to create the hole. Do not cover top of root ball/clump.

Ground Covers/Perennials: Beds are to be prepared by tilling well to a minimum depth of 6", and soils shall be amended by incorporating 1" of compost meeting the US Composting Council reference specification, 1" of worm castings and/or well decomposed commercially produced compost, or a Class A biosolid also meeting the referenced US Composting Council specification prior to planting. Apply 3" of shredded non-dyed hardwood mulch immediately after planting.

Compacted or Poorly Drained Soils: For sites with heavily compacted or poorly draining soils, alternate planting methods will need to be employed. Contact project Landscape Architect for additional planting details and specifications should either unforeseen condition be encountered.

Conflicts with Existing Roots: Proposed landscape may be shown to be planted in the Critical Root Zones of existing large trees. Should, in the course of planting, large woody roots be discovered belonging to adjacent large trees that are to be preserved, shift the planting location of the tree to be planted to avoid cutting the woody root. Should a suitable planting location not be found within the proximity of where a proposed tree is to be planted, contact the project landscape architect for alternate planting location and recording of the discrepancy for landscape inspection/approval purposes.

Irrigation: New plant materials are to be watered as necessary to maintain health. If no permanent irrigation system is installed, trees are to be watered until established through the use of temporary water bags. Shrubs, perennials, and ground covers shall be hand-watered. Infrequent deep watering is preferred to more frequent quick/shallow watering.

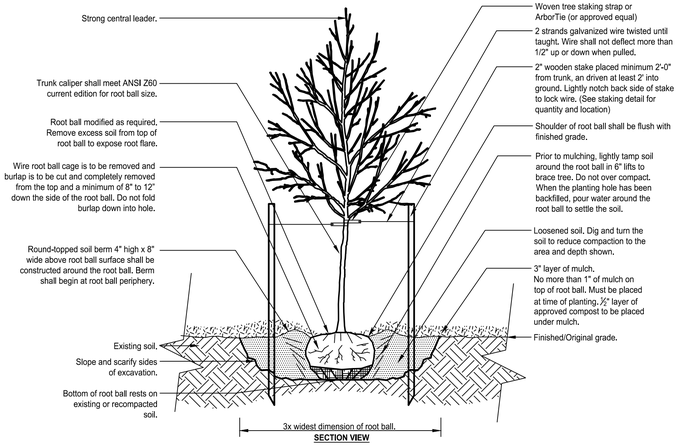
Lawn Areas:

Seeded Lawn Area: Areas to be seeded shall have planting soil tilled to a depth of 6" and free of stones greater than 1" diameter or length. Any amendments that are to be added should be tilled into soil prior to seeding. A seed mix composition chart shall be submitted for review prior to installation. Unless specified by the Owner's Representative, the seed mix must contain a minimum of three cultivars or types of grass in the blend, chosen from the recommended cultivars list of the most recent "TT-77 Recommended Turfgrass Cultivars for Certified Sod Production in Maryland" document produced by the University of Maryland and the Maryland Turfgrass Council. Use of cultivars also appearing on the Turfgrass Water Conservation Alliance approved list is encouraged. Seeds coatings that aid in germination, moisture retention and prevent loss to bird consumption are acceptable. Seeded areas are to be covered by a light and loose layer of rapidly degradable mulch such as straw or hydraulically applied cellulose. Use of erosion control blankets or any synthetic webbing is not permissible for lawn areas unless specified by the Owner's Representative.

