

DRAWING FILE PATH: D:\DROPOBOX (ANDROPOGON\NC)\130014.01 POTOMAC GREENS\DRAWINGS\PHASE 2\DRAWING SET\500_POTOMAC METRO 30% DD FILES\2016-05-17 130014 30% DD AA DWG\LC-000-130014.DWG
DATE MODIFIED: 5/17/2016

PROPERTY OWNER
THE CITY OF ALEXANDRIA
301 KING ST
ALEXANDRIA, VA 22314

LANDSCAPE ARCHITECT
ANDROPOGON ASSOCIATES
10 SHURS LANE
PHILADELPHIA, PA 19127
215.487.0700
www.andropogon.com

CIVIL ENGINEERING
PRIME AE
3201 JERMANTOWN ROAD, SUITE 660
FAIRFAX, VA 22030
703.865.0606
www.primeeng.com

STRUCTURAL ENGINEER
KEARST & HOOD
400 MARKET STREET, SUITE 1250
PHILADELPHIA, PA 19106
215.625.0099
www.keasthood.com

IRRIGATION CONSULTING, INC.
IRRIGATION DESIGN
4 HOTEL PLACE
PEPPERELL, MA 01463
978.433.8972
www.irrigationconsulting.com

PRELIMINARY SITE PLAN SUBMISSION

POTOMAC GREENS PARK

CITY OF ALEXANDRIA, VA

STORMWATER QUALITY ARTICLE XIII REQUIREMENTS NARRATIVE AND IMPERVIOUS SURFACE CALCULATIONS

SEE SHEET SW-100, SW-101, SW-102

ZONING TABULATIONS

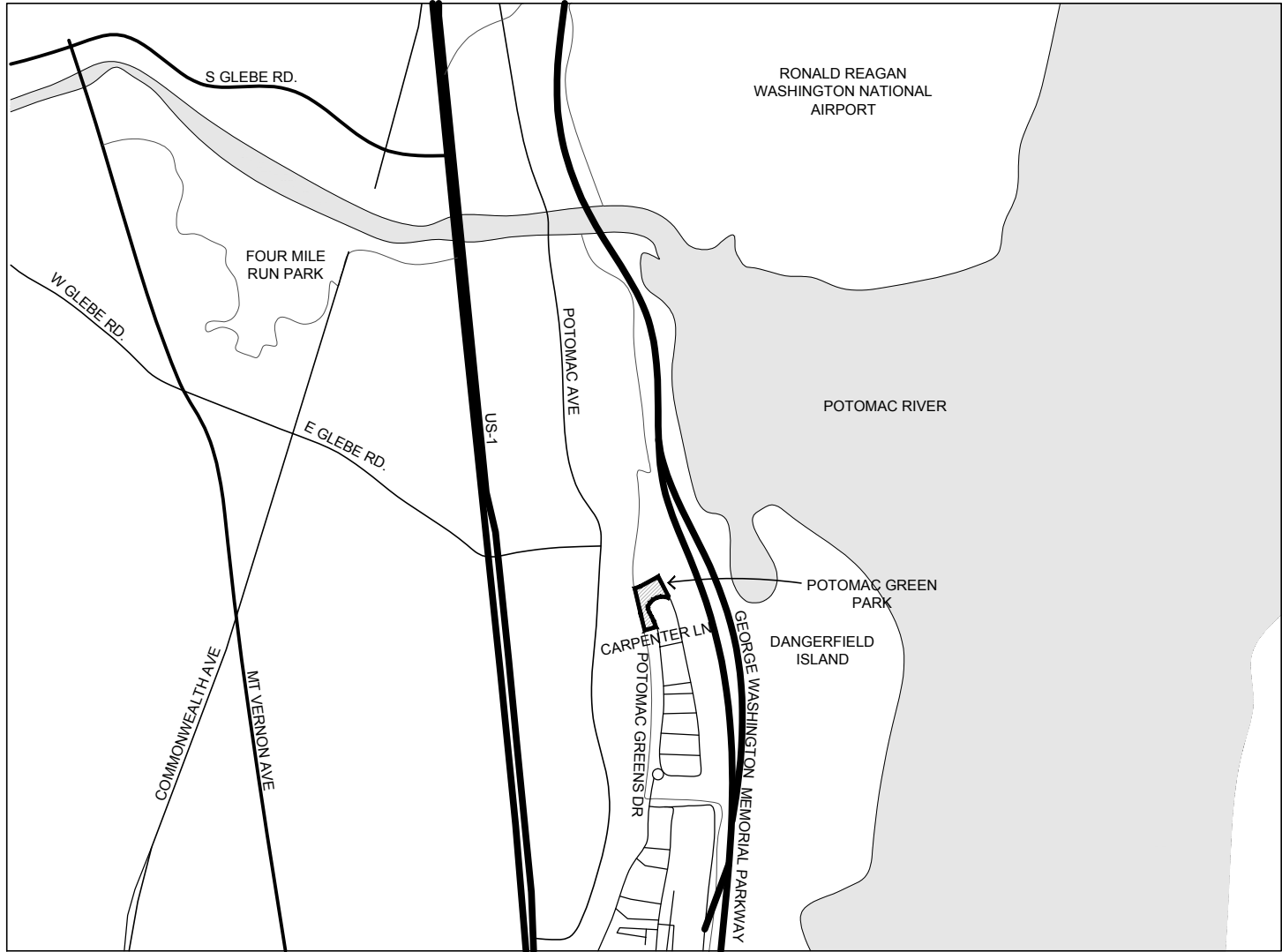
ONING OF THE SITE:	CDD #10
EXISTING USES ON THE SITE:	PASSIVE NEIGHBORHOOD PARK
PROPOSED USES ON THE SITE:	PASSIVE NEIGHBORHOOD PARK
ORIGINAL LOT AREA:	±43,560 SQFT PARK WITHIN THE 805,195 SQFT PARCEL
NEW LOT AREA:	±92,363 SQFT
REFINED TABULATIONS	
DENSITY:	0
GROSS SQFT OF BUILDINGS:	N/A
FLOOR AREA RATIO (FAR):	N/A
BUILDING HEIGHTS:	N/A
PARKING LAYOUT:	N/A
OPEN SPACE:	±43,560 SQFT PARK WITHIN THE 805,195 SQFT PARCEL
PROPOSED PARKING:	
REQUIRED:	0
PROVIDED:	0
NUMBER OF DWELLING UNITS:	N/A
UNITS/ACRE, RESIDENTIAL:	N/A
GROSS FLOOR AREA:	N/A
NET FLOOR AREA:	N/A
OPEN SPACE:	
GROUND LEVEL:	±43,560 SQFT PARK WITHIN THE 805,195 SQFT PARCEL
ROOF TOP:	N/A
TOTAL:	±43,560 SQFT PARK WITHIN THE 805,195 SQFT PARCEL
AVERAGE FINISHED GRADE:	N/A
AVERAGE HEIGHT:	N/A
BUILDING SETBACK:	N/A

PARKING TABULATIONS

LOT FRONTAGE:	
REQUIRED:	0
PROVIDED:	0
PARKING SPACES:	
COMPACT:	0
STANDARD:	0
HANDICAP:	0
TOTAL:	0
LOADING SPACES:	
REQUIRED:	0
PROVIDED:	0
EXISTING TRIP GENERATION:	N/A
PROPOSED TRIP GENERATION:	N/A

PROJECT TABULATIONS

TOTAL PROJECT AREA:	±92,363 SQFT
TOTAL AREA OF DISTURBANCE:	±44,770 SQFT



VICINITY MAP
NTS

NARRATIVE

THIS POTOMAC GREENS PARK PLAN IS INTENDED TO PROVIDE ENHANCEMENTS TO THE EXISTING PARK AS A RESULT OF IMPACTS TO THE EXISTING PARK FROM THE PLANNED CONSTRUCTION OF THE POTOMAC YARD METRO STATION. THE LAND IS CURRENTLY ZONED CDD 10. ITS PROPOSED DEVELOPMENT IS NOT MATERIALLY DIFFERENT FROM WHAT CURRENTLY EXISTS. EXISTING SITE CONDITIONS INCLUDE AGING PLAY EQUIPMENT, AN OPEN FIELD, AND A GAZEBO WHICH WILL BE RELOCATED ON THE SITE. IN ADDITION THERE ARE SEVERAL PICNIC TABLES AND OTHER PARK FURNISHINGS.

EXISTING/PROPOSED SPECIAL USE PERMITS ZONING MODIFICATIONS/WAIVERS

1. MAJOR AMENDMENT TO AN EXISTING DEVELOPMENT SPECIAL USE PERMIT (DSUP 2002-0026)

ARCHAEOLOGY NOTES

ALL REQUIRED ARCHAEOLOGICAL PRESERVATION MEASURES SHALL BE COMPLETED PRIOR TO GROUND-DISTURBING ACTIVITIES (SUCH AS CORING, GRADING, FILLING, VEGETATION REMOVAL, UNDERGROUNDING UTILITIES, PILE DRIVING, LANDSCAPING AND OTHER EXCAVATIONS AS DEFINED IN SECTION 2-151 OF THE ZONING ORDINANCE) OR A RESOURCE MANAGEMENT PLAN MUST BE IN PLACE TO PRESERVE AND/OR RECOVER SIGNIFICANT RESOURCES IN CONCERT WITH CONSTRUCTION ACTIVITIES. TO CONFIRM, CALL ALEXANDRIA ARCHAEOLOGY AT (703) 838-4399.

CALL ALEXANDRIA ARCHAEOLOGY (703/838-4399) TWO WEEKS BEFORE THE STARTING DATE OF ANY GROUND DISTURBANCE SO THAT AN INSPECTION OR MONITORING SCHEDULE FOR CITY ARCHAEOLOGISTS CAN BE ARRANGED. (THE SUBMITTING ENGINEER MUST CONFIRM WITH ALEXANDRIA ARCHAEOLOGY AT (703) 838-4399 BEFORE INCLUDING THIS NOTE ON THE PLAN)

THE APPLICANT SHALL CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-838-4399) IF ANY BURIED STRUCTURAL REMAINS (WALL FOUNDATIONS, WELLS, PRIVIES, CISTERNS, ETC.) OR CONCENTRATIONS OF ARTIFACTS ARE DISCOVERED DURING DEVELOPMENT. WORK MUST CEASE IN THE AREA OF THE DISCOVERY UNTIL A CITY ARCHAEOLOGIST COMES TO THE SITE AND RECORDS THE FINDS.

THE APPLICANT SHALL NOT ALLOW ANY METAL DETECTION AND/OR ARTIFACT COLLECTION TO BE CONDUCTED ON THE PROPERTY, UNLESS AUTHORIZED BY ALEXANDRIA ARCHAEOLOGY. FAILURE TO COMPLY SHALL RESULT IN PROJECT DELAYS.

SHEET INDEX

LC-000	COVERSHEET	LP-502	PLANTING DETAILS- WETLAND
LE-000	EXISTING CONDITIONS	LP-503	PLANT SCHEDULE- WETLAND
LE-001	EXISTING CONDITIONS - ENLARGEMENT	LP-504	PLANT SCHEDULE- WETLAND
LE-002	TREE SURVEY	LI-100	IRRIGATION PLAN
LM-100	CONCEPT PLAN- PARK	LI-500	IRRIGATION DETAILS
LM-500	SITE DETAILS- PARK	LG-100	GRADING PLAN
LP-100	PLANTING PLAN- PARK	LO-100	DIMENSION PLAN
LP-500	PLANTING DETAILS- GENERAL	SW-100	STORMWATER MANAGEMENT PLAN
LP-501	PLANT SCHEDULE- PARK	SW-101	VRRM WORKSHEET
LP-101	CONCEPT PLAN- WETLAND	SW-102	STORMWATER NOTES
LP-102	PLANTING PLAN- WETLAND	UP-100	UTILITY PLANS
LM-101	SITE DETAILS- WETLAND		

SOIL INFORMATION - MARINE CLAY

NO SOIL SURVEY OR GEOTECHNICAL REPORT HAS BEEN PERFORMED. FROM THE INFORMATION AVAILABLE THROUGH THE POTOMAC GREENS DEVELOPMENT DRAWINGS, THE PARK SOIL IS ANTICIPATED TO BE URBAN FILL.

SOIL INFORMATION - CONTAMINATION

NO SOIL SURVEY OR GEOTECHNICAL REPORT HAS BEEN PERFORMED. FROM THE INFORMATION AVAILABLE THROUGH THE POTOMAC GREENS DEVELOPMENT DRAWINGS, THERE IS A POSSIBILITY THAT THE PARK CONTAINS CONTAMINATED SOIL.

EXISTING TOPOGRAPHY NOTE

THE TOPOGRAPHY HEREIN WAS PROVIDED BY AECOM

RPA NOTE

SEE EXISTING CONDITIONS SHEET LE-001

FLOODPLAIN NOTE

PORTIONS OF THIS SITE ARE IN THE 100 YEAR FLOODPLAIN, SEE ATTACHED SHEETS

TRIP GENERATION

THE PARK USE WILL REMAIN THE SAME. TRIP GENERATION IS N/A

POTOMAC YARD URBAN DESIGN GUIDELINES APPLY

THE PARK USE WILL REMAIN THE SAME. CONNECTIONS TO AND THROUGH THE OPEN SPACE WILL BE MAINTAINED AND ENHANCED.

(2) TWO COLOR SETS OF ELEVATIONS:

N/A

COMPLETE STREETS CHECKLIST

	NEW	UPGRADED
CROSSWALKS (NUMBER)		
STANDARD	2 (EXISTING TO REMAIN)	0
HIGH VISIBILITY	0	0
CURB RAMPS	0 (EXISTING TO REMAIN)	
SIDEWALKS (LF)	144.25 (LF) (EXISTING TO REMAIN)	
BICYCLE PARKING (NUMBER SPACES)	4 (EXISTING TO REMAIN)	0
PUBLIC/VISITOR	0	0
PRIVATE/GARAGE	0	0
BICYCLE PATHS (LF)	N/A	N/A
PEDESTRIAN SIGNALS	N/A	N/A

DSUP-2016-0005

APPROVED	
SPECIAL USE PERMIT NO. _____	
DEPARTMENT OF PLANNING & ZONING	
DIRECTOR _____	DATE _____
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES	
SITE PLAN NO. _____	
DIRECTOR _____	DATE _____
CHAIRMAN, PLANNING COMMISSION _____	
DATE _____	
DATE RECORDED _____	
INSTRUMENT NO. _____ DEED BOOK NO. _____ PAGE NO. _____	



ANDROPOGON
ASSOCIATES, LTD
10 SHURS LANE
PHILADELPHIA, PA 19127
T: 215.487.0700
F: 215.483.7520
W: www.andropogon.com

POTOMAC GREENS PARK

THE CITY OF ALEXANDRIA
CITY HALL
301 KING STREET
ALEXANDRIA, VA 22314



PRIME AE
CIVIL ENGINEERING
3201 JERMANTOWN ROAD, SUITE 660
FAIRFAX, VA 22030
703.865.0606
www.primeeng.com

KEAST & HOOD
STRUCTURAL ENGINEER
400 MARKET STREET, SUITE 1250
PHILADELPHIA, PA 19106
215.625.0099
www.keasthood.com/

IRRIGATION CONSULTING, INC.
IRRIGATION DESIGN
4 HOTEL PLACE
PEPPERELL, MA 01463
978.433.8972
www.irrigationconsulting.com

REV.	DATE	DESCRIPTION



PRELIMINARY PLAN
NOT FOR CONSTRUCTION OR PRICING

SCALE:	AS INDICATED ON DRAWINGS
DATE:	05/19/2016
DRAWN BY:	BM
CHECKED BY:	EM
APPROVED BY:	EM

AA PROJECT #: 130014.01
PROJECT PHASE: DESIGN DEVELOPMENT

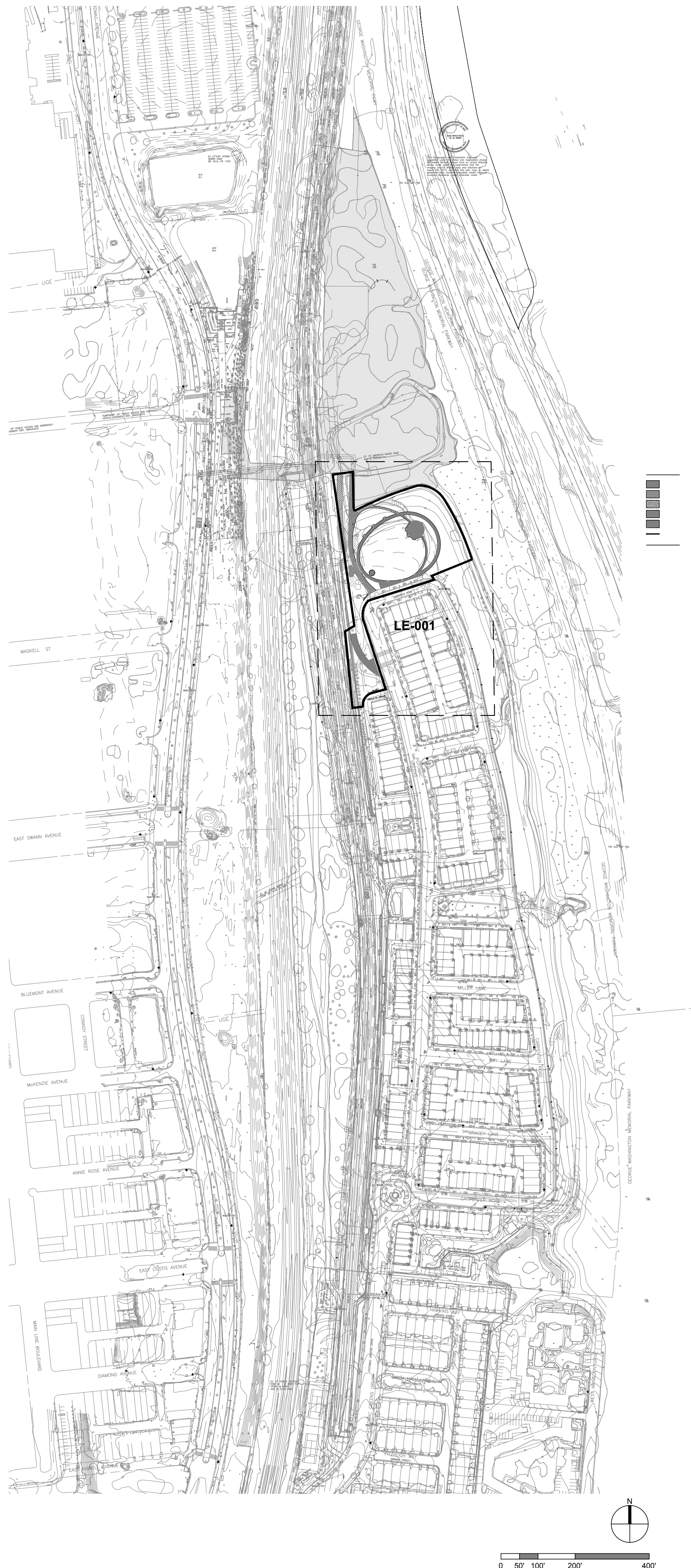
DRAWING TITLE:

COVER SHEET

SHEET:

LC-000

PARCEL SCALE EXISTING CONDITIONS



**EXISTING PROPERTY BOUNDARY (805,195 SQFT)
DSUP 2002-0026 (43,560 SQFT)**

PROPOSED PROPERTY BOUNDARY
PROJECT BOUNDARY ±92,363 SQFT

1. NO ENCUMBRANCES NOTED THAT WOULD IMPACT DEVELOPMENT ARE NOTED AT THIS TIME.
2. SEE LE-001 AND LM-100 FOR OTHER UTILITIES AND EASEMENTS
3. SOIL SURVEY HAS YET TO BE PERFORMED
4. THE PROPERTY BOUNDARY PER AECOM SURVEY DOES NOT COINCIDE WITH THE PROPERTY BOUNDARY PROVIDED ON THE CITY OF ALEXANDRIA GIS DATABASE. THE 'CONTEXT MAP' SHOWS THE PROPERTY BOUNDARY PROVIDED ON THE CITY OF ALEXANDRIA GIS DATABASE AND THE 'PARCEL SCALE EXISTING CONDITIONS MAP' SHOWS THE AECOM SURVEY PROPERTY BOUNDARY.

DRAWING FILE PATH: P:\130014-POTMETRO\DRAWINGS\PHASE 2\DRAWING SETS\PILOT\1-E-100-130014.DWG
DATE MODIFIED: 5/17/2016



THE CITY OF ALEXANDRIA
CITY HALL
301 KING STREET
ALEXANDRIA, VA 22314



PRIME AE
CIVIL ENGINEERING
3201 JERMANTOWN ROAD, SUITE 660
FAIRFAX, VA 22030
703.865.0606
www.primeeng.com

KEAST & HOOD
STRUCTURAL ENGINEER
400 MARKET STREET, SUITE 1250
PHILADELPHIA, PA 19106
215.625.0099
www.keasthood.com/

IRRIGATION CONSULTING, INC.
IRRIGATION DESIGN
4 HOTEL PLACE
PEPPERELL, MA 01463
978.433.8972
www.rrigationconsulting.com

[illegible]

PRELIMINARY PLAN
NOT FOR CONSTRUCTION OR PRICING

SCALE:	AS INDICATED ON DRAWINGS
DATE:	05/19/2016
DRAWN BY:	BM
CHECKED BY:	EM
APPROVED BY:	EM

AA PROJECT #:	130014.02
PROJECT PHASE:	DESIGN DEVELOPMENT

DRAWING TITLE:

EXISTING CONDITION

SHEET:

LE-000

APPROVED		
SPECIAL USE PERMIT NO. _____		
DEPARTMENT OF PLANNING & ZONING		
DIRECTOR _____	DATE _____	
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES		
SITE PLAN NO. _____		
DIRECTOR _____	DATE _____	
CHAIRMAN, PLANNING COMMISSION _____ DATE _____		
DATE RECORDED _____		
INSTRUMENT NO. _____	DEED BOOK NO. _____	PAGE NO. _____

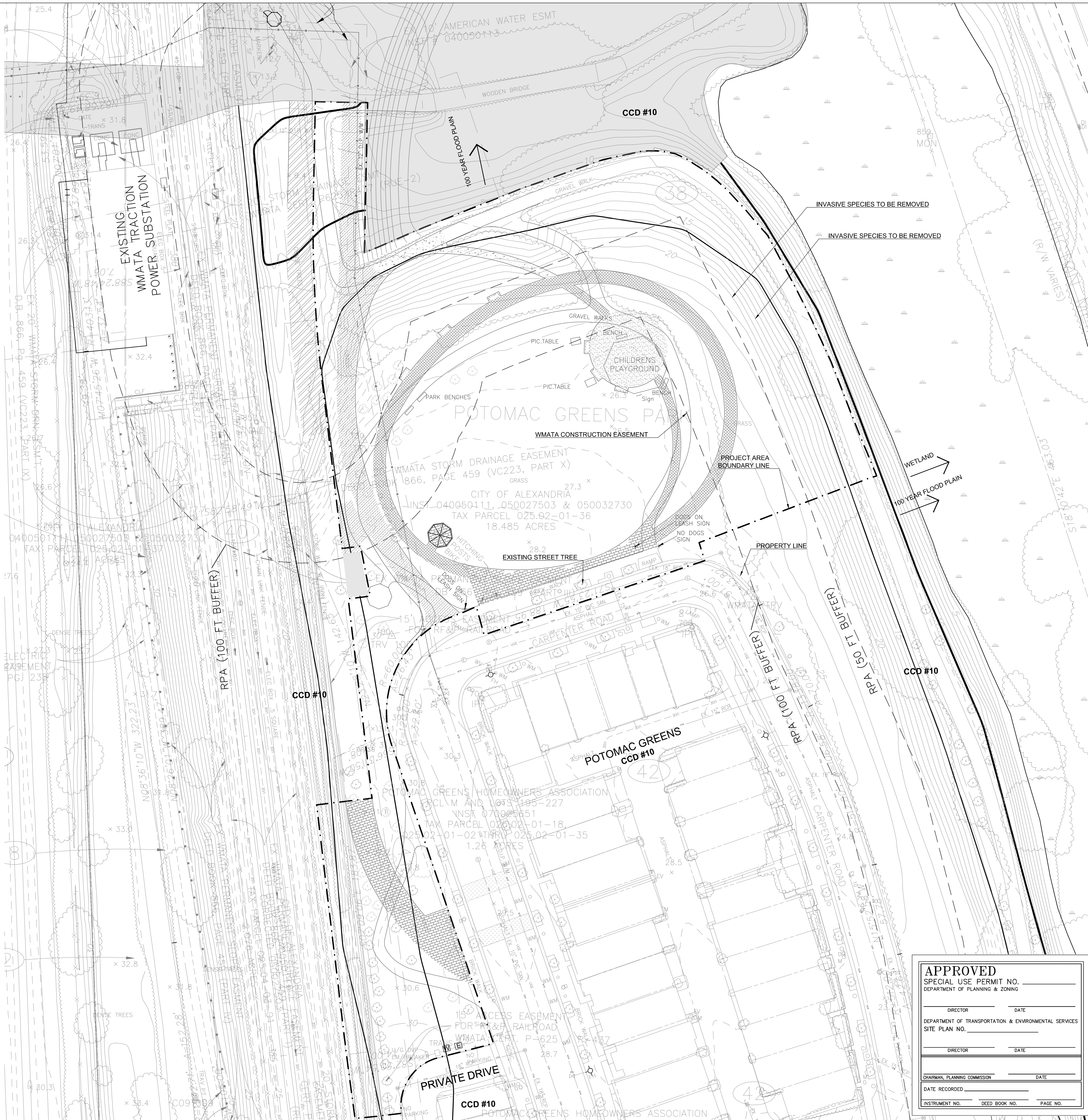
U/G DVP □	POWER HANDHOLE
U/G VDOT □	POWER VAULT
U/G TRAFFIC BOX □	TRAFFIC CONTROL VAULT
TRAFFIC SIGNAL BOX □	GROUND TRAFFIC CONTROL LOC.
TRANS □	ELECTRIC TRANSFORMER
CTV PED	CABLE TV PEDESTAL
VZN PED	TELEPHONE PEDESTAL
EM POST / EM	ELECTRIC METER (POST)
TMH ○	TELEPHONE MANHOLE
EMH ○	ELECTRIC MANHOLE
WMH ○	WATER MANHOLE
SMH ○	SANITARY MANHOLE
SDMH ○	DRAINAGE MANHOLE
D □	DRAINAGE INLET
G □	GRATE TOP INLET
CLB □	CURB INLET
TRAFFIC SIGNAL POLE ○	TRAFFIC SIGNAL POLE (ARMS)
WALK/DON'T WALK SIGNAL ☆	PEDESTRIAN SIGNAL POLE
LAMP ☆	LAMP POST (360° TOP LIGHT)
ST. LT. ☆	STREET LIGHT (LIGHT ON ARM)
NO PARKING+	SIGN (WITH DESCRIPTOR)
MB+	MAILBOXES
A □	AIR CONDITIONING UNIT
CO □	SANITARY CLEANOUT
FD ○	FIRE HYDRANT
WV □	WATER VALVE
WM ○	DOMESTIC WATER METER
CLF	CHAIN-LINK FENCE
—X—	FENCE
BRICK WALK	PLANTER OPENING IN SIDEWALK



This Topographic and Planimetric map was completed under the direct and responsible charge of, Joseph Michael Kovach from an actual Airborne survey made under my supervision; that the imagery and/or original data was obtained on August 30, 2011; and that this plot, map, or digital geospatial data including metadata meets minimum accuracy standards unless otherwise noted.

NO SLOPES GREATER THAN 2:1 NOTED WITHIN PROJECT AREA

1. NO ENCUMBRANCES NOTED THAT WOULD IMPACT DEVELOPMENT ARE NOTED AT THIS TIME.
2. SEE PLAN FOR OTHER UTILITIES AND EASEMENTS
3. SOIL SURVEY HAS YET TO BE PERFORMED
4. SEE COVER PAGE FOR MARINE CLAY AND KNOWN CONTAMINATION STATEMENTS.



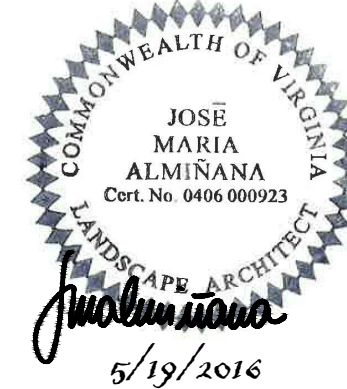
THE CITY OF ALEXANDRIA
CITY HALL
301 KING STREET
ALEXANDRIA, VA 22314



PRIME AE
CIVIL ENGINEERING
3201 JERMANTOWN ROAD, SUITE 660
FAIRFAX, VA 22030
703.865.0606
www.primeeng.com

KEAST & HOOD
STRUCTURAL ENGINEER
400 MARKET STREET, SUITE 1250
PHILADELPHIA, PA 19106
215.625.0099
www.keasthood.com/

IRRIGATION CONSULTING, INC.
IRRIGATION DESIGN
4 HOTEL PLACE
PEPPERELL, MA 01463
978.433.8972
www.irrigationconsulting.com

[illegible]

PRELIMINARY PLAN
NOT FOR CONSTRUCTION OR PRICING

SCALE:	AS INDICATED ON DRAWINGS
DATE:	05/19/2016
DRAWN BY:	BM
CHECKED BY:	EM
APPROVED BY:	EM

AA PROJECT #:	130014.02
---------------	-----------

PROJECT PHASE:	DESIGN DEVELOPMENT
----------------	--------------------

DRAWING TITLE:

EXISTING CONDITION ENLARGEMENT

SHEET:

LE-001

NOTES

1. ALL PROTECTION AND PRESERVATION MEASURES FOR EXISTING VEGETATION, INCLUDING MAINTENANCE SHALL BE APPROVED BY THE CITY ARBORIST IN-FIELD PRIOR TO COMMENCEMENT OF ANY SITE DISTURBING ACTIVITY.

TREE SURVEY

POTOMAC GREENS PARK

EXISTING TREES

TREES TO BE PROTECTED

Inv Num	Common Name	Scientific Name	Native	CBH1	CBH2	CBH3	Life_Exp	Comments	CCA
253	black locust	Robinia pseudoacacia	Y	24	0	0	>15	leaning over path	176
254	black locust	Robinia pseudoacacia	Y	27	0	0	>15	leaning over path	154
255	black locust	Robinia pseudoacacia	Y	22	18	0	>15	leaning over path	283
256	box elder maple	Acer negundo	Y	28	0	0	>15		132
257	black locust	Robinia pseudoacacia	Y	40	0	0	<5	trunk wounds, small canopy	176
260	black locust	Robinia pseudoacacia	Y	29	15	0	>15		314
261	black locust	Robinia pseudoacacia	Y	28	24	0	>15	ivy, codom	531
79	black locust	Robinia pseudoacacia	Y	22	0	0	>15	eng ivy	78
263	black locust	Robinia pseudoacacia	Y	30	0	0	>15	was a codom, one leader dead	283
265	box elder maple	Acer negundo	Y	41	0	0	>15	codom at 5'	490
267	white mulberry	Morus alba	N	25	32	0	>15		1134
269	eastern cottonwood	Populus deltoides	Y	68	0	0	>15	on edge of path	2734
270	eastern cottonwood	Populus deltoides	Y	92	0	0	>15	adjacent to path	3525
									10,010

TREES TO BE DEMOLISHED

Inv Num	Common Name	Scientific Name	Native	CBH1	CBH2	CBH3	Life_Exp	Comments	CCA
6	black locust	Robinia pseudoacacia	Y	39	0	0	>15	codom	1256
7	American elm	Ulmus americana	Y	56	0	0	>15	codom	1075
8	black locust	Robinia pseudoacacia	Y	65	0	0	5-15	cav at base	415
9	black locust	Robinia pseudoacacia	Y	20	0	0	>15	vines	176
10	dead			22	25	0	0	standing dead	0
11	Siberian elm	Ulmus pumila	N	34	0	0	5-15	covered in vines	452
12	black locust	Robinia pseudoacacia	Y	39	0	0	5-15	vines, poor br attachment	1452
13	quaking aspen	Populus tremuloides	Y	24	0	0	>15	edge of grass area	314
14	black locust	Robinia pseudoacacia	Y	48	0	0	>15	vines	1520
15	white mulberry	Morus alba	N	26	0	0	>15	can protect if need be	1134
16	black locust	Robinia pseudoacacia	Y	62	0	0	>15	3 ldr-1 dead, cav at base	962
17	white mulberry	Morus alba	N	26	0	0	5-15	vines	380
258	black locust	Robinia pseudoacacia	Y	28	0	0	>15		113
259	black locust	Robinia pseudoacacia	Y	48	0	0	>15	English ivy on trunk	962
264	Siberian elm	Ulmus pumila	N	25	0	0	>15		754
266	white mulberry	Morus alba	N	29	26	0	>15	codom, can protect if need be	962
								3 leaders, Vines covering canopy, can protect if need be	415
268	white mulberry	Morus alba	N	40	0	0	5-15		12,342

TOTAL EXISTING CCA TO BE REMOVED

12,342 SQUARE FEET OF CROWN COVERAGE

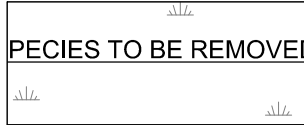
TOTAL EXISTING CCA TO REMAIN

10,010 SQUARE FEET OF CROWN COVERAGE

STEEP SLOPES ANALYSIS

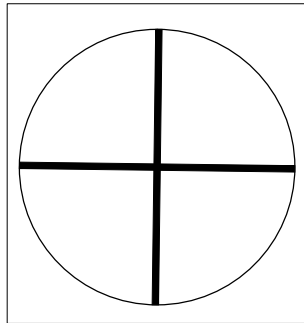
NO SLOPES GREATER THAN 2:1 NOTED

LEGEND

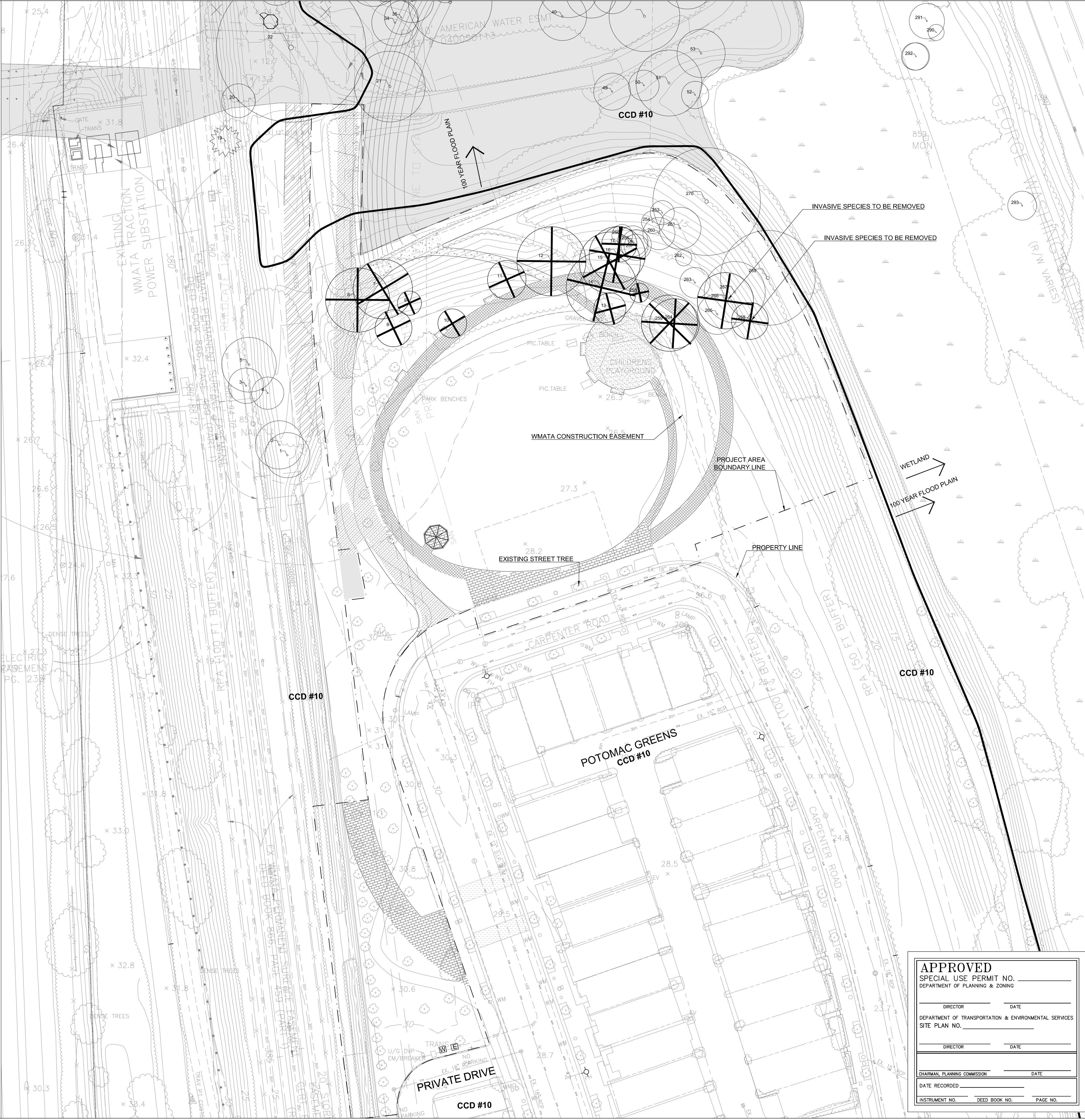


SPECIES TO BE REMOVED

WETLANDS



EXISTING TREE TO BE DEMOLISHED FROM PROPOSED POTOMAC YARD METRO STATION (DSUP2016-004)



ANDROPOGON ASSOCIATES, LTD
10 SHURS LANE
PHILADELPHIA, PA 19127
T: 215.487.0700
F: 215.483.7520
W: www.andropogon.com

POTOMAC GREENS PARK

THE CITY OF ALEXANDRIA
CITY HALL
301 KING STREET
ALEXANDRIA, VA 22314

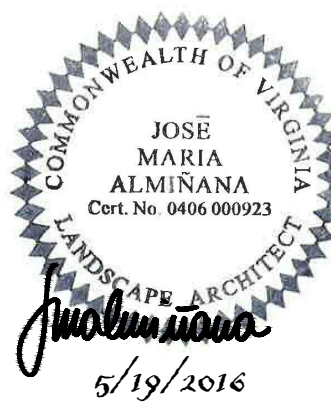


PRIME AE
CIVIL ENGINEERING
3201 JERMANTOWN ROAD, SUITE 660
FAIRFAX, VA 22030
703.865.0606
www.primeeng.com

KEAST & HOOD
STRUCTURAL ENGINEER
400 MARKET STREET, SUITE 1250
PHILADELPHIA, PA 19106
215.625.0099
www.keasthood.com/

IRRIGATION CONSULTING, INC.
IRRIGATION DESIGN
4 HOTEL PLACE
PEPPERELL, MA 01463
978.433.8972
www.irrigationconsulting.com

REV. DATE DESCRIPTION



PRELIMINARY PLAN
NOT FOR CONSTRUCTION OR PRICING

SCALE:	AS INDICATED ON DRAWINGS
DATE:	05/19/2016
DRAWN BY:	BM
CHECKED BY:	EM
APPROVED BY:	EM

AA PROJECT #: 130014.02
PROJECT PHASE: DESIGN DEVELOPMENT

DRAWING TITLE:
TREE SURVEY

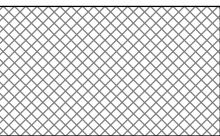
SHEET:

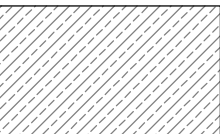
LE-002

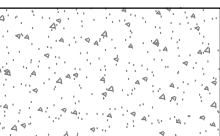
GENERAL NOTES

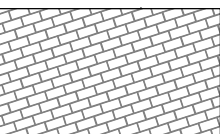
1. REVIEW CONTRACT DOCUMENTS AND FIELD CONDITIONS BEFORE STARTING EACH PORTION OF THE WORK. REPORT ERRORS, OMISSIONS, OR INCONSISTENCIES PROMPTLY TO LANDSCAPE ARCHITECT.
2. CONTACT UTILITY COMPANIES AS REQUIRED BY STATE AND LOCAL REGULATIONS BEFORE DIGGING TO LOCATE AND MARK EXISTING UTILITIES.
3. EXERCISE CARE IN OPERATIONS TO PROTECT EXISTING UNDERGROUND UTILITIES.
4. BASE SURVEY INFORMATION WAS SUPPLIED BY _____
5. THESE CONTRACT DOCUMENTS MAKE NO REPRESENTATIONS AS TO THE MEANS AND METHODS OF CONSTRUCTION.

