

GENERAL SITE CONSTRUCTION NOTES

- HUSKA CONSULTING, LLC IS NOT RESPONSIBLE FOR CONSTRUCTION SAFETY, ACCIDENTS, OR SUPERVISION. HUSKA CONSULTING, LLC IS NOT RESPONSIBLE FOR ANY CONSTRUCTION DAMAGE OR INJURY TO ANY PERSON, VEHICLE, EQUIPMENT, OR PROPERTY ON OR NEAR THE CONSTRUCTION SITE.
- HUSKA CONSULTING, LLC IS NOT RESPONSIBLE FOR CONSTRUCTION SITE SECURITY. THE CONTRACTOR SHALL COORDINATE ALL TEMPORARY SITE SECURITY WITH THE OWNER AS REQUIRED AND APPROPRIATE.
- THE PROJECT PROPERTY SHALL BE VERIFIED BY A LICENSED LAND SURVEYOR PRIOR TO CONSTRUCTION. IF ANY DISCREPANCIES ARE FOUND REGARDING THE PROJECT BOUNDARY NOTIFY HUSKA CONSULTING, LLC.
- BEFORE COMMENCING CONSTRUCTION, CALL MISS UTILITY TO FIELD MARK UNDERGROUND UTILITIES. FOLLOW MISS UTILITY REQUIREMENTS.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS WHICH ARE NOT PROVIDED WITH THE CONSTRUCTION DOCUMENTS. THIS INCLUDES ANCILLARY DESIGN, PERMIT PROCESSING, INSPECTIONS, AND CLOSEOUTS. ALL PERMITS MUST BE ONSITE, INCLUDING PUBLIC SPACE EXCAVATION, OCCUPANCY, AND TRAFFIC CONTROL PLANS IF/AS REQUIRED.
- THE EXTENT OF EXISTING STRUCTURES INCLUDING UNDERGROUND FEATURES MAY NOT BE DEPICTED ON THE PLANS.
- THE CONTRACTOR MUST NOTIFY THE FAIRFAX COUNTY INSPECTOR BEFORE MAKING ANY FIELD ADJUSTMENTS TO ACCOMMODATE EXISTING CONDITIONS.
- ALL GENERAL NOTES ARE FOR TYPICAL CONSTRUCTION ACTIVITIES. THEY MAY INCLUDE INFORMATION THAT IS NOT APPLICABLE TO THE SCOPE OF THIS PROJECT.
- THE VARIOUS CODES AND STANDARDS WHICH ARE SHOWN ON THE PLANS ARE FOR GENERAL INFORMATION ONLY. THEY DO NOT NECESSARILY REPRESENT THE MOST CURRENT OR COMPLETE STANDARDS REQUIRED FOR THE CONSTRUCTION. THE CONTRACTOR MUST REFER TO THE CORRECT, APPLICABLE CODES AND STANDARDS.
- ACCESS TO THE PROJECT PROPERTY AND ALL SURROUNDING AREAS MUST BE MAINTAINED FOR ALL EMERGENCY SERVICES, PEDESTRIANS, AND DELIVERIES IF REQUIRED AND AS APPROPRIATE. ACCESS TO FIRE HYDRANTS MUST NOT BE IMPAIRED.
- THE CONTRACTOR SHALL RESTORE OR REPLACE ANY ITEMS TO REMAIN THAT ARE DAMAGED DURING CONSTRUCTION.
- THE CONTRACTOR MUST MAINTAIN A SET OF CONSTRUCTION PLANS WHICH HAVE BEEN MARKED UP TO ACCURATELY CONVEY CONSTRUCTION WHICH HAS DEVIATED FROM THE APPROVED CONSTRUCTION PLANS. THESE PLANS MUST BE PROVIDED TO THE CLIENT, THE CLIENT'S REPRESENTATIVE, OR HUSKA CONSULTING, LLC PRIOR TO THE PROJECT CLOSEOUT.

GENERAL PAVEMENT NOTES

- EXISTING PAVEMENT TO BE REPLACED SHALL AT MINIMUM MATCH THE EXISTING CROSS SECTION.
- EXISTING CURB AND/OR GUTTER TO BE REPLACED SHALL MATCH EXISTING TYPE, MATERIAL, AND DIMENSIONS.
- SAWCUT EXISTING ASPHALT PAVEMENT 1' FROM EDGE OF NEW CURB AND/OR GUTTER FOR REPLACEMENT.
- MILL AND OVERLAY EXISTING ASPHALT PAVEMENT 1' FROM EDGE OF NEW PAVEMENT TO PROVIDE SMOOTH TRANSITION.

GENERAL UTILITY NOTES

- THE CONSTRUCTION WORK SHALL BE COMPLETED IN SUCH A WAY AS TO MINIMIZE UTILITY OUTAGES. ALL UTILITY OUTAGES MUST BE COORDINATED WITH THE UTILITY OWNER AND AFFECTED PARTIES.
- SOME EXISTING UTILITIES MAY NOT BE SHOWN ON THE PLANS. BEFORE BEGINNING CONSTRUCTION, VERIFY THERE ARE NO CONFLICTS WITH EXISTING UTILITIES. TEST PIT AS REQUIRED TO DETERMINE LOCATIONS AND DEPTHS OF EXISTING UTILITIES WITHIN THE CONSTRUCTION WORK AREA. IF ANY EXISTING UTILITIES ARE FOUND WHICH ARE NOT DEPICTED IN THE EXISTING CONDITIONS PLAN OR CONFLICT WITH THE PROPOSED WORK NOTIFY HUSKA CONSULTING, LLC.
- NOTIFY HUSKA CONSULTING, LLC IF COVER FOR ANY UTILITY IS REDUCED BELOW THE MINIMUM REQUIRED.
- THE SITE CIVIL PLAN IS MEANT TO CONVEY WET (SANITARY SEWER, STORM SEWER, AND WATER) UTILITY WORK, ALL DRY (ELECTRIC, NATURAL GAS, TELECOMMUNICATIONS) UTILITY WORK SHOWN IS FOR INFORMATION AND REFERENCE ONLY. REFER TO THE DRY UTILITY AND/OR MEP PLANS FOR DRY UTILITY WORK.
- REFER TO FAIRFAX WATER STANDARDS FOR ABANDONMENT OF EXISTING SANITARY SEWER, STORM SEWER, AND WATER LATERALS AND MAINS. NOTE THIS INVOLVES DISCONNECTING ALL LATERALS AT THE MAINS, PLUGGING AND SEALING THE MAINS, AND REMOVING ALL ABANDONED METERS, VALVES, AND APPURTENANCES. COORDINATE WITH THE DC WATER INSPECTOR.
- ALL WYE CONNECTIONS TO EXISTING SEWER LINES SHALL MATCH THE EXISTING SIZE AND MATERIAL.
- REMOVE ABANDONED UTILITIES AS REQUIRED.
- ADJUST EXISTING STRUCTURE TIPS AND MANHOLES TO REMAIN WITHIN THE LIMITS OF DISTURBANCE TO MATCH FINAL GRADE AS REQUIRED. INSTALL ADDITIONAL STEPS WITHIN MANHOLES AS REQUIRED.

GENERAL GRADING NOTES

- THE SITE MUST BE GRADED AND PAVED SO THAT NO NEW LOW POINTS WITHOUT PROPER DRAINAGE ARE CREATED. NO PONDING SHALL OCCUR ONSITE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE STORMWATER MANAGEMENT PLANS WITHIN BMP FACILITIES OR ON THE SEDIMENT CONTROL PLAN WITHIN SEDIMENT TRAPS OR BASINS.
- ALL PAVED SURFACES SHALL BE AT A 0.5% MINIMUM SLOPE. ALL GRASSED AND LANDSCAPED AREAS SHALL BE AT A 1% MINIMUM SLOPE. EXCEPTIONS MAY BE MADE ONLY IF APPROVED BY HUSKA CONSULTING, LLC.
- SPOT ELEVATIONS SHOWN AT TIE-IN POINTS WITH EXISTING SURFACES ARE SHOWN APPROXIMATE, AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR. PROPOSED ELEVATIONS MAY BE MODIFIED WITH APPROVAL FROM HUSKA CONSULTING, LLC TO MATCH EXISTING GRADE.
- SITE CONSTRUCTION MUST BE ADA COMPLIANT UNLESS SPECIFICALLY NOTED OTHERWISE. ADA ROUTES MUST HAVE LONGITUDINAL SLOPES LESS THAN 5% AND CROSS SLOPES LESS THAN 2%. ADA RAMPS MUST HAVE A LONGITUDINAL SLOPE LESS THAN 1:4 AND HAVE A LENGTH NO MORE THAN 30'. PROVIDE ADA HANDRAILS, GUARDRAILS, AND LANDINGS WHERE APPROPRIATE. ADA PARKING SPACES MUST HAVE A SLOPE LESS THAN 2% IN ANY DIRECTION.
- ANY UNSUITABLE IN SITU SOIL OR MATERIAL MUST BE REMOVED OR REMEDIATED PER DIRECTION FROM THE GEOTECHNICAL ENGINEER.
- REFER TO THE SITE NOTES AND DETAILS FOR ADDITIONAL INFORMATION.

GENERAL SITE DEMOLITION NOTES

- REFER TO THE ARCHITECTURAL PLANS FOR SELECTIVE DEMOLITION RELATED TO INTERIOR RENOVATIONS. COORDINATE WITH THE DESIGN TEAM, INCLUDING THE STRUCTURAL ENGINEER, IN REGARDS TO THE STABILITY OF EXISTING STRUCTURES TO REMAIN.
- THE APPROXIMATE SCALE OF ABANDONMENT AND DEMOLITION OF SITE FEATURES AND UTILITIES ARE DEPICTED BOLD OR HATCHED ON THE DEMOLITION PLAN.
- DEMOLITION OF SITE FEATURES AND UTILITIES TO REPLACE ITEMS IN KIND ARE NOT NECESSARILY SHOWN BUT ARE WITHIN THE SCOPE OF WORK.
- SAWCUT EXISTING PAVEMENT TO BE REMOVED WHERE ADJACENT TO EXISTING PAVEMENT TO REMAIN. FOR CONCRETE AND GRANITE, SAWCUT AT THE NEAREST JOINT.
- ALL DEMOLITION DEBRIS MUST BE DISPOSED PER APPLICABLE LAW. DEMOLITION DEBRIS MAY ONLY BE USED FOR BACKFILL IF EXPRESS KNOWLEDGE AND PERMISSION IS GRANTED FROM THE STRUCTURAL AND GEOTECHNICAL ENGINEERS.
- REFER TO THE DEMOLITION NOTES AND DETAILS FOR ADDITIONAL INFORMATION.

GENERAL SEDIMENT CONTROL NOTES


- THE CONTRACTOR MUST NOTIFY THE FAIRFAX COUNTY INSPECTOR BEFORE MAKING ANY ADJUSTMENTS IN REGARDS TO THE LIMITS OF DISTURBANCE AND SEDIMENT CONTROL MEASURES TO PERFORM THE WORK AND ACCOMMODATE FIELD CONDITIONS.
- WHERE NO STABILIZED CONSTRUCTION IS PROVIDED CONTRACTOR SHALL DESIGNATE VEHICLES THAT SHALL ENTER THE SITE. ALL VEHICLES LEAVING THE SITE MUST HAVE THEIR TIRES/TREADS WASHED PRIOR TO ENTERING ANY PUBLIC STREETS. WASH WATER MUST NOT BE ALLOWED TO LEAVE THE SITE.
- THE LIMITS OF DISTURBANCE AND SEDIMENT CONTROL MEASURES ARE SHOWN APPROXIMATELY. PRESENTATION ON THE PLANS MAY DEVIATE SLIGHTLY FROM THE ACTUAL DESIGN INTENT FOR GRAPHICAL CLARITY.
- TEMPORARY SOIL STOCKPILES SHOULD BE PLACED AS NEEDED ON THE SITE IN COORDINATION WITH THE FAIRFAX COUNTY. INSTALL SILT FENCE AROUND THE PERIMETER OF ALL STOCKPILES AND COVER WITH A TARP OR OTHER APPROVED IMPERMEABLE SURFACE PRIOR TO RAIN EVENTS.
- THE CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR ALL CATCH BASINS, CURB INLETS, DRAINS, AND RISER STRUCTURES. ON OR ADJACENT TO THE LIMITS OF DISTURBANCE. ANY SEWER WHICH BECOMES CLOGGED DUE TO CONSTRUCTION MUST BE PROMPTLY CLEANED AND CLEARED.
- ANY AND ALL SITE STORM RUNOFF FROM DISTURBED AREAS MUST BE FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT PRIOR TO LEAVING THE SITE. SEDIMENT MUST BE PLACED IN AN APPROVED AREA AND STABILIZED. SEDIMENT MUST NOT BE PLACED IN A FLOODPLAIN, WETLAND, WITHIN THE CRITICAL ROOT ZONE OF AN EXISTING TREE TO REMAIN, OR RPA.
- NO EXISTING TREES ARE TO BE REMOVED AS PART OF THIS PROJECT. EXISTING TREES SHALL BE PROTECTED AS NEEDED AND REQUIRED BY FAIRFAX COUNTY WITH TREE PROTECTION FENCE. SEE FAIRFAX COUNTY PLATE 6-12 ON SHEET CIV-510.
- MINIMIZE DUST GENERATION DURING CONSTRUCTION.
- REFER TO THE SEDIMENT CONTROL NOTES AND DETAILS FOR ADDITIONAL INFORMATION.

ABBREVIATIONS

ABND	ABANDONED	MH	MANHOLE
AD	AREA DRAIN	MIN	MINIMUM
ADA	AMERICANS WITH DISABILITIES ACT	MS	MINIMUM STANDARD
APPROX	APPROXIMATE	NRS	NATURAL RESOURCES
BFP	BACKFLOW PREVENTER	OC	CONSERVATION SERVICE ON CENTER
BLDG	BUILDING	PFM	PUBLIC FACILITIES MANUAL
BRL	BUILDING RESTRICTION LINE	PL	PROPERTY LINE
BSMT	BASEMENT	PROP	PROPOSED
BW	BOTTOM OF WALL	RPA	RESOURCE PROTECTION AREA
CI	CAST IRON	AREA	AREA
CO	CLEANOUT	SAN	SANITARY
CS	COMBINED SEWER	SCH	SCHEDULE
DEQ	VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY	STM	STORM SEWER
ELEV	ELEVATION	SWR	SEWER
EX	EXISTING	TC	TOP OF CURB
FFI	FIRST FLOOR ELEVATION	TW	TOP OF WALL
HB	HORIZONTAL BEND	VB	VERTICAL BEND
HSG	HYDROLOGIC SOIL GROUP	VP	VITRIFIED CLAY PIPE WITH W/TH
MAX	MAXIMUM	WM	WATERMAIN
MEP	MECHANICAL	WW	WINDOW WELL
	ELECTRICAL/PLUMBING		

WETLANDS PERMIT CERTIFICATION:

I HEREBY CERTIFY THAT ALL WETLANDS PERMITS REQUIRED BY LAW WILL BE OBTAINED PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES.

SIGNATURE:  _____
 OWNER/DEVELOPER: **EMRE ZIREKOGLU** Name _____ Manager _____
 NAME: _____ TITLE _____

RESPONSIBLE LAND DISTURBER:

NAME: _____
 CERT. NO.: _____
 PHONE NO.: _____
 ADDRESS: _____

PARK RD TOWNHOUSE REZONING PLANS
 FOR
PROJECT
 LOCATION OF SITE
 11004 & 11008 PARK RD
 FAIRFAX, VA 22036
 TAX MAP #RENDING
 D.B. 27365, P.G. 1623
 SQUARE 02 LOT 002

SITE CIVIL ENGINEERING SHEET INDEX	
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VICINITY MAP



ZONING INFORMATION	
LOT AREA	1.16 AC (50.778 FT)
EXISTING ZONING	CR
PROPOSED ZONING	RT
PROPOSED USE	TOWNHOUSES
WATERSHED:	ACCOTINK CREEK
DISTURBANCE:	X.XX ACRES
SEWER:	PUBLIC
WATER:	PUBLIC
MAXIMUM DENSITY (RT)	12 UNITS/ACRE
PROPOSED TOWNHOME UNITS	13
PROPOSED DENSITY	11.21 UNITS/ACRE
OFF-STREET PARKING REQ. (RT)	2 SPACES/UNIT
TOTAL SPACES REQ. (RT)	28 SPACES
PROPOSED SPACES	33 SPACES
LAND USE ACTIONS/GRANTED	NONE
OPEN SPACE REQ.	NONE
OPEN SPACE PROVIDED	NONE
TYPE OF CONSTRUCTION	PENDING

City of Fairfax APPROVED SITE PLAN

Zoning Official	Date
Review approval by:	
_____	Fire Marshal (for water distribution system & fire hydrant location)
_____	Fairfax Water
_____	Director CDP
_____	Director of Public Works
_____	City Engineer
_____	PW Plan Reviewer
_____	Code Admin. Asst. Chief
_____	Site Plan Coordinator
_____	BAR Liaison
_____	Waterwater Reviewer
_____	GIS Manager
_____	Boarding Administrator
_____	Date

11004 & 11008 PARK RD
 FAIRFAX, VA 22036
 TAX MAP #RENDING
 SQUARE 02, LOT 002

CLIENT
 EMRE ZIREKOGLU
 CAGLAYAN INVESTMENT GROUP
 32713 LATROBE ST
 CHANTILLY, VA 20152
 571.564.6363

CONTRACTOR
 TBD

CIVIL ENGINEER
 PATRICK HORGAN
 HUSKA CONSULTING, LLC
 1050 30TH STREET, NW
 WASHINGTON, DC 20007
 703.425.3862

LAND SURVEYOR
 DOMINION SURVEYS, INC.
 8808 H PEAR TREE VILLAGE COURT
 ALEXANDRIA, VA 22309
 703.619.6555

NOT FOR CONSTRUCTION
 REZONING PLANS
 01/25/2022



COVER SHEET

DRAWING TITLE
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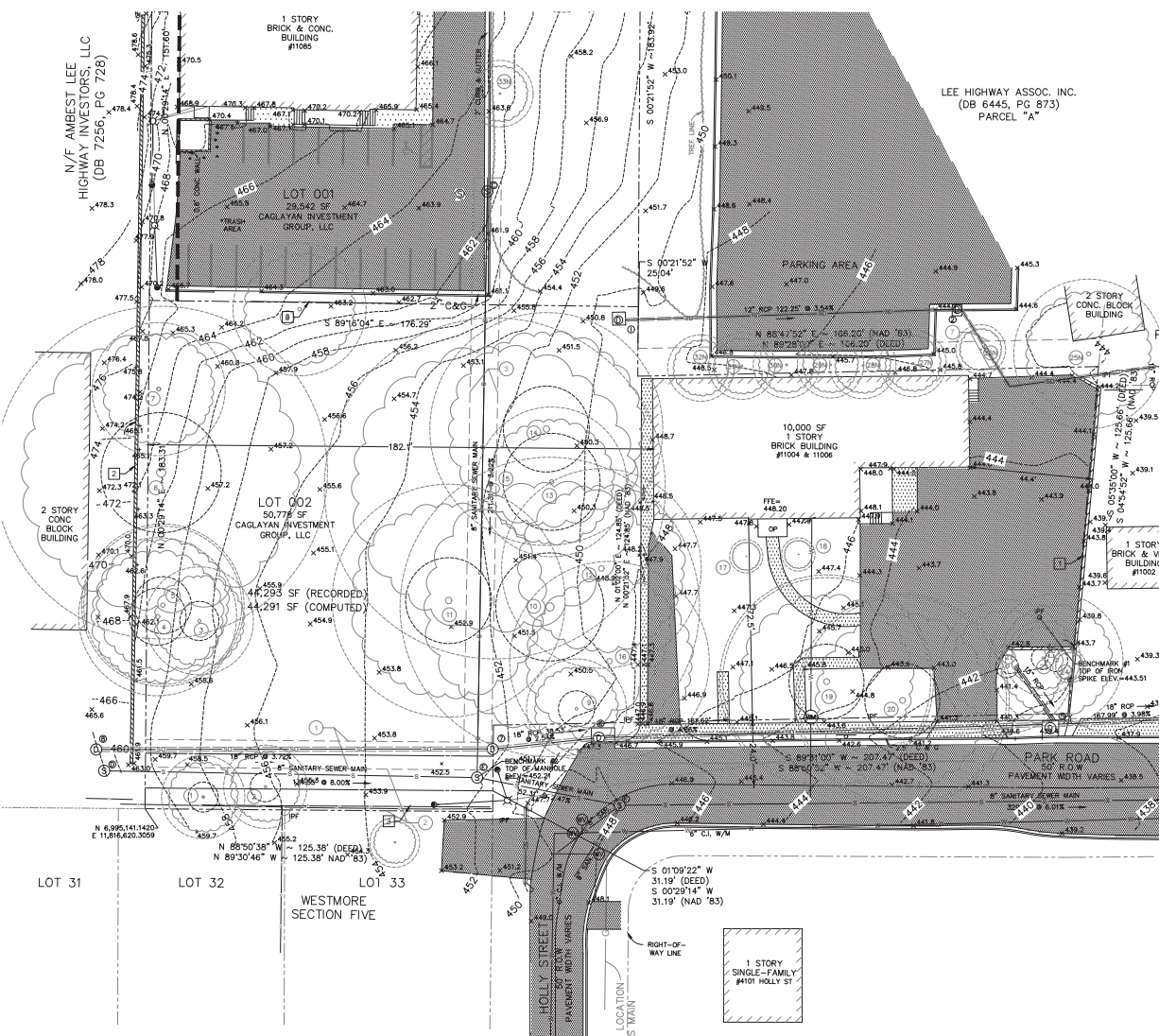
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APPROVAL	DATE	REVISIONS
	MM/DD/YYYY	COMMENT
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EXISTING CONDITIONS PLAN LEGEND