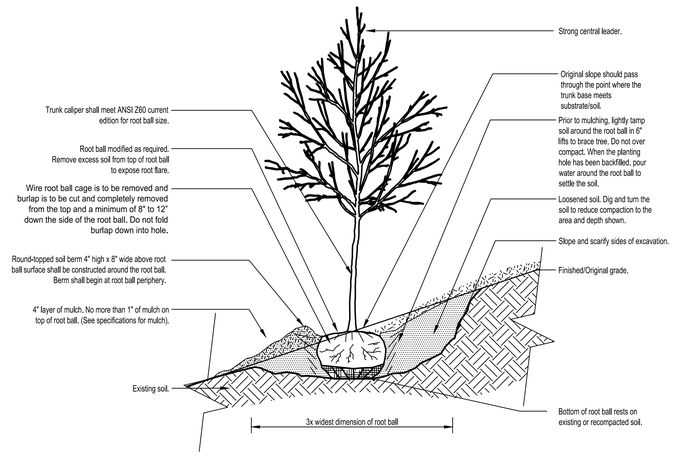
Sodded Lawn Area: Unless a proprietary sod is specified by the Owner's Representative, sod must be of a Maryland or Virginia certified variety suited to the specific growing requirements of where it is to be installed. Grower and variety to be submitted to Owner's Representative for review prior to ordering. Certification documentation for all sod is to be provided to the Owner's Representative upon delivery. For installation on slopes, the Contractor shall use biodegradable sod spikes to secure sod in place. Metal sod staples are not to be utilized for installation.

Invasive Species: Existing invasive species are to be removed utilizing appropriate approved methods including in the invasive species management plan (if applicable) prior to the installation of new plant materials, and is subject to inspection, and is a factor in the Certification of Installation.

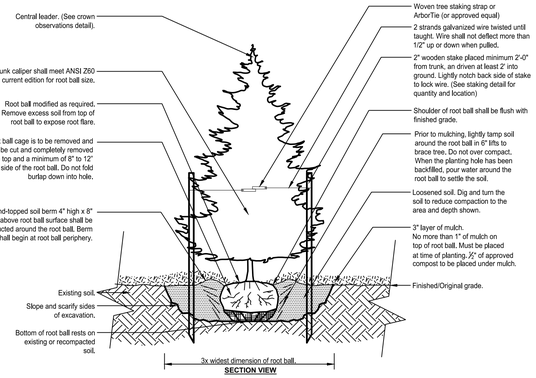
NOTE: These specifications and details are based on those developed by the Urban Tree Foundation, and have been improved to reflect current research and in planting. The ISA has also accepted and reference the UTF details in place of their own. The specifications and details illustrated in this plan set exceed the standards set in the ISA, LCA, and local jurisdictional planting details and specifications.



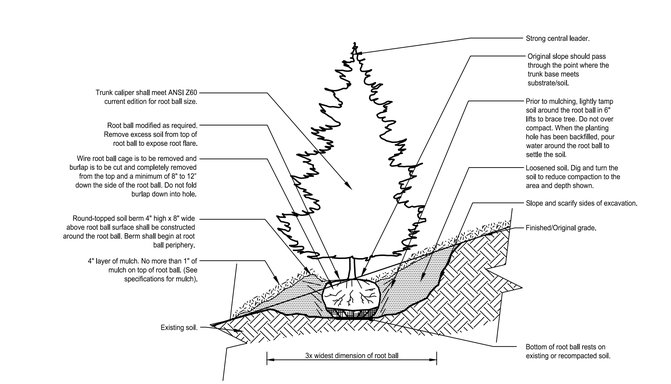
DECIDUOUS TREE PLANTING DETAIL
SCALE: NOT TO SCALE