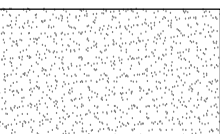
LEGEND

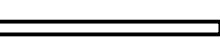
- 

PEDESTRIAN SIDEWALK:
POROUS CONCRETE
- 

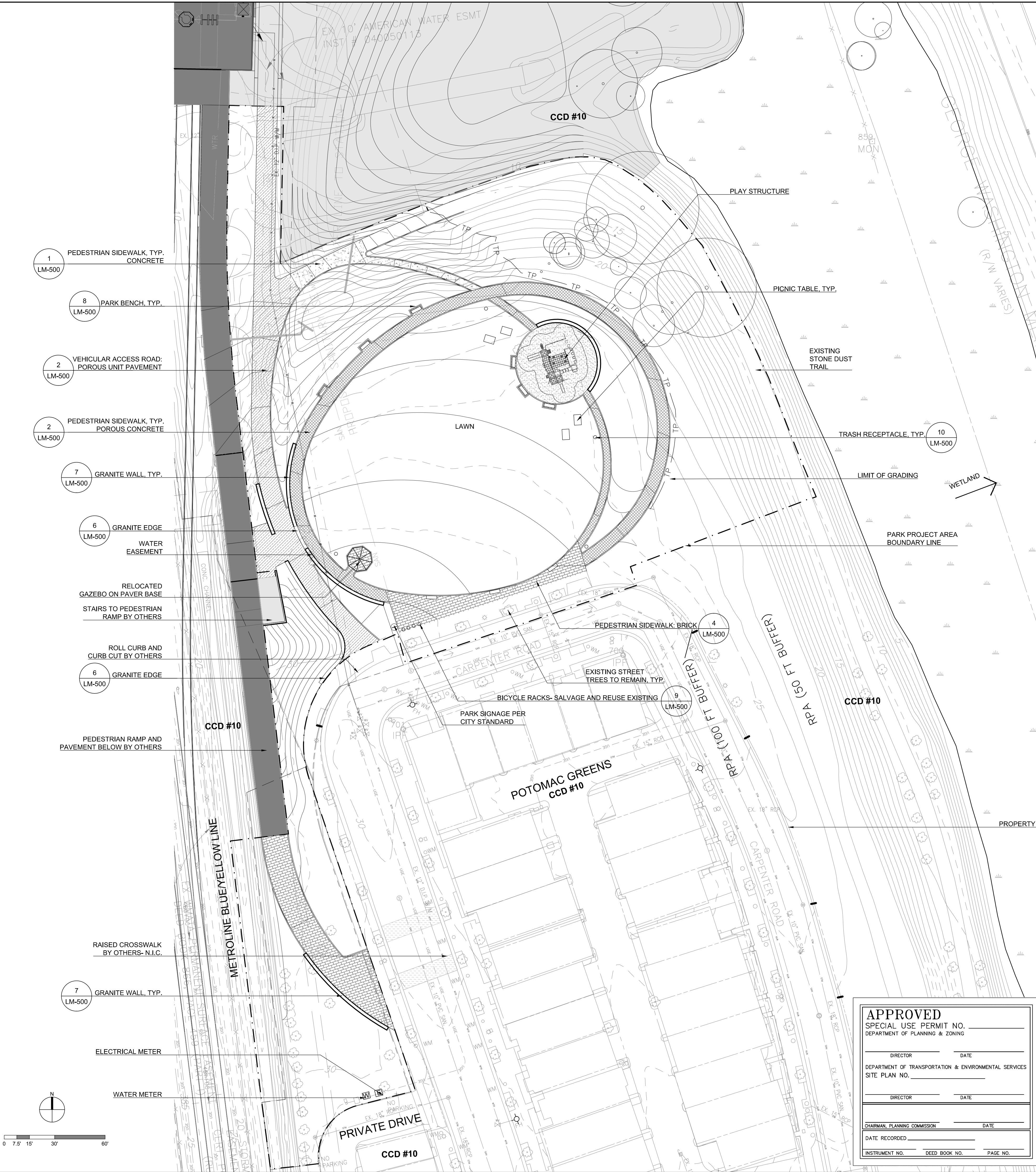
VEHICULAR ACCESS ROAD:
POROUS UNIT PAVEMENT
- 

PEDESTRIAN SIDEWALK:
CONCRETE
- 

PEDESTRIAN SIDEWALK:
NEW BRICK AND PATTERN TO MATCH EXISTING
- 

PLAY SURFACE:
ENGINEERED WOOD FIBER
2/LM-100
- 

SEAT WALL 1/LM-100



ANDROPOGON
ASSOCIATES, LTD
10 SHURS LANE
PHILADELPHIA, PA 19127
T: 215.487.0700
F: 215.483.7520
W: www.andropogon.com

POTOMAC GREENS
PARK

THE CITY OF ALEXANDRIA
CITY HALL
301 KING STREET
ALEXANDRIA, VA 22314



PRIME AE
CIVIL ENGINEERING
3201 JERMANTOWN ROAD, SUITE 660
FAIRFAX, VA 22030
703.865.0606
www.primeeng.com

KEAST & HOOD
STRUCTURAL ENGINEER
400 MARKET STREET, SUITE 1250
PHILADELPHIA, PA 19106
215.625.0099
www.keasthood.com/

IRRIGATION CONSULTING, INC.
IRRIGATION DESIGN
4 HOTEL PLACE
PEPPERELL, MA 01463
978.433.8972
www.irrigationconsulting.com

REV. DATE DESCRIPTION

REV.	DATE	DESCRIPTION



PRELIMINARY PLAN
NOT FOR CONSTRUCTION OR PRICING

SCALE:	AS INDICATED ON DRAWINGS
DATE:	05/19/2016
DRAWN BY:	BM
CHECKED BY:	EM
APPROVED BY:	EM

AA PROJECT #: 130014.02

PROJECT PHASE: DESIGN DEVELOPMENT

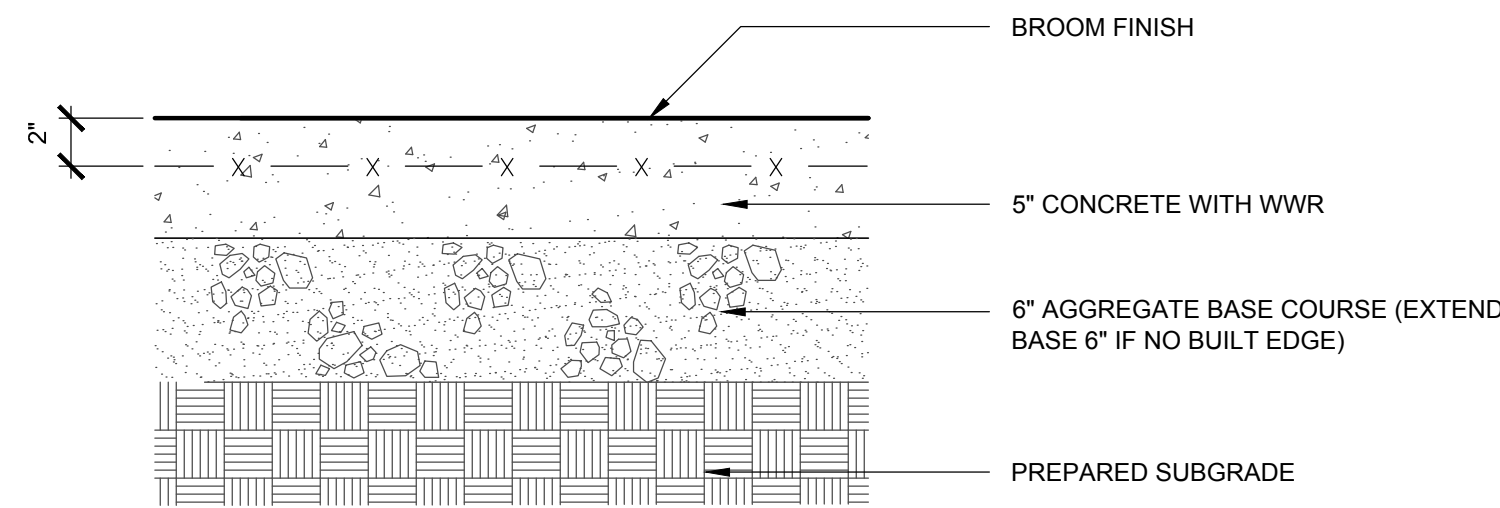
DRAWING TITLE:

MATERIALS PLAN

SHEET:

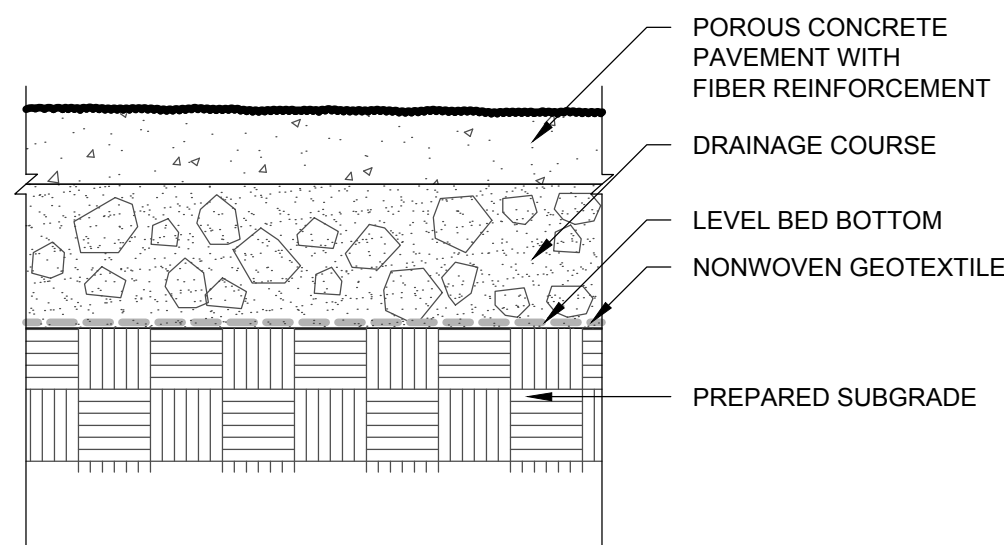
LM-100

DRAWING FILE PATH: D:\DROPBOX (ANDROPOGON.NC)\130014.01 POTOMAC GREENSDRAWINGSPHASE 2\DRAWING SETS\00_POTOMAC METRO 30% DD FILES\2016-05-17 130014.30% DD AA DWG\LM-500-130014.DWG
DATE MODIFIED: 5/18/2016



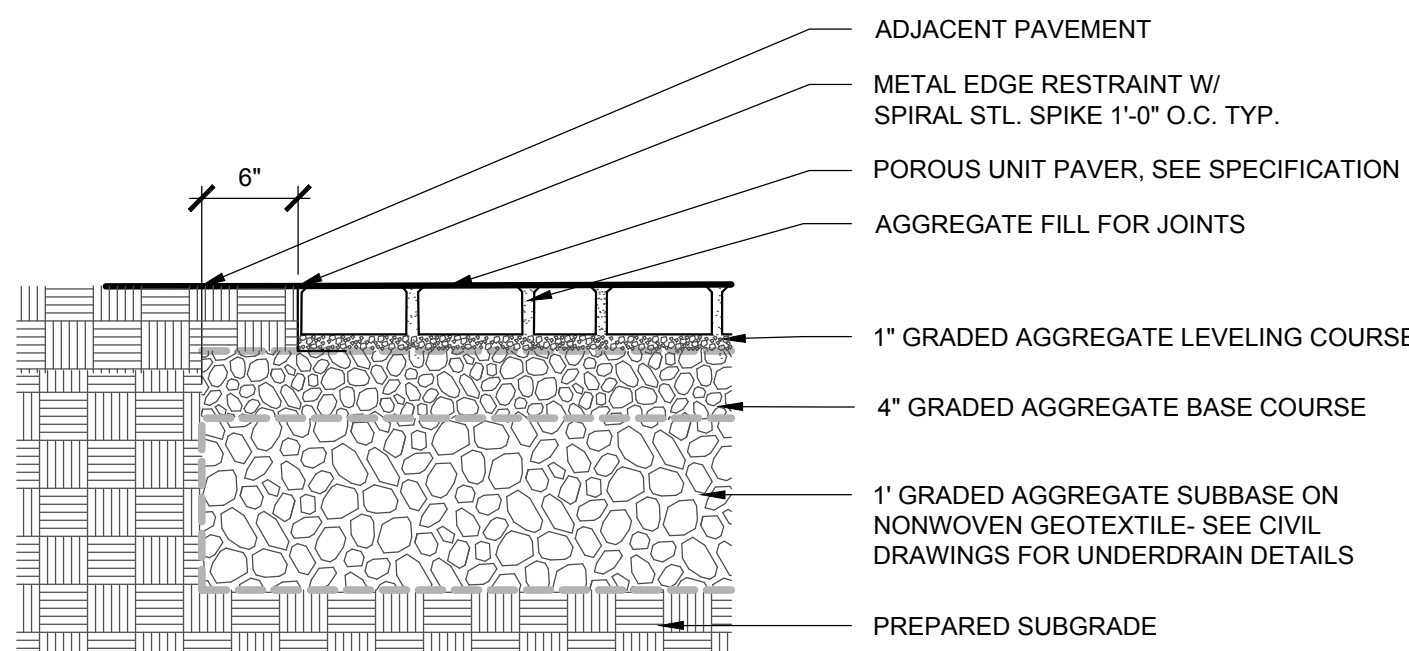
SECTION
1
LM-500 1 1/2" □ 1'-0"

PEDESTRIAN SIDEWALK / CONCRETE



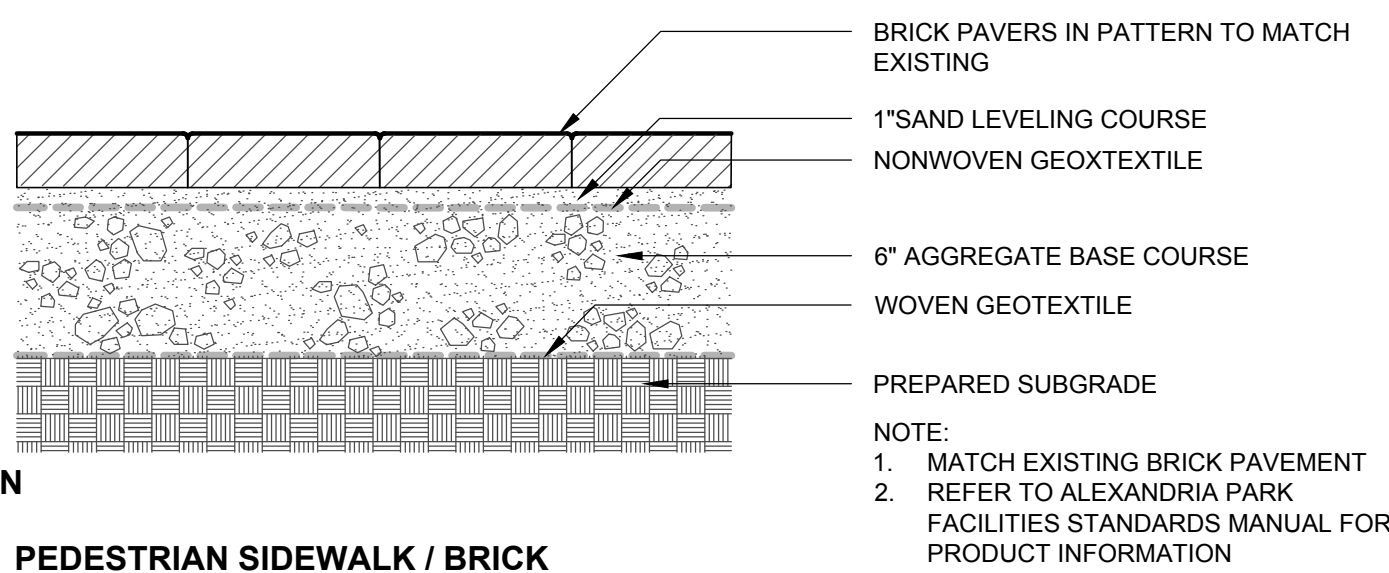
SECTION
2
LM-500 1-1/2" □ 1'-0"

PEDESTRIAN SIDEWALK / POROUS CONCRETE



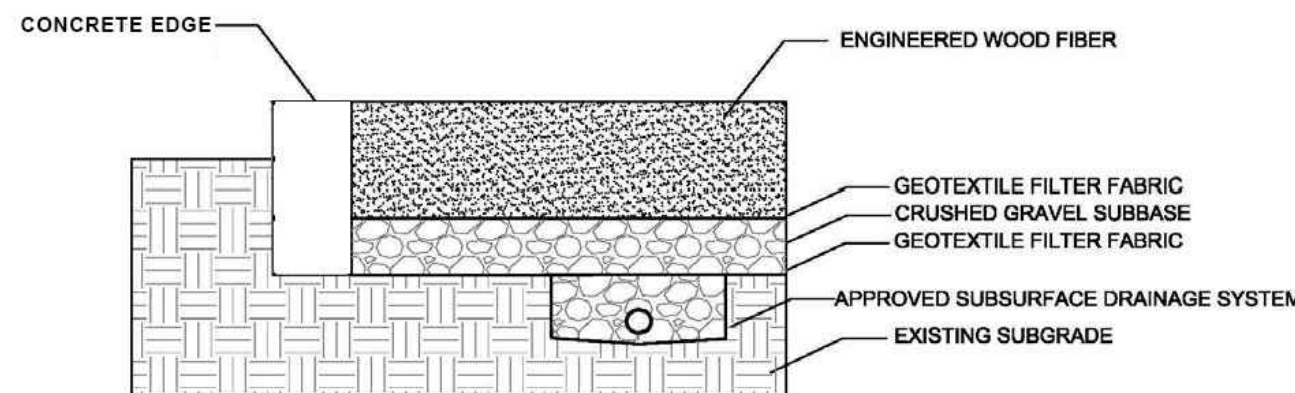
SECTION
3
LM-500 1" □ 1'-0"

VEHICULAR ACCESS ROAD / POROUS UNIT PAVEMENT



SECTION
4
LM-500 1 1/2" □ 1'-0"

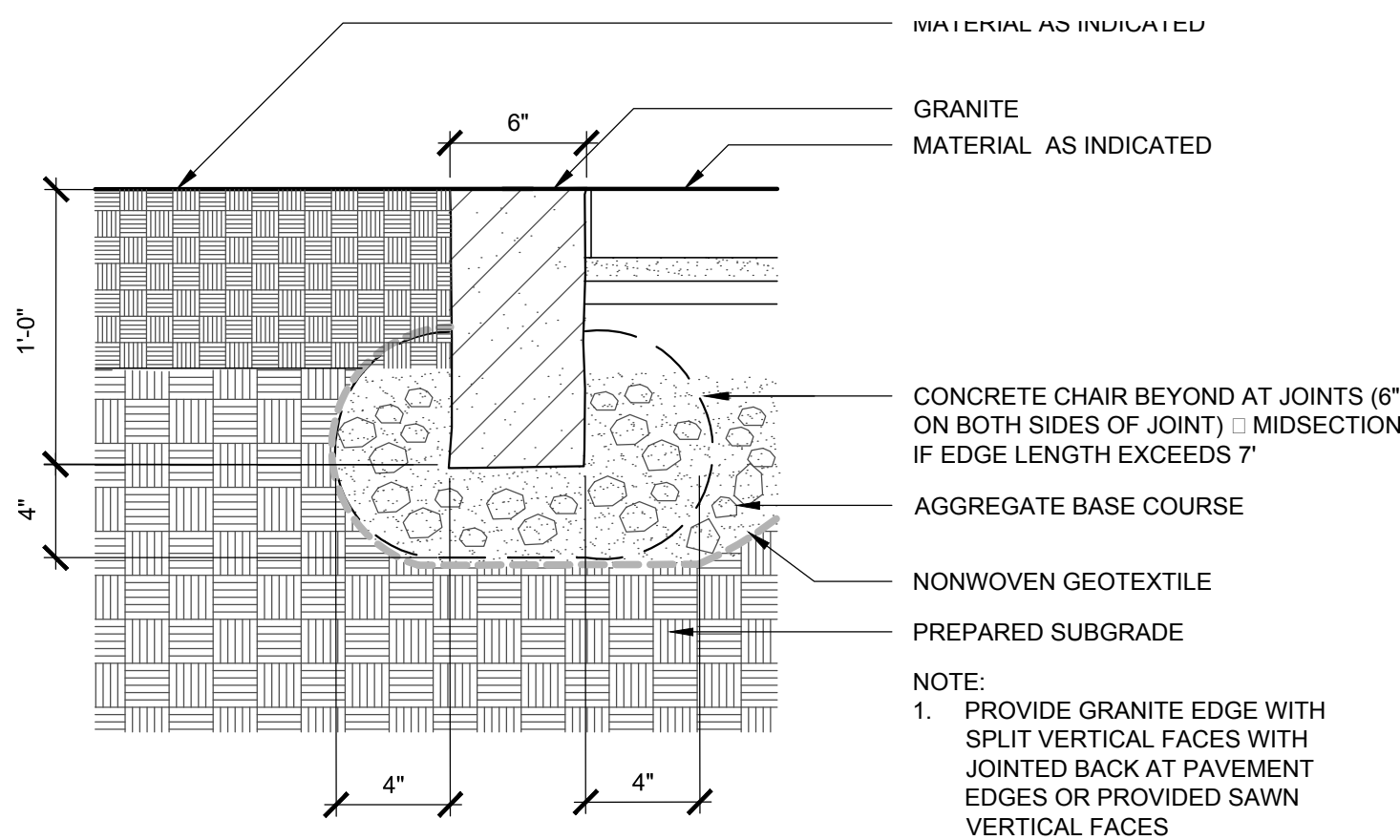
PEDESTRIAN SIDEWALK / BRICK



SECTION
5
LM-500 NTS

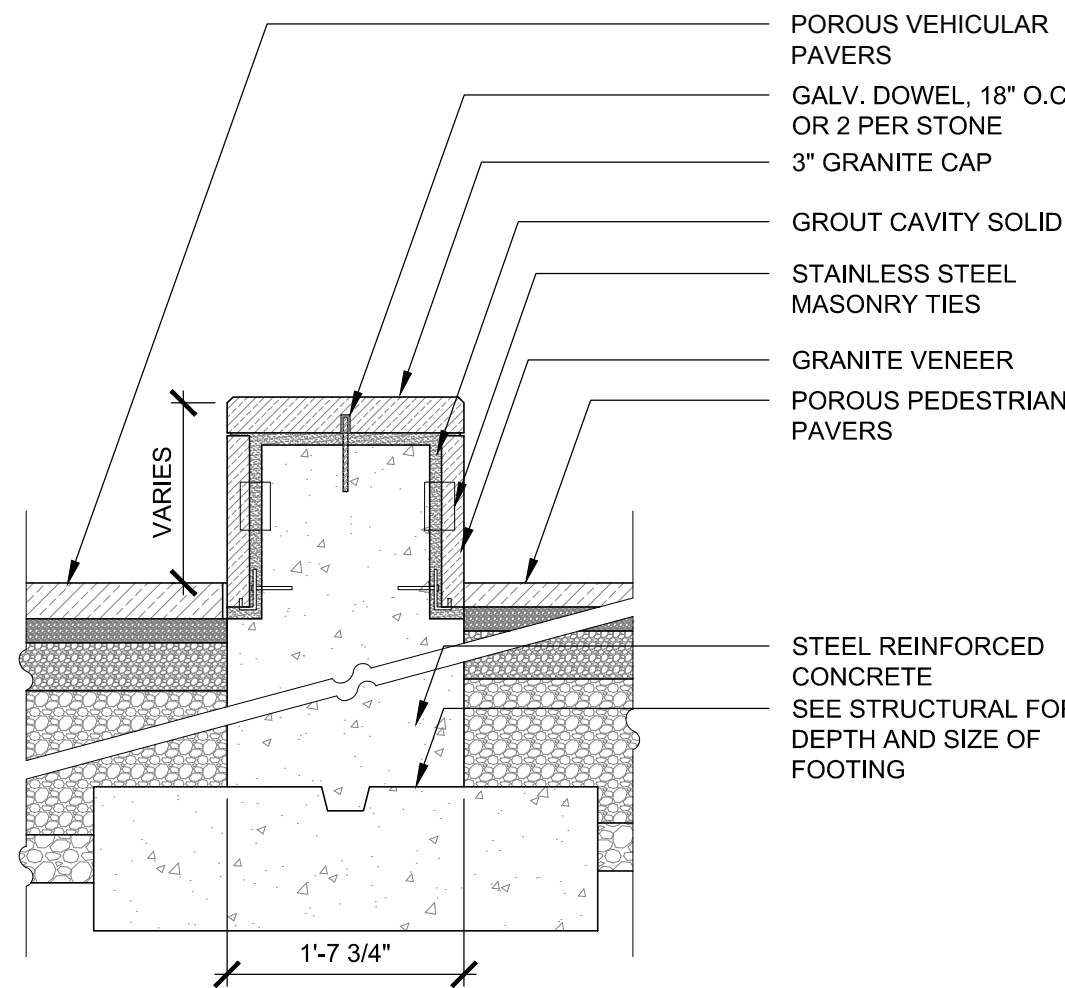
ENGINEERED WOOD FIBER

- NOTES:
- EXISTING PARK SIGNAGE TO BE SALVAGED AND REUSED.
 - ALL SITE FURNISHINGS, INCLUDING THE PARK SIGNAGE AND GA EBO, MUST CONFORM TO CITY STANDARDS AND/OR SUBJECT TO THE APPROVAL OF THE DIRECTOR OF THE RPCA.
 - PLAYGROUND DESIGN SUBJECT TO APPROVAL OF THE DIRECTOR OF RPCA.



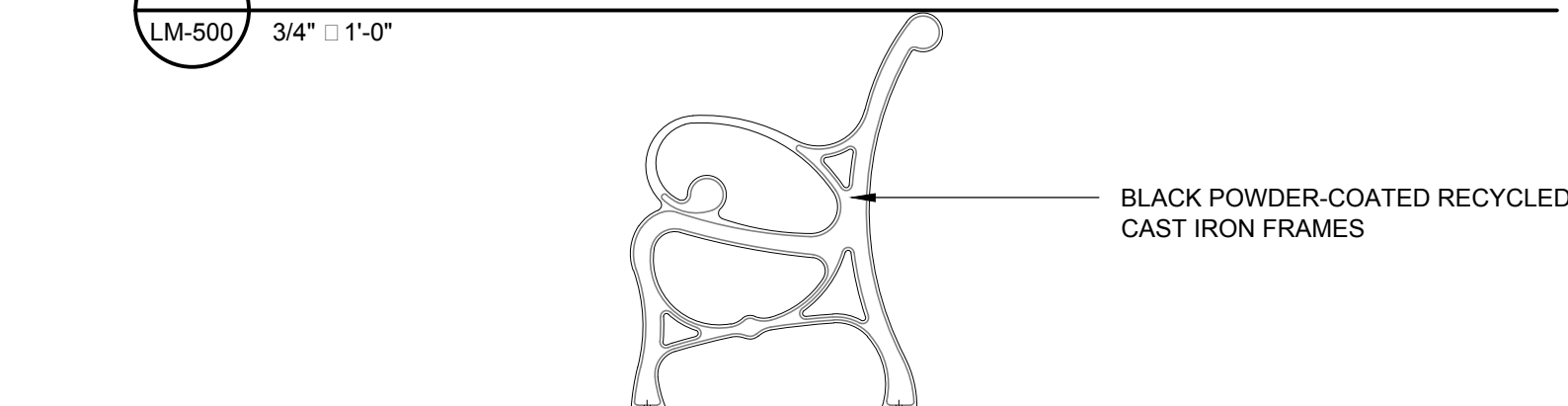
SECTION
6
LM-500 1 1/2" □ 1'-0"

GRANITE EDGE



SECTION
7
LM-500 3/4" □ 1'-0"

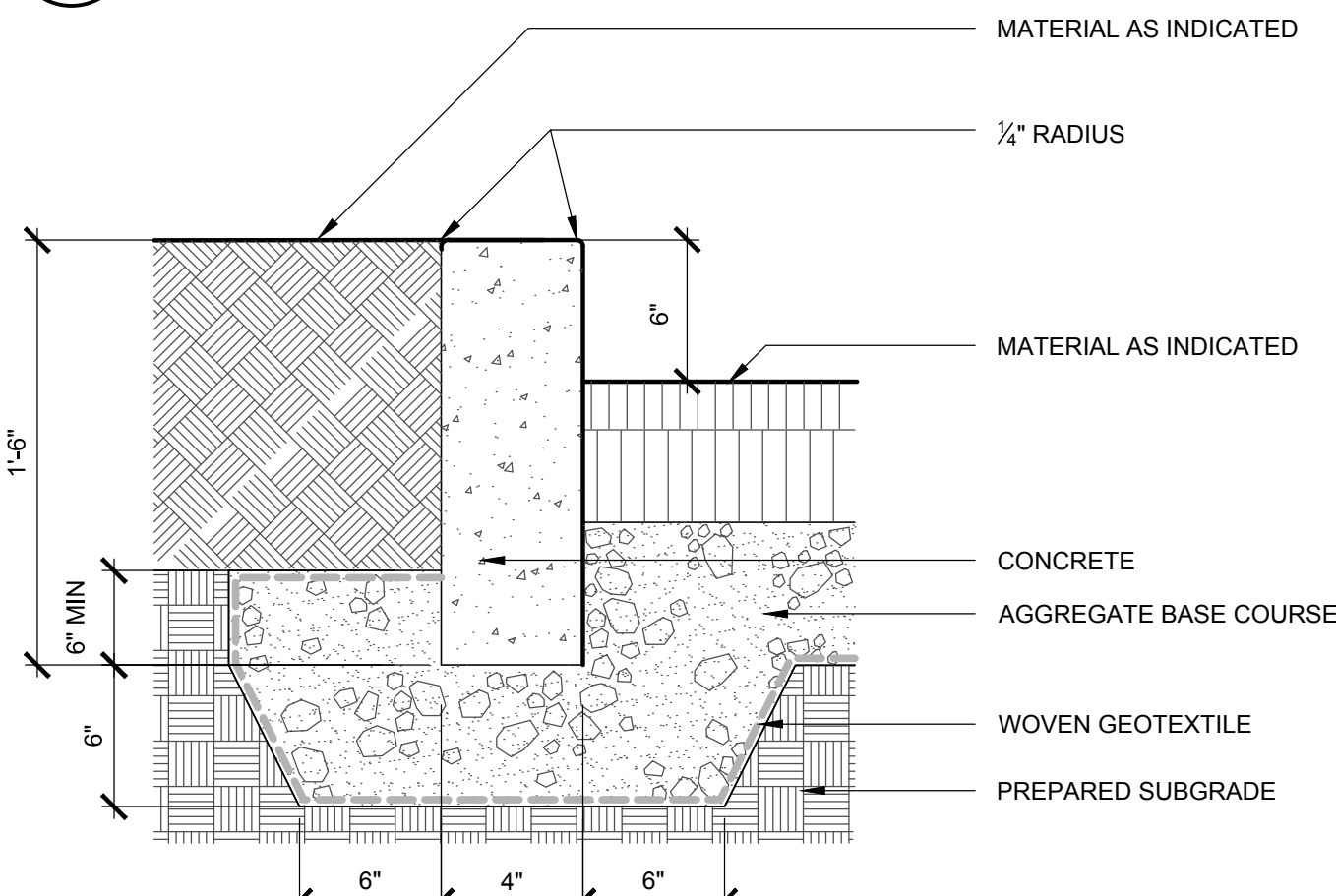
GRANITE WALL



SECTION

ELEVATION
8
LM-500 3/4" □ 1'-0"

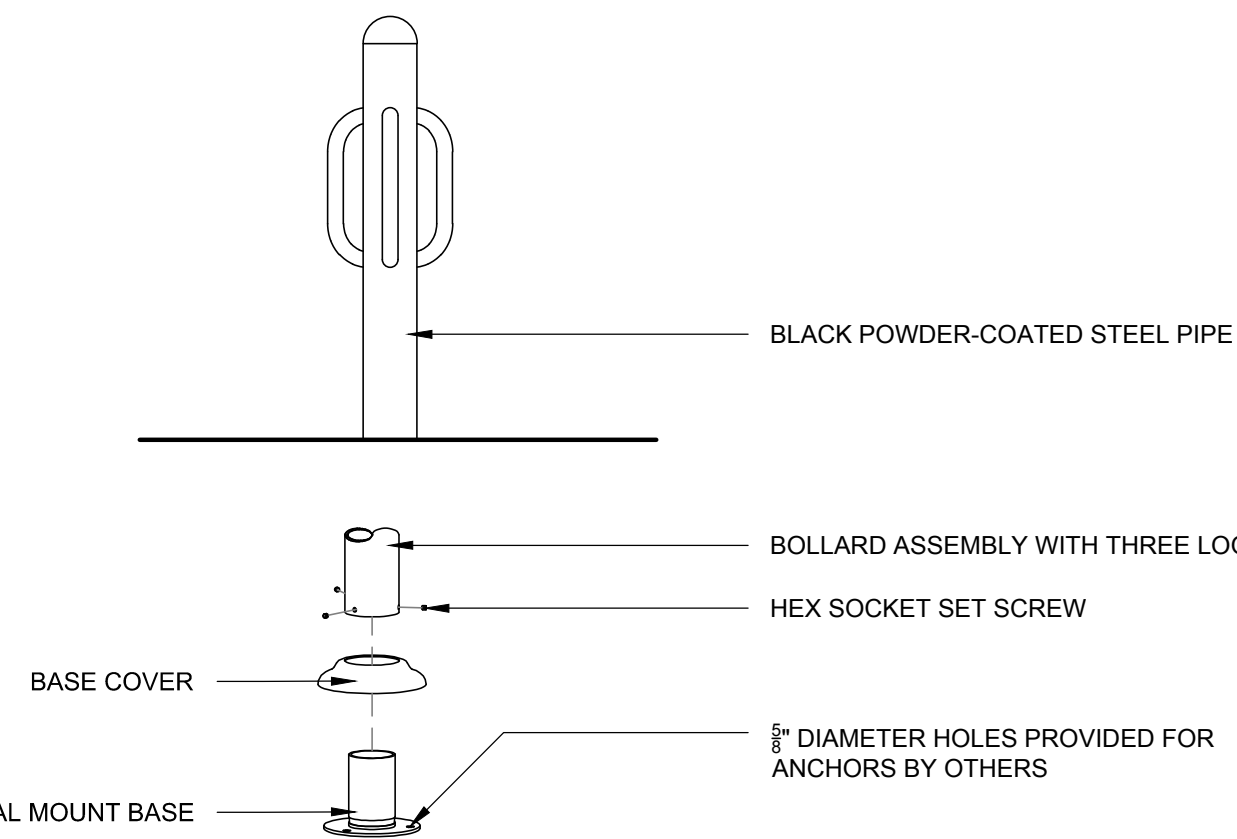
PARK BENCH



SECTION
11
LM-500 1 1/2" □ 1'-0"

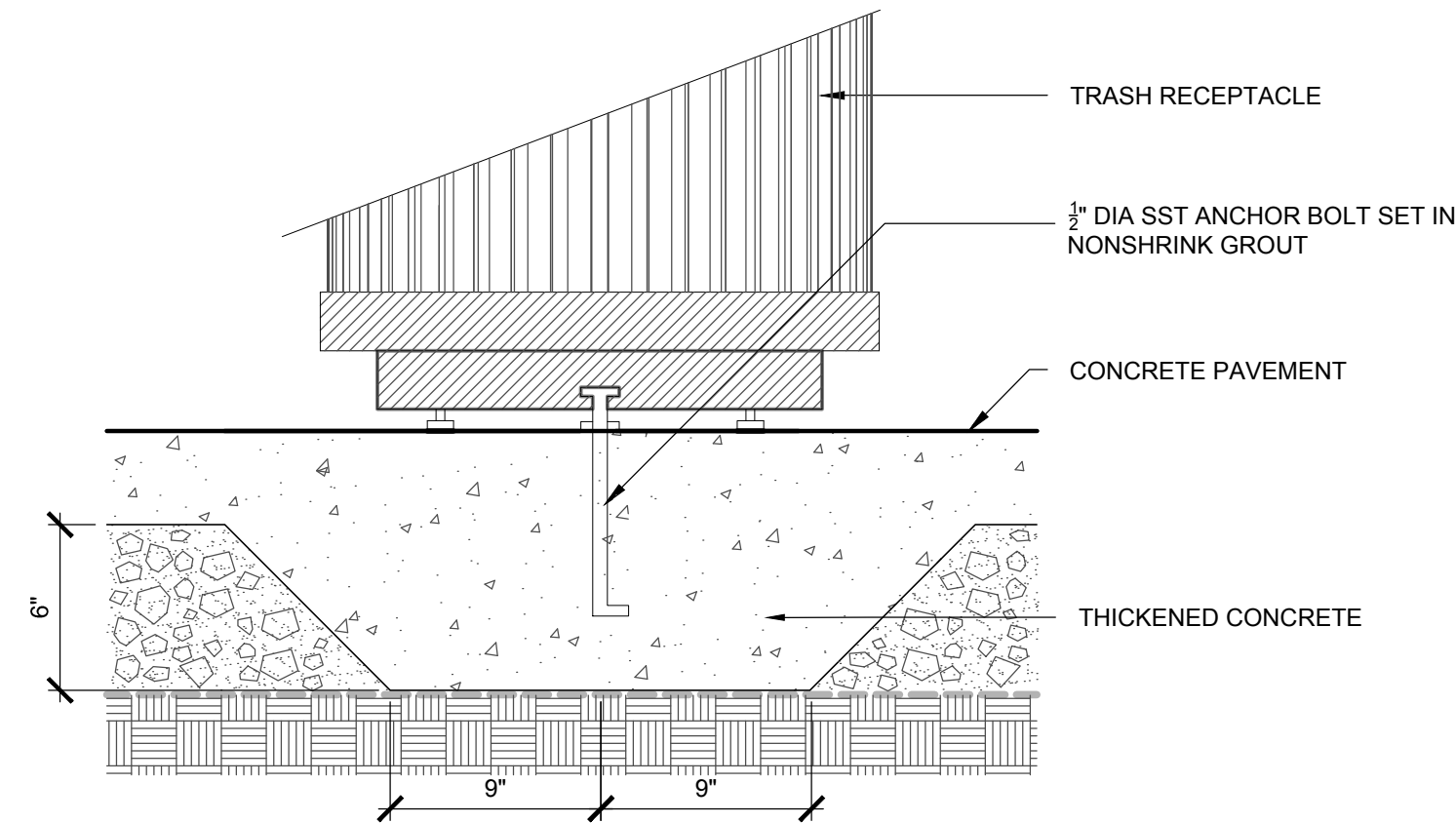
PRECAST CONCRETE CURB

ELEVATION

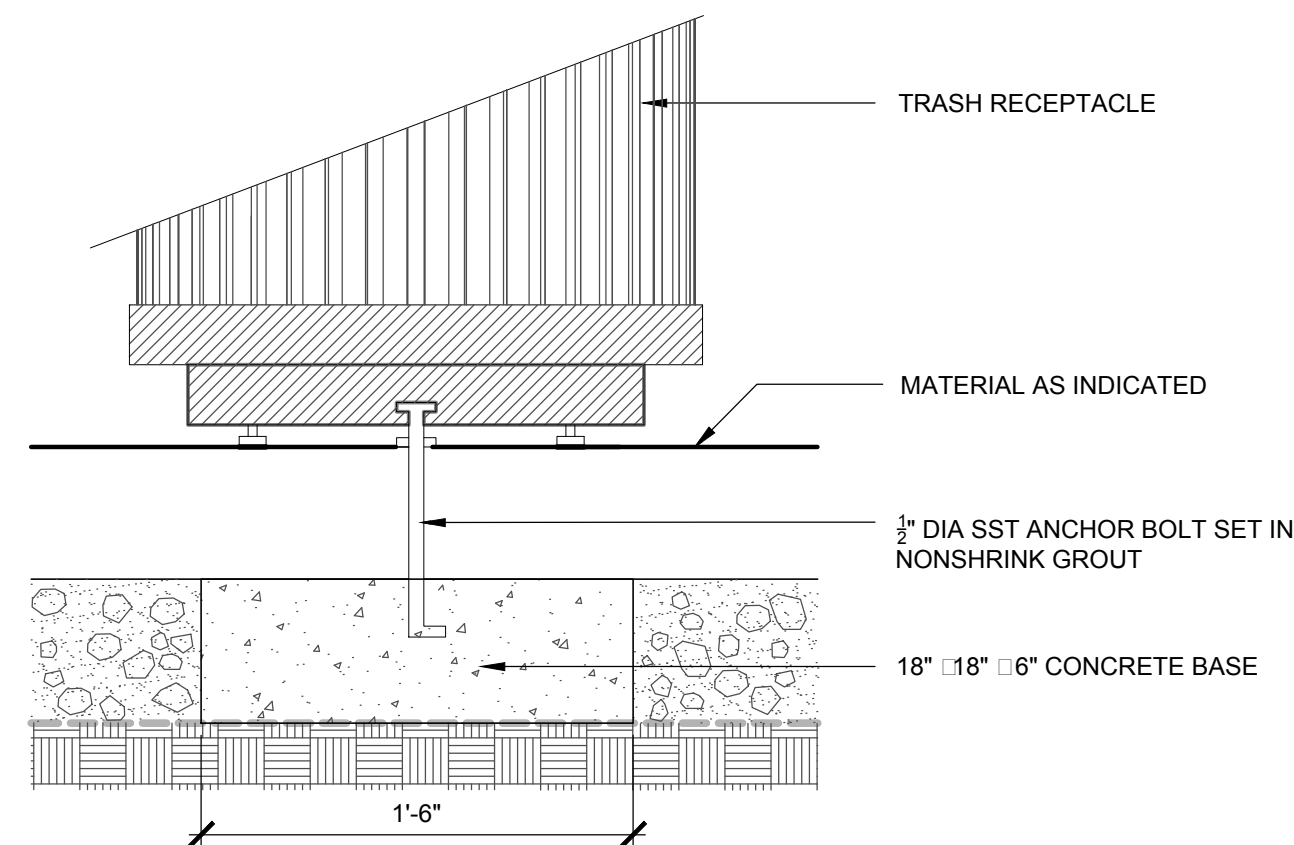


MOUNTING DETAIL
9
LM-500 3/4" □ 1'-0"

BICYCLES RACKS / MOUNTING



SECTION ON CONCRETE PAVEMENT



SECTION - CONCRETE UNIT PAVEMENT AND ASPHALT

10
LM-500 1-1/2" □ 1'-0"

WASTE RECEPTACLE

APPROVED	
SPECIAL USE PERMIT NO. _____	
DEPARTMENT OF PLANNING & ZONING	
DIRECTOR _____	DATE _____
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES	
SITE PLAN NO. _____	
DIRECTOR _____	DATE _____
CHAIRMAN, PLANNING COMMISSION _____	
DATE _____	
DATE RECORDED _____	
INSTRUMENT NO. _____ DEED BOOK NO. _____ PAGE NO. _____	

andropogon

ANDROPOGON
ASSOCIATES, LTD
10 SHURS LANE
PHILADELPHIA, PA 19127
T: 215.487.0700
F: 215.483.7520
W: www.andropogon.com

POTOMAC GREENS PARK

THE CITY OF ALEXANDRIA
CITY HALL
301 KING STREET
ALEXANDRIA, VA 22314



PRIME AE
CIVIL ENGINEERING
3201 JERMANTOWN ROAD, SUITE 660
FAIRFAX, VA 22030
703.865.0606
www.primeeng.com

KEAST & HOOD
STRUCTURAL ENGINEER
400 MARKET STREET, SUITE 1250
PHILADELPHIA, PA 19106
215.625.0099
www.keasthood.com/

IRRIGATION CONSULTING, INC.
IRRIGATION DESIGN
4 HOTEL PLACE
PEPPERELL, MA 01463
978.433.8872
www.rrigationconsulting.com

REV.	DATE	DESCRIPTION
------	------	-------------



PRELIMINARY PLAN
NOT FOR CONSTRUCTION OR PRICING

SCALE:	AS INDICATED ON DRAWINGS
DATE:	05/19/2016
DRAWN BY:	BM
CHECKED BY:	EM
APPROVED BY:	EM

AA PROJECT #: 130014.01
PROJECT PHASE: DESIGN DEVELOPMENT

DRAWING TITLE:

SITE DETAILS

SHEET:

LM-500

3. PROVIDE "QUALITY GRADE" PLANTS OF STRAIGHT SPECIES UNLESS INDICATED OTHERWISE ON PLANT SCHEDULE.
2. PROVIDE SLOPES IN PLANTING AREAS AS INDICATED ON GRADING PLANS.
3. PRIOR TO COMMENCEMENT OF LANDSCAPE INSTALLATION/PLANTING OPERATIONS, A PRE-INSTALLATION/CONSTRUCTION MEETING WILL BE SCHEDULED WITH THE CITY'S ARBORIST AND LANDSCAPE ARCHITECTS TO REVIEW THE SCOPE OF INSTALLATION PROCEDURES AND PROCESSES.
4. STAKE LOCATIONS OF NEW PLANT MATERIALS BEFORE EXCAVATING PLANT PITS FOR REVIEW IN FIELD WITH LANDSCAPE ARCHITECT.
5. COORDINATE LOCATIONS OF NEW PLANTINGS WITH UTILITIES. OBTAIN AS-BUILT PLAN OF UTILITIES BEFORE BEGINNING PLANTING. REVIEW WITH LANDSCAPE ARCHITECT.
6. REPAIR VEGETATIVE COVER OVER UTILITY TRENCHES NOT SHOWN ON THIS DRAWING BY (PREPARING PLANTING SOIL AND SEEDING/SODDING/PLANTING TO MATCH EXISTING CONDITION).
7. PROVIDE THE QUANTITY OF EACH PLANT INDICATED ON THE PLANTING PLAN IF THOSE QUANTITIES DO NOT AGREE WITH THE QUANTITIES SHOWN IN THE PLANT SCHEDULE.
8. KEEP ALL PLANTS UNTIL SUBSTITUTION IS COMPLETED.
9. ALL LANDSCAPE RELATED WORK SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE CURRENT AND MOST UP-TO-DATE EDITION (AT TIME OF CONSTRUCTION) OF LANDSCAPE SPECIFICATION GUIDELINES AS PRODUCED BY THE LANDSCAPE CONTRACTORS ASSOCIATION OF MARYLAND, DISTRICT OF COLUMBIA AND VIRGINIA. : GAITHERSBURG, MARYLAND.
10. SPECIFICATION FOR ALL PLANTINGS SHALL BE IN ACCORDANCE WITH THE CURRENT AND MOST UP TO DATE EDITION OF ANSI- 60.1, THE AMERICAN STANDARD FOR NURSERY STOCK AS PRODUCED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, WASHINGTON, DC.
11. SUITABLE ARRANGEMENTS HAVE BEEN MADE FOR PRE-SELECTION TAGGING, PRE-CONTRACT GROWING, OR IS UNDERTAKING SPECIAL ED PLANTING STOCK DEVELOPMENT WITH A NURSERY OR GROWER THAT IS CONVENIENTLY LOCATED TO THE PROJECT SITE, OTHER PROCEDURES THAT WILL ENSURE AVAILABILITY OF SPECIFIED MATERIALS. IN THE EVENT THAT SHORTAGES AND/OR INABILITY TO OBTAIN SPECIFIED PLANTINGS OCCURS, REMEDIAL EFFORTS INCLUDING SPECIES CHANGES, ADDITIONAL PLANTINGS AND MODIFICATION TO THE LANDSCAPE PLAN SHALL BE UNDERTAKEN BY THE APPLICANT. ALL REMEDIAL EFFORTS SHALL, WITH PRIOR APPROVAL, BY THE CITY, BE PERFORMED TO THE SATISFACTION OF THE DIRECTORS OF PLANNING, HOUSING, RECREATION, PARKS, AND CULTURAL ACTIVITIES AND TRANSPORTATION / ENVIRONMENTAL SERVICES.
12. MAINTENANCE FOR THIS PROJECT SHALL BE PERFORMED IN PERPETUITY, IN COMPLIANCE WITH CITY OF ALEXANDRIA LANDSCAPE GUIDELINES AND/OR AS CONDITIONED BY PROJECT APPROVAL.
13. A CERTIFICATION LETTER FOR TREE WELLS, TREE TRENCHES AND PLANTINGS ABOVE STRUCTURE SHALL BE PROVIDED BY THE PROJECT'S LANDSCAPE ARCHITECT. THE LETTER SHALL CERTIFY THAT ALL BELOW GRADE CONSTRUCTION IS IN COMPLIANCE WITH APPROVED DRAWINGS AND SPECIFICATIONS. THE LETTER SHALL BE SUBMITTED TO THE CITY ARBORIST AND APPROVED PRIOR TO APPROVAL OF THE LAST AND FINAL CERTIFICATE OF OCCUPANCY FOR THE PROJECT. THE LETTER SHALL BE SUBMITTED BY THE OWNER/APPLICANT/SUCCESSOR AND SEAMED AND DATED AS APPROVED BY THE PROJECT'S LANDSCAPE ARCHITECT.
14. ALL LANDSCAPE ELEMENTS MUST MEET THE CITY OF ALEXANDRIA'S LANDSCAPING GUIDELINES AND RELATED REQUIREMENTS.

