

ARLINGTON VIRGINIA

Plans For: Towers Park Playground Renovations

801 South Scott Street
Arlington, VA 22204
ITB # 20-246-ITB

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DEPARTMENT OF PARKS AND RECREATION

Park Development Division

2100 Clarendon Boulevard, Suite 414, Arlington, VA 22201
Phone: 703.228.3332 Fax: 703.228.3328 www.arlingtonva.us

ENGINEER
NAME: A. MORTON THOMAS & ASSOCIATES, INC.
ADDRESS: 14555 AVION PARKWAY, SUITE 150
CHANTILLY, VA 20151
TELEPHONE #: (703) 817-1373

CONTRACTOR
NAME: TO BE DETERMINED
ADDRESS: TO BE DETERMINED
TELEPHONE #: TO BE DETERMINED

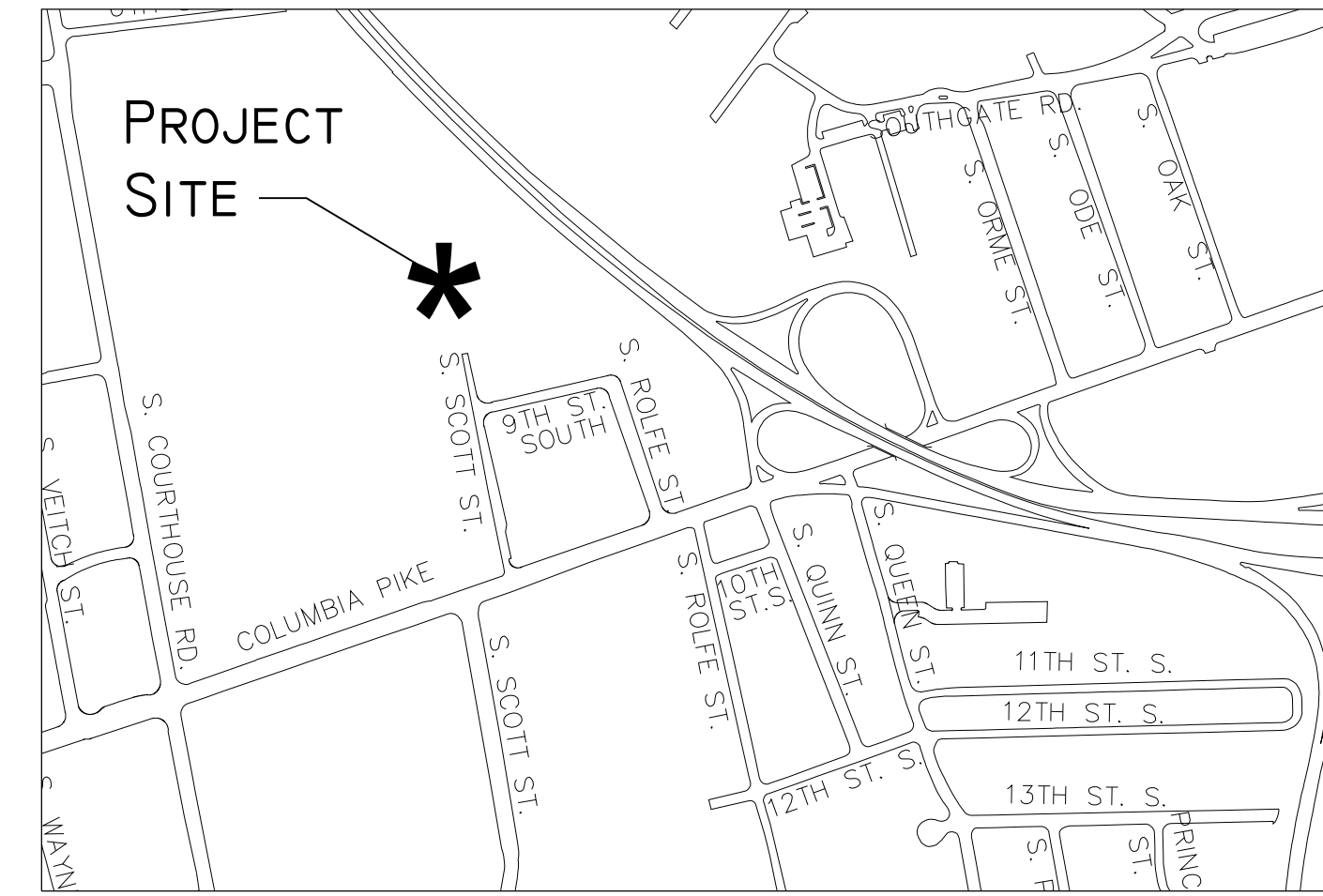
GENERAL NOTES

- THE CONTRACTOR SHALL FULLY ACQUAINT HIMSELF WITH THE CONDITIONS OF THE SITE. THE CONTRACTOR SHALL THOROUGHLY EXAMINE AND BE FAMILIAR WITH THE DRAWINGS AND SPECIFICATIONS. SHOULD THE CONTRACTOR FIND ANY DISCREPANCIES, OMISSIONS, AMBIGUITIES, OR CONFLICTS IN OR AMONG THE CONTRACT DOCUMENTS OR BE IN DOUBT AS TO THEIR MEANING, HE SHALL BRING THESE ITEMS TO THE ATTENTION OF THE PROJECT OFFICER FOR DIRECTION BEFORE PROCEEDING WITH WORK.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND BE RESPONSIBLE FOR ADHERENCE TO ALL ORDINANCES, REGULATIONS, LAWS AND CODES HAVING JURISDICTION OVER THE PROPERTY.
- THE CONTRACTOR SHALL SUBMIT A REQUIRED "RESPONSIBLE LAND DISTURBER" CERTIFICATION LETTER AS PART OF OBTAINING A BUILDING (OR DISTURBANCE) PERMIT.
- THE CONTRACTOR IS RESPONSIBLE FOR LICENSING AS REQUIRED BY APPLICABLE REGULATORY AGENCIES.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL SALES, USE AND CAPITAL GAINS TAXES.
- UTILITY LOCATIONS SHOWN ON THIS PLAN ARE APPROXIMATE LOCATIONS DETERMINED FROM VISIBLE EVIDENCE AND AVAILABLE RECORDS. ADDITIONAL UNDERGROUND UTILITY LINES MAY BE PRESENT THAT ARE NOT SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND PRESERVE EXISTING UTILITIES.
- CONTRACTOR SHALL NOT SUBSTITUTE PRODUCTS OR MATERIALS WITHOUT PRIOR APPROVAL BY THE PROJECT OFFICER.
- THE CONTRACTOR SHALL IDENTIFY ALL STAGING AREAS AND LIMITS OF WORK FOR APPROVAL BY THE PROJECT OFFICER PRIOR TO THE START OF WORK. AREAS OUTSIDE LIMITS OF WORK SHALL NOT BE USED FOR STORAGE OR MOVEMENT OF MATERIALS, MACHINERY OR DEBRIS.
- THE CONTRACTOR SHALL OBTAIN THE PROJECT OFFICER'S APPROVAL FOR TIMES OF DAY DURING WHICH CONSTRUCTION OPERATIONS MAY OCCUR. ALL CONSTRUCTION OPERATIONS SHALL OCCUR WITHIN TIMES SPECIFIED BY LOCAL ORDINANCES.
- CONSTRUCTION ACTIVITIES FOR THIS PROJECT OCCUR ENTIRELY ON PARK PROPERTY, THEREFORE, A MAINTENANCE OF TRAFFIC (MOT) PLAN IS NOT EXPECTED TO BE REQUIRED. HOWEVER, IF THE ARLINGTON DEPARTMENT OF ENVIRONMENTAL SERVICES (DES) DETERMINES THAT AN MOT PLAN IS REQUIRED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE PLAN TO DES FOR THEIR REVIEW AND APPROVAL.
- THE CONTRACTOR SHALL BE ON SITE AT TIME OF ALL MATERIALS DELIVERIES.
- THE CONTRACTOR SHALL KEEP THE SITE CLEAN AND FREE OF TRASH AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE A TRASH RECEPTACLE TO BE USED ON SITE DURING CONSTRUCTION AND SHALL REMOVE TRASH FROM THE SITE ON A DAILY BASIS.
- THE CONTRACTOR SHALL KEEP VEHICULAR ACCESS AREAS CLEAN DURING CONSTRUCTION. VEHICULAR AND OTHER PAVED AREAS SHALL BE WASHED FREE OF MUD ON A WEEKLY BASIS DURING CONSTRUCTION.
- THE CONTRACTOR SHALL SECURE THE CONSTRUCTION AREA WITH FENCING AT END OF WORKDAY AND WHEN CONTRACTOR IS NOT ON SITE.
- THE CONTRACTOR SHALL DISTRIBUTE ALL PROJECT MATERIALS AND EQUIPMENT AND DISTRIBUTE ANY STOCKPILES IN SUCH A MANNER AS TO PROTECT EXISTING CONDITIONS, SUCH AS UTILITIES, PAVING, VEGETATION, ETC. THE CONTRACTOR SHALL NOT STOCKPILE SOIL OR CONSTRUCTION MATERIALS, OR DRIVE VEHICLES WITHIN THE CRITICAL ROOT ZONE OF EXISTING TREES TO REMAIN. THE CONTRACTOR SHALL OBTAIN THE PROJECT OFFICER'S APPROVAL FOR ALL CONSTRUCTION ACCESS AREAS, STAGING AND STOCKPILE AREAS PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL NOT BLOCK STREETS, PARKING AREAS, HOUSE OR DRIVEWAY ENTRANCES DURING CONSTRUCTION WITHOUT THE PROJECT OFFICER'S PERMISSION AND APPROVAL OF ANY RIGHT-OF-WAY PERMITS IF REQUIRED.
- THE CONTRACTOR SHALL STAKE THE ALIGNMENT OF ALL PAVEMENT, WALLS, CURBING, SAFETY SURFACING AND SITE FEATURES IN THE FIELD FOR APPROVAL BY THE PROJECT OFFICER PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL PROMPTLY REPAIR ALL DAMAGE TO EXISTING PAVEMENT, DRIVEWAYS, AND ADJACENT FACILITIES CAUSED BY CONSTRUCTION OPERATIONS. COST OF REPAIRS SHALL BE AT CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL REMOVE ALL EXCESS SOIL, TEMPORARY FENCING, EROSION CONTROL MEASURES, STABILIZATION MATERIALS, AND OTHER DEBRIS AND SHALL DISPOSE OF LEGALLY UPON COMPLETION OF THE PROJECT. CONTRACTOR SHALL THOROUGHLY WASH AND CLEAN ALL PAVED AREAS, WALLS, SITE FURNISHINGS AND FEATURES, ETC. UPON COMPLETION OF THE PROJECT.
- REFER TO INDIVIDUAL DRAWINGS FOR ADDITIONAL NOTES.

ARLINGTON COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES WATER-SEWER CONSTRUCTION REQUIREMENTS (REVISED MARCH 2005)

- ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH ARLINGTON COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES CONSTRUCTION STANDARDS & SPECIFICATIONS (LATEST EDITION) AND SHALL BE APPROVED BY THE DEPARTMENT OF ENVIRONMENTAL SERVICES. UPON PHYSICAL INSPECTION, THE COUNTY RESERVES THE RIGHT TO REJECT THE USE OF ANY MATERIAL FOUND TO BE DEFECTIVE OR NOT CONFORMING TO THE STANDARDS AND SPECIFICATIONS.
- BEFORE START OF CONSTRUCTION, THE CONTRACTOR SHALL FURNISH THE FOLLOWING INFORMATION AND/OR EVIDENCE OF COMPLIANCE WITH ALL APPLICABLE REGULATIONS AND LAWS, TO THE ARLINGTON COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES:
 - THE NAME AND ADDRESS OF THE CONTRACTOR HIRED TO WORK ON THE PROJECT. THE CONTRACTOR SHALL BE REGISTERED IN THE COMMONWEALTH OF VIRGINIA. SATISFACTORY EVIDENCE SHALL BE FURNISHED OF THE CONTRACTOR'S PRIOR EXPERIENCE AS PRIME CONTRACTOR IN THE CONSTRUCTION OF WATER MAINS AND/OR SANITARY SEWER INSTALLATIONS. FURTHER, THE CONTRACTOR SHALL FURNISH A LETTER WITH A LIST OF MATERIALS AND SUPPLIERS FOR PROPOSED PROJECT.
 - A RIGHT OF WAY PERMIT IS REQUIRED TO WORK IN ARLINGTON COUNTY STREETS. IN INSTANCES OF EXCAVATIONS IN STATE RIGHT OF WAY, THE DATE AND NUMBER OF ALL PERMITS REQUIRED BY THE VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT) SHALL BE FURNISHED.
 - IF ANY OTHER EASEMENT IS NEEDED, TWO (2) COPIES OF THE DESCRIPTION OF SUCH EASEMENT, AS ACTUALLY RECORDED, SHALL BE FURNISHED, INCLUDING THE PLACE, DATE AND REFERENCE OF SUCH RECORDATION.
 - WRITTEN NOTICE OF TENTATIVE STARTING DATE OF CONSTRUCTION, WHICH SHALL BE A MINIMUM OF ONE (1) WEEK FOLLOWING THE DATE OF NOTICE. IN ADDITION, THE CONTRACTOR SHALL FURNISH THE NAMES AND TELEPHONE NUMBERS OF TWO (2) RESPONSIBLE PERSONS WHO CAN BE CONTACTED IN CASE OF EMERGENCY.

ACTUAL CONSTRUCTION SHALL NOT BEGIN UNTIL THE ABOVE ITEMS HAVE BEEN COMPLETED AND THE ARLINGTON COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES APPROVED THE STARTING DATE AND ARRANGEMENTS HAVE BEEN MADE FOR THE REQUIRED INSPECTION SERVICE.
- ALL CONSTRUCTION SHALL BE ACCOMPLISHED FROM APPROVED PLANS, SPECIFICATIONS AND CUT SHEETS SUBMITTED BY A REGISTERED ENGINEER AND APPROVED BY THE COUNTY. TO AVOID CONSTRUCTION DELAYS ALL NECESSARY TEST HOLE INFORMATION SHALL BE OBTAINED PRIOR TO MOBILIZATION AND CONSTRUCTION PLANS SHALL BE REVISED ACCORDINGLY.
- NO EXISTING WATER MAINS, FIRE HYDRANTS, OR SANITARY SEWERS MAY BE TAKEN OUT OF SERVICE OR MADE INACCESSIBLE BY THE CONTRACTOR WITHOUT THE PRIOR APPROVAL FROM THE DEPARTMENT OF ENVIRONMENTAL SERVICES.
- UPON COMPLETION OF CONSTRUCTION, ALL FINAL TESTS, AS REQUIRED, SHALL BE PERFORMED IN THE PRESENCE OF THE COUNTY'S REPRESENTATIVE. WATER AND SEWER SERVICE CONNECTIONS SHALL NOT BE MADE UNTIL THE WATER AND/OR SEWER MAINS AND APPURTENANCES HAVE BEEN APPROVED AND ACCEPTED BY ARLINGTON COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES.
- EXISTING WATER SERVICES MAY BE ALLOWED FOR CONSTRUCTION PURPOSES ONLY FOR WHICH CONTRACTOR SHALL REQUEST TO THE ARLINGTON COUNTY'S UTILITY SERVICES BY CALLING 703-228-3636. PRIOR TO THE FINAL ACCEPTANCE OF THE PROJECT, THE DEVELOPER SHALL REQUEST TO THE UTILITY SERVICES IN WRITING FOR THE DISCONTINUATION OF ALL EXISTING WATER SERVICES. ALSO, THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL EXISTING METER BOXES RELATED TO THE SERVICES BEING DISCONTINUED.
- THE CONTRACTOR SHALL MAINTAIN BACKFILL FOR UTILITY EXCAVATIONS UNTIL ARLINGTON COUNTY HAS FINALLY ACCEPTED THE PROPOSED WATER AND/OR SEWER MAIN. ALSO, ALL SURFACES OVER THE UTILITY EXCAVATIONS SHALL EITHER BE RESTORED TO THE ORIGINAL CONDITION OR FINISHED AS PER THE PROPOSED DESIGN BEFORE THE ACCEPTANCE OF THE PROJECT. PAVEMENT PATCHING FOR UTILITY CUTS IN THE PUBLIC STREETS SHALL BE PERFORMED IN ACCORDANCE WITH ARLINGTON COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES CONSTRUCTION STANDARDS AND SPECIFICATIONS OR AS PER VDOT ROAD AND BRIDGE STANDARDS AND SPECIFICATIONS DEPENDING UPON THE STREET JURISDICTION. PRIOR TO FINAL PAVING, THE CONTRACTOR SHALL ADJUST ALL EXISTING VALVE BOXES AND SANITARY SEWER MANHOLE FRAMES AND COVERS AS PER COUNTY STANDARDS, REMOVE ALL ABANDONED SANITARY MANHOLES AND VALVE BOXES OVER THE ABANDONED WATER MAINS, AND COMPLETE ALL NECESSARY WATER MAIN "CUT AND CAPS".
- UPON COMPLETION, APPROVAL, AND ACCEPTANCE OF WATER AND/OR SEWER MAINS AND APPURTENANCES, THE DEVELOPER'S REGISTERED ENGINEER SHALL SUBMIT TO ARLINGTON COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES, A SET OF MYLAR TRACINGS INDICATING THE AS-BUILT CONDITIONS AND A SIGNED STATEMENT CONFIRMING THAT THE WORK, AS INDICATED, IS ACCEPTABLE TO THE ENGINEER. SUCH SUBMITTALS SHALL BE MADE BEFORE REQUESTING REDUCTION AND/OR RELEASE OF THE SURETY BOND.



VICINITY MAP - 1" = 500'

ARLINGTON COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES NOTES

- ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT ARLINGTON COUNTY DES STANDARDS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL REMOVE AND REPLACE, TO THE CURRENT ARLINGTON COUNTY DES STANDARDS AND SPECIFICATIONS, ANY EXISTING ENTRANCES, CURB AND GUTTER OR SIDEWALK ALONG THE FRONTAGE OF THIS SITE IN POOR CONDITION, OR DAMAGED DURING CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND CLOSING, TO ARLINGTON COUNTY STANDARDS, ANY EXISTING ENTRANCES NOT BEING USED IN CONJUNCTION WITH THIS DEVELOPMENT.
- THE CONTRACTOR SHALL OBTAIN ARLINGTON COUNTY PERMITS FOR EACH SITE.
- THERE MAY BE UNDERGROUND CONDUIT, CABLES AND TRAFFIC DETECTION DEVICES IN THIS AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ANY TRAFFIC CONTROLS THAT ARE DISTURBED DURING CONSTRUCTION. NOTIFY THE TRANSPORTATION ENGINEERING & OPERATIONS BUREAU AT (703) 228-3575, 24 HOURS PRIOR TO STARTING WORK.
- THE CONTRACTOR SHALL NOT DISTURB OR REMOVE ANY TRAFFIC CONTROL SIGNS, PARKING METERS OR ANY OTHER TRAFFIC CONTROL DEVICE WITHOUT PRIOR PERMISSION FROM THE TRANSPORTATION ENGINEERING & OPERATIONS BUREAU. CONTACT TRANSPORTATION ENGINEERING AT (703) 228-3575.
- THE CONTRACTOR SHALL OBTAIN A PERMIT FROM THE TRANSPORTATION ENGINEERING & OPERATIONS BUREAU, PRIOR TO PLACING ANY OBSTRUCTION WITHIN THE PUBLIC RIGHT OF WAY, OR ON SIDEWALKS ALONG THE FRONTAGE OF THIS DEVELOPMENT.
- THE CONTRACTOR SHALL OBTAIN PERMITS FROM THE INSPECTION SERVICES DIVISION PRIOR TO ANY DEMOLITION, EXCAVATION OR CONSTRUCTION OF ON-SITE FACILITIES. FOR INFORMATION AND PERMIT REQUIREMENTS TELEPHONE (703) 228-3800.

UTILITY MARKING REQUIREMENTS:

- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 811, 72 HOURS PRIOR TO THE START OF ANY EXCAVATION OR CONSTRUCTION, FOR THE MARKING OF UNDERGROUND UTILITIES IN THE RIGHT-OF-WAY.
- UTILITY LOCATIONS SHOWN ON THIS PLAN ARE APPROXIMATE LOCATIONS DETERMINED FROM A TOPOGRAPHIC SURVEY AND AVAILABLE RECORDS. ADDITIONAL UNDERGROUND UTILITY LINES MAY BE PRESENT THAT ARE NOT SHOWN. THE CONTRACTOR SHALL LOCATE AND PRESERVE ALL EXISTING UTILITIES.

HORIZONTAL DATUM:

THE SITE SHOWN HEREON IS REFERENCED TO THE VIRGINIA COORDINATE SYSTEM OF 1983 AS COMPUTED FROM A FIELD RUN BOUNDARY AND HORIZONTAL CONTROL SURVEY.

VERTICAL DATUM:

THE SITE SHOWN HEREON IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 AS COMPUTED FROM A FIELD RUN VERTICAL CONTROL SURVEY.

PROPERTY NOTE:

THE SUBJECT PROPERTY IS IDENTIFIED AS RPC#25-021-014, RPC#25-021-015, RPC#25-021-016, RPC#25-021-017, RPC#25-021-018, RPC#25-021-022, RPC#25-021-023, RPC#25-021-024, RPC#25-021-025, RPC#25-021-027, RPC#25-021-041, RPC#25-021-046 AND RPC#25-021-050.



DEPARTMENT OF PARKS AND RECREATION

Parks Development Division
2100 Clarendon Boulevard, Suite 414
Arlington, VA 22201
Phone: 703.228.3332
Fax: 703.228.3328

21-DPR-ITB-639

TOWERS PARK PLAYGROUND RENOVATIONS

By-Right (County Project)

5/6/2020

801 SOUTH SCOTT STREET
ARLINGTON, VA 22204

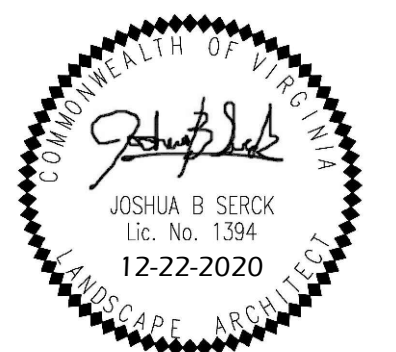
100% CONSTRUCTION DRAWINGS
LDA#11341
SWM# 20-0010