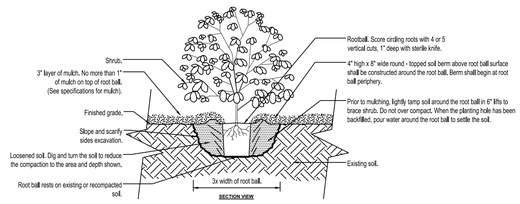
DECIDUOUS TREE SLOPE PLANTING DETAIL
SCALE: NOT TO SCALE



EVERGREEN TREE PLANTING DETAIL
SCALE: NOT TO SCALE

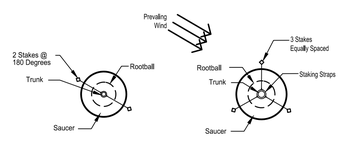


EVERGREEN TREE SLOPE PLANTING DETAIL
SCALE: NOT TO SCALE



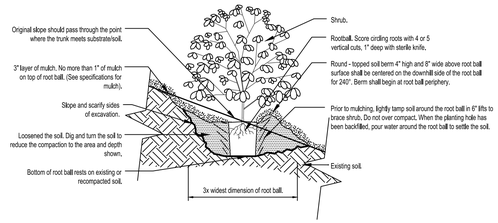
Notes:
1. For ball and burlapped shrubs, remove completely as much burlap as possible, minimum halfway down the side of the rootball. Do not fold burlap down into hole.
2. See specifications for further requirements related to this detail.

SHRUB PLANTING DETAIL
SCALE: NOT TO SCALE



Notes:
1. Utilize only Arbor-tie or approved equal or staking straps against tree trunks.
2. Reference manufacturer's detail of approved system for installation instructions.
3. Wire tension (if used) should not allow greater than 1/2" of play in any direction.
4. Staking should be removed on year after planting or as instructed.

TREE STAKING DETAIL
SCALE: NOT TO SCALE



Notes:
1. For ball and burlapped shrubs, remove completely as much burlap as possible, minimum halfway down the side of the rootball. Do not fold burlap down into hole.
2. See written specifications for further requirements related to this detail.

SHRUB SLOPE PLANTING DETAIL
SCALE: NOT TO SCALE

IMEG
4035 Ridge Top Rd, Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
01/16/2024
CELIA C. MCCANN
Lic. No. 0406002013
LANDSCAPE ARCHITECT

N29 APARTMENTS
GENERAL DEVELOPMENT PLAN

CITY OF FAIRFAX, VA

MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-28-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-16-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

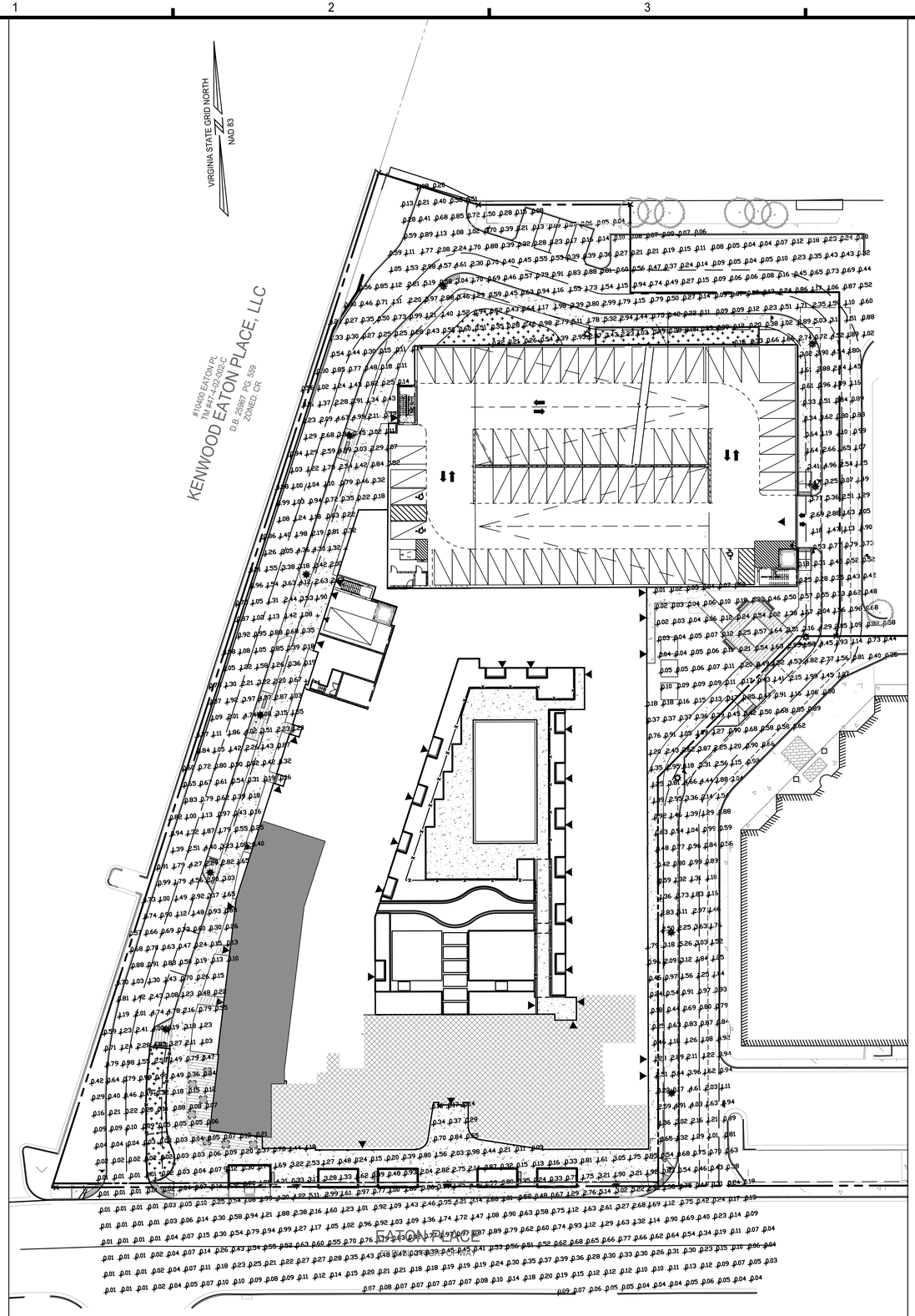
PROJECT No.: 21082.002.00
DRAWING No.: 111772
DATE: 2022-07-15
SCALE: NOT TO SCALE
DESIGN: LBD
DRAWN: ZY
CHECKED: CM