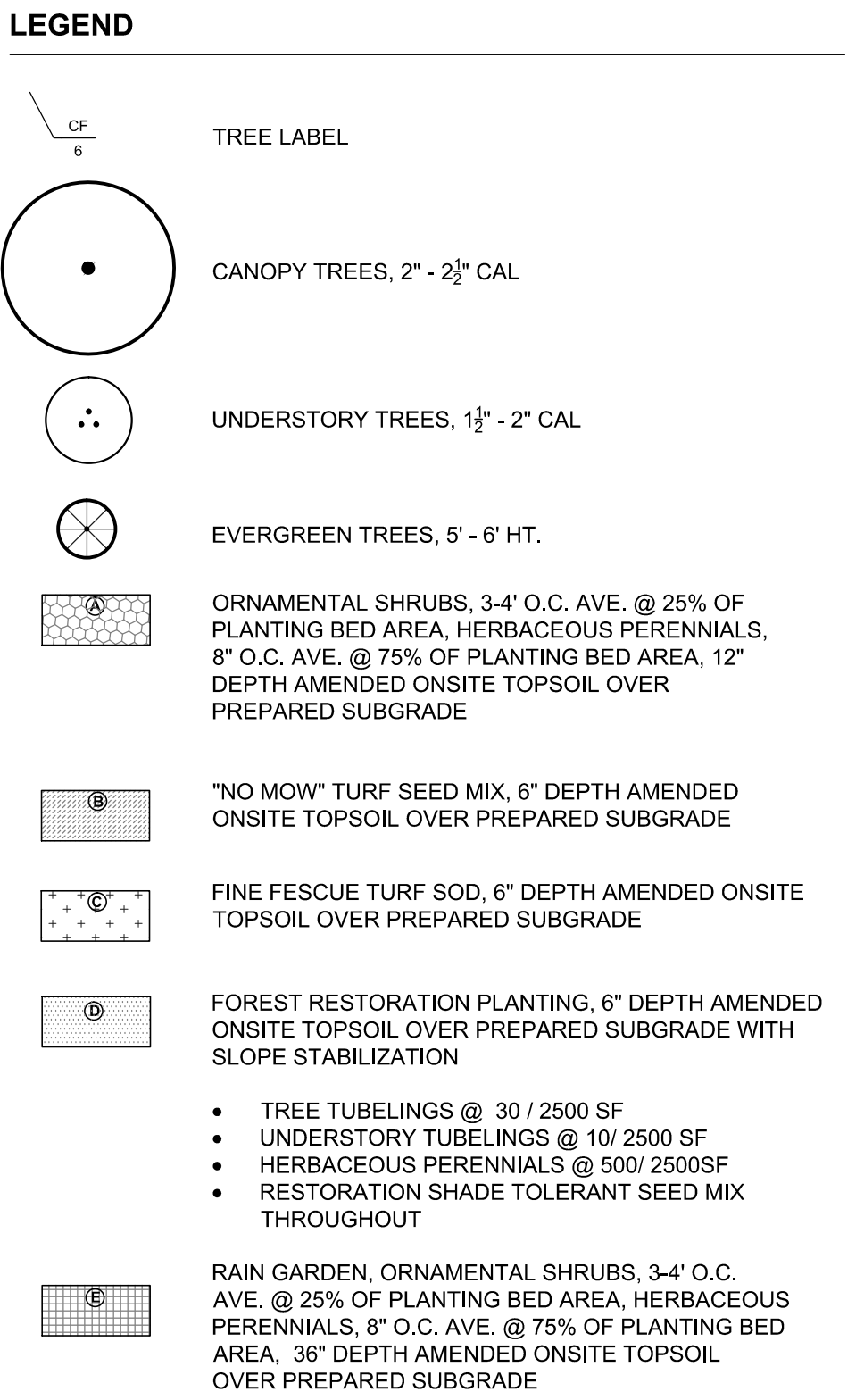
LARGE SHADE TREES	38,750
MEDIUM SHADE TREES	2,250
MEDIUM ORNAMENTAL □ EVERGREEN TREES	4,500
SMALL ORNAMENTAL □ EVERGREEN TREES	11,000
ORNAMENTAL SHRUBS	938
FOREST RESTORATION PLANTING	165,750
TOTAL	223,188 SF

1 PLANT SCHEDULE

LP-100

N

0 7.5' 15' 30' 60'



**ANDROPOGON
ASSOCIATES, LTD**
10 SHURS LANE
PHILADELPHIA, PA 19127
T: 215.487.0700
F: 215.483.7520
W: www.andropogon.com

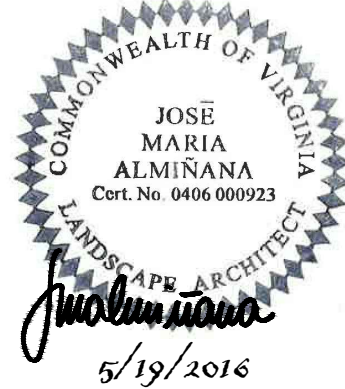
THE CITY OF ALEXANDRIA
CITY HALL
301 KING STREET
ALEXANDRIA, VA 22314



PRIME AE
CIVIL ENGINEERING
3201 JERMANTOWN ROAD, SUITE 660
FAIRFAX, VA 22030
703.865.0606
www.primeeng.com

KEAST & HOOD
STRUCTURAL ENGINEER
 400 MARKET STREET, SUITE 1250
 PHILADELPHIA, PA 19106
 215.625.0099
www.keasthood.com/

IRRIGATION CONSULTING, INC.
IRRIGATION DESIGN
4 HOTEL PLACE
PEPPERELL, MA 01463
978.433.8972
www.irrigationconsulting.com

[illegible]

SCALE:	AS INDICATED ON DRAWINGS
DATE:	5/19/2016
DRAWN BY:	BM
CHECKED BY:	EM
APPROVED BY:	EM

AA PROJECT #:	130014.02
---------------	-----------

PROJECT PHASE:	DESIGN DEVELOPMENT
-----------------------	--------------------

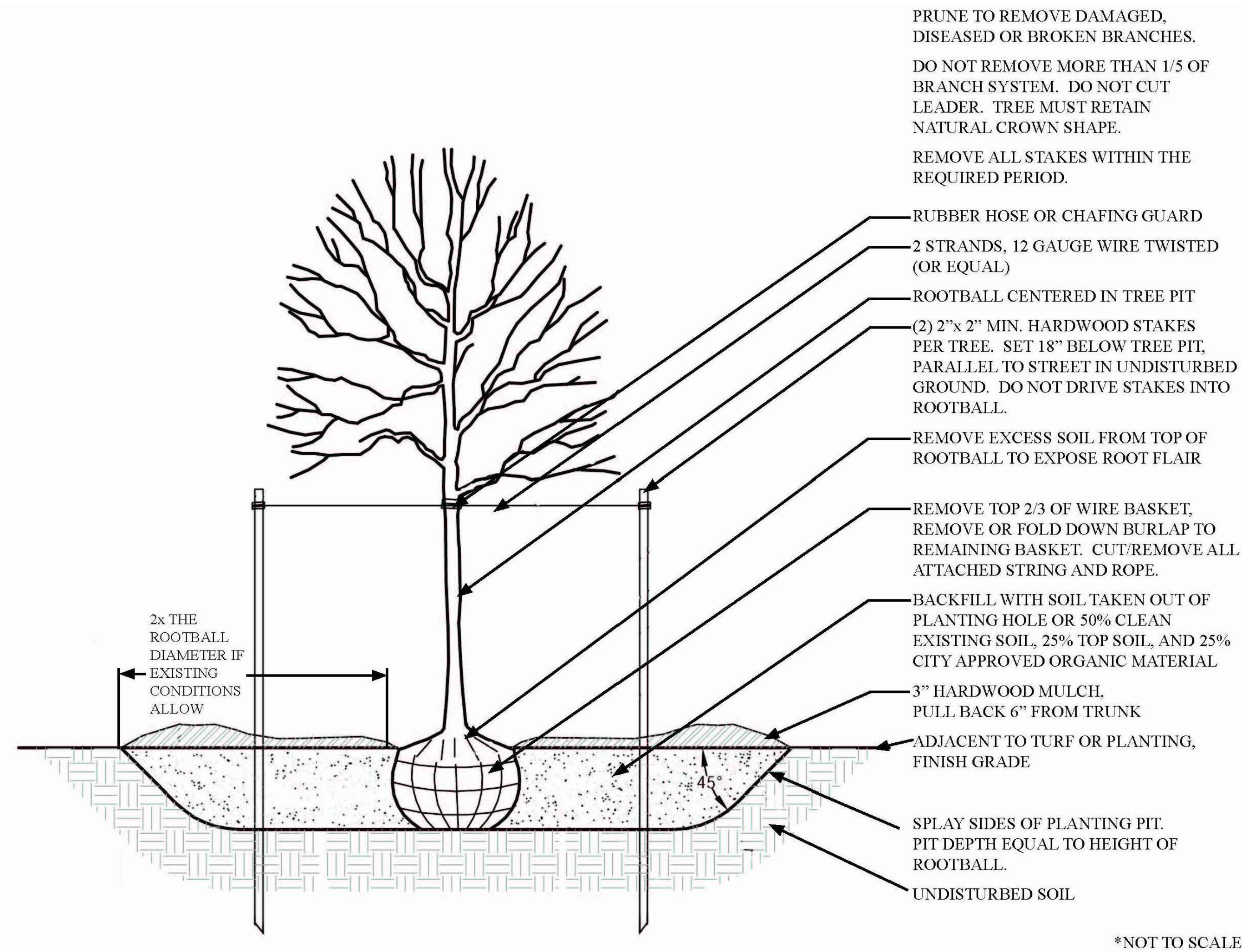
DRAWING TITLE:

PI A

SHEET:

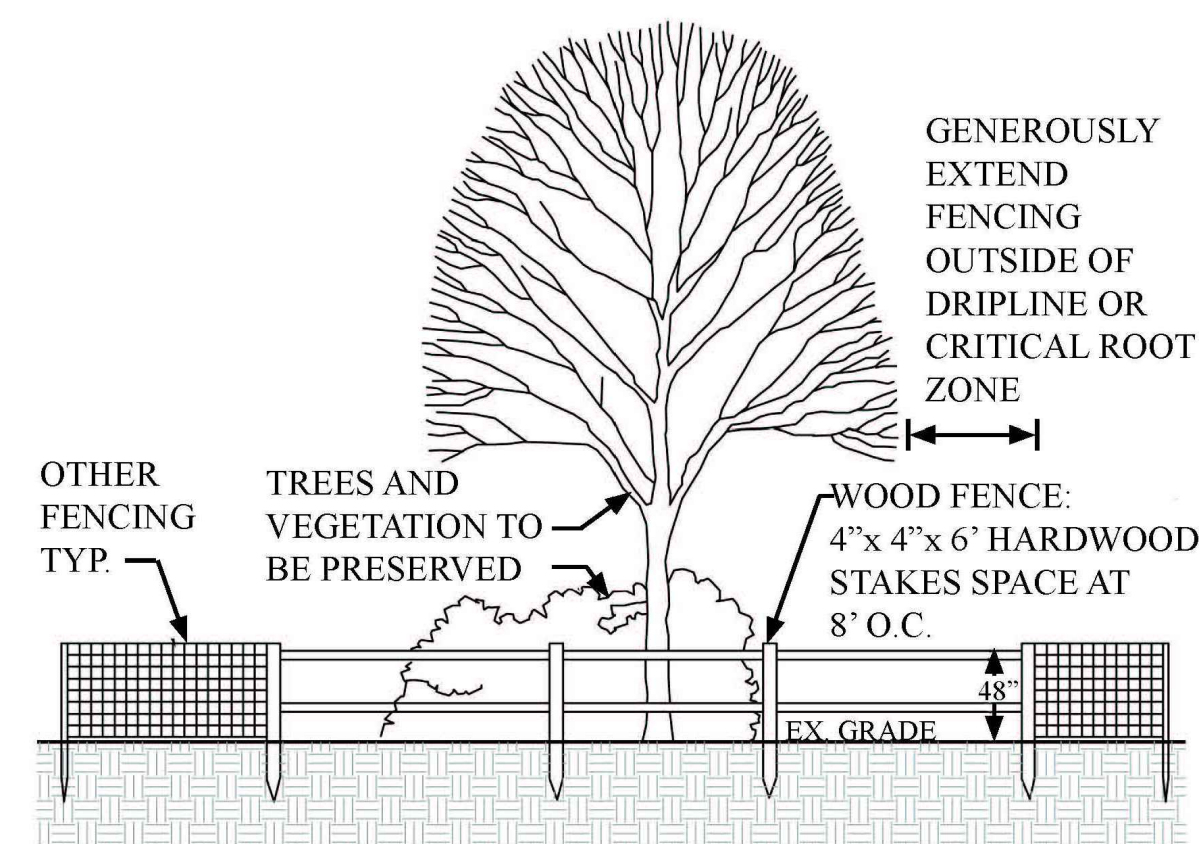
LP-100

© COPYRIGHT 2016 ANDROPOGON ASSOCIATES, LTD



SECTION

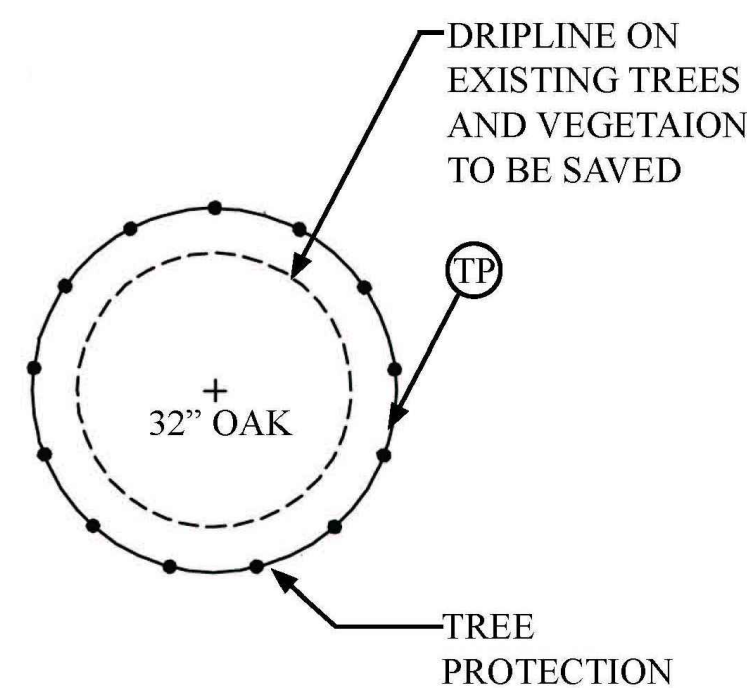
1 LP-500	TREE PLANTING IN TURF OR PLANTED AREA - CITY STANDARD
	NTS



SECTION

2 VEGETATION PROTECTION & PRESERVATION - CITY STANDARD

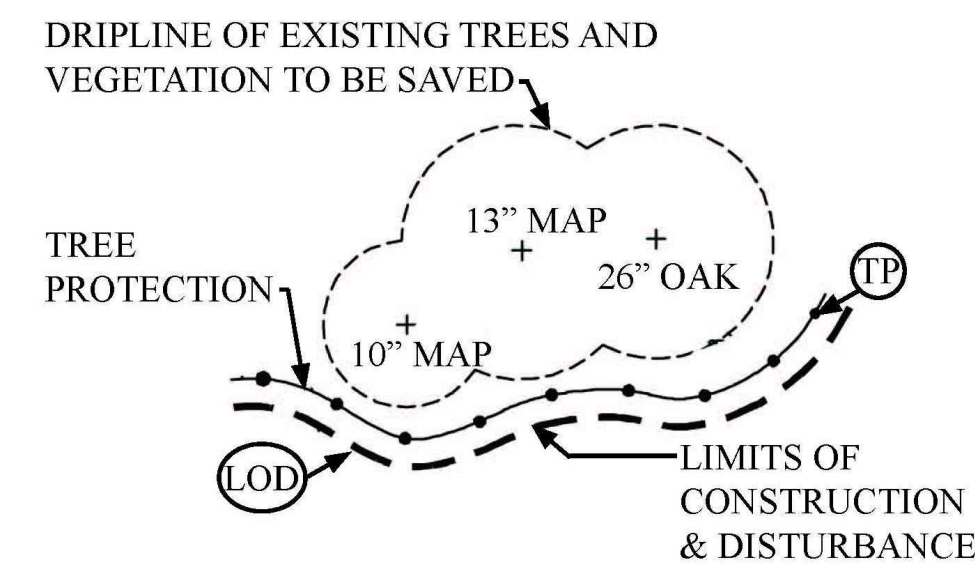
LP-500 NTS



PLAN

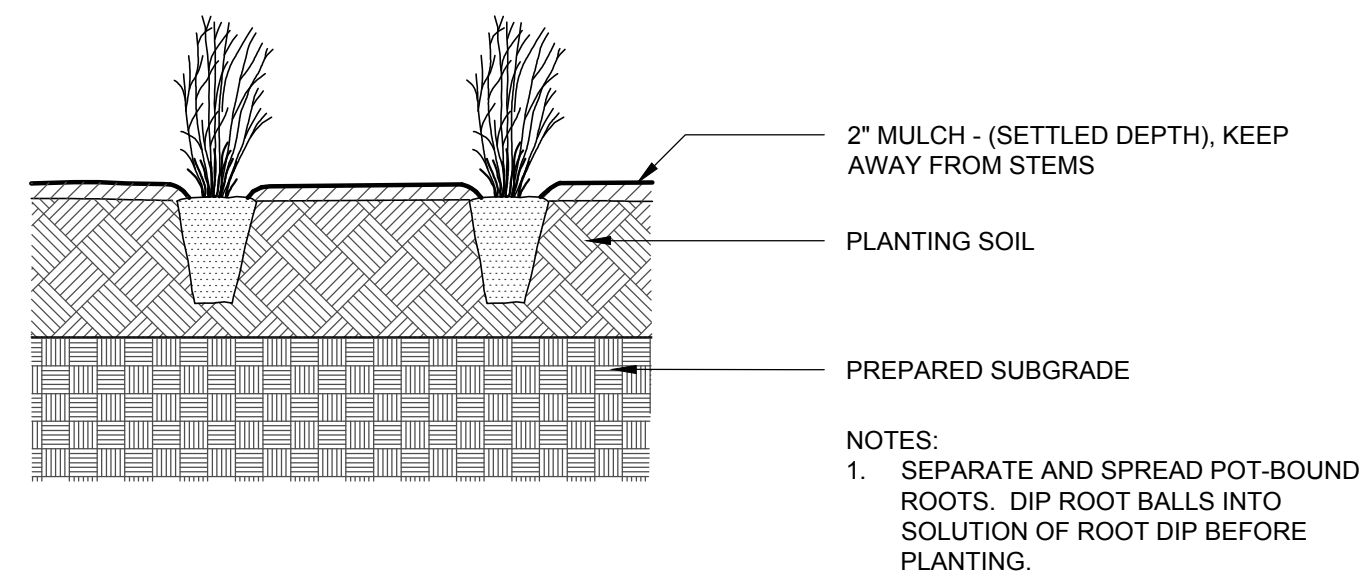
3 VEGETATION PROTECTION SINGLE SPECIMEN - CITY STANDARD

LP-500 NTS



SECTION

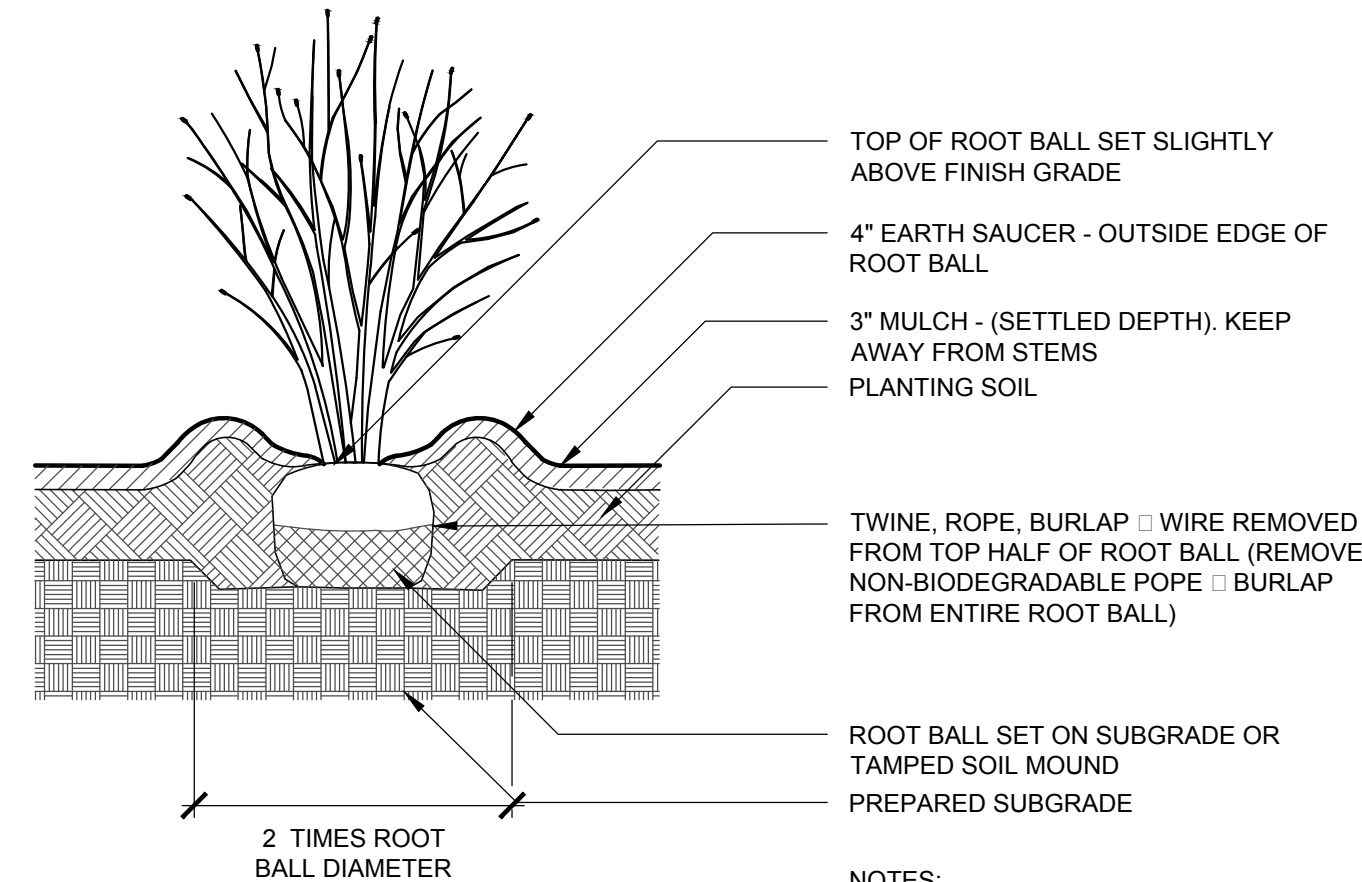
4	VEGETATION PROTECTION MULTIPLE SPECIMENS - CITY STANDARD
LP-500	NTS



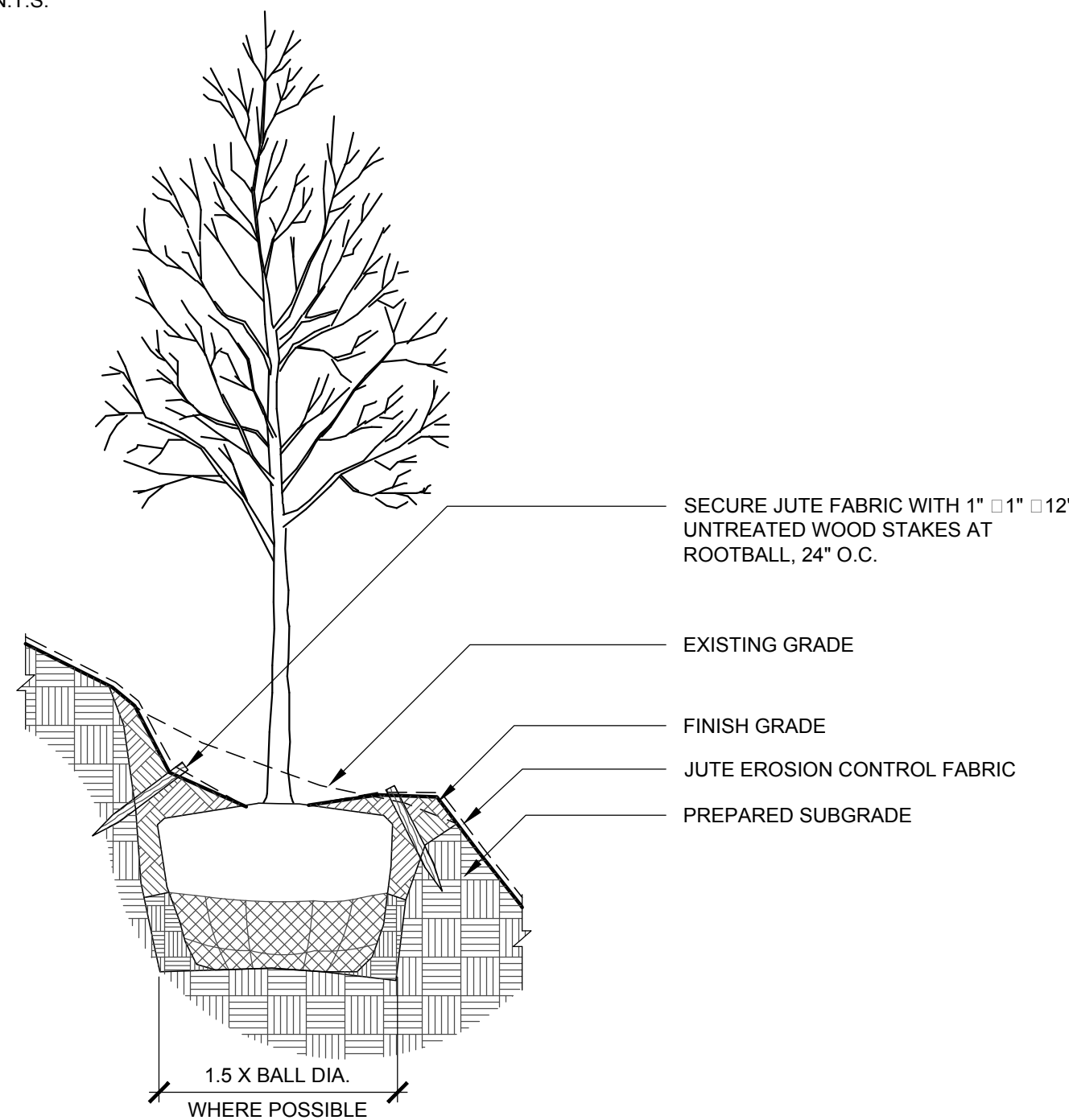
SECTION PLANTING.

5 HERBACEOUS PLANTING

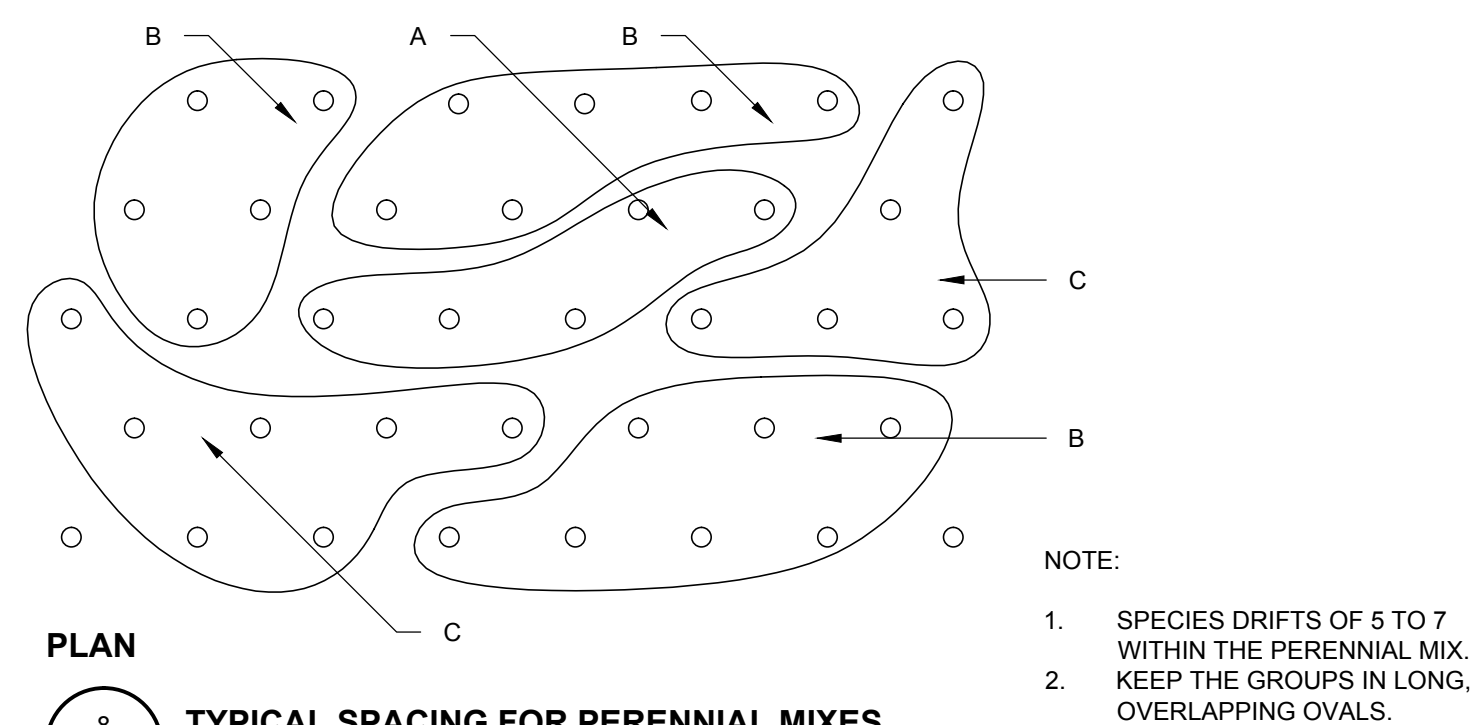
LP-500 N.T.S.



SECTION	REMOVE SAUCER, AND REDISTRIBUTE, ADD, AND/OR REPLACE MULCH AS NEEDED.
6 LP-500	SHRUB PLANTING N.T.S.



SECTION		WHERE POSSIBLE
7	TREE PLANTING ON SLOPE	
LP-500	N.T.S.	



PLAN

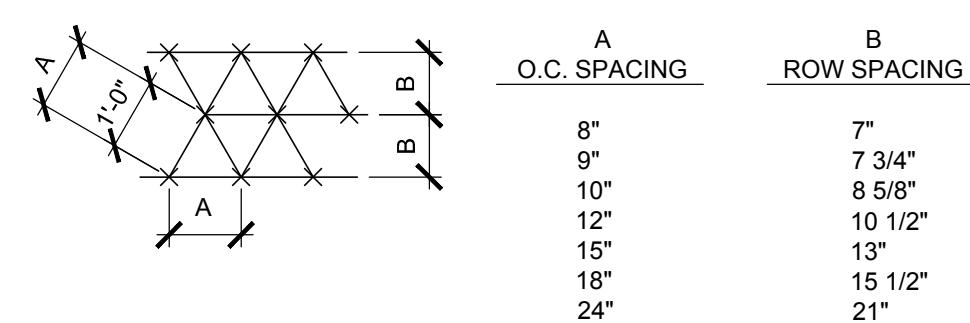
8

TYPICAL SPACING FOR PERENNIAL MIXES

LP-500

N.T.S

1. SPECIES DRIFTS OF 5' TO 7' WITHIN THE PERENNIAL MIX.
2. KEEP THE GROUPS IN LONG, OVERLAPPING OVALS.



PLAN

9	PLANT SPACING
LP-500	N.T.S.

APPROVED	
SPECIAL USE PERMIT NO. _____	
DEPARTMENT OF PLANNING & ZONING	
DIRECTOR _____	DATE _____
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES	
SITE PLAN NO. _____	
DIRECTOR _____	DATE _____
CHAIRMAN, PLANNING COMMISSION _____	DATE _____
DATE RECORDED _____	
INSTRUMENT NO. _____	DEED BOOK NO. _____ PAGE NO. _____

**ANDROPOGON
ASSOCIATES, LTD**
10 SHURS LANE
PHILADELPHIA, PA 19127
T: 215.487.0700
F: 215.483.7520
W: www.andropogon.com

POTOMAC GREENS PARK

THE CITY OF ALEXANDRIA
CITY HALL
301 KING STREET
ALEXANDRIA, VA 22314



PRIME AE
CIVIL ENGINEERING
3201 JERMANTOWN ROAD, SUITE 660
FAIRFAX, VA 22030
703.865.0606
www.primeeng.com

KEAST & HOOD
STRUCTURAL ENGINEER
400 MARKET STREET, SUITE 1250
PHILADELPHIA, PA 19106
215.625.0099
www.keasthood.com/

IRRIGATION CONSULTING, INC.
IRRIGATION DESIGN
4 HOTEL PLACE
PEPPERELL, MA 01463
978.433.8972
www.rrigationconsulting.com

[illegible]

PRELIMINARY PLAN
NOT FOR CONSTRUCTION OR PRICING

SCALE:	AS INDICATED ON DRAWINGS
DATE:	05/19/2016
DRAWN BY:	EM
CHECKED BY:	EM
APPROVED BY:	BM

AA PROJECT #:	130014.01
PROJECT PHASE:	DESIGN DEVELOPMENT

DRAWING TITLE:
PLANTING DETAILS

SHEET:

LP-500

DRAWING FILE PATH: D:\ORPOBOX (ANDROPOGON\NO130014.01 POTOMAC GREENS\RECEIVED\2016-05-17 13:00:14.30% DD AA DWG\LP-501-130014.DWG
DATE MODIFIED: 5/17/2016