- PROPERTY LINE
- BUILDING FACE
- DOOR
- WALL
- WOOD FENCE
- IRON FENCE
- HANDRAIL
- CURB AND GUTTER
- BOLLARD
- ASPHALT PAVEMENT
- BRICK PAVEMENT
- CONCRETE PAVEMENT
- WOOD/LUMBER DECK
- SPOT ELEVATION
- CONTOUR
- TREE W/ CRZ & SRZ
- TRAFFIC SIGN
- ELECTRIC LINE
- ELECTRIC MANHOLE
- ELECTRIC METER
- ELECTRIC VAULT
- GAS LINE
- GAS VALVE
- OVERHEAD UTILITY
- 12" CS COMBINED SEWER
- 12" SAN SANITARY SEWER
- 12" STM STORM SEWER
- COMBINED/SANITARY MANHOLE
- STORM SEWER MANHOLE
- STORM DRAIN
- CLEANOUT
- DOWNSPOUT
- TELECOMMUNICATIONS
- TELECOMMUNICATIONS MANHOLE
- LIGHT POLE/STREET LIGHT
- UTILITY POLE
- GUY WIRE
- WATER LINE
- FIRE HYDRANT
- FIRE DEPT. CONN.
- WATER METER
- WATER VALVE



EASEMENT INFORMATION TABLE

EASEMENT #	TYPE	WIDTH (FT)	METES & BOUNDS OF CENTERLINE	DB & PG. #
1	STORM SEWER	10	N 89°30'46" W ~ 125.38'	DB 6827, PG 1808
2	SANITARY SEWER & WATER LINE	15	N 89°30'46" W ~ 125.38'	DB 1192, PG 94
3	SANITARY SEWER	10	N 01°00'00" W ~ 203.62'	DB 2765, PG1623
4	SANITARY SEWER	15	S 81°03'02" W ~ 18.93' N 06°40'40" W ~ 3.37'	DB 2765, PG1623
5	SANITARY SEWER	20	S 81°03'02" W ~ 18.93'	DB 3808, PG 269
6	SIDEWALK	6.5	DB 6550, PG 1184	
7	STORM SEWER	10	S 88°47'52"E	DB 6550, PG 1190

SANITARY SEWER STRUCTURES

- A TOP=451.18
INV.OUT=438.64 TO SOUTH
INV.IN=439.48 FROM NORTH
- B TOP=464.66
INV.OUT=445.41 TO A
INV.IN=445.76 FROM NORTH
- C TOP=460.45
INV.OUT=452.36 TO E
INV.IN=452.99 FROM E
- D TOP=466.32
INV.OUT=453.67 TO NORTH
INV.IN=454.91 FROM NORTH
- E TOP=457.91
INV.OUT=447.91 TO F
INV.IN=443.98 FROM D
- F TOP=468.02
INV.OUT=446.67 TO D
INV.IN=441.80 FROM SOUTHWEST
INV.IN=442.32 FROM SOUTHWEST
INV.IN=438.19 FROM NORTHWEST
- G TOP=433.14
INV.OUT=431.70 TO EAST
INV.IN=421.98 FROM SOUTH
INV.IN=421.98 FROM SOUTH
INV.IN=421.77 FROM NORTH

STORM SEWER STRUCTURES

- 1 TOP=448.82
INV.OUT=443.14 TO 2
INV.IN=438.81 FROM 1
- 2 TOP=444.91
INV.OUT=438.81 TO 3
INV.IN=438.81 FROM 1
- 3 TOP=436.45
INV.OUT=433.04 TO SOUTH
INV.IN=433.15 FROM NORTH
- 3A TOP=433.15
INV.OUT=433.15 TO SOUTH
INV.IN=437.18 FROM NORTH
- 4 TOP=433.36
INV.OUT=429.82 TO EAST
INV.IN=428.25 FROM NORTH
- 5 TOP=439.44
INV.OUT=435.42 TO SOUTH
INV.IN=438.19 FROM NORTHWEST
- 6 TOP=447.61
INV.OUT=444.08 TO S
INV.IN=443.42 FROM 7
- 7 TOP=422.29
INV.OUT=422.40 TO 6
INV.IN=445.40 FROM WEST

EXISTING CONDITIONS PLAN KEYNOTES

- 1 EXISTING 1-FIT WIDE CONCRETE WALL
MAXIMUM HEIGHT: 4'-0"
- 2 EXISTING 1-FIT WIDE CONCRETE WALL
MAXIMUM HEIGHT: 10'-0"
- 3 WOOD FENCE
HEIGHT: 6'-0"

SURVEYOR'S NOTES:

- THE PROPERTIES DELINEATED HERON IS SHOWN ON TAX MAP 57-1-02-135, 57-1-02-135, 57-1-02-136, 57-1-02-137A & 57-1-02-138B AND ARE ZONED C-2 COMMERCIAL.
- OWNER: CAGLAYAN INVESTMENT GROUP, LLC 42713 LATROBE ST, CHANTILLY VIRGINIA 20152 DB. 25288, PG 1940, DB. 25288, PG. 1942 AND DB. 26229, PG. 2180
- NO TITLE REPORT FURNISHED.
- THESE PROPERTIES ARE SUBJECT TO RESTRICTIONS OF RECORD.
- HORIZONTAL DATUM IS REFERENCED TO NAD '83. VERTICAL DATUM IS REFERENCED TO NGVD '29.
- THESE PROPERTIES ARE NOT LOCATED WITHIN A RESOURCE PROTECTION AREA.
- FENCES ARE CHAIN LINK UNLESS NOTED.
- TOTAL AREA= 81,154 SQUARE FEET.

FLOODPLAIN CERTIFICATE

I HEREBY CERTIFY THAT THE PROPERTY IS NOT WITHIN 500 FEET OF A DELINEATED OR KNOWN FLOODPLAIN PER THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD MAP #510590040E.

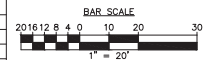
Patrick Horgan, P.E.
PATRICK HORGAN, P.E.
LICENSE NO. 061930

1/25/2022

APPROVAL	DATE	REVISIONS
MM/DD/YYYY	COMMENT	
MM/DD/YYYY	COMMENT	
MM/DD/YYYY	COMMENT	

EXISTING CONDITIONS PLAN NOTES

- THIS EXISTING CONDITIONS PLAN IS BASED ON A SURVEY AND AUTOCAD FILES PERFORMED AND PROVIDED BY DOMINION ENGINEERS, INC.
- THE EXISTING CONDITIONS LEGEND IS APPLICABLE TO THIS SHEET ONLY. THE EXISTING CONDITIONS MAY BE DEPICTED DIFFERENTLY (GRAY SCALED) OR NOT FULLY DEPICTED ON OTHER SHEETS.
- THE LOCATIONS AND DEPTHS OF EXISTING UTILITIES ARE APPROXIMATE AND BASED ON AVAILABLE RECORDS AND, WHERE INFORMATION IS NOT AVAILABLE, ASSUMPTIONS. CONTRACTOR SHALL LOCATE AND CONFIRM ALL UTILITIES WITHIN THE BOUNDS OF CONSTRUCTION PRIOR TO UNDERTAKING ANY DEMOLITION OR EXCAVATION.



NOT FOR CONSTRUCTION
REZONING PLANS
01/25/2022

11004 & 11006 PARK RD
FAIRFAX, VA 22036
TAX MAP PENDING
SQUARE 02, LOT 002

CLIENT
EMRE CIREKCOGLU
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CONTRACTOR
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703.425.3862

LAND SURVEYOR
DOMINION SURVEYS, INC.
8808-H PEAR TREE VILLAGE COURT
ALEXANDRIA, VA 22309
703.619.6555



REAL

EXISTING CONDITIONS

DRAWING TITLE

001

DRAWING NO.

SITE PLAN LEGEND

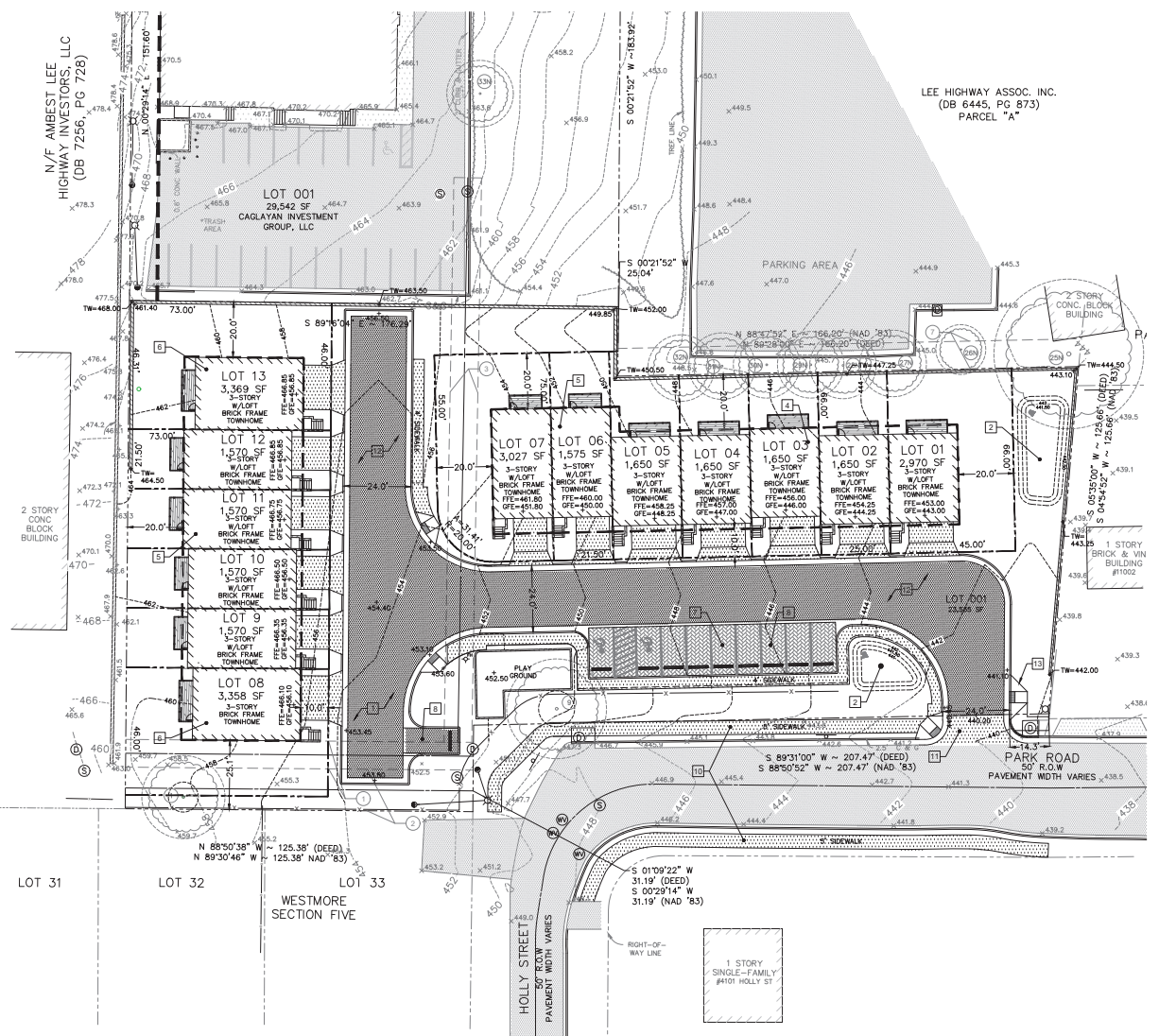
	BUILDING FACE		PERMEABLE PAVERS
	EXTERIOR DOOR		PAVEMENT MARKING
	RETAINING WALL		WOOD DECK
	GUARD RAIL		GREEN ROOF
	WOOD FENCE		UTILITY POLE
	STAIRS		VELOCITY DISSIPATION STONE BLANKET
	CONCRETE WHEEL STOP		PROPOSED CONTOUR
	ASPHALT PAVEMENT		PROPOSED SPOT ELEVATION
	CONCRETE PAVEMENT		PROPOSED SLOPE

- SITE PLAN KEYNOTES**
- TURN-AROUND AREA FOR EMERGENCY VEHICLES
 - 37'-4" CURB-TO-CURB TURNING RADIUS PROVIDED THROUGHOUT SITE
 - LEVEL 1 BIORETENTION FACILITY, SEE SHEET 012 FOR DETAILED DESIGN INFORMATION
 - PROPOSED 10-FT WIDE FAIRFAX WATER UTILITY EASEMENT
 - LOTS 01-05 TO HAVE 25'X32' TOWNHOME WITH TWO CAR GARAGE
 - LOTS 06-07, 09-12 TO HAVE 21.50'X39' TOWNHOME WITH ONE CAR GARAGE
 - LOTS 08 & 13 TO HAVE 26'X39' TOWNHOME WITH TWO CAR GARAGE
 - LEVEL 1 PERMEABLE PAVERS, SEE SHEET 012 FOR DETAILED DESIGN INFORMATION
 - TEN TOTAL GUEST PARKING SPACES
 - EIGHT 9'X18' STANDARD PARKING SPACES
 - ONE 9'X18' STANDARD ADA COMPLIANT PARKING SPACE
 - ONE 9'X18' VAN ADA COMPLIANT PARKING SPACE WITH 8' ACCESS AISLE
 - PRIVATE ROADS, SIDEWALKS, PARKING AREA, PLAYGROUND, SEWER AND STORM UTILITIES, AND STORMWATER MANAGEMENT FACILITIES TO BE OWNED AND MAINTAINED BY FUTURE HOMEOWNERS ASSOCIATION.
 - 5-FT CONCRETE SIDEWALK TO BE PROVIDED ADJACENT TO PARK RD ALONG PROPERTY FRONTAGE (DWP STD. 404.01)
 - 24-FT WIDE COMMERCIAL ENTRANCE OFF PARK RD (DWP STD. 404.06)
 - 24-FT WIDE PRIVATE ASPHALT ROAD (DWP STD. 401.01) REQUIRES VARIANCE TO MINIMUM WIDTH, 2-FT WIDE CONCRETE CURB AND GUTTER (VDTO STD. 201.03)
 - ADA COMPLIANT CONCRETE CURB RAMP (DWP STD. 404.04), TYPICAL FLARE SLOPE: 1:10 MAX (H:V)

ZONING REQUIREMENTS: RESIDENTIAL TOWNHOUSE (RT)

ZONING STANDARD	REQUIRED	PROPOSED
MINIMUM LOT SIZE	1,500 SF	1,570 SF
SITE AREA (ACRE)	0.4 ACRE OR 17,424 SF	1.16 ACRE OR 50,778 SF
MAXIMUM LOT COVERAGE	80%	67.13
MAXIMUM BUILDING COVERAGE	60%	53.41
MAXIMUM BUILDING HEIGHT		
ADJACENT TO RESIDENTIAL USE	35-FT/3-STORY	PENDING
ADJACENT TO COMMERCIAL USE	45-FT/4-STORY	PENDING
SETBACKS		
FRONT:	10 FEET	13 FEET (MIN)
SIDE:	20 FEET TO STREET 0 FEET INTERIOR	20 FEET 0 FEET
REAR:	20 FEET	20 FEET (MIN)
DENSITY	12 UNITS/ACRE	11.20 UNITS/ACRE
MINIMUM LOT WIDTH	18 FEET	22 FEET (MIN)

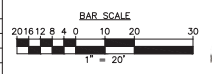
- OFF-STREET PARKING CALCULATIONS**
- USE: RESIDENTIAL TOWNHOUSES
- OFF-STREET PARKING REQUIRED: 2.0/UNIT
- PROPOSED UNITS: 13
- TOTAL OFF-STREET SPACES REQUIRED: 26
- TOTAL ADA SPACES REQUIRED: 2 (1 VAN)
- TOTAL OFF-STREET SPACES PROVIDED: 33*
- TOTAL ADA SPACES PROVIDED: 2 (1 VAN)
- *16-FT WIDE DRIVEWAYS CONNECT TO A 2-CAR GARAGE, 12-FT WIDE DRIVEWAYS CONNECT TO A 1-CAR GARAGE.
- REFUSE DISPOSAL NOTE**
- REFUSE AND RECYCLING SHALL BE STORED ON EACH INDIVIDUAL LOT AND COLLECTED WEEKLY BY PRIVATE REFUSE DISPOSAL COMPANY.



- PFM SOIL NOTES:**
- 4-0501.2 ENGINEERED FILL AND BACKFILL AROUND STRUCTURES MUST BE PLACED WITH APPROVED SELECT MATERIALS AND UNIFORM COMPACTION THROUGHOUT MUST BE PROVIDED IN 6-INCH TO 8-INCH LAYERS. EACH LAYER OF ENGINEERED FILL MUST BE COMPACTED AT OPTIMUM MOISTURE, PLUS OR MINUS 2 PERCENT, TO A DENSITY OF NOT LESS THAN 95 PERCENT IN ACCORDANCE WITH AASHTO T-99 OR ASTM D-698.
- 4-0503.1 THE MINIMUM FREQUENCY OF FIELD DENSITY TESTING MUST BE AS LISTED IN TABLE 4.2, UNLESS OTHERWISE APPROVED BY THE DIRECTOR. THE TESTING FREQUENCIES ARE THE MINIMUMS CONSIDERED NECESSARY TO PROVIDE EFFECTIVE QUALITY CONTROL OF SOIL AND AGGREGATE MATERIAL COMPACTIVE EFFORT UNDER NORMAL CONDITIONS. ADDITIONAL TESTING OTHER THAN THAT SPECIFIED SHOULD BE PERFORMED IF DEEMED NECESSARY BY THE INSPECTION AND TESTING AGENCY, THE GEOTECHNICAL ENGINEER OF RECORD, OR THE FAIRFAX COUNTY SITE INSPECTOR. ALL TESTING MUST CONFORM TO APPROVED VDOT TEST METHODS. IF THE TESTING FREQUENCIES ARE SPECIFIED TO BE GREATER IN OTHER APPLICABLE STANDARDS OR SPECIFICATIONS, THOSE FREQUENCIES MUST SUPERSEDE THE FREQUENCIES LISTED IN TABLE 4.2.

- SITE PLAN NOTES**
- ALL EXISTING FEATURES ARE NOT NECESSARILY SHOWN ON THIS PLAN. SEE EXISTING CONDITIONS PLAN.
 - THIS PLAN IS TO DEPICT WORK ON PRIVATE PROPERTY ONLY. NO WORK IS PROPOSED IN PUBLIC SPACE.
 - SPOT SHOTS ARE SHOWN PURPOSEFULLY OFFSET 0.5' FROM THE SPOT DESCRIBED FOR VISUAL CLARITY. MOREOVER, SPOTS ARE ROUNDED TO THE NEAREST 5 HUNDRETHS.
 - REFER TO THE CIVIL COVER SHEET FOR ADDITIONAL INFORMATION.

APPROVAL	DATE	REVISIONS



NOT FOR CONSTRUCTION
REZONING PLANS
01/05/2022

11004 & 11006 PARK RD
FAIRFAX, VA 22036
TAX MAP PENDING
SQUARE 02, LOT 002

CLIENT
EMRE ZIREKOGLU
CAGLAYAN INVESTMENT GROUP
32713 LATROSE ST
CHANTILLY, VA 20152
571.584.6503

CONTRACTOR
TBD

CIVIL ENGINEER
PATRICK HORGAN
HUSKA CONSULTING, LLC
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LAND SURVEYOR
DOMINION SURVEYS, INC.
8808-H PEAR TREE VILLAGE COURT
ALEXANDRIA, VA 22309
703.619.6555



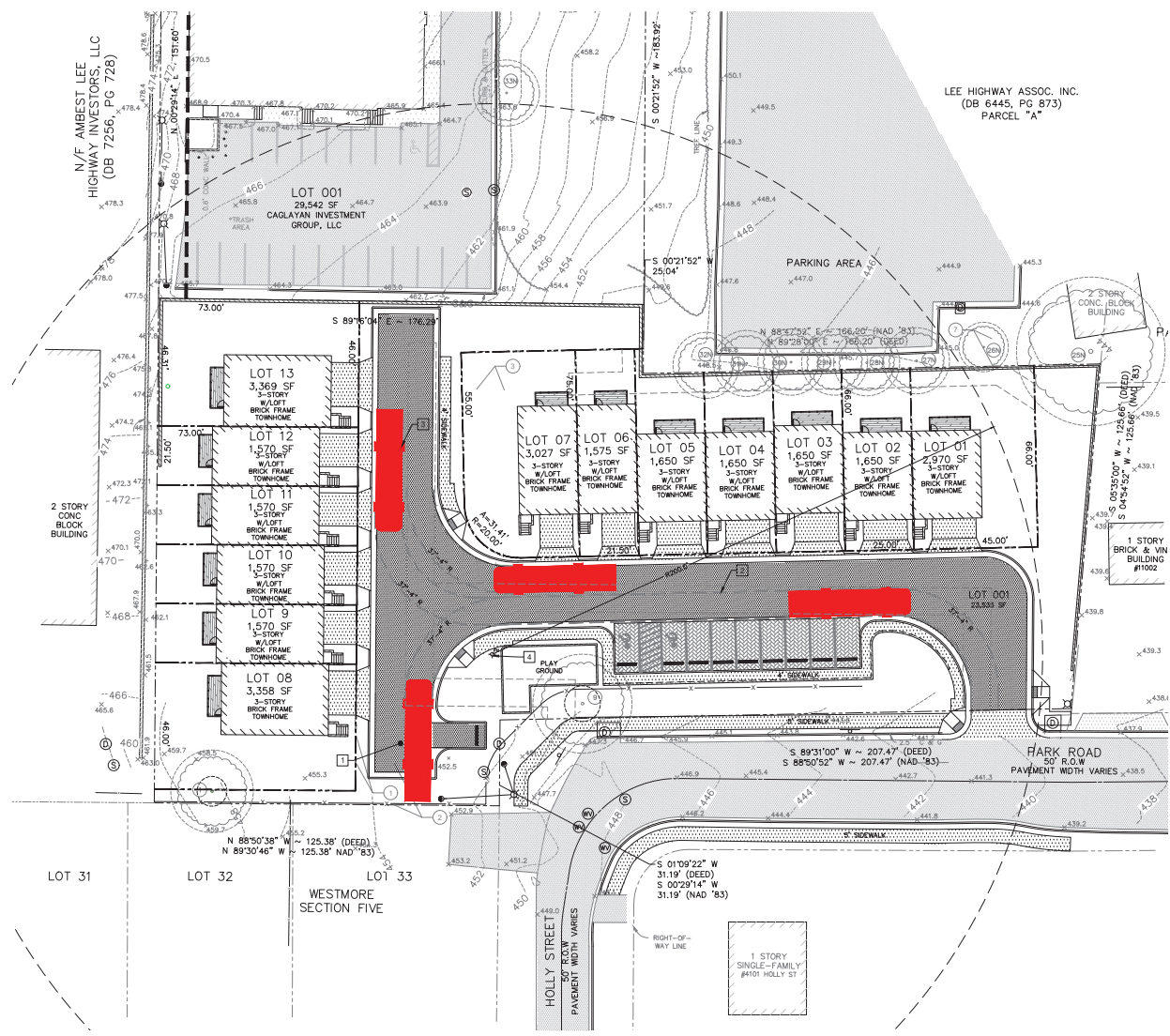
SITE PLAN

DRAWING TITLE
002

DRAWING NO.