SHEET TITLE:

LANDSCAPE DETAILS

SHEET No.

PI_920



Numeric Summary							
Project: WILLOWWOOD							
Label	Calc. Type	Units	Avg.	Max	Min.	Avg./Min.	Max/Min.
WEST	Illuminance	Fc	1.00	5.35	0.01	99.57	535.00
NORTH	Illuminance	Fc	0.57	5.28	0.04	14.33	132.00
EAST	Illuminance	Fc	0.57	5.36	0.01	57.38	536.00
SOUTH	Illuminance	Fc	0.56	5.31	0.04	14.07	132.75

Luminaire Schedule				
Project: Willowwood				
Symbol	Qty.	Arrangement	Lumens (Nominal)	Description
✹	16	Single	11,500	Prop. LED Acorn - 14 ft Pole - Type III

30 15 0 30 60

GRAPHIC SCALE
1" = 30'

IMEG
4035 Ridge Top Rd. Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
01/12/2024
PROFESSIONAL ENGINEER

N29 APARTMENTS
GENERAL DEVELOPMENT PLAN

CITY OF FAIRFAX, VA

MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-28-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-16-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

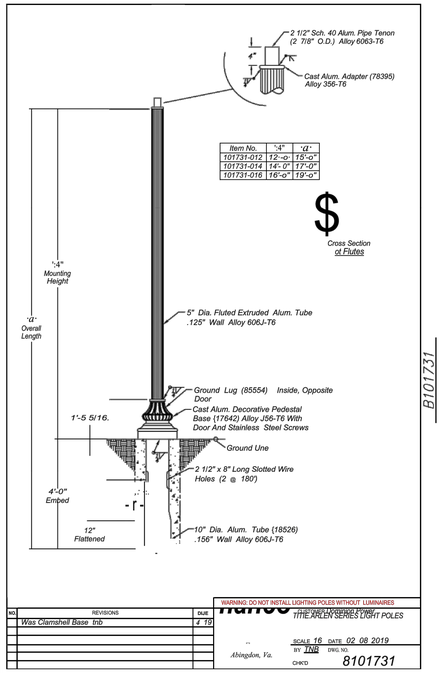
PROJECT No.: 21082.002.00
DRAWING No.: 111772
DATE: 2022-07-15
SCALE: AS SHOWN
DESIGN: LBD,ZY
DRAWN: ZY
CHECKED: JR

SHEET TITLE:

LIGHTING PLAN

SHEET No.