POTOMAC GREENS PARK											
PLANT SCHEDULE											
Large Shade Trees											
KEY	QTY	Botanical Name	Common Name	Size	Spacing	ROOT	Remarks	CCA - 1250	Installation Height	Height at Maturity	
QB	3	Quercus bicolor	Swamp White Oak	2 - 2.5 cal	AS SHOWN	B&B		3,750	8-10' ft.	75-100' ft.	
QP	13	Quercus phellos	Willow Oak	2 - 2.5 cal	AS SHOWN	B&B		16,250	8-10' ft.	75-100' ft.	
QM	9	Quercus macrocarpa	Bur Oak	2 - 2.5 cal	AS SHOWN	B&B		11,250	8-10' ft.	75-100' ft.	
UA	6	Ulmus americana- disease resistant cultivar	American Elm	2 - 2.5 cal	AS SHOWN	B&B		7,500	8-10' ft.	75-100' ft.	
								38,750			
Medium Shade Trees											
KEY	QTY	Botanical Name	Common Name	Size	Spacing	ROOT	Remarks	CCA - 750	Installation Height	Height at Maturity	
CR	3	Carpinus canadensis	Hornbeam	2 - 2.5 cal	AS SHOWN	B&B		2,250	8-10' ft.	50' - 75' ft.	
NS	2	Nyssa sylvatica	Blackgum	2 - 2.5 cal	AS SHOWN	B&B		1,500	8-10' ft.	50' - 75' ft.	
								2,250			
Medium Ornamental and Evergreen Trees											
KEY	QTY	Botanical Name	Common Name	Size	Spacing	ROOT	Remarks	CCA - 500	Installation Height	Height at Maturity	
CC	9	Cercis canadensis	Redbud	8-10' ft.	AS SHOWN	B&B		4,500	8-10' ft.	20' - 30' ft.	
								4,500			
Small Ornamental and Evergreen Trees											
KEY	QTY	Botanical Name	Common Name	Size	Spacing	ROOT	Remarks	CCA - 250	Installation Height	Height at Maturity	
ID	17	Ilex opaca	American Holly	5 - 6' ft.	AS SHOWN	B&B		4,250	5 - 6' ft.	25' - 30' ft.	
OF	13	Coronua florida cultivar	Flowering Dogwood	1 - 1.5' cal.		B&B		3,250	6'-7' ft.	25' - 35' ft.	
MV	8	Magnolia virginiana	Sweetbay Magnolia	5 - 6' ft.		B&B		2,000	5 - 6' ft.	15' - 30' ft.	
AA	6	Amelanchier arborea	Shadblow serviceberry	5 - 6' ft.		B&B		1,500	5 - 6' ft.	15' - 30' ft.	
								11,000			
A - Ornamental Shrubs 14,092 sf											
KEY	QTY	Botanical Name	Common Name	Size	Spacing	ROOT	Remarks	CCA - 2	Installation Height	Initial Width	Height at Maturity
	456	Ornamental Shrubs									
	36	Aronia arbutifolia	Red Chokeberry	3 - 4' ft.	3-4' OC AVE	B&B/ CONT.		76	3 - 4' ft.	1' - 2' wide	3'-6' ft.
	36	Asimina triloba	Pawpaw	3 - 4' ft.	3-4' OC AVE	B&B/ CONT.	MALE AND FEMALE	76	3 - 4' ft.	4' - 6' wide	15' - 30' ft.
	36	Ceanothus americanus	New Jersey Tea	1.5 - 3' ft.	3-4' OC AVE	CONT.		76	1.5 - 3' ft.	22' - 1.5' wide	3'-6' ft.
	36	Cephalanthus occidentalis	Butterbush	3 - 4' ft.	3-4' OC AVE	B&B/ CONT.		76	3 - 4' ft.	4' - 6' wide	12' - 20' ft.
	36	Clethra alnifolia	Summersweet	1.5 - 3' ft.	3-4' OC AVE	CONT.		76	1.5 - 3' ft.	1'-1.5' wide	6'-12' ft.
	36	Cornus amomum	Silly Dogwood	1.5 - 3' ft.	3-4' OC AVE	CONT.		76	1.5 - 3' ft.	3' - 6' wide	6'-12' ft.
	36	Cornus sericea	Red-Twig Dogwood	3 - 4' ft.	3-4' OC AVE	B&B/ CONT.		76	3 - 4' ft.	2'-2.5' wide	6'-9' ft.
	36	Hydrangea arboreascent	Smooth Hydrangea	3 - 4' ft.	3-4' OC AVE	B&B/ CONT.		76	3 - 4' ft.	1' - 2' wide	3'-6' ft.
	36	Ilex glabra	Hollyberry Holly	1.5 - 3' ft.	3-4' OC AVE	CONT.		76	1.5 - 3' ft.	1' - 2' wide	6'-9' ft.
	36	Ilex verticillata	Winterberry	1.5 - 3' ft.	3-4' OC AVE	CONT.	MALE AND FEMALE	76	1.5 - 3' ft.	1' - 2' wide	6'-12' ft.
	36	Viburnum acerifolium	Maple-leaf Viburnum	1.5 - 3' ft.	3-4' OC AVE	CONT.		76	1.5 - 3' ft.	1' - 2' wide	6'-12' ft.
	36	Viburnum dentatum	Southern Arrowwood	1.5 - 3' ft.	3-4' OC AVE	CONT.		76	1.5 - 3' ft.	1' - 2' wide	6'-12' ft.
								912			
	27,480	ORNAMENTAL HERBACEOUS PERENNIALS								Initial spread	
		Andropogon gerardii	Big Bluestem		8" OC AVE	CONT/ PLUG		N/A		3'-5' wide	
		Asclepias tuberosa	Butterfly Weed		8" OC AVE	CONT/ PLUG		N/A		3'-5' wide	
		Cornegop lanceolata	Lancelot cosmos		8" OC AVE	CONT/ PLUG		N/A		3'-5' wide	
		Echinacea purpurea	Purple Coneflower		8" OC AVE	CONT/ PLUG		N/A		3'-5' wide	
		Eupatorium purpureum	Joe-Pye Weed		8" OC AVE	CONT/ PLUG		N/A		3'-5' wide	
		Mimulus festuosa	Wild bergamot		8" OC AVE	CONT/ PLUG		N/A		3'-5' wide	
		Monsarda punctata	Spotted Beekham		8" OC AVE	CONT/ PLUG		N/A		3'-5' wide	
		Panicum virgatum	Switchgrass		8" OC AVE	CONT/ PLUG		N/A		3'-5' wide	
		Penstemon digitalis	Fonglwa Beardtongue		8" OC AVE	CONT/ PLUG		N/A		3'-5' wide	
		Rudbeckia hirta	Black-eyed Susan		8" OC AVE	CONT/ PLUG		N/A		3'-5' wide	
		Schizanthium bicolorium	Little Bluebell		8" OC AVE	CONT/ PLUG		N/A		3'-5' wide	
		Sorghastrum nutans	Indiangrass		8" OC AVE	CONT/ PLUG		N/A		3'-5' wide	
B - No Mow Turf - 5,775 sf											
KEY	QTY	Botanical Name	Common Name	Size	Spacing	ROOT	Remarks	CCA - N/A			
	5,775 sf		No-Mow Lawn Seed Mix	220 lbs/acre			Source: Prairie Nursery	N/A			
	5.75 lbs		5 lbs/1000 sf								
C - Fine Fescue Turf Sod - 22,313 sf											
KEY	QTY	Botanical Name	Common Name	Size	Spacing	ROOT	Remarks	CCA - N/A			
	22,313 sf							N/A			
	90%	Festuca arundinacea	Turf-type tall fescue				Source: Tuckahoe Turf Farm				
	10%	Poa pratensis	Kentucky bluegrass								
D - Forest Restoration - 9,658 sf											
KEY	QTY	Botanical Name	Common Name	Size	Spacing	ROOT	Remarks	CCA - varies	Installation Height	Height at Maturity	
	146	RESTORATION SIZE TREES									
	12	Acer rubrum	Red Maple	3 - 5' ft.		CONT.	large shade	15,000	3 - 5' ft.	75-100' ft.	
	5	Carya ovata	Shagbark Hickory	3 - 5' ft.		CONT.	large shade	6,250	3 - 5' ft.	75-100' ft.	
	4	Celtis occidentalis	Hackberry	3 - 5' ft.		CONT.	medium ornamental	2,000	3 - 5' ft.	75-100' ft.	
	4	Fagus grandifolia	American Beech	3 - 5' ft.		CONT.	large shade	5,000	3 - 5' ft.	75-100' ft.	
	4	Ilex opaca	American Holly	5 - 6' ft.		CONT.	small ornamental	1,000	5 - 6' ft.	25' - 30' ft.	
							small ornamental -				
	5	Juniperus virginiana	Eastern Red Cedar	5 - 6' ft.		CONT.	male and female	1,000	5 - 6' ft.	50' - 75' ft.	
	5	Liquidambar styraciflua	Sweetgum	3 - 5' ft.		CONT.	large shade	6,250	3 - 5' ft.	75-100' ft.	
	13	Liriodendron tulipifera	Tuliptree	3 - 5' ft.		CONT.	large shade	16,250	3 - 5' ft.	75-100' ft.	
	4	Nyssa sylvatica	Blackgum	3 - 5' ft.		CONT.	medium shade	3,000	3 - 5' ft.	50' - 75' ft.	
	4	Pinus rigida	Pinus Pine	5 - 6' ft.		CONT.	medium ornamental	2,000	5 - 6' ft.	50' - 75' ft.	
	4	Pinus virginiana	Virginia Pine	5 - 6' ft.		CONT.	medium ornamental	2,000	5 - 6' ft.	50' - 75' ft.	
	13	Platanus occidentalis	American Sycamore	3 - 5' ft.		CONT.	large shade	16,250	3 - 5' ft.	75-100' ft.	
	12	Populus grandidentata	Big Tooth Aspen	3 - 5' ft.		CONT.	medium shade	9,000	3 - 5' ft.	50' - 75' ft.	
	4	Prunus serotina	Black Cherry	3 - 5' ft.		CONT.	medium ornamental	2,000	3 - 5' ft.	50' - 75' ft.	
	12	Quercus alba	White Oak	3 - 5' ft.		CONT.	large shade	15,000	3 - 5' ft.	75-100' ft.	
	13	Quercus bicolor	Swamp White Oak	3 - 5' ft.		CONT.	large shade	16,250	3 - 5' ft.	75-100' ft.	
	12	Quercus palustris	Pin Oak	3 - 5' ft.		CONT.	large shade	15,000	3 - 5' ft.	50' - 75' ft.	
	13	Quercus phellos	Willow Oak	3 - 5' ft.		CONT.	large shade	16,250	3 - 5' ft.	75-100' ft.	
	13	Quercus prinus	Chestnut Oak	2 - 2.5 cal		CONT.	large shade	16,250	8-10' ft.	75-100' ft.	
								165,750			
	1,932	HERBACEOUS PERENNIALS								Initial spread	
		Cornegop lanceolata	Lancelot cosmos		8" OC AVE	landscape plug		N/A		3'-5' wide	
		Dryopteris marginalis	Bleeding Heart		8" OC AVE	landscape plug		N/A		3'-5' wide	
		Mimulus festuosa	Wild bergamot		8" OC AVE	landscape plug		N/A		3'-5' wide	
		Monsarda punctata	Spotted Beekham		8" OC AVE	landscape plug		N/A		3'-5' wide	
		Polystichum acrostichoides	Christmas Fern		8" OC AVE	landscape plug		N/A		5'-7' wide	
	9,658 sf	RESTORATION SHADE TOLERANT SEED MIX						N/A			
			Custom seed mix with species less than 2" tall, 70% grasses/ 30% native wildflowers, include nurse crop of oats or grain rye & partridge pea								
							SEED				
E - Rain Garden - 520 sf											
KEY	QTY	Botanical Name	Common Name	Size	Spacing	ROOT	Remarks	CCA - varies			
	13	ORNAMENTAL SHRUBS									
	5	Clethra alnifolia	Summersweet	1.5 - 3' ft.	3-4' OC AVE	CONT.		10	1.5 - 3' ft.	1'-1.5' wide	
	3	Cornus sericea	Red-Twig Dogwood	3 - 4' ft.	3-4' OC AVE	B&B/ CONT.		6	3 - 4' ft.	2'-2.5' wide	
	5	Ilex glabra	Hollyberry Holly	1.5 - 3' ft.	3-4' OC AVE	CONT.		10	1.5 - 3' ft.	1' - 2' wide	
								26			
	1362	HERBACEOUS PERENNIALS									
		Aster roseae-anglica 'Purple Dome'	New England aster		8" OC	CONT.					
		Carex stricta	Upright sedge		8" OC	CONT.					
		Deschamisia cespitosa	Tufted hairgrass		10" OC	CONT.					
		Iris versicolor	Southern blue flag iris		8" OC	CONT.					
		Juncus tenuis	Powery rush		8" OC	CONT.					
		Lobelia cardinalis	Cardinal flower		8" OC	CONT.					
		Viola sororia	Common blue violet		8" OC	CONT.					



ANDROPOGON ASSOCIATES, LTD
10 SHURS LANE
PHILADELPHIA, PA 19127
T: 215.487.0700
F: 215.483.7520
W: www.andropogon.com

POTOMAC GREENS PARK

THE CITY OF ALEXANDRIA
CITY HALL
301 KING STREET
ALEXANDRIA, VA 22314

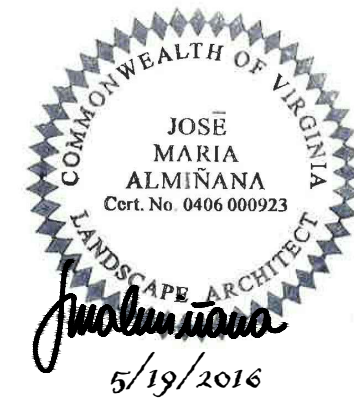


PRIME AE
CIVIL ENGINEERING
3201 JERMANTOWN ROAD, SUITE 660
FAIRFAX, VA 22030
703.865.0606
www.primeeng.com

KEAST & HOOD
STRUCTURAL ENGINEER
400 MARKET STREET, SUITE 1250
PHILADELPHIA, PA 19106
215.625.0099
www.keasthood.com/

IRRIGATION CONSULTING, INC.
IRRIGATION DESIGN
4 HOTEL PLACE
PEPPERELL, MA 01463
978.433.8972
www.irationconsulting.com

REV.	DATE	DESCRIPTION



PRELIMINARY PLAN
NOT FOR CONSTRUCTION OR PRICING

SCALE:	AS INDICATED ON DRAWINGS
DATE:	05/19/2016
DRAWN BY:	EM
CHECKED BY:	EM
APPROVED BY:	BM

AA PROJECT #:

130014.02

PROJECT PHASE:

DESIGN DEVELOPMENT

DRAWING TITLE:

PARK
PLANT SCHEDULE

SHEET:

LP-501

POTOMAC GREENS PARK

THE CITY OF ALEXANDRIA
CITY HALL
301 KING STREET
ALEXANDRIA, VA 22314



PRIME AE
CIVIL ENGINEERING
3201 JERMANTOWN ROAD, SUITE 660
FAIRFAX, VA 22030
703.865.0606
www.primeeng.com

KEAST & HOOD
STRUCTURAL ENGINEER
400 MARKET STREET, SUITE 1250
PHILADELPHIA, PA 19106
215.625.0099
www.keasthood.com/

IRRIGATION CONSULTING, INC.
IRRIGATION DESIGN
4 HOTEL PLACE
PEPPERELL, MA 01463
978.433.8972
www.irrigationconsulting.com

REV.	DATE	DESCRIPTION



PRELIMINARY PLAN
NOT FOR CONSTRUCTION OR PRICING

SCALE:	NTS
DATE:	5/19/2016
DRAWN BY:	EM
CHECKED BY:	BM
APPROVED BY:	EM

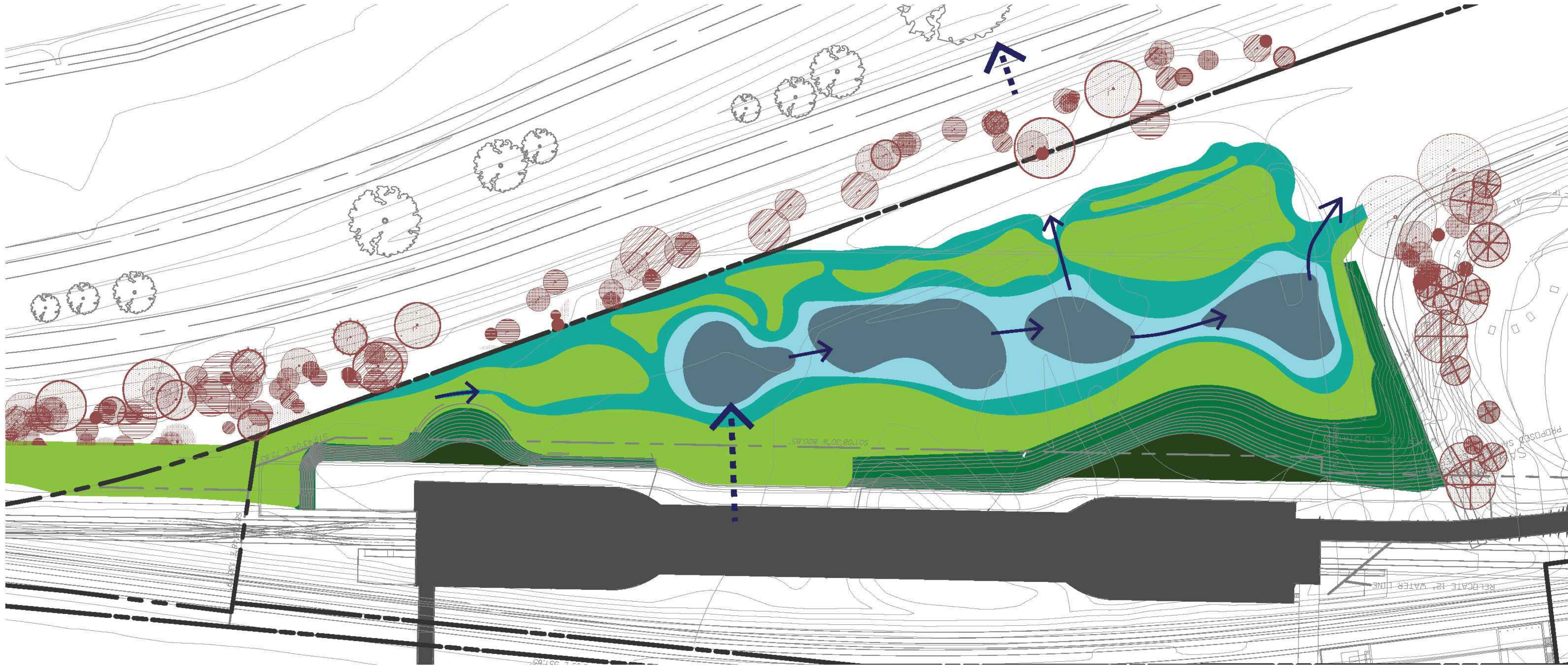
AA PROJECT #: 130014.01
PROJECT PHASE: DESIGN DEVELOPMENT

DRAWING TITLE:
**WETLAND
PLANTING DIAGRAM**

SHEET:

LP-101

- METRORAIL STATION UPLAND BUFFER
- STEEP SLOPE UPLAND
- PALUSTRINE FORESTED WETLAND (PFO)(SATURATED ZONE)
- TRANSITION BETWEEN PFO AND PSS (TEMPORARILY INUNDATED ZONE)
- PALUSTRINE SCRUB-SHRUB WETLAND (PSS) (PERMANENTLY INUNDATED ZONE)
- PALUSTRINE EMERGENT WETLAND (PEM) (PERMANENTLY INUNDATED ZONE)



APPROVED

SPECIAL USE PERMIT NO. _____

DEPARTMENT OF PLANNING & ZONING

DIRECTOR _____ DATE _____

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

SITE PLAN NO. _____

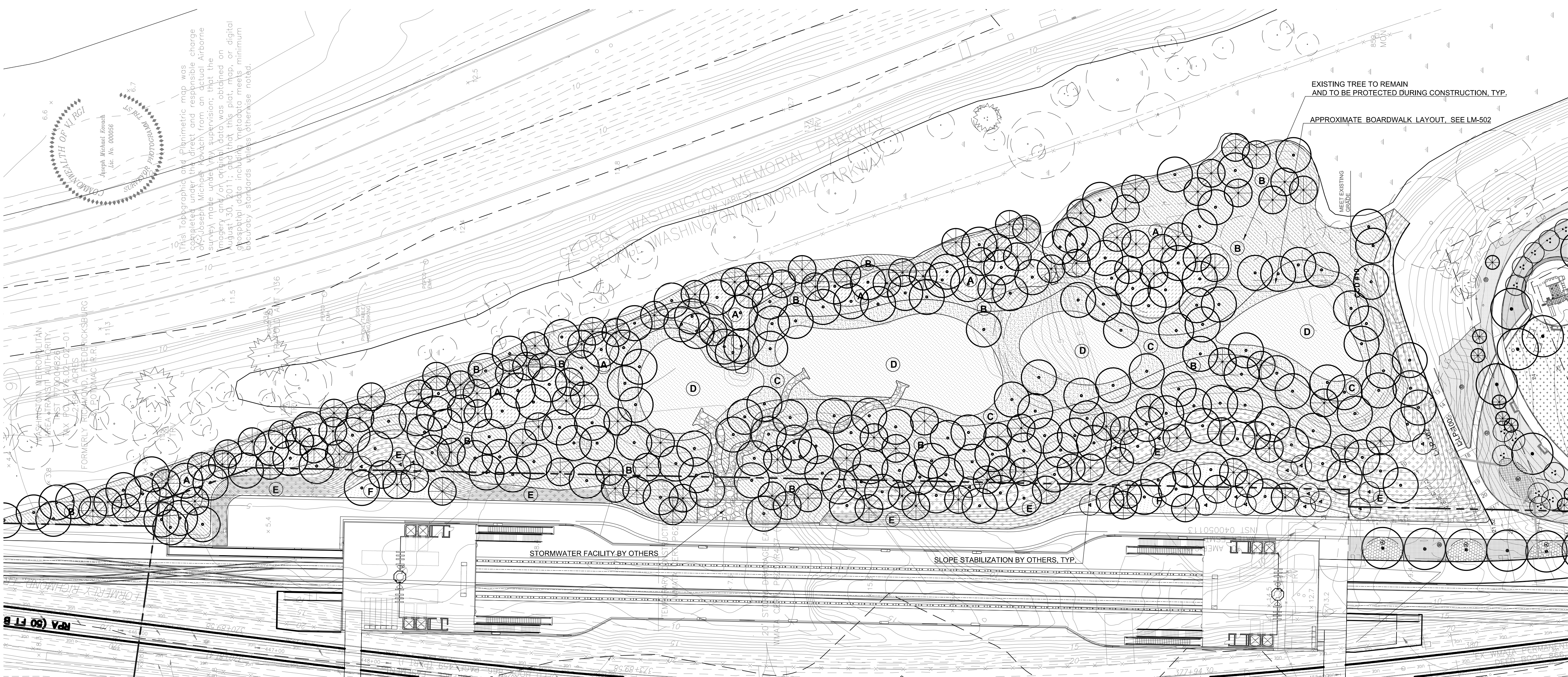
DIRECTOR _____ DATE _____

CHAIRMAN, PLANNING COMMISSION _____ DATE _____

DATE RECORDED _____

INSTRUMENT NO. _____ DEED BOOK NO. _____ PAGE NO. _____

DRAWING FILE PATH: D:\DROPOGON\DRAWINGS\PHASE 2\DRAWING SETS\LOT14-01 POTOMAC GREENS\DRAWINGS\PHASE 2\DRAWING SETS\LOT14-01-130014-WETLAND.DWG
DATE MODIFIED: 5/16/2016

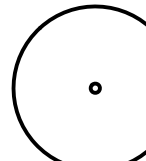
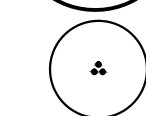
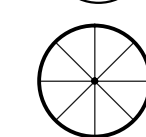


PLANTING NOTES

1. PROVIDE "QUALITY GRADE" PLANTS OF STRAIGHT SPECIES (NO CULTIVARS, HYBRIDS OR VARIETIES) UNLESS INDICATED OTHERWISE ON PLANT SCHEDULE.
2. TREES SHOULD BE IN THEIR NATURAL FORM AND BRANCH TO THE GROUND, IF THAT IS THEIR NATURAL FORM. "LIMBED-UP" TREES ARE NOT DESIRABLE FOR THIS PROJECT.
3. PROVIDE SLOPES IN PLANTING AREAS AS INDICATED ON GRADING PLANS.
4. PRIOR TO COMMENCEMENT OF LANDSCAPE INSTALLATION/PLANTING OPERATIONS, A PRE-INSTALLATION/CONSTRUCTION MEETING WILL BE SCHEDULED WITH THE CITY ARBORIST AND LANDSCAPE ARCHITECTS TO REVIEW THE SCOPE OF INSTALLATION PROCEDURES AND PROCESSES.
5. STAKE LOCATIONS OF NEW PLANT MATERIALS BEFORE EXCAVATING PLANT PITS FOR REVIEW IN FIELD WITH LANDSCAPE ARCHITECT.
6. COORDINATE LOCATIONS OF NEW PLANTINGS WITH UTILITIES. OBTAIN AS-BUILT PLAN OF UTILITIES BEFORE BEGINNING PLANTING. REVIEW WITH LANDSCAPE ARCHITECT.
7. REPAIR VEGETATIVE COVER OVER UTILITY TRENCHES NOT SHOWN ON THIS DRAWING BY (PREPARING PLANTING SOIL AND SEEDING/SODDING/PLANTING TO MATCH EXISTING CONDITION).
8. PROVIDE THE QUANTITY OF EACH PLANT INDICATED ON THE PLANTING PLAN IF THOSE QUANTITIES DO NOT AGREE WITH THE QUANTITIES SHOWN IN THE PLANT SCHEDULE.
9. KEEP SEALS ON PLANTS UNTIL SUBSTANTIAL COMPLETION.
10. ALL LANDSCAPE RELATED WORK SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE CURRENT AND MOST UP-TO-DATE EDITION (AT TIME OF CONSTRUCTION) OF LANDSCAPE SPECIFICATION GUIDELINES AS PRODUCED BY THE LANDSCAPE CONTRACTORS ASSOCIATION OF MARYLAND, DISTRICT OF COLUMBIA AND VIRGINIA, GAITHERSBURG, MARYLAND.
11. SPECIFICATION FOR ALL PLANTINGS SHALL BE IN ACCORDANCE WITH THE CURRENT AND MOST UP TO DATE EDITION OF ANSI-60.1, THE AMERICAN STANDARD FOR NURSERY STOCK AS PRODUCED BY THE AMERICAN ASSOCIATION OF NURSERYMEN WASHINGTON, DC.
12. SUITABLE ARRANGEMENTS HAVE BEEN MADE FOR PRE-SELECTION TAGGING, PRE-CONTRACT GROWING, OR IS UNDERTAKING SPECIALIZED PLANTING STOCK DEVELOPMENT WITH A NURSERY OR GROWER THAT IS CONVENIENTLY LOCATED TO THE PROJECT SITE. OTHER PROCEDURES THAT WILL ENSURE AVAILABILITY OF SPECIFIED MATERIALS. IN THE EVENT THAT SHORTAGES AND/OR INABILITY TO OBTAIN SPECIFIED PLANTINGS OCCURS, REMEDIAL EFFORTS INCLUDING SPECIES CHANGES, ADDITIONAL PLANTINGS AND MODIFICATION TO THE LANDSCAPE PLAN SHALL BE UNDERTAKEN BY THE APPLICANT. ALL REMEDIAL EFFORTS SHALL, WITH PRIOR APPROVAL BY THE CITY, BE PERFORMED TO THE SATISFACTION OF THE DIRECTORS OF PLANNING, ZONING, RECREATION, PARKS, CULTURAL ACTIVITIES AND TRANSPORTATION ENVIRONMENTAL SERVICES.
13. MAINTENANCE FOR THIS PROJECT SHALL BE PERFORMED IN PERPETUITY, IN COMPLIANCE WITH CITY OF ALEXANDRIA LANDSCAPE GUIDELINES AND/OR AS CONDITIONED BY PROJECT APPROVAL.
14. A CERTIFICATION LETTER FOR TREE WELLS, TREE TRENCHES AND PLANTINGS ABOVE STRUCTURE SHALL BE PROVIDED BY THE PROJECT'S LANDSCAPE ARCHITECT. THE LETTER SHALL CERTIFY THAT ALL BELOW GRADE CONSTRUCTION IS IN COMPLIANCE WITH APPROVED DRAWINGS AND SPECIFICATIONS. THE LETTER SHALL BE SUBMITTED TO THE CITY ARBORIST AND APPROVED PRIOR TO APPROVAL OF THE LAST AND FINAL CERTIFICATE OF OCCUPANCY FOR THE PROJECT. THE LETTER SHALL BE SUBMITTED BY THE OWNER/APPLICANT/SUCCESSOR AND SEALED AND DATED AS APPROVED BY THE PROJECT'S LANDSCAPE ARCHITECT.
15. ALL LANDSCAPE ELEMENTS MUST MEET THE CITY OF ALEXANDRIA'S LANDSCAPING GUIDELINES AND RELATED REQUIREMENTS.
16. FINAL WETLAND RESTORATION AND LANDSCAPING PLANS (THE "PLANS") SUBJECT TO THE REVIEW AND APPROVAL OF THE PERMITTING AGENCIES (USACE AND VDEQ) AND THE DIRECTOR OF ALEXANDRIA'S DEPARTMENT OF RECREATION, PARKS AND CULTURAL ACTIVITIES (RPCA).
17. PLANS TO COMPLY WITH THE CITY'S URBAN FORESTRY MASTER PLAN. SPECIFICALLY, USE NATURALLY OCCURRING NATIVE SPECIES IN WETLANDS PLANTINGS AND OTHER SITES IN AND AROUND NATURAL AREAS.
18. PLANTING OF NON-NATIVE (NATIVE IS DEFINED AS NATIVE TO THE LEVEL IV ECOREGION OF ALEXANDRIA, THE CHESAPEAKE ROLLING COASTAL PLAIN) SPECIES MAY BE APPROVED BY THE DIRECTOR OF THE RPCA, IF CRITICAL TO SCREENING THE METRO STATION FROM THE GEORGE WASHINGTON NATIONAL PARKWAY.
19. TO ACCOMPLISH CITY'S OBJECTIVE TO SCREEN THE METRO STATION FROM GEORGE WASHINGTON PARKWAY, THIS PLANTING PLAN REPRESENTS THE MINIMUM PLANTING STANDARDS REQUIRED.
20. ALL AREAS TO BE DISTURBED TO THE NORTH OF THE WETLANDS ALONG THE TRACKS, MUST BE RESTORED WITH APPROPRIATE GRADES TO DRAIN THE AREA AND ESTABLISHED WITH GROUND COVER TO BE APPROVED BY THE DIRECTOR OF THE RPCA.
21. PLANTING AREAS SHOULD INCLUDE PROTECTION FROM PESTS, SUCH AS GEESE AND BEAVERS, DURING THE WARRANTY PERIOD.

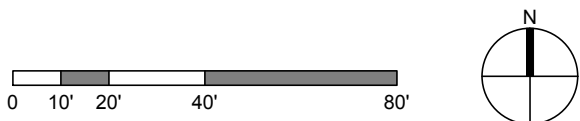
LEGEND

VISUAL SCREENING PLANTING LOCATIONS

-  CANOPY TREES, 2.5-3" CAL. MIN., VISUAL SCREENING LOCATIONS. SEE PLANT SCHEDULE FOR SPECIES PER ZONE
-  UNDERSTORY TREES, 1.5-2" CAL. MIN., VISUAL SCREENING LOCATIONS. SEE PLANT SCHEDULE FOR SPECIES PER ZONE
-  EVERGREEN TREES, 10' HT. MIN., VISUAL SCREENING LOCATIONS. SEE PLANT SCHEDULE FOR SPECIES PER ZONE

RESTORATION PLANTING ZONES- SEE SHEET L-LP-1/502

-  PALUSTRINE FORESTED WETLAND RESTORATION PLANTING- 20,895 SF 500 STEMS/ ACRE MINIMUM IN ADDITION TO VISUAL SCREENING PLANTING AS SHOWN; SEE PLANT SCHEDULE FOR SPECIES, SIZES AND QUANTITIES PER ZONE (PFO)(SATURATED ZONE)
-  PFO AND PSS TRANSITION RESTORATION PLANTING- 65,583 sf 500 STEMS/ ACRE MINIMUM IN ADDITION TO VISUAL SCREENING PLANTING AS SHOWN; SEE PLANT SCHEDULE FOR SPECIES, SIZES AND QUANTITIES PER ZONE (TEMPORARILY INUNDATED ZONE)
-  PALUSTRINE SCRUB-SHRUB RESTORATION PLANTING- 13,600 sf 500 STEMS/ ACRE MINIMUM IN ADDITION TO VISUAL SCREENING PLANTING AS SHOWN; SEE PLANT SCHEDULE FOR SPECIES, SIZES AND QUANTITIES PER ZONE (PSS) (PERMANENTLY INUNDATED ZONE)
-  PALUSTRINE EMERGENT WETLAND RESTORATION PLANTING- 20,540 sf 500 STEMS/ ACRE MINIMUM IN ADDITION TO VISUAL SCREENING PLANTING AS SHOWN; SEE PLANT SCHEDULE FOR SPECIES, SIZES AND QUANTITIES PER ZONE (PEM) (PERMANENTLY INUNDATED ZONE)
-  STEEP SLOPE UPLAND RESTORATION PLANTING- 26,435 sf 500 STEMS/ ACRE MINIMUM IN ADDITION TO VISUAL SCREENING PLANTING AS SHOWN; SEE PLANT SCHEDULE FOR SPECIES, SIZES AND QUANTITIES PER ZONE
-  METRO STATION UPLAND BUFFER- 5,188 sf VISUAL SCREENING PLANTING AS SHOWN; SEE PLANT SCHEDULE FOR SPECIES, SIZES AND QUANTITIES PER ZONE



APPROVED SPECIAL USE PERMIT NO. _____ DEPARTMENT OF PLANNING & ZONING	
DIRECTOR _____	DATE _____
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES SITE PLAN NO. _____	
DIRECTOR _____	DATE _____
CHAIRMAN, PLANNING COMMISSION _____ DATE _____	
DATE RECORDED _____	
INSTRUMENT NO. _____	DEED BOOK NO. _____ PAGE NO. _____



ANDROPOGON ASSOCIATES, LTD
10 SHURS LANE
PHILADELPHIA, PA 19127
T: 215.487.0700
F: 215.483.7520
W: www.andropogon.com

POTOMAC GREENS PARK

THE CITY OF ALEXANDRIA
CITY HALL
301 KING STREET
ALEXANDRIA, VA 22314



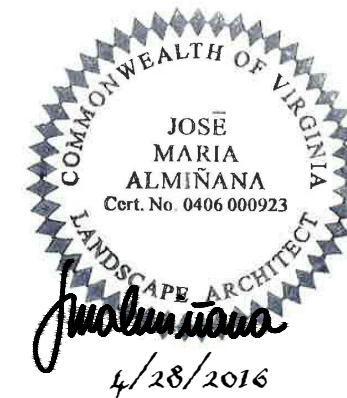
PRIME AE
CIVIL ENGINEERING
3201 JERMANTOWN ROAD, SUITE 660
FAIRFAX, VA 22030
703.865.0606
www.primeeng.com

KEAST & HOOD
STRUCTURAL ENGINEER
400 MARKET STREET, SUITE 1250
PHILADELPHIA, PA 19106
215.625.0099
www.keasthood.com/

IRRIGATION CONSULTING, INC.
IRRIGATION DESIGN
4 HOTEL PLACE
PEPPERELL, MA 01463
978.433.8972
www.irrigationconsulting.com

REV. DATE DESCRIPTION

REV.	DATE	DESCRIPTION



PRELIMINARY PLAN
NOT FOR CONSTRUCTION OR PRICING

SCALE:	AS SHOWN
DATE:	5/19/2016
DRAWN BY:	EM
CHECKED BY:	BM
APPROVED BY:	EM

AA PROJECT #: 130014.01
PROJECT PHASE: DESIGN DEVELOPMENT

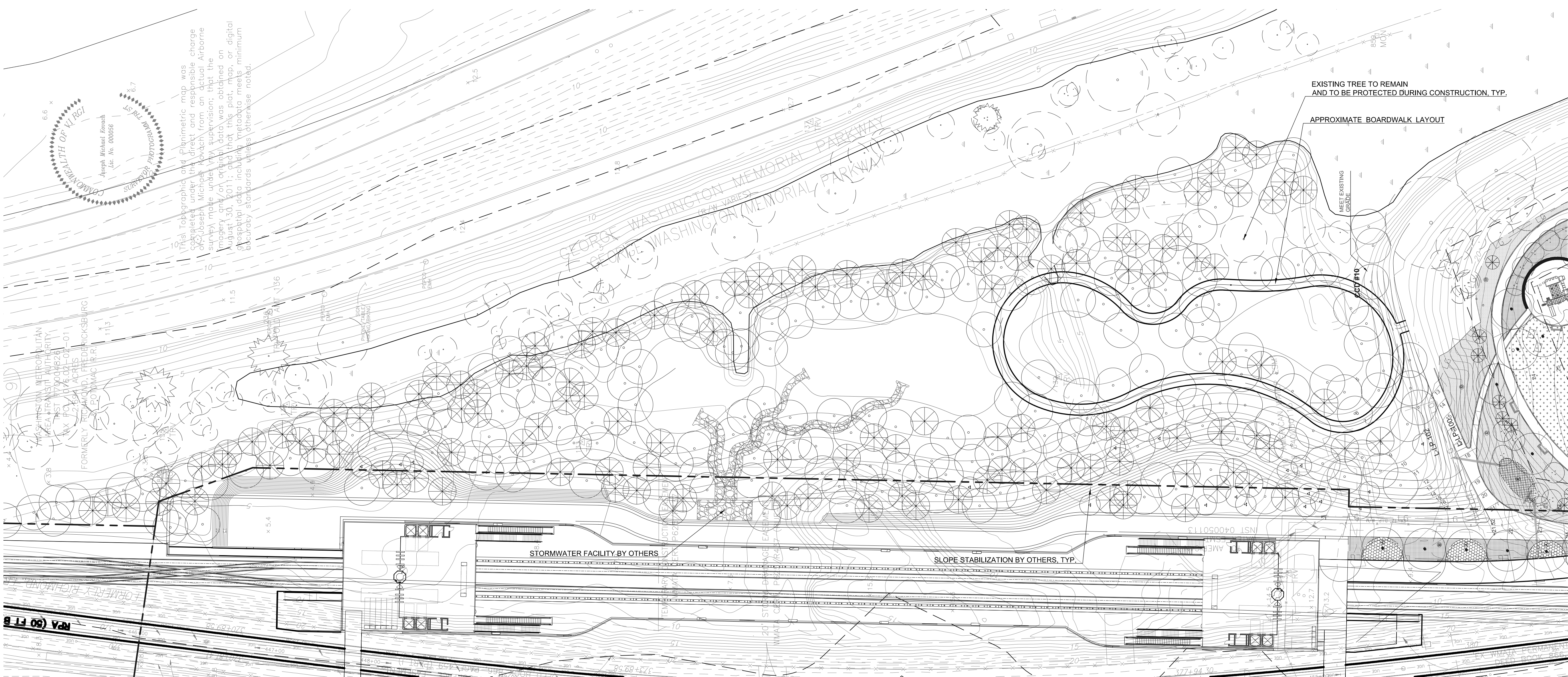
DRAWING TITLE:

WETLAND
PLANTING PLAN

SHEET:

LP-102

DRAWING FILE PATH: D:\DROPOBOX (ANDROPOGON\NO)\130014.01 POTOMAC GREENS\RECEIVED\2016-05-17 13:00:14 30% DD AA DWG\LLM-501-130014-WETLAND.DWG
DATE MODIFIED: 5/17/2016



- NOTES**
1. THIS DRAWING IS A CONCEPT DRAWING AND FOR THE PURPOSES OF COSTING ONLY.
 2. INSTALL INTERPRETIVE SIGNAGE TO MATCH EXISTING SIGNAGE IN CONTENT AND QUANTITY.
 3. MAINTENANCE FOR THIS PROJECT SHALL BE PERFORMED IN PERPETUITY, IN COMPLIANCE WITH CITY OF ALEXANDRIA LANDSCAPE GUIDELINES AND/OR AS CONDITIONED BY PROJECT APPROVAL.
 4. ALL LANDSCAPE ELEMENTS MUST MEET THE CITY OF ALEXANDRIA'S LANDSCAPING GUIDELINES AND RELATED REQUIREMENTS.
 5. FINAL WETLAND RESTORATION AND LANDSCAPING PLANS (THE "PLANS") SUBJECT TO THE REVIEW AND APPROVAL OF THE PERMITTING AGENCIES (USACE AND VDEQ) AND THE DIRECTOR OF ALEXANDRIA'S DEPARTMENT OF RECREATION, PARKS AND CULTURAL ACTIVITIES (RPCA).
 6. ALL AREAS TO BE DISTURBED TO THE NORTH OF THE WETLANDS ALONG THE TRACKS, MUST BE RESTORED WITH APPROPRIATE GRADES TO DRAIN THE AREA AND ESTABLISHED WITH GROUND COVER TO BE APPROVED BY THE DIRECTOR OF THE RPCA.