- FIRE PLAN LEGEND**
- LARGEST FIRE APPARATUS
 - FIRE APPARATUS TRAVEL PATH

- FIRE PLAN KEYNOTES**
- 1 TURN-AROUND AREA FOR EMERGENCY VEHICLES
 - 2 37'-4" CURB-TO-CURB TURNING RADIUS PROVIDED THROUGHOUT SITE
 - 3 TRAVEL PATH OF FAIRFAX CITY'S LARGEST FIRE APPARATUS (100'-FT AERIAL PLATFORM LADDER TRUCK) BASED ON MANUFACTURER'S PUBLISHED TURNING RADIUS
 - 4 100'-FT AERIAL PLATFORM LADDER TRUCK BASED ON MANUFACTURER'S PUBLISHED DIMENSIONS:
 TOTAL LENGTH: 46'-9.25"
 AXLE TRACK: 82.92"
 TREAD WIDTH: 17.7"
 CHASSIS OVERHANG: 78"
 BUMPER OVERHANG: 26"
 WHEELBASE: 263"
 NEW FIRE HYDRANT TO SERVE ALL 13 TOWNHOMES WITHIN 200'-FT RADIUS



11004 & 11006 PARK RD
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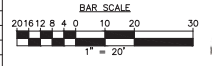
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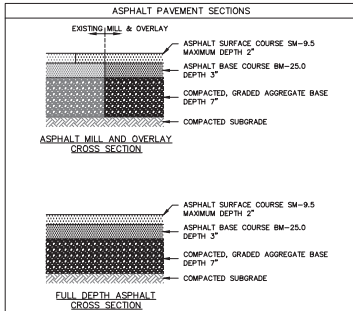
FIRE PLAN

APPROVAL	DATE	REVISIONS
	MM/DD/YYYY	COMMENT
	MM/DD/YYYY	COMMENT
	MM/DD/YYYY	COMMENT

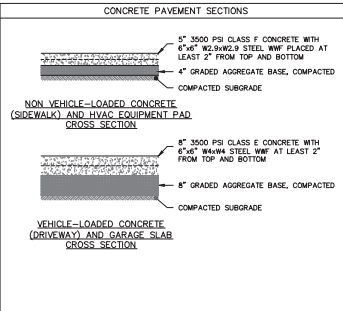


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 REZONING PLANS
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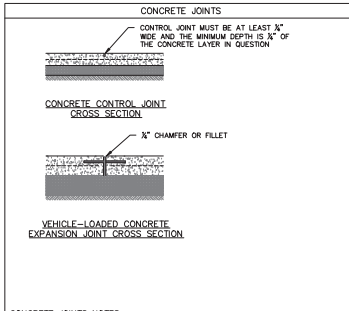
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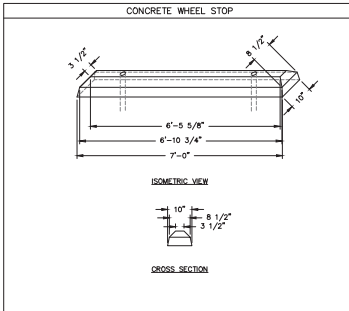
- ASPHALT PAVEMENT SECTIONS NOTES**
- MILL AND OVERLAY AS REQUIRED TO ATTAIN ADA ACCESSIBLE GRADES AND SLOPES AS REQUIRED.
 - MINIMUM ASPHALT MILLING DEPTH IS 1".
 - UTILIZE A VERTICAL SAWCUT AT THE INTERFACE BETWEEN EXISTING ASPHALT PAVEMENT AND MILLE AND OVERLAY SECTION.
 - TACK COAT TO BE INSTALLED AT INTERFACE BETWEEN SURFACE AND BASE COURSE, AND BETWEEN MILL AND OVERLAY AND EXISTING PAVEMENT SECTIONS.



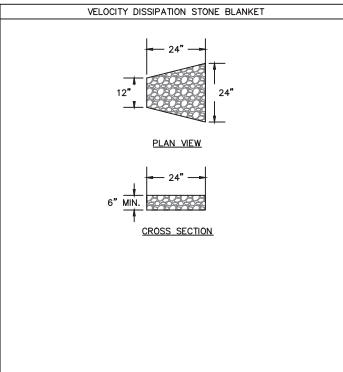
- CONCRETE PAVEMENT SECTIONS NOTES**
- CONTRACTOR TO REFER TO THE FAIRFAX COUNTY PUBLIC FACILITIES MANUAL & THE VIRGINIA CONSTRUCTION CODE FOR CONSTRUCTION METHODS AND MATERIALS.
 - CONCRETE REINFORCEMENT MUST BE PLACED AT LEAST 2" FROM CONCRETE SURFACES AND EDGES. UTILIZE REINFORCEMENT STANDS IF REQUIRED.
 - PROVIDE A LIGHT BROOM FINISH ON THE CONCRETE SURFACE.



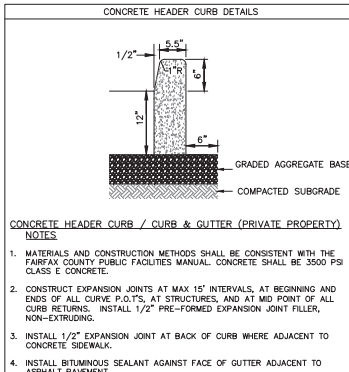
- CONCRETE JOINTS NOTES**
- CONTROL JOINTS SHOULD BE SPACED EQUAL TO THE WIDTH OF THE PAVEMENT IN QUESTION TO FORM SQUARES. HOWEVER, CONTROL JOINTS SHOULD BE PLACED NO MORE THAN 6' APART.
 - EXPANSION JOINTS SHOULD BE PLACED NO MORE THAN 30' APART AND BE 1/2" WIDE. EXPANSION JOINTS SHOULD BE PLACED WHERE CONCRETE PAVEMENT ABUTS A STRUCTURE, WALL, COLUMN, FOOTING, OR CURB.
 - EXPANSION JOINTS SHOULD CONSIST OF SEALED CORN, ASPHALT IMPREGATED FIBER SHEETING, ISO STRIP OFF, OR APPROVED EQUIVALENT.
 - DOWELS SHOULD BE GRADE 60 STEEL, AT LEAST 18" LONG, 3/4" MINIMUM DIAMETER, AND MAXIMUM 12" SPACING ON CENTER. EDGE OF DOWEL MUST BE AT LEAST 2" FROM CONCRETE SURFACE AND EDGES.



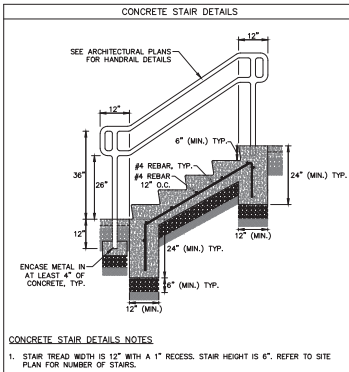
- CONCRETE WHEEL STOP NOTES**
- THE DIMENSION BETWEEN THE LONG EDGE OF THE CONCRETE WHEEL STOP CLOSEST TO THE END OF THE PARKING SPACE AND THE END OF THE PARKING SPACE IS 2.5'.
 - THE CONCRETE WHEEL STOP SHALL BE PLACED CENTERED RELATIVE TO THE WIDTH AXIS OF THE PARKING SPACE.
 - EACH CONCRETE WHEEL STOP MUST BE SECURED WITH TWO #7 REBAR ANCHORAGE PINS WITH A MINIMUM EMBEDMENT DEPTH OF 15".
 - THE STEEL REINFORCEMENT IN THE CONCRETE WHEEL STOPS (EXCLUDING THE ANCHORAGE PINS) MUST BE #3 REBAR AND AT LEAST 2" FROM ALL FINISHED SURFACES.



- VELOCITY DISSIPATION STONE BLANKET NOTES**
- STONES SHALL HAVE A MINIMUM MEAN DIAMETER (D50) OF 3"
 - DEPTH OF STONE SHALL BE AT LEAST 6"
 - STONE MAY BE GROUTED IN PLACE AT CLIENT/CONTRACTOR OPTION.



- CONCRETE HEADER CURB / CURB & GUTTER (PRIVATE PROPERTY) NOTES**
- MATERIALS AND CONSTRUCTION METHODS SHALL BE CONSISTENT WITH THE FAIRFAX COUNTY PUBLIC FACILITIES MANUAL. CONCRETE SHALL BE 3500 PSI CLASS E CONCRETE.
 - CONSTRUCT EXPANSION JOINTS AT MAX 15' INTERVALS, AT BEGINNING AND ENDS OF ALL CURVE P.O.T.S., AT STRUCTURES, AND AT MID POINT OF ALL CURB RETURNS. INSTALL 1/2" PRE-FORMED EXPANSION JOINT FILLER, NON-EXTRUDING.
 - INSTALL 1/2" EXPANSION JOINT AT BACK OF CURB WHERE ADJACENT TO CONCRETE SIDEWALK.
 - INSTALL BITUMINOUS SEALANT AGAINST FACE OF GUTTER ADJACENT TO ASPHALT PAVEMENT.
 - WHENEVER NEW CONCRETE CURB (AND GUTTER) MEETS EXISTING CONCRETE CURB (AND GUTTER), ASSURE CURBS ARE ON LINE AND ON GRADE.
 - TRANSITION CURBS SHALL BE USED WHENEVER A DIFFERENT TYPE OF CURB IS CALLED OUT. TRANSITIONS MUST BE 10' LONG (MIN.) UNLESS NOTED OTHERWISE.



- CONCRETE STAIR DETAILS NOTES**
- STAIR TREAD WIDTH IS 12" WITH A 1" RECESS. STAIR HEIGHT IS 6". REFER TO SITE PLAN FOR NUMBER OF STAIRS.
 - ALL CONCRETE CORNERS AND EDGES SHOULD HAVE A FILLET OF 1/2".
 - CONCRETE MUST HAVE A COMPRESSIVE STRENGTH OF 3500 PSI WITH NO BLACK POINTS AND WITH A LIGHT BROOM FINISH.
 - SUBGRADE MUST BE COMPACTED TO 95% PROCTOR DENSITY.
 - HANDRAILS SHALL BE PAINTED MATTE BLACK.

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CONTRACTOR
TBD

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REAL

SITE DETAILS

DRAWING TITLE

004

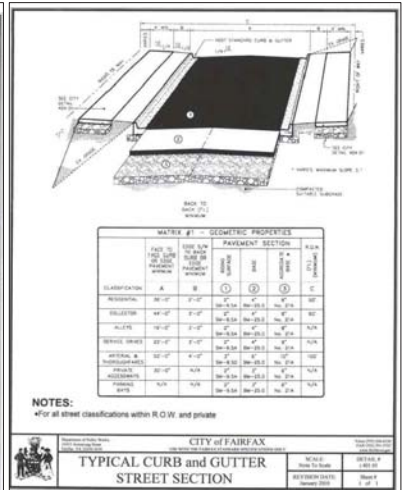
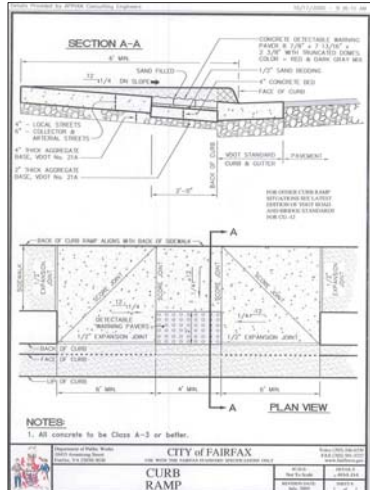
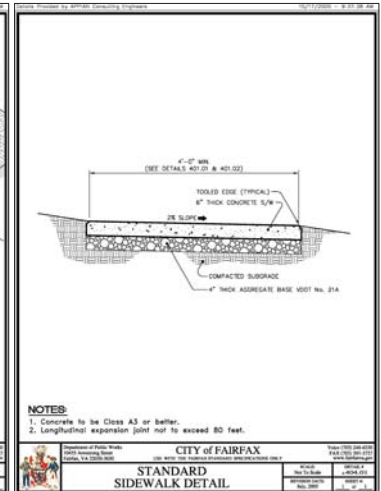
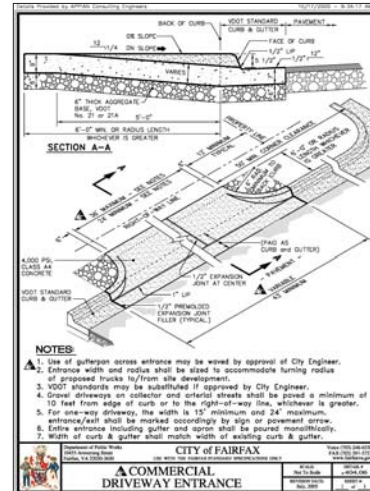
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- SITE DETAILS NOTES**
- REFER TO THE CIVIL COVER SHEET FOR ADDITIONAL NOTES.

APPROVAL	DATE	REVISIONS
	MM/DD/YYYY	COMMENT
	MM/DD/YYYY	COMMENT
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NOT FOR CONSTRUCTION
REVISIONING PLANS
01/05/2022



11034 & 11036 PARK RD
 FAIRFAX, VA 22306
 TAX MAP APENDING
 SQUARE 02, LOT 002

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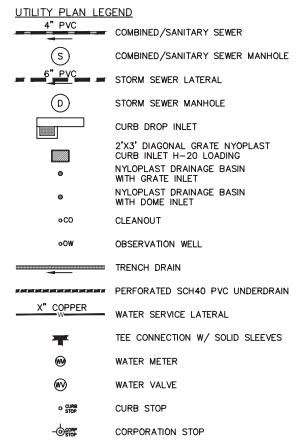
SITE DETAILS NOTES
 1. REFER TO THE CIVIL COVER SHEET FOR ADDITIONAL NOTES.

APPROVAL	DATE	REVISIONS
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NOT FOR CONSTRUCTION
 REZONING PLANS
 01/05/2022

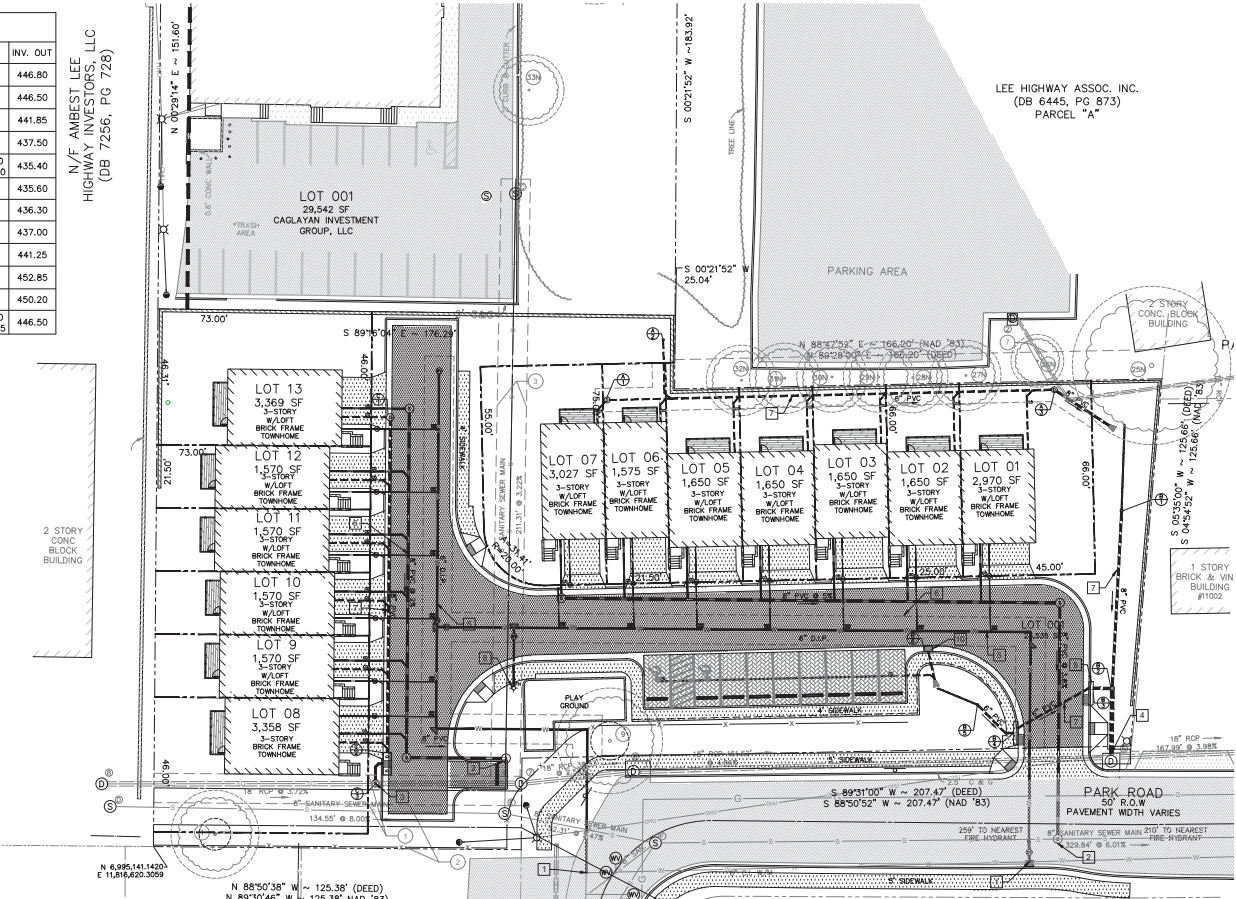
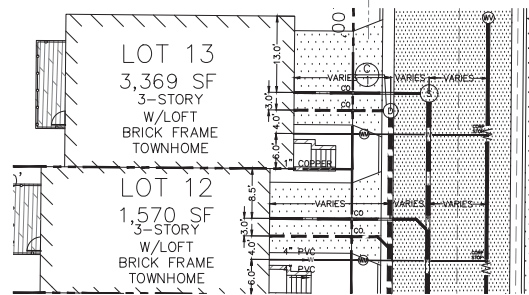
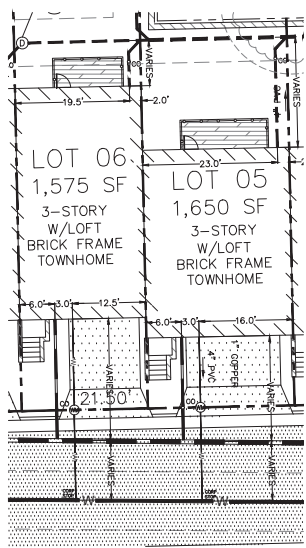
FAIRFAX CITY DPW
 DETAILS
 DRAWING TITLE
005
 DRAWING NO.