Approvals Date

Park Development Division Chief

DEC 2019

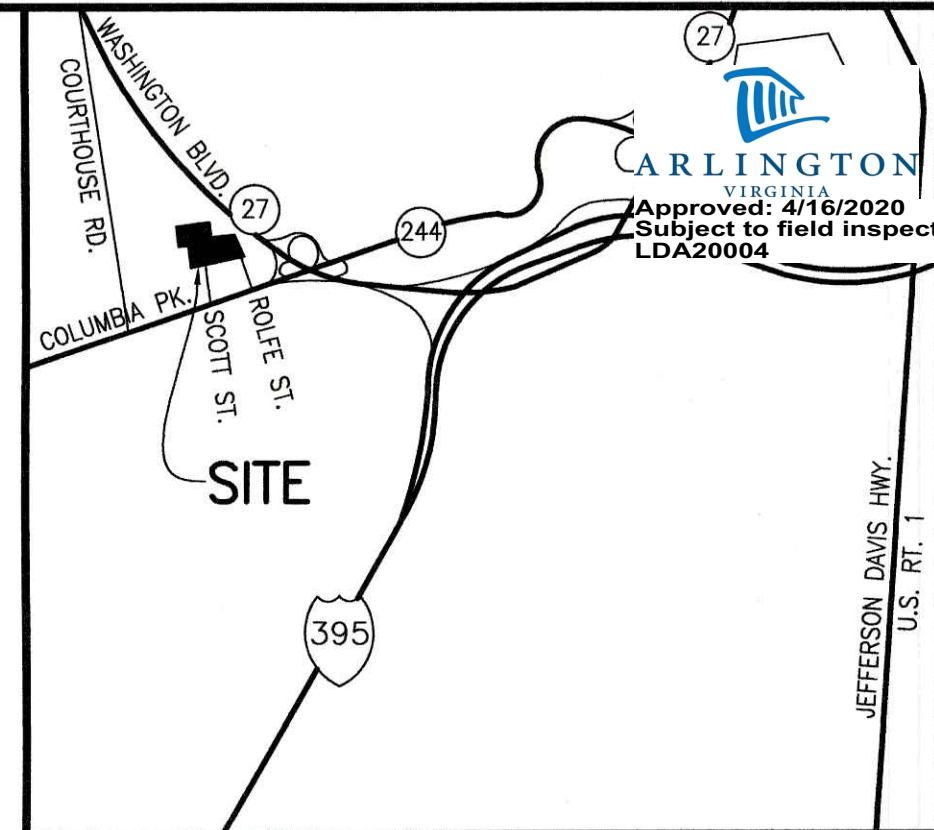
Design Manager



Sheet

C-01

No. 1 of 41

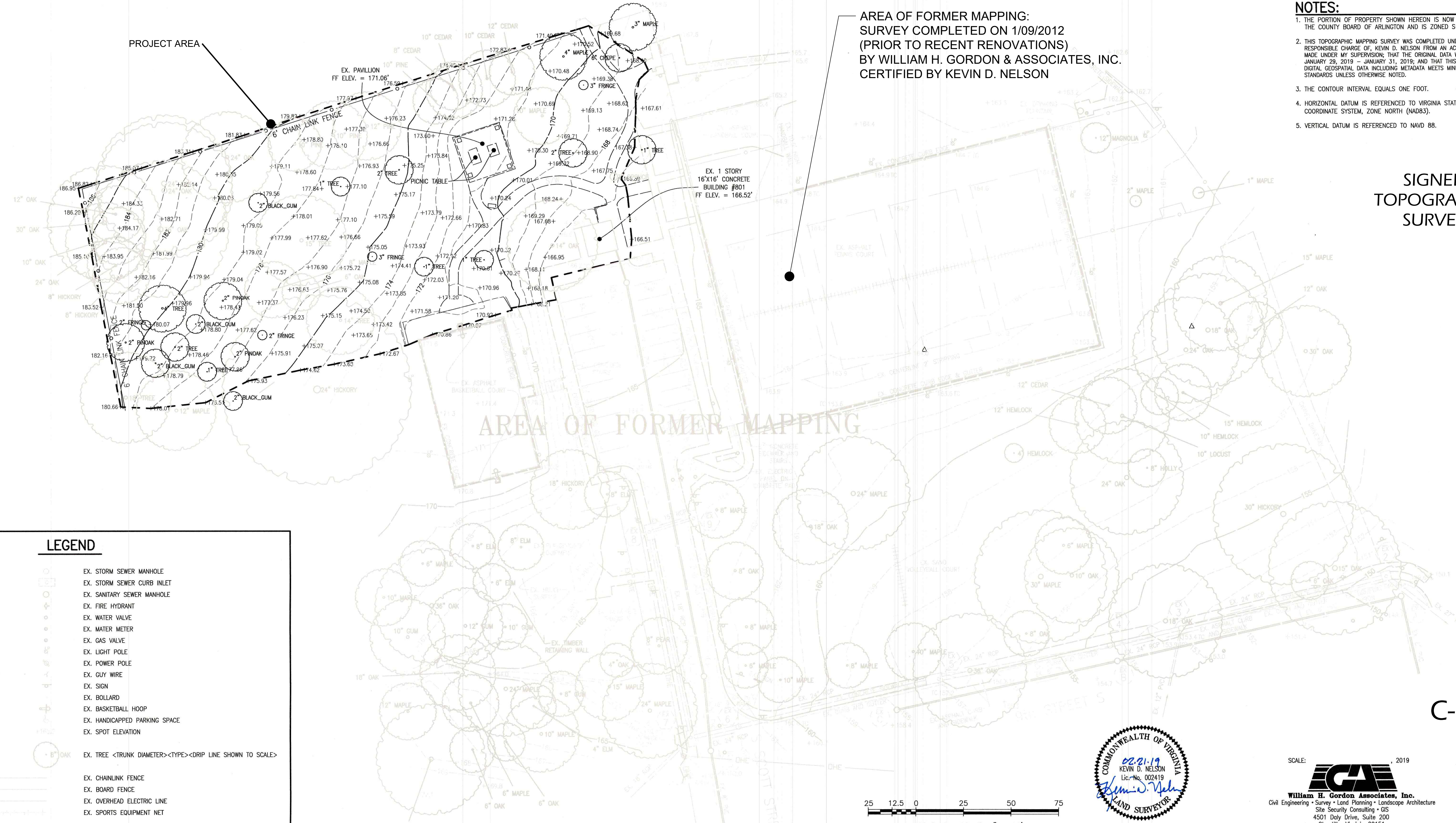


VICINITY MAP
SCALE: 1" = 2000'

NOTES:

1. THE PORTION OF PROPERTY SHOWN HEREON IS NOW IN THE NAME OF THE COUNTY BOARD OF ARLINGTON AND IS ZONED S-3A.
2. THIS TOPOGRAPHIC MAPPING SURVEY WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF KEVIN D. NELSON FROM AN ACTUAL GROUND SURVEY MADE UNDER MY SUPERVISION; THAT THE ORIGINAL DATA WAS OBTAINED ON JANUARY 29, 2019 - JANUARY 31, 2019; AND THAT THIS PLAN, MAP, OR DIGITAL GEOSPATIAL DATA INCLUDING METADATA MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.
3. THE CONTOUR INTERVAL EQUALS ONE FOOT.
4. HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE PLANE COORDINATE SYSTEM, ZONE NORTH (NAD83).
5. VERTICAL DATUM IS REFERENCED TO NAVD 88.

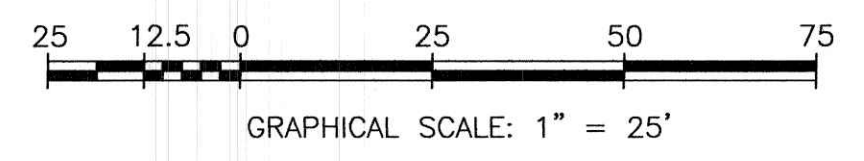
AREA OF FORMER MAPPING:
SURVEY COMPLETED ON 1/09/2012
(PRIOR TO RECENT RENOVATIONS)
BY WILLIAM H. GORDON & ASSOCIATES, INC.
CERTIFIED BY KEVIN D. NELSON



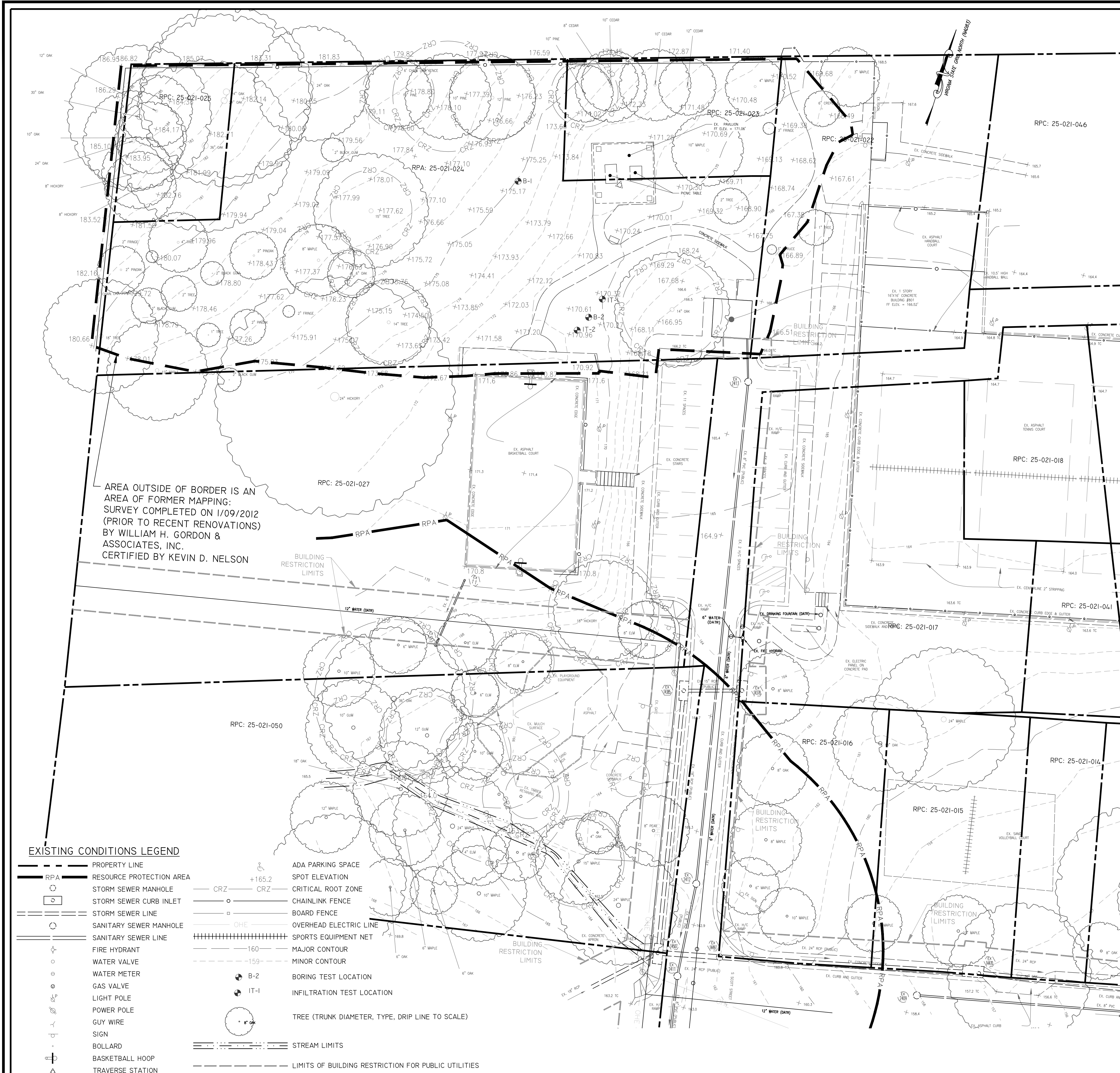
SIGNED
TOPOGRAPHIC
SURVEY

LEGEND

- EX. STORM SEWER MANHOLE
- EX. STORM SEWER CURB INLET
- EX. SANITARY SEWER MANHOLE
- EX. FIRE HYDRANT
- EX. WATER VALVE
- EX. WATER METER
- EX. GAS VALVE
- EX. LIGHT POLE
- EX. POWER POLE
- EX. GUY WIRE
- EX. SIGN
- EX. BOLLARD
- EX. BASKETBALL HOOP
- EX. HANDICAPPED PARKING SPACE
- EX. SPOT ELEVATION
- EX. TREE <TRUNK DIAMETER><TYPE><DRIP LINE SHOWN TO SCALE>
- EX. CHAIN LINK FENCE
- EX. BOARD FENCE
- EX. OVERHEAD ELECTRIC LINE
- EX. SPORTS EQUIPMENT NET



C-02



EXISTING CONDITIONS LEGEND

---	PROPERTY LINE	○	ADA PARKING SPACE
— RPA —	RESOURCE PROTECTION AREA	○	SPOT ELEVATION
○	STORM SEWER MANHOLE	CRZ	CRITICAL ROOT ZONE
○	STORM SEWER CURB INLET	—	CHAINLINK FENCE
—	STORM SEWER LINE	—	BOARD FENCE
○	SANITARY SEWER MANHOLE	— OHE —	OVERHEAD ELECTRIC LINE
—	SANITARY SEWER LINE		SPORTS EQUIPMENT NET
○	FIRE HYDRANT	— 160 —	MAJOR CONTOUR
○	WATER VALVE	— 159 —	MINOR CONTOUR
○	WATER METER	● B-2	BORING TEST LOCATION
○	GAS VALVE	● IT-1	INFILTRATION TEST LOCATION
○	LIGHT POLE	○	TREE (TRUNK DIAMETER, TYPE, DRIP LINE TO SCALE)
○	POWER POLE	—	STREAM LIMITS
○	GUY WIRE	---	LIMITS OF BUILDING RESTRICTION FOR PUBLIC UTILITIES
○	SIGN		
○	BOLLARD		
○	BASKETBALL HOOP		
○	TRAVERSE STATION		

STORM SEWER AS-BUILT TABLE

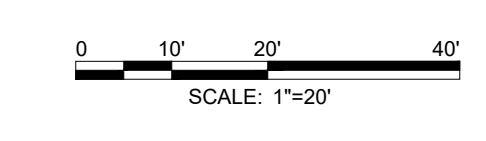
STRUCTURE No.	TYPE	ELEVATION	DESCRIPTION
2	TOP	149.59	RIM (CURB INLET)
	24" RCP	145.54	INVERT IN(3)
	27" RCP	145.39	INVERT OUT(SOUTH/EAST)
3	TOP	153.44	RIM (MANHOLE)
	24" RCP	149.29	INVERT IN(4)
	12" PVC	150.24	INVERT IN(SOUTH)
	24" RCP	149.22	INVERT OUT(2)
4	TOP	154.18	RIM (MANHOLE)
		(CAN NOT ACCESS)	
14470	TOP	157.49	RIM (CURB INLET)
	24" RCP	152.69	INVERT IN(6)
	24" RCP	152.59	INVERT OUT(4)
14497	TOP	162.13	RIM (MANHOLE)
		156.73	INVERT CENTERLINE (DOGHOUSE STRUCTURE)
14507	TOP	163.16	RIM (CURB INLET)
	18" RCP	158.16	INVERT IN(SOUTH)
	18" RCP	158.16	INVERT IN(B)
	24" RCP	157.66	INVERT OUT(6)
14385	TOP	164.11	RIM (CURB INLET)
	15" RCP	161.61	INVERT IN(9)
	18" RCP	160.41	INVERT OUT(7)
14378	TOP	164.21	RIM (CURB INLET)
	15" RCP	161.36	INVERT OUT(8)
10	6" PIPE	167.40	INVERT OUT
	11	TOP	169.90
	6"	167.55	INVERT OUT(10)

SANITARY SEWER AS-BUILT TABLE

STRUCTURE No.	TYPE	ELEVATION	DESCRIPTION
A	TOP	149.59	RIM (MANHOLE)
	8" PVC	146.28	INVERT IN(B)
	8" PVC	146.23	INVERT OUT(SOUTH/EAST)
B	TOP	154.46	RIM (MANHOLE)
	8" PVC	147.11	INVERT IN(C)
	8" PVC	147.04	INVERT OUT(A)
2409	TOP	158.08	RIM (MANHOLE)
	8" PVC	149.58	INVERT OUT(B)
2411	TOP	163.00	RIM (MANHOLE)
	8" PVC	155.74	INVERT IN(E)
	8" PVC	155.70	INVERT OUT(SOUTH/EAST)
2412	TOP	163.08	RIM (MANHOLE)
	8" PVC	156.28	INVERT IN(F)
	8" PVC	156.26	INVERT OUT(D)
2413	TOP	165.60	RIM (MANHOLE)
	6" PVC	157.55	INVERT IN(BUILDING)
	8" PVC	157.45	INVERT OUT(E)

PROPERTY AREAS

RPC NUMBER	AREA	
	SF	ACRES
25-021-014	3,208	0.0736
25-021-015	6,416	0.1473
25-021-016	6,624	0.1521
25-021-017	13,891	0.3189
25-021-018	4,728	0.1085
25-021-022	10,890	0.2500
25-021-023	5,445	0.1250
25-021-024	21,780	0.5000
25-021-025	2,722	0.0625
25-021-027	36,399	0.8356
25-021-041	2,819	0.0647
25-021-046	10,936	0.2511
25-021-050	26,878	0.6170
TOTAL AREA:	152,736	3.5063



DEPARTMENT OF PARKS AND RECREATION
 Park Development Division
 2100 Clarendon Boulevard, Suite 414
 Arlington, VA 22201
 Phone: 703.228.3332
 Fax: 703.228.3328

21-DPR-ITB-639

Project Name and Location
Towers Park Playground Renovations
 By Right (County Project)

801 SOUTH SCOTT STREET
 ARLINGTON, VA 22204

Sheet Title
EXISTING CONDITIONS PLAN

100% Construction Drawings

Approval _____ Date _____

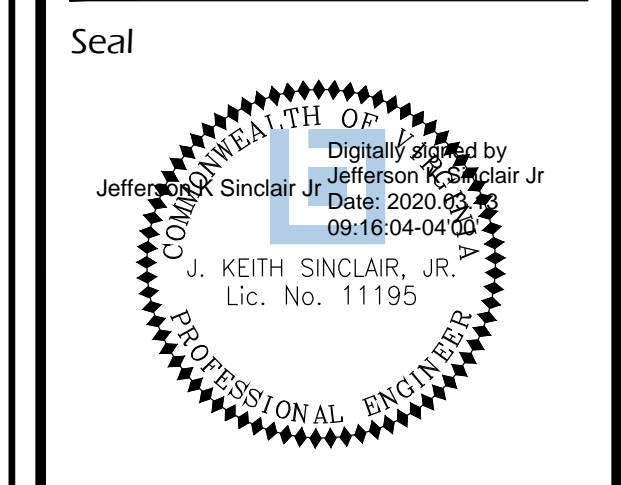
Design Manager _____

Revisions _____ Date _____

Designed: cmb
 Drawn: KRF
 Checked: cmb

Filename: C-03-VF01-150396021.dwg
 Plotted: 2020-03-12

Scale: 1" = 20'
 Date: MARCH 13, 2020



Sheet **C-03**

TREE PRESERVATION LEGEND

LOD LOD LIMITS OF DISTURBANCE
 -200 EXISTING CONTOUR
 LOD/TP LIMITS OF DISTURBANCE / TREE PROTECTION FENCE
 CRZ CRZ CRITICAL ROOT ZONE
 TEMPORARY ROOT PROTECTION MATTING / HAND REMOVAL AREA
 PERMANENT ROOT AERATION MATTING
 REFORESTATION AREA

2

LF-04

1

LF-04

4

LF-04

3

LF-04



NOTES:

1. TREE PROTECTION FENCE SHALL REMAIN IN PLACE UNTIL COUNTY PROJECT OFFICER APPROVES ITS REMOVAL.
2. LIMITS OF DISTURBANCE / TREE PROTECTION FENCE AND PERIMETER SEDIMENT CONTROLS TO BE INSTALLED AT LIMITS OF WORK. SEPARATION BETWEEN THESE ITEMS ON THE PLANS IS FOR GRAPHICAL PURPOSES.
3. EXCAVATION WITHIN CRZ OF EXISTING TREES TO REMAIN SHALL BE PERFORMED WITH SPECIAL CARE (I.E. HAND OR LIGHT MACHINERY OPERATIONS) AS TO NOT DAMAGE, DISTURB OR REMOVE TREE ROOTS.
4. CONSTRUCTION SAFETY FENCING AND PERIMETER SEDIMENT CONTROLS SHALL BE INSTALLED AS SHOWN ON THE PHASE IA EROSION AND SEDIMENT CONTROL PLAN PRIOR TO COMMENCING TO DEMOLITION ACTIVITIES AS INDICATED ON THE DEMOLITION PLAN. UPON COMPLETION THE AREA SHALL IMMEDIATELY BE STABILIZED.

Towers Park Playground Renovations Tree Inventory												
Tree Survey Information Completed by : Kathy von Bredow #MA -4729A 2019.08.07												
8/8/2019												
Tree #	Botanical Name	Common Name	Size (DBH)	Critical Root Zone (CRZ)	Species Rating	Condition %	Action	RPA	Inside Reforestation Area	Replacement Calculation	Replacement	Notes
1	<i>Pinus strobus</i>	Eastern white pine	14"	14'	75%	81%	Protect			9		Compacted soils
2	<i>Pinus strobus</i>	Eastern white pine	18"	18'	75%	84%	Protect			11		
3	<i>Pinus strobus</i>	Eastern white pine	23"	23'	75%	78%	Protect			13		Double leader
4	<i>Quercus acutissima</i>	Sawtooth oak	17"	17'	50%	84%	Protect			7		Very large canopy
5	<i>Quercus alba</i>	White oak	9"	9'	85%	72%	Protect			5		Suppressed, poor form
6	<i>Quercus acutissima</i>	Sawtooth oak	17"	17'	50%	84%	Protect			7		
7	<i>Quercus bicolor</i>	Swamp white oak	21"	21'	85%	84%	Protect			15		
8	<i>Linden spp.</i>	Linden spp.	12"	12'	80%	69%	Protect			6		Girdling roots, compacted soils
9	<i>Robinia pseudoacacia</i>	Black locust	23"	23'	65%	63%	Protect/Prune deadwood	X		9		Interior deadwood
10	<i>Linden spp.</i>	Linden spp.	13"	13'	80%	75%	Protect	X		8		Girdling roots, compacted soils
11	<i>Nyssa sylvatica</i>	Blackgum	10"	10'	85%	84%	Protect	X		7		
12	<i>Acer saccharinum</i>	Silver maple	33"	33'	60%	63%	Protect	X	Y	12		Poor form, decay
13	<i>Liquidambar styraciflua</i>	Sweetgum	13"	13'	80%	84%	Protect	X	Y	9		
14	<i>Liquidambar styraciflua</i>	Sweetgum	17"	17'	80%	81%	Protect	X	Y	11		
15	<i>Liquidambar styraciflua</i>	Sweetgum	15"	15'	80%	84%	Protect	X	Y	10		
16	<i>Acer rubrum</i>	Red maple	29"	29'	80%	78%	Protect	X	Y	18		Minor deadwood, prune
17	<i>Liquidambar styraciflua</i>	Sweetgum	16"	16'	80%	81%	Protect	X	Y	10		
18	<i>Acer rubrum</i>	Red maple	19"	19'	80%	69%	Protect	X	Y	10		Deadwood, prune
19	<i>Nyssa sylvatica</i>	Blackgum	7"	8'	85%	84%	Protect	X	Y	5		
20	<i>Malus spp.</i>	Malus spp.	4"	8'	70%	72%	Protect	X		2		



TREE CANOPY COVERAGE NOTE:

PER SECTION 61-10-C.3 OF THE CHESAPEAKE BAY PRESERVATION ORDINANCE, THE PROPOSED USE IS EXEMPT FROM THE TREE CANOPY COVERAGE REQUIREMENTS OF THE ORDINANCE.

21-DPR-ITB-639

Project Name and Location

TOWERS PARK PLAYGROUND RENOVATIONS

801 S Scott St
Arlington, VA 22204

Sheet Title

TREE PRESERVATION OVERALL PLAN & TREE TABLE

Approval _____ Date _____

Design Supervisor _____

Revisions _____ Date _____

Designed:

Drawn:

Checked:

Filename: LF-01-04_TP.DWG

Plotted: Dec. 22, 20

Scale: 1"=10'-0"

Date: DECEMBER 20, 2019




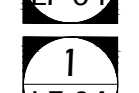




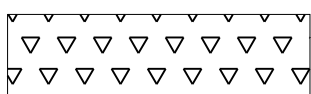
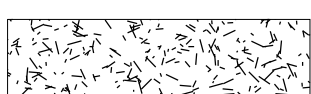
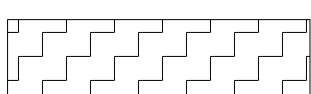
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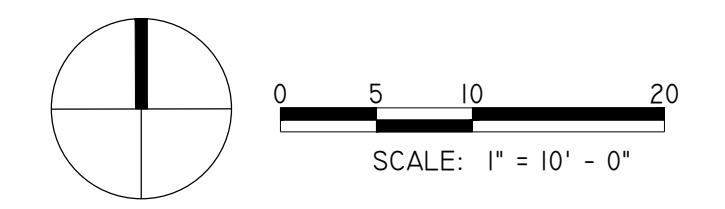
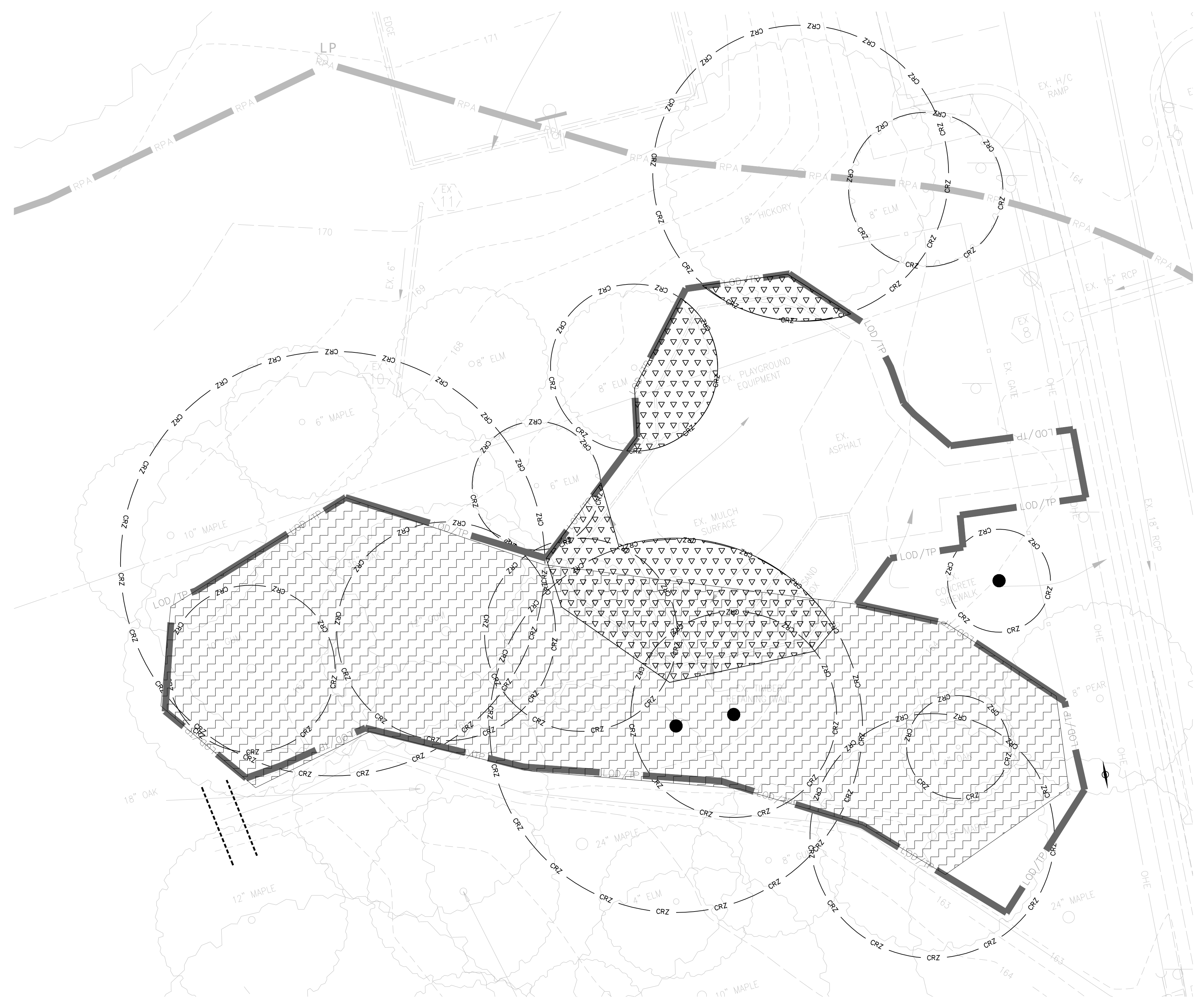
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LF-01

TREE PRESERVATION LEGEND

	LIMITS OF DISTURBANCE	
	EXISTING CONTOUR	
	LIMITS OF DISTURBANCE / TREE PROTECTION FENCE	
	CRITICAL ROOT ZONE	
	TEMPORARY ROOT PROTECTION MATTING / HAND REMOVAL AREA	
	PERMANENT ROOT AERATION MATTING	
	REFORESTATION AREA	

- NOTES:**
- TREE PROTECTION FENCE SHALL REMAIN IN PLACE UNTIL COUNTY PROJECT OFFICER APPROVES ITS REMOVAL.
 - LIMITS OF DISTURBANCE / TREE PROTECTION FENCE AND PERIMETER SEDIMENT CONTROLS TO BE INSTALLED AT LIMITS OF WORK. SEPARATION BETWEEN THESE ITEMS ON THE PLANS IS FOR GRAPHICAL PURPOSES.
 - EXCAVATION WITHIN CRZ OF EXISTING TREES TO REMAIN SHALL BE PERFORMED WITH SPECIAL CARE (I.E. HAND OR LIGHT MACHINERY OPERATIONS) AS TO NOT DAMAGE, DISTURB OR REMOVE TREE ROOTS.
 - CONSTRUCTION SAFETY FENCING AND PERIMETER SEDIMENT CONTROLS SHALL BE INSTALLED AS SHOWN ON THE PHASE IA EROSION AND SEDIMENT CONTROL PLAN PRIOR TO COMMENCING TO DEMOLITION ACTIVITIES AS INDICATED ON THE DEMOLITION PLAN. UPON COMPLETION THE AREA SHALL IMMEDIATELY BE STABILIZED.