APPROVED		
SPECIAL USE PERMIT NO. _____		
DEPARTMENT OF PLANNING & ZONING		
DIRECTOR _____	DATE _____	
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES		
SITE PLAN NO. _____		
DIRECTOR _____	DATE _____	
CHAIRMAN, PLANNING COMMISSION _____		
DATE RECORDED _____		
INSTRUMENT NO. _____	DEED BOOK NO. _____	PAGE NO. _____



ANDROPOGON ASSOCIATES, LTD
10 SHURS LANE
PHILADELPHIA, PA 19127
T: 215.487.0700
F: 215.483.7520
W: www.andropogon.com

POTOMAC GREENS PARK

THE CITY OF ALEXANDRIA
CITY HALL
301 KING STREET
ALEXANDRIA, VA 22314

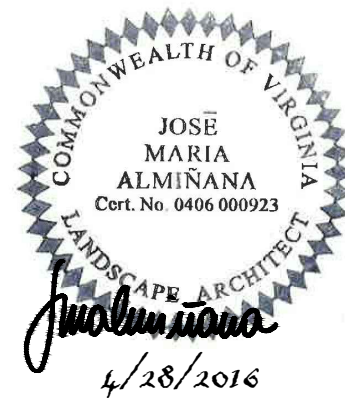


PRIME AE
CIVIL ENGINEERING
3201 JERMANTOWN ROAD, SUITE 660
FAIRFAX, VA 22030
703.865.0606
www.primeeng.com

KEAST & HOOD
STRUCTURAL ENGINEER
400 MARKET STREET, SUITE 1250
PHILADELPHIA, PA 19106
215.625.0099
www.keasthood.com/

IRRIGATION CONSULTING, INC.
IRRIGATION DESIGN
4 HOTEL PLACE
PEPPERELL, MA 01463
978.433.8972
www.irrigationconsulting.com

REV.	DATE	DESCRIPTION



PRELIMINARY PLAN
NOT FOR CONSTRUCTION OR PRICING

SCALE:	AS SHOWN
DATE:	5/19/2016
DRAWN BY:	EM
CHECKED BY:	BM
APPROVED BY:	EM

AA PROJECT #: 130014.01
PROJECT PHASE: DESIGN DEVELOPMENT

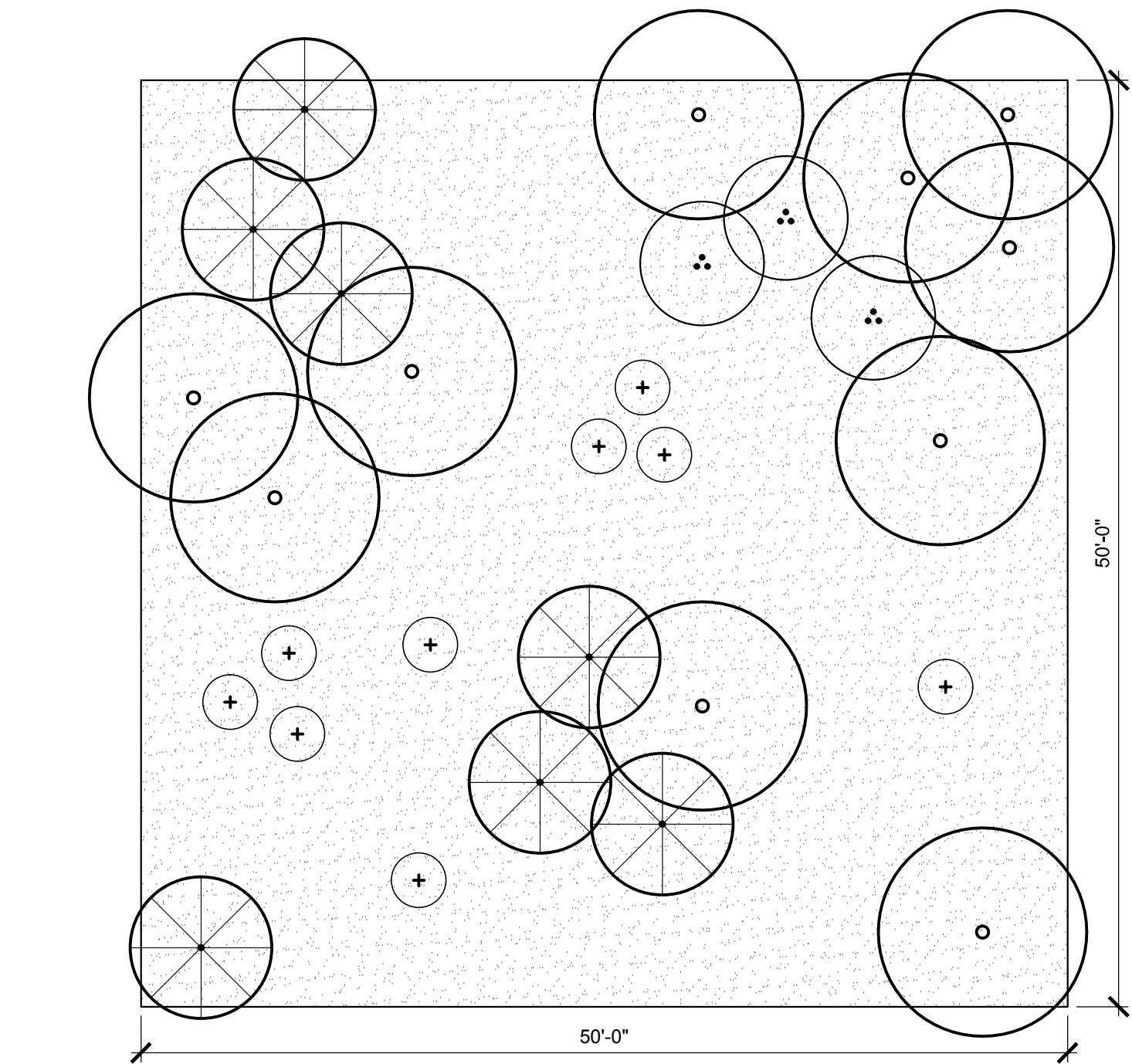
DRAWING TITLE:

**WETLAND
SITE DETAILS**

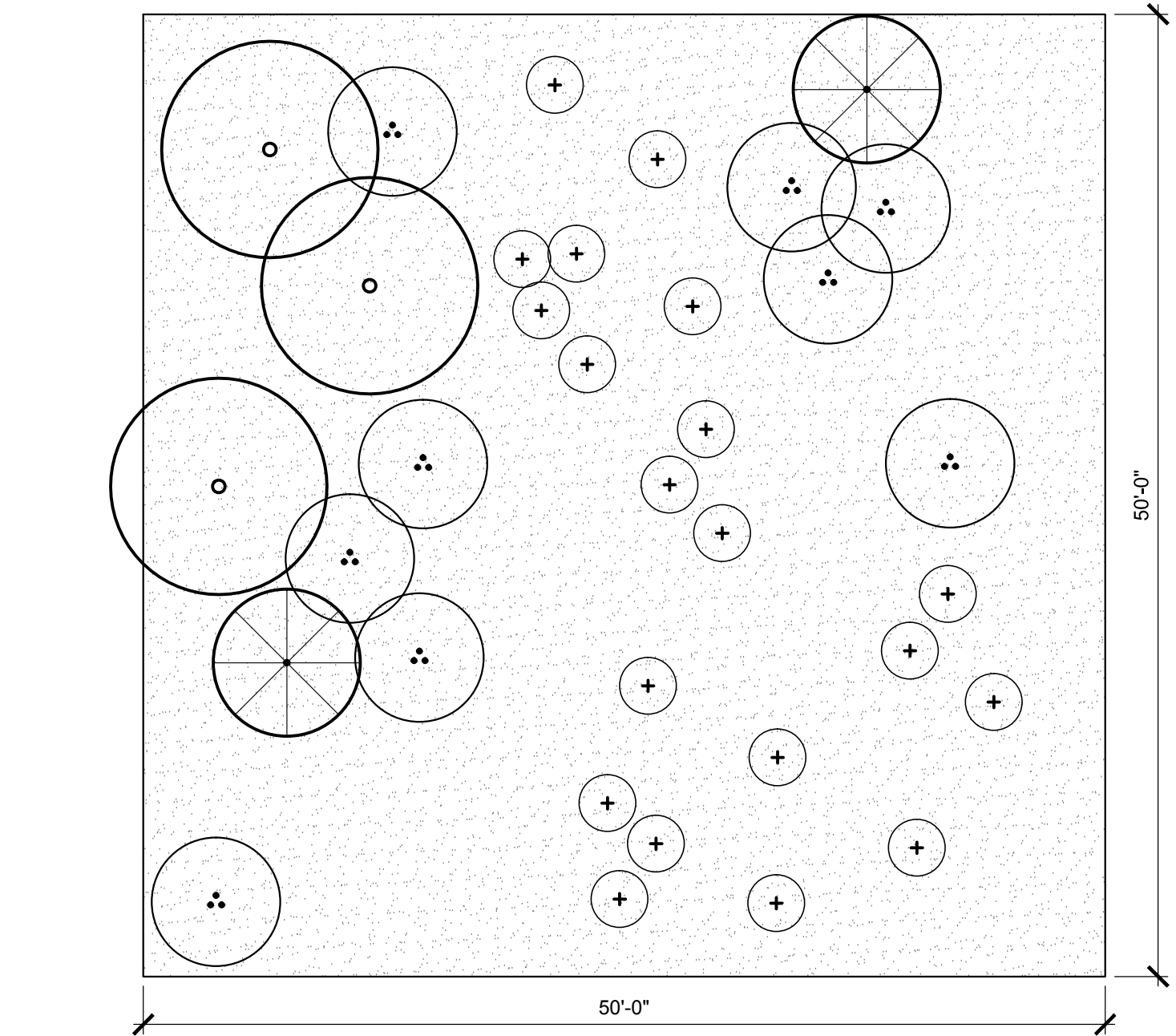
SHEET:

LM-101

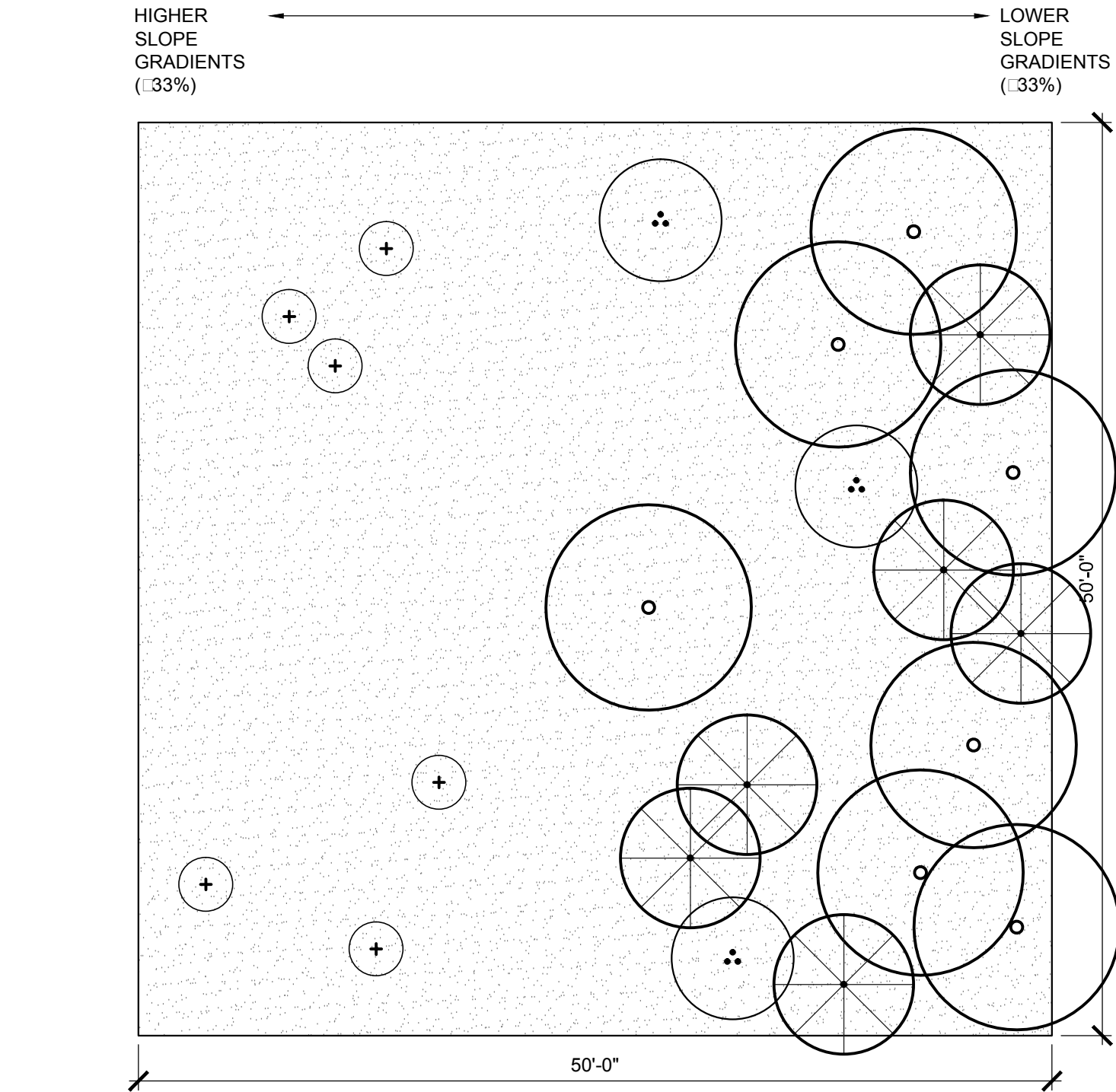
DRAWING FILE PATH: D:\DROPOBOX (ANDROPOGON\NC)\130014.01 POTOMAC GREENS\RECEIVED\2016-05-17 AA DD SET\POTOMAC METRO 30% DD FILES\2016-05-17 130014 30% DD AA DWG\LP-500-130014-WETLAND.DWG
DATE MODIFIED: 5/17/2016



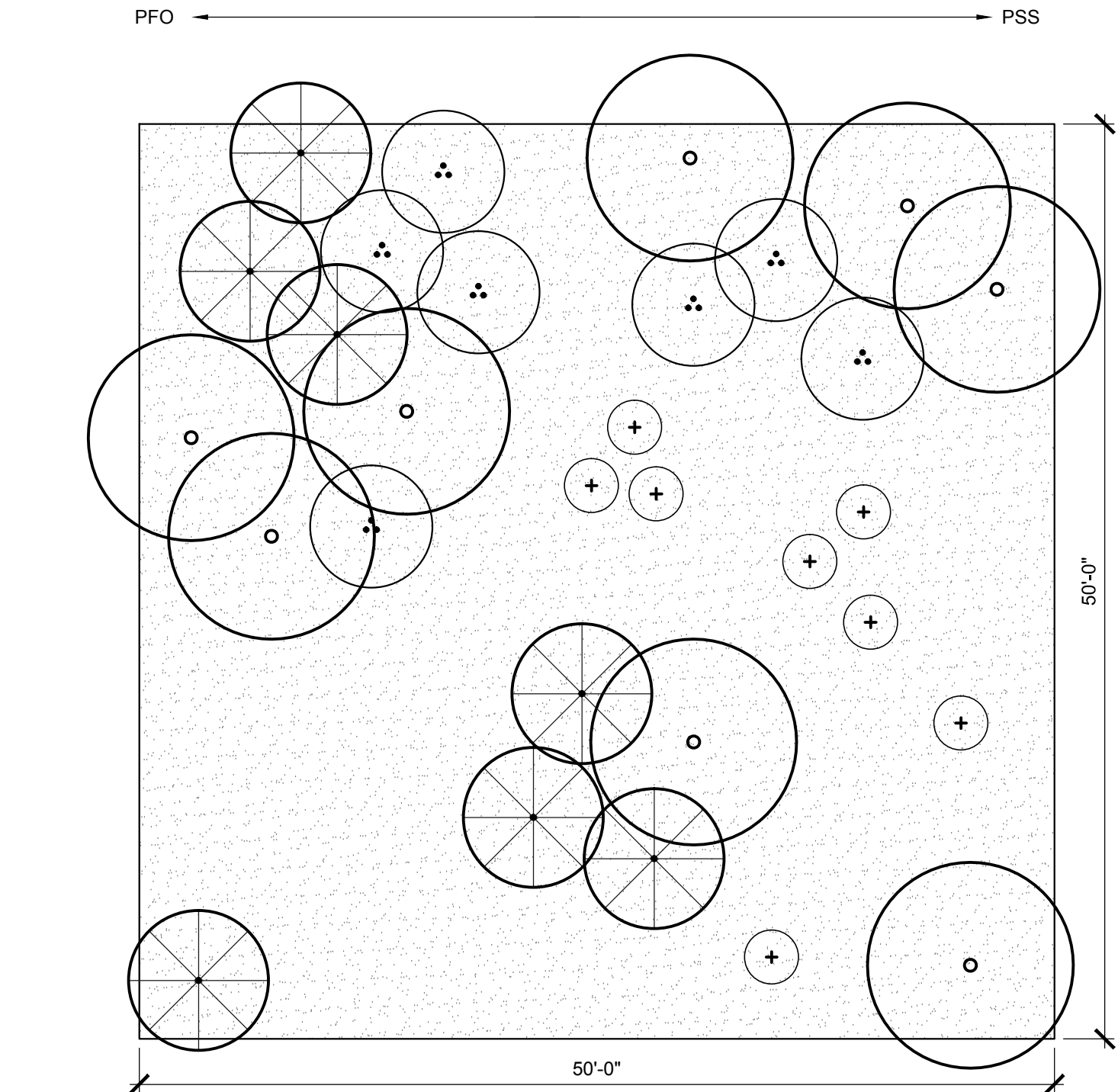
PLAN
1
LP-502
1/8" = 1'-0"
PAUSTRINE FORESTED WETLAND RESTORATION PLANTING (A)- CONCEPTUAL LAYOUT



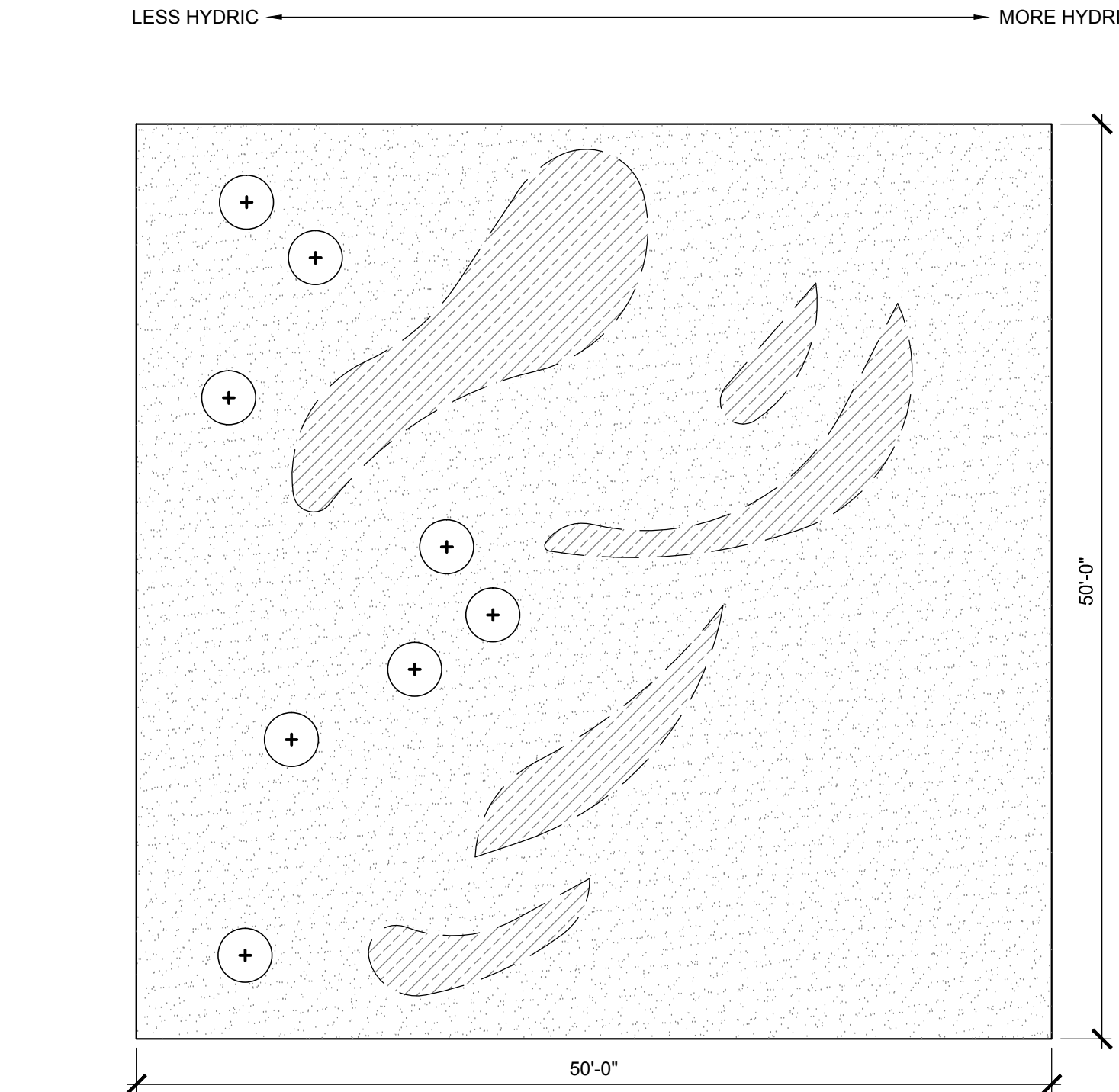
PLAN
3
LP-502
1/8" = 1'-0"
PALUSTRINE SCRUB-SHRUB WETLAND RESTORATION PLANTING (C)- CONCEPTUAL LAYOUT



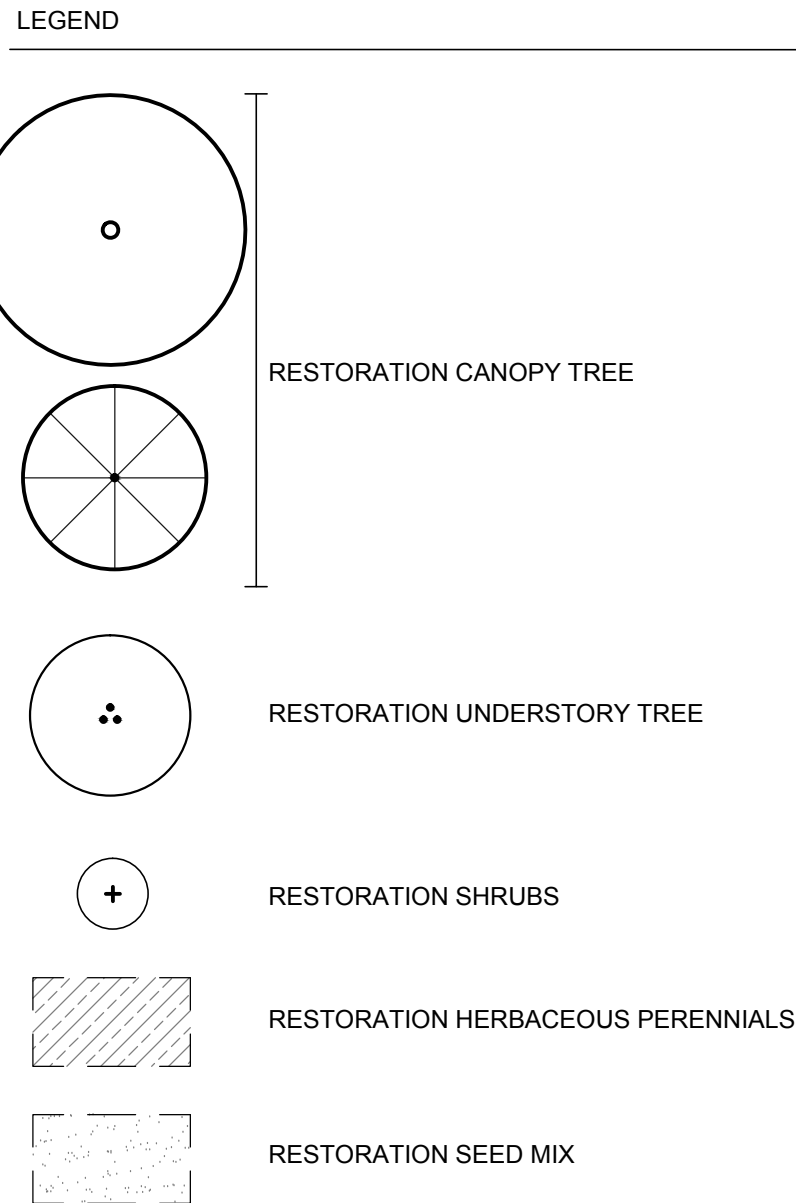
PLAN
5
LP-502
1/8" = 1'-0"
STEEP SLOPE UPLAND RESTORATION PLANTING (E)- CONCEPTUAL LAYOUT



PLAN
2
LP-502
1/8" = 1'-0"
PFO AND PSS TRANSITION WETLAND RESTORATION PLANTING (B) - CONCEPTUAL LAYOUT



PLAN
4
LP-502
1/8" = 1'-0"
PALUSTRINE EMERGENT WETLAND RESTORATION PLANTING (D)- CONCEPTUAL LAYOUT



APPROVED
SPECIAL USE PERMIT NO. _____
DEPARTMENT OF PLANNING & ZONING

DIRECTOR _____ DATE _____
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. _____

DIRECTOR _____ DATE _____

CHAIRMAN, PLANNING COMMISSION _____ DATE _____
DATE RECORDED _____
INSTRUMENT NO. _____ DEED BOOK NO. _____ PAGE NO. _____



ANDROPOGON
ASSOCIATES, LTD
10 SHURS LANE
PHILADELPHIA, PA 19127
T: 215.487.0700
F: 215.483.7520
W: www.andropogon.com

POTOMAC GREENS PARK

THE CITY OF ALEXANDRIA
CITY HALL
301 KING STREET
ALEXANDRIA, VA 22314

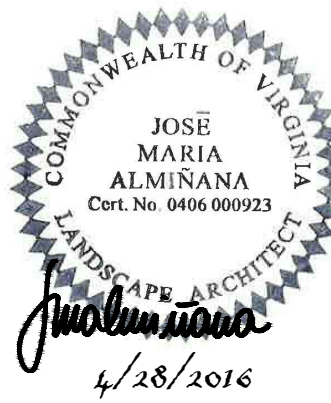


PRIME AE
CIVIL ENGINEERING
3201 JERMANTOWN ROAD, SUITE 660
FAIRFAX, VA 22030
703.865.0606
www.primeeng.com

KEAST & HOOD
STRUCTURAL ENGINEER
400 MARKET STREET, SUITE 1250
PHILADELPHIA, PA 19106
215.625.0099
www.keasthood.com/

IRRIGATION CONSULTING, INC.
IRRIGATION DESIGN
4 HOTEL PLACE
PEPPERELL, MA 01463
978.433.8972
www.irrigationconsulting.com

REV.	DATE	DESCRIPTION



PRELIMINARY PLAN
NOT FOR CONSTRUCTION OR PRICING

SCALE:	AS INDICATED ON DRAWINGS
DATE:	5/19/2016
DRAWN BY:	EM
CHECKED BY:	EM
APPROVED BY:	BM

AA PROJECT #: 130014.01
PROJECT PHASE: DESIGN DEVELOPMENT

DRAWING TITLE:
**WETLAND
PLANTING DETAILS**

SHEET:

LP-502

APPROVED	
SPECIAL USE PERMIT NO. _____	
DEPARTMENT OF PLANNING & ZONING	
_____ DIRECTOR	_____ DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES	
SITE PLAN NO. _____	
_____ DIRECTOR	_____ DATE
_____ CHAIRMAN, PLANNING COMMISSION	
DATE RECORDED _____	
_____ INSTRUMENT NO.	_____ DEED BOOK NO.
_____ PAGE NO.	

Andropogon
ANDROPOGON
ASSOCIATES, LTD
 10 SHURS LANE
 PHILADELPHIA, PA 19127
 T: 215.487.0700
 F: 215.483.7520
 W: www.andropogon.com

THE CITY OF ALEXANDRIA
CITY HALL
301 KING STREET
ALEXANDRIA, VA 22314



PRIME AE
CIVIL ENGINEERING
3201 JERMANTOWN ROAD, SUITE 660
FAIRFAX, VA 22030
703.865.0606
www.primeeng.com

KEAST & HOOD
STRUCTURAL ENGINEER
 400 MARKET STREET, SUITE 1250
 PHILADELPHIA, PA 19106
 215.625.0099
www.keasthood.com/

IRRIGATION CONSULTING, INC.
IRRIGATION DESIGN
4 HOTEL PLACE
PEPPERELL, MA 01463
978.433.8972
www.rrigationconsulting.com

[illegible]

PRELIMINARY PLAN
NOT FOR CONSTRUCTION OR PRICING

SCALE:	AS INDICATED ON DRAWINGS
DATE:	5/19/2016
DRAWN BY:	EM
CHECKED BY:	EM
APPROVED BY:	BM

AA PROJECT #:	130014.01
PROJECT PHASE:	DESIGN DEVELOPMENT

DRAWING TITLE:

WETLAND PLANT SCHEDULE

SHEET:

LP-503

DRAWING FILE PATH: D:\DROPOBOX (ANDROPOGON\NC)\130014.01 POTOMAC GREENS\RECEIVED\2016-05-17 AA-DD SET\POTOMAC METRO 30%. DD FILES\2016-05-17 130014.03%. DD AA DWG\3-LP-500-130014-WETLAND.DWG
DATE MODIFIED: 5/17/2016

C- PALUSTRINE SCRUB-SHRUB WETLAND RESTORATION PLANTING							
KEY	QTY	Botanical Name	Common Name	Size	Spacing	ROOT	Remarks
	24	Visual Mitigation Canopy Trees		2.5 - 3" cal. minimum	AS SHOWN	B&B	
		Alnus serrulata*	Hazel alder				
		Salix nigra*	Black willow				
		Salix sericea*	Silky willow				
	50	Restoration Understory Trees		#3	SEE L-LP-3/502		
		Alnus serrulata*	Hazel alder				
		Magnolia virginiana	Sweetbay				
		Persea palustris	Swampbay				
		Salix caroliniana	Coastal plain willow				
		Salix nigra*	Black willow				
		Salix sericea*	Silky willow				
	110	Restoration Shrubs		#1	SEE L-LP-3/502		
		Amorpha fruticosa	False indigo bush				
		Cephalanthus occidentalis*	Buttonbush				
		Cornus amomum*	Silky dogwood				
		Eubotrys racemosus	Swamp doghobble				
		Hibiscus moscheutos*	Crimsoneyed rosemallow				
		Ilex verticillata	Winterberry				
		Itea virginica	Virginia willow				
		Morella cerifera*	Southern wax myrtle				
		Morella pensylvanica	Northern bayberry				
		Rhododendron viscosum	Swamp azalea				
		Rosa palustris*	Swamp rose				
		Sambucus canadensis	American black elderberry				
		Vaccinium corymbosum	Highbush blueberry				
		Viburnum dentatum*	Southern arrowwood				
	13,600 sf	Seed Mix					
		PSS Seed Mix [Adapted from OBL Wetland Mix (ERNMX-131, Ernst Conservation Seeds, or Equivalent)]					
		Apply at a rate of 30 lbs/Ac or per Manufacturer's specifications					
		Carex vulpinoidea	Fox sedge		% of Mix		
		Carex lurida	Shallow sedge		0.35		
		Carex lupulina	Hop sedge		0.2		
		Scirpus atrovirens	Green bulrush		0.07		
		Carex scoparia	Blunt broom sedge		0.07		
		Sparganium eurycarpum	Broadfruit bur-reed		0.06		
		Verbena hastata	Blue vervain		0.04		
		Juncus effusus	Soft rush		0.04		
		Glyceria striata*	Fowl mannagrass		0.03		
		Sparganium americanum	American bur-reed		0.02		
		Asclepias incarnata	Swamp milkweed		0.01		
		Carex crinita	Fringed sedge		0.01		
		Mimulus ringens	Square stemmed monkeyflower		0.01		
		Onoclea sensibilis	Sensitive fern		0.01		
		Scirpus cyperinus	Woolgrass		0.01		
		Schoenoplectus tabernaemontani	Softstem bulrush		0.01		
		Alisma subcordatum	American water plantain		0.005		
		Bidens cernua	Nodding beggarticks		0.005		
		Eupatorium distulosum	Joe pye weed		0.005		
		Eutrochium perfoliatum	Boneset		0.005		
		Iris virginica*	Virginia iris		0.005		
		Ludwigia alternifolia	Seedbox		0.005		
		Penthorum sedoides	Ditch stonecrop		0.005		
		Solidago rugosa*	Wrinkleleaf goldenrod		0.005		
D- PALUSTRINE EMERGENT WETLAND RESTORATION PLANTING							
KEY	QTY	Botanical Name	Common Name	Size	Spacing	ROOT	Remarks
	66	Restoration Shrubs		#1	SEE L-LP-1/502	CONTAINER	
		Cephalanthus occidentalis	Buttonbush				
		Hibiscus moscheutos*	Crimsoneyed rosemallow				
		Rhododendron viscosum	Swamp azalea				
		Rosa palustris	Swamp rose				
	6525	Restoration Herbaceous Perennials		SP4	SEE L-LP-4/502	CONTAINER	
		Bidens laevis	Smooth beggartick				
		Carex comosa *	Longhair sedge				
		Iris versicolor	Harlequin blueflag				
		Nuphar advena (lutea)	Yellow pond-lily				
		Onoclea sensibilis	Sensitive fern				
		Peltandra virginica *	Green arrow arum				
		Pontederia cordata *	Pickersweeed				
		Sagittaria latifolia	Broadleaf arrowhead				
		Schoenoplectus fluviatilis	River bulrush				
		Zizania aquatica	Annual wildrice				
	20,540 sf	Seed Mix					
		PEM Seed Mix [Adapted from OBL Wetland Mix (ERNMX-131, Ernst Conservation Seeds, or Equivalent)]					
		Apply at a rate of 30 lbs/Ac or per Manufacturer's specifications					
		Carex vulpinoidea	Fox sedge		% of Mix		
		Carex lurida	Shallow sedge		0.35		
		Carex lupulina	Hop sedge		0.2		
		Scirpus atrovirens	Green bulrush		0.07		
		Carex scoparia	Blunt broom sedge		0.07		
		Sparganium eurycarpum	Broadfruit bur-reed		0.06		
		Verbena hastata	Blue vervain		0.04		
		Juncus effusus	Soft rush		0.04		
		Glyceria striata*	Fowl mannagrass		0.03		
		Sparganium americanum	American bur-reed		0.02		
		Asclepias incarnata	Swamp milkweed		0.02		
		Carex crinita	Fringed sedge		0.01		
		Mimulus ringens	Square stemmed monkeyflower		0.01		
		Onoclea sensibilis	Sensitive fern		0.01		
		Scirpus cyperinus	Woolgrass		0.01		
		Schoenoplectus tabernaemontani	Softstem bulrush		0.01		
		Alisma subcordatum	American water plantain		0.005		
		Bidens cernua	Nodding beggarticks		0.005		
		Eupatorium distulosum	Joe pye weed		0.005		
		Eutrochium perfoliatum	Boneset		0.005		
		Iris virginica*	Virginia iris		0.005		
		Ludwigia alternifolia	Seedbox		0.005		
		Penthorum sedoides	Ditch stonecrop		0.005		
		Solidago rugosa*	Wrinkleleaf goldenrod		0.005		

E- STEEP SLOPE UPLAND RESTORATION MIX							
KEY	QTY	Botanical Name	Common Name	Size	Spacing	ROOT	Remarks
	23	Visual Mitigation Canopy Trees		2.5 - 3" cal. minimum	AS SHOWN	B&B	
		Acer rubrum	Red maple				
		Acer saccharum*	Sugar maple				
		Carya cordiformis *	Bitternut hickory				
		Carya glabra*	Pignut hickory				
		Celtis occidentalis*	Common hackberry				
		Liquidambar styraciflua	Sweetgum				
		Liriodendron tulipifera	Tulip tree				
		Nyssa sylvatica	Blackgum				
		Ostrya virginiana	Eastern hophornbeam				
		Platanus occidentalis	American sycamore				
		Quercus alba	White oak				
		Quercus palustris	Pin oak				
		Quercus rubra*	Northern red oak				
		Tilia americana*	American basswood				
	12	Visual Mitigation Understory Trees		1.5 - 2" cal. minimum	AS SHOWN	B&B	
		Amelanchier canadensis	Serviceberry				
		Carpinus caroliniana*	Hornbeam				
		Cercis canadensis*	Eastern redbud				
		Magnolia virginiana	Sweetbay				
		Prunus serotina*	Black cherry				
	13	Visual Mitigation Evergreen Trees		10' ht. minimum	AS SHOWN	B&B	
		Ilex opaca*	American holly				
		Juniperus virginiana	Eastern red cedar				
		Pinus echinata*	Shortleaf pine				
		Thuja occidentalis	Eastern arborvitae				
	144	Restoration Canopy Trees		1-1.5" cal.	SEE L-LP-5/502		
		Acer saccharum*	Sugar maple				
		Acer rubrum	Red maple				
		Carya cordiformis *	Bitternut hickory				
		Celtis occidentalis*	Common hackberry				
		Ilex opaca*	American holly				
		Liquidambar styraciflua	Sweetgum				
		Liriodendron tulipifera	Tulip tree				
		Nyssa sylvatica	Blackgum				
		Pinus echinata*	Shortleaf pine				
		Pinus taeda	Loblolly pine				
		Pinus virginiana*	Virginia pine				
		Platanus occidentalis	American sycamore				
		Quercus palustris	Pin oak				
		Quercus rubra*	Northern red oak				
		Thuja occidentalis	Eastern arborvitae				
		Tilia americana*	American basswood				
	30	Restoration Understory Trees		#3	SEE L-LP-5/502		
		Amelanchier canadensis	Serviceberry				
		Quercus nigra	Water Oak				
		Quercus palustris	Pin Oak				
		Carpinus caroliniana*	Hornbeam				
		Cercis canadensis*	Eastern redbud				
		Magnolia virginiana	Sweetbay				
		Prunus serotina*	Black cherry				
	66	Restoration Shrubs		#1	SEE L-LP-5/502		
		Asimina triloba	Pawpaw				
		Ilex verticillata	Winterberry				
		Lindera benzoin	Spicebush				
		Sambucus racemosa	Elderberry				
		Viburnum dentatum	Southern arrowwood				
	26,435 sf	Seed Mix					
		ERNMX-181-2 Native Steep Slope Mix w/Grain Rye, or Equivalent					
		Apply at a rate of 75 - 100 lbs/Ac or per Manufacturer's specifications					
F- METRO STATION UPLAND BUFFER							
KEY	QTY	Botanical Name	Common Name	Size	Spacing	ROOT	Remarks
	6	Canopy Trees		2.5 - 3" cal. minimum	AS SHOWN	B&B	
		Acer rubrum	Red maple				
		Acer saccharum*	Sugar maple				
		Carya cordiformis *	Bitternut hickory				
		Carya glabra*	Pignut hickory				
		Celtis occidentalis*	Common hackberry				
		Liquidambar styraciflua	Sweetgum				
		Liriodendron tulipifera	Tulip tree				
		Nyssa sylvatica	Blackgum				
		Ostrya virginiana	Eastern hophornbeam				
		Platanus occidentalis	American sycamore				
		Quercus alba	White oak				
		Quercus palustris	Pin oak				
		Quercus rubra*	Northern red oak				
		Tilia americana*	American basswood				
	5	Understory Trees		1.5 - 2" cal. Minimum	AS SHOWN	B&B	
		Amelanchier canadensis	Serviceberry				
		Cornus florida	Flowering dogwood				
		Cercis canadensis	Eastern redbud				
	13	Evergreen Trees		10' ht. minimum	AS SHOWN	B&B	
		Ilex opaca*	American holly				
		Juniperus virginiana	Eastern red cedar				
		Pinus echinata*	Shortleaf pine				
		Thuja occidentalis	Eastern arborvitae				
	5,188 sf	Seed Mix					
		ERNMX-106 Athletic Field Mix					
		Apply at a rate of 150lbs/Ac or per Manufacturer's specifications					

APPROVED	
SPECIAL USE PERMIT NO. _____	
DEPARTMENT OF PLANNING & ZONING	
DIRECTOR _____	DATE _____
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES	
SITE PLAN NO. _____	
DIRECTOR _____	DATE _____
CHAIRMAN, PLANNING COMMISSION _____	
DATE _____	
DATE RECORDED _____	
INSTRUMENT NO. _____ DEED BOOK NO. _____ PAGE NO. _____	



ANDROPOGON ASSOCIATES, LTD
10 SHURS LANE
PHILADELPHIA, PA 19127
T: 215.487.0700
F: 215.483.7520
W: www.andropogon.com

POTOMAC GREENS PARK

THE CITY OF ALEXANDRIA
CITY HALL
301 KING STREET
ALEXANDRIA, VA 22314

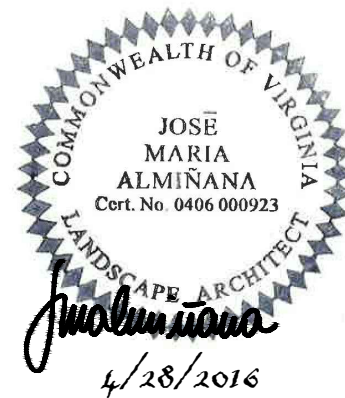


PRIME AE
CIVIL ENGINEERING
3201 JERMANTOWN ROAD, SUITE 660
FAIRFAX, VA 22030
703.865.0606
www.primeeng.com

KEAST & HOOD
STRUCTURAL ENGINEER
400 MARKET STREET, SUITE 1250
PHILADELPHIA, PA 19106
215.625.0099
www.keasthood.com/

IRRIGATION CONSULTING, INC.
IRRIGATION DESIGN
4 HOTEL PLACE
PEPPERELL, MA 01463
978.433.8972
www.irrigationconsulting.com

REV.	DATE	DESCRIPTION



PRELIMINARY PLAN
NOT FOR CONSTRUCTION OR PRICING

SCALE:	AS INDICATED ON DRAWINGS
DATE:	5/19/2016
DRAWN BY:	EM
CHECKED BY:	EM
APPROVED BY:	BM

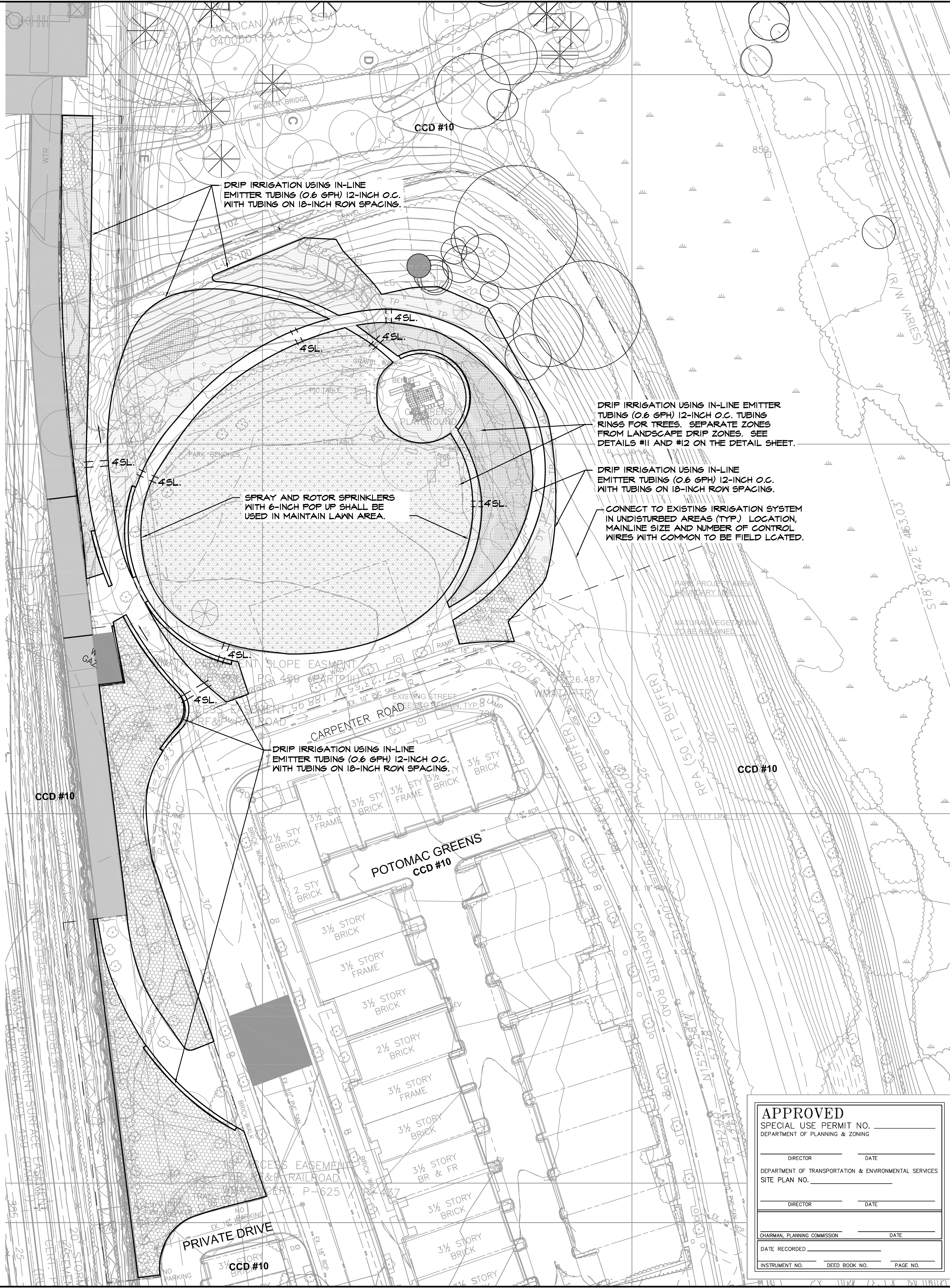
AA PROJECT #: 130014.01
PROJECT PHASE: DESIGN DEVELOPMENT

DRAWING TITLE:
WETLAND PLANT SCHEDULE
SHEET:

LP-504

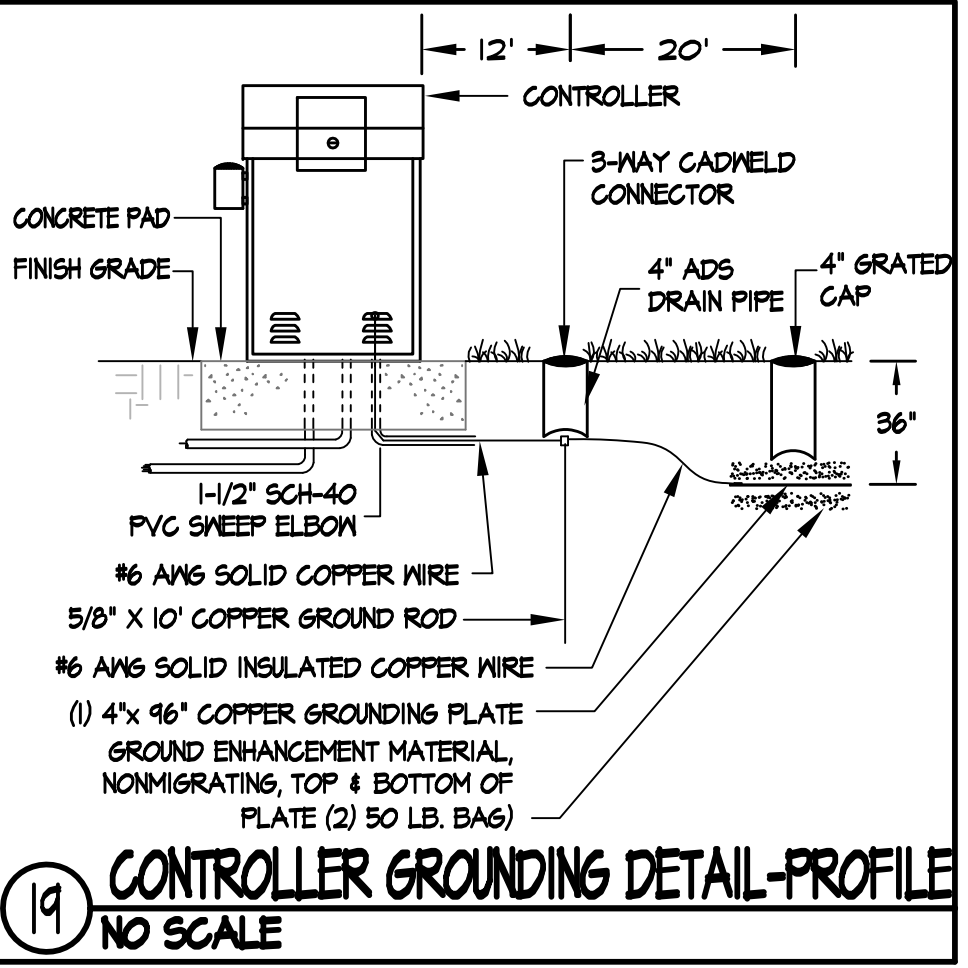
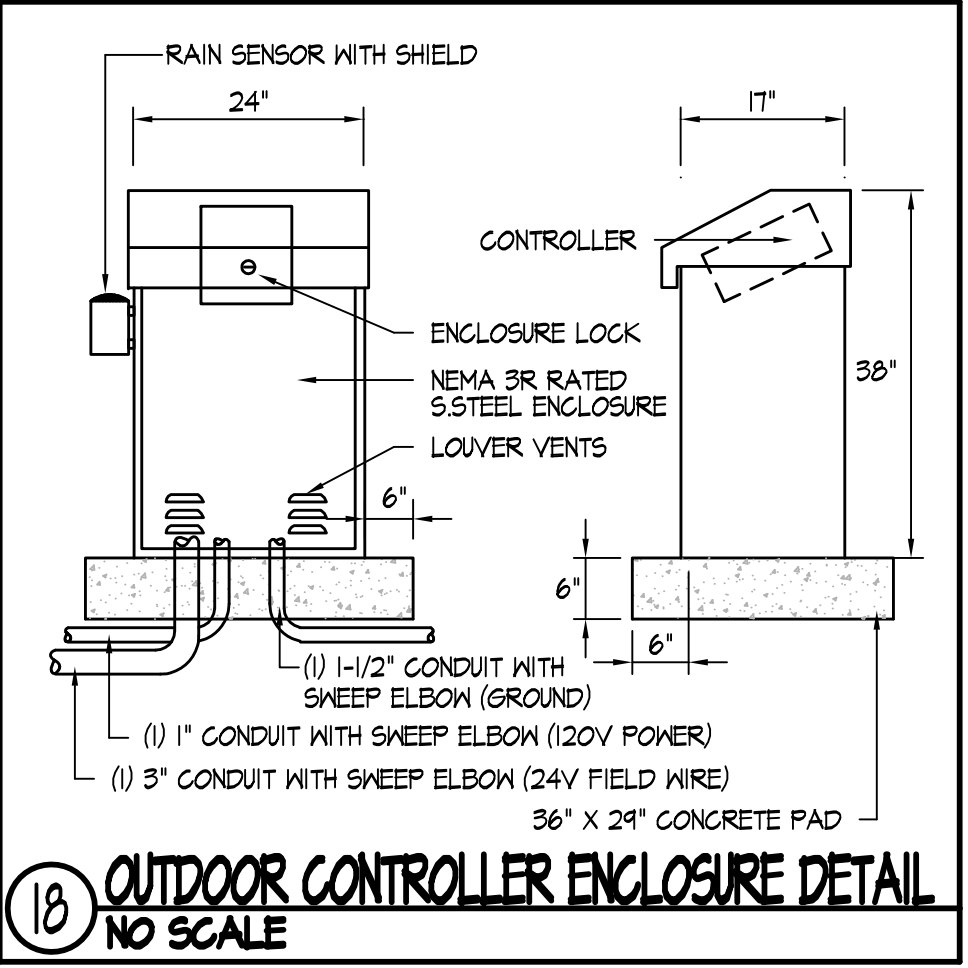
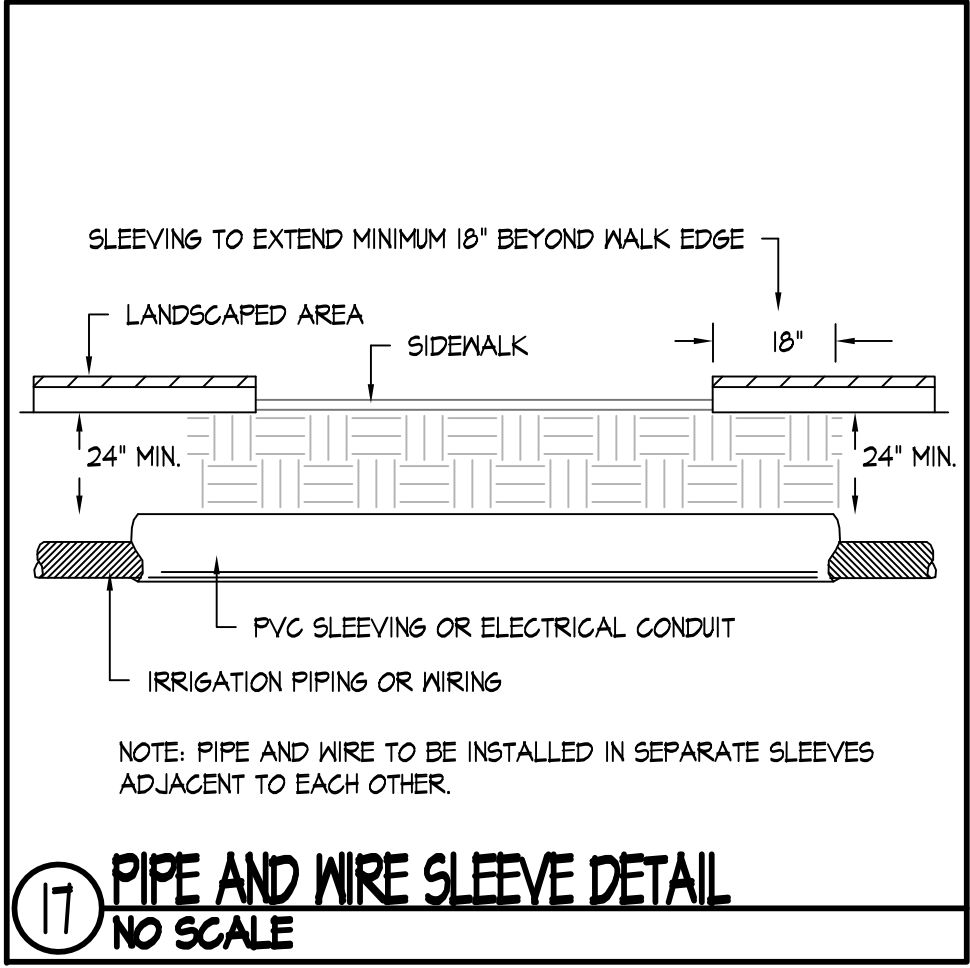
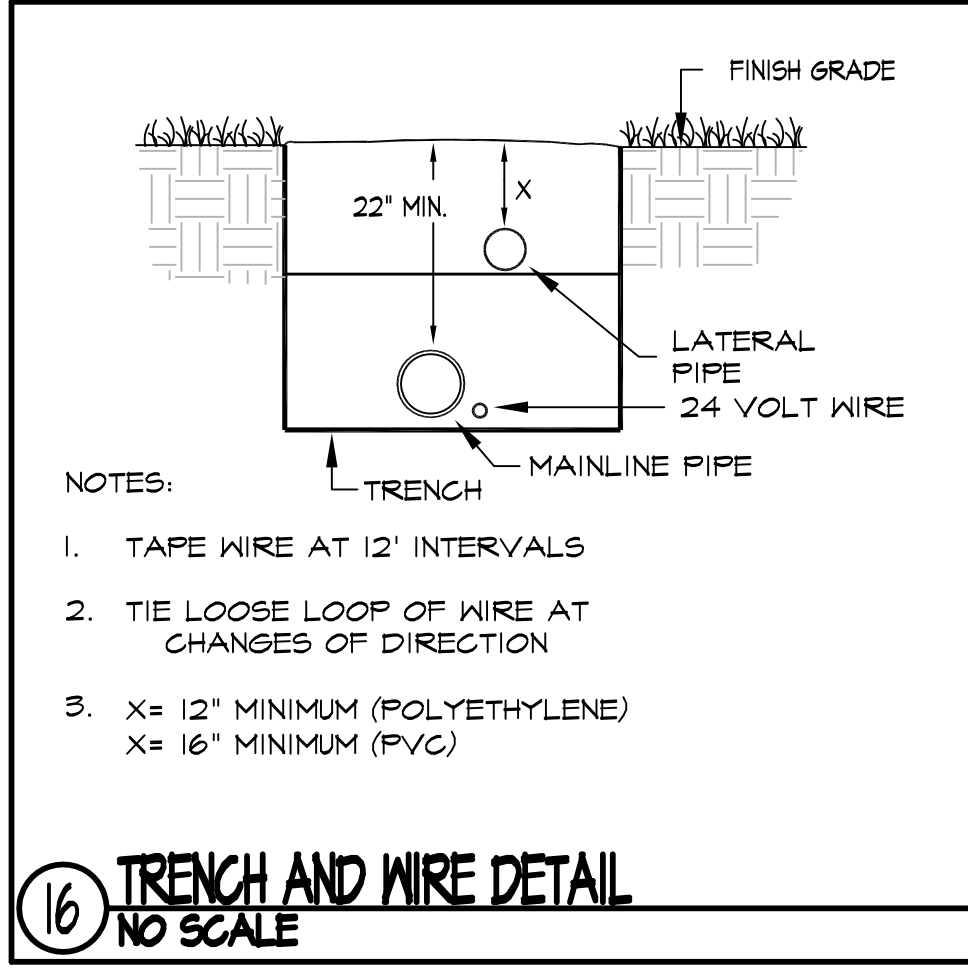
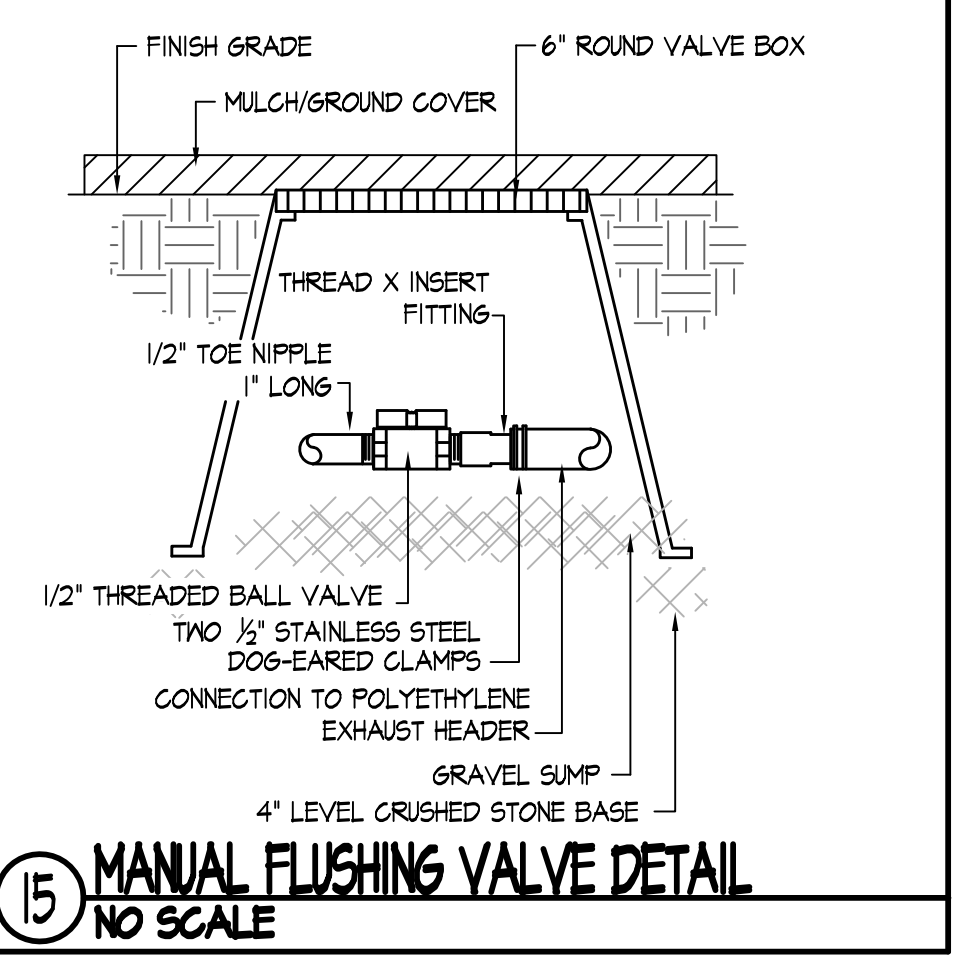
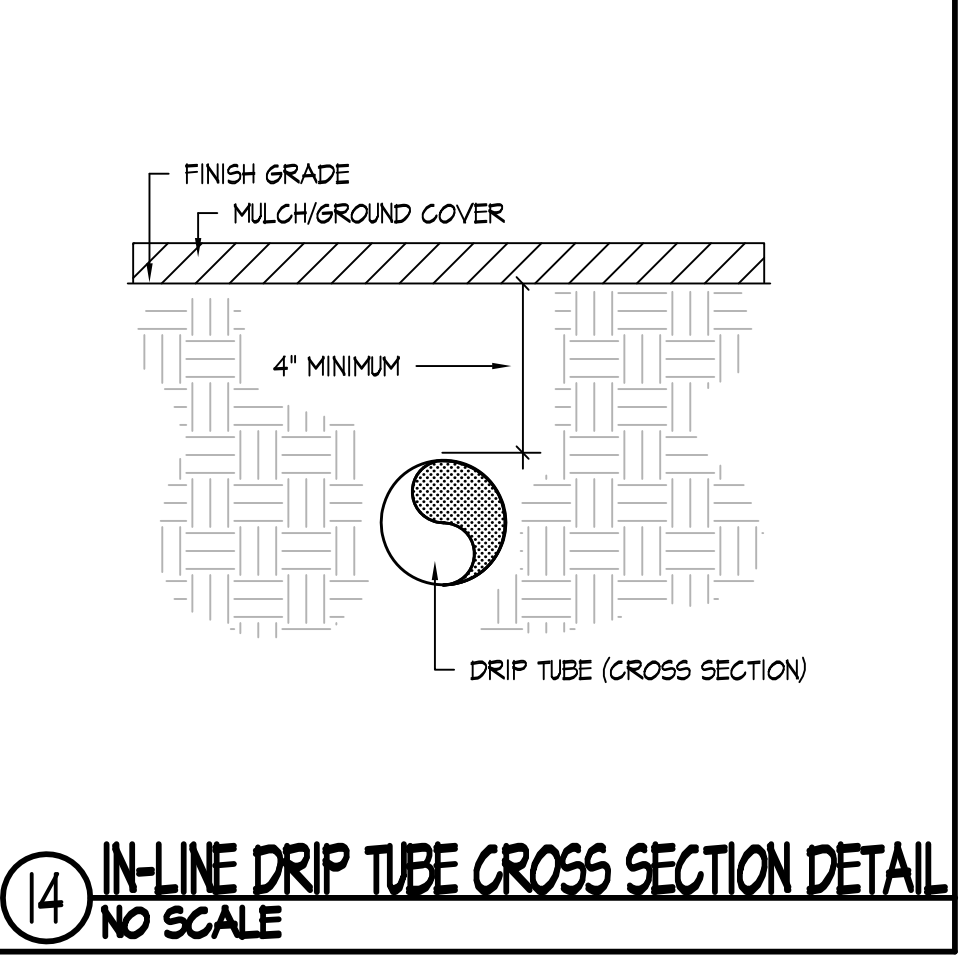
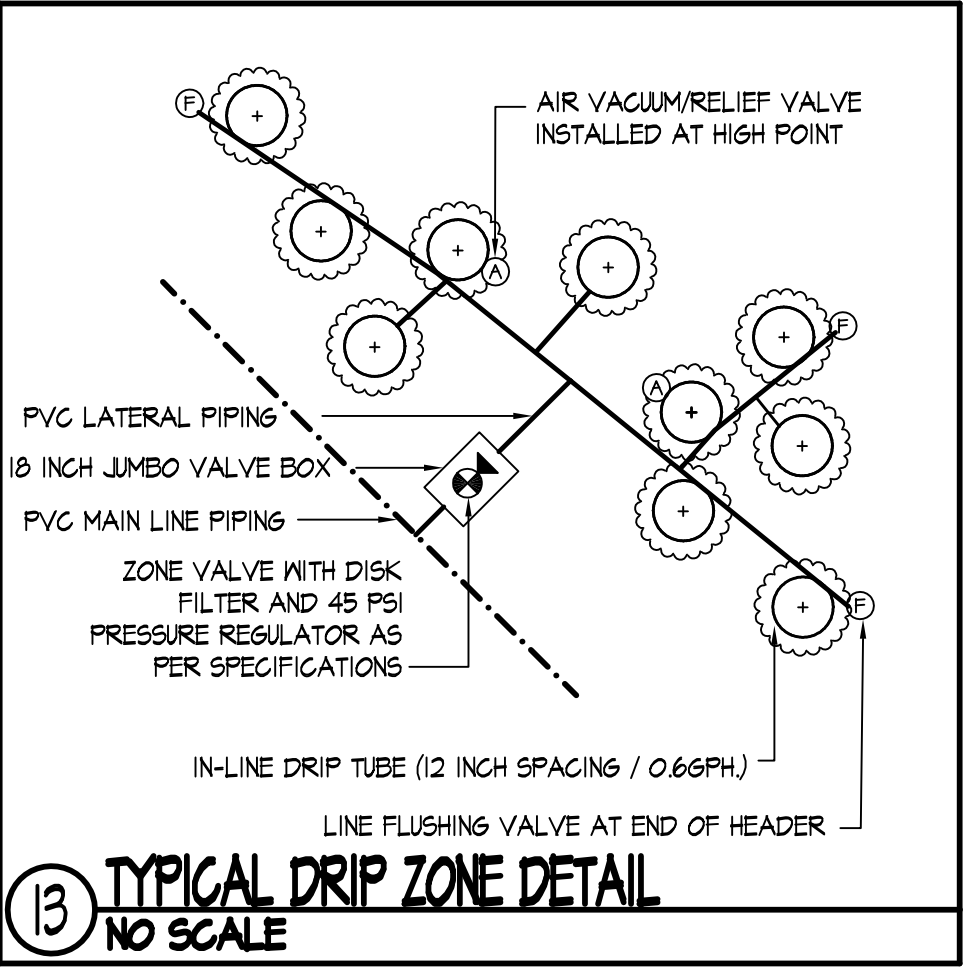
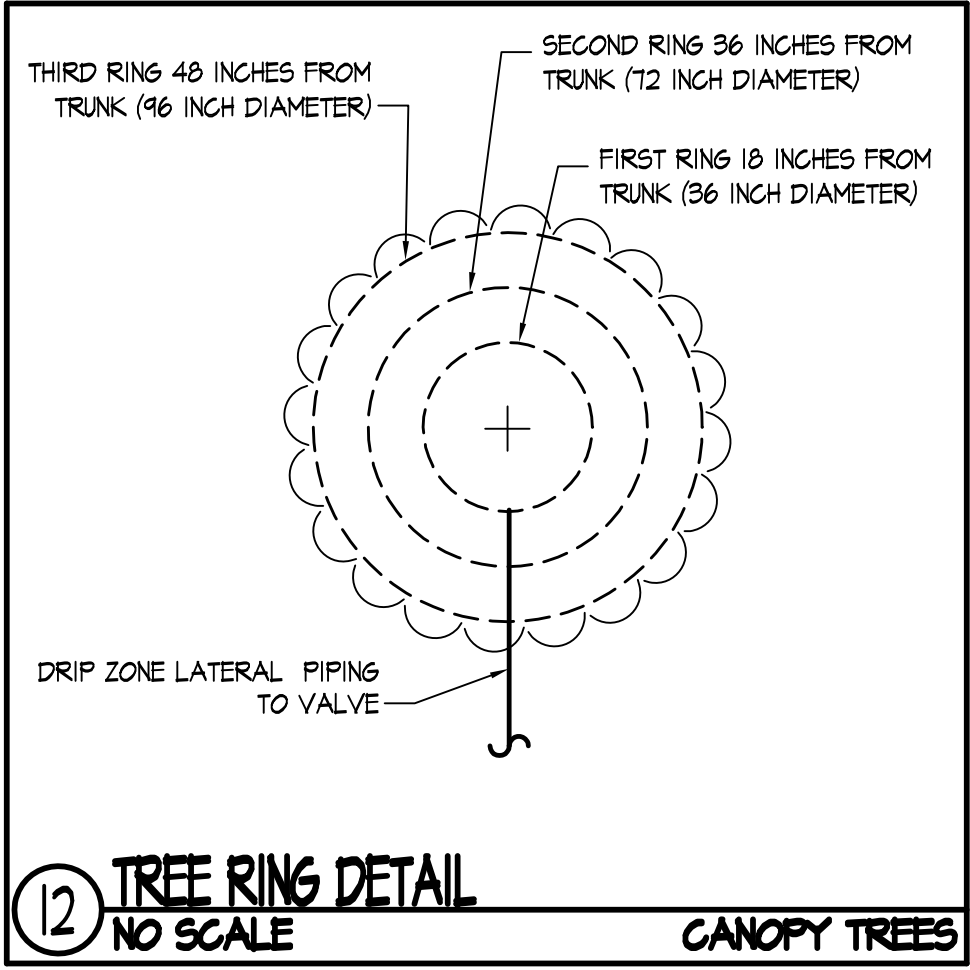
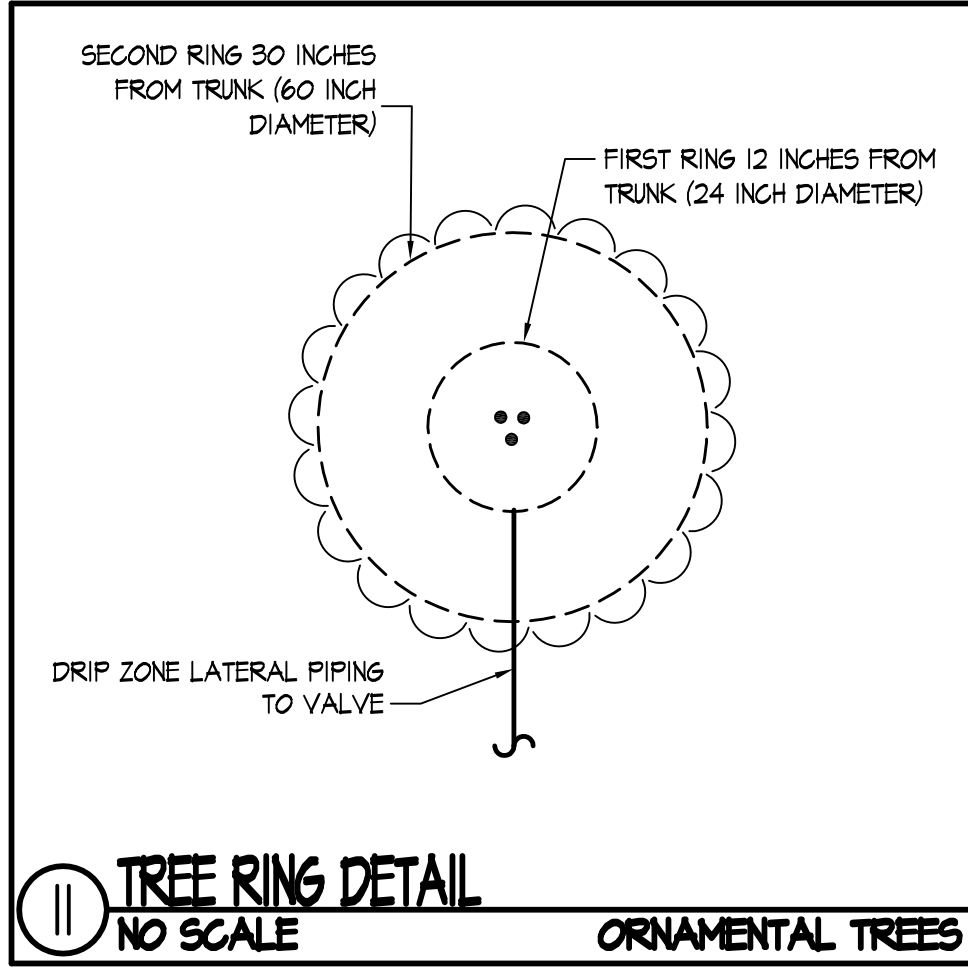
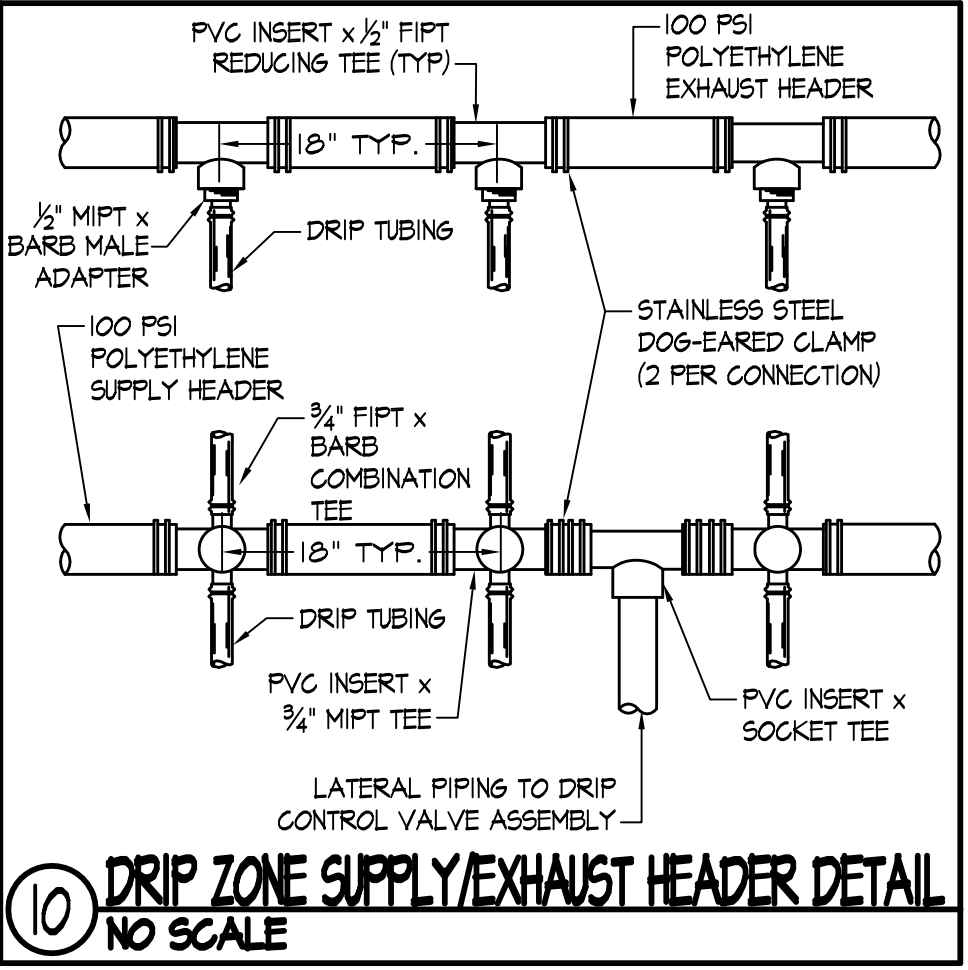
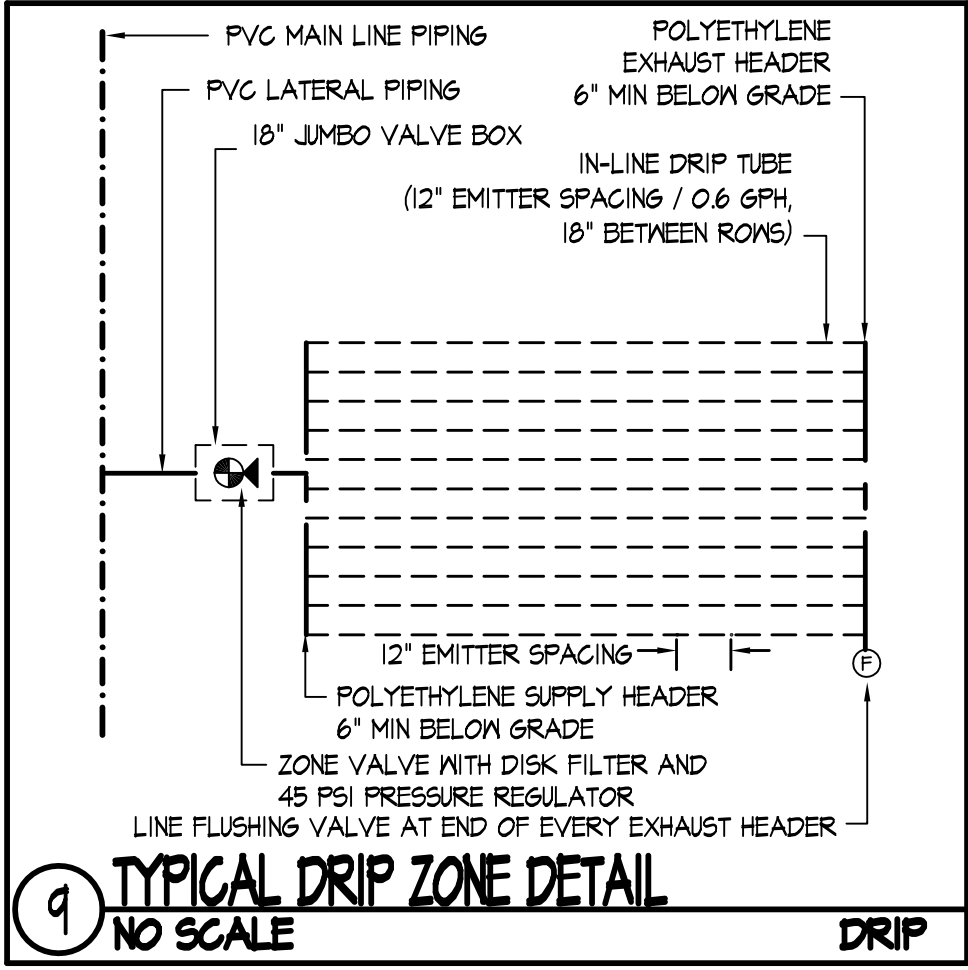
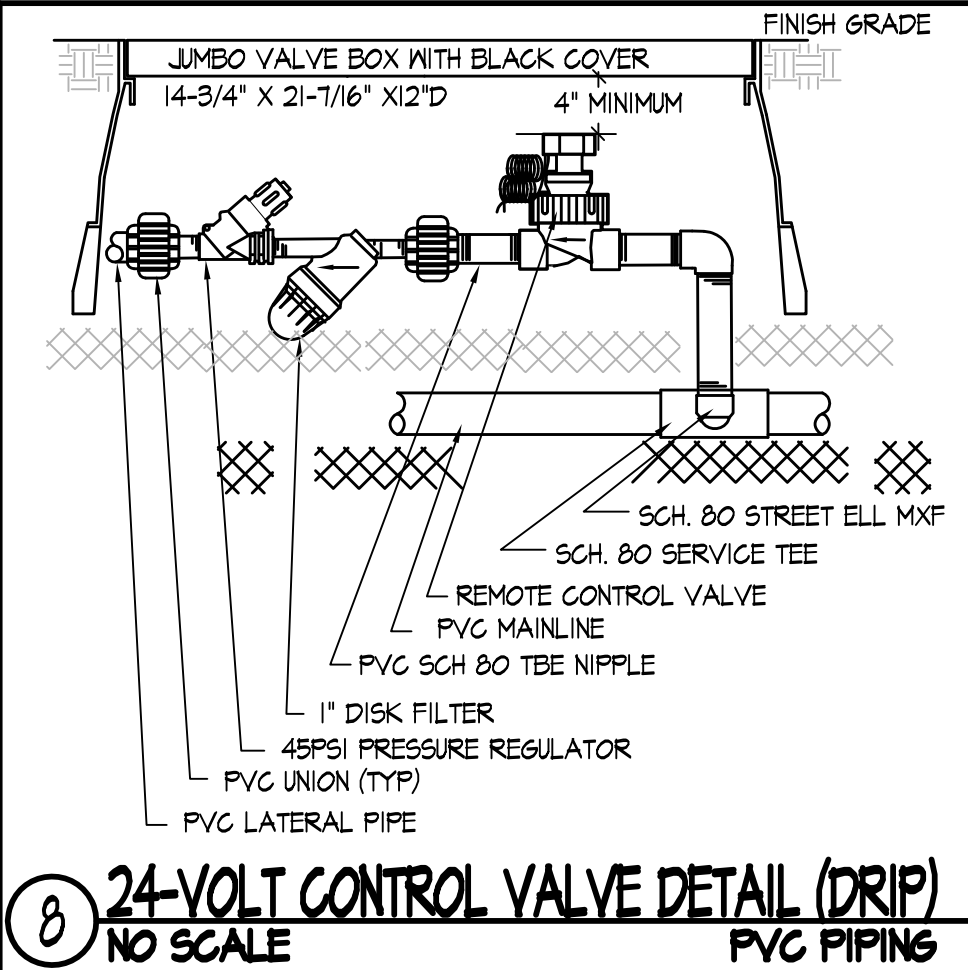
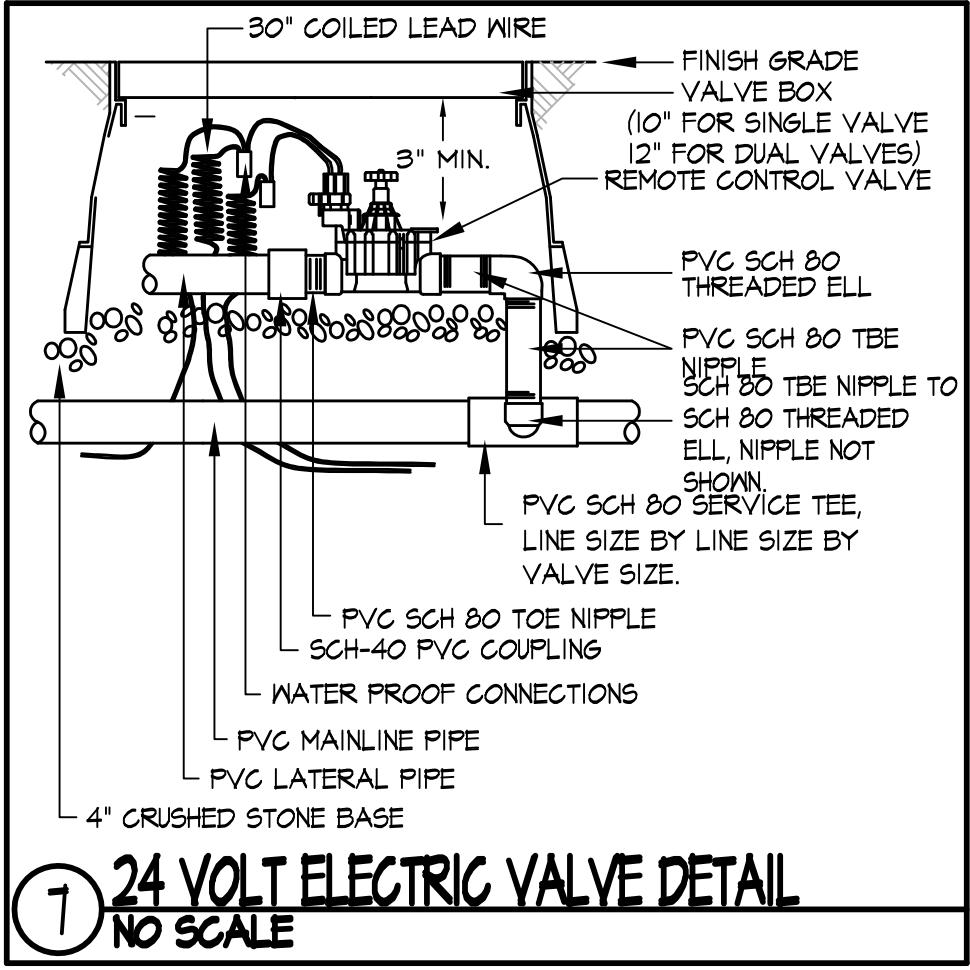
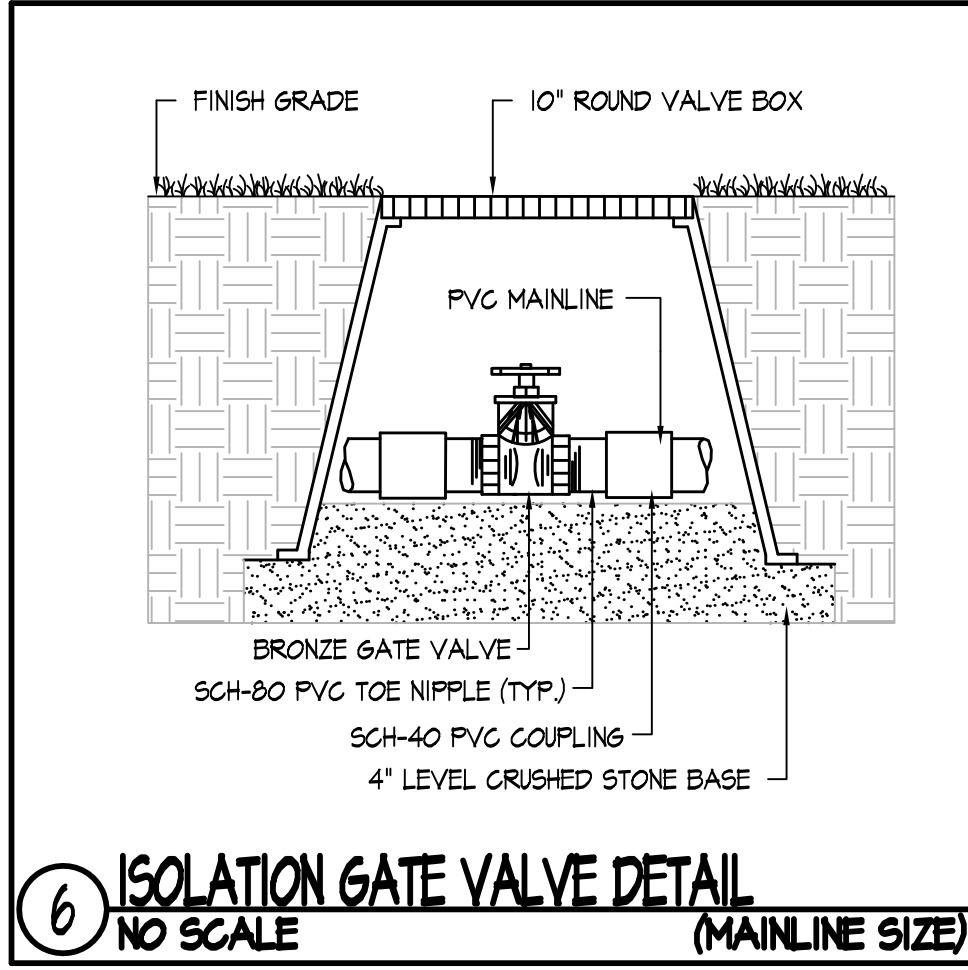
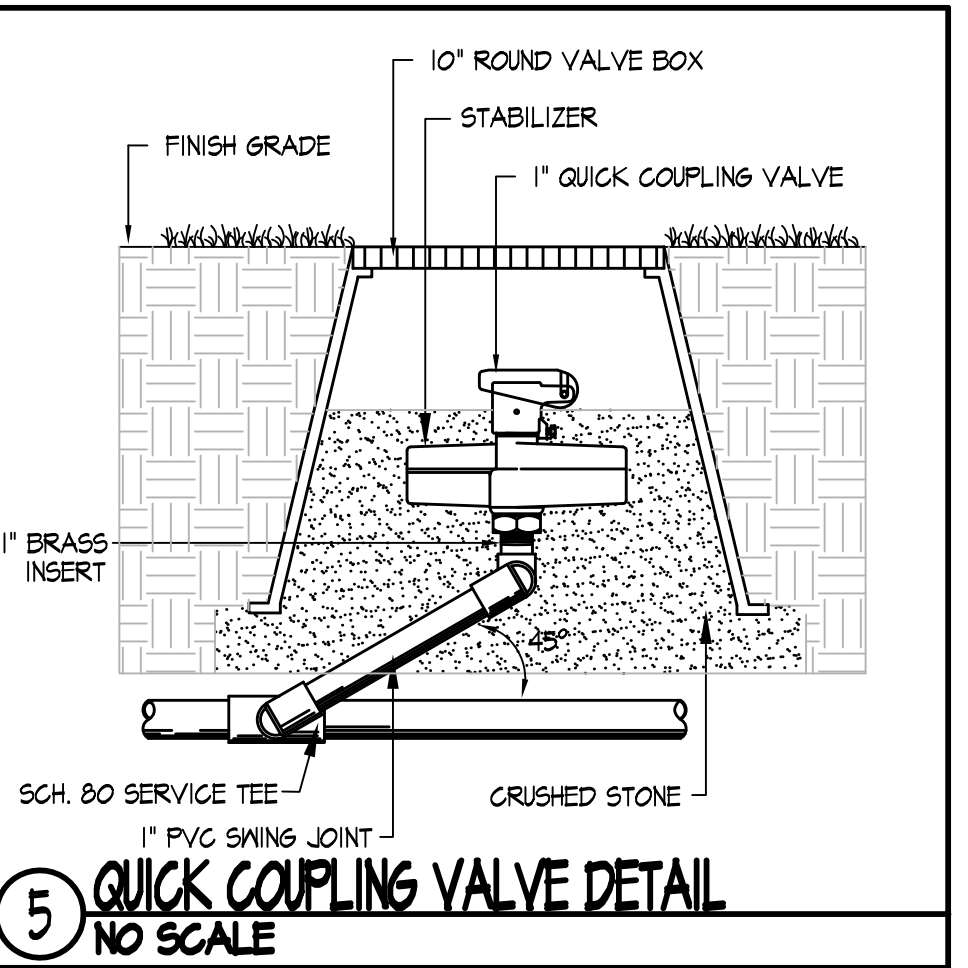
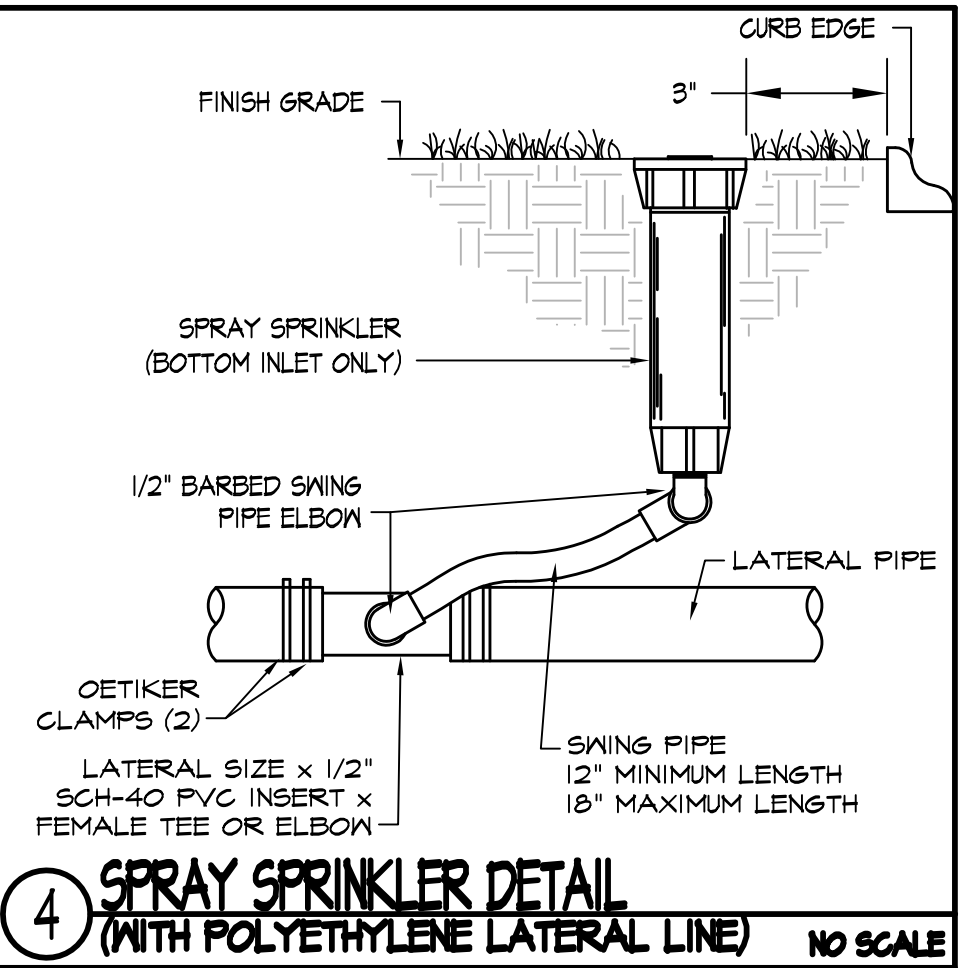
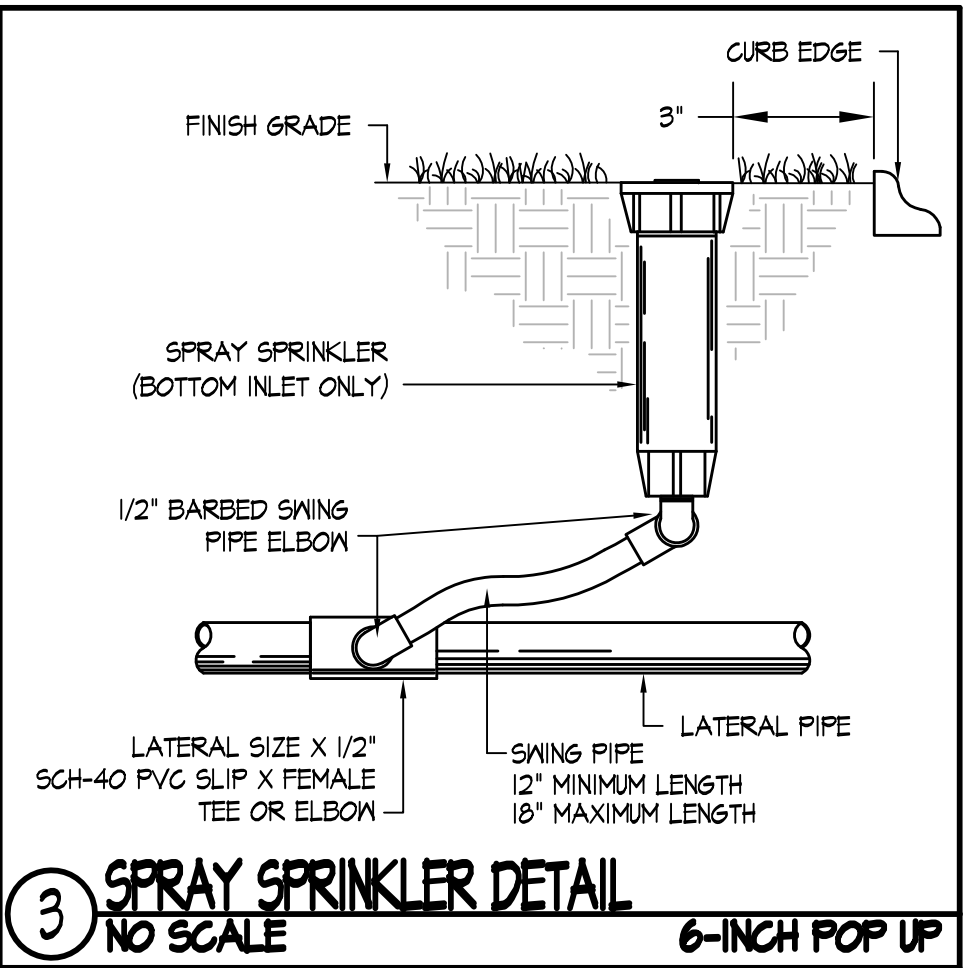
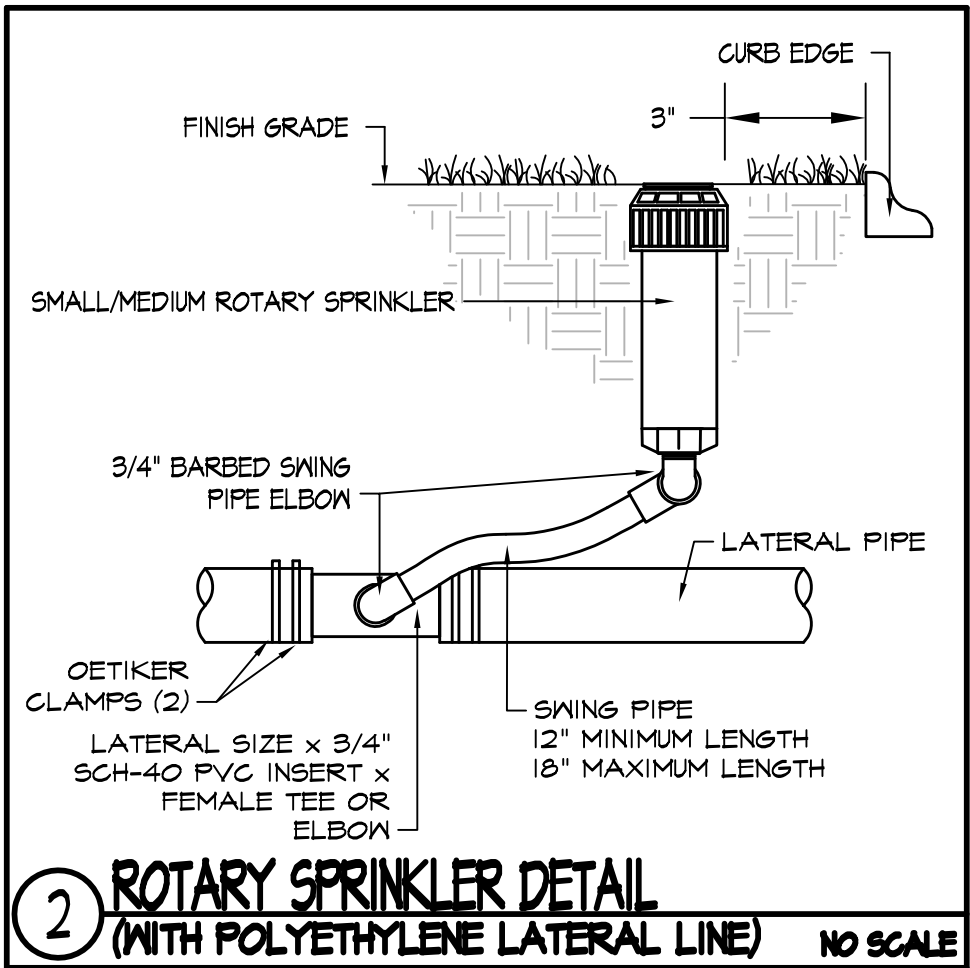
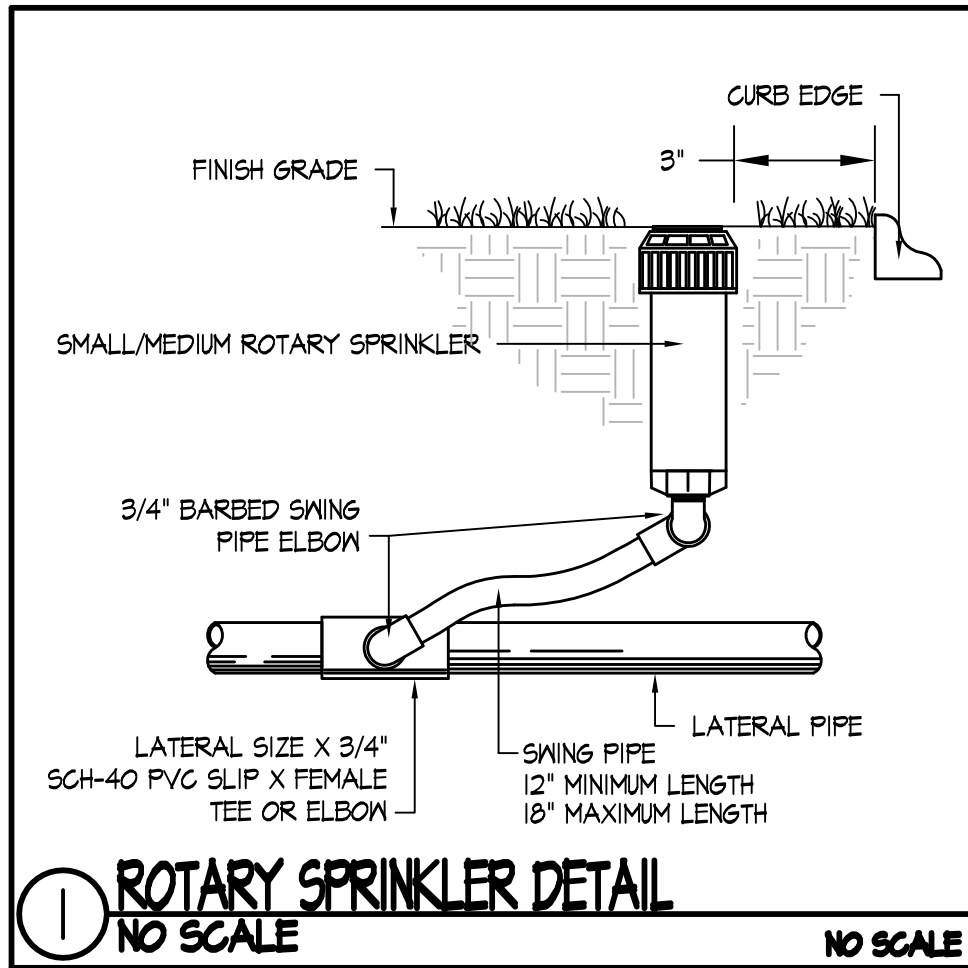
1. COORDINATE FINAL LOCATION OF ALL DRIP TUBING, SPRINKLERS AND NOZZLE SELECTION WITH FINAL APPROVED LANDSCAPE.
2. ALL SPRINKLERS, PIPE AND VALVE LOCATIONS SHALL BE FIELD VERIFY AND APPROVE BY THE LANDSCAPE ARCHITECT BEFORE INSTALLATION.
3. ALL VALVES AND VALVE BOXES SHALL BE PLACED, WHERE POSSIBLE, IN PLANTED AREAS UNDER MULCH.
4. INSTALL ALL PIPING AS FAR FROM TREES AND ROOT BALLS AS POSSIBLE WHILE MAINTAINING SPRINKLER AND DRIP TUBE SPACING.
5. ALL CONTROL WIRE SHALL BE #14 GAUGE SINGLE STRAND, RED FOR TURF ZONES AND ORANGE FOR DRIP. ALL COMMON WIRE SHALL BE #12 GAUGE SINGLE STRAND WHITE AND ALL SPARE WIRES, SHALL BE #14 GAUGE SINGLE STRAND BLUE.
6. ENDS OF ALL MAINLINE LOCATIONS, INSTALL TWO (2) SPARE WIRES AT EACH LOCATION FROM THE PROPOSED CONTROLLER. INSTALL ENDS OF WIRES WITH 3FT. EXTRA IN A 10-INCH VALVE BOX WITH WATERTIGHT CONNECTORS.
7. QUICK COUPLING VALVES SHALL BE INSTALLED ON 1 INCH PVC SWING JOINTS WITH BRASS INSERTS AND STABILIZERS. (SEE DETAIL)
8. ALL SPRAY AND ROTARY SPRINKLERS SHALL BE INSTALLED ON SWING PIPE ASSEMBLIES, MIN. LENGTH TO BE 6 INCHES, 18 INCH MAXIMUM.
9. THE PROPOSED IRRIGATION SYSTEM SHALL BE DESIGNED FOR SEPARATE WATER SUPPLY TO PROVIDE 20 GPM MAX FROM NEW 1-1/2 INCH SERVICE. SYSTEM TO PRODUCE 65-PSI DYNAMIC PRESSURE AT CONTRACTOR'S POINT OF CONNECTION IN LANDSCAPED AREA.
10. CONTRACTOR SHALL TEST DYNAMIC PRESSURE BEFORE STARTING WORK, REPORT ANY DEVIATION FROM PRESSURE REQUIRED TO OWNER'S REPRESENTATIVE. BEFORE CONTINUING.
11. CONTROLLER SHALL BE FIELD LOCATED, INSTALL CONTROLLER IN A PEDESTAL ENCLOSURE. LOCATION SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT BEFORE CONSTRUCTION. HARD WIRE TO 120 VOLT, DEDICATED 20 AMP CIRCUIT, POWER SUPPLY. ROUTE ALL PROPOSED, EXISTING, ZONE AND SPARE WIRES TO CONTROLLER VIA 3-INCH CONDUIT THROUGH ENCLOSURE BASE.
12. INSTALL RAIN SENSOR ON OUTSIDE OF CONTROLLER ENCLOSURE. ROUTE RAIN SENSOR WIRING TO CONTROLLER THROUGH ENCLOSURE WALL.
13. ALL ABOVE GROUND WIRING, INSIDE AND OUTSIDE OF BUILDING, SHALL BE INSTALLED IN RIGID, METALLIC CONDUIT FOR VANDALISM PROTECTION.
14. COORDINATE LOCATION OF ALL EXISTING AND FUTURE UTILITIES ON SITE AND CONTACT PROPER AUTHORITIES AND UTILITY COMPANIES BEFORE THE START OF WORK.
15. IN-LINE DRIP TUBING TO BE INSTALLED 6" FROM ALL MASONRY WALLS, PLANTER SIDE WALLS, AND CURBING, ON AN 18" CENTER TO CENTER ROW SPACING.
15. FLUSH ALL LATERAL LINES BEFORE INSTALLING IN-LINE DRIP TUBING OR SPRINKLERS.
16. STAKE IN-LINE DRIP TUBING AT MINIMUM 5 FOOT INTERVALS TO PREVENT MOVEMENT.
17. IN-LINE DRIP TUBING TO BE INSTALLED 4" BELOW GRADE UNDER MULCH. NO DRIPPER LINE TUBING SHALL BE VISIBLE.
18. INSTALL MANUAL FLUSH PORTS AT LOWEST POINT OF EXHAUST DRIP HEADERS.
20. SPRAY SPRINKLERS FOR TURF SHALL HAVE 6 INCH POP UP HEIGHT. SPACING OF ALL PROPOSED SPRINKLERS SHALL NOT EXCEED MANUFACTURER'S RECOMMENDATIONS FOR SPRINKLER SPACING.
21. CONTRACTOR MUST SUBMIT SHOP DRAWINGS AND PRODUCT SUBMITTALS TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO ORDERING MATERIAL AND BEGINNING WORK.
22. ANY AND ALL MATERIAL SUBSTITUTIONS WHICH VARY FROM THE SPECIFIED PRODUCTS MUST BE SUBMITTED TO THE LANDSCAPE ARCHITECT FOR APPROVAL AS PART OF THE SUBMITTAL PROCESS.
23. ONCE APPROVED SUBMITTALS HAVE BEEN RETURNED TO THE CONTRACTOR, WORK MAY BEGIN. THE LANDSCAPE ARCHITECT MUST BE NOTIFIED A MINIMUM OF 7-DAYS IN ADVANCE OF THE START OF WORK TO COORDINATE ON-SITE SUPERVISION AND ADMINISTRATION.
24. SEE IRRIGATION DETAILS FOR ADDITIONAL NECESSARY INFORMATION.