STORMWATER STRUCTURE TABLE

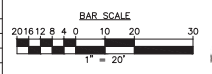
STRUCTURE ID	DESCRIPTION	RIM INV.	INV. IN	INV. OUT
A1	24\" NYOPLAST MANHOLE	452.00		446.80
A2	8\" NYOPLAST DRAINAGE BASIN	449.50		446.50
A3	24\" NYOPLAST MANHOLE	443.10	441.95	441.85
B1	12\" NYOPLAST DRAINAGE BASIN	442.00		437.50
B2	18\" NYOPLAST DRAINAGE BASIN	441.10	8\"=435.50 10\"=435.70	435.40
B3	VDOOT STD. CURB INLET	441.10	435.70	435.60
B4	VDOOT STD. CURB INLET	440.45	436.70	436.30
B5	8\" NYOPLAST DRAINAGE BASIN	441.50		437.00
B6	2'X3' CURB I NLET	444.00		441.25
C1	24\" NYOPLAST MANHOLE	456.05		452.85
C2	BAYFILTER, CB-4	453.45	451.20	450.20
C3	30\" PRECAST CONC. MANHOLE	454.00	6\"=449.60 15\"=446.55	446.50

- ### UTILITY PLAN KEYNOTES
- NEW CONNECTION TO EXISTING FAIRFAX WATER 6\" D.I.P. WATER MAIN
 - NEW CONNECTION TO FAIRFAX CITY 8\" CONCRETE SEWER MAIN VIA PRECAST CONCRETE DOORHOUSE MANHOLE
 - NEW CONNECTION TO FAIRFAX CITY 18\" R.O.P. STORM MAIN VIA PRECAST CONCRETE DOORHOUSE MANHOLE
 - NEW CONNECTION TO FAIRFAX CITY 18\" R.O.P. STORM MAIN VIA CORE DRILL TO EXISTING CURB INLET
 - NEW 6\" D.I.P. FAIRFAX WATER MAIN ON PRIVATE PROPERTY WITH 10'-FT SURROUNDING UTILITY EASEMENT
 - NEW 8\" SCH40 PVC SEWER MAIN TO BE PRIVATELY OWNED AND MAINTAINED
 - NEW 8\"-12\" SCH40 PVC STORM MAIN TO BE PRIVATELY OWNED AND MAINTAINED
 - NEW FAIRFAX WATER FIRE HYDRANT WITHIN 10'-FT UTILITY EASEMENT
 - VDOOT STANDARD CURB DROP INLET (VDOOT STD. 104.04) W/ 8\"-12\" SCH40 PVC OUTLET PIPE
 - ADS 2'X3' CURB INLET STRUCTURE 18\" NYOPLAST DRAINAGE BASIN



- ### UTILITY PLAN NOTES
- THIS PLAN CONVEYS INFORMATION PERTAINING TO THE 'WET' UTILITIES, CONSISTING OF SANITARY SEWER, STORM SEWER, AND WATER DISTRIBUTION PIPES. ANY 'DRY' UTILITY INFORMATION SHOWN IS FOR INFORMATION AND COORDINATION PURPOSES ONLY.
 - UNLESS OTHERWISE APPROVED BY THE FAIRFAX WATER INSPECTOR, MAINTAIN A MINIMUM 12\" OF VERTICAL AND HORIZONTAL CLEARANCE BETWEEN FAIRFAX WATER UTILITIES AND OTHER UTILITIES IN PUBLIC SPACE.
 - REFER TO THE CIVIL COVER SHEET FOR ADDITIONAL INFORMATION.

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REZONING PLANS
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11004 & 11006 PARK RD
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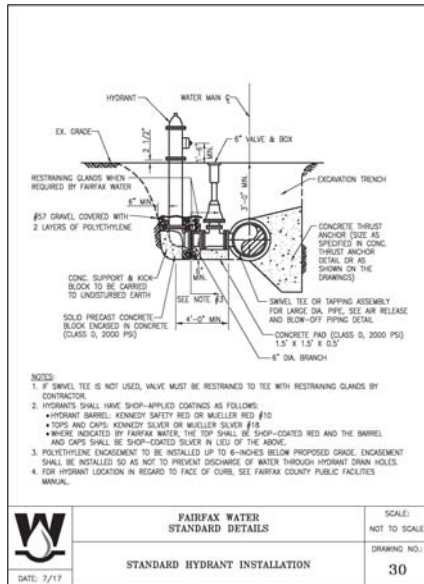
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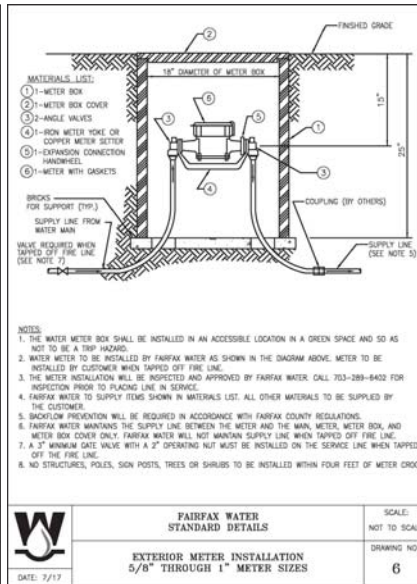
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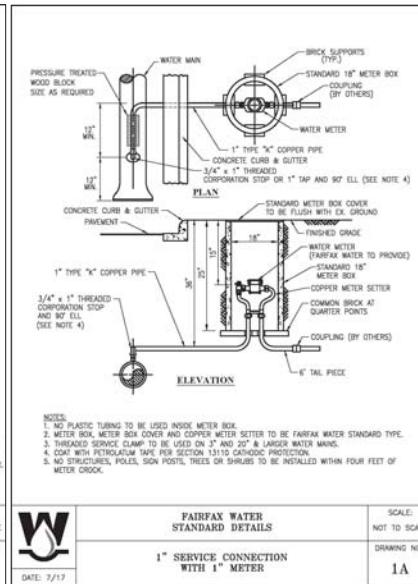
UTILITY PLAN
DRAWING TITLE
006
DRAWING NO.



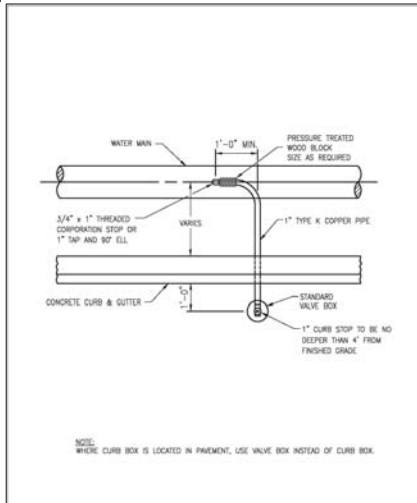
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	STANDARD HYDRANT INSTALLATION	DRAWING NO.: 30
DATE: 7/17		



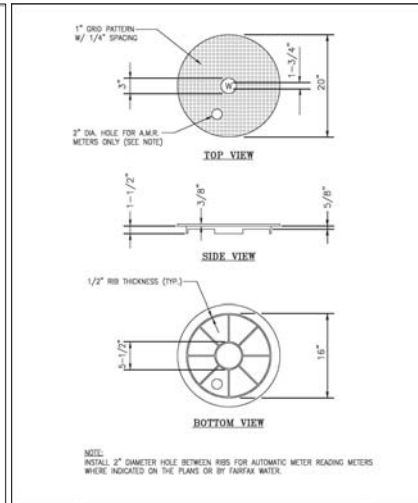
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	EXTERIOR METER INSTALLATION 5/8" THROUGH 1" METER SIZES	DRAWING NO.: 6
DATE: 7/17		



	FAIRFAX WATER STANDARD DETAILS	SCALE: NOT TO SCALE
	1" SERVICE CONNECTION WITH 1" METER	DRAWING NO.: 1A
DATE: 7/17		



	FAIRFAX WATER STANDARD DETAILS	SCALE: NOT TO SCALE
	1" SERVICE CONNECTION WITH CURB STOP	DRAWING NO.: 2
DATE: 7/17		



	FAIRFAX WATER STANDARD DETAILS	SCALE: NOT TO SCALE
	CAST IRON METER BOX COVER	DRAWING NO.: 4
DATE: 7/17		

UTILITY DETAILS NOTES
1. REFER TO THE CIVIL COVER SHEET FOR ADDITIONAL NOTES.

APPROVAL	DATE	REVISIONS
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NOT FOR CONSTRUCTION
REZONING PLANS
01/25/2022

11034 & 11036 PARK RD
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FAIRFAX WATER
DETAILS
DRAWING TITLE
007
DRAWING NO.

04

NOTES:

- THIS ITEM MAY BE PRECAST OR CAST IN PLACE.
- CONCRETE TO BE CLASS 40 IF CAST IN PLACE. ROAD PAVEMENT.
- COMBINATION CURB & GUTTER HAVING A RADIUS OF 300 FEET ON LEAVE SIDE. FACE OF CURB SHALL SURFACE FOR 45 FEET. COMBINATION CURB 1.
- FOR USE WITH STABILIZED OPEN-GRADES GRANULES. IN THE BOTTOM SECTION OF THE CURB AND GUTTER SHALL BE CONSTRUCTED PARALLEL TO THE FACE OF THE INLET. AND TO THE FACE OF THE INLET.
- ALLOWABLE CONDITIONS FOR THE USE OF CURB & GUTTER IN HIGHWAY APPLICATIONS WHOSE DESIGN SPEED IS SHOWN IN APPENDIX A OF THE "ROAD DESIGN MANUAL".

THE BOTTOM OF THE CURB AND GUTTER MAY BE CONSTRUCTED PARALLEL TO THE FACE OF THE INLET. AND TO THE FACE OF THE INLET.

THIS AREA MAY BE CONCRETE AT THE OPTION OF THE CONTRACTOR

COMBINATION 6" CURB & GUTTER

VIRGINIA DEPARTMENT OF TRANSPORTATION

REV: 2/04
2016.3

SPECIFICATION REFERENCE:		
105		
500		

STANDARD CURB DROP INLET

12" x 24" PIPE; MAXIMUM DEPTH 40'-0"

VIRGINIA DEPARTMENT OF TRANSPORTATION

2016 ROAD & BRIDGE STANDARDS

REV: 2/04
2016.3

SPECIFICATION REFERENCE:		
105		
500		

TABLE OF QUANTITIES

D-2A, B, C, D

TYPE	L	REINFORCING STEEL										REMARKS	
		TYPE 1	TYPE 2	TYPE 3	TYPE 4	TYPE 5	TYPE 6	TYPE 7	TYPE 8	TYPE 9	TYPE 10		
D-2A	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
D-2B	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
D-2C	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
D-2D	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
D-2E	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	

NOTES:

- DEPTH OF INLET SH TO BE SHOWN ON PLANS.
- THE TOP SURFACE SHALL BE FINISHED TO THE POINT OF THE CURB AND GUTTER TO BE CONFORMED TO THE DESIGN GRADE. ALL REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE WITH THE CONTRACTOR'S FIELD CONDITIONS.
- REINFORCEMENT ON THE PLANS THE REINFORCEMENT SHALL BE PLACED IN ACCORDANCE WITH THE CONTRACTOR'S FIELD CONDITIONS.
- IN THE EVENT OF THE CURB AND GUTTER BEING CONSTRUCTED IN PLACE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE EXISTING UTILITIES IN THE AREA.
- THIS ITEM MAY BE PRECAST OR CAST-IN-PLACE.
- ALL REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE WITH THE CONTRACTOR'S FIELD CONDITIONS.
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STANDARD CURB DROP INLET

12" x 24" PIPE; MAXIMUM DEPTH 40'-0"

VIRGINIA DEPARTMENT OF TRANSPORTATION

2016 ROAD & BRIDGE STANDARDS

REV: 2/04
2016.3

SPECIFICATION REFERENCE:		
105		
500		

11004 & 11006 PARK RD
FAIRFAX, VA 22036
TAX MAP PENDING
SQUARE 02, LOT 002

CLIENT
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CONTRACTOR
TBD

CIVIL ENGINEER
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ALEXANDRIA, VA 22309
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VDOT STANDARD DETAILS

REVISION TITLE

008

DRAWING NO.

APPROVAL	DATE	REVISIONS
	MM/DD/YYYY	COMMENT
	MM/DD/YYYY	COMMENT
	MM/DD/YYYY	COMMENT

UTILITY DETAILS NOTES

- REFER TO THE CIVIL COVER SHEET FOR ADDITIONAL NOTES.






NOT FOR CONSTRUCTION

REZONING PLANS

01/25/2022

STORMWATER MANAGEMENT PLAN LEGEND

-  BIORETENTION FACILITY
-  PERMEABLE PAVERS
-  DRAINAGE DIVIDE

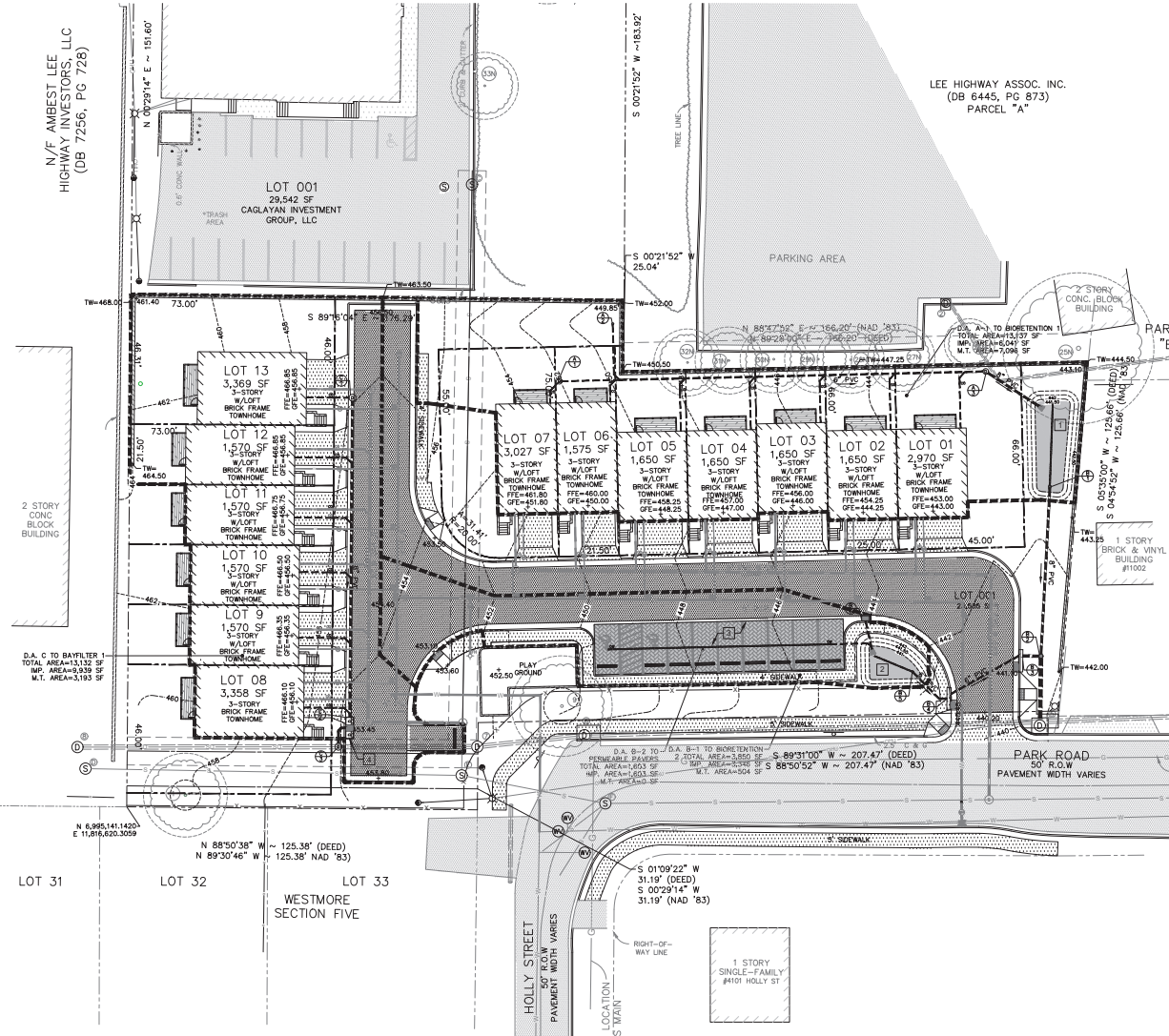
STORMWATER MANAGEMENT PLAN KEYNOTES

- 1 BIORETENTION #1, LEVEL 1 BIORETENTION FACILITY
4" SCH40 PERFORATED PVC UNDERDRAIN
12" NYOPLAST DRAINAGE BASIN CAPABLE OF CONVEYING THE 100-YR STORM TO SERVE AS OVERFLOW.
- 2 BIORETENTION #1, LEVEL 1 BIORETENTION FACILITY
4" SCH40 PERFORATED PVC UNDERDRAIN
8" NYOPLAST DRAINAGE BASIN CAPABLE OF CONVEYING THE 100-YR STORM TO SERVE AS OVERFLOW.
- 3 LEVEL 1 PERMEABLE PAVERS
SLOPE IN ANY DIRECTION NOT TO EXCEED 5%
12" STONE RESERVOIR
4" SCH40 PERFORATED PVC UNDERDRAIN
4" SCH40 PVC PIPE TO OVERFLOW TO BIORETENTION #2
- 4 ADS BAYFILTER
MODEL: CBF-4
6" SCH40 PVC PIPE TO OVERFLOW TO THE INTO CITY STORM SEWER SYSTEM VIA A NEW PRECAST CONCRETE MANHOLE

PRO-RATA SHARE ASSESSMENT INFORMATION			
COVER TYPE	EXISTING (SF)	PROPOSED (SF)	INCREASE (SF)
LOT AREA		50,778	
IMPERVIOUS	14,154	28,879	14,725
BUILDINGS	5,090	11,081	5,991
DRIVEWAYS	454	2,837	2,383
MISCELLANEOUS	8,610	14,961	6,351
PERVIOUS	36,624	21,899	-14,725

VRRM SITE INFORMATION			
COVER TYPE	EXISTING (SF)	PROPOSED (SF)	INCREASE (SF)
LOT AREA		50,778	
HSG A			
IMPERVIOUS	0	0	0
MANAGED TURF	0	0	0
HSG B			
IMPERVIOUS	0	0	0
MANAGED TURF	0	0	0
HSG C			
IMPERVIOUS	14,154	28,879	14,725
MANAGED TURF	3,6624	21,899	-14,725
HSG D			
IMPERVIOUS	0	0	0
MANAGED TURF	0	0	0
PERCENT IMPERVIOUS	27.9	56.9	

VRRM DRAINAGE AREA TABULATIONS			
DRAINAGE AREA	IMPERVIOUS AREA (SF)	MANAGED TURF (SF)	
A (TOTAL AREA)	23,791		
EXISTING	12606	11185	
PROPOSED	13479	10312	
A-1 (TOTAL AREA)	13137		
EXISTING	8167	4970	
PROPOSED	6041	7096	
A-2 (TOTAL AREA)	10654		
EXISTING	4439	6215	
PROPOSED	7438	3216	
B (TOTAL AREA)	5,453		
EXISTING	1124	4329	
PROPOSED	4949	504	
B-1 (TOTAL AREA)	3850		
EXISTING	775	3075	
PROPOSED	3346	504	
B-2 (TOTAL AREA)	1603		
EXISTING	349	1254	
PROPOSED	1603	0	
C (TOTAL AREA)	13132		
EXISTING	0	13132	
PROPOSED	9939	3193	



11004 & 11036 PARK RD
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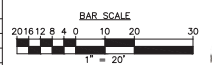
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STORMWATER MANAGEMENT PLAN NOTES
1. REFER TO THE CIVIL COVER SHEET FOR ADDITIONAL INFORMATION.

APPROVAL	DATE	REVISIONS
	MM/DD/YYYY	COMMENT
	MM/DD/YYYY	COMMENT
	MM/DD/YYYY	COMMENT



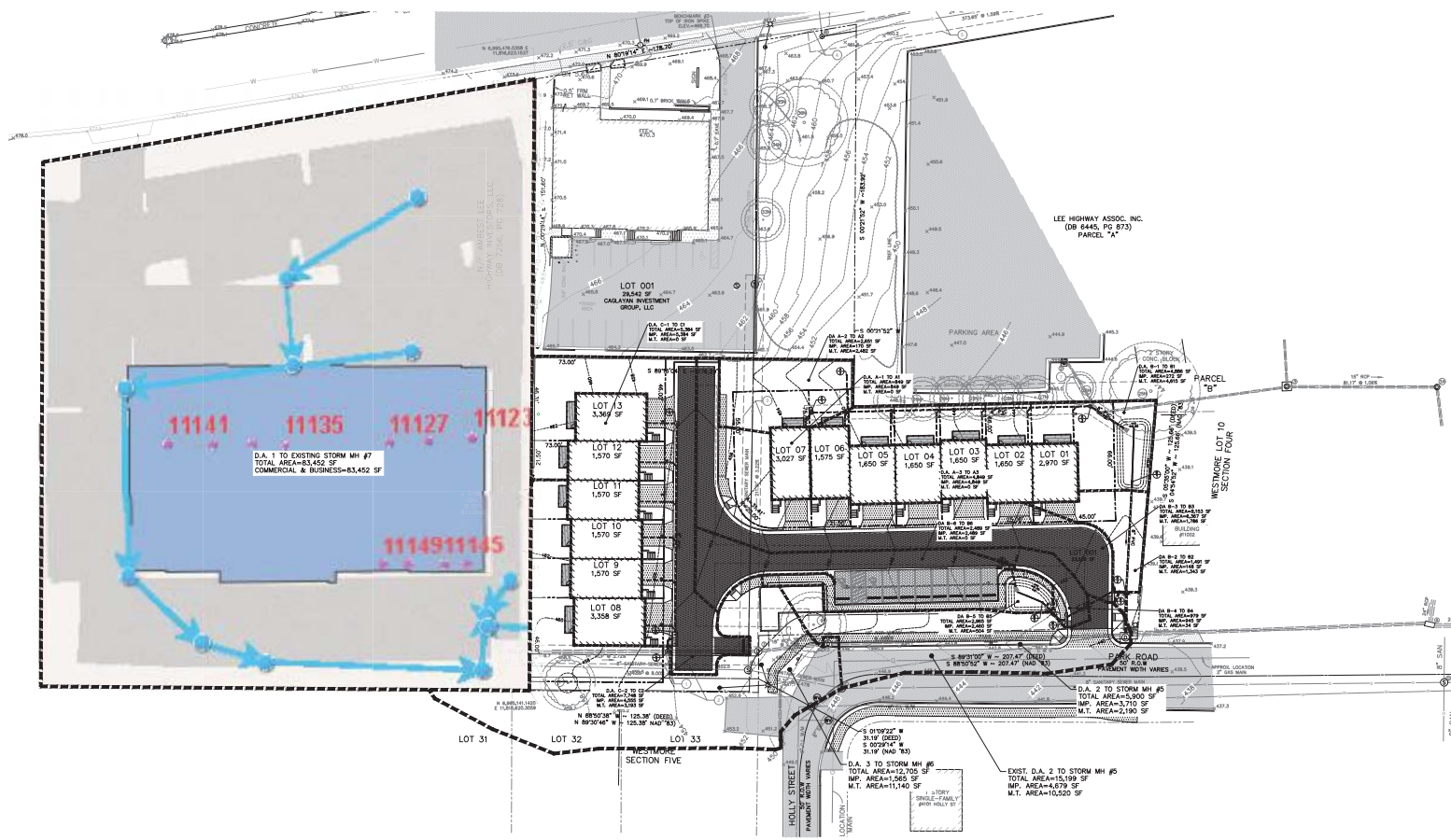
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REZONING PLANS
01/25/2022



STORMWATER
MANAGEMENT
PLAN
DRAWING TITLE
009
DRAWING NO.