PI_950



NO.	REVISIONS	DUE
	Was Clamshell Base tnb	4 19

WARNING: DO NOT INSTALL LIGHTING POLES WITHOUT LUMINAIRES THEY ARE DESIGNED TO BE USED WITH THE ARLEN SERIES LIGHT POLES

Abingdon, Va.

SCALE 16 DATE 02 08 2019
BY TNB DWG. NO.
CHK'D 8101731

City of Fairfax, VA – Public Facilities Manual April 2021

NOTE:
TOP OF CONCRETE BASE THAT THIS POLE WILL BE MOUNTED ONTO SHALL BE INSTALLED FLUSH WITH THE SURROUNDING FINISHED GRADE, UNDER NO CIRCUMSTANCE SHALL THE CONCRETE BASE PROTRUDE MORE THAN 3" ABOVE THE ELEVATION OF THE SURROUNDING OR NEARBY WALKING SURFACE.

ORDERING INFORMATION
AS GNL2 N P73

Example: WFCL2 P20 30K

WFCL2	P30	3K	AS	BK	L3	N
Series	Led performance package	LED Color temperature	Voltage	Housing color	Optics	Finial
WFCL2 Utility Washington LED FOG	P10 1,500 nominal lumens (amber only) P20 4,500 nominal lumens P30 8,500 nominal lumens P40 8,500 nominal lumens P50 11,500 nominal lumens	AM True amber 27K 2700K CCT 30K 3000K CCT 40K 4000K CCT 50K 5000K CCT	AS Auto-sensing voltage (120 thru 277) 50/60 HZ AH Auto-sensing voltage (347 thru 480) 50/60 HZ	BK Black GR Gray GH Graphite GN Green PP Prime paint WH White BZ Bronze TDC RAL Color color (RAL**) CMC Custom color match	L2 Type 2 distribution full cutoff L3 Type 3 distribution full cutoff L4 Type 4 distribution full cutoff L5 Type 5 distribution full cutoff	N None B Ball S Spike

P7E

Options: *Option Compatibility Matrix on page 3 of 4*

AO	Field Adjustable Output	P3E	NEMA Twist Lock Dimming Photocontrol Receptacle - 3 PIN. Externally mounted	L1H	1.5 ft prewired leads
DE	ROAM Hardware DecoNode and DCM Factory Installed	P7E	NEMA Twist Lock Dimming Photocontrol Receptacle - 7 PIN. Externally mounted	L03	3ft prewired leads
FPDxx	Factory Programmed Driver	RME	ROAM Node (External)	L10	10 ft prewired leads
P3	NEMA Twist Lock photocontrol receptacle - 3 PIN receptacle only.	RME3	347V ROAM NODE (External)	L20	20 ft prewired leads
P7	NEMA Twist Lock Dimming photocontrol receptacle - 7 PIN receptacle only.	RME4	480V ROAM NODE (External)	L25	25 ft prewired leads
PCS	DTL twistoff photocontrol for solid-state lighting 120-277V	PSC	Shorting cap	L30	30 ft prewired leads
PCL	DTL long life twistlock photocontrol for solid-state AS	HSS	House side shield	NL1X1	NEMA Label 1"X 1"
P34	DTL long life twistlock photocontrol for solid-state 347V			NL2X2	NEMA Label 2" X 2"
P48	DTL long life twistlock photocontrol for solid-state 480V			20KV	20kV/10kA surge protection
PND	Part night dimming - down to 50%				