DEPARTMENT OF PARKS AND RECREATION
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21-DPR-ITB-639

Project Name and Location
TOWERS PARK PLAYGROUND RENOVATIONS

801 S Scott St
 Arlington, VA 22204

Sheet Title
TREE PRESERVATION PLAN - DEMOLITION



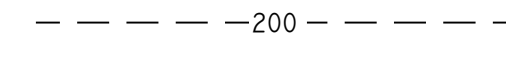

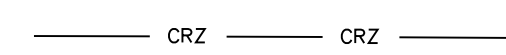
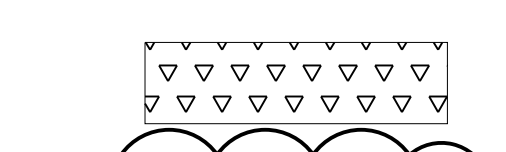

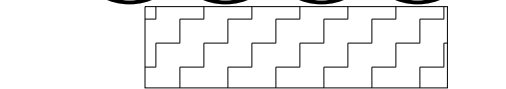
Approval	Date
Design Supervisor	
Revisions	Date

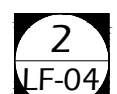
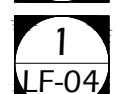

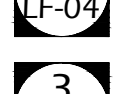
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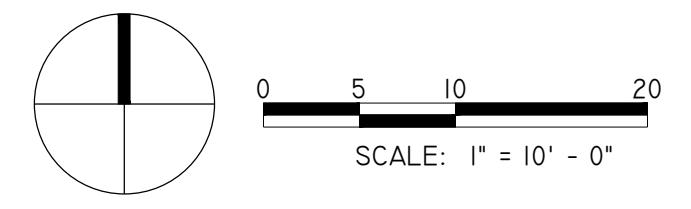
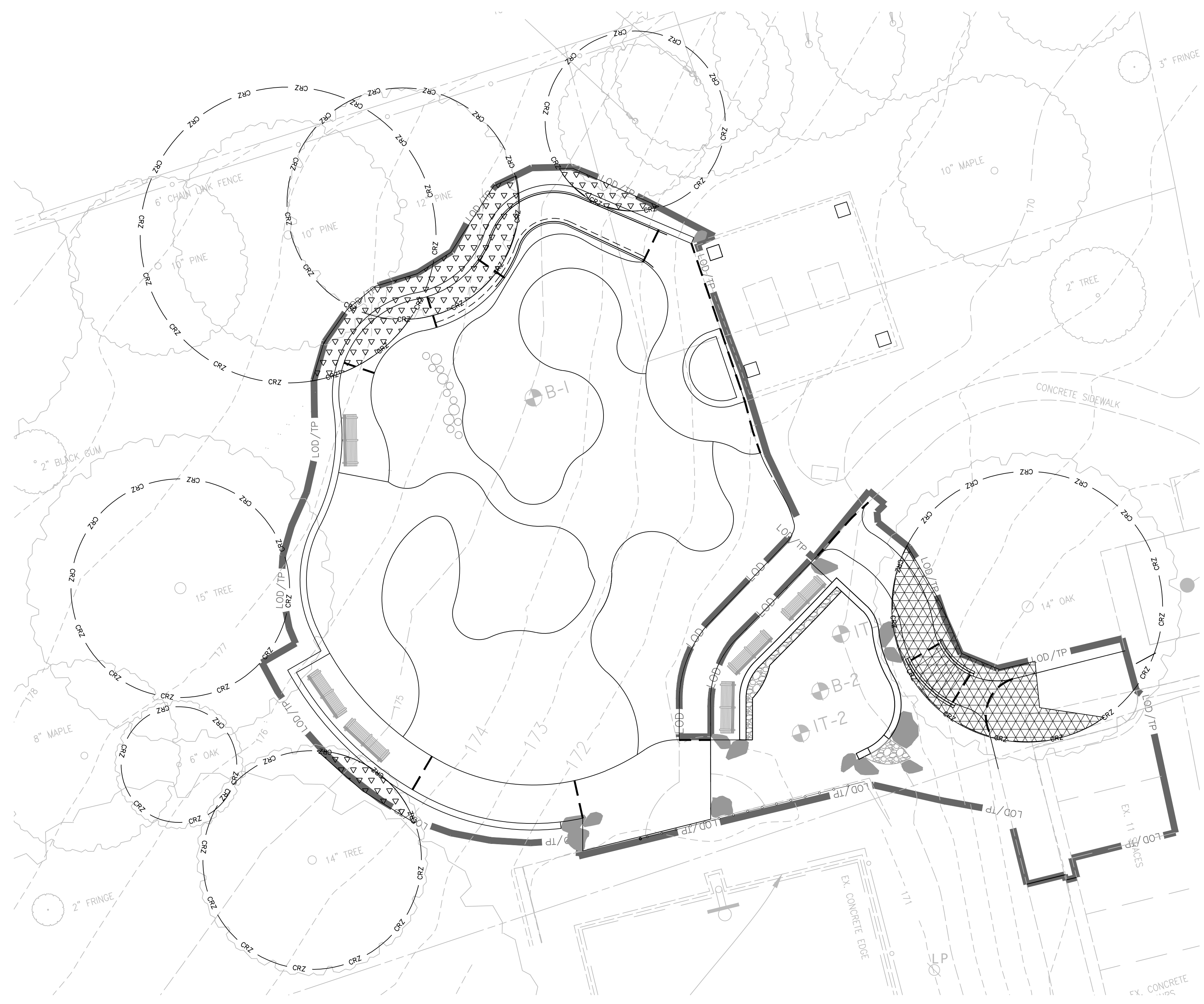
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LF-02
 No. 5 of 40

TREE PRESERVATION LEGEND

-  LOD  LOD LIMITS OF DISTURBANCE
-  -200- EXISTING CONTOUR
-  LOD/TP LIMITS OF DISTURBANCE / TREE PROTECTION FENCE
-  CRZ CRZ CRITICAL ROOT ZONE
-  TEMPORARY ROOT PROTECTION MATTING / HAND REMOVAL AREA
-  PERMANENT ROOT AERATION MATTING
-  REFORESTATION AREA

-  2
LF-04
-  1
LF-04
-  4
LF-04
-  3
LF-04

- NOTES:**
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ARLINGTON VIRGINIA
 DEPARTMENT OF PARKS AND RECREATION
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21-DPR-ITB-639

Project Name and Location
TOWERS PARK PLAYGROUND RENOVATIONS

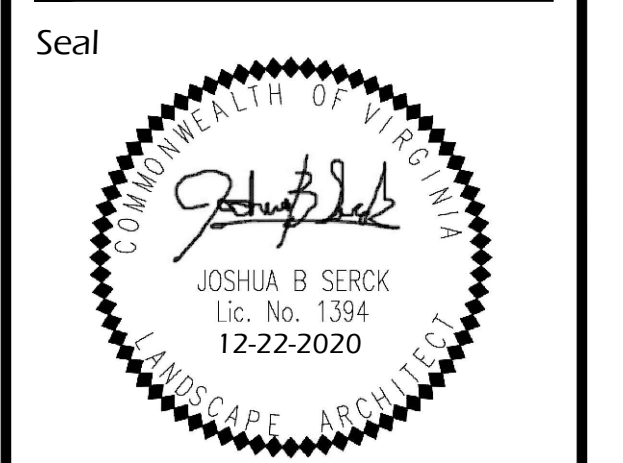
801 S Scott St
 Arlington, VA 22204

Sheet Title
TREE PRESERVATION PLAN - CONSTRUCTION

Approval _____ Date _____
 Design Supervisor _____

Revisions Date
 1 SYMBOL FIX 6/15/21

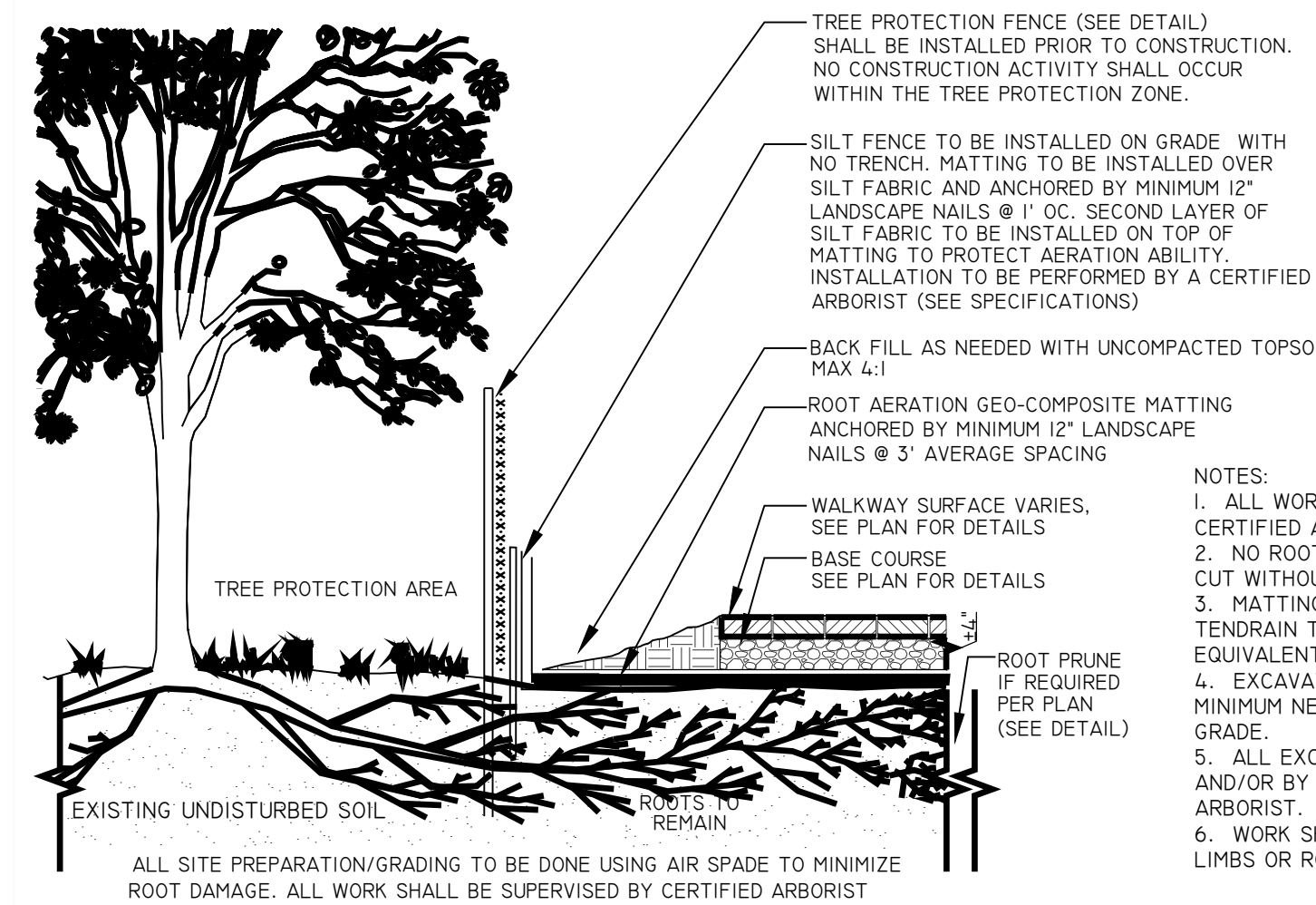
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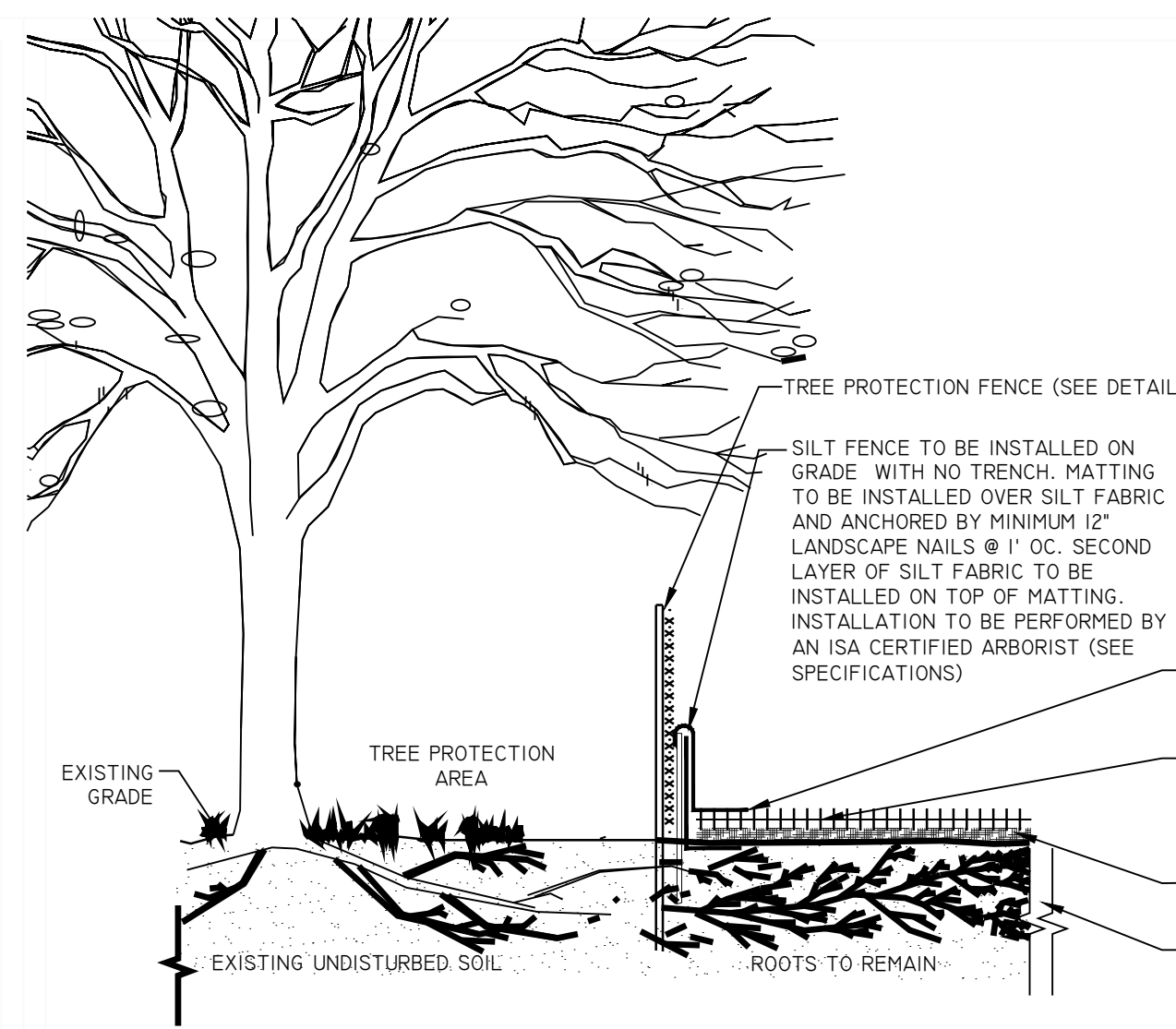
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 No. 6 of 40

TREE PRESERVATION NOTES

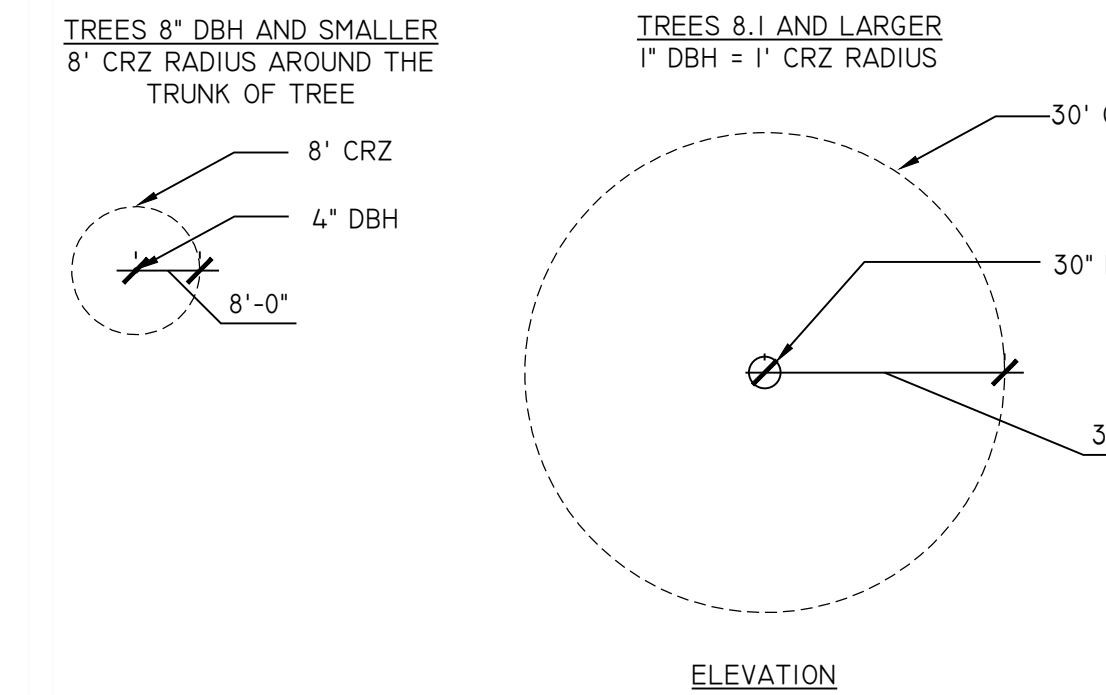
- ALL MEASURES WILL BE REVIEWED AFTER INSTALLATION AND APPROVED BY THE PROJECT MANAGER AND COUNTY URBAN FORESTER. SUBSTITUTIONS OR ALTERNATIVE METHODS OR MATERIALS SHALL BE REVIEWED AND APPROVED BY COUNTY AND URBAN FORESTER. ALL TREE PROTECTION MEASURES SHALL BE IN PLACE PRIOR TO COMMENCEMENT OF DEMOLITION, SITE CLEARING OR CONSTRUCTION AND MAINTAINED THROUGHOUT CONSTRUCTION. TREE PROTECTION MEASURES SHALL ONLY BE REMOVED WITH COUNTY APPROVAL. TREE PROTECTION DEVICES SHALL BE MAINTAINED UNTIL ALL WORK IN THE VICINITY HAS BEEN COMPLETED AND SHALL NOT BE REMOVED OR RELOCATED WITHOUT THE CONSENT OF THE COUNTY URBAN FORESTER. IF THE COUNTY URBAN FORESTER DEEMS THAT THE PROTECTIVE DEVICES ARE INSUFFICIENT, INSTALLATION OF ADDITIONAL PROTECTIVE DEVICES MAY BE REQUIRED AS DIRECTED BY COUNTY REPRESENTATIVE.
- HEAVY EQUIPMENT, VEHICULAR TRAFFIC, STOCKPILING OF MATERIALS, OR DEPOSITION OF SEDIMENT SHALL NOT BE PERMITTED WITHIN THE DRIPLINE OF EXISTING TREES TO REMAIN. DEMOLITION OF EXISTING CONDITIONS AND CONSTRUCTION OF PROPOSED IMPROVEMENTS IS PERMITTED WITHIN DRIPLINE (WITHIN LIMITS OF WORK) WITH LIGHT DUTY EQUIPMENT. CONSTRUCTION EQUIPMENT ACCESS BETWEEN VARIOUS WORK AREAS SHALL REMAIN ON EXISTING PAVEMENT/IMPROVED SURFACES TO THE GREATEST EXTENT POSSIBLE. WHERE THIS IS NOT POSSIBLE AND WITHIN THE CRITICAL ROOT ZONE (CRZ) OF ANY TREE TO REMAIN, ACCESS SHALL BE MADE ON ROOT PROTECTION MATTING (RPM) OR APPROVED ALTERNATIVE. CONTRACTOR TO DETERMINE ACCESS NEEDS AND COORDINATE RPM INSTALLATION WITH THE CONTRACT ARBORIST AND COUNTY URBAN FORESTER AT THE PRE-CONSTRUCTION MEETING OR BEFORE.
- NO PROTECTIVE DEVICES, SIGNS, UTILITY BOXES OR OTHER OBJECTS SHALL BE NAILED OR AFFIXED TO TREES TO BE PRESERVED.
- IN THE EVENT THAT A TREE OR PORTION THEREOF IS DEAD OR DYING DUE TO CONSTRUCTION OR ENVIRONMENTAL CHANGES RESULTING FROM DEMOLITION, CONSTRUCTION AND/OR CLEARING, AND POSSES A HAZARD TO EITHER LIFE OR PROPERTY, THE CONTRACTOR SHALL NOTIFY PROJECT OFFICER AND TAKE SUCH ACTION AS NECESSARY TO ELIMINATE THE HAZARD CAREFULLY AS PER PROJECT MANAGER'S APPROVAL.
- ANY DAMAGE INFLICTED TO THE ABOVE OR BELOW-GROUND PORTIONS OF THE TREES SHOWN TO BE PRESERVED SHALL BE REPAIRED IMMEDIATELY. ALL DAMAGED BRANCHES IN THE CROWN SHALL BE CUT OFF CLEANLY PER ARLINGTON COUNTY URBAN FORESTER.
- TREES THAT ARE REQUIRED TO BE REMOVED SHALL BE REMOVED IN SUCH A WAY THAT SURROUNDING TREES, VEGETATION, LANDSCAPING, STRUCTURES, AND SITE FEATURES ARE NOT DAMAGED.
- TREES THAT ARE REQUIRED TO BE REMOVED SHALL BE CUT DOWN BY HAND WITH A CHAIN SAW. THESE TREES SHALL BE CUT DOWN FLUSH WITH THE GROUND (WITHIN 2" OF THE SOIL), AND CUT INTO MOVABLE LENGTHS, TO PREVENT THE CREATION OF A NEW HAZARD. REMAINING STUMPS SHALL BE REMOVED OR GROUND DOWN WITH A STUMP GRINDER.
- TREES BEING REMOVED SHALL NOT BE FELLED, PUSHED, OR PULLED INTO TREE PRESERVATION AREAS. EQUIPMENT OPERATORS SHALL NOT CLEAN ANY PART OF THEIR EQUIPMENT BY SLAMMING IT AGAINST THE TRUNKS OF TREES TO BE RETAINED.
- THE EXACT LOCATION AND DEPTH OF ROOT PRUNING WILL BE DETERMINED DURING THE PRE-CONSTRUCTION MEETING. SPECIFIC EQUIPMENT & METHODS WILL BE DETERMINED BY CONTRACT ARBORIST AND COUNTY URBAN FORESTER BASED UPON DEPTH & TREE IMPACT. (SEE DETAIL)
- HAND PRUNE ROOTS OVER 1" DIAMETER WITHIN CRZS OF SIGNIFICANT TREES. STEEP SLOPES, DEEP EXCAVATIONS AND PAVEMENT/CURB REMOVAL WILL BE REVIEWED WHEN OPEN FOR HAND ROOT PRUNING DURING CONSTRUCTION. COORDINATE WITH SILT FENCE INSTALLATION TO MINIMIZE UNNECESSARY ROOT DAMAGE. ROOT PRUNING SHALL BE PERFORMED BY A CERTIFIED ARBORIST AND SHALL FOLLOW ALL DPR APPROVED DETAILS.
- SPECIAL DEMO AREAS: HEAVY EQUIPMENT, VEHICULAR TRAFFIC, STOCKPILING OF MATERIALS, OR DEPOSITION OF SEDIMENT SHALL NOT BE PERMITTED. CONTRACTOR SHALL HAND EXCAVATE AND REMOVE WITH NON-MECHANIZED EQUIPMENT. ACCESS SHALL BE MADE ON ROOT PROTECTION MATTING (RPM) OR APPROVED ALTERNATIVE. CONTRACTOR TO DETERMINE ACCESS NEEDS AND COORDINATE RPM INSTALLATION WITH THE CONTRACT ARBORIST AND COUNTY URBAN FORESTER AT THE PRE-CONSTRUCTION MEETING OR BEFORE. BACKFILL OF VOIDS FROM DEMOLITION WITHIN THE SPECIAL TREE PROTECTION AREAS SHALL BE LOOSELY PLACED TOPSOIL. ONLY THE AMOUNT OF SOIL NECESSARY TO FILL THE VOID WITHOUT SPREADING OVER EXISTING ADJACENT GRADES SHALL BE ALLOWED. THESE AREAS SHALL BE MULCHED WITH 3" OF APPROVED MULCH WITHIN 24 HOURS OF DEMOLITION ACTIVITIES.
- ROOTS ENCOUNTERED DURING DEMOLITION SHALL BE REVIEWED ON A CASE-BY-CASE BASIS BY THE CONTRACTOR, PROJECT MANAGER AND COUNTY URBAN FORESTER. THE CONTRACTOR SHALL PROVIDE APPROPRIATE TREATMENT OR PRUNING METHODS AS NEEDED AND IN GENERAL CONFORMANCE WITH ACCEPTED INDUSTRY STANDARDS AND THIS SECTION.
- TREE LOCATIONS MAY BE APPROXIMATE. OWNER AND CONTRACT ARBORIST SHALL VERIFY ALL TREE LOCATIONS AND CONDITIONS PRIOR TO CONSTRUCTION AND/OR TREATMENT OR REMOVAL.
- PRE-CONSTRUCTION MEETING SHALL BE HELD PRIOR TO COMMENCEMENT OF DEMOLITION/CONSTRUCTION ACTIVITY. COUNTY, OWNER, DESIGN TEAM MEMBERS (PROJECT MANAGER, LANDSCAPE ARCHITECT, ARLINGTON COUNTY URBAN FORESTER, ARLINGTON COUNTY LANDSCAPE ARCHITECT), CONTRACT ARBORIST, SITE AND LANDSCAPE CONTRACTORS SHALL ATTEND.
- THE INSPECTION OF THESE TREES CONSISTED SOLELY OF A VISUAL INSPECTION FROM THE GROUND. WHILE MORE THOROUGH TECHNIQUES ARE AVAILABLE FOR INSPECTION AND EVALUATION, THEY WERE NEITHER REQUESTED NOR CONSIDERED NECESSARY OR APPROPRIATE AT THIS TIME.
- TREES RATED "POOR" OR "DEAD" THAT ARE NOT RECOMMENDED FOR REMOVAL DUE TO CONSTRUCTION IMPACT MAY WARRANT FURTHER EVALUATION AND/OR TREATMENT OR REMOVAL.



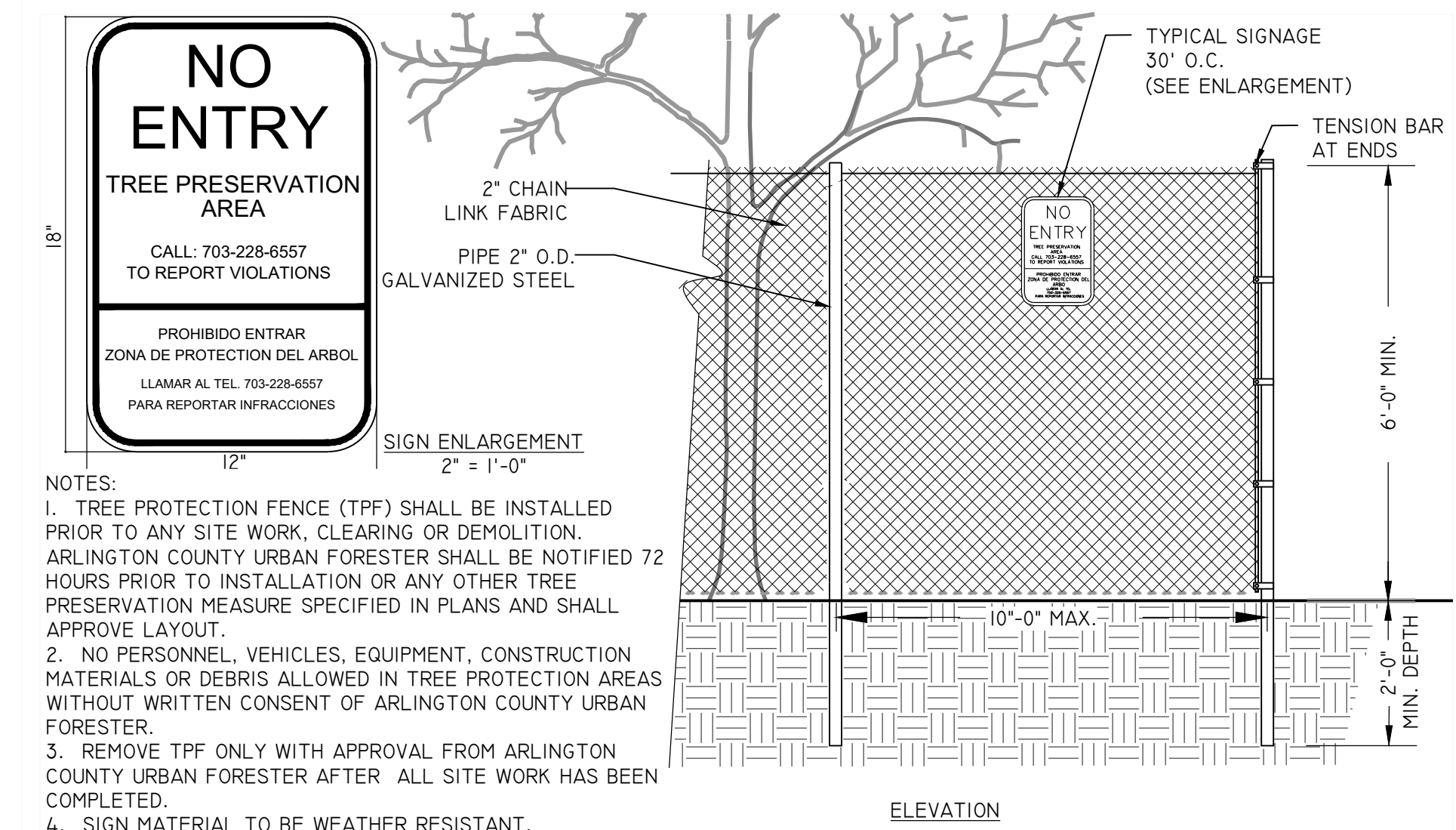
3 ABOVE GRADE SIDEWALK WITH ROOT AERATION MATTING
LF-04 311300.10NS N.T.S. ARLINGTON DPR



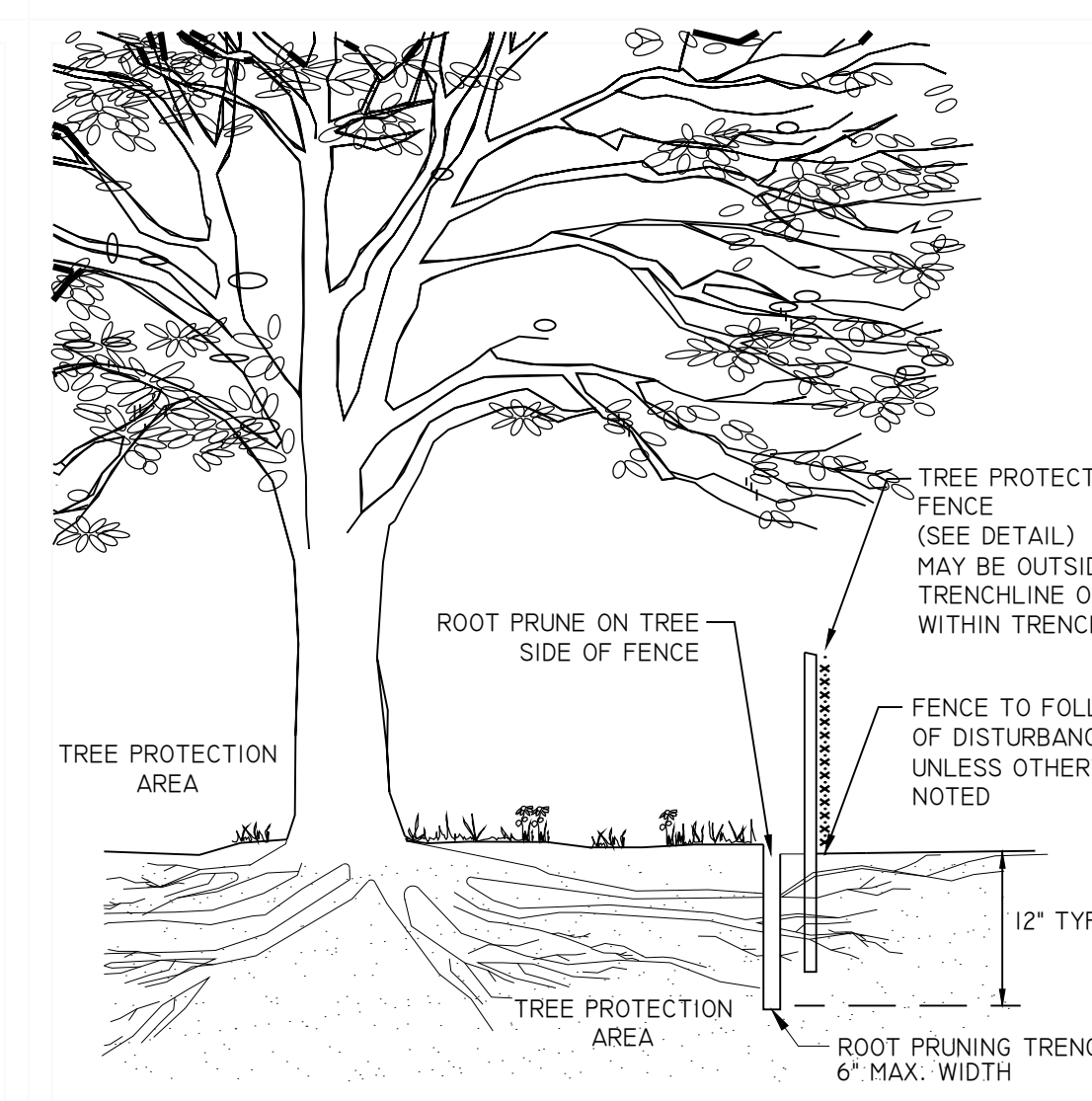
4 TEMPORARY ROOT PROTECTION MATTING WITHIN CRZ
LF-04 311300.7NS NOT TO SCALE ARLINGTON DPR



1 TREE PROTECTION DETAIL FOR DETERMINING CRITICAL ROOT ZONE
LF-04 311300.3 (2019) N.T.S. ARLINGTON DPR



2 6' CHAIN LINK TREE PROTECTION FENCE
LF-04 311300.1 (2019) 1/2\"/>



5 ROOT PRUNING
LF-04 311300.5 (2019) N.T.S. ARLINGTON DPR

- NOTES:
- GRAPHICALLY, THE CRITICAL ROOT ZONE (CRZ) IS REPRESENTED AS A CIRCULAR REGION MEASURED OUTWARD FROM A TREE TRUNK REPRESENTING THE AREA OF ROOTS THAT MUST BE MAINTAINED OR PROTECTED FOR THE TREE'S SURVIVAL.
 - THE CRZ OF A TREE IS THE ZONE IN WHICH THE MAJORITY OF THE ROOTS LAY. 95% OF THE ROOTS OF MOST TREES WILL BE FOUND IN THE UPPER 12-18" OF THE SOIL. MOST OF THE ROOTS THAT SUPPLY THE NUTRIENTS AND WATER TO THE TREE ARE FOUND JUST BELOW THE SOIL SURFACE. THE TOTAL AMOUNT OF A TREE'S ROOTS ARE GENERALLY PROPORTIONAL TO THE VOLUME OF THE TREE'S CANOPY. THEREFORE, IF THE ROOTS ONLY PENETRATE A THIN LAYER OF SOIL, THEN THE ROOTS MUST SPREAD FAR FROM THE TREE, BEYOND THE EXTENSION OF THE CANOPY.
 - PLOT ACCURATE TRUNK LOCATIONS OF ALL TREES GREATER THAN 3" DIAMETER AT BREAST HEIGHT (DBH) AND/OR TREE STANDS WITHIN DEVELOPMENT AREAS ON ALL PLANS FOR THE PROJECT AND DELINEATE THEIR ESTIMATED CRITICAL ROOT ZONE.
 - PLOT ACCURATE TRUNK LOCATIONS OF OFFSITE TREES WHICH WILL HAVE THEIR CRZ AFFECTED BY DEVELOPMENT AND DELINEATE THEIR ESTIMATED CRITICAL ROOT ZONE.



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21-DPR-ITB-639

Project Name and Location
TOWERS PARK PLAYGROUND RENOVATIONS

801 S Scott St
Arlington, VA 22204

Sheet Title
TREE PRESERVATION NOTES & DETAILS

Approval	Date
Design Supervisor	
Revisions	Date

Designed:
Drawn:
Checked:
Filename: LF-01-04_TP.DWG
Plotted: Dec. 22, 20
Scale: 1"=10'-0"
Date: DECEMBER 20, 2019



Sheet
LF-04
No. 7 of 40



DEMOLITION LEGEND

	PROPERTY LINE
	RESOURCE PROTECTION AREA (RPA)
	LIMITS OF DISTURBANCE/TREE PROTECTION FENCE
	CRZ
	ASPHALT PAVEMENT TO BE REMOVED
	CONCRETE PAVEMENT TO BE REMOVED
	COMPACTED MULCH TO BE REMOVED
	TIMBER BORDER TO BE REMOVED
	FENCE TO BE REMOVED
	SITE FEATURE TO BE REMOVED

- DEMOLITION NOTES:**
- LOCATION OF ALL UTILITIES SHOWN ARE APPROXIMATE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY AND DETERMINE THE EXACT LOCATION AND DEPTH OF ALL UTILITIES WITHIN THE LIMIT OF DISTURBANCE PRIOR TO COMMENCING WORK. REPORT ANY DISCREPANCY TO THE PROJECT OFFICER. THE CONTRACTOR SHALL CONTACT MISS UTILITY AT 811 A MINIMUM OF 72 HOURS PRIOR TO ANY EXCAVATION TO DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES AND SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL EXISTING UTILITIES.
 - THE DEMOLITION PLAN IS A GENERAL GUIDE OF WHAT ITEMS NEED TO BE DEMOLISHED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY ALL ITEMS THAT REQUIRED DEMOLITION TO COMPLETE THE PROPOSED CONSTRUCTION.
 - CONTRACTOR SHALL PROTECT AND PRESERVE ALL EXISTING SITE STRUCTURES AND FEATURES NOT SCHEDULED FOR DEMOLITION AND/ OR CONSTRUCTION FROM DAMAGE DUE TO DEMOLITION PROCEDURES. ANY RESULTING DAMAGE SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE RESTORED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE PROJECT OFFICER.
 - TREE PROTECTION AND CONSTRUCTION FENCE SHALL BE THE SAME WHEREVER THEY OVERLAP.
 - THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR SAFETY AND SECURITY AT THE PROJECT SITE FOR THE DURATION OF THE CONTRACT.
 - CONTRACTOR SHALL COORDINATE WITH THE PROJECT OFFICER TO IDENTIFY ANY NECESSARY STAGING/STORAGE AREAS. PROPOSED STAGING AND STORAGE AREAS SHALL BE REVIEWED AND APPROVED BY THE PROJECT OFFICER, AND THE LIMITS OF WORK WILL BE ADJUSTED ACCORDINGLY.
 - ANY STOCKPILING, REGARDLESS OF LOCATION ON SITE, SHALL BE STABILIZED IMMEDIATELY AFTER ITS ESTABLISHMENT AND FOR THE DURATION OF THE PROJECT. STOCKPILES SHALL BE CONTAINED BY STRAW BALES OR EROSION CONTROL FENCING AND COVERED WITH PLASTIC OR CANVAS AT THE END OF EACH WORK DAY FOR THE DURATION OF THE PROJECT.
 - TEMPORARY CONSTRUCTION FENCING SHALL BE ERRECTED AS SHOWN ON THE PLANS PRIOR TO BEGINNING CONSTRUCTION OPERATIONS AND MAINTAINED UNTIL COMPLETION OF PROJECT.
 - WHERE ITEMS TO BE REMOVED OCCUR WITHIN TREE PROTECTION ZONES, THE CONTRACTOR SHALL REMOVE THE ITEMS WORKING WITH A COUNTY ARBORIST (PROVIDED BY COUNTY) ON-SITE TO OBSERVE AND MINIMIZE TREE DAMAGE. CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT FIVE BUSINESS DAYS PRIOR TO THESE REMOVALS.
 - CARE SHALL BE TAKEN TO PRESERVE EXISTING TREES AND THEIR ROOT SYSTEMS. TREES INCURRING ROOT DAMAGE DUE TO CONSTRUCTION SHALL BE PRUNED AND FERTILIZED PER THE SPECIFICATIONS.
 - NO MATERIALS OR EQUIPMENT SHALL BE PERMITTED WITHIN THE TREE PROTECTION AREA.
 - UNAUTHORIZED TREE REMOVALS, TREE DEATH OR SEVERE DAMAGE DUE TO THE CONTRACTOR'S FAILURE TO EXERCISE PROPER CARE WHEN WORKING NEAR TREES, SHALL RESULT IN A FINE EQUAL TO THE LANDSCAPE VALUE OF THE TREE AS PUBLISHED IN THE LATEST EDITION OF THE COUNCIL OF TREE AND LANDSCAPE APPRAISERS GUIDE FOR PLANT APPRAISALS PUBLISHED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE.
 - COUNTY ARBORIST INSPECTION IS REQUIRED PRIOR TO ANY SITE LAND DISTURBANCE ACTIVITY.
 - DEMOLITION STAGE EROSION AND SEDIMENT CONTROLS AND TREE PROTECTION MEASURES SHALL BE INSTALLED PRIOR TO DEMOLITION. REFER TO SHEET C-07 FOR DETAILED SEQUENCE OF CONSTRUCTION FOR DEMOLITION PHASING NOTES.
 - REFER TO TREE PRESERVATION DETAILS AND EROSION AND SEDIMENT CONTROL DRAWINGS FOR TREE PROTECTION AND OTHER REQUIRED TREE CARE.
 - ALL MATERIAL FROM DEMOLITION NOT IDENTIFIED FOR REUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH APPROPRIATE REGULATIONS.
 - ALL PAVEMENT REMOVED SHALL BE DONE SUCH THAT REMAINING PAVEMENT IS LEFT WITH CLEAN STRAIGHT EDGE. CONCRETE PAVEMENT/ CURBING SHALL BE REMOVED TO THE NEAREST JOINT.
 - EXISTING PAVEMENT SHALL BE SAW CUT WHEN NEXT TO REMAINING PAVEMENT BEFORE REMOVAL. ALL SAW CUTS SHALL BE STRAIGHT, EVEN CUTS; JAGGED CUTS WILL NOT BE PERMITTED.
 - WOOD AND STEEL TUBE FENCE REMOVED: INCLUDES ALL FENCE POSTS AND CONCRETE FOOTINGS.
 - CONCRETE REMOVAL: SHALL INCLUDE CONCRETE, STEEL REINFORCEMENT, AND GRAVEL BASE WHERE NO PROPOSED CONCRETE WILL BE INSTALLED.
 - ASPHALT REMOVAL: SHALL INCLUDE SURFACE, BASE AND SUBBASE MATERIALS.
 - PER SPECIFICATIONS, PLAYGROUND EQUIPMENT REMOVAL SHALL INCLUDE REMOVAL AND DISPOSAL OF ALL EQUIPMENT AND FOOTERS.
 - CONTRACTOR SHALL REMOVE AND DISPOSE OF ANY SITE FURNISHINGS WITHIN THE LIMITS OF DISTURBANCE NOT REMOVED FROM SITE PRIOR TO COMMENCEMENT OF CONSTRUCTION (IE SIGNAGE, BENCHES, TRASH RECEPTACLES, ETC).
 - CONTRACTOR SHALL PROVIDE EXISTING DAMAGE PHOTOS PRIOR TO MOBILIZING OR PERFORMING ANY WORK. LOCATIONS OF PICTURES TO BE RECORDED ON THIS SHEET.
 - TO PREVENT DAMAGES OUTSIDE THE LIMITS OF DISTURBANCE, NO PARK AREAS OUTSIDE THE LOD SHALL BE USED FOR STAGING OR STORAGE.
 - UPON COMPLETION OF THE PROJECT, ALL EXCESS SOIL, SAND, MULCH, TEMPORARY FENCING, EROSION CONTROL MEASURES, STABILIZATION MATERIALS, AND OTHER DEBRIS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY. ALL PAVED AREAS, WALLS, ETC. SHALL BE THOROUGHLY WASHED AND CLEANED UPON COMPLETION OF THE PROJECT.
 - REFER TO SITE CLEARING, DEMOLITION, & REMOVALS SPECIFICATIONS FOR EXISTING EQUIPMENT REMOVAL AND RE-PURPOSING.
 - CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANIES FOR SHUTOFF, CAPPING, AND CONTINUATION OF UTILITY SERVICES AS REQUIRED.
 - THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE THAT OCCURS TO ANY EXISTING SITE ELEMENT THAT IS NOT MARKED FOR DEMOLITION DURING CONSTRUCTION AND MUST REPLACE AT NO COST TO ARLINGTON COUNTY IF DAMAGED.
 - CONTRACTOR SHALL INFORM LANDSCAPE ARCHITECT AND PROJECT OFFICER IF ANY ITEMS/INFORMATION IS NOT LISTED OR CALLED OUT, SO AN APPROPRIATE SOLUTION CAN BE DISCUSSED. CONTRACTOR SHALL HAVE WRITTEN APPROVAL FROM LANDSCAPE ARCHITECT AND PROJECT OFFICER PRIOR TO ANY FURTHER SITE WORK.



DEPARTMENT OF PARKS AND RECREATION
 Park Development Division
 2100 Clarendon Boulevard, Suite 414
 Arlington, VA 22201
 Phone: 703.228.3332
 Fax: 703.228.3328

21-DPR-ITB-639

Project Name and Location
**Towers Park
 Playground
 Renovations**
 By Right (County Project)

801 SOUTH SCOTT STREET
 ARLINGTON, VA 22204

Sheet Title
**DEMOLITION
 PLAN**

100% Construction Drawings

Approval _____ Date _____

Design Manager _____

Revisions _____ Date _____

Designed: cmb
 Drawn: krf
 Checked: cmb

Filename: C-04-CD01-150396021.dwg
 Plotted: 2020-12-22

Scale: 1" = 20'
 Date: MARCH 13, 2020



Sheet **C-04**



EROSION & SEDIMENT CONTROL LEGEND

NO.	KEY	SYMBOL	DESCRIPTION
		---	PROPERTY LINE
		==	RESOURCE PROTECTION AREA
		---	LIMITS OF DISTURBANCE
		---	LIMITS OF WORK
3.38	TP	○	TREE PROTECTION/CONSTRUCTION SAFETY FENCE ON PAVEMENT
3.02	CE	▨	LIMITS OF DISTURBANCE/TREE PROTECTION FENCE
3.07	IP	⊗	MODIFIED 4' CONSTRUCTION ENTRANCE WITH WASH RACK
3.05	SF	— X —	INLET PROTECTION
		— X —	SILT FENCE

- EROSION AND SEDIMENT CONTROL NOTES:**
- WHERE SILT FENCE IS SHOWN ADJACENT TO TREE PROTECTION FENCE, ADHERE SILT FABRIC DIRECTLY TO TREE PROTECTION FENCE.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR RE-CONSTRUCTING ANY ASPHALT, CURB AND GUTTER OR SIDEWALK AS NECESSARY TO BRING THE AREA BACK TO GOOD CONDITION.
 - CONTRACTOR SHALL REFER TO SHEET LF-01 FOR ROOT MATTING PLACEMENT PRIOR TO INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES. CONTRACTOR SHALL USE STONE AT CURB TO CREATE A MOUNTABLE CURB TO PRESERVE ASPHALT, CURB AND SIDEWALK TO THE EXTENT PRACTICABLE.
 - REFER TO SEQUENCE OF CONSTRUCTION, SHEET C-07.
 - FOR TREE PROTECTION FENCE INSTALLED ON PAVEMENT, ANCHOR POSTS INTO CONCRETE BLOCKS, NOT ANCHORED INTO PAVEMENT, SO AS TO NOT DISTURB EXISTING PAVEMENT.
 - AREA TO BE USED FOR STAGING AREA AND MATERIAL STORAGE.
 - THE AREA BEYOND THE CONSTRUCTION ENTRANCE WHERE BIORETENTION WILL BE INSTALLED SHALL BE TEMPORARILY PROTECTED BY MULCH.



ARLINGTON VIRGINIA
 DEPARTMENT OF PARKS AND RECREATION
 Park Development Division
 2100 Clarendon Boulevard, Suite 414
 Arlington, VA 22201
 Phone: 703.228.3332
 Fax: 703.228.3328

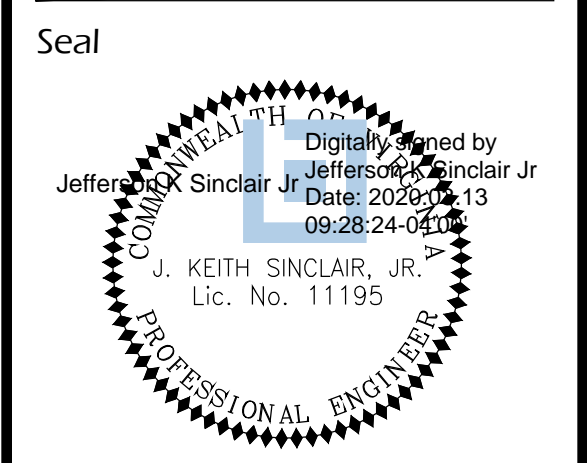
21-DPR-ITB-639
 Project Name and Location
Towers Park Playground Renovations
 By Right (County Project)

801 SOUTH SCOTT STREET
 ARLINGTON, VA 22204

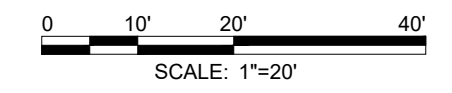
Sheet Title
EROSION AND SEDIMENT CONTROL PLAN - PHASE I
 100% Construction Drawings

Approval	Date
Design Manager	
Revisions	Date

Designed: cmb
 Drawn: KRF
 Checked: cmb
 Filename: C-05-CE01-150396021.dwg
 Plotted: 2020-03-12
 Scale: 1" = 20'
 Date: MARCH 13, 2020



Sheet **C-05**





EROSION & SEDIMENT CONTROL LEGEND

NO.	KEY	SYMBOL	DESCRIPTION
		---	PROPERTY LINE
		==	RESOURCE PROTECTION AREA
		---	LIMITS OF DISTURBANCE
		---	LIMITS OF WORK
3.38	TP	---	LIMITS OF DISTURBANCE/TREE PROTECTION FENCE
3.02	CE	[Symbol]	MODIFIED 40" CONSTRUCTION ENTRANCE WITH WASH RACK
3.07	IP	[Symbol]	INLET PROTECTION
3.05	SF	X	SILT FENCE
		[Symbol]	STORM SEWER STRUCTURE

EROSION AND SEDIMENT CONTROL NOTES:

- WHERE SILT FENCE IS SHOWN ADJACENT TO TREE PROTECTION FENCE, ADHERE SILT FABRIC DIRECTLY TO TREE PROTECTION FENCE.
- CONTRACTOR SHALL PROVIDE STONE AT EXISTING CURB TO CREATE MOUNTABLE ACCESS FOR CONSTRUCTION ENTRANCE. CONTRACTOR SHALL BE RESPONSIBLE FOR RE-CONSTRUCTING ANY ASPHALT, CURB AND GUTTER OR SIDEWALK AS NECESSARY TO BRING THE AREA BACK TO GOOD CONDITION.
- CONTRACTOR SHALL REFER TO SHEET LF-01 FOR ROOT MATTING PLACEMENT PRIOR TO INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES.
- REFER TO SEQUENCE OF CONSTRUCTION, SHEET C-07.
- FOR TREE PROTECTION FENCE INSTALLED ON PAVEMENT, ANCHOR POSTS INTO CONCRETE BLOCKS (NOT ANCHORED INTO GROUND), SO AS NOT TO DISTURB EXISTING PAVEMENT.
- SEE SHEET C-14 FOR ADDITIONAL INFORMATION.



DEPARTMENT OF PARKS AND RECREATION
 Park Development Division
 2100 Clarendon Boulevard, Suite 414
 Arlington, VA 22201
 Phone: 703.228.3332
 Fax: 703.228.3328

21-DPR-ITB-639

Project Name and Location
**Towers Park
 Playground
 Renovations**
 By Right (County Project)

801 SOUTH SCOTT STREET
 ARLINGTON, VA 22204

Sheet Title
**EROSION AND
 SEDIMENT
 CONTROL
 PLAN - PHASE II**
 100% Construction Drawings

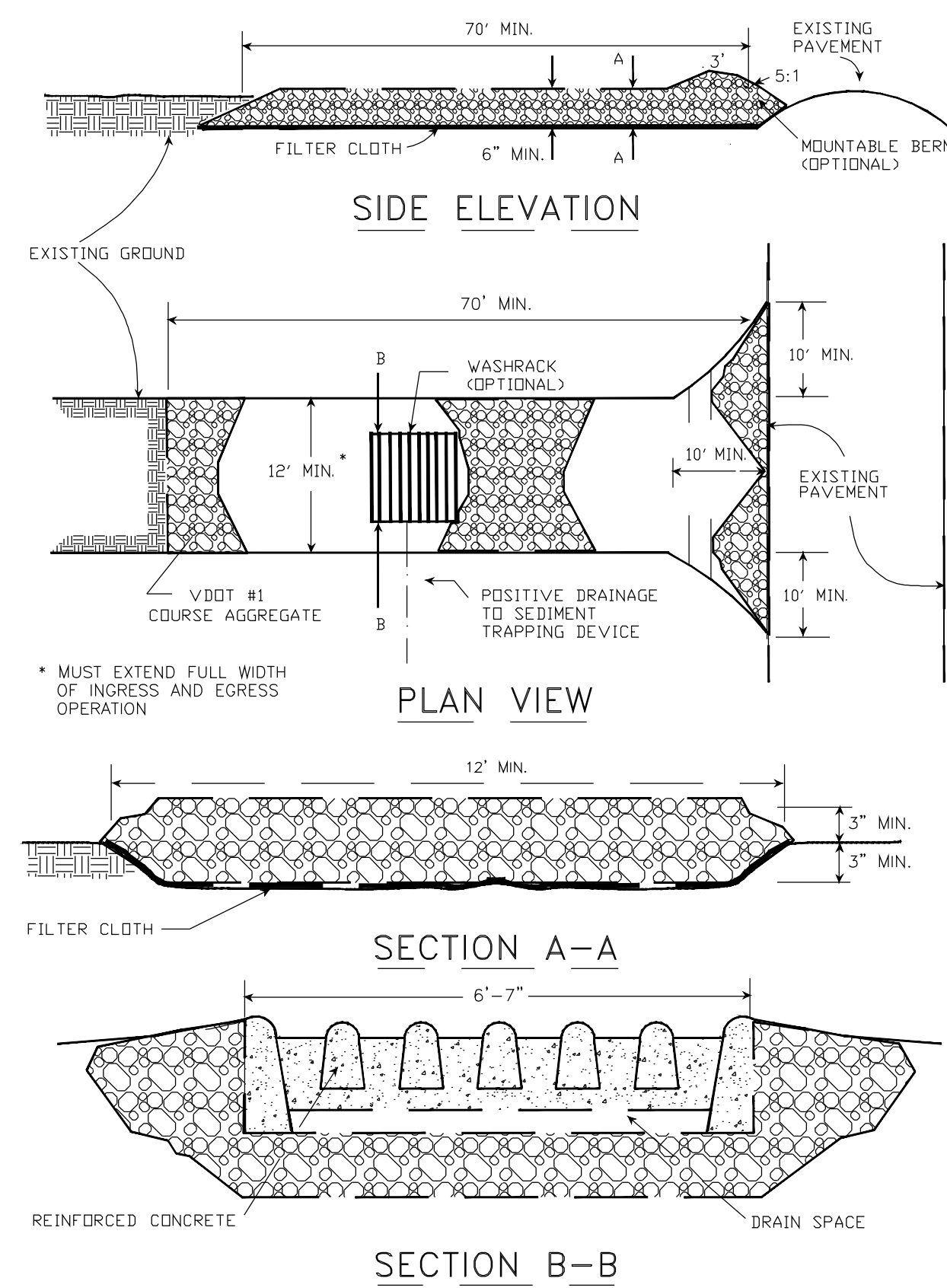
Approval	Date
Design Manager	
Revisions	Date

Designed: CMB
 Drawn: KRF
 Checked: CMB
 Filename: C-06-CE01-150396021.dwg
 Plotted: 2021-05-17
 Scale: 1" = 20'
 Date: MARCH 13, 2020



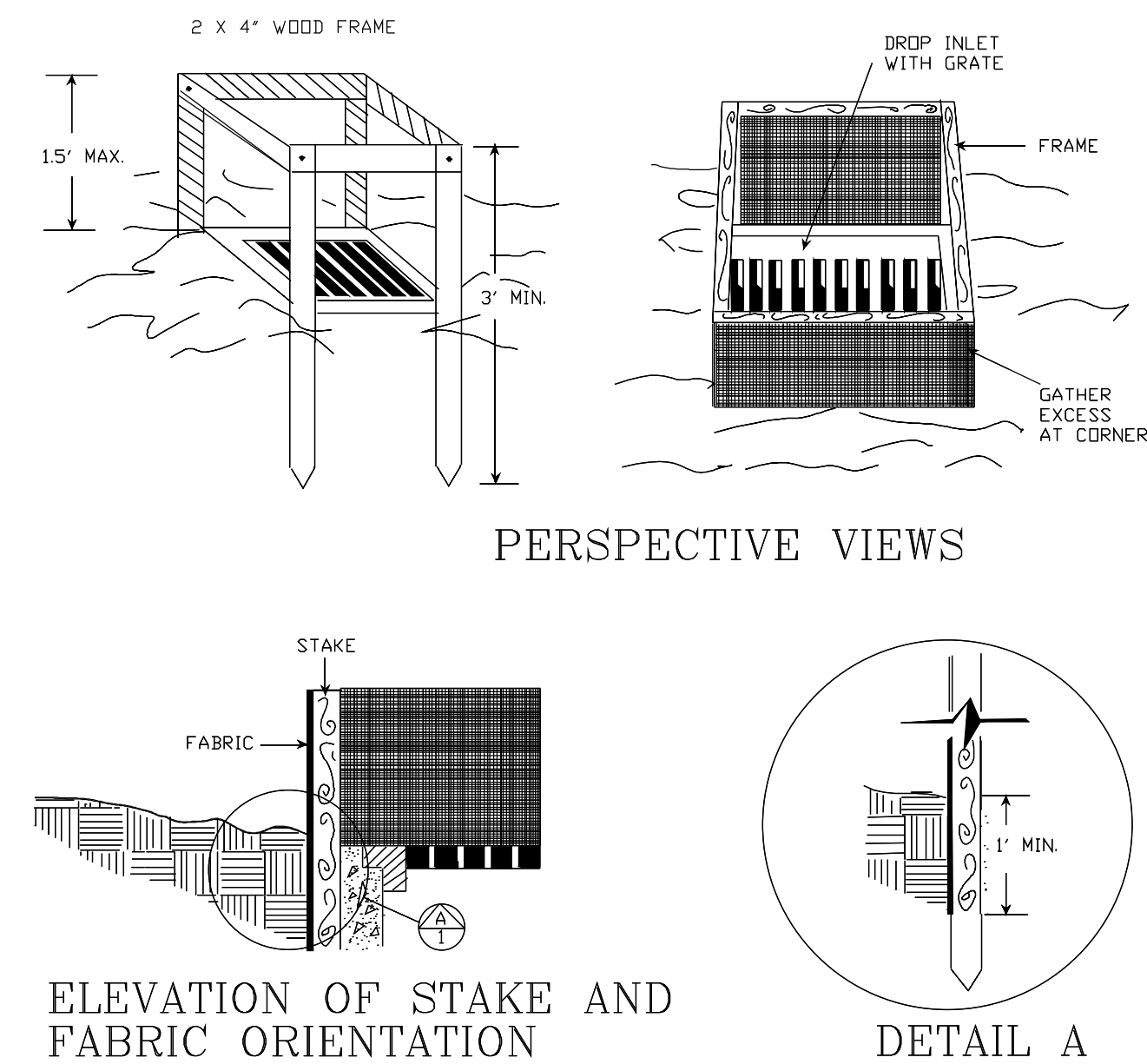
Sheet **C-06**

STONE CONSTRUCTION ENTRANCE



SOURCE: ADAPTED FROM 1983 MARYLAND STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL, AND VA. DSWC PLATE 3.02-1

SILT FENCE DROP INLET PROTECTION



SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPE NO GREATER THAN 5%) WHERE THE INLET SHEET OR OVERLAND FLOWS (NOT EXCEEDING 1 C.F.S.) ARE TYPICAL. THIS METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.

SOURCE: N.C. EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, 1988 PLATE 3.07-1

5-7-2020
date

Qianqian Li, P.E.
ESC Program Administrator
Department of Environmental Services
2100 Clarendon Boulevard, Suite 813
Arlington, Virginia 22201

Re: Erosion and Sediment Control Permit Application for:

801 S. Scott Street
street address

lot, block, section subdivision

permit number

Dear Mrs. Li:

I hereby certify that I accept the responsibilities of Responsible Land Disturber for the above referenced project. I understand that these responsibilities include:

1. Reviewing the erosion and sedimentation (E&S) plan for the project.
2. Walking the site prior to construction to identify critical areas.
3. Conducting a pre-construction briefing with earth moving and site contractors to present the E&S plan and highlight the presence of critical areas, the limits of clearing and the required E&S controls and tree protection measures to be installed. Call 703-228-0760 to schedule pre-construction meeting.
4. Regularly inspecting the site during construction to ensure that all E&S controls are functioning and are adequate to address erosion and sedimentation. Inspect the site 48 hours after a runoff-generating storm, and provide a copy of the inspection findings to the county.
5. Reporting to the owner the presence inadequate or non functioning E&S controls when they are observed.
6. Ensuring that temporary soil stabilization is applied within 7 days to areas denuded that will remain undisturbed for longer than 14 days. Permanent stabilization shall be applied to areas that are to be left dormant for more than one year.
7. Calling (703) 228-0760 at least 80 hours before demolishing any structure.

I may be reached at 703-228-3586 with questions about this plan or my execution of the duties of Responsible Land Disturber.
telephone number

Sincerely,

Juan Du

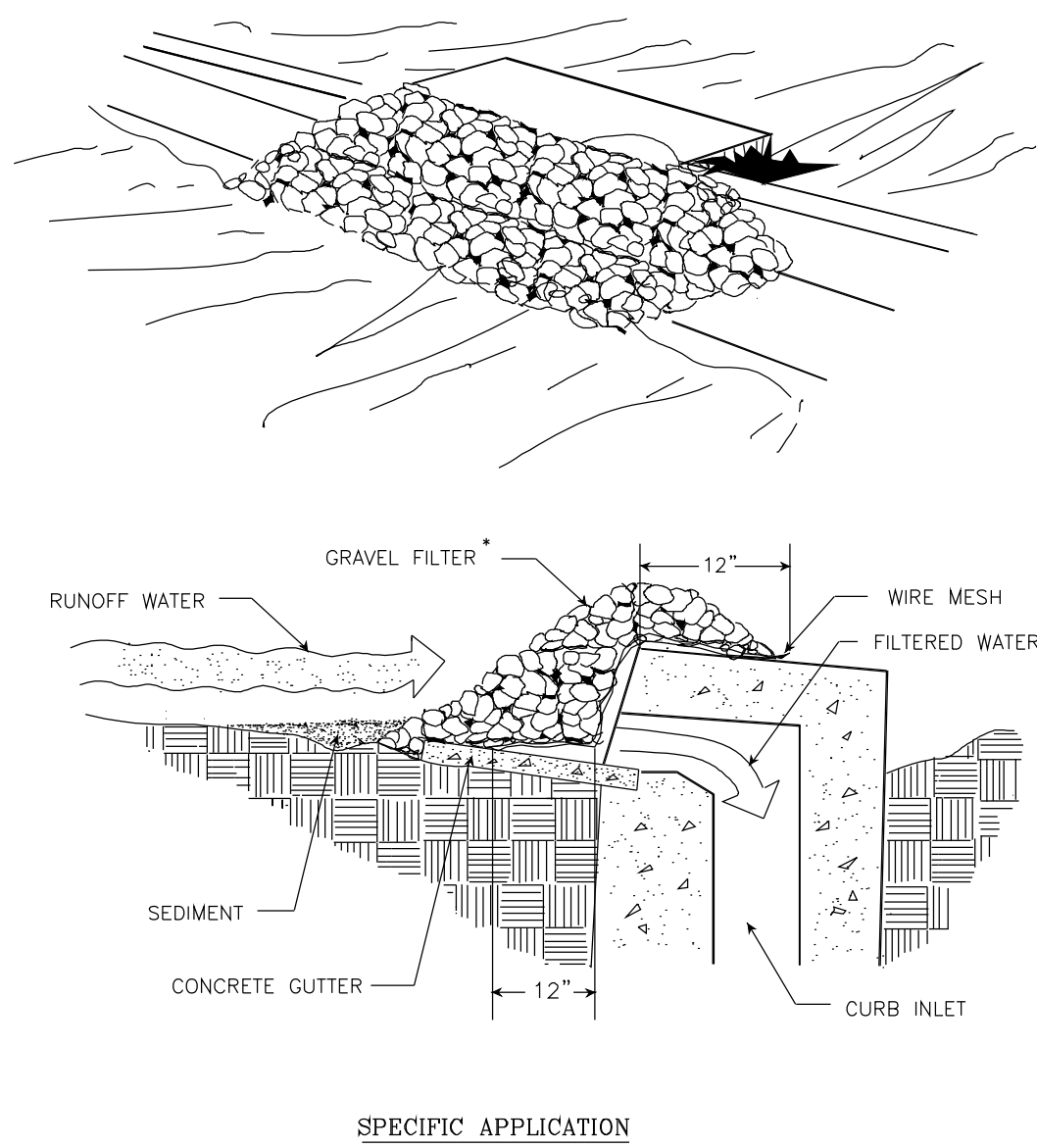
Juan Du, RLA

name printed

LA 2120

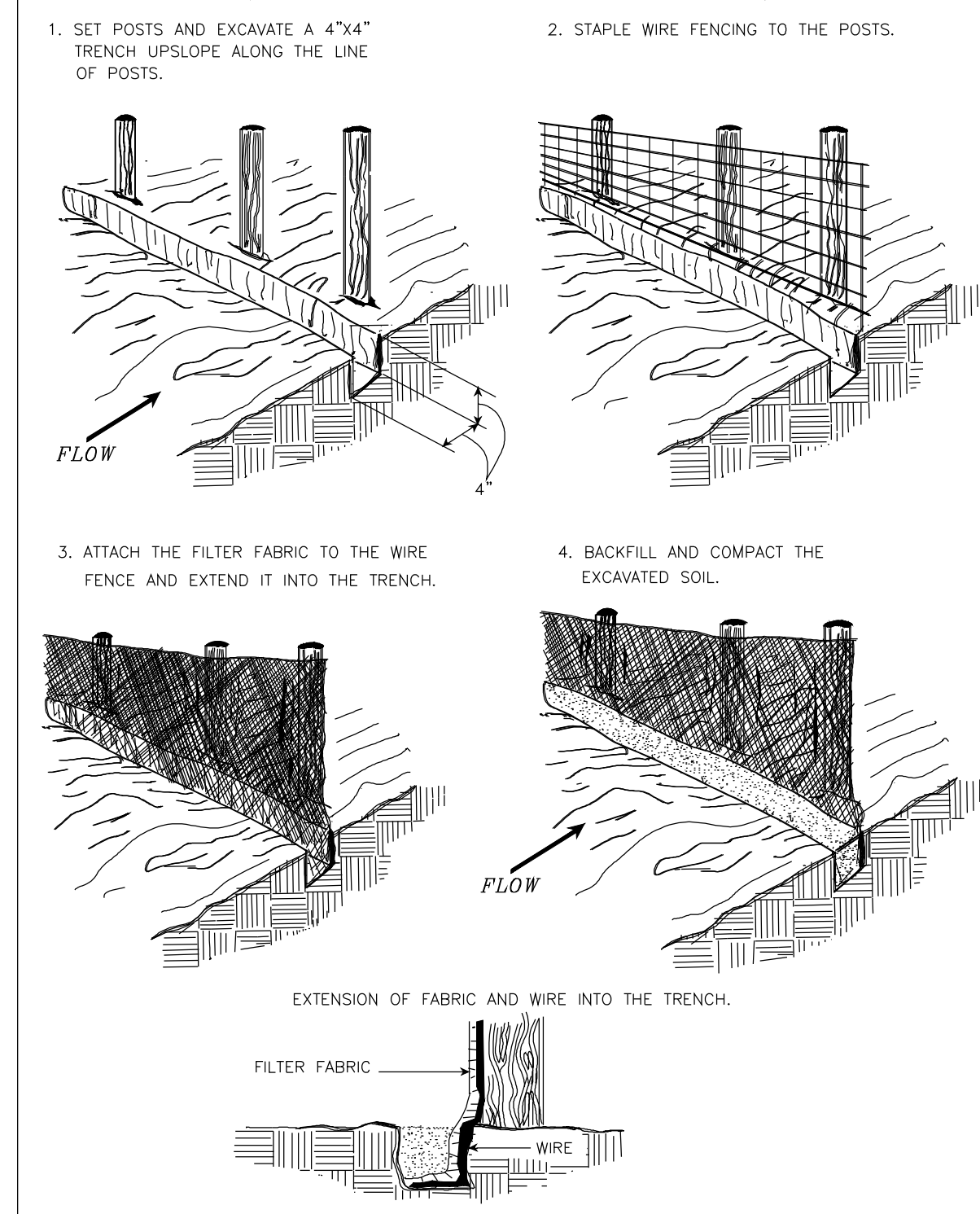
professional registration (type and number)

GRAVEL CURB INLET SEDIMENT FILTER



SOURCE: VA. DSWC PLATE 3.07-6

CONSTRUCTION OF A SILT FENCE (WITH WIRE SUPPORT)



SOURCE: ADAPTED FROM INSTALLATION OF STRAW AND FABRIC FILTER BARRIERS FOR SEDIMENT CONTROL. PLATE 3.05-1 Sherwood & Nyant

21-DPR-ITB-639

Project Name and Location
Towers Park Playground Renovations
By Right (County Project)

801 SOUTH SCOTT STREET
ARLINGTON, VA 22204

Sheet Title
EROSION AND SEDIMENT CONTROL DETAILS

100% Construction Drawings

Approval _____ Date _____

Design Manager _____

Revisions _____ Date _____

Designed: cmb
Drawn: KRF
Checked: cmb

Filename: C-07-C-08-CE05-150396021.dwg

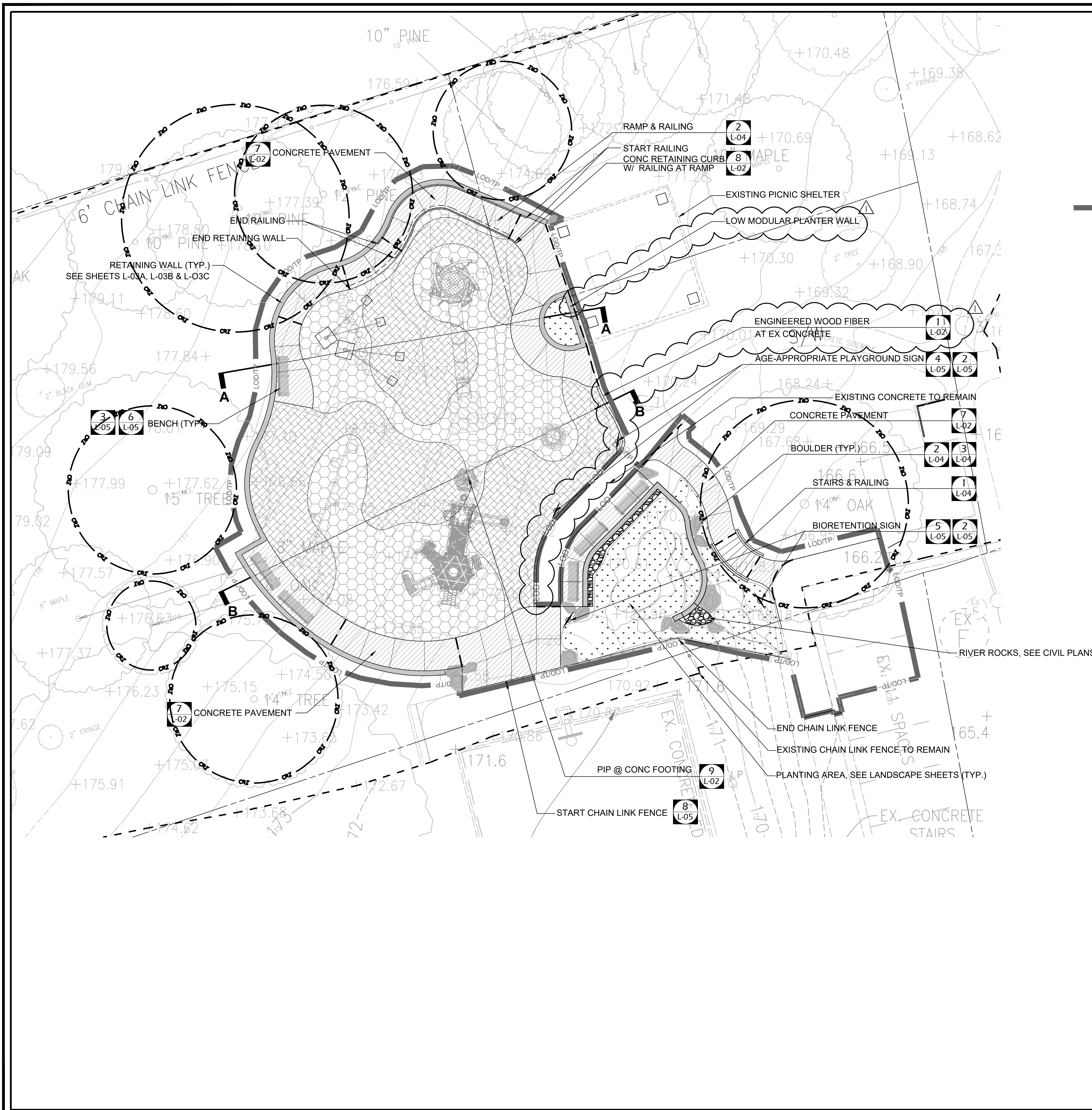
Plotted: 2019-12-17

Scale: N/A

Date: December 16, 2019

Seal
Professional Engineer
J. KEITH SINCLAIR, JR.
Lic. No. 11195
Digital Verified by Jefferson Keiser, Jr.
Date: 2019-12-16 15:53:24-05:00

Sheet **C-08**



LEGEND

DETAIL # SHEET #

POURED-PLAY SAFETY SURFACE

ENGINEERED WOOD FIBER PLAY SURFACE

PLANTING

PROPERTY LINE

LOD/TP LIMITS OF DISTURBANCE / TREE PROTECTION FENCE

LOD LIMITS OF WORK

4 L-02

5 L-02

6 L-02

1 L-02

2 L-02

2 L-04

2 L-05

1 L-04

2 L-05

2 L-04

3 L-04

1 L-04

5 L-05

2 L-05

7 L-02

2 L-04

3 L-04

1 L-04

9 L-02

8 L-05

NOTES:

1. FINAL LOCATION OF ALL SITE FURNISHINGS SHALL BE APPROVED BY LANDSCAPE ARCHITECT BEFORE INSTALLATION.
2. PROVIDE EXPANSION JOINTS WHERE PROPOSED CONSTRUCTION MEETS EXISTING.
3. SEE SHEET L-01 FOR PLAY EQUIPMENT INFORMATION.
4. SEE SHEETS LF-01 THROUGH LF-04 FOR TREE PRESERVATION INFORMATION.
5. SEE SHEETS L-06 & L-07 FOR LANDSCAPE CONSERVATION INFORMATION.
6. SEE SHEET C-09B FOR SECTIONS AA, BB & CC.
7. SEE SHEET L-02 SECTION DD.



DEPARTMENT OF PARKS AND RECREATION

Park Development Division
2100 Clarendon Boulevard, Suite 414
Arlington, VA 22201
Phone: 703.228.3332
Fax: 703.228.3328

21-DPR-ITB-639

Project Name and Location
TOWERS PARK PLAYGROUND RENOVATIONS

801 S Scott St
Arlington, VA 22204

Sheet Title
SITE & MATERIALS PLAN

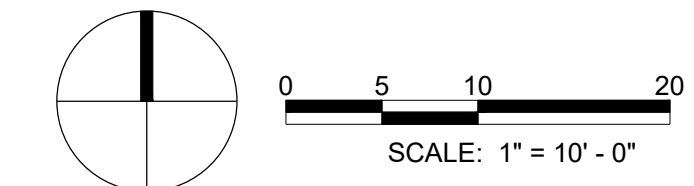
Approval Date
DESIGN SUPERVISOR DS_DATE
Design Supervisor

Revisions Date
ADD CURB LINE 6/15/21 & ADD CALLOUTS

Designed:
Drawn:
Checked:
Filename: C-09A_SITE-MATERIAL.DWG
Plotted: Jun. 16, 21
Scale: 1"=10'-0"
Date: DECEMBER 20, 2019



Sheet
C-09AR
No. 13 of 41



21-DPR-ITB-639

Project Name and Location

**TOWERS
PARK
PLAYGROUND
RENOVATIONS**

801 S Scott St
Arlington, VA 22204

Sheet Title

**LANDSCAPE
DESIGN
SECTIONS**

Approval _____ Date _____

Design Supervisor _____

Revisions _____ Date _____

1 REVISED SECTIONS 6/15/21

Designed: _____

Drawn: _____

Checked: _____

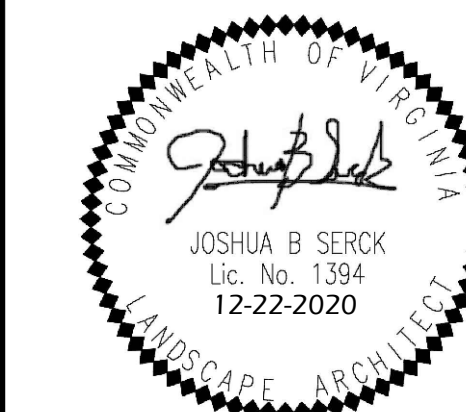
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Plotted: Jun. 15, 21

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Date: DECEMBER 20, 2019

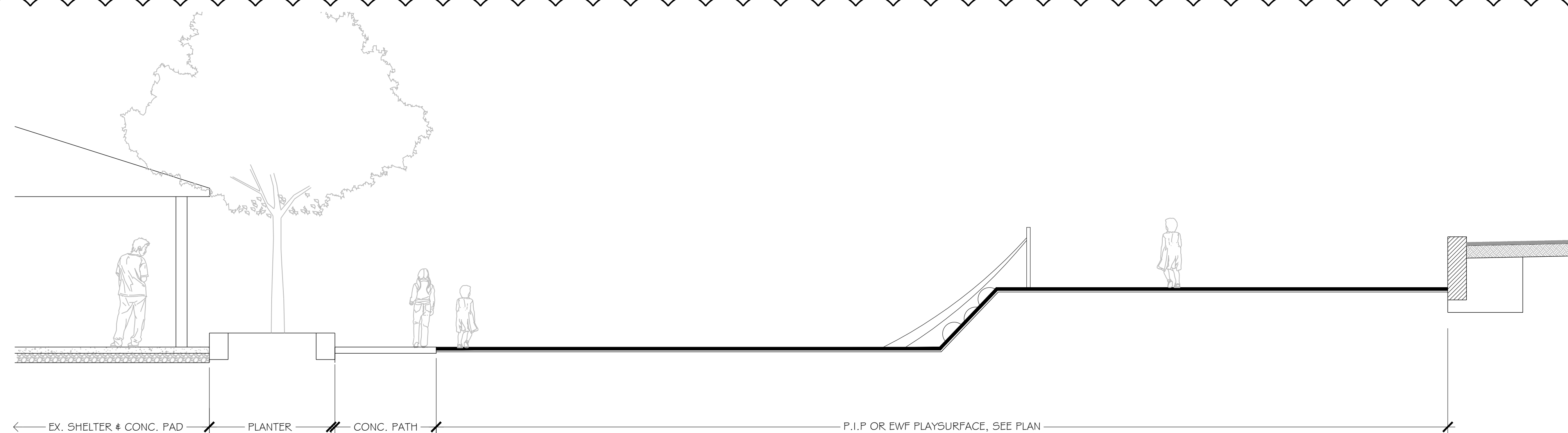
Seal



Sheet

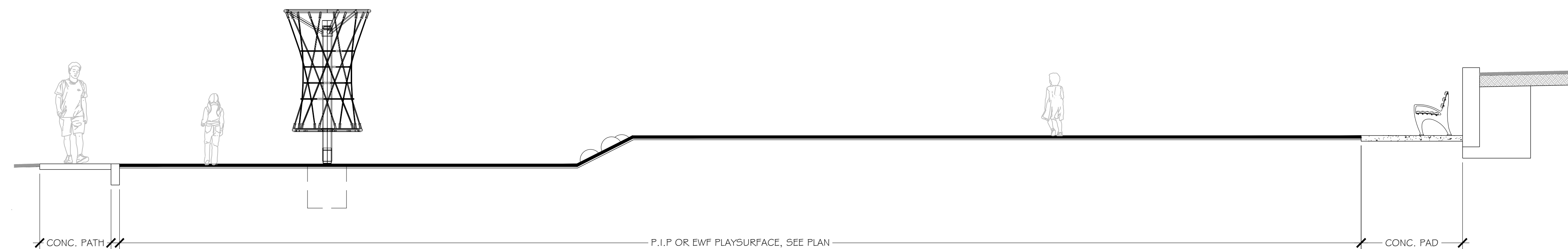
C-09BR

No. 14 of 40



1 SECTION A-A
C-09A

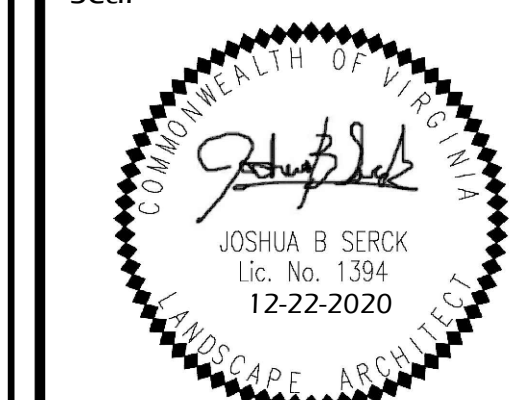
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2 SECTION B-B
C-09A

SCALE: 1/4" = 1'-0"

- NOTES:
- EQUIPMENT FOUNDATION SHOWN IN SECTIONS IS DIAGRAMATIC.
 - FOUNDATION OF ALL PLAY EQUIPMENT SHALL BE PROVIDED BY CONTRACTOR PER MANUFACTURES RECOMMENDATIONS.
 - FOR SITE GRADING REFERENCE. EQUIPMENT ELEVATION NOT SHOWN.



LAYOUT LEGEND

- P.C. POINT OF CURVATURE
- POINT OF BEGINNING (NORTHWEST CORNER OF EXISTING PICNIC SHELTER CONCRETE PAD)
- BOULDER - TO BE FIELD LOCATED BY LANDSCAPE ARCHITECT

POINT SCHEDULE

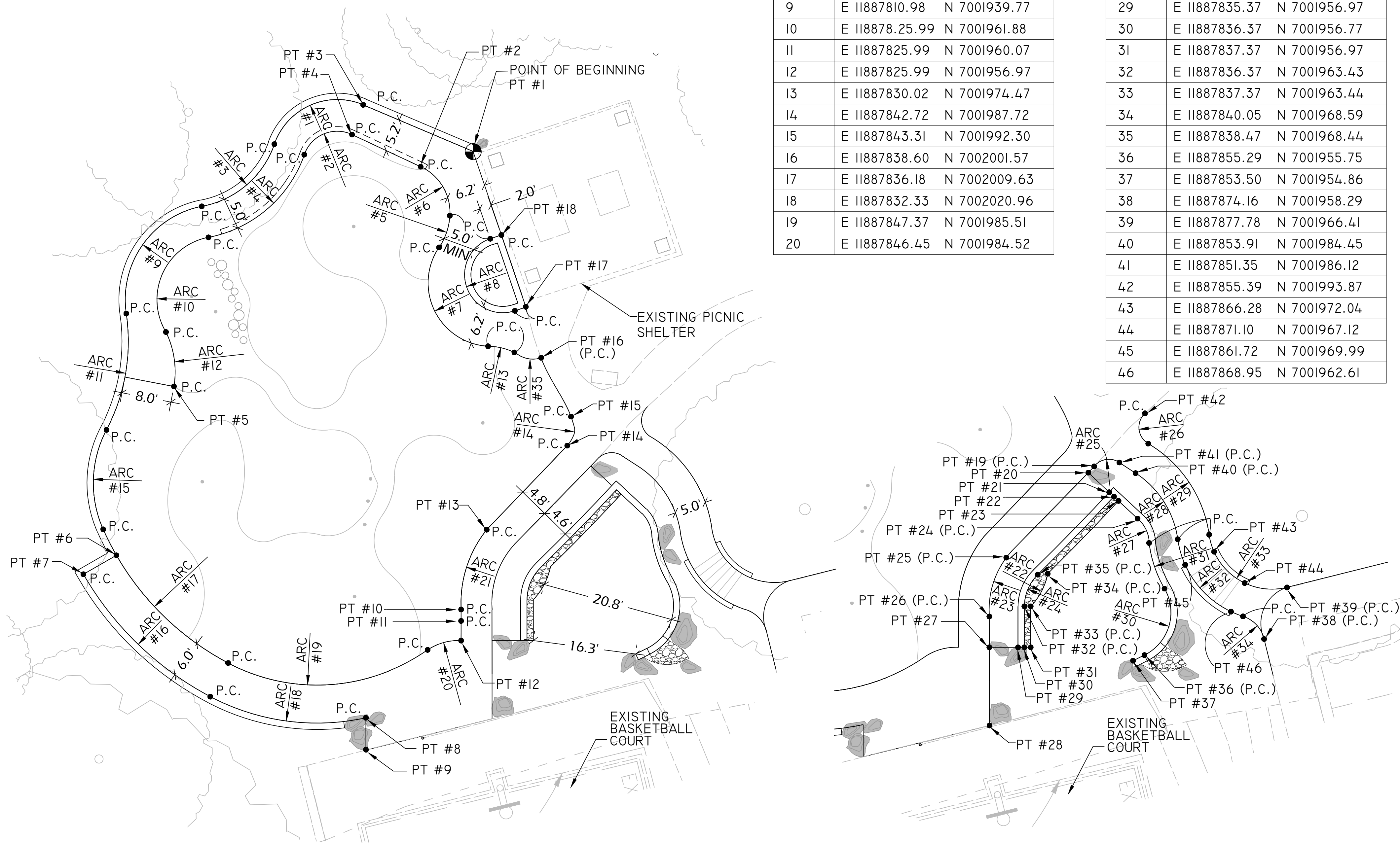
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4	E 11887808.79	N 7002036.78
5	E 11887780.71	N 7001997.06
6	E 11887771.64	N 7001970.43
7	E 11887766.44	N 7001967.44
8	E 11887810.98	N 7001944.79
9	E 11887810.98	N 7001939.77
10	E 118878.25.99	N 7001961.88
11	E 11887825.99	N 7001960.07
12	E 11887825.99	N 7001956.97
13	E 11887830.02	N 7001974.47
14	E 11887842.72	N 7001987.72
15	E 11887843.31	N 7001992.30
16	E 11887838.60	N 7002001.57
17	E 11887836.18	N 7002009.63
18	E 11887832.33	N 7002020.96
19	E 11887847.37	N 7001985.51
20	E 11887846.45	N 7001984.52

POINT SCHEDULE

POINT#	COORDINATES	
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24	E 11887854.22	N 7001977.27
25	E 11887833.52	N 7001971.12
26	E 11887830.86	N 7001961.83
27	E 11887830.86	N 7001956.97
28	E 11887830.89	N 7001944.65
29	E 11887835.37	N 7001956.97
30	E 11887836.37	N 7001956.77
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32	E 11887836.37	N 7001963.43
33	E 11887837.37	N 7001963.44
34	E 11887840.05	N 7001968.59
35	E 11887838.47	N 7001968.44
36	E 11887855.29	N 7001955.75
37	E 11887853.50	N 7001954.86
38	E 11887874.16	N 7001958.29
39	E 11887877.78	N 7001966.41
40	E 11887853.91	N 7001984.45
41	E 11887851.35	N 7001986.12
42	E 11887855.39	N 7001993.87
43	E 11887866.28	N 7001972.04
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45	E 11887861.72	N 7001969.99
46	E 11887868.95	N 7001962.61

CURVE SCHEDULE

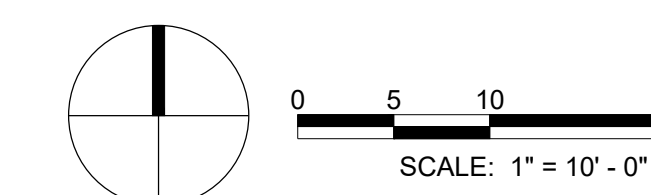
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4	20.00	20.89	E 11887782.38	N 7002040.21
5	10.00	5.34	E 11887814.22	N 7002024.59
6	8.00	9.55	E 11887816.21	N 7002024.47
7	10.00	21.10	E 11887830.23	N 7002013.39
8	5.13	21.84	E 11887831.70	N 7002014.46
9	15.00	22.92	E 11887788.04	N 7002010.76
10	10.00	27.38	E 11887788.04	N 7002010.76
11	30.00	18.93	E 11887743.53	N 7002004.16
12	14.34	8.80	E 11887766.56	N 7001999.36
13	13.66	11.72	E 11887829.48	N 7001989.77
14	3.60	5.02	E 11887840.28	N 7001990.36
15	18.00	16.24	E 11887786.01	N 7001981.82
16	50.08	28.18	E 11887809.84	N 7001992.41
17	44.08	29.39	E 11887809.84	N 7001992.41
18	36.00	25.26	E 11887803.27	N 7001979.96
19	30.00	26.19	E 11887803.27	N 7001979.96
20	8.74	5.55	E 11887824.60	N 7001950.14
21	18.38	13.53	E 11887844.36	N 7001962.94
22	10.53	5.88	E 11887829.73	N 7001970.69
23	13.70	11.23	E 11887844.51	N 7001962.94
24	7.00	5.57	E 11887843.36	N 7001963.44
25	3.00	4.20	E 11887849.71	N 7001983.61
26	3.00	5.57	E 11887857.43	N 7001991.68
27	2.00	4.00	E 11887850.74	N 7001993.27
28	15.00	12.75	E 11887845.70	N 7001971.89
29	20.00	17.87	E 11887845.70	N 7001971.89
30	7.50	12.27	E 11887851.97	N 7001962.47
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34	5.00	5.10	E 11887869.31	N 7001957.10
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LAYOUT NOTES

- NEW WORK SHALL MEET AND MATCH EXISTING ALIGNMENT OF FEATURES AND FINISHED GRADES AT EXISTING PAVEMENT OR OTHER FACILITIES TO REMAIN. THE CONTRACTOR SHALL MAKE ANY NECESSARY MINOR ADJUSTMENTS IN THE PROPOSED WORK TO MEET THE INTENT OF THE PLANS AND TO PROVIDE SMOOTH TRANSITIONS BETWEEN EXISTING CONDITIONS AND NEW WORK.
- THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS, SPOT ELEVATIONS AND EXISTING CONDITIONS IN THE FIELD AND SHALL BE RESPONSIBLE FOR PERFORMING THE WORK IN ACCORDANCE WITH THE SAME. CONTRACTOR SHALL NOTIFY PROJECT OFFICER OF ANY DISCREPANCIES, PRIOR TO COMMENCING WITH WORK.

- THE CONTRACTOR SHALL STAKE THE ALIGNMENT OF PAVEMENT, EDGING, WALKS, AND SITE FEATURES IN THE FIELD FOR APPROVAL BY THE PROJECT OFFICER PRIOR TO INSTALLATION. NO CHANGES SHALL BE MADE TO THE DESIGN OR LAYOUT OF THE PROJECT WITHOUT WRITTEN APPROVAL BY THE PROJECT OFFICER PRIOR TO INSTALLATION.
- LAYOUT OF PARK BENCHES, SIGNS, AND BOULDERS SHALL BE DETERMINED AND VERIFIED BY PROJECT OFFICER IN THE FIELD.





ARLINGTON VIRGINIA

DEPARTMENT OF PARKS AND RECREATION

Park Development Division
2100 Clarendon Boulevard, Suite 414
Arlington, VA 22201
Phone: 703.228.3332
Fax: 703.228.3328

21-DPR-ITB-639

Project Name and Location

TOWERS PARK PLAYGROUND RENOVATIONS

801 S Scott St
Arlington, VA 22204

Sheet Title

PLAY EQUIPMENT LAYOUT PLAN

100% CONSTRUCTION DRAWING

Approval _____ Date _____

Design Supervisor _____

Revisions _____ Date _____

Designed: _____

Drawn: _____

Checked: _____

Filename: C-10A-10B_LAYOUT.DWG

Plotted: May. 27, 21

Scale: 1"=10'-0"

Date: DECEMBER 20, 2019

Seal



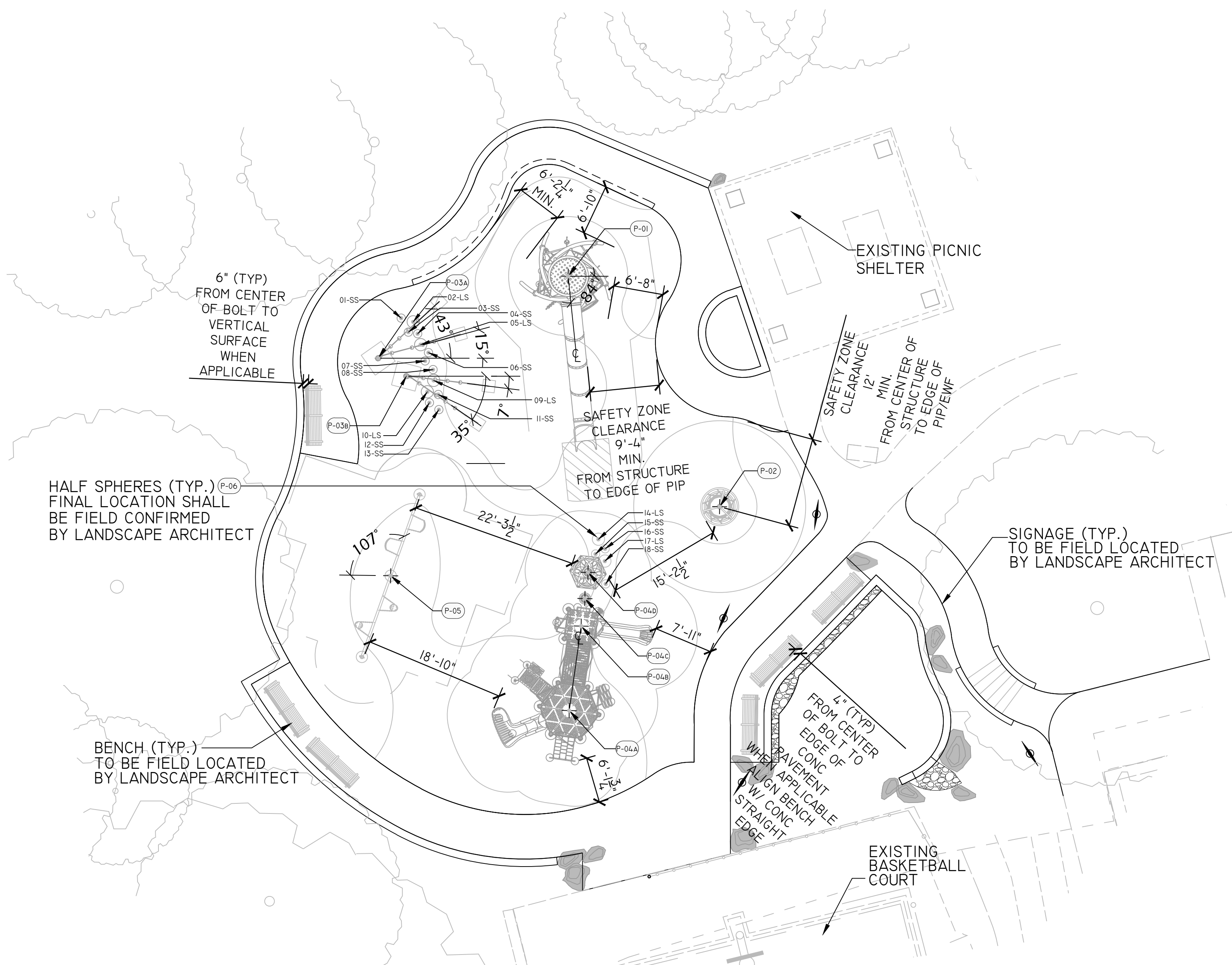
Sheet

C-10B

No. 16 of 40

POINT SCHEDULE		
POINT#	COORDINATES	
(P-01)	E 11887808.92	N 7002022.29
(P-02)	E 11887829.28	N 7001991.32
(P-03A)	E 11887783.39	N 7002011.27
(P-03B)	E 11887787.17	N 7002008.86
(P-04A)	E 11887809.06	N 7001963.92
(P-04B)	E 11887810.67	N 7001975.27
(P-04C)	E 11887811.17	N 7001978.98
(P-04D)	E 11887811.59	N 7001982.50
(P-05)	E 11887785.06	N 7001982.03
(P-06)	SEE HALF SPHERE CENTER SCHEDULE	

HALF SPHERE CENTER SCHEDULE		
HALF SPHERE #	HALF SPHERE CENTER POINT COORDINATES	
01-SS	E 11887786.47	N 7002016.64
02-LS	E 11887788.08	N 7002016.15
03-SS	E 11887787.44	N 7002014.77
04-SS	E 11887788.68	N 7002014.54
05-LS	E 11887789.08	N 7002013.09
06-SS	E 11887790.14	N 7002012.02
07-SS	E 11887789.69	N 7002010.90
08-SS	E 11887790.74	N 7002009.74
09-LS	E 11887790.83	N 7002008.29
10-LS	E 11887789.99	N 7002006.74
11-SS	E 11887791.45	N 7002006.39
12-SS	E 11887790.26	N 7002005.28
13-SS	E 11887791.54	N 7002004.35
14-LS	E 11887812.97	N 7001986.93
15-SS	E 11887812.60	N 7001984.94
16-SS	E 11887813.88	N 7001985.66
17-LS	E 11887813.84	N 7001984.01
18-SS	E 11887813.97	N 7001980.93



SYMBOL	PLAY EQUIPMENT DESCRIPTION	MODEL NO.	MANUFACTURER	REMARKS	COLOR
(P-01)	SKY TWISTER	COR29900	KOMPAN	INSTALL PER MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS	TBD FROM MANUFACTURER'S FULL RANGE
(P-02)	NET TWISTER	COR203011	KOMPAN	INSTALL PER MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS	TBD FROM MANUFACTURER'S FULL RANGE
(P-03)	MOUNTAINEERING ROPES	COR880843	KOMPAN	INSTALL PER MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS	TBD FROM MANUFACTURER'S FULL RANGE
(P-04)	2-5 COMBO STRUCTURE	P020821-10E	PLAYSPEC	INSTALL PER MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS	TBD FROM MANUFACTURER'S FULL RANGE
(P-05)	SWINGS	ZZXX0818,0819,0265,0260	PLAYSPEC	INSTALL PER MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS	TBD FROM MANUFACTURER'S FULL RANGE
(P-06)	HALF SPHERES, 6X500MM, 12X345MM	SURI3367, SURI3366	KOMPAN	INSTALL PER MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS	TBD FROM MANUFACTURER'S FULL RANGE

LAYOUT NOTES

1. NEW WORK SHALL MEET AND MATCH EXISTING ALIGNMENT OF FEATURES AND FINISHED GRADES AT EXISTING PAVEMENT OR OTHER FACILITIES TO REMAIN. THE CONTRACTOR SHALL MAKE ANY NECESSARY MINOR ADJUSTMENTS IN THE PROPOSED WORK TO MEET THE INTENT OF THE PLANS AND TO PROVIDE SMOOTH TRANSITIONS BETWEEN EXISTING CONDITIONS AND NEW WORK.

2. THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS, SPOT ELEVATIONS AND EXISTING CONDITIONS IN THE FIELD AND SHALL BE RESPONSIBLE FOR PERFORMING THE WORK IN ACCORDANCE WITH THE SAME. CONTRACTOR SHALL NOTIFY PROJECT OFFICER OF ANY DISCREPANCIES, PRIOR TO COMMENCING WITH WORK.

3. THE CONTRACTOR SHALL STAKE THE ALIGNMENT OF PAVEMENT, EDGING, WALKS, AND SITE FEATURES IN THE FIELD FOR APPROVAL BY THE PROJECT OFFICER PRIOR TO INSTALLATION. NO CHANGES SHALL BE MADE TO THE DESIGN OR LAYOUT OF THE PROJECT WITHOUT WRITTEN APPROVAL BY THE PROJECT OFFICER PRIOR TO INSTALLATION.

4. LAYOUT OF PARK BENCHES, SIGNS, AND BOULDERS SHALL BE DETERMINED AND VERIFIED BY PROJECT OFFICER IN THE FIELD.

5. ALL HALF SPHERES TO BE LOCATED ON SLOPE AND TO BE CONFIRMED ONSITE BY LANDSCAPE ARCHITECT.





LAYOUT LEGEND

P.C. POINT OF CURVATURE

BOULDER - TO BE FIELD
LOCATED BY LANDSCAPE
ARCHITECT

NOTES:

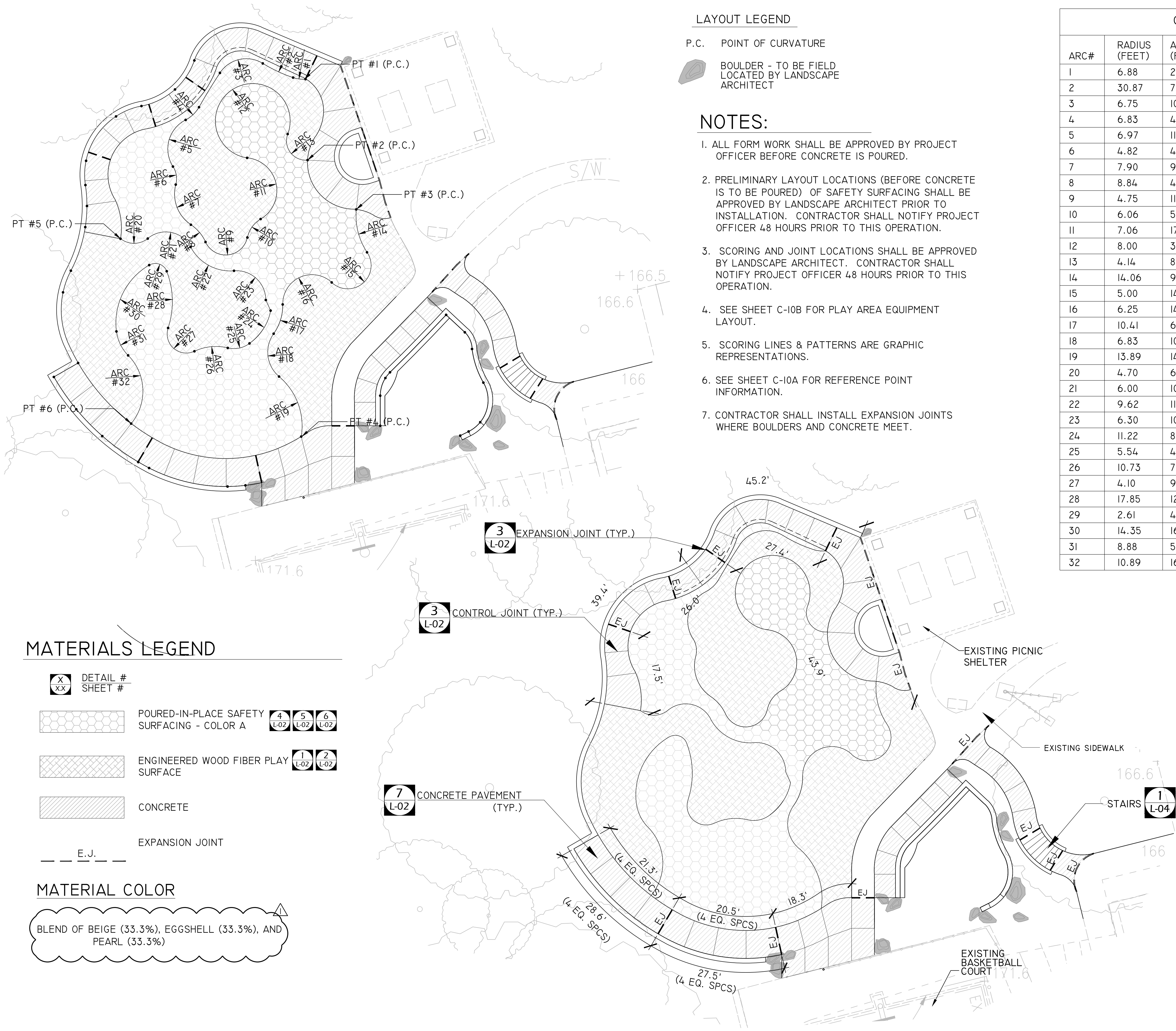
1. ALL FORM WORK SHALL BE APPROVED BY PROJECT OFFICER BEFORE CONCRETE IS POURED.
2. PRELIMINARY LAYOUT LOCATIONS (BEFORE CONCRETE IS TO BE POURED) OF SAFETY SURFACING SHALL BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. CONTRACTOR SHALL NOTIFY PROJECT OFFICER 48 HOURS PRIOR TO THIS OPERATION.
3. SCORING AND JOINT LOCATIONS SHALL BE APPROVED BY LANDSCAPE ARCHITECT. CONTRACTOR SHALL NOTIFY PROJECT OFFICER 48 HOURS PRIOR TO THIS OPERATION.
4. SEE SHEET C-10B FOR PLAY AREA EQUIPMENT LAYOUT.
5. SCORING LINES & PATTERNS ARE GRAPHIC REPRESENTATIONS.
6. SEE SHEET C-10A FOR REFERENCE POINT INFORMATION.
7. CONTRACTOR SHALL INSTALL EXPANSION JOINTS WHERE BOULDERS AND CONCRETE MEET.

CURVE SCHEDULE

ARC#	RADIUS (FEET)	ARC LENGTH (FEET)	CENTER POINT COORDINATES
1	6.88	2.69	E 11887819.86 N 7002038.13
2	30.87	7.18	E 11887827.42 N 7002060.89
3	6.75	10.42	E 11887807.66 N 7002028.89
4	6.85	4.01	E 11887791.59 N 7002028.61
5	6.97	11.68	E 11887797.82 N 7002016.29
6	4.82	4.02	E 11887787.90 N 7002009.91
7	7.90	9.82	E 11887800.18 N 7002006.62
8	8.84	4.92	E 11887790.88 N 7001992.70
9	4.75	11.89	E 11887803.26 N 7001998.31
10	6.06	5.01	E 11887813.83 N 7001996.06
11	7.06	17.70	E 11887807.13 N 7002007.35
12	8.00	39.37	E 11887809.05 N 7002022.29
13	4.14	8.37	E 11887820.42 N 7002018.03
14	14.06	9.67	E 11887845.23 N 7002001.95
15	5.00	14.63	E 11887829.41 N 7001991.32
16	6.25	14.61	E 11887821.73 N 7001983.10
17	10.41	6.67	E 11887805.07 N 7001982.78
18	6.83	10.18	E 11887819.08 N 7001972.74
19	13.89	14.34	E 11887805.73 N 7001956.90
20	4.70	6.30	E 11887783.61 N 7002000.76
21	6.00	10.72	E 11887790.43 N 7001992.50
22	9.62	11.24	E 11887804.25 N 7001999.78
23	6.30	10.40	E 11887805.56 N 7001983.92
24	11.22	8.57	E 11887801.86 N 7001983.77
25	5.54	4.91	E 11887805.01 N 7001979.05
26	10.73	7.32	E 11887801.15 N 7001963.24
27	4.10	9.57	E 11887794.80 N 7001976.64
28	17.85	12.41	E 11887773.99 N 7001983.60
29	2.61	4.51	E 11887788.18 N 7001989.15
30	14.35	16.78	E 11887794.09 N 7001979.00
31	8.88	5.82	E 11887788.66 N 7001978.31
32	10.89	16.04	E 11887774.61 N 7001964.39

POINT SCHEDULE

POINT#	COORDINATES
1	E 11887820.22 N 7002031.26
2	E 11887820.67 N 7002013.91
3	E 11887831.11 N 7002003.34
4	E 11887819.31 N 7001954.66
5	E 11887780.59 N 7001997.06
6	E 11887782.87 N 7001957.45



MATERIALS LEGEND

DETAIL #
SHEET #

POURED-IN-PLACE SAFETY SURFACING - COLOR A

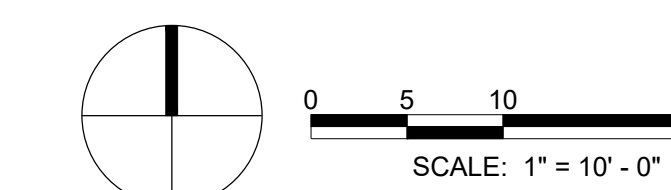
ENGINEERED WOOD FIBER PLAY SURFACE

CONCRETE

EXPANSION JOINT
E.J.

MATERIAL COLOR

BLEND OF BEIGE (33.3%), EGGSHELL (33.3%), AND PEARL (33.3%)



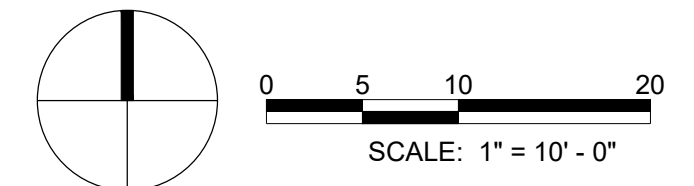
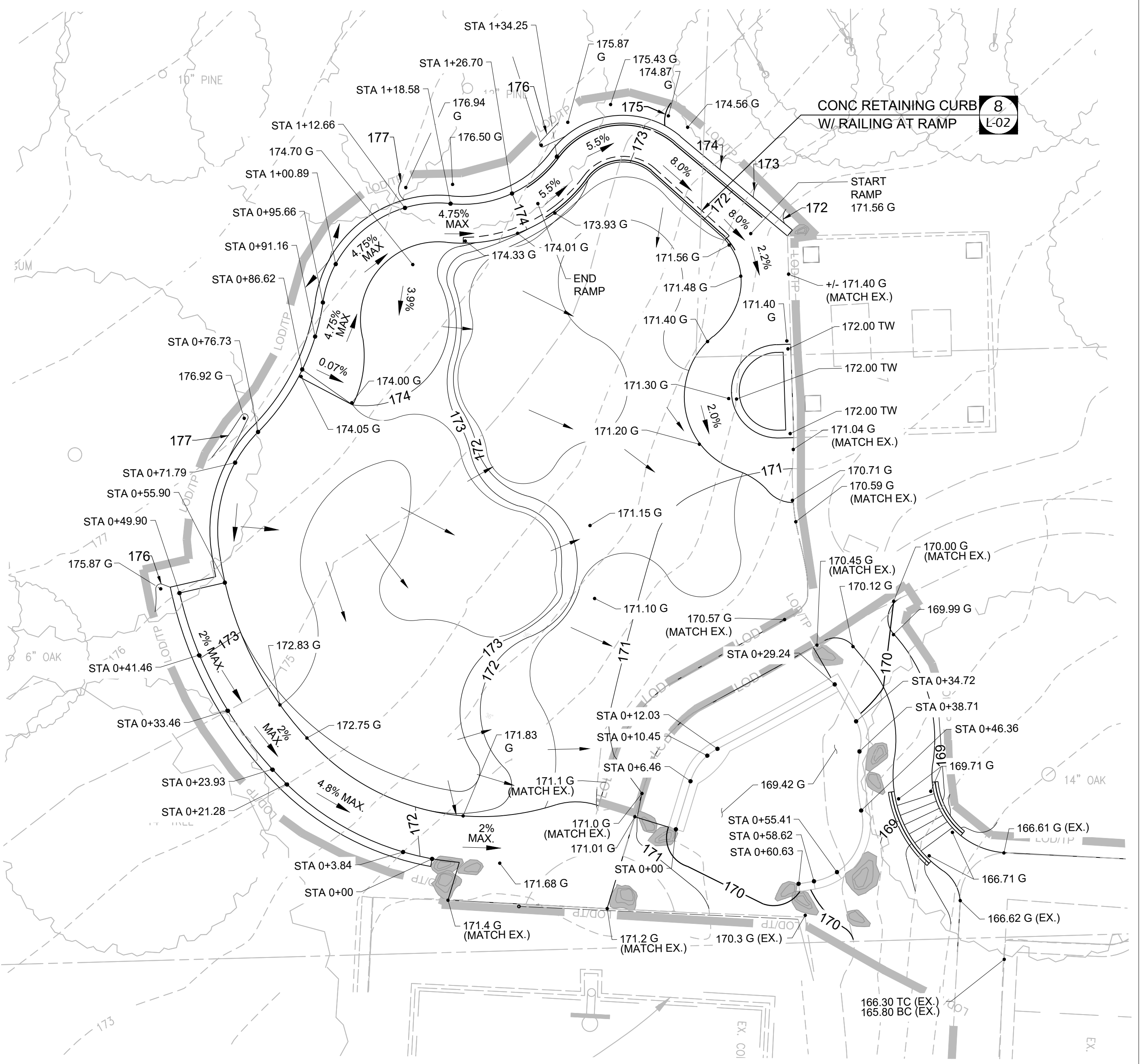


GRADING LEGEND

- PROPERTY LINE
- - - 173 - - - EXISTING MINOR CONTOUR
- - - 175 - - - EXISTING MAJOR CONTOUR
- 173 — PROPOSED MINOR CONTOUR
- 175 — PROPOSED MAJOR CONTOUR
- TW TOP OF WALL
- BW BOTTOM OF WALL
- G GRADE SPOT

GRADING AND ADA COMPLIANCE NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL ELEMENTS ARE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN DOCUMENTS AND CONTRACT CONDITIONS INCLUDING THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN (ADA) AND THE VIRGINIA ACCESSIBILITY CODE AND ANY UPDATES. IF THE CONTRACTOR OBSERVES THAT PORTIONS OF THE PROJECT ARE NON-COMPLIANT WITH THE ADA, HE SHALL NOTIFY ARLINGTON COUNTY PROJECT OFFICER SO THAT A FIELD ADJUSTMENT CAN BE MADE TO ENSURE COMPLIANCE. GRADE TOLERANCES SHALL BE MEASURED WITH A 2 FOOT DIGITAL LEVEL.
2. SEE SHEET C-13 FOR ADA ACCESS PLAN.
3. VERIFY ALL EXISTING AND PROPOSED GRADES PRIOR TO FINAL CONSTRUCTION. CONTRACTOR SHALL STAKE OUT GRADES IN THE FIELD FOR REVIEW BY ARLINGTON COUNTY PROJECT OFFICER AND LANDSCAPE ARCHITECT PRIOR TO FINAL CONSTRUCTION.
4. PROPOSED GRADING SHALL MEET EXISTING GRADE UNIFORMLY TO ENSURE A SMOOTH TRANSITION. NOTIFY ARLINGTON COUNTY CONSTRUCTION MANAGER IMMEDIATELY IF THERE ARE ANY EDGE CONDITIONS THAT CREATE AREAS WITHOUT POSITIVE DRAINAGE.
5. IN AREAS WHERE FULL DEPTH PAVEMENT AND THE MULCH PLAYGROUND IS DEMOLISHED, CONTRACTOR SHALL PROVIDE FILL TO BRING GRADES BACK TO EXISTING CONDITIONS AND IMMEDIATELY STABILIZE UPON COMPLETION. FINAL GRADES SHALL BE A MINIMUM OF 2% TO PROMOTE PROPER DRAINAGE. SEE SHEET C-07 FOR PERMANENT SEEDING SPECIFICATIONS.
6. ALL LONGITUDINAL SLOPES ALONG THE WALKS SHALL BE NO STEEPER THAN 4.8% WITHOUT RAILING AND 7.8% WITH RAILING. THE CROSS SLOPE SHALL BE MINIMUM 1% AND MAXIMUM 1.8% OR AS NOTED ON THE DRAWINGS. ALL LANDING AND TRANSITION AREAS SHALL BE LESS THAN 1.8% IN ALL DIRECTIONS. THESE LIMITS PROVIDE A 0.2% MARGIN FROM THE D.O.J. ADA REQUIREMENTS TO ALLOW FOR CONSTRUCTION TOLERANCES.
7. ANY HARDSCAPE SURFACE AREAS THAT ARE BUILT WITHOUT COMPLYING WITH THE ABOVE CODE MUST BE CORRECTED BY CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE COUNTY.
8. THE MAXIMUM VERTICAL CHANGE BETWEEN THE FINISH GRADES OF ADJACENT HARDSCAPE SURFACES IS 1/4". THE MAXIMUM HORIZONTAL GAP BETWEEN THE EDGES OF ADJACENT HARDSCAPE SURFACES IS 3/8".
9. PROPOSED BOTTOM OF WALL AS SHOWN INDICATES THE FINISH GRADE WHERE WALL INTERSECTS WITH HARDSCAPE OR SOFTSCAPE. SEE SHEET L-01 FOR FOOTER ELEVATIONS.
10. SEE SHEET L-03A, B, C FOR TOP OF WALL ELEVATIONS.



DEPARTMENT OF PARKS AND RECREATION

Park Development Division
2100 Clarendon Boulevard, Suite 414
Arlington, VA 22201
Phone: 703.228.3332
Fax: 703.228.3328

21-DPR-ITB-639

Project Name and Location

**Towers Park
Playground
Renovations**
By Right (County Project)

801 SOUTH SCOTT STREET
ARLINGTON, VA 22204

Sheet Title

**GRADING
PLAN**

100% Construction Drawings

Approval _____ Date _____

Design Manager _____

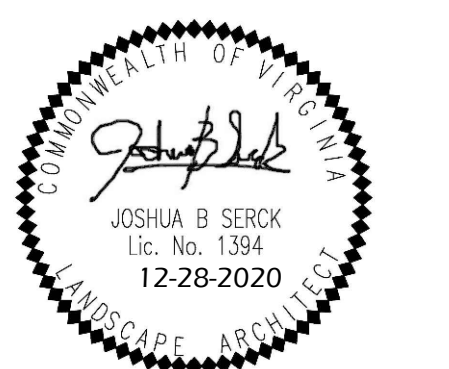
Revisions _____ Date _____

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Drawn: KRF
Checked: cMB

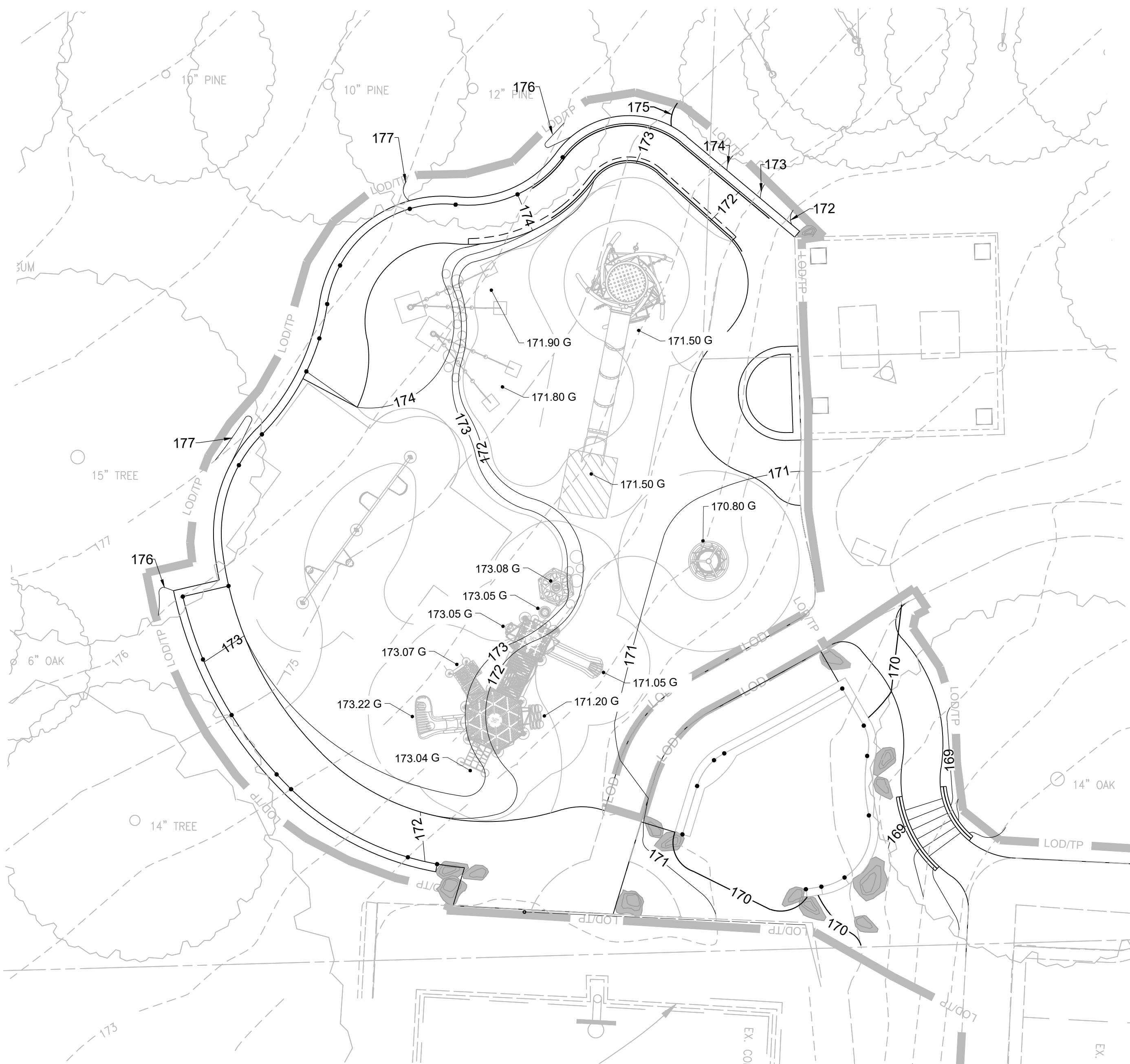
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Plotted: 2021-05-18

Scale: AS SHOWN
Date: MARCH 13, 2020

Seal



Sheet **C-11**



PLAY EQUIPMENT LANDING

GRADING LEGEND

- — — — — PROPERTY LINE
- - - - - 173 - - - - - EXISTING MINOR CONTOUR
- - - - - 175 - - - - - EXISTING MAJOR CONTOUR
- — — — — 173 ——— PROPOSED MINOR CONTOUR
- — — — — 175 ——— PROPOSED MAJOR CONTOUR
- TW ——— TOP OF WALL
- BW ——— BOTTOM OF WALL
- G ——— GRADE SPOT

GRADING AND ADA COMPLIANCE NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL ELEMENTS ARE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN DOCUMENTS AND CONTRACT CONDITIONS INCLUDING THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN (ADA) AND THE VIRGINIA ACCESSIBILITY CODE AND ANY UPDATES. IF THE CONTRACTOR OBSERVES THAT PORTIONS OF THE PROJECT ARE NON-COMPLIANT WITH THE ADA, HE SHALL NOTIFY ARLINGTON COUNTY PROJECT OFFICER SO THAT A FIELD ADJUSTMENT CAN BE MADE TO ENSURE COMPLIANCE. GRADE TOLERANCES SHALL BE MEASURED WITH A 2 FOOT DIGITAL LEVEL.
2. SEE SHEET C-13 FOR ADA ACCESS PLAN.
3. VERIFY ALL EXISTING AND PROPOSED GRADES PRIOR TO FINAL CONSTRUCTION. CONTRACTOR SHALL STAKE OUT GRADES IN THE FIELD FOR REVIEW BY ARLINGTON COUNTY PROJECT OFFICER AND LANDSCAPE ARCHITECT PRIOR TO FINAL CONSTRUCTION.
4. PROPOSED GRADING SHALL MEET EXISTING GRADE UNIFORMLY TO ENSURE A SMOOTH TRANSITION. NOTIFY ARLINGTON COUNTY CONSTRUCTION MANAGER IMMEDIATELY IF THERE ARE ANY EDGE CONDITIONS THAT CREATE AREAS WITHOUT POSITIVE DRAINAGE.
5. IN AREAS WHERE FULL DEPTH PAVEMENT AND THE MULCH PLAYGROUND IS DEMOLISHED, CONTRACTOR SHALL PROVIDE FILL TO BRING GRADES BACK TO EXISTING CONDITIONS AND IMMEDIATELY STABILIZE UPON COMPLETION. FINAL GRADES SHALL BE A MINIMUM OF 2% TO PROMOTE PROPER DRAINAGE. SEE SHEET C-07 FOR PERMANENT SEEDING SPECIFICATIONS.
6. ALL LONGITUDINAL SLOPES ALONG THE WALKS SHALL BE NO STEEPER THAN 4.8% WITHOUT RAILING AND 7.8% WITH RAILING. THE CROSS SLOPE SHALL BE MINIMUM 1% AND MAXIMUM 1.8% OR AS NOTED ON THE DRAWINGS. ALL LANDING AND TRANSITION AREAS SHALL BE LESS THAN 1.8% IN ALL DIRECTIONS. THESE LIMITS PROVIDE A 0.2% MARGIN FROM THE D.O.J. ADA REQUIREMENTS TO ALLOW FOR CONSTRUCTION TOLERANCES.
7. ANY HARDSCAPE SURFACE AREAS THAT ARE BUILT WITHOUT COMPLYING WITH THE ABOVE CODE MUST BE CORRECTED BY CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE COUNTY.
8. THE MAXIMUM VERTICAL CHANGE BETWEEN THE FINISH GRADES OF ADJACENT HARDSCAPE SURFACES IS 1/4". THE MAXIMUM HORIZONTAL GAP BETWEEN THE EDGES OF ADJACENT HARDSCAPE SURFACES IS 3/8".
9. PROPOSED BOTTOM OF WALL AS SHOWN INDICATES THE FINISH GRADE WHERE WALL INTERSECTS WITH HARDSCAPE OR SOFTSCAPE. SEE SHEET L-01 FOR FOOTER ELEVATIONS.
10. SEE SHEET L-03A, B, C FOR TOP OF WALL ELEVATIONS.

21-DPR-ITB-639

Project Name and Location

**Towers Park
Playground
Renovations**

By Right (County Project)

801 SOUTH SCOTT STREET
ARLINGTON, VA 22204

Sheet Title

**GRADING
PLAN-PLAY
EQUIPMENT
LANDING**

100% Construction Drawings

Approval _____ Date _____

Design Manager _____

Revisions _____ Date _____

Designed: CMB
Drawn: KRF
Checked: CMB

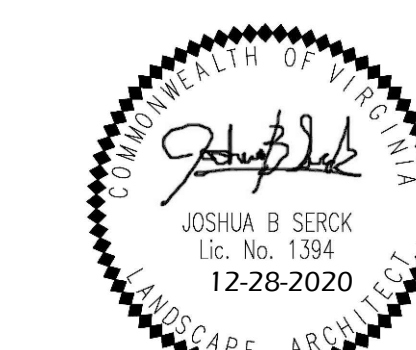
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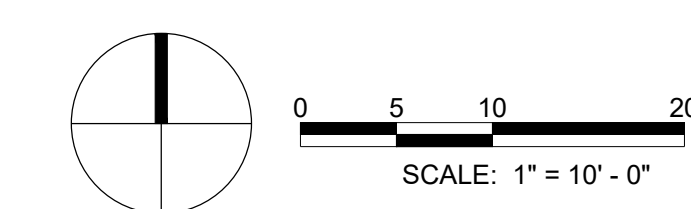
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Seal



Sheet **C-12**



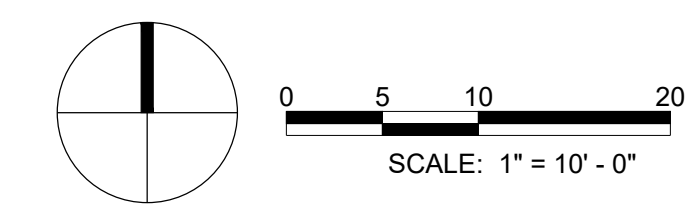


LEGEND

- ADA PLAY SURFACE
- ADA ACCESSIBLE WALKWAY
- PROPERTY LINE
- LOD/TP LIMITS OF WORK / TREE PROTECTION FENCE
- LOD LIMITS OF DISTURBANCE/WORK
- BOULDER
- ADA ACCESSIBLE ROUTE
- ADA ACCESSIBLE PLAY DESTINATION
- DESTINATION / ADA ACCESSIBLE SEATING

ADA NOTES:

1. ADA COMPLIANCE NOTE: THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL ELEMENTS ARE CONSTRUCTED IN ACCORDANCE WITH THE LATEST VERSION OF ADA STANDARDS FOR ACCESSIBLE DESIGN, BY THE DEPARTMENT OF JUSTICE. SHOULD ANY QUESTIONS ARISE DURING CONSTRUCTION, INSTALLATION, OR IF ANY CLARIFICATIONS ARE NEEDED, THE CONTRACTOR SHALL CONTACT THE COUNTY PROJECT OFFICER.
2. SEE GRADING PLANS FOR SPOT ELEVATIONS AND GENERAL NOTES.



DEPARTMENT OF PARKS AND RECREATION
 Park Development Division
 2100 Clarendon Boulevard, Suite 414
 Arlington, VA 22201
 Phone: 703.228.3332
 Fax: 703.228.3328

21-DPR-ITB-639

Project Name and Location
TOWERS PARK PLAYGROUND RENOVATIONS

801 S Scott St
 Arlington, VA 22204

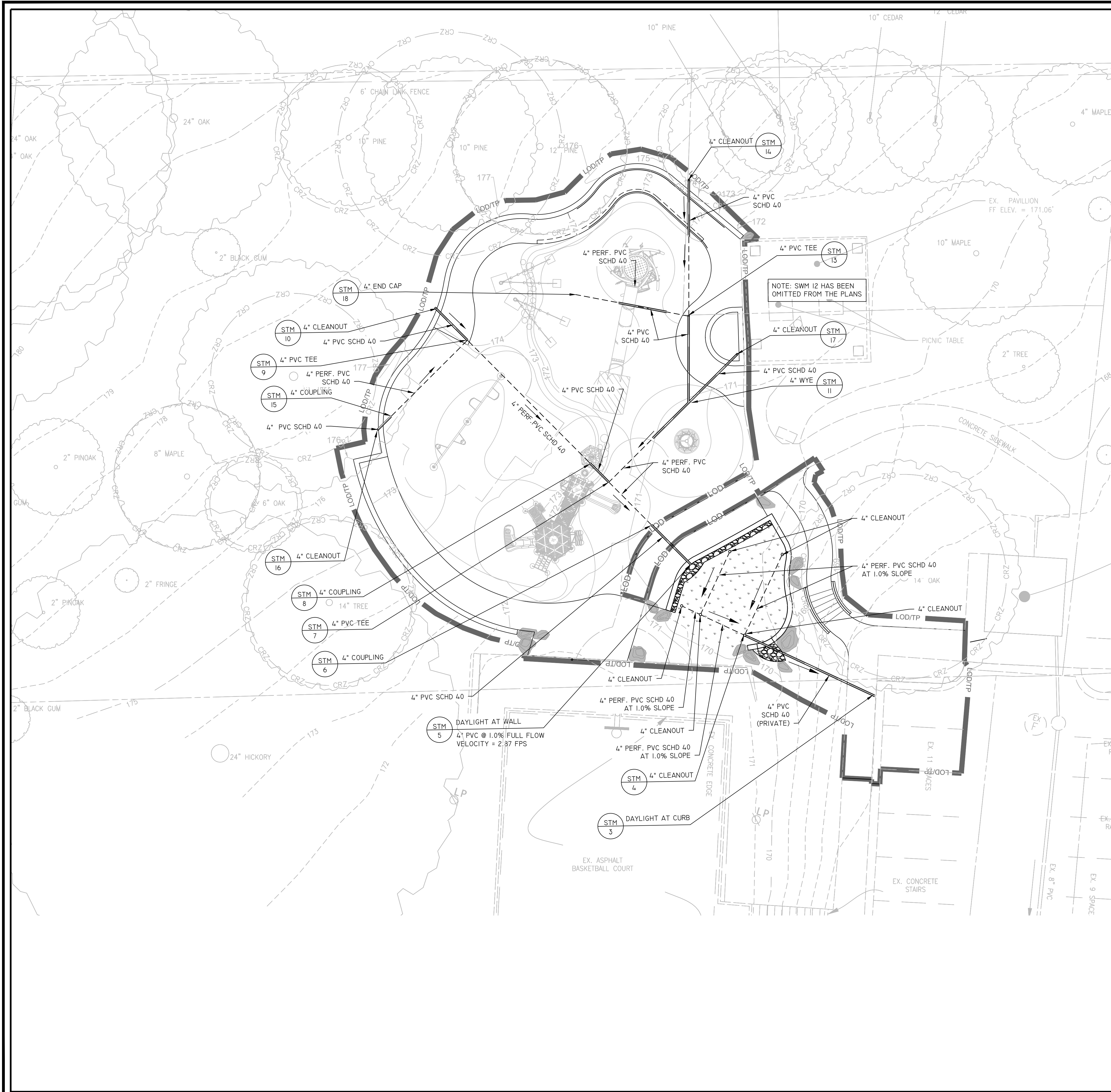
Sheet Title
ADA ACCESS PLAN

Approval	Date
Design Supervisor	
Revisions	Date

Designed:
 Drawn:
 Checked:
 Filename: C-13_ADA.DWG
 Plotted: May. 27, 21
 Scale: 1"=10'-0"
 Date: DECEMBER 20, 2019



Sheet
C-13
 No. 20 of 40



UTILITY LEGEND

SYMBOL	DESCRIPTION
---	PROPERTY LINE
— LOD/TP —	LIMITS OF DISTURBANCE/TREE PROTECTION FENCE
—	SOLID PVC PIPE
- - -	PERFORATED PVC PIPE
[Pattern]	URBAN BIORETENTION FACILITY
•	4" PVC CLEANOUT (DETAIL 3/C-21)
○ STM #	STORM SEWER STRUCTURE

NOTES:

1. LOCATION OF ALL UTILITIES SHOWN ARE APPROXIMATE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY AND DETERMINE THE EXACT LOCATION AND DEPTH OF ALL UTILITIES WITHIN THE LIMIT OF WORK PRIOR TO COMMENCING WORK. REPORT ANY DISCREPANCY TO THE PROJECT OFFICER. THE CONTRACTOR SHALL CONTACT MISS UTILITY AT 811 A MINIMUM OF 72 HOURS PRIOR TO ANY EXCAVATION TO DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES AND SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL EXISTING UTILITIES.
2. ALL NEW SITE DRAINAGE SYSTEMS SHALL BE TESTED IN THE PRESENCE OF THE PROJECT OFFICER PRIOR TO THE INSTALLATION OF BACKFILL MATERIAL.
3. FIELD VERIFY AND COORDINATE ALL PROPOSED LOCATIONS FOR EQUIPMENT, PIPE RUNS, AND SLOPES WITH EXISTING CONDITIONS PRIOR TO BEGINNING NEW WORK AS SHOWN. CONTRACTOR TO SLOPE PIPES APPROPRIATELY TO ENSURE POSITIVE DRAINAGE.
4. ALL PROPOSED STORM PIPE WITHIN AND UPSTREAM OF THE PROPOSED BIORETENTION FACILITY SHALL BE PRIVATELY MAINTAINED.



DEPARTMENT OF PARKS AND RECREATION
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21-DPR-ITB-639

Project Name and Location
Towers Park Playground Renovations
 By Right (County Project)

801 SOUTH SCOTT STREET
 ARLINGTON, VA 22204

Sheet Title
UTILITY PLAN

100% Construction Drawings

Approval _____ Date _____

Design Manager _____

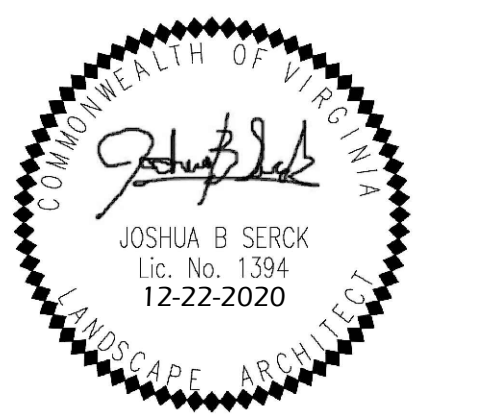
Revisions _____ Date _____

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 Drawn: KRF
 Checked: CMB

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 Plotted: 2021-05-17

Scale: 1" = 20'
 Date: MARCH 13, 2020

Seal



Sheet **C-14**

21-DPR-ITB-639

Project Name and Location
**Towers Park
Playground
Renovations**
By Right (County Project)

801 SOUTH SCOTT STREET
ARLINGTON, VA 22204

Sheet Title
**STORM SEWER
PROFILES**

100% Construction Drawings

Approval _____ Date _____

Design Manager _____

Revisions _____ Date _____

Designed: cmb
Drawn: krf
Checked: cmb

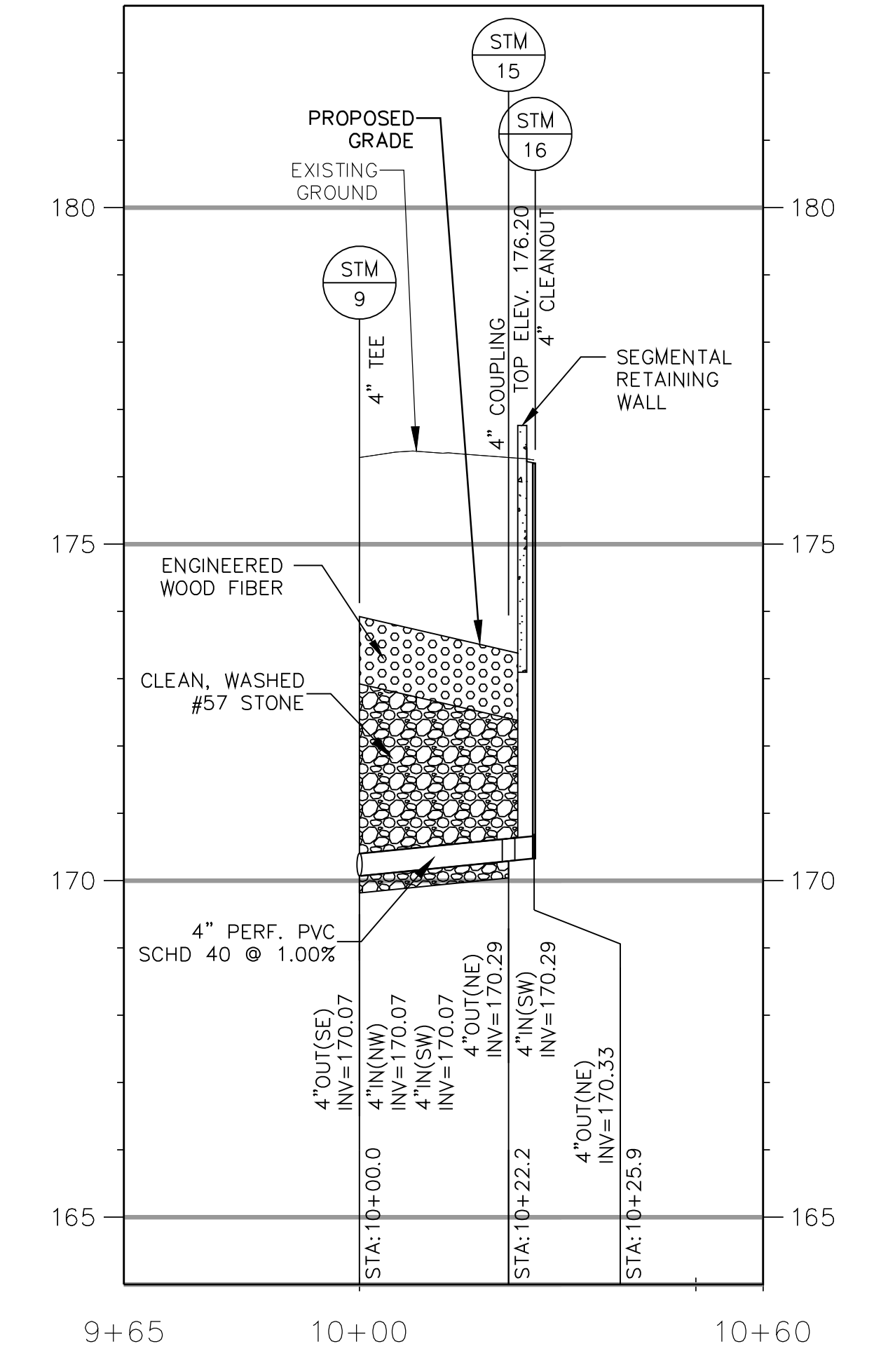
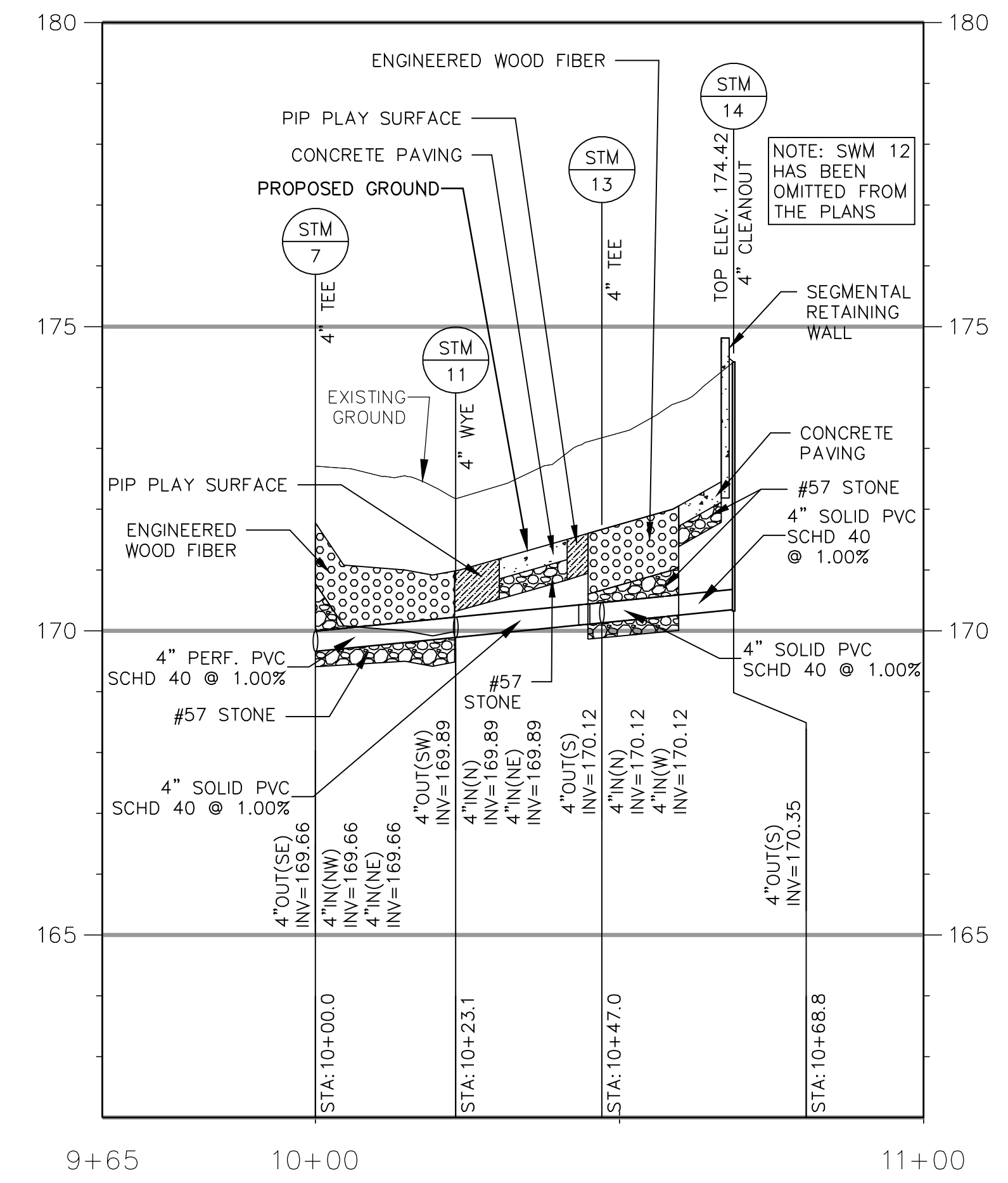
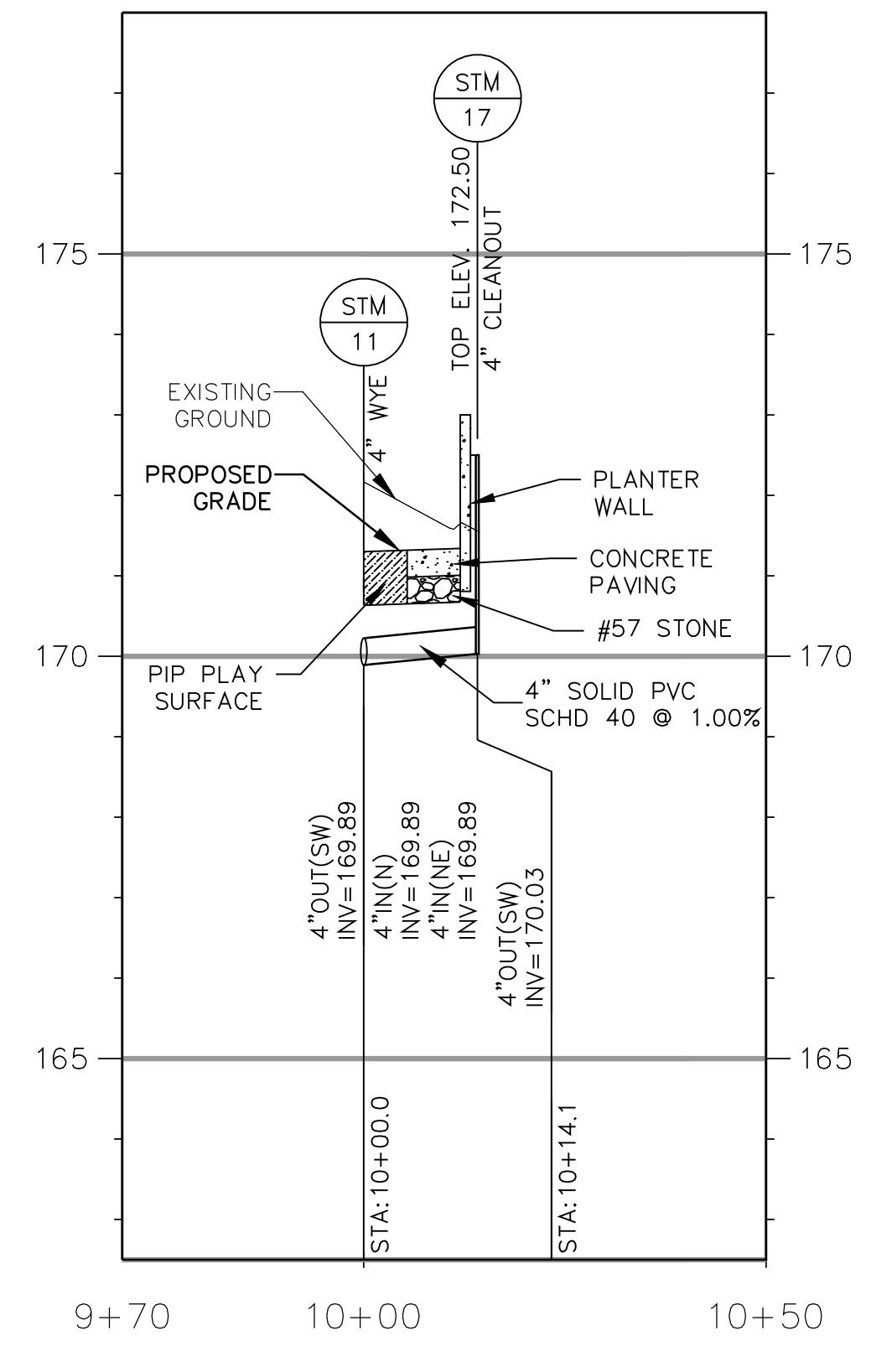