DRAINAGE PLAN LEGEND

----- DRAINAGE DIVIDE



11034 S 11036 PARK RD
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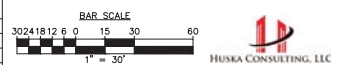
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- DRAINAGE PLAN NOTES**
- ALL EXISTING FEATURES ARE NOT NECESSARILY SHOWN ON THIS PLAN. SEE EXISTING CONDITIONS PLAN.
 - REFER TO THE CIVIL COVER SHEET FOR ADDITIONAL INFORMATION.

APPROVAL	DATE	REVISIONS
	MM/YY/YYY	COMMENT
	MM/YY/YYY	COMMENT
	MM/YY/YYY	COMMENT



NOT FOR CONSTRUCTION
REZONING PLANS
01/25/2022



DRAINAGE PLAN

DRAWING TITLE
010

DRAWING NO.

Pipe Inverts		Hydraulics										Hydrology										Circular Channel Ratios ⁸					Flow Type						
Upstream ID	Downstream ID	Length (ft)	Diam. (in)	Mat ¹	n	Slope	I _{inv} (ft)	V (ft/hr)	Q (cfs)	R (ft)	A (sq ft)	Imp.	M.T. (SF)	B&C (SF)	CN	S (in)	Runoff (in)	Peak Q (cfs)	Q ₁₀₀ (cfs)	Q ₅₀ (cfs)	Q ₂₅ (cfs)	V ₁₀₀ /V _{inv} (fps)	V ₅₀ (fps)	Q ₁₀₀ /Q _{inv} (cfs)	Q ₅₀ (cfs)	A ₁₀₀ /A _{inv} (sq ft)	A ₅₀ (sq ft)	R ₁₀₀ /R _{inv} (ft)	R ₅₀ (ft)	R ₂₅ (ft)			
A1	446.80	HB1	446.10	20.58	4	PVC	0.011	3.40%	8.25	4.10	0.12	0.07	0.03	849	0	0	98.00	0.20	8.01	0.12	0.12	0.00	0.00	0.86	4.75	0.29	0.41	0.32	0.09	0.79	0.08	CHANNEL	
HB1	446.10	A3	441.95	19.92	6	PVC	0.011	3.19%	8.25	6.82	0.15	0.16	4849	0	0	98.00	0.20	8.01	0.70	1.07	0.00	0.00	1.13	6.04	0.90	1.19	0.80	0.20	1.21	0.13	CHANNEL		
A3	441.95	B0.1	441.90	21.59	8	PVC	0.011	1.62%	8.25	5.34	1.07	0.17	0.35	0	0	0	0.00	0.00	0.00	0.00	1.07	0.00	0.00	1.03	5.21	0.59	1.82	0.55	0.25	1.05	0.17	CHANNEL	
A2	446.50	HB1	446.10	20.58	4	PVC	0.011	1.94%	8.25	3.99	0.25	0.10	0.06	170	2482	0	95.54	3.24	5.33	0.25	0.25	0.00	0.00	1.11	3.59	0.81	0.31	0.72	0.09	1.17	0.08	CHANNEL	
B1	437.50	B2	435.80	58.86	8	PVC	0.011	2.89%	8.25	7.38	1.56	0.18	0.22	772	4886	0	97.77	3.29	5.30	0.49	1.56	0.00	0.00	1.06	6.95	0.64	2.43	0.63	0.35	1.10	0.17	CHANNEL	
B2	435.70	SD 5	435.52	20.80	15	PVC	0.011	0.87%	8.25	5.81	3.68	0.31	0.62	148	1343	0	96.38	3.09	5.43	0.15	3.68	0.00	0.00	1.00	5.79	0.52	7.10	0.51	1.23	1.01	0.31	CHANNEL	
SD 5	435.42	SD 4	428.73	167.99	18	RCP	0.013	3.98%	8.25	13.38	18.66	0.45	1.40	3710	2190	0	89.09	1.22	6.94	0.73	18.66	0.00	0.00	1.13	11.86	0.89	20.96	0.79	1.77	1.21	0.38	CHANNEL	
B6	441.25	B5	441.00	10.19	6	PVC	0.011	2.45%	8.25	4.81	0.36	0.11	0.08	2489	0	0	98.00	0.20	8.01	0.36	0.36	0.00	0.00	0.91	5.29	0.34	1.04	0.38	0.20	0.86	0.13	CHANNEL	
B5	437.00	B4	436.70	15.98	8	PVC	0.011	1.88%	8.25	5.22	0.70	0.15	0.14	2460	504	0	93.92	0.65	7.52	0.40	0.76	0.00	0.00	0.93	5.61	0.39	1.96	0.41	0.35	0.90	0.17	CHANNEL	
B4	436.40	B3	436.00	27.70	8	PVC	0.011	1.44%	8.25	4.96	0.90	0.17	0.18	945	34	0	97.17	0.29	7.91	0.14	0.90	0.00	0.00	1.01	4.92	0.52	1.72	0.51	0.35	1.01	0.17	CHANNEL	
B3	435.90	B2	435.80	5.23	10	PVC	0.011	1.91%	8.25	6.70	1.98	0.21	0.25	6367	1786	0	92.74	0.78	7.38	1.08	1.98	0.00	0.00	1.02	6.56	0.55	3.58	0.53	0.55	1.03	0.21	CHANNEL	
C1	452.82	C2	451.20	112.96	8	PVC	0.011	1.43%	8.25	4.75	0.77	0.16	0.16	5384	0	0	98.00	0.20	8.01	0.77	0.77	0.00	0.00	0.97	4.90	0.45	1.71	0.46	0.35	0.93	0.17	CHANNEL	
C2	450.20	C3	450.05	7.42	8	PVC	0.011	2.02%	8.25	6.50	1.72	0.20	0.26	4555	3193	0	98.11	1.35	6.83	0.95	1.72	0.00	0.00	1.12	5.82	0.85	2.03	0.74	0.35	1.19	0.17	CHANNEL	
C3	447.13	SD 7	445.40	46.38	18	RCP	0.013	3.73%	8.25	12.19	12.99	0.41	1.09	0	0	0	83452	94.00	6.64	7.53	11.27	12.99	0.00	0.00	1.06	11.48	0.64	20.29	0.62	1.77	1.10	0.38	CHANNEL
SD 7	444.40	SD 6	443.47	33.80	18	RCP	0.013	2.90%	8.25	11.01	12.99	0.42	1.15	0	0	0	0.00	0.00	0.00	0.00	12.99	0.00	0.00	1.09	10.12	0.73	17.89	0.65	1.77	1.13	0.38	CHANNEL	
SD 6	443.08	SD 5	435.23	154.40	18	RCP	0.013	5.08%	8.25	13.81	14.25	0.40	1.01	1565	1140	0	76.96	2.99	5.50	1.25	14.25	0.00	0.00	0.83	13.40	0.68	23.69	0.57	1.77	1.06	0.38	CHANNEL	

Hydrology and Hydraulic Calculations Methodology

Note all sewer conveyance calculations shown here are for the 100-year storm event

¹ Manning's roughness coefficient ² rainfall intensity ³ V, velocity ⁴ Q, flowrate ⁵ R, hydraulic radius ⁶ A, flow area ⁷ Imp., impervious

⁸ TR-55 CN values are **98.00** for impervious areas and are **74** for managed turf, HSG C **94** for business & commercial, HSG C Design Storm is 100-yr, 24-hr: 8.25 in

¹ Time of concentration of flow to upstream structure of run by direct, overland flow if an inlet. Else take as 5 minutes. If not 5 minutes, provide separate Tc calculation justification

² Flow time in pipe from upstream structure in run to downstream structure in run

³ Time of concentration of flow to downstream structure via storm sewer system

⁴ Controlling time of concentration of flow to upstream structure

⁵ At the engineer's option, an additional flowrate may be added which will propagate downstream in the system. This flowrate is not affected by time of concentration.

⁶ The sum of the additional flowrates added to the system upstream of the run in question.

⁷ Circular channel ratios are tabulated in the reference tab and have nested if statements that hinge on the flow type for the pipe run in question

⁸ For BMP overflow manually enter the adjust curve number from the VBRM worksheet

Hydraulic Gradeline Calculations Methodology

¹ S₀, friction slope = 0.4532 * (A / K)² ² H_{fr}, friction loss = L * S₀ ³ V₀, velocity out ⁴ H_{so}, structure outlet loss = 0.25(0.3 if top pipe) * V₀² / g ⁵ g, gravity = 32.2 ⁶ V_i, velocity in ⁷ H_{si}, structure inlet loss = 0.35 * V_i² / g

⁸ H_{so}, structure head loss = H_{fr} + H_{so} ⁹ H_{so}, total head loss = H_{fr} + H_{so}

¹ Water surface elevation in bottom structure of pipe run. For the first (most downstream) run of HGL analysis per VDOT standards use the greater of the tailwater elevation (if known) or 80% full depth.

² Expansion loss for upper structure of pipe run. If the upstream structure is a wye, the expansion losses are taken as zero.

³ Velocity of water entering pipe run. If pipe run is at the top of the system, set this to the velocity out of the pipe run. Otherwise, use upstream pipe's velocity. If multiple pipes feed in, use the inlet velocity with the greatest momentum (QxV)

⁴ Contraction loss for upper structure of pipe run. If the upstream structure is a wye, the expansion losses are taken as zero.

⁵ Angle of deflection in the horizontal plane between the upper structure of the pipe run in question and the next upstream pipe. If multiple pipes in, this is the angle of the pipe which creates the most headloss. If no pipes in, set to zero.

⁶ Bend loss for upper structure of pipe run. By default this formula uses the listed inlet velocity. However, if multiple pipes feed into this run bend losses must be calculated for all inflowing pipes and the maximum chosen.

⁷ If 20%+ of the total flow is coming from a curb/grate inlet, or if there's an inlet pipe with an invert greater than the crown of the outlet pipe, plunging losses apply.

⁸ The engineer may specify IS-1 inlet shaping for a structure which allows the inlet head losses to be reduced by 50%.

⁹ Structure loss (sum of expansion, contraction, and bend losses) for the upstream structure of the pipe run.

¹⁰ Top elevation of upper structure of pipe run.

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REVISIONING PLANS
01/25/2022

DRAINAGE PLAN CALCULATIONS

DRAWING TITLE: **011**

DRAWING NO.

Project Name: Park Rd Townhomes
Date: 12/17/2021
Linear Development Project? No

Site Information

Post-Development Project (Treatment Volume and Loads)

Enter Total Disturbed Area (acres) → 1.00
 Check: **BMP Design Specifications List: 2013 Draft Sds & Specs**
 Linear project? No
 Land cover areas entered correctly?
 Total disturbed area entered?

Maximum reduction required: 20%
 The site's net increase in impervious cover (acres) is: 0.938033486
 Post-Development TP Load Reduction for Site (lb/yr): 0.79

Pre-Development Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) - undisturbed					0.00
Managed Turf (acres) - disturbed, graded for yards or other turf to be			0.84		0.84
Impervious Cover (acres)			0.32		0.32
Totals					1.17

Post-Development Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) - undisturbed					0.00
Managed Turf (acres) - disturbed, graded for yards or other turf to be			0.30		0.30
Impervious Cover (acres)			0.66		0.66
Totals					1.17

Area Check: OK, OK, OK, OK

Site Results (Water Quality Compliance)

Area Check	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)	0.31	0.11	0.23	0.00	0.00	OK
IMPERVIOUS COVER TREATED (ac)	0.14	0.11	0.23	0.00	0.00	OK
MANAGED TURF AREA (ac)	0.14	0.01	0.07	0.00	0.00	OK
MANAGED TURF AREA TREATED (ac)	0.16	0.01	0.07	0.00	0.00	OK
AREA CHECK	OK	OK	OK	OK	OK	

Site Treatment Volume (ft³): 2.688

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)	263	199	0	0	0	462
TP LOAD AVAILABLE FOR REMOVAL (lb/yr)	0.79	0.25	0.33	0.00	0.00	1.37
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.21	0.16	0.27	0.00	0.00	0.63
TP LOAD REMAINING (lb/yr)	0.58	0.09	0.27	0.00	0.00	0.94
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	1.75	1.27	0.00	0.00	0.00	3.02

Total Phosphorus

FINAL POST-DEVELOPMENT TP LOAD (lb/yr)	1.60
TP LOAD REDUCTION REQUIRED (lb/yr)	0.79
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.63
TP LOAD REMAINING (lb/yr)	1.05
REMAINING TP LOAD REDUCTION REQUIRED (lb/yr)	0.45

Total Nitrogen (For Information Purposes)

POST-DEVELOPMENT NITROGEN LOAD (lb/yr)	12.08
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	3.02
REMAINING POST-DEVELOPMENT NITROGEN LOAD (lb/yr)	9.06

0.15 NUTRIENT CREDITS SHALL BE PURCHASED TO MEET THE TP LOAD REDUCTION REQUIREMENT OF 0.79 LBS/YR. MORE THAN 75% OF THE REQUIRED TP LOAD REDUCTION IS MET THROUGH ONSITE TREATMENT. PENDING LETTER OF AVAILABILITY.

Drainage Area A

Drainage Area A Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv
Forest/Open Space (acres)					0.00	0.00
Managed Turf (acres)			0.24		0.24	0.22
Impervious Cover (acres)			0.31		0.31	0.95
Total					0.55	

Stormwater Best Management Practices (RR = Runoff Reduction)

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
6. Bioretention (RR)	40	0.16	0.14	0	243	305	608	25	0.00	0.38	0.21	0.17	6. Bioretention (RR)

Total Phosphorus Available for Removal in D.A. A (lb/yr): 0.79
 Post Development Treatment Volume in D.A. A (ft³): 1,256

Runoff Volume and CN Calculations

Target Rainfall Event (in)	1-year storm	2-year storm	10-year storm
Runoff (ft ³)	2.58	3.13	6.78

Drainage Areas	RV & CN	Drainage Area A	Drainage Area B	Drainage Area C	Drainage Area D	Drainage Area E
OK	98	96	92	0	0	0
RR (ft ³)	243	195	0	0	0	0
1-year return period	RV w/ RR (acres)	1.45	2.14	1.77	0.00	0.00
	RV w/ RR (acres)	1.33	1.71	1.77	0.00	0.00
	OK adjusted	86	92	92	0	0
2-year return period	RV w/ RR (acres)	1.92	2.86	2.27	0.00	0.00
	RV w/ RR (acres)	1.79	2.23	2.27	0.00	0.00
	OK adjusted	86	92	92	0	0
10-year return period	RV w/ RR (acres)	3.46	4.31	3.87	0.00	0.00
	RV w/ RR (acres)	3.34	3.89	3.87	0.00	0.00
	OK adjusted	87	92	92	0	0

Drainage Area B

Drainage Area A Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv
Forest/Open Space (acres)					0.00	0.00
Managed Turf (acres)			0.01		0.01	0.22
Impervious Cover (acres)			0.11		0.11	0.95
Total					0.13	

Stormwater Best Management Practices (RR = Runoff Reduction)

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
3. Permeable Pavement (RR)	45		0.04	0	57	70	127	25	0.00	0.08	0.05	0.03	6. Bioretention #1
6. Bioretention (RR)	40	0.01	0.08	70	138	206	344	25	0.03	0.17	0.11	0.09	6. Bioretention (RR)

Total Phosphorus Available for Removal in D.A. B (lb/yr): 0.25
 Post Development Treatment Volume in D.A. B (ft³): 401

Stormwater Best Management Practices (RR = Runoff Reduction)

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
3. Permeable Pavement (RR)	25		0.00	0.57	0.33	0.24							
6. Bioretention (RR)	40	0.24	1.23		0.94	0.53							

Drainage Area C

Drainage Area A Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv
Forest/Open Space (acres)					0.00	0.00
Managed Turf (acres)			0.07		0.07	0.22
Impervious Cover (acres)			0.23		0.23	0.95
Total					0.30	

Stormwater Best Management Practices (RR = Runoff Reduction)

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
14. Manufactured Treatment Devices (no RR)	0			0	0	0	0	20	0.00	0.00	0.00	0.00	14. Manufactured BMP (no RR)
14b. Manufactured Treatment Device-Filtering	0	0.07	0.23	0	0	845	845	50	0.00	0.53	0.27	0.27	14. Manufactured BMP (no RR)

Total Phosphorus Available for Removal in D.A. C (lb/yr): 0.53
 Post Development Treatment Volume in D.A. C (ft³): 845

Stormwater Best Management Practices (RR = Runoff Reduction)

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
14. Manufactured Treatment Devices (no RR)	0			0	0	0	0	20	0.00	0.00	0.00	0.00	14. Manufactured BMP (no RR)
14b. Manufactured Treatment Device-Filtering	0	0.07	0.23	0	0	845	845	50	0.00	0.53	0.27	0.27	14. Manufactured BMP (no RR)

STORMWATER CALCULATIONS NOTES
 1. REFER TO THE CIVIL COVER SHEET FOR ADDITIONAL INFORMATION.

APPROVAL	DATE	REVISIONS
	MM/DD/YYYY	COMMENT
	MM/DD/YYYY	COMMENT
	MM/DD/YYYY	COMMENT



NOT FOR CONSTRUCTION
 REZONING PLANS
 01/25/2022



STORMWATER MANAGEMENT CALCULATIONS
 DRAWING TITLE
 012
 DRAWING NO.

11024 & 11036 PARK RD
 FAIRFAX, VA 22036
 TAX MAP REFENDING
 SQUARE 02, LOT 002

CONTRACTOR
 TBD

CIVIL ENGINEER
 PATRICK HORGAN
 HUSKA CONSULTING, LLC
 1050 30TH STREET, NW
 WASHINGTON, DC 20007
 703.425.3862

LAND SURVEYOR
 DOMINION SURVEYS, INC.
 8808-H PEAR TREE VILLAGE COURT
 ALEXANDRIA, VA 22309
 703.619.6555

Bioretention Level 1	
Runoff Reduction	40%
Total Phosphorus Removal	25%
Maximum Drainage Area	2.5 AC
Define Drainage Area	
Total Drainage Area (A)	13,137 SF
Total Impervious Area (A _i)	6,041 SF
Managed Turf Area (A _m)	7,096 SF
Forested Area (A _f)	0 SF
HSG	C
Drainage Area R _i	0.56
Total Treatment Volume (TV)	613 CF
Min/Max Values	
Min Mulch Layer	0.25 FT
Min Media Depth (d _{media})	2.00 FT
Max Media Depth (d _{media})	4.00 FT
Min Choker Stone above Pipe Crown	0.25 FT
Min Underdrain dia	0.33 FT
Max Ponding Depth (d _{pond})	1.00 FT
Calculate Surface Area	
Void Ratio of Bioretention Soil Mix (ν _{void})	0.25
Void Ratio of Gravel (ν _g)	0.40
Depth of Ponding (d _{pond})	0.50 FT
Depth of Bioretention Soil Mix (d _{bio})	3.00 FT
Depth of Gravel (d _g)	1.25 FT
Equivalent Storage Depth (d _e)	1.75 FT
Required Surface Area (SA)	350 SF
Actual Surface Area	363 SF
Overflow Riser Design	
100-Yr, 5-min Rainfall Intensity (I ₁₀₀)	9.01 IN/HR
100 Year Peak Flowrate (Q ₁₀₀)	1.52 CFS
Overflow Type	Dome Basin
Overflow Basin Diameter	12.00 IN
Overflow Basin Rim Elev.	442.00 FT
Elev. of Surrounding Wall	442.50 FT
Freeboard (Head)	6.00 IN
Overflow Basin Flowrate	1.65 CFS
Design Adequate?	YES

Bioretention Level 2	
Runoff Reduction	40%
Total Phosphorus Removal	25%
Maximum Drainage Area	2.5 AC
Define Drainage Area	
Total Drainage Area (A)	3,850 SF
Total Impervious Area (A _i)	3,346 SF
Managed Turf Area (A _m)	504 SF
Forested Area (A _f)	0 SF
HSG	C
Drainage Area R _i	0.63
Total Treatment Volume (TV)	262 CF
Min/Max Values	
Min Mulch Layer	0.25 FT
Min Media Depth (d _{media})	2.00 FT
Max Media Depth (d _{media})	4.00 FT
Min Choker Stone above Pipe Crown	0.25 FT
Min Underdrain dia	0.33 FT
Max Ponding Depth (d _{pond})	1.00 FT
Calculate Surface Area	
Void Ratio of Bioretention Soil Mix (ν _{void})	0.25
Void Ratio of Gravel (ν _g)	0.40
Depth of Ponding (d _{pond})	0.50 FT
Depth of Bioretention Soil Mix (d _{bio})	3.00 FT
Depth of Gravel (d _g)	1.00 FT
Equivalent Storage Depth (d _e)	1.65 FT
Required Surface Area (SA)	159 SF
Actual Surface Area	167 SF
Overflow Riser Design	
100-Yr, 5-min Rainfall Intensity (I ₁₀₀)	9.01 IN/HR
100 Year Peak Flowrate (Q ₁₀₀)	0.65 CFS
Overflow Type	Dome Basin
Overflow Basin Diameter	8.00 IN
Overflow Basin Rim Elev.	441.50 FT
Elev. of Surrounding Wall	442.00 FT
Freeboard (Head)	6.00 IN
Overflow Basin Flowrate	0.72 CFS
Design Adequate?	YES