LATERAL PIPE SCHEDULE	
FLOW	PIPE SIZE / TYPE
0-10 GPM	1 INCH CLASS-200 PVC
11-20 GPM	1-1/4 INCH CLASS-200 PVC
21-30 GPM	1-1/2 INCH CLASS-200 PVC
31-50 GPM	2 INCH CLASS-200 PVC
0-7 GPM	1 INCH 100 PSI POLYETHYLENE PIPE
8-15 GPM	1-1/4 INCH 100 PSI POLYETHYLENE PIPE



IR-100

DRAWING FILE PATH: K:\ANDROPOGON\POTOMAC METRO PROJECT\02 DESIGN\IRR 130014.DWG
DATE MODIFIED: 5/9/2016



Andropogon

ANDROPOGON ASSOCIATES, LTD
10 SHURS LANE
PHILADELPHIA, PA 19127
T: 215.487.0700
F: 215.483.7520
W: www.andropogon.com

POTOMAC GREENS PARK

THE CITY OF ALEXANDRIA
CITY HALL
301 KING STREET
ALEXANDRIA, VA 22314



PRIME AE
CIVIL ENGINEERING
3201 JERMANTOWN ROAD, SUITE 660
FAIRFAX, VA 22030
703.865.0606
www.primeeng.com

KEAST & HOOD
STRUCTURAL ENGINEER
400 MARKET STREET, SUITE 1250
PHILADELPHIA, PA 19106
215.625.0099
www.keasthood.com/

IRRIGATION CONSULTING, INC.
IRRIGATION DESIGN
4 HOTEL PLACE
PEPPERELL, MA 01463
978.433.8972
www.ircoll.com

REV. DATE DESCRIPTION

PRELIMINARY PLAN
NOT FOR CONSTRUCTION OR PRICING

SCALE:	AS INDICATED ON DRAWINGS
DATE:	5/9/2016
DRAWN BY:	GD
CHECKED BY:	-
APPROVED BY:	-

AA PROJECT #: 130014.02
PROJECT PHASE: DESIGN DEVELOPMENT

DRAWING TITLE:
IRRIGATION DETAILS

SHEET:

IR-100

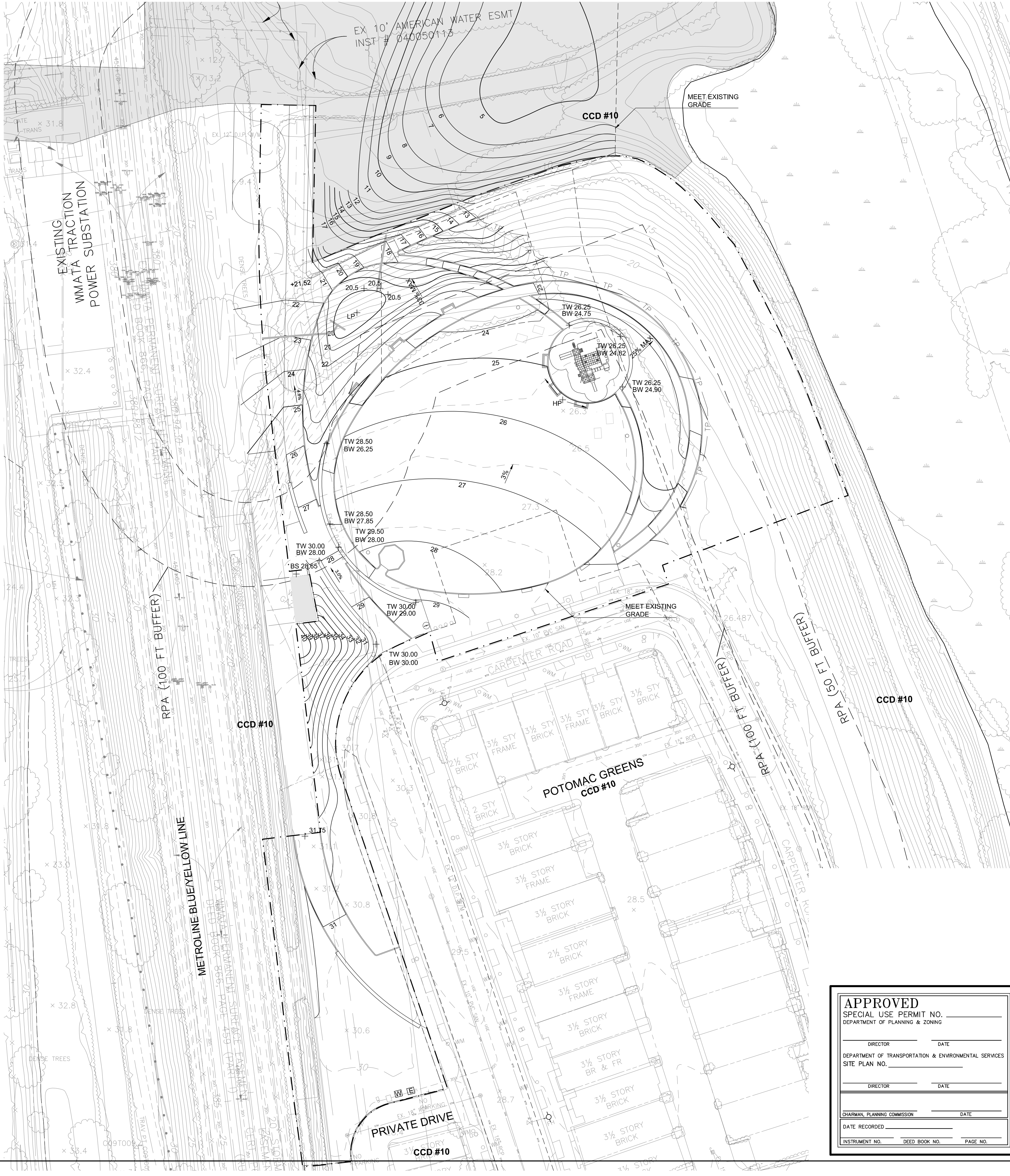
DRAWING FILE PATH: D:\DROPOBOX (ANDROPOGON\NC)\130014.01 POTOMAC GREENS\DRAWINGS\PHASE 2\DRAWING SETS\00_POTOMAC METRO 30% DD FILES\2016-05-17 130014.30% DD AA DWGL-LG-100-130014.DWG
DATE MODIFIED: 5/18/2016

GRADING NOTES

1. ROUND BREAKS IN GRADE WITH 5 FEET MINIMUM ROUNDING.
2. MEET ELEVATIONS OF EXISTING SURFACES FLUSH.
3. ADJUST EXISTING MANHOLE AND CATCH BASIN RIMS AND VALVE COVERS TO NEW FINISH GRADE.
4. SEE UTILITY DRAWINGS FOR TRENCH BACK FILLING NOT SHOWN ON THIS DRAWING.
5. COORDINATE STORM DRAINAGE STRUCTURES WITH CIVIL DRAWINGS.
6. WHERE EXCAVATION IS REQUIRED WITHIN THE DRIP LINE OF TREES, SEE SPECIFICATIONS FOR TREE PROTECTION AND TRIMMING. DO NOT CUT MAIN LATERAL ROOTS.
7. SLOPE GRADES TO DIRECT WATER AWAY FROM BUILDINGS, ACROSS PAVEMENT SURFACES, TOWARDS DRAINAGE DEVICES, AND TO PREVENT PONDING, EXCEPT WHERE INDICATED OTHERWISE ON DRAWINGS.

LEGEND

- TP — TREE PROTECTION
— LG — LIMIT OF GRADING
- - - - - PROPOSED PROPERTY LINE



ANDROPOGON ASSOCIATES, LTD
10 SHURS LANE
PHILADELPHIA, PA 19127
T: 215.487.0700
F: 215.483.7520
W: www.andropogon.com

POTOMAC GREENS PARK

THE CITY OF ALEXANDRIA
CITY HALL
301 KING STREET
ALEXANDRIA, VA 22314



PRIME AE
CIVIL ENGINEERING
3201 JERMANTOWN ROAD, SUITE 660
FAIRFAX, VA 22030
703.865.0606
www.primeeng.com

KEAST & HOOD
STRUCTURAL ENGINEER
400 MARKET STREET, SUITE 1250
PHILADELPHIA, PA 19106
215.625.0099
www.keasthood.com/

IRRIGATION CONSULTING, INC.
IRRIGATION DESIGN
4 HOTEL PLACE
PEPPERELL, MA 01463
978.433.8972
www.irrigationconsulting.com

REV. DATE DESCRIPTION



PRELIMINARY PLAN
NOT FOR CONSTRUCTION OR PRICING

SCALE:	AS INDICATED ON DRAWINGS
DATE:	5/19/2016
DRAWN BY:	BM
CHECKED BY:	EM
APPROVED BY:	EM

AA PROJECT #: 130014.01
PROJECT PHASE: DESIGN DEVELOPMENT

DRAWING TITLE:
GRADING PLAN

SHEET:

LG-100

APPROVED	
SPECIAL USE PERMIT NO. _____	
DEPARTMENT OF PLANNING & ZONING	
DIRECTOR _____	DATE _____
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES	
SITE PLAN NO. _____	
DIRECTOR _____	DATE _____
CHAIRMAN, PLANNING COMMISSION _____	
DATE RECORDED _____	
INSTRUMENT NO. _____	DEED BOOK NO. _____
PAGE NO. _____	

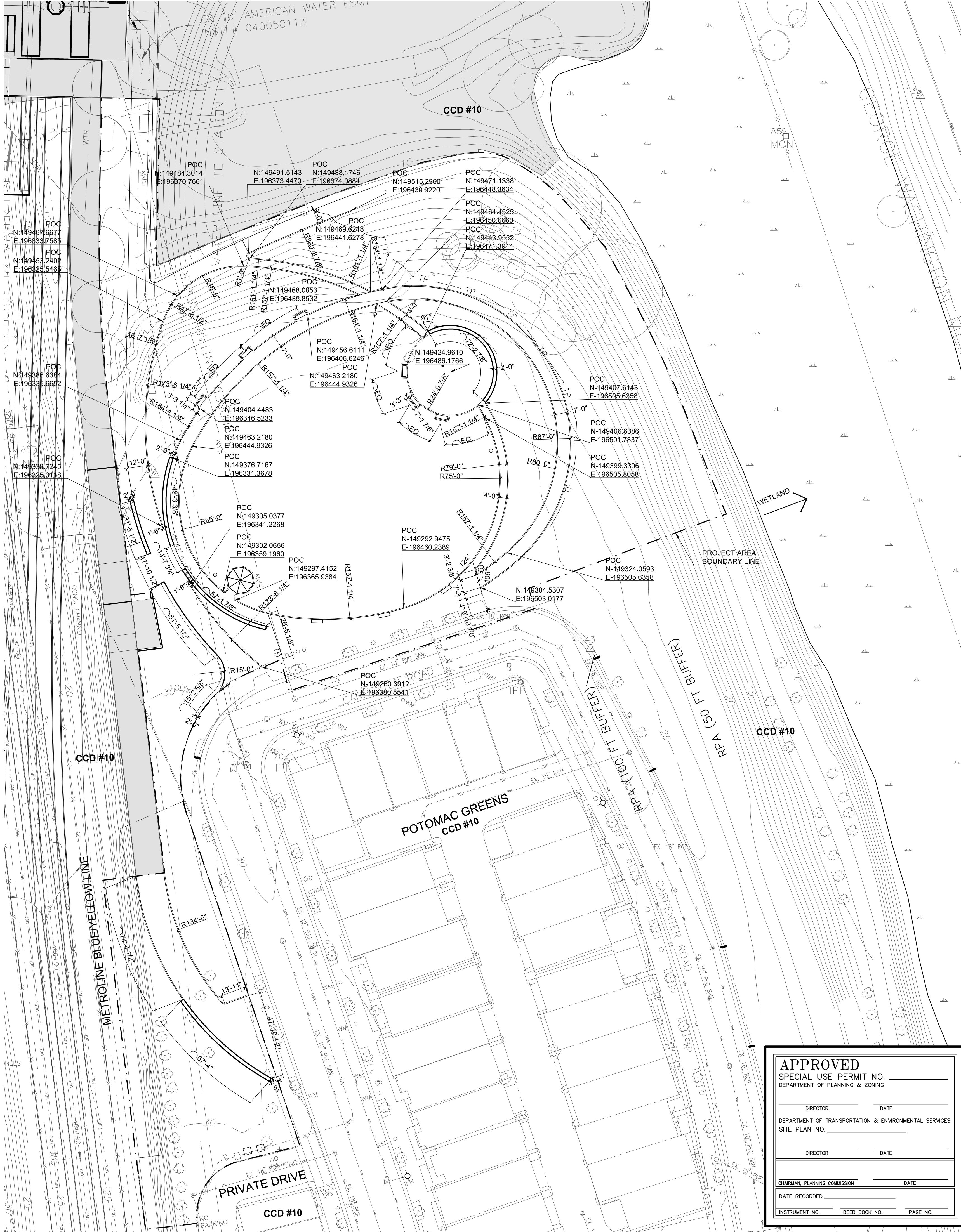
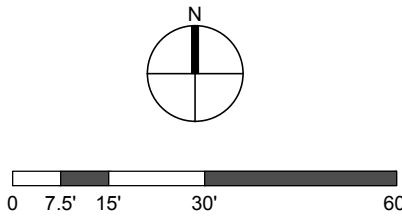
DRAWING FILE PATH: C:\JOBS\ACTIVE\130014\POTMETRO\DRAWINGS\PHASE 2\DRAWING SETS\PLOT\LO-100-130014.DWG
DATE MODIFIED: 5/18/2016

LAYOUT NOTES

1. VERIFY DIMENSIONS AND ACCEPT CONDITIONS BEFORE PROCEEDING WITH ANY WORK. REPORT DISCREPANCIES TO LANDSCAPE ARCHITECT.
2. DIMENSIONS TO CURBS AND WALLS ARE TO EXPOSED FACES UNLESS NOTED OTHERWISE.
3. SEE ELECTRICAL DRAWINGS FOR LAYOUT OF SITE LIGHTING.
4. SEE UTILITY DRAWINGS FOR TRENCH BACKFILLING AND SURFACE REPAIRS NOT SHOWN ON THIS DRAWING.
5. INSTALL ISOLATION JOINTS IN CONCRETE PAVING ABUTTING CURBS, STEPS AND OTHER FIXED OBJECTS.
6. PROVIDE SLOPES ON PAVEMENT SURFACES AS INDICATED ON GRADING PLANS.

LEGEND

- TP TREE PROTECTION
LG LIMIT OF GRADING
- - - PROPOSED PROPERTY LINE



APPROVED	
SPECIAL USE PERMIT NO. _____	
DEPARTMENT OF PLANNING & ZONING	
DIRECTOR _____	DATE _____
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES	
SITE PLAN NO. _____	
DIRECTOR _____	DATE _____
CHAIRMAN, PLANNING COMMISSION _____	
DATE RECORDED _____	
INSTRUMENT NO. _____	DEED BOOK NO. _____
PAGE NO. _____	



ANDROPOGON
ASSOCIATES, LTD
10 SHURS LANE
PHILADELPHIA, PA 19127
T: 215.487.0700
F: 215.483.7520
W: www.andropogon.com

POTOMAC GREENS PARK

THE CITY OF ALEXANDRIA
CITY HALL
301 KING STREET
ALEXANDRIA, VA 22314

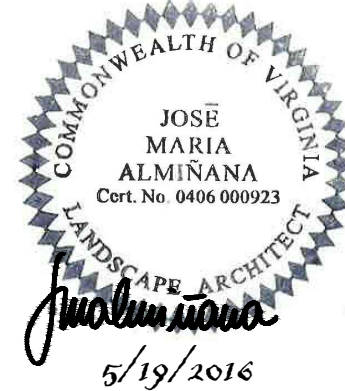


PRIME AE
CIVIL ENGINEERING
3201 JERMANTOWN ROAD, SUITE 660
FAIRFAX, VA 22030
703.865.0606
www.primeeng.com

KEAST & HOOD
STRUCTURAL ENGINEER
400 MARKET STREET, SUITE 1250
PHILADELPHIA, PA 19106
215.625.0099
www.keasthood.com/

IRRIGATION CONSULTING, INC.
IRRIGATION DESIGN
4 HOTEL PLACE
PEPPERELL, MA 01463
978.433.8972
www.irrigationconsulting.com

REV.	DATE	DESCRIPTION



PRELIMINARY PLAN
NOT FOR CONSTRUCTION OR PRICING

SCALE:	AS INDICATED ON DRAWINGS
DATE:	5/19/2016
DRAWN BY:	BM
CHECKED BY:	EM
APPROVED BY:	EM

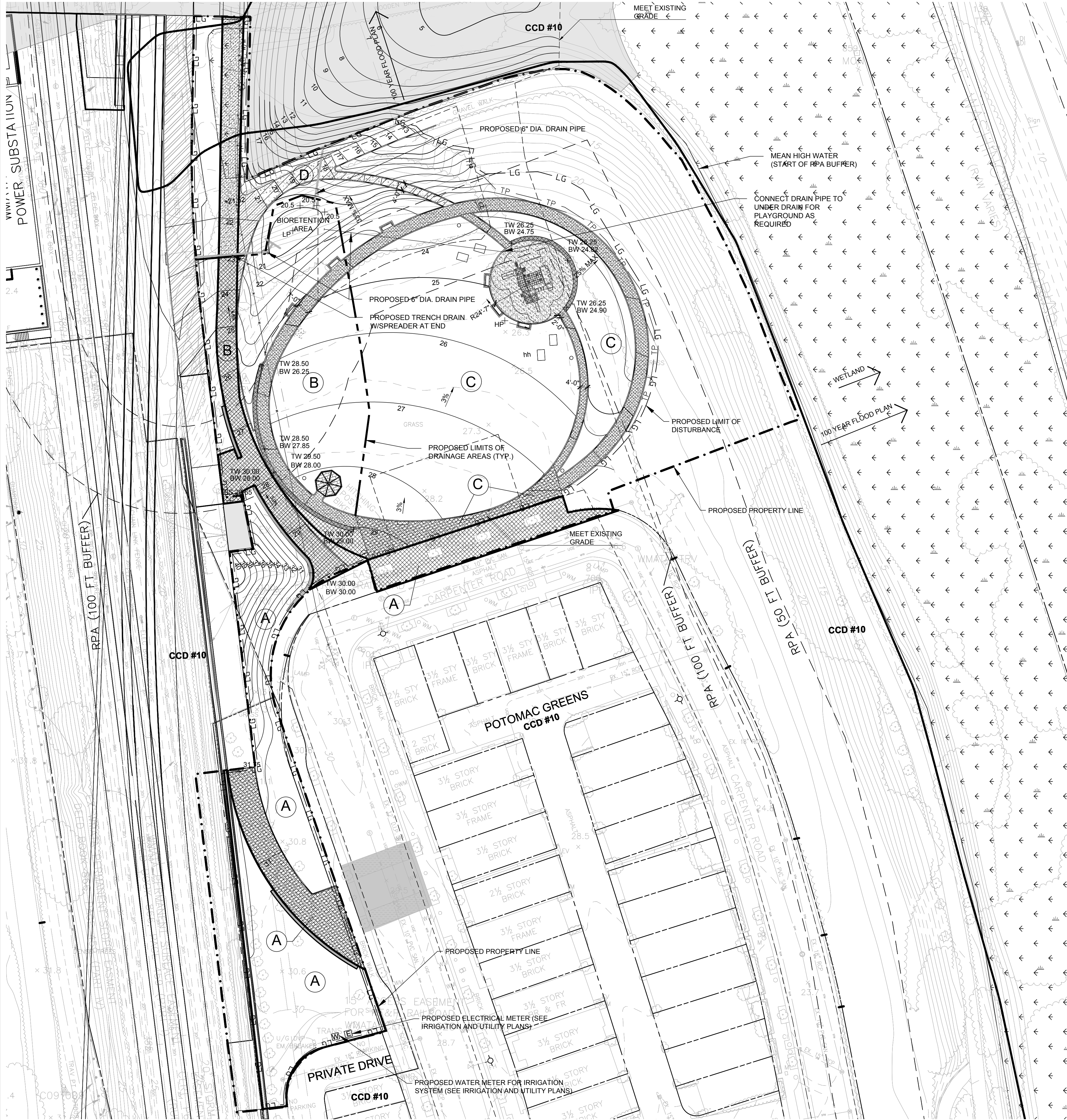
AA PROJECT #: 130014.02
PROJECT PHASE: DESIGN DEVELOPMENT

DRAWING TITLE:
LAYOUT PLAN

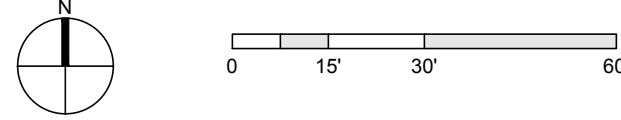
SHEET:

LO-100

DRAWING FILE PATH: I:\001 - PROJECTS\ANDROPOGON\15114 - ALEXANDRIA METRO STATIONS CIVIL\DRAWING\130014_PRIME.DWG
DATE MODIFIED: 5/19/2016



SITE PLAN



NOTE:
SEE DRAWINGS #SW-101 AND SW-102 FOR VRRM WORKSHEET AND STORMWATER NOTES.

STORMWATER MANAGEMENT NARRATIVE

AS DEMONSTRATED ON THE ATTACHED VRRM WORKSHEET, THE PROJECT CAN MEET THE WATER QUALITY REQUIREMENTS OF ALEXANDRIA'S ENVIRONMENTAL MANAGEMENT ORDINANCE. THE THREE BMP'S UTILIZED TO MEET THE REQUIREMENTS ARE: 1) A NEW BIORETENTION AREA TO TREAT A SIGNIFICANT PORTION OF THE ACCESS ROAD 2) POROUS PAVEMENT APPLICATIONS FOR THE MAJORITY OF THE PROPOSED WALKWAYS AND TRAILS 3) A SIMPLE DISCONNECTION/ VEGETATIVE BUFFER BMP TO PROVIDE TREATMENT FOR THE NEW IMPERVIOUS AREA AT THE POTOMAC GREENS PARK ENTRANCE.

IN ADDITION TO THE THREE BMP'S ABOVE, THE EXISTING POTOMAC GREENS STORMFILTER WILL CONTINUE TO HAVE 0.36 ACRES OF PROJECT SITE AREA DIRECTED TO IT POST DEVELOPMENT. ALTHOUGH THE AREA DIRECTED TO THE STORMFILTER REMAINS THE SAME, 926 SF WILL BE CONVERTED FROM MANAGED TURF TO IMPERVIOUS AREA DUE TO THE NEW PEDESTRIAN LANDING FOR THE STATION. THE ADDITIONAL PHOSPHORUS LOAD REDUCTION ASSOCIATED WITH THIS LAND COVER CHANGE IS 0.01 LBS/YR. **NO CREDIT WAS TAKEN FOR AREA DIRECTED TO THE STORMFILTER IN THE VRRM WORKSHEET SINCE IT WAS PREEXISTING AND THE CHANGE IS SO SMALL.**

INCLUDING THE ADDITION OF NEW IMPERVIOUS AREAS ASSOCIATED WITH THE ACCESS ROAD AND THE METRO STATION RAMP LANDING AREA, THERE IS AN INCREASE OF 0.85 CFS AND 1.24 CFS IN THE 2 AND 10 YEAR STORM RESPECTIVELY, PRE TO POST DEVELOPMENT. NO DETENTION IS PROPOSED WITH THIS PORTION OF THE METRO STATION PLAN SUBMISSION. COORDINATION WITH THE METRO STATION DEVELOPMENT PLAN WILL BE REQUIRED TO ENSURE NO INCREASE IN PEAK FLOWS.