Accessories: *Order as separate catalog number*

XXCL2HSS1	Field Accessory - Louvered house side shield (Qty 1)
XXCL2HSSJ50	Field Accessory - Louvered house side shield (Bulk Qty 50)
XXCL2SPD10KAS	10kV/5kA Extreme surge 120-277V
XXCL2SPD10KAH	10kV/5kA Extreme surge 480V
XXCL2SPD20KAS	20kV/10kA Extreme surge 120-277VV
XXCL2SPD20KAH	20kV/10kA Extreme surge 480V

Dominion Energy

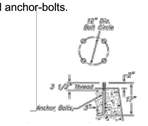
Outdoor Lighting Pole Specifications

Decorative Fluted Tapered Aluminum for Post Top Luminaires

Fluted tapered pole with structural Arlen style base constructed of aluminum alloy for single or twin post top luminaires. Poles are available directly embedded or base mounted for use with underground supplied conductors only. Anchor base poles require customer-installed and maintained concrete pole foundations and anchor-bolts.

Light fixtures that match well with this pole include:

- All LED Acorn styles
- All LED Colonial styles
- Premium LED Cutoff styles
- Premium LED Lantern styles



POLE SPECIFICATIONS

FIXTURE MOUNTING HEIGHT (ft)	TOTAL POLE LENGTH (ft)	BASE DIAMETER (in)	BASE HEIGHT (in)	EMBED or ANCHOR BASE	FINISH COLOR	WMIS CU	POLE ONLY STOCK #
12.0	16.0	17.0	17.0	Embed	Black RAL-9017	PA16ARB	42337639
12.0	16.0	17.0	17.0	Embed	Green RAL-6009	PA16ARM	42337642
14.0	18.0	17.0	17.0	Embed	Black RAL-9005	PA18ARB	42337640
14.0	18.0	17.0	17.0	Embed	Green RAL-6009	PA18ARM	42337643
16.0	20.0	17.0	17.0	Embed	Black RAL-9005	PA20ARB	42337641
16.0	20.0	17.0	17.0	Embed	Green RAL-6009	PA20ARM	42337644
12.0*	12.0	12 inch bolt circle		Anchor	Black RAL-9017	PA12ABAB	42337782
12.0*	12.0	12 inch bolt circle		Anchor	Green RAL-6009	PA12ABAM	42337785
14.0*	14.0	12 inch bolt circle		Anchor	Black RAL-9005	PA14ABAB	42337783
14.0*	14.0	12 inch bolt circle		Anchor	Green RAL-6009	PA14ABAM	42337786
16.0*	16.0	12 inch bolt circle		Anchor	Black RAL-9005	PA16ABAB	42337784
16.0*	16.0	12 inch bolt circle		Anchor	Green RAL-6009	PA16ABAM	42337887

*** Approximate based on height above grade to top of anchor base**

Many localities have restrictions on light distribution and placement of outdoor lighting equipment. Consult with your local government before selecting outdoor lighting equipment.

IMEG
4035 Ridge Top Rd. Suite 601
Fairfax, VA 22030 P 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
01/12/2024
PROFESSIONAL ENGINEER

N29 APARTMENTS
GENERAL DEVELOPMENT PLAN

CITY OF FAIRFAX, VA

MARK	DATE	DESCRIPTION
1	11-30-2022	ADDRESSED PER CITY COMMENTS
2	04-28-2023	ADDRESSED PER CITY COMMENTS
3	08-11-2023	ADDRESSED PER CITY COMMENTS
4	10-16-2023	ADDRESSED PER CITY COMMENTS
5	01-12-2024	ADDRESSED PER CITY COMMENTS

PROJECT No.: 21082.002.00
DRAWING No.: 111772
DATE: 2022-07-15
SCALE: N/A
DESIGN: LBD,ZY
DRAWN: ZY
CHECKED: JR

SHEET TITLE:

LIGHTING DETAILS

SHEET No.

PI_951