Bioretention Sizing Methodology	
$T_r = (R_i \times A) / 12$	
$R_i = (A_i \times R_{i1}) + (A_m \times R_{i2}) + (A_f \times R_{i3})$	
$d_{e1} = (d_{media} \times \nu_{void}) + (d_{g1} \times \nu_{g1}) + d_{pond}$	
HSG	R _i R _{ur} R _e
A	0.9 0.20 0.12
B	0.9 0.23 0.16
C	0.9 0.27 0.19
D	0.9 0.29 0.24
HSG	C
$T_r = (T_r \times 4) / ((R_i \times 12) \times (0.5h + d) \times A)$	
$T_r < 24$ hrs	
Soil media coefficient of permeability (k _s)	1.5 in/hr
$d_{e2} = ((R_i \times A) + (R_{i2} \times A_m) + (R_{i3} \times A_f)) / (4356000 \times 10)$	
$d_{e2} = 3.247W^{0.76} - (0.566W^{1.7}) / 3 + 2W^{1.8} / 100 + 0.699e^{0.20}$	

Basin Dia. (IN)	Flow Rate Based on Head (IN)			
	3	6	9	12
8	0.495	0.715	0.860	0.990
10	0.900	1.275	1.540	1.780
12	1.155	1.650	2.025	2.340
15	1.500	2.225	2.900	3.300
18	1.825	2.600	3.225	3.675
24	2.400	3.200	3.600	4.000
30	3.250	4.250	4.750	5.250

MTD - Filter Devices Sizing	
Runoff Reduction	90%
Total Phosphorus Removal	50%
Define Drainage Area	
Total Drainage Area (A)	13,137 SF
Total Impervious Area (A _i)	9,939 SF
Managed Turf Area (A _m)	3,193 SF
Forested Area (A _f)	0 SF
HSG	C
Drainage Area R _i	0.75
Calculate Peak Discharge	
Total Treatment Volume (TV)	817 CF
Runoff Volume (Q _r)	0.06
Time of Concentration, T _c	5.00 MIN
Initial abstraction, I _a	0.564
I _a /P	0.564
Unit Peak Discharge, q _p	550
Peak discharge, Q_{pk}	0.02 CFS
Filtering Device Sizing	
Manufacturer	ACS
Filtering Device Bay/Filter	
Model	CBF-4
Water Quality Flowrate	33.75 GPM
Convert to CFS	0.08 CFS

MTD - Filter Devices Methodology	
$T_r = (R_i \times A) / 12$	
$R_i = (A_i \times R_{i1}) + (A_m \times R_{i2}) + (A_f \times R_{i3})$	
$Q_r = TV / A$	
$CN = 1,000 / (10 + 5P + 10Q_r - 10(Q_r^2 + 1.25Q_r)^{0.5})$	
$P = 1.0$ inches in Wrigins	
Values from Table 4-3 of the NRCS TR-55	
$Q_{pk} = q_p \times A \times Q_r$	A is in square miles
HSG	R _i R _{ur} R _e
A	0.9 0.20 0.12
B	0.9 0.23 0.16
C	0.9 0.27 0.19
D	0.9 0.29 0.24

Permeable Paver 1 (Level 1)	
Runoff Reduction	45%
Total Phosphorus Removal (Efflu)	25%
Paver Area:DA ratio	2.5:1 Max
Define Drainage Area	
Total Drainage Area (A)	1,603 SF
Permeable Pavement Area (A _p)	1,603 SF
Impervious Area (A _i)	0 SF
Drainage Area R _i	0.90
Required Treatment Volume (TV)	132 CF
Underlying Soil Information	
Assumed Infiltration Rate (i _a)	0.50 in/hr
HSG	C
Depth to GW	Unknown FT
Design Criteria	
Max Impervious CSA	4008 FT
Min. Stone Reservoir Depth (d _{stone})	0.20 FT
Max. Stone Reservoir Depth (d _{stone})	2.50 FT
Void Ratio of Gravel (ν)	0.40
Depth of Stone Reservoir (d _{stone})	1.00 FT

Permeable Paver Sizing Methodology	
$T_r = (12.1 \times R_i \times A) / 12$	
$R_i = (A_i \times R_{i1}) + (A_{m1} \times R_{i2}) + (A_f \times R_{i3})$	
$d_{e1} = P \times [(A_i \times R_{i1}) + (A_{m1} \times R_{i2}) + (A_f \times R_{i3})] / (R_i \times A)$	Eq 7.1
$P = \text{Rainfall depth, Level 1} = 0.68$ ft, Level 2 = 0.99 ft	Eq 7.2
$d_{e2} = (0.5 \times 1 \times 1) / (R_i \times 12)$	
Runoff coefficients taken from Table 4-4 Of the VA SWMM	
HSG	R _i R _{ur} R _e
A	0.9 0.20 0.12
B	0.9 0.23 0.16
C	0.9 0.27 0.19
D	0.9 0.29 0.24

11094 S. 11030 PARK RD
FAIRFAX, VA 22306
TAX MAP APENDING
SQUARE 02, LOT 002

CLIENT
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	MM/DD/YYYY	COMMENT
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NOT FOR CONSTRUCTION
REZONING PLANS
01/25/2022

REAL
**STORMWATER
MANAGEMENT
CALCULATIONS**
DRAWING TITLE
013
DRAWING NO.

FAIRFAX COUNTY BIORETENTION MATERIAL SPECIFICATIONS

THE BIORETENTION SOIL MEDIA MUST MEET THE REQUIREMENTS OF VIRGINIA STORMWATER DESIGN SPECIFICATION NO. 9 BIORETENTION (LATEST VERSION REFERENCED IN THE VSMF REGULATIONS). SEE VIRGINIA DEQ BIORETENTION MATERIAL SPECIFICATIONS THIS SHEET.

THE FOLLOWING IS THE RECOMMENDED COMPOSITION OF THE BIORETENTION SOIL MEDIA INGREDIENTS:

TOPSOIL: TOPSOIL USED TO CREATE BIORETENTION SOIL MEDIA SHOULD BE A SANDY LOAM OR CLAY SAND PER USDA TEXTURAL CLASSIFICATION. THE TEXTURAL CLASS OF THE TOPSOIL SHOULD BE VERIFIED BY A LABORATORY ANALYSIS. TOPSOIL MUST BE FREE OF UNIFORM COMPOST, CONTAINING NO MORE THAN 5 PERCENT CLAY, SOIL STONES, STUMPS, BRUSH, ROOTS, OR SIMILAR OBJECTS LARGER THAN 2 INCHES. TOPSOIL MUST BE FREE OF BERMUDA GRASS, BEARGRASS, JOHNSON GRASS, WEEDS, NUTSHELL, POKON VIV, CANADIAN THISTLE, TEARthumb, OR OTHER NOXIOUS WEEDS.

SAND: SAND MUST MEET ASTM M-6, ASTM C-33, OR VDOT SECTION 202 GRADE "A" FINE AGGREGATE SPECIFICATIONS. SAND MUST BE CLEAN AND FREE OF DELETED MATERIALS.

ORGANIC MATERIAL: ANY ORGANIC MATERIAL ADDED TO CREATE THE FINAL SOIL MIXTURE MUST CONSIST OF LEAF COMPOST OR COMPOST MEETING THE REQUIREMENTS OF VIRGINIA STORMWATER DESIGN SPECIFICATION NO. 4 SOIL COMPOST AMENDMENTS. THE FINAL SOIL MIXTURE MAY NOT CONTAIN ANY MATERIAL OR SUBSTANCE THAT MAY BE HARMFUL TO PLANT GROWTH, OR AN INHIBITANT TO PLANT GROWTH OR MAINTENANCE.

THE FINAL SOIL MIXTURE MAY NOT CONTAIN ANY MATERIAL OR SUBSTANCE THAT MAY BE HARMFUL TO PLANT GROWTH, OR AN INHIBITANT TO PLANT GROWTH OR MAINTENANCE. EACH BIORETENTION AREA MUST HAVE A MINIMUM ONE SOIL TEST PERFORMED ON THE FINAL SOIL MIXTURE TO DEMONSTRATE COMPLIANCE WITH THE MIXTURE REQUIREMENTS FOR SAND, SOIL FINES, ORGANIC MATTER, P-INDEX (PHOSPHORUS CONTENT) AND CATION EXCHANGE CAPACITY (CEC) USING STANDARD TEST METHODS. TEST RESULTS AND MATERIALS CERTIFICATIONS MUST BE SUBMITTED TO LIDS BEFORE BOND RELEASE.

MULCH: MULCH MUST BE DOUBLE SHREDDED, ACID HARDWOOD BARK WITH A PARTICLE SIZE GREATER THAN 0.5 INCH. MULCH MUST BE WELL AERED, UNIFORM IN COLOR, AND FREE OF SALTS, METALS, CHEMICALS, AND EXTENSIVE MATERIAL INCLUDING STONES, ANIMAL WASTE, AND PLANT MATERIAL. WELL-AERED MULCH IS MULCH THAT IS STORED OR STORED FOR 6-12 MONTHS.

UNDERDRAINS MUST BE PVC PIPE CONFORMING TO THE REQUIREMENTS OF ASTM F758, TYPE PS 28 OR ASTM F949, HDPE PIPE CONFORMING TO THE REQUIREMENTS ASHOTO M252 OR M 294, TYPE S, OR APPROVED EQUIVALENT PIPE. UNDERDRAINS MUST BE PERFORATED WITH FOUR ROWS OF 3/8-INCH HOLES WITH A HOLE SPACING OF 3.25 ± 0.25 INCHES OR A COMBINATION OF HOLE SIZE AND SPACING THAT PROVIDES A MINIMUM INLET AREA >>= 1.76 SQUARE INCHES PER LINEAR FOOT OF PIPE OR PER FOR PERFORATED WITH SLOTS 0.125 INCHES IN WIDTH THAT PROVIDES A MINIMUM INLET AREA >>= 1.5 SQUARE INCHES PER LINEAR FOOT OF PIPE.

FILTER FABRIC: FILTER FABRIC MUST BE A NEEDED, NON-WOVEN, POLYPROPYLENE GEXOTILE MEETING THE REQUIREMENTS LISTED IN VIRGINIA STORMWATER DESIGN SPECIFICATION NO. 9 BIORETENTION (LATEST VERSION REFERENCED IN THE VSMF REGULATIONS) (SEE VIRGINIA DEQ BIORETENTION MATERIAL SPECIFICATIONS THIS SHEET). HEAVY-DUTY OR HEAT-GLUED/FABRICS ARE NOT PERMITTED.

NOTES: 1. P-INDEX IS AN AGRONOMIC TEST USED IN NORTH CAROLINA TO INDICATE THE POTENTIAL FOR P LEACHING FROM SOIL. THE TEST METHOD HAS BEEN REVISED TO ADD P CONCENTRATION TO FACILITATE LOCAL LAB TESTING. THE VALUE OF THE P-INDEX IS THE CORRELATION BETWEEN THE CEC AND P CONCENTRATION. HIGHER CEC INDICATES GREATER ADSORPTION SITES WITHIN THE MEDIA, THUS INCREASING THE ABILITY TO FIX P WITHIN THE SOIL, THEREBY RESULTING IN HIGHER NUTRIENT RETENTION WITHOUT LEACHING. HIGHER P-INDEX MAY BE A BETTER OVERALL REPRESENTATION OF P, THE TEST METHOD MAY NOT BE READILY AVAILABLE.

2. TESTS FOR ORGANIC CONTENT, CEC, SOLUBLE SALTS, AND PH ARE REFERENCED TO BE IN ACCORDANCE WITH RECOMMENDED SOIL TESTING PROCEDURES FOR THE NORTHEASTERN UNITED STATES. CURRENT EDITION, NORTHEASTERN REGIONAL PUBLICATION NO. 493.

VIRGINIA DEQ BIORETENTION MATERIAL SPECIFICATIONS

THE MINERAL SOIL TEXTURE OF THE BIORETENTION SOIL MIX SHOULD BE LOAMY COARSE SAND WITH NO MORE THAN 10% CLAY. NO MORE THAN 20% SILT + CLAY AND AT LEAST 75% OF THE SAND FRACTION SHOULD BE COARSE OR VERY COARSE SAND.

TO ALLOW FOR APPROPRIATE CATION EXCHANGE CAPACITY (CEC) AND NUTRIENT REMOVAL, THE MIX SHOULD CONTAIN AT LEAST 10% SILT FINES (SILT + CLAY) WHILE MEETING THE OVERALL TEXTURE SPECIFICATION ABOVE.

THE FILTER MEDIA SHOULD CONTAIN 3% TO 5% ORGANIC MATTER BY CONVENTIONAL METHOD-BLACK SOIL ORGANIC MATTER DETERMINATION METHOD OR SIMILAR ANALYSIS. SOIL ORGANIC MATTER IS EXPRESSED ON A DRY WEIGHT BASIS AND DOES NOT INCLUDE COARSE PARTICULATE (VISIBLE) COMPONENTS.

THE BIORETENTION SOIL MIX SHALL HAVE A MINIMUM SOIL PERMEABILITY OR HYDRAULIC CONDUCTIVITY OF (K SAT) OF 1 TO 2 INCHES PER HOUR (OR 30 TO 60 CM/DAY).

TREE PLANTINGS: IF TREES ARE INCLUDED IN THE BIORETENTION PLANTING PLAN, TREE PLANTING HOLES IN THE FILTER BED MUST BE AT LEAST 4 FEET DEEP TO PROVIDE ENOUGH SOIL VOLUME FOR THE ROOT STRUCTURE OF MATURE TREES. USE TURF, PERENNIALS OR SHRUBS INSTEAD OF TREES TO LANDSCAPE SHALLOWER FILTER BEDS.

FILTER FABRICS: USE A NON-WOVEN GEXOTILE FABRIC WITH A FLOW RATE OF > 10 GAL/MIN/SQ. FT. (E.G., GEXOTE 351 OR EQUIVALENT). APPLY ONLY TO THE SIDES AND DIRECTLY ABOVE THE UNDERDRAIN. FOR HOTSPOTS AND CERTAIN HARSH SITES ONLY, USE AN APPROPRIATE LINER ON BOTTOM.

IMPERMEABLE LINING NOTE: FOR A MINIMUM DISTANCE OF 10' FROM THE FOOTPRINT OF ALL BIORETENTION FACILITIES, AN IMPERMEABLE LINER WITH A MINIMUM THICKNESS OF 30 MM AND CONSISTING OF PVC GEOMEMBRANE MUST BE APPLIED ALONG THE DEPTH OF THE PRACTICE NEXT TO ALL ADJACENT WALLS AND BUILDINGS.

FAIRFAX COUNTY BIORETENTION CONSTRUCTION SPECIFICATIONS

THE OWNER MUST PROVIDE FOR INSPECTION DURING CONSTRUCTION OF THE FACILITY BY A LICENSED DESIGN PROFESSIONAL (IN ACCORDANCE WITH STANDARD PRACTICE). THE ACTUAL INSPECTIONS MAY BE PERFORMED BY AN INDIVIDUAL UNDER RESPONSIBLE CHARGE OF THE LICENSED PROFESSIONAL. THE LICENSED PROFESSIONAL MUST CERTIFY THAT THE FACILITY WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS. THE LICENSED PROFESSIONAL'S CERTIFICATION ALONG WITH ANY MATERIAL DELIVERY TICKETS AND CERTIFICATIONS FROM THE MATERIAL SUPPLIERS AND RESULTS OF THE TESTS AND INSPECTIONS REQUIRED UNDER SECTIONS 6-1307.9A, 6-1307.11D, AND 6-1307.11K OF THE FAIRFAX COUNTY PUBLIC FACILITIES MANUAL ARE TO BE SUBMITTED TO THE COUNTY BEFORE BOND RELEASE. FOR PROJECTS REQUIRING AS-BUILT PLANS, THE REQUIRED CERTIFICATION AND SUPPORTING DOCUMENTS MUST BE SUBMITTED WITH THE AS-BUILT PLANS. THE REQUIRED CERTIFICATION AND SUPPORTING DOCUMENTS MUST BE SUBMITTED WITH THE P/F OR NON-F REQUEST.

BIORETENTION FACILITIES MUST BE CONSTRUCTED AFTER THE DRAINAGE AREA TO THE FACILITY IS COMPLETELY STABILIZED. FROSTION AND SEDIMENT CONTROLS FOR CONSTRUCTION OF THE FACILITY MUST BE INSTALLED AS PER SECTION 3 OF THE EROSION AND SEDIMENT CONTROL PLAN. THE COMPONENTS OF THE SOIL MEDIA MUST BE THOROUGHLY MIXED UNTIL A HOMOGENEOUS MIXTURE IS OBTAINED. IT IS PREFERABLE THAT THE COMPONENTS OF THE SOIL MEDIA BE MIXED AT A BATCH FACILITY BEFORE DELIVERY TO THE SITE. THE SOIL MEDIA MUST BE MOISTENED, AS NECESSARY, TO PREVENT SEPARATION DURING INSTALLATION.

THE SOIL MEDIA MUST BE TESTED FOR PH, ORGANIC MATTER, GRAIN SIZE DISTRIBUTION, P-INDEX (PHOSPHORUS CONTENT) AND CATION EXCHANGE CAPACITY (CEC) USING STANDARD TEST METHODS BEFORE INSTALLATION. IF THE RESULTS OF THE TESTS INDICATE THAT THE REQUIRED SPECIFICATIONS ARE NOT MET, THE SOIL REPRESENTED BY SUCH TESTS MUST BE AMENDED OR CORRECTED AS REQUIRED AND RETESTED UNTIL THE SOIL MEETS THE REQUIRED SPECIFICATIONS. IF THE PH IS LOW, IT MAY BE RAISED BY ADDING LIME. IF THE PH IS TOO HIGH, IT MAY BE LOWERED BY ADDING IRON SULFATE PLUS SULFUR.

FOR BIORETENTION BASINS, THE FLOOR OF THE FACILITY MUST BE SCARIFIED OR TILLED TO REDUCE SOIL COMPACTION AND RAKED TO LEVEL. IF BEFORE THE FILTER FABRIC, STONE, AND SOIL MEDIA ARE PLACED.

THE SOIL MEDIA MAY BE PLACED BY MECHANICAL METHODS WITH MINIMAL COMPACTION IN ORDER TO MAINTAIN THE POROSITY OF THE MEDIA. SPREADING MUST BE BY HAND. THE SOIL MEDIA MUST BE PLACED IN 6- TO 12-INCH LIFTS WITH NO MACHINERY ALLOWED OVER THE SOIL MEDIA DURING OR AFTER CONSTRUCTION. THE SOIL MEDIA SHOULD BE OVERLAPPED ABOVE THE PROPOSED SURFACE ELEVATION AS NEEDED TO ALLOW FOR NATURAL SETTLEMENT. LIFTS MAY BE LIGHTLY WATERED TO ENHANCE SETTLEMENT. AFTER THE FINAL LIFT IS PLACED, THE SOIL MEDIA MUST BE RAKED TO LEVEL, IT SATURATED, AND ALLOWED TO SETTLE FOR AT LEAST ONE WEEK BEFORE INSTALLATION OF PLANT MATERIALS.

FILL FOR THE BERM AND OVERFLOW WEIR MUST CONSIST OF CLEAN MATERIAL FREE OF ORGANIC MATTER, RUBBISH, FROZEN SOIL, SNOW, ICE, PARTICLES WITH SIZES LARGER THAN 3 INCHES, OR OTHER DELETTERIOUS MATERIAL. FILL MUST BE PLACED IN 6- TO 12-INCH LIFTS AND COMPACTED TO AT LEAST 95 PERCENT OF STANDARD PROCTOR MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D-1586, ASHOTO T-99, OR VDOT SPECIFICATIONS. COMPACTION EQUIPMENT IS NOT ALLOWED WITHIN THE FACILITY ON THE SOIL BED. THE TOP OF THE BERM AND THE HEIGHT OF THE OVERFLOW WEIR MUST BE CONSTRUCTED LEVEL AT THE DESIGN ELEVATION.

PLANT MATERIAL MUST BE INSTALLED PER SECTION 12-0505 OF THE FAIRFAX COUNTY PFM. PLANTING MUST TAKE PLACE AFTER CONSTRUCTION IS COMPLETED AND DURING THE FOLLOWING PERIODS: MARCH 15 THROUGH JUNE 15 AND SEPT. 15 THROUGH NOV. 15, UNLESS OTHERWISE APPROVED BY THE DIRECTOR.

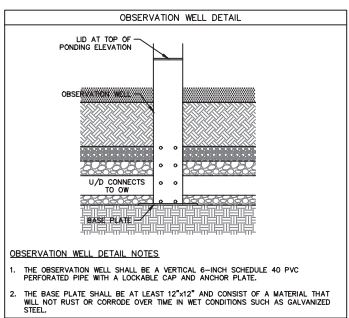
ALL AREAS SURROUNDING THE FACILITY THAT ARE GRADED OR BONDED DURING CONSTRUCTION OF THE FACILITY AND ARE TO BE PLANTED WITH TURF GRASS MUST BE SOLOED.

THE FACILITY MUST BE INSPECTED AT 12-24 AND 36-48 HOURS AFTER A SIGNIFICANT RAINFALL (0.5-1.0 INCHES) OR ARTIFICIAL FLOODING TO DETERMINE THAT THE FACILITY IS DRAINING PROPERLY. RESULTS OF THE INSPECTION MUST BE PROVIDED TO LIDS BEFORE BOND RELEASE.

Table with 3 columns: DIMENSIONS, SW PLANTER BOXES, MICRO BIORETENTION. Rows A, B, C with dimensions 6.0", 12", 12" and 12", 24", 24".

Table with 2 columns: MAINTENANCE TASKS, FREQUENCY. Rows include mowing of grass filter strips, spot weeding, erosion repair, trash removal, mulch planting, sod reinforcement, etc.

REPLACE THE MULCH LAYER EVERY 3 YRS



- 1. THE OBSERVATION WELL SHALL BE A VERTICAL 6-INCH SCHEDULE 40 PVC PERFORATED PIPE WITH A LOCKABLE CAP AND ANCHOR PLATE. 2. THE BASE PLATE SHALL BE AT LEAST 12"x12" AND CONSIST OF A MATERIAL THAT WILL NOT RUST OR CORRODE OVER TIME IN WET CONDITIONS SUCH AS GALVANIZED STEEL.

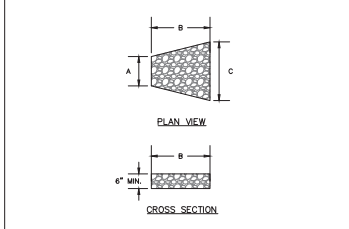
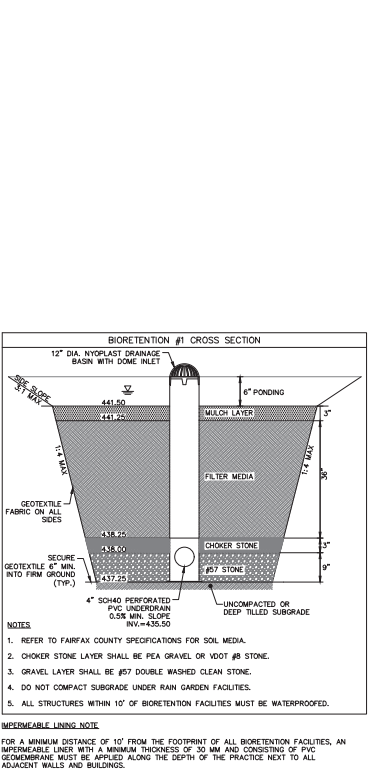


Table with 3 columns: DIMENSIONS, SW PLANTER BOXES, MICRO BIORETENTION. Rows A, B, C with dimensions 6.0", 12", 12" and 12", 24", 24".

- 1. STONES SHALL HAVE A MINIMUM MEAN DIAMETER (D50) OF 3" 2. DEPTH OF STONE SHALL BE AT LEAST 6" 3. STONE MAY BE GROUTED IN PLACE AT CLIENT/CONTRACTOR OPTION.

VELOCITY DISSIPATION STONE BLANKET NOTES

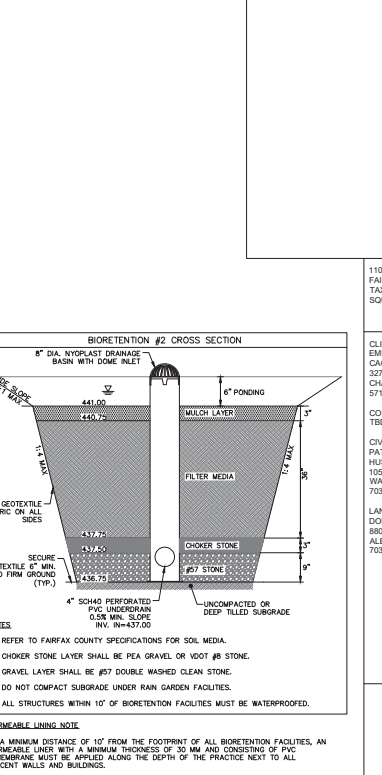
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- 1. REFER TO FAIRFAX COUNTY SPECIFICATIONS FOR SOIL MEDIA. 2. CHOKER STONE LAYER SHALL BE PEA GRAVEL OR VDOT #007. 3. GRAVEL LAYER SHALL BE #57 DOUBLE WASHED CLEAN STONE. 4. DO NOT COMPACT SUBGRADE UNDER RAIN GARDEN FACILITIES. 5. ALL STRUCTURES WITHIN 10' OF BIORETENTION FACILITIES MUST BE WATERPROOFED.

IMPERMEABLE LINING NOTE

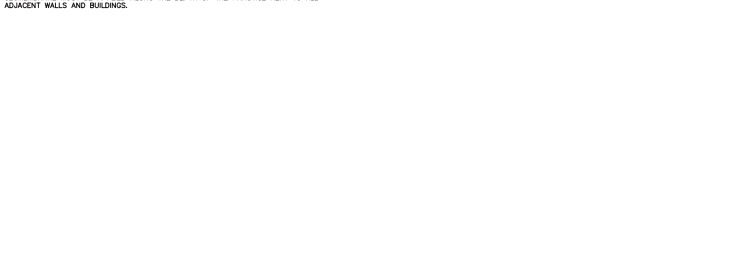
FOR A MINIMUM DISTANCE OF 10' FROM THE FOOTPRINT OF ALL BIORETENTION FACILITIES, AN IMPERMEABLE LINER WITH A MINIMUM THICKNESS OF 30 MM AND CONSISTING OF PVC GEOMEMBRANE MUST BE APPLIED ALONG THE DEPTH OF THE PRACTICE NEXT TO ALL ADJACENT WALLS AND BUILDINGS.



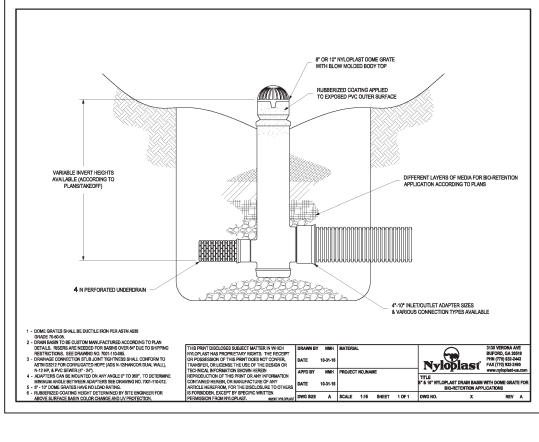
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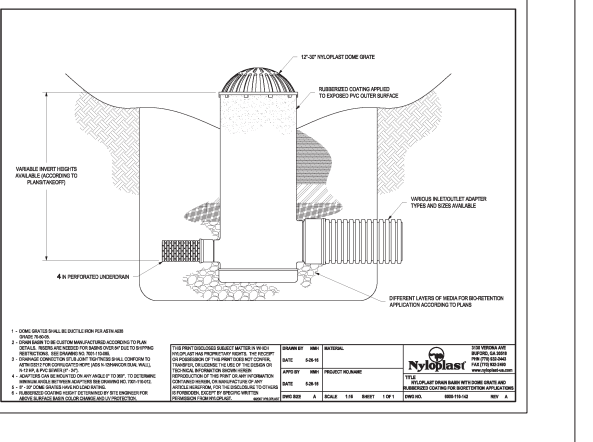
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- 1. - DOME INLET SHALL BE IDENTICAL PER PLAN VIEW 2. - DOME INLET SHALL BE IDENTICAL PER PLAN VIEW 3. - ALL MATERIALS SHALL BE IDENTICAL PER PLAN VIEW 4. - ALL MATERIALS SHALL BE IDENTICAL PER PLAN VIEW 5. - ALL MATERIALS SHALL BE IDENTICAL PER PLAN VIEW 6. - ALL MATERIALS SHALL BE IDENTICAL PER PLAN VIEW 7. - ALL MATERIALS SHALL BE IDENTICAL PER PLAN VIEW 8. - ALL MATERIALS SHALL BE IDENTICAL PER PLAN VIEW 9. - ALL MATERIALS SHALL BE IDENTICAL PER PLAN VIEW 10. - ALL MATERIALS SHALL BE IDENTICAL PER PLAN VIEW



- 1. - DOME INLET SHALL BE IDENTICAL PER PLAN VIEW 2. - DOME INLET SHALL BE IDENTICAL PER PLAN VIEW 3. - ALL MATERIALS SHALL BE IDENTICAL PER PLAN VIEW 4. - ALL MATERIALS SHALL BE IDENTICAL PER PLAN VIEW 5. - ALL MATERIALS SHALL BE IDENTICAL PER PLAN VIEW 6. - ALL MATERIALS SHALL BE IDENTICAL PER PLAN VIEW 7. - ALL MATERIALS SHALL BE IDENTICAL PER PLAN VIEW 8. - ALL MATERIALS SHALL BE IDENTICAL PER PLAN VIEW 9. - ALL MATERIALS SHALL BE IDENTICAL PER PLAN VIEW 10. - ALL MATERIALS SHALL BE IDENTICAL PER PLAN VIEW



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Table with 4 columns: APPROVAL, DATE, REVISIONS, COMMENTS. Rows for MM/DD/YYYY COMMENT.

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11024 N 11036 PARK RD FAIRFAX, VA 22306 TAX MAP PRECENDING SQUARE ECD LOT 002

CLIENT EMRE CIREKCOGLU CAGLAYAN INVESTMENT GROUP 32713 LATROBE ST CHANTILLY, VA 20152 571.584.6563

CONTRACTOR TBD

CIVIL ENGINEER PATRICK HORGAN HUSKA CONSULTING, LLC 1050 30TH STREET, NW WASHINGTON, DC 20007 703.425.3862

LAND SURVEYOR DOMINION SURVEYS, INC. 8808 H PEAR TREE VILLAGE COURT ALEXANDRIA, VA 22309 703.619.6555



BIORETENTION DETAILS DRAWING TITLE 014 DRAWING NO.



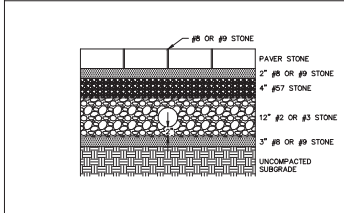
VA DEQ BMP SPECIFICATION NO. 7 - TABLE 7.6 MATERIAL SPECIFICATIONS FOR UNDERNEATH THE PAVEMENT SURFACE

MATERIAL	SPECIFICATION	NOTES
BEDDING LAYER	PC: NONE PA: 2 IN. OF NO. 57 STONE PF: 2 IN. OF NO. 8 STONE OVER 4 INCHES OF NO. 57 STONE	ASTM D448 SIZE NO. 8 STONE (E.G. 3/8 TO 3/4 INCH IN SIZE). SHOULD BE WASHED AND CLEAN AND FREE OF ALL FINES.
RESERVOIR LAYER	PC: NO. 57 STONE PA: NO. 2 STONE PF: NO. 2, 3, OR 4 STONE	ASTM D448 SIZE NO. 57 STONE (E.G. 1 1/2 TO 1/2 INCH IN SIZE); NO. 2 STONE (E.G. 3/8 INCH TO 3/4 INCH IN SIZE). DEPTH IS BASED ON THE PAVEMENT STRUCTURAL AND HYDRAULIC REQUIREMENTS. SHOULD BE WASHED AND CLEAN AND FREE OF ALL FINES.
UNDERDRAIN	USE 4 TO 6 INCH DIAMETER PERFORATED PVC (ASTM D 252) PIPE, WITH 3/8-INCH PERFORATIONS AT 6 INCHES ON CENTER. EACH UNDERDRAIN INSTALLED AT A MINIMUM SLOPE LOCATED 20 FEET OR LESS FROM THE NEXT PIPE (OR EQUIVALENT CORRUGATED HDPE MAY BE USED FOR SMALLER LOAD-BEARING APPLICATIONS). PERFORATED PIPE INSTALLED FOR THE FULL LENGTH OF THE PERMEABLE PAVEMENT CELL, AND NON-PERFORATED PIPE, AS NEEDED, IS USED TO CONNECT WITH THE STORM DRAIN SYSTEM. 'S' AND 'TS' INSTALLED AS NEEDED, DEPENDING ON THE UNDERDRAIN CONFIGURATION. EXTEND CLEANOUT PIPES TO THE SURFACE WITH VENTED CAPS AT THE 'S' AND 'TS'.	
FILTER LAYER	THE UNDERLYING NATIVE SOILS SHOULD BE SEPARATED FROM THE STONE RESERVOIR BY A MIN. 2 TO 4 INCH LAYER OF CHOKER (E.G. NO. 8) COVERED BY A 6 TO 8 INCH LAYER OF COARSE SAND (E.G. ASTM C 33, GRADATION).	THE SAND SHOULD BE PLACED BETWEEN THE STONE RESERVOIR AND THE CHOKER STONE, WHICH SHOULD BE PLACED ON TOP OF THE UNDERLYING NATIVE SOILS.
FILTER FABRIC	USE AN APPROPRIATE FILTER FABRIC FOR THE PARTICULAR APPLICATION BASED ON AASHTO M288-06. FILTER FABRIC SHOULD HAVE A FLOW RATE GREATER THAN 125 GPM/SQ. FT. (ASTM D4491), AND AN APPEARANT OPENING SIZE (AOS) EQUIVALENT TO A US # 70 OR # 80 SIEVE (ASTM D4751). THE GEOTEXTILE AOS SELECTION IS BASED ON THE PERCENT PASSING THE NO. 200 SIEVE IN "A" SOIL SUBGRADE, USING FHWA OR AASHTO SELECTION CRITERIA.	
IMPERMEABLE LINER	USE A THIRTY MIL (MINIMUM) PVC GEOMEMBRANE LINER COVERED BY 8 TO 12 OZ./SQ. YD.2 NON-WOVEN GEOTEXTILE. NOTE: THIS IS USED ONLY FOR KARST REGIONS.	
OBSERVATION WELL	USE A PERFORATED 4 TO 6 INCH VERTICAL PVC PIPE (ASTM D 252) WITH A LOCKABLE CAP, INSTALLED FLUSH WITH THE SURFACE.	

VA DEQ BMP SPECIFICATION NO. 7 - TABLE 7.8 RECOMMENDED MAINTENANCE TASKS FOR PERMEABLE PAVEMENT PRACTICES

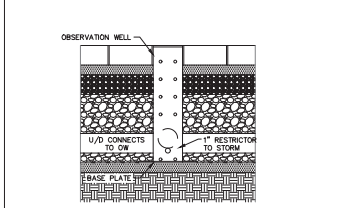
MAINTENANCE TASKS	FREQUENCY
FOR THE FIRST 6 MONTHS FOLLOWING CONSTRUCTION, THE PRACTICE AND CONTRIBUTING DRAINAGE AREA SHOULD BE INSPECTED AT LEAST TWICE AFTER STORM EVENTS THAT EXCEED 1/2 INCH OF RAINFALL. CONDUCT ANY NEEDED REPAIRS OR STABILIZATION.	AFTER INSTALLATION
MOW GRASS IS GRID PAVEMENT APPLICATIONS	AT LEAST 1 TIME EVERY 1-2 MONTHS DURING THE GROWING SEASON
STABILIZE THE CDA TO PREVENT EROSION. REMOVE ANY SOIL OR SEDIMENT DEPOSITED ON PAVEMENT. REPLACE OR REPAIR ANY NECESSARY PAVEMENT SURFACE AREAS THAT ARE DEGENERATING OR SPALLING	AS NEEDED
VACUUM PAVEMENT WITH A STANDARD STREET SWEEPER TO PREVENT CLOGGING	2-4 TIMES PER YEAR (DEPENDING ON USE)
CONDUCT A MAINTENANCE INSPECTION SPOT REPAIRS OF GRASS APPLICATIONS	ANNUALLY
REMOVE ANY ACCUMULATED SEDIMENT IN PRE-TREATMENT CELLS AND INFLOW POINTS	ONCE EVERY 2 TO 3 YEARS
CONDUCT MAINTENANCE USING A REGENERATIVE STREET SWEEPER. REPLACE ANY NECESSARY JOINT MATERIAL	IF CLOGGED

VEHICLE-LOADED PERMEABLE PAVER CROSS SECTION



- PERMEABLE PAVER DETENTION FACILITY DETAILS NOTES**
- PAVER TYPE, STYLE, AND MANUFACTURER PER ARCHITECTURAL PLANS. USE MANUFACTURER'S SPECIFICATIONS.
 - UNDERDRAINS SHALL BE 4" PERFORATED SCHEDULE 40 PVC UNLESS NOTED OTHERWISE. UNDERDRAINS SHALL BE INSTALLED 2" ABOVE COMPACTED SUBGRADE.
 - SPACE BETWEEN PAVERS MUST BE FILLED WITH #8 OR #9 STONE UP TO 1/4" FROM THE SURFACE.

PERMEABLE PAVER OBSERVATION WELL DETAIL



- PERMEABLE PAVER OBSERVATION WELL DETAIL NOTES**
- THE OBSERVATION WELL SHALL BE A VERTICAL 6-INCH SCHEDULE 40 PVC PERFORATED PIPE WITH A LOCKABLE CAP AND ANCHOR PLATE.
 - THE BASE PLATE SHALL BE AT LEAST 12"x12" AND CONSIST OF A MATERIAL THAT WILL NOT RUST OR CORRODE OVER TIME IN WET CONDITIONS SUCH AS GALVANIZED STEEL.
 - REFER TO ARCHITECTURAL PLANS FOR THE TOP TO BE USED FOR THE OBSERVATION WELL, WHICH DOUBLES AS A DRAIN.

IMPERMEABLE LINING NOTE
FOR A MINIMUM DISTANCE OF 10' FROM THE FOOTPRINT OF ALL BIORETENTION FACILITIES, AN IMPERMEABLE LINER WITH A MINIMUM THICKNESS OF 30 MM AND CONSISTING OF PVC GEOMEMBRANE MUST BE APPLIED ALONG THE DEPTH OF THE PRACTICE NEXT TO ALL ADJACENT WALLS AND BUILDINGS.

11004 & 11030 PARK RD
FAIRFAX, VA 22036
TAX MAP APENDING
SQUARE 02, LOT 002

CLIENT
EMRE ZIREKOGLU
CAGLAYAN INVESTMENT GROUP
32713 LATROBE ST
CHANTILLY, VA 20152
571.564.6363

CONTRACTOR
TBD

CIVIL ENGINEER
PATRICK HORGAN
HUSKA CONSULTING, LLC
1050 30TH STREET, NW
WASHINGTON, DC 20007
703.425.3862

LAND SURVEYOR
DOMINION SURVEYS, INC.
8808-H PEAR TREE VILLAGE COURT
ALEXANDRIA, VA 22309
703.619.6555



REAL

PERMEABLE
PAVEMENT DETAILS

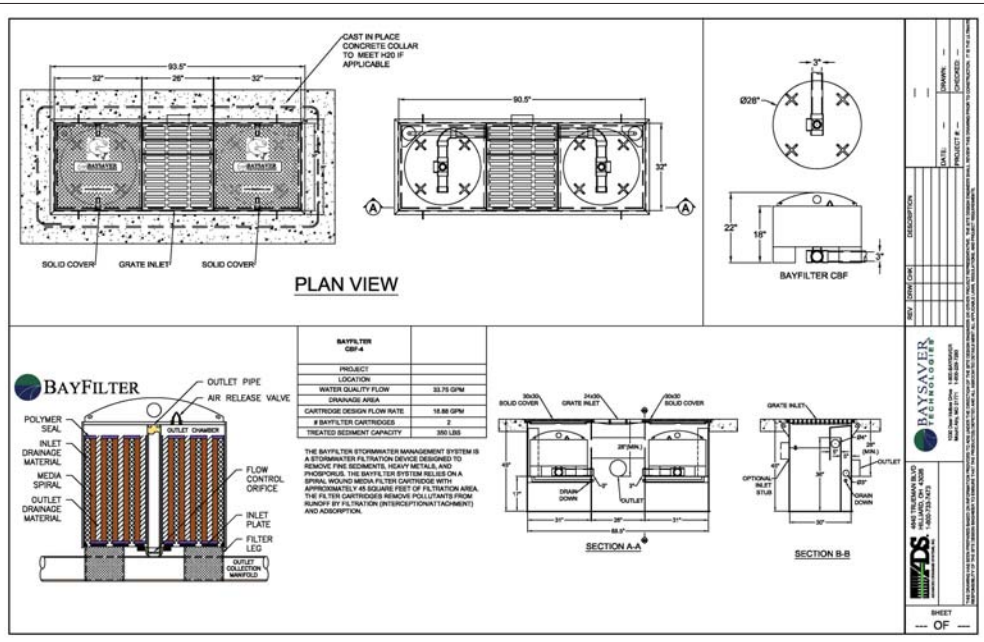
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APPROVAL	DATE	REVISIONS
	MM/DD/YYYY	COMMENT
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DATE:	PROJECT #:
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DESIGNATION:	
SCALE:	
SHEET NO.:	TOTAL SHEETS:
SHEET OF	

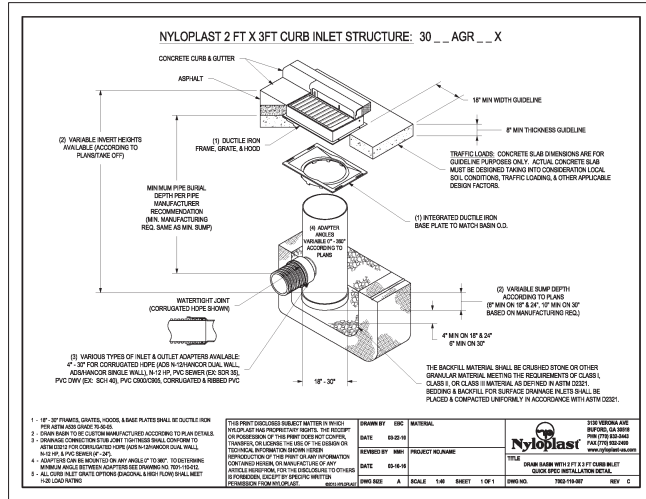
11034 & 11036 PARK RD
FAIRFAX, VA 22036
TAX MAP APENDING
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DOMINION SURVEYS, INC.
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APPROVAL	DATE	REVISIONS
	MM/DD/YYYY	COMMENT
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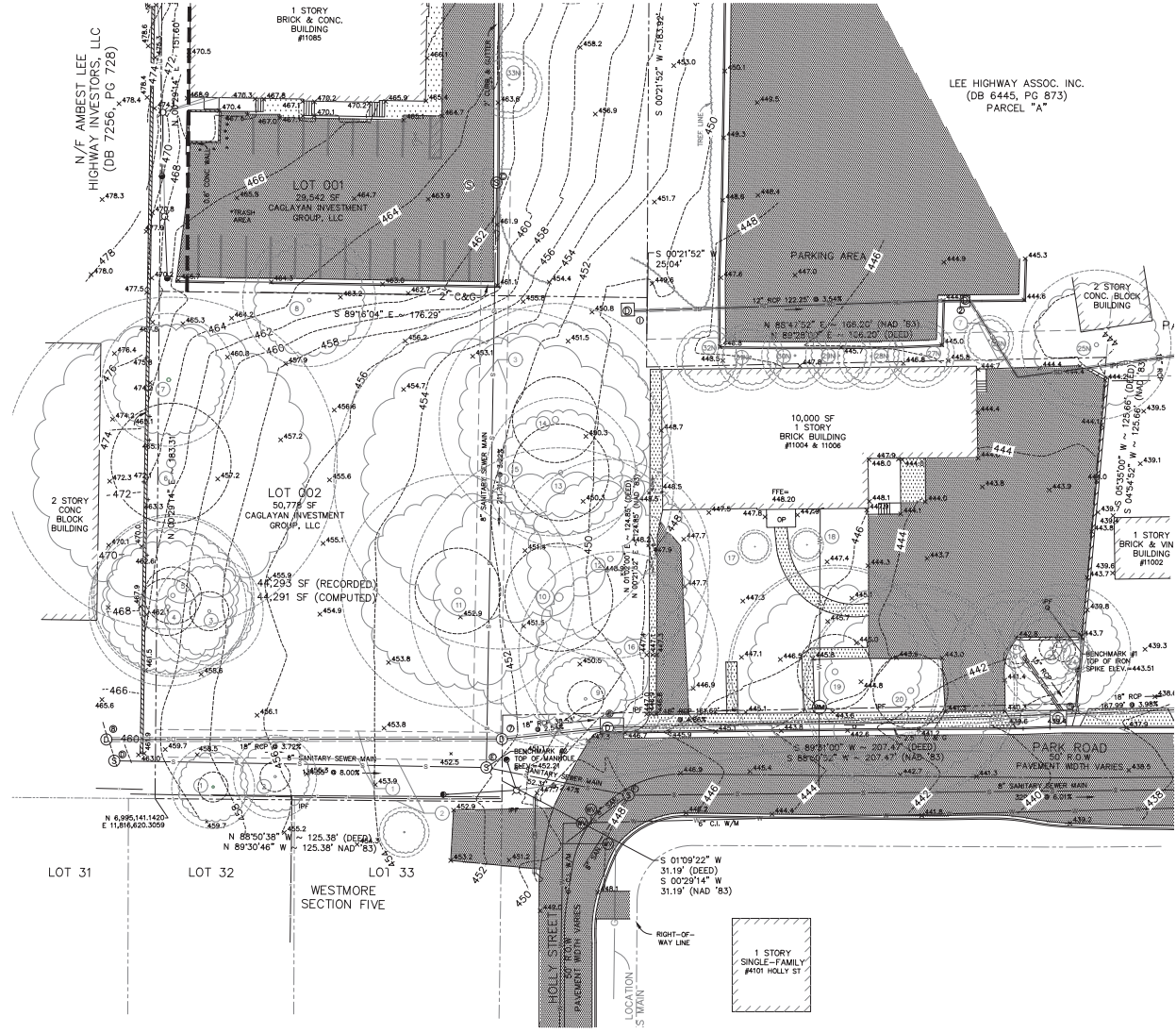
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Tree List for 11004Park Rd. Fairfax City, VA
 Prepared by Bill Becker, ISA Certified Arborist # MA-0216A November 18, 2021

N denotes neighbor's tree. R denotes City ROW tree.

Tree #	Common Name Botanical name	DBH Inch	Condition	Life Exp	Preservation Measures	Canopy Sq. Ft.
1	Black Locust <i>Robinia pseudoacacia</i>	10"	Fair	>10	To be determined.	N/A
2	Black Locust <i>Robinia pseudoacacia</i>	10"	Fair	>10	To be determined.	N/A
3	Black Locust <i>Robinia pseudoacacia</i>	13"	Fair	>10	To be determined.	N/A
4	Tulip Poplar <i>Liriodendron tulipifera</i>	19"	Dead	0	To be determined.	N/A
5	Tulip Poplar <i>Liriodendron tulipifera</i>	19"	Dead	0	To be determined.	N/A
6	Pin Oak <i>Quercus palustris</i>	40"	Fair	>7	To be determined.	N/A
7	Black Locust <i>Robinia pseudoacacia</i>	16"	Dead	0	To be determined.	N/A
8	Bradford Pear <i>Pyrus calleryana</i>	16"	Fair	>10	To be determined.	N/A
9	Black Locust <i>Robinia pseudoacacia</i>	12"	Poor	-3	To be determined.	N/A
10	Wild Cherry <i>Prunus serotina</i>	36"	Poor	-3	To be determined.	N/A
11	Tulip Poplar <i>Liriodendron tulipifera</i>	28"	Fair	>10	To be determined.	N/A
12	Tulip Poplar <i>Liriodendron tulipifera</i>	24"	Fair	>10	To be determined.	N/A
13	White Ash <i>Fraxinus americana</i>	18"	Fair	>10	To be determined.	N/A
14	Red Maple <i>Acer rubrum</i>	28"	Fair	>10	To be determined.	N/A
15	Tulip Poplar <i>Liriodendron tulipifera</i>	41"	Fair	>10	To be determined.	N/A
16	Tulip Poplar <i>Liriodendron tulipifera</i>	24"	Fair	>10	To be determined.	N/A
17	Sugar Maple <i>Acer saccharum</i>	4"	Good	>10	To be determined.	N/A
18	Sugar Maple <i>Acer saccharum</i>	4"	Good	>10	To be determined.	N/A
19	Tulip Poplar <i>Liriodendron tulipifera</i>	25"	Good	>10	To be determined.	N/A
20	Pin Oak <i>Quercus palustris</i>	25"	Good	>10	To be determined.	N/A
21	Eastern Redcedar <i>Juniperus virginiana</i>	16"	Good	>10	To be determined.	N/A

22	Eastern Redcedar <i>Juniperus virginiana</i>	9"	Good	>10	To be determined.	N/A
23	Eastern Redcedar <i>Juniperus virginiana</i>	16"	Good	>10	To be determined.	N/A
24	Wild Cherry <i>Prunus serotina</i>	4"	Poor	-3	To be determined.	N/A
25N	White Pine <i>Pinus strobus</i>	18"	Dead	0	To be determined.	N/A
26N	Layland Cypress <i>Cupressocyparis leylandii</i>	6"	Good	>10	To be determined.	N/A
27N	Layland Cypress <i>Cupressocyparis leylandii</i>	8"	Good	>10	To be determined.	N/A
28N	Layland Cypress <i>Cupressocyparis leylandii</i>	8"	Good	>10	To be determined.	N/A
29N	Layland Cypress <i>Cupressocyparis leylandii</i>	8"	Good	>10	To be determined.	N/A
30N	Layland Cypress <i>Cupressocyparis leylandii</i>	8"	Good	>10	To be determined.	N/A
31N	Layland Cypress <i>Cupressocyparis leylandii</i>	8"	Good	>10	To be determined.	N/A
32N	Layland Cypress <i>Cupressocyparis leylandii</i>	8"	Fair	>10	To be determined.	N/A
33N	Black Locust <i>Robinia pseudoacacia</i>	8"	Fair	>10	To be determined.	N/A
34N	Black Walnut <i>Juglans nigra</i>	8"	Fair	>10	To be determined.	N/A
35N	White Mulberry <i>Morus alba</i>	8"	Fair	>10	To be determined.	N/A
36N	Black Walnut <i>Juglans nigra</i>	16"	Fair	>10	To be determined.	N/A



11004 & 11006 PARK RD
FAIRFAX, VA 22036
TAX MAP REFERENCE
SQUARE 02, LOT 002

CLIENT
EMRE ZIREKCOGLU
CAGLAYAN INVESTMENT GROUP
32713 LATROBE ST
CHANTILLY, VA 20152
571.584.6363

CONTRACTOR
TBD

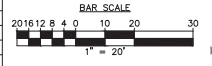
CIVIL ENGINEER
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703.425.3862

LAND SURVEYOR
DOMINION SURVEYS, INC.
8808-H PEAR TREE VILLAGE COURT
ALEXANDRIA, VA 22309
703.619.6555

EXISTING CONDITIONS PLAN NOTES

- THIS EXISTING CONDITIONS PLAN IS BASED ON A SURVEY AND AUTOCAD FILES PERFORMED AND PROVIDED BY DOMINION ENGINEERS, INC.
- THE LOCATIONS AND DEPTHS OF EXISTING UTILITIES ARE APPROXIMATE AND BASED ON AVAILABLE RECORDS AND, WHERE INFORMATION IS NOT AVAILABLE, ASSUMPTIONS. CONTRACTOR SHALL LOCATE AND CONFIRM ALL UTILITIES WITHIN THE BOUNDS OF CONSTRUCTION PRIOR TO UNDERTAKING ANY DEMOLITION OR EXCAVATION.

APPROVAL	DATE	REVISIONS
	MM/DD/YYYY	COMMENT
	MM/DD/YYYY	COMMENT
	MM/DD/YYYY	COMMENT



NOT FOR CONSTRUCTION
 REZONING PLANS
 01/25/2022



TREE SURVEY

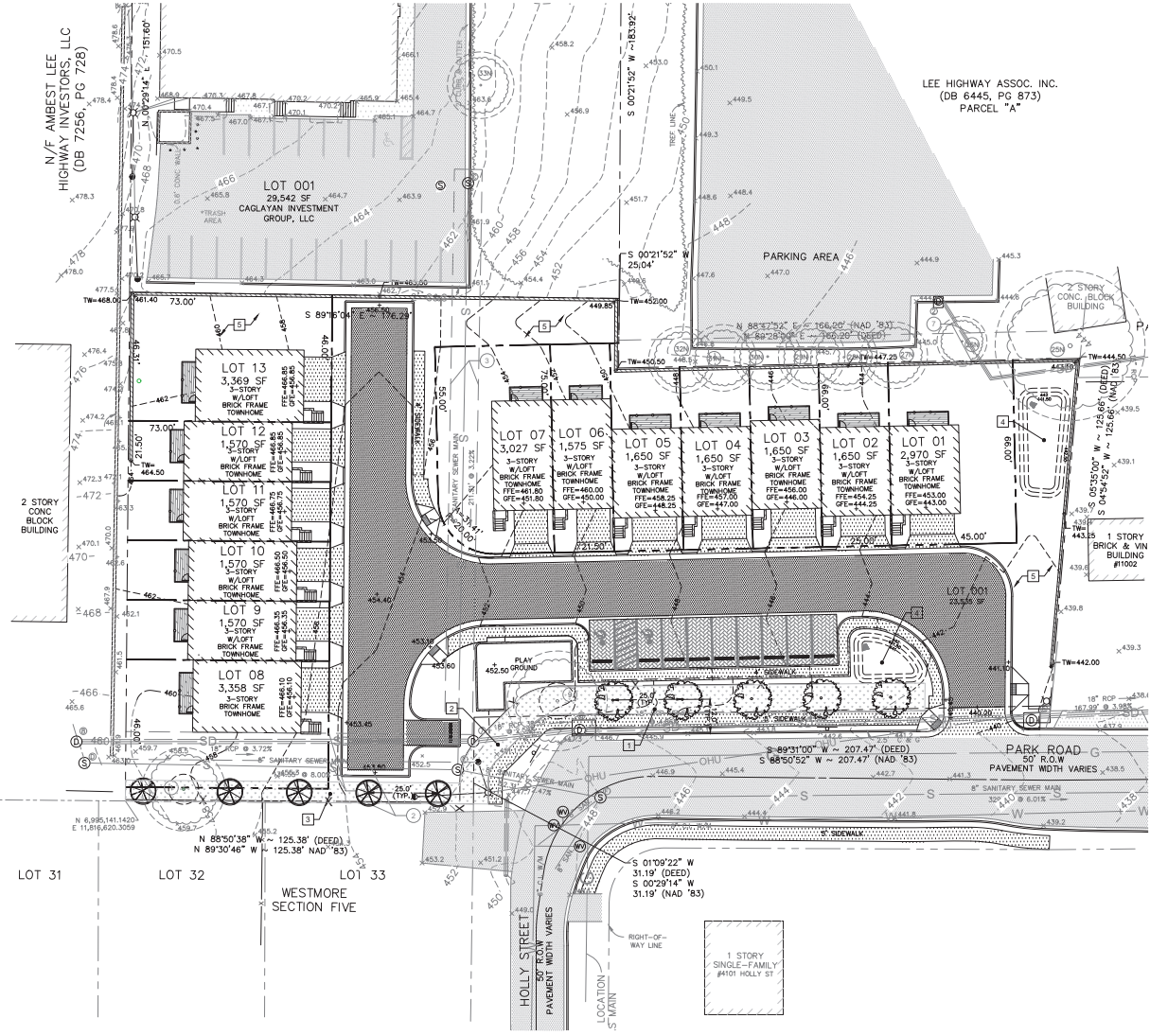
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LANDSCAPE PLAN LEGEND



LANDSCAPE CONSERVATION PLAN KEYNOTES

- 1 10'-FT WIDE LANDSCAPE BUFFER ALONG PARK RD R.O.W.
TOTAL LENGTH=185'-FT
1 TREE REQUIRED PER 40 LF
TOTAL TREES REQUIRED=5
TOTAL TREES PROVIDED=6
PRESERVE EXISTING LOCUST TREE WITHIN LANDSCAPE BUFFER
PLANT 5 NEW TREES
- 2 TREES CANNOT BE PLANTED IN THIS AREA DUE TO EXISTING SEWER, STORM, AND WATER INFRASTRUCTURE
- 3 7.5'-FT WIDE TY-1 LANDSCAPE TRANSITION YARD ALONG ADJACENT R-M ZONED LOTS
TOTAL LENGTH=125 LF
6'-FT TALL WOOD SCREENING FENCE ALONG PROPERTY LINE
NO CANOPY TREES REQUIRED OR PROVIDED
4 UNDERSTORY TREES REQUIRED PER 100 LF
TOTAL UNDERSTORY TREES REQUIRED=5
TOTAL UNDERSTORY TREES PROVIDED=6
PRESERVE EXISTING LOCUST TREE WITHIN TRANSITION YARD
- 4 BIORETENTION PLANTING PLAN TO BE DEVELOPED DURING SITE PLAN
FREE CANOPY CALCULATIONS AND REQUIRED PLANTINGS TO BE DEVELOPED DURING SITE PLAN
- 5 TREE PLANTING'S LOCATION SHOWN CONCEPTUALLY AND SUBJECT TO CHANGE PER OWNER'S REQUEST. PLANTING LOCATION'S SHALL ADHERE TO THE REQUIREMENTS OF SECTION 12-2315.5 OF THE FAIRFAX COUNTY PUBLIC FACILITIES MANUAL (TYPICAL).



LEE HIGHWAY ASSOC. INC.
(DB 6445, PC 873)
PARCEL "A"

11034 & 11036 PARK RD
FAIRFAX, VA 22036
TAX MAP APPENDING
SQUARE 02, LOT 002

CLIENT
EMRE CIREKCOGLU
CAGLAYAN INVESTMENT GROUP
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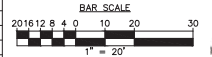
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TBD

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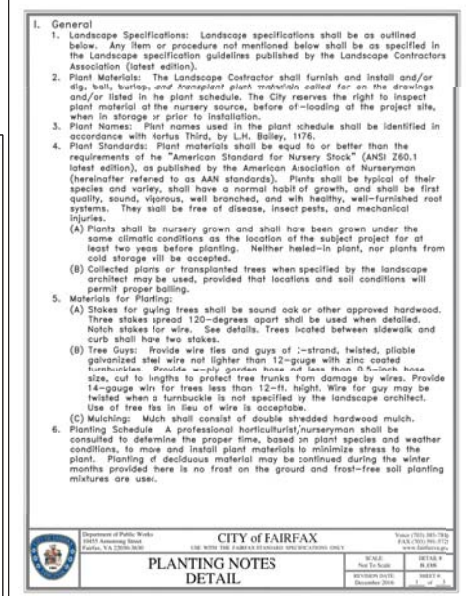
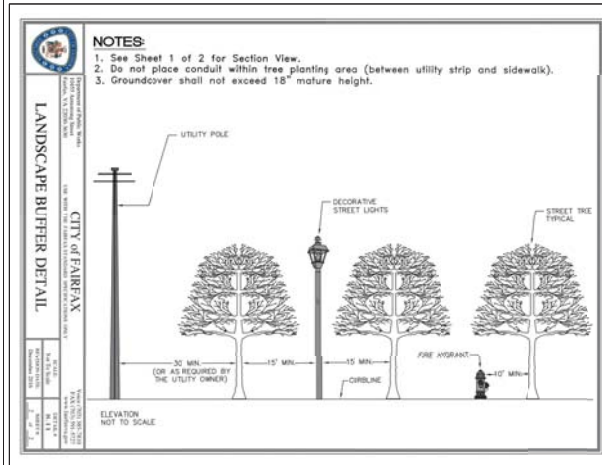
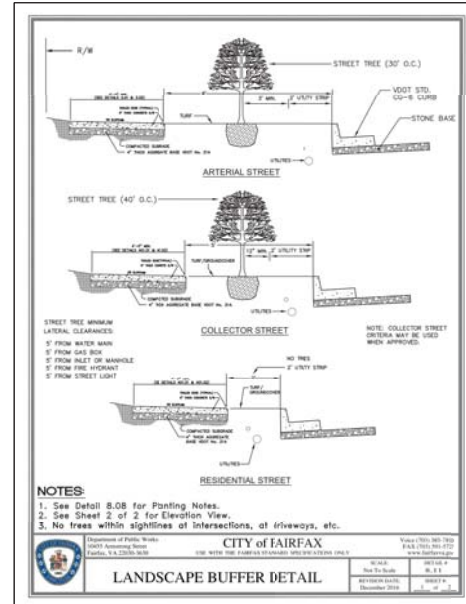
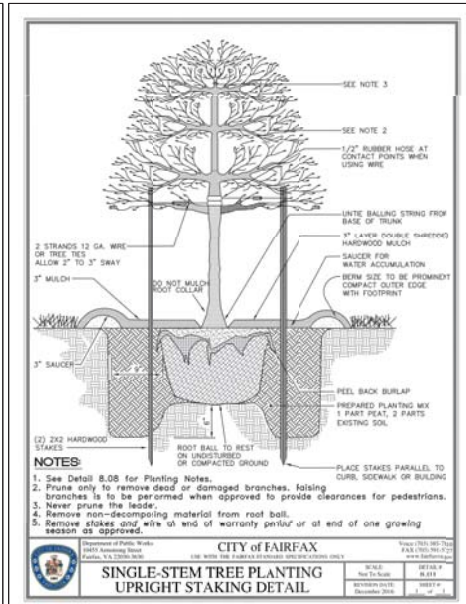
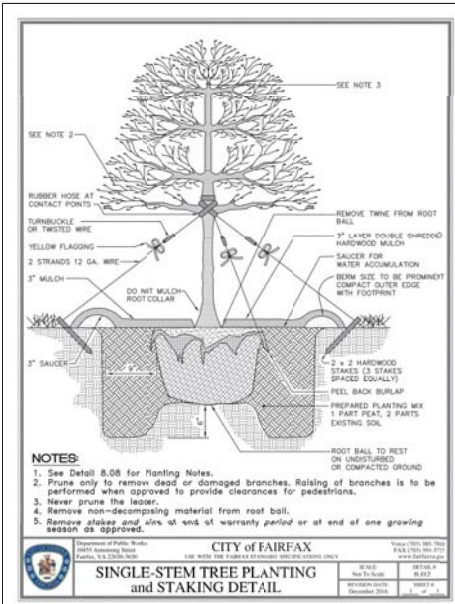
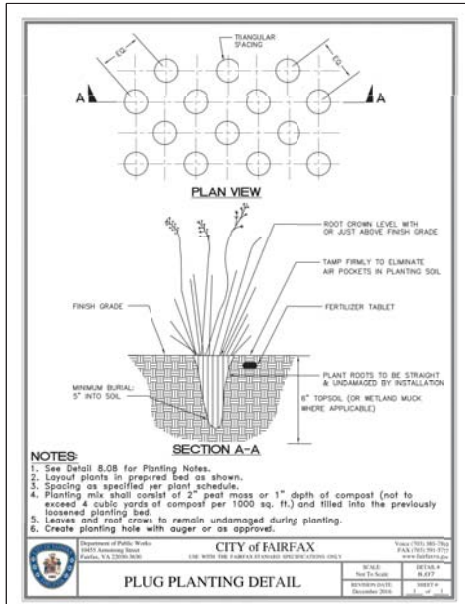
LAND SURVEYOR
DOMINION SURVEYS, INC.
8808-H PEAR TREE VILLAGE COURT
ALEXANDRIA, VA 22309
703.619.6555



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	MM/DD/YYYY	COMMENT
	MM/DD/YYYY	COMMENT
	MM/DD/YYYY	COMMENT



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REZONING PLANS
01/25/2022



11034 & 11036 PARK RD
FAIRFAX, VA 22036
TAX MAP REFENDING
SQUARE 02, LOT 002

CLIENT
EMRE ZIREKOGLU
CAGLAYAN INVESTMENT GROUP
32713 LATROBE ST
CHANTILLY, VA 20152
571.584.6563

CONTRACTOR
TBD

CIVIL ENGINEER
PATRICK HORSAN
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01/25/2022

LANDSCAPE DETAILS

DRAWING TITLE

019

DRAWING NO.