WATER QUALITY VOLUME DEFAULT

DUE TO THE MAINTENANCE REQUIREMENT OF HAVING AN ACCESS ROAD IMMEDIATELY ADJACENT TO THE WETLANDS, THE ENTIRE WATER QUALITY VOLUME DEFAULT CANNOT BE MET WITH STORMWATER BMP'S. THERE IS 0.03 ACRES OF IMPERVIOUS AREA ASSOCIATED WITH THE TRAIL SYSTEM ON STEEP SLOPES WHERE POROUS APPLICATIONS CANNOT BE USED AND RETAINING WALLS REQUIRED FOR GRADING THAT DUE TO SITE CONSTRAINTS CANNOT RECEIVE TREATMENT. AN ALTERNATIVE TO PROVIDING A BMP FOR THIS AREA WILL BE PROVIDED IN ACCORDANCE WITH ENVIRONMENTAL ORDINANCE SECTION 13-110. THE SPECIFIC OFFSITE STORMWATER IMPROVEMENTS TO MEET THE REQUIREMENT ARE TO BE DETERMINED AT FINAL SITE PLAN.

CAPACITY OF POTOMAC GREENS STORMFILTER

PER THE SHEET ENTITLED "OVERALL BMP MASTER PLAN COMPUTATIONS" (SHEET 64) OF THE POTOMAC GREEN'S DESIGN PLANS COMPLETED BY BOWMAN CONSULTING DATED JUNE 3, 2004, THE EXISTING STORMFILTER IS DESIGNED TO HANDLE 9.16 ACRES INCLUDING 8.32 ACRES OF IMPERVIOUS AREA. THE CAPTURED DRAINAGE AREA IS SHOWN TO INCLUDE APPROXIMATELY ONE ACRE OF POTOMAC GREENS PARK, OF WHICH ONLY THE IMPERVIOUS AREA (2,237 SF) ASSOCIATED WITH THE PARK ENTRANCE IS ACTUALLY DIRECTED TO THE STORMFILTER.

ALTHOUGH THERE IS NO NEW AREA DIRECTED TO THE STORMFILTER PROPOSED WITH THIS PLAN, THERE WILL BE AN INCREASE OF IMPERVIOUS AREA TO THE STORMFILTER OF 926 SF ASSOCIATED WITH THE NEW PEDESTRIAN LANDING. THIS INCREASE OF 0.02 AC OF IMPERVIOUS AREA CAN BE ACCOMMODATED BY THE EXISTING STORMFILTER AS DEMONSTRATED BY THE BOWMAN PLAN.

LEGEND

- IMPERVIOUS AREA
- PERVIOUS AREA
- UNTREATED IMPERVIOUS AREA
- TO EXISTING POTOMAC GREENS STORM FILTER
- TO PROPOSED BIORETENTION AREA
- DISCONNECTED BUFFER AREA (FOR ADDITIONAL BRICK AT PARK ENTRANCE)
- UNTREATED IMPERVIOUS AREA

APPROVED

SPECIAL USE PERMIT NO. _____
DEPARTMENT OF PLANNING & ZONING

DIRECTOR _____ DATE _____
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. _____

DIRECTOR _____ DATE _____
CHAIRMAN, PLANNING COMMISSION _____

DATE RECORDED _____
INSTRUMENT NO. _____ DEED BOOK NO. _____ PAGE NO. _____



ANDROPOGON ASSOCIATES, LTD
10 SHURS LANE
PHILADELPHIA, PA 19127
T: 215.487.0700
F: 215.483.7520
W: www.andropogon.com

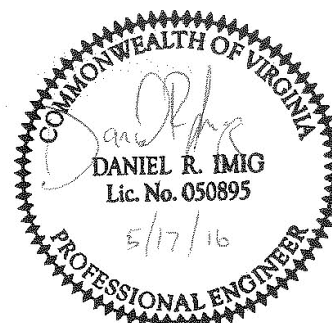
POTOMAC GREENS PARK

THE CITY OF ALEXANDRIA
CITY HALL
301 KING STREET
ALEXANDRIA, VA 22314

PRIME AE Group, Inc.
CIVIL ENGINEERING
3201 JERMANTOWN ROAD, SUITE 660
FAIRFAX, VA 22030
703.865.0606
www.primeeng.com

KEAST & HOOD
STRUCTURAL ENGINEER
400 MARKET STREET, SUITE 1250
PHILADELPHIA, PA 19106
215.625.0099
www.keasthood.com/

IRRIGATION CONSULTING, INC.
IRRIGATION DESIGN
4 HOTEL PLACE
PEPPERELL, MA 01463
978.433.8972
www.irrigationconsulting.com



PRELIMINARY PLAN
NOT FOR CONSTRUCTION OR PRICING

SCALE:	AS INDICATED ON DRAWINGS
DATE:	5/19/2016
DRAWN BY:	MS
CHECKED BY:	DI
APPROVED BY:	DI

AA PROJECT #: 130014.02
PROJECT PHASE: DESIGN DEVELOPMENT

DRAWING TITLE:
STORMWATER MANAGEMENT PLAN

SHEET:

SW-100

Site Data Summary

Total Rainfall = 43 inches

Site Land Cover Summary

	A Soils	B Soils	C Soils	D Soils	Total	% of Total
Forest (acres)	0.00	0.00	0.00	0.18	0.18	10.65
Turf (acres)	0.00	0.00	0.00	1.07	1.07	63.31
Impervious (acres)	0.00	0.00	0.00	0.44	0.44	26.04
				1.69	1.69	100.00

Site Rv	0.41
Post Development Treatment Volume (ft ³)	2521
Post Development TP Load (lb/yr)	1.58
Post Development TN Load (lb/yr)	11.33
Total TP Load Reduction Required (lb/yr)	0.50

DUE TO THE CONDITION OF THE EXISTING TRAIL
AT POTOMAC GREENS PARK, THE 0.24 ACRES OF TRAIL
AREA WAS COUNTED AS IMPERVIOUS AREA IN THE EXISTING
CONDITION

Total Runoff Volume Reduction (ft ³)	882
Total TP Load Reduction Achieved (lb/yr)	1
Total TN Load Reduction Achieved (lb/yr)	4.57
Adjusted Post Development TP Load (lb/yr)	0.95
Remaining Phosphorous Load Reduction (Lb/yr) Required	0.00

Drainage Area Summary

	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	Total
Forest (acres)	0.08	0.00	0.10	0.00	0.00	0.18
Turf (acres)	0.25	0.29	0.53	0.00	0.00	1.07
Impervious (acres)	0.11	0.16	0.17	0.00	0.00	0.44
						1.69

Drainage Area Compliance Summary

	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	Total
TP Load Red. (lb/yr)	0.00	0.46	0.17	0.00	0.00	0.63
TN Load Red. (lb/yr)	0.00	3.34	1.23	0.00	0.00	4.57

Drainage Area A Summary

Land Cover Summary

	A Soils	B Soils	C Soils	D Soils	Total	% of Total
Forest (acres)	0.00	0.00	0.00	0.08	0.08	18.18
Turf (acres)	0.00	0.00	0.00	0.25	0.25	56.82
Impervious (acres)	0.00	0.00	0.00	0.11	0.11	25.00
				0.44		

BMP Selections

Practice - NO CREDIT TAKEN FOR POTOMAC GREENS STORMFILTER	Credit Area (acres) - ZERO	Downstream Practice
Total Impervious Cover Treated (acres)	0.11	NOTE: THE POTOMAC GREENS STORMFILTER WAS REMOVING 0.17 LBS OF PHOSPHORUS IN THE EXISTING CONDITON WITH 0.09 ACRES OF IMPERVIOUS AND 0.27 ACRES OF TURF. THE POST DEVELOPED ACREAGE RESULTED IN A REMOVAL OF 0.18 LBS OF PHOSPHORUS. THIS ADDITIONAL 0.01 LBS/YR WAS NOT INCLUDED. ZERO REMOVAL CREDIT TAKEN FOR STORMFILTER.
Total Turf Area Treated (acres)	0.25	
Total TP Load Reduction Achieved in D.A. A (lb/yr)	0.00	
Total TN Load Reduction Achieved in D.A. A (lb/yr)	0.00	

Drainage Area B Summary

Land Cover Summary

	A Soils	B Soils	C Soils	D Soils	Total	% of Total
Forest (acres)	0.00	0.00	0.00	0.00	0.00	0.00
Turf (acres)	0.00	0.00	0.00	0.29	0.29	64.44
Impervious (acres)	0.00	0.00	0.00	0.16	0.16	35.56
				0.45		

BMP Selections

Practice	Credit Area (acres)	Downstream Practice
3.a. Permeable Pavement #1 (Spec #7)	acres of permeable pavement + acres of "external" (upgradient) impervious pavement	0.07 6.b. Bioretention #2
6.b. Bioretention #2 (Spec #9)	Impervious: 0.09 Turf (Pervious): 0.27	

Total Impervious Cover Treated (acres)	0.16
Total Turf Area Treated (acres)	0.27
Total TP Load Reduction Achieved in D.A. A (lb/yr)	0.46
Total TN Load Reduction Achieved in D.A. A (lb/yr)	3.34

Drainage Area C Summary

Land Cover Summary

	A Soils	B Soils	C Soils	D Soils	Total	% of Total
Forest (acres)	0.00	0.00	0.00	0.10	0.10	12.50
Turf (acres)	0.00	0.00	0.00	0.53	0.53	66.25
Impervious (acres)	0.00	0.00	0.00	0.17	0.17	21.25
				0.80		

BMP Selections

Practice	Credit Area (acres)	Downstream Practice
3.a. Permeable Pavement #1 (Spec #7)	acres of permeable pavement + acres of "external" (upgradient) impervious pavement	0.11 Bioretention #2
9.c. Sheetflow to Vegetated Filter Strip in A Soils or Compost Amended B/C/D Soils (Spec #2 & #4)	Impervious: 0.03 Turf (Pervious): 0	

Total Impervious Cover Treated (acres)	0.14
Total Turf Area Treated (acres)	0.00
Total TP Load Reduction Achieved in D.A. A (lb/yr)	0.17
Total TN Load Reduction Achieved in D.A. A (lb/yr)	1.23

Channel and Flood Protection

	Weighted CN	1-year storm Adjusted CN	2-year storm Adjusted CN	10-year storm Adjusted CN
Target Rainfall Event (in)		2.60	3.10	4.80
D.A. A CN	84	84	84	84
D.A. B CN	86	79	80	82
D.A. C CN	83	82	82	82
D.A. D CN	0	43	#N/A	#N/A
D.A. E CN	0	43	#N/A	#N/A

Virginia Runoff Reduction Method ReDevelopment Worksheet - v2.8 - June 2014

To be used w/ DRAFT 2013 BMP Standards and Specifications

Site Data

Project Name: Potomac Greens Park Rehabilitation Plan

Date: 2/16/2016

data input cells
calculation cells
constant values

Post-ReDevelopment Project & Land Cover Information

Total Disturbed Acreage 1.69

Constants

Annual Rainfall (inches)	43
Target Rainfall Event (inches)	1.00
Phosphorus EMC (mg/L)	0.26
Target Phosphorus Target Load (lb/acre/yr)	0.41
P	0.95
Nitrogen EMC (mg/L)	1.86

Pre-ReDevelopment Land Cover (acres)

	A soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed, protected forest/open space or reforested land	0.00	0.00	0.00	0.38	0.38
Managed Turf (acres) -- disturbed, graded for yards or other turf to be mowed/managed	0.00	0.00	0.00	0.99	0.99
Impervious Cover (acres)	0.00	0.00	0.00	0.32	0.32
				1.69	

Post-ReDevelopment Land Cover (acres)

	A soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed, protected forest/open space or reforested land	0.00	0.00	0.00	0.18	0.18
Managed Turf (acres) -- disturbed, graded for yards or other turf to be mowed/managed	0.00	0.00	0.00	1.07	1.07
Impervious Cover (acres)	0.00	0.00	0.00	0.44	0.44
				1.69	

Area Check

Okay	Okay	Okay	Okay
------	------	------	------

Rv Coefficients

	A soils	B Soils	C Soils	D Soils
Forest/Open Space	0.00	0.00	0.04	0.05
Managed Turf	0.15	0.20	0.22	0.25
Impervious Cover	0.95	0.95	0.95	0.95

Land Cover Summary

	Listed	Adjusted ¹		Land Cover Summary Post-ReDevelopment		Land Cover Summary Post-ReDevelopment New Impervious
Forest/Open Space Cover (acres)	0.38	0.26		Forest/Open Space Cover (acres)	0.18	
Composite Rv(forest)	0.00	0.00		Composite Rv(forest)	0.00	
% Forest	25%	17%		% Forest	11%	
Managed Turf Cover (acres)	0.99	0.99		Managed Turf Cover (acres)	1.07	
Composite Rv(turf)	0.25	0.25		Composite Rv(turf)	0.25	
% Managed Turf	59%	63%		% Managed Turf	68%	
Impervious Cover (acres)	0.32	0.32		ReDev. Impervious Cover (acres)	0.32	
Rv(impervious)	0.95	0.95		Rv(impervious)	0.95	
% Impervious	19%	20%		% Impervious	20%	
Total Site Area (acres)	1.69	1.57		Total ReDev. Site Area (acres)	1.57	
Site Rv	0.34	0.36		ReDev. Site Rv	0.37	

Pre-Development Treatment Volume (acre-ft)	0.0475	0.0470		Post-Development Treatment Volume (acre-ft)	0.0484	
Pre-Development Treatment Volume (cubic feet)	2,071	2,049		Post-Development Treatment Volume (cubic feet)	2,107	
Pre-Development Load (TP) (lb/yr)	1.30	1.29		Post-Development Load (TP) (lb/yr)	1.32	

Adjusted Land Cover Summary reflects the pre redevelopment land cover minus the pervious land cover (forest/open space or managed turf) acreage proposed for new impervious cover. The adjusted total acreage is consistent with the Post Redevelopment acreage (minus the acreage of new impervious cover). The load reduction requirement for the new impervious cover to meet the new development load limit is computed in Column 1.	Maximum % Reduction Required Below Pre-Redevelopment Load	20%
	TP Load Reduction Required for Redeveloped Area (lb/yr)	0.29

Site Results

	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	AREA CHECK
IMPERVIOUS COVER	0.11	0.16	0.17	0.00	0.00	OK
IMPERVIOUS COVER TREATED	0.11	0.16	0.14	0.00	0.00	OK
TURF AREA	0.25	0.29	0.53	0.00	0.00	OK
TURF AREA TREATED	0.25	0.27	0.00	0.00	0.00	OK
AREA CHECK	OK	OK	OK	OK	OK	OK

Phosphorous

TOTAL PHOSPHOROUS LOAD REDUCTION REQUIRED (LB/YEAR)	0.96
RUNOFF REDUCTION (CT)	882
PHOSPHOROUS LOAD REDUCTION ACHIEVED (LB/YR)	0.63
ADJUSTED POST-DEVELOPMENT PHOSPHOROUS LOAD (TP) (LB/YR)	0.95
REMAINING PHOSPHOROUS LOAD REDUCTION (LB/YR) NEEDED	CONGRATULATIONS!! YOU EXCEEDED THE TARGET REDUCTION BY 0.1 LB/YEAR!!

Nitrogen (for information purposes)

RUNOFF REDUCTION (CT)	882
NITROGEN LOAD REDUCTION ACHIEVED (LB/YR)	4.57
ADJUSTED POST-DEVELOPMENT NITROGEN LOAD (TP) (LB/YR)	6.76

STORMWATER COMPUTATIONS

PEAK DISCHARGE FOR 2 AND 10 YEAR STORMS
RATIONAL METHOD (Q= CIA)

RUNOFF COEFFICIENTS

UNMANAGED OPEN SPACE (STEEP SLOPES) = 0.20
MANAGED TURF = 0.3
GRAVEL TRAILS / PERVIOUS PAVEMENT = 0.7
IMPERVIOUS AREA = 0.9

PREDEVELOPMENT AREAS

UNMANAGED OPEN SPACE = 0.83 AC
MANAGED TURF = 1.06 AC
GRAVEL TRAILS = 0.17 AC
IMPERVIOUS AREAS = 0.08 AC
TOTAL: 2.14 AC

POSTDEVELOPMENT AREAS

UNMANAGED OPEN SPACE = 0.55 AC
MANAGED TURF = 1.15 AC
PERVIOUS PAVEMENT = 0.18 AC
IMPERVIOUS AREAS = 0.26 AC
TOTAL: 2.14 AC

RAINFALL INTENSITIES

2 YR = 6.2 IN/HR
10 YR = 9.0 IN/HR

PREDEVELOPMENT

COMPOSITE C

[(0.20*(0.83/2.14)) + (0.30*(1.06/2.14)) + (0.70*(0.17/2.14)) + (0.9*(0.08/2.14))] = 0.316

Q2 = (0.316)(6.2)(2.14) = 4.19 CFS

Q10 = (0.316)(9.0)(2.14) = 6.08 CFS

POSTDEVELOPMENT

COMPOSITE C

[(0.20)*(0.55/2.14)) + (0.30)*(1.15/2.14)) + (0.70)*(0.18/2.14)) + (0.90)(0.26/2.14)) = 0.380

Q2 = (0.380)(6.2)(2.14) = 5.04 CFS

Q10 = (0.380)(9.0)(2.14) = 7.32 CFS

Q2 PRE TO POST -- INCREASE OF 0.85 CFS

Q10 PRE TO POST -- INCREASE OF 1.24 CFS

THE PRIMARY REASONS FOR THE INCREASE IN RUNOFF IS THE PROPOSED 12 FOOT WIDE ACCESS ROAD FOR THE FUTURE METRO STATION AND THE ADDITIONAL IMPERVIOUS AREA ASSOCIATED WITH THE PEDESTRIAN LANDING. THERE IS RUNOFF REDUCTION ACHIEVED BY THE PERVIOUS PAVEMENT, BIORETENTION AREA AND DISCONNECTED IMPERVIOUS AREA. NO DETENTION IS PROPOSED WITH THIS PORTION OF THE METRO STATION PLANS.

Development or REDEVELOPMENT

Drainage Area	Impervious	Pervious	Total
Site Area	0.26	1.88*	2.14
On-Site Treated	0.23	0.52	0.75
Off-Site Treated			
Total Treated	0.23	0.52	0.75
Any On-Site Disconnected by a Vegetated Buffer (25 ft)	0.03		
Total On-Site Treated or Disconnected			0.78

*Includes 0.18 acres of porous pavement. This area is initially counted as impervious area in the VRRM spreadsheet.

Water Treatment on site

BMP Type	Area treated by BMP (acres)	Impervious area treated by BMP (acres)	BMP efficiency (%)
Permeable Pavement #1 (VRRM 3a)	0.18	0	45% RR, 25% P
Disconnected Impervious Area / Vegetative Filter (VRRM 9c)	0.03	0.03	50% RR , 0% P
Bioretention #2 (VRRM 6b)	0.27	0.09	90% RR, 25% P
Existing Stormfilter**	0.36	0.11	0% RR, 50% P

**The amount of area the existing Potomac Green's Stormfilter is treating will remain the same from predevelopment conditions to postdevelopment conditions. Due to the new pedestrian landing 0.02 acres of managed turf will be converted to impervious area. The 0.11 acres of impervious area above includes this additional 0.02ac. No phosphorus removal credit was taken in the VRRM worksheet for area directed to the stormfilter.

Miscellaneous

Total WQV treated: yes NO
Detention on site: yes NO

Project is within which watershed? Potomac River Watershed

Project discharges to which body of water? Potomac River

APPROVED	
SPECIAL USE PERMIT NO. _____	
DEPARTMENT OF PLANNING & ZONING	
DIRECTOR _____	DATE _____
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES	
SITE PLAN NO. _____	
DIRECTOR _____	DATE _____
CHAIRMAN, PLANNING COMMISSION _____	
DATE RECORDED _____	
INSTRUMENT NO. _____	DEED BOOK NO. _____
PAGE NO. _____	



ANDROPOGON
ASSOCIATES, LTD
10 SHURS LANE
PHILADELPHIA, PA 19127
T: 215.487.0700
F: 215.483.7520
W: www.andropogon.com

POTOMAC GREENS
PARK

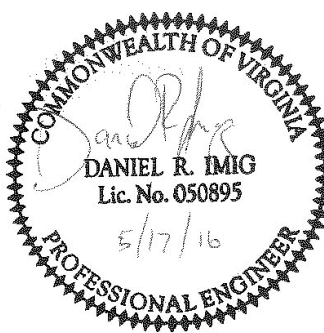
THE CITY OF ALEXANDRIA
CITY HALL
301 KING STREET
ALEXANDRIA, VA 22314

PRIME AE Group, Inc.
CIVIL ENGINEERING
3201 JERMANTOWN ROAD, SUITE 660
FAIRFAX, VA 22030
703.865.0606
www.primeeng.com

KEAST & HOOD
STRUCTURAL ENGINEER
400 MARKET STREET, SUITE 1250
PHILADELPHIA, PA 19106
215.625.0099
www.keasthood.com/

IRRIGATION CONSULTING, INC.
IRRIGATION DESIGN
4 HOTEL PLACE
PEPPERELL, MA 01463
978.433.8972
www.irrigationconsulting.com

REV. DATE DESCRIPTION



PRELIMINARY PLAN

NOT FOR CONSTRUCTION OR PRICING

SCALE:	AS INDICATED ON DRAWINGS
DATE:	5/19/2016
DRAWN BY:	MS
CHECKED BY:	DI
APPROVED BY:	DI

AA PROJECT #: 130014.02
PROJECT PHASE: DESIGN DEVELOPMENT

DRAWING TITLE:

VRRM WORKSHEET

SHEET:

SW-101

DRAWING FILE PATH: I:\001 - PROJECTS\ANDROPOGON\15114 - ALEXANDRIA METRO STATION\5 CIVIL\CAD\WORKING\NOTES-130014_PRIME.DWG
DATE MODIFIED: 4/25/2016

RESOURCE PROTECTION AREA NOTES

1. THE SUBJECT PROPERTY LIES WITHIN A CITY OF ALEXANDRIA RESOURCE PROTECTION AREA (RPA). FIELD DEMARCATED VERIFIED 50 FEET AND 100 FEET RESOURCE PROTECTION AREA LINES ARE SHOWN ON THE SITE PLAN.
2. DISTURBED VEGETATION WITHIN THE RPA SHALL BE MITIGATED IN ACCORDANCE WITH A WATER QUALITY IMPACT ASSESSMENT AS DETAILED IN ARTICLE 13-117 OF THE ALEXANDRIA ZONING ORDINANCE (THE ENVIRONMENTAL MANAGEMENT ORDINANCE)
3. DEVELOPMENT AND USES PROPOSED IN THE RPA ARE IN COMPLIANCE WITH THE REQUIREMENTS OF ARTICLE 13-107 AND 13-123 OF THE ALEXANDRIA ZONING ORDINANCE (AZO). ALL DISTURBANCE LOCATED WITH THE RPA IS ASSOCIATED WITH THE CONSTRUCTION OF A METRO RAIL (RAILROAD) STATION FOR AND BY THE CITY OF ALEXANDRIA AND IS THUS EXEMPT UNDER 13-123 OF THE AZO. THE AMOUNT OF DISTURBANCE AND THE IMPERVIOUS AREA WITHIN THE RPA IS THE MINIMUM NECESSARY TO CONSTRUCT THE STATION AND RELATED IMPROVEMENTS.

DISTURBANCE & MITIGATION WITHIN THE RPA

THE TOTAL DISTURBANCE WITHIN THE RPA IS APPROXIMATELY 29,490 SF. THIS INCLUDES THE CONVERSION OF 3,685 SF OF OPEN SPACE TO MANAGED TURF ON THE EAST SIDE OF POTOMAC GREENS PARK. THE LOSS OF PARK AREA DUE TO THE ACCESS ROAD REQUIRED FOR THE METRO STATION NECESSITATED THE CONVERSION OF OPEN SPACE TO MANAGED TURF. THE REDESIGNED LAYOUT FOR THE PARK WAS DEVELOPED WITH FEEDBACK RECEIVED DURING THE PUBLIC OUTREACH PROCESS INCLUDING INPUT FROM POTOMAC GREENS. THE OPEN SPACE ON THE NORTH SIDE OF THE PARK WILL LARGELY BE RESTORED POST DEVELOPMENT EXCEPT FOR THE AREA REQUIRED FOR THE PROPOSED BIORETENTION AREA.

MITIGATION FOR THE ENCROACHMENTS INTO THE RPA WILL BE PROVIDED IN ACCORDANCE WITH ENVIRONMENTAL MANAGEMENT ORDINANCE 13-117. THESE MITIGATION MEASURES WILL INCLUDE EROSION AND SEDIMENT CONTROL MEASURES TO MINIMIZE CLEARED AREA, REPLACEMENT OF LOST WETLAND AREAS, AND A DETAILED REPLANTING PLAN. THESE MITIGATION ITEMS AND OTHERS COULD BE INCLUDED IN A MAJOR WATER QUALITY IMPACT ASSESSMENT THAT WILL BE REQUIRED DURING FINAL SITE PLAN.

PRE AND POST DEVELOPMENT IMPERVIOUS AREAS WITHIN THE RPA

	POTOMAC GREENS PARCEL (0.955 AC IN RPA)	ACCESS ROAD & PEDESTRIAN LANDING PARCEL (0.159 AC IN RPA)	TOTAL (1.114 AC IN RPA)
EXISTING PERVIOUS	0.955 AC (INCLUDING 0.16 AC OF GRAVEL TRAILS)	0.159 AC	1.114 AC
EXISTING IMPERVIOUS	0 AC	0 AC	0 AC
PROPOSED PERVIOUS	0.916 AC	0.066 AC	0.982 AC
PROPOSED IMPERVIOUS	0.039 AC	0.093 AC	0.132 AC

FOR THE POTOMAC GREENS PARCEL, THE NEW IMPERVIOUS AREA IN THE RPA IS ASSOCIATED WITH AN EXTENTION OF THE METRO STATION'S ACCESS ROAD AND SMALL RETAINING WALLS IMMEDIATELY ADJACENT TO THE WETLANDS. THERE IS ALSO A SMALL (128 SF) RETAINING/SEAT WALL ADJACENT TO THE RELOCATED CHILDREN'S PLAYGROUND TO PROVIDE APPROPRIATE GRADING ACROSS THE PLAY AREA AND A PASSIVE RECREATIONAL SEATING AREA.

FOR THE ACCESS ROAD AND PEDESTRIAN LANDING PARCEL, THE NEW IMPERVIOUS AREA WITHIN THE RPA IS ASSOCIATED WITH THE ACCESS ROAD FOR THE STATION AND RELATED RETAINING WALLS.

ENVIRONMENTAL SITE ASSESSMENT

1. THERE ARE CONNECTED TIDAL WETLANDS AND AN RPA BUFFER AREA ON THIS PROJECT. WETLAND PERMITS WILL BE REQUIRED FOR THIS PROJECT. THE PROJECT AREA HAS DOCUMENTED CONTAMINATION ASSOCIATED WITH METALS FROM IMPORTED FILL FROM THE HISTORIC POTOMAC YARD RAILROAD YARD. A PORTION OF THE PROJECT IS WITHIN THE 100 YEAR FLOODPLAIN. THERE ARE NO TIDAL SHORES, TRIBUTARY STREAMS, ISOLATED WETLANDS OR HIGHLY ERODIABLE/PERMEABLE SOILS ASSOCIATED WITH SHORES OR STREAMS LOCATED ON THE SITE. THERE ARE NO KNOWN UNDERGROUND STORAGE TANKS ON THE SITE.
2. THE CITY OF ALEXANDRIA DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES, OFFICE OF ENVIRONMENTAL QUALITY MUST BE NOTIFIED IF UNUSUAL OR UNANTICIPATED CONTAMINATION OR UNDERGROUND STORAGE TANKS, DRUMS, AND CONTAINERS ARE ENCOUNTERED AT THE SITE. IF THERE IS ANY DOUBT ABOUT PUBLIC SAFETY OR A RELEASE TO THE ENVIRONMENT, THE ALEXANDRIA FIRE DEPARTMENT MUST BE CONTACTED IMMEDIATELY BY CALLING 911. THE TANK OR CONTAINERS REMOVAL, ITS CONTENTS, ANY SOIL CONTAMINATION AND RELEASES TO THE ENVIRONMENT WILL BE HANDLED IN ACCORDANCE WITH FEDERAL, STATE, AND CITY REGULATIONS.
3. ALL WELLS TO BE DEMOLISHED IN THIS PROJECT, INCLUDING MONITORING WELLS MUST BE CLOSED IN ACCORDANCE WITH VIRGINIA STATE WATER CONTROL BOARD (VSWCB) REQUIREMENTS. CONTACT ENVIRONMENTAL HEALTH SPECIALIST AND COORDINATE WITH THE ALEXANDRIA HEALTH DEPARTMENT AT 703-838-4400 EXT 2671255.
4. ALL CONSTRUCTION ACTIVITIES MUST COMPLY WITH THE ALEXANDRIA NOISE CONTROL CODE TITLE 11, CHAPTER 5, WHICH PERMITS CONSTRUCTION ACTIVITIES TO OCCUR BETWEEN THE FOLLOWING HOURS:
 - MONDAY THROUGH FRIDAY FROM 7 AM TO 6 PM AND
 - SATURDAYS FROM 9 AM TO 6 PM.
 - NO CONSTRUCTION ACTIVITIES ARE PERMITTED ON SUNDAYS.PILE DRIVING IS FURTHER RESTRICTED TO THE FOLLOWING HOURS:
 - MONDAY THROUGH FRIDAY FROM 9 AM TO 6 PM AND
 - SATURDAYS FROM 10 AM TO 4 PM.



ANDROPOGON
ASSOCIATES, LTD
10 SHURS LANE
PHILADELPHIA, PA 19127
T: 215.487.0700
F: 215.483.7520
W: www.andropogon.com

POTOMAC GREENS
PARK

THE CITY OF ALEXANDRIA
CITY HALL
301 KING STREET
ALEXANDRIA, VA 22314

PRIME AE Group, Inc.
CIVIL ENGINEERING
3201 JERMANTOWN ROAD, SUITE 660
FAIRFAX, VA 22030
703.865.0606
www.primeeng.com

KEAST & HOOD
STRUCTURAL ENGINEER
400 MARKET STREET, SUITE 1250
PHILADELPHIA, PA 19106
215.625.0099
www.keasthood.com/

IRRIGATION CONSULTING, INC.
IRRIGATION DESIGN
4 HOTEL PLACE
PEPPERELL, MA 01463
978.433.8972
www.irrigationconsulting.com

REV. DATE DESCRIPTION



PRELIMINARY PLAN
NOT FOR CONSTRUCTION OR PRICING

SCALE:	AS INDICATED ON DRAWINGS
DATE:	5/19/2016
DRAWN BY:	MS
CHECKED BY:	DI
APPROVED BY:	DI

AA PROJECT #:	130014.02
PROJECT PHASE:	DESIGN DEVELOPMENT

DRAWING TITLE:
STORMWATER
NOTES

SHEET:

SW-102

APPROVED

SPECIAL USE PERMIT NO. _____

DEPARTMENT OF PLANNING & ZONING

DIRECTOR _____ DATE _____

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

SITE PLAN NO. _____

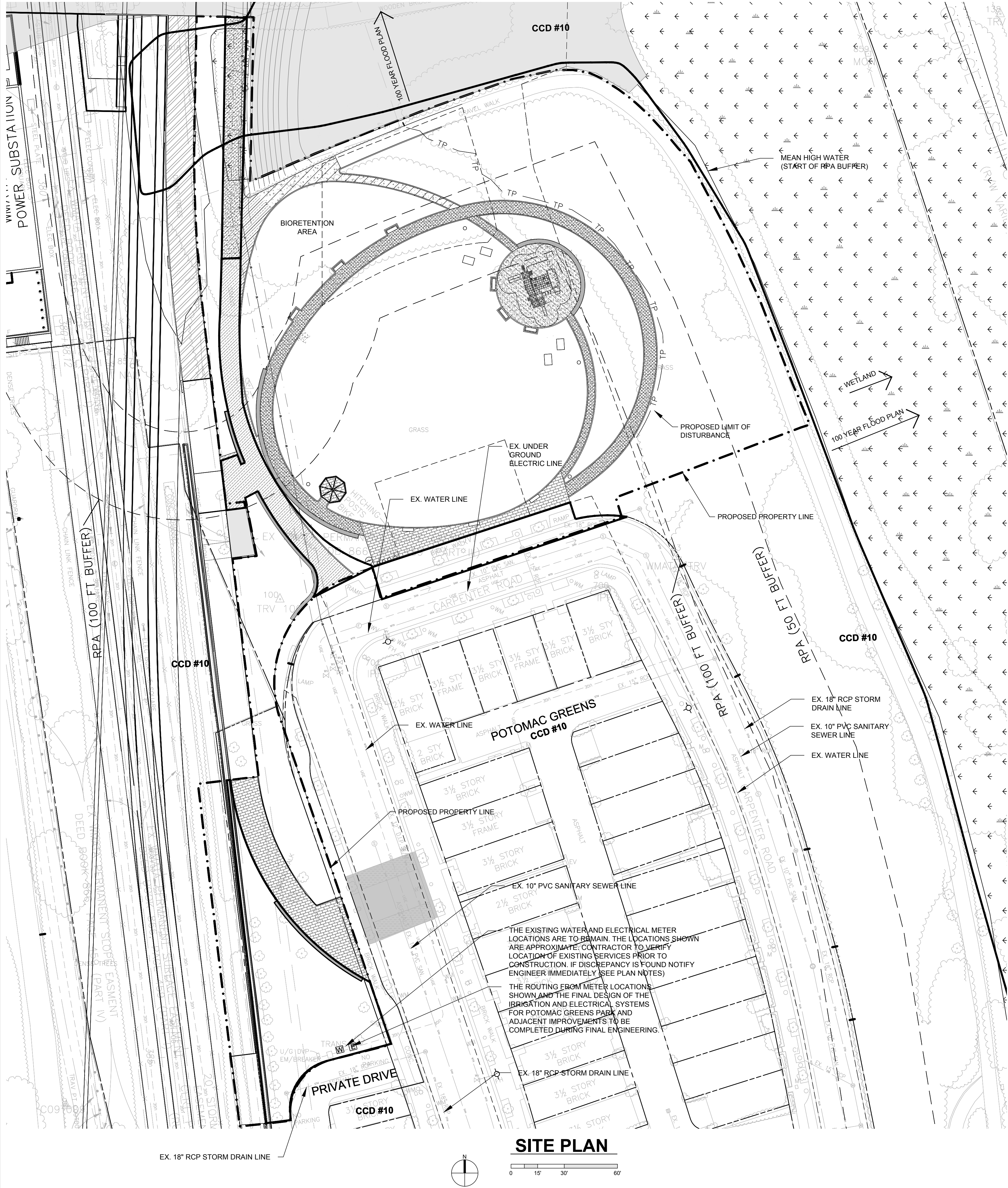
DIRECTOR _____ DATE _____

CHAIRMAN, PLANNING COMMISSION _____ DATE _____

DATE RECORDED _____

INSTRUMENT NO. _____ DEED BOOK NO. _____ PAGE NO. _____

DRAWING FILE PATH: I:\001 - PROJECTS\ANDROPOGON\15114 - ALEXANDRIA METRO STATIONS CIVIL\DRAWING\UTILITY\130014_PRIME.DWG
DATE MODIFIED: 5/17/2016



UTILITY WORKS

UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING MINIMUM STANDARDS DESCRIBED IN SECTION 4VAC50-30-40 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH) AND ADDITIONAL APPLICABLE PRACTICES FOLLOWED BY THE CITY OF ALEXANDRIA:

- ALL PRIVATE UTILITIES SHALL BE LOCATED OUTSIDE OF THE PUBLIC RIGHT-OF-WAY AND PUBLIC UTILITY EASEMENTS UNLESS THE UTILITY OWNERS HAVE FRANCHISE AGREEMENT WITH THE CITY OF ALEXANDRIA; HOWEVER, NO ELECTRIC TRANSFORMERS AND SWITCH GEARS / CONTROL BOXES SHALL BE PLACED IN THE PUBLIC RIGHT OF WAY.
- ALL THE EXISTING AND PROPOSED PUBLIC AND PRIVATE UTILITIES AND EASEMENTS SHALL BE SHOWN AND A DESCRIPTIVE NARRATION OF VARIOUS UTILITIES SHALL BE PROVIDED ON THE PLAN.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN UTILITY SERVICES AT ALL TIMES DURING CONNECTION AND/OR CONSTRUCTION.
- NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.
- EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
- EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.
- MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ACCORDANCE WITH THE CITY OF ALEXANDRIA STANDARDS AND SPECIFICATIONS TO MINIMIZE EROSION AND PROMOTE STABILIZATION.
- SHOULD UTILITY CONSTRUCTION BE PERFORMED AFTER COMPLETING EARTHWORK, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACHIEVING 98 PERCENT OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D-1551) COMPACTION IN ALL TRENCH BACKFILL.
- RESTALLIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE VIRGINIA REGULATIONS 4VAC50-30 EROSION AND SEDIMENT CONTROL REGULATIONS, VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH).
- APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH.
- THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL CONTROL MEASURES AS NECESSARY TO PREVENT EROSION AND SEDIMENTATION, AS DETERMINED BY THE DIRECTOR OF TRANSPORTATION AND ENVIRONMENTAL SERVICES, CITY OF ALEXANDRIA.
- A REMEDIATION PLAN SHALL BE SUBMITTED DETAILING HOW CONTAMINATED SOILS AND/OR GROUNDWATER WILL BE DEALT WITH, INCLUDING PLANS TO REMEDIATE UTILITY CORRIDORS.
- UTILITY CORRIDORS IN CONTAMINATED SOIL SHALL BE OVER EXCAVATED BY 2 FEET AND BACKFILLED WITH "CLEAN" SOIL.
- GRADING CAN BE PERFORMED ON INSTALLATION OF UTILITIES.
- ALL UTILITIES SUCH AS ELECTRICAL LINES, GAS PIPES, COMMUNICATION CABLES, INCLUDING WATER AND SEWER LATERALS ON PRIVATE PROPERTY IN THE CITY OF ALEXANDRIA SHALL BE PROVIDED WITH MINIMUM 3" WIDE 5 MIL OVERALL THICKNESS DETECTABLE UNDERGROUND WARNING TAPE (DUWT). THE DUWT SHALL BE INSTALLED AT DEPTHS OF 12" TO 18" FOR DUWT WIDTHS OF 3" AND 24" FOR WIDTHS OF 6" SO AS TO MAKE UNDERGROUND INSTALLATIONS EASY TO FIND USING A NON-FERROUS LOCATOR. THE DUWT SHALL BE WITH ALUMINUM BACKING OR SOLID ALUMINUM CORE LAMINATED WITH A PROTECTIVE CLEAR FILM ON BOTH SIDES, SEALING AND PROTECTING THE GRAPHICS FROM UNDERGROUND MOISTURE, ACIDS, ALKALIS, AND OTHER SOIL SUBSTANCES. ALL DUWT TAPES SHALL BE PRINTED IN BLACK INK ON AMERICAN PUBLIC WORKS ASSOCIATION (APWA) APPROVED COLORS TO MEET OR EXCEED INDUSTRY STANDARDS.

COLOR	CODES
RED	CAUTION BURIED ELECTRIC POWER LINES, CABLES, CONDUITS, AND LIGHTING CABLES
YELLOW	CAUTION GAS, OIL, STEAM, PETROLEUM, OR GASEOUS MATERIALS
ORANGE	CAUTION COMMUNICATIONS, ALARM OR SIGNAL LINES, CABLES, OR CONDUITS
BLUE	CAUTION POTABLE WATER
PURPLE	CAUTION RECLAIMED WATER, IRRIGATION AND SLURRY LINES
GREEN	CAUTION SEWER, DRAIN LINES, AND FORCE MAIN

PLAN NOTES:

- WATER SERVICE INSTALLATION SHALL BE PER CITY OF ALEXANDRIA REQUIREMENTS FOR WATER SERVICE INSTALLATION.
- PARK IRRIGATION TO COVER ALL LANDSCAPE AREAS. IRRIGATION SYSTEM TO BE FULLY COMPATIBLE WITH THE CITY'S MAXICOM CENTRAL CONTROL IRRIGATION SYSTEM (RPCA).
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF ALL UTILITY RELOCATION WORK REQUIRED FOR THE REMOVAL OF EXISTING AND INSTALLATION OF NEW IRRIGATION AND ELECTRICAL SERVICES FOR POTOMAC GREENS PARK AND ADJACENT IMPROVEMENTS.

APPROVED	
SPECIAL USE PERMIT NO. _____	
DEPARTMENT OF PLANNING & ZONING	
DIRECTOR _____	DATE _____
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES	
SITE PLAN NO. _____	
DIRECTOR _____	DATE _____
CHAIRMAN, PLANNING COMMISSION _____	
DATE RECORDED _____	
INSTRUMENT NO. _____	DEED BOOK NO. _____
PAGE NO. _____	



ANDROPOGON
ASSOCIATES, LTD
10 SHURS LANE
PHILADELPHIA, PA 19127
T: 215.487.0700
F: 215.483.7520
W: www.andropogon.com

POTOMAC GREENS PARK

THE CITY OF ALEXANDRIA
CITY HALL
301 KING STREET
ALEXANDRIA, VA 22314

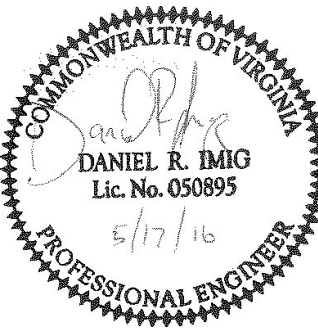
PRIME AE Group, Inc.
CIVIL ENGINEERING
3201 JERMANTOWN ROAD, SUITE 660
FAIRFAX, VA 22030
703.865.0606
www.primeeng.com

KEAST & HOOD
STRUCTURAL ENGINEER
400 MARKET STREET, SUITE 1250
PHILADELPHIA, PA 19106
215.625.0099
www.keasthood.com/

IRRIGATION CONSULTING, INC.
IRRIGATION DESIGN
4 HOTEL PLACE
PEPPERELL, MA 01463
978.433.8972
www.irrigationconsulting.com

REV. DATE DESCRIPTION

REV.	DATE	DESCRIPTION



PRELIMINARY PLAN NOT FOR CONSTRUCTION OR PRICING

SCALE: AS INDICATED ON DRAWINGS

DATE: 5/19/2016

DRAWN BY: MS

CHECKED BY: DI

APPROVED BY: DI

AA PROJECT #: 130014.02

PROJECT PHASE: DESIGN DEVELOPMENT

DRAWING TITLE:

UTILITY PLAN

SHEET:

UP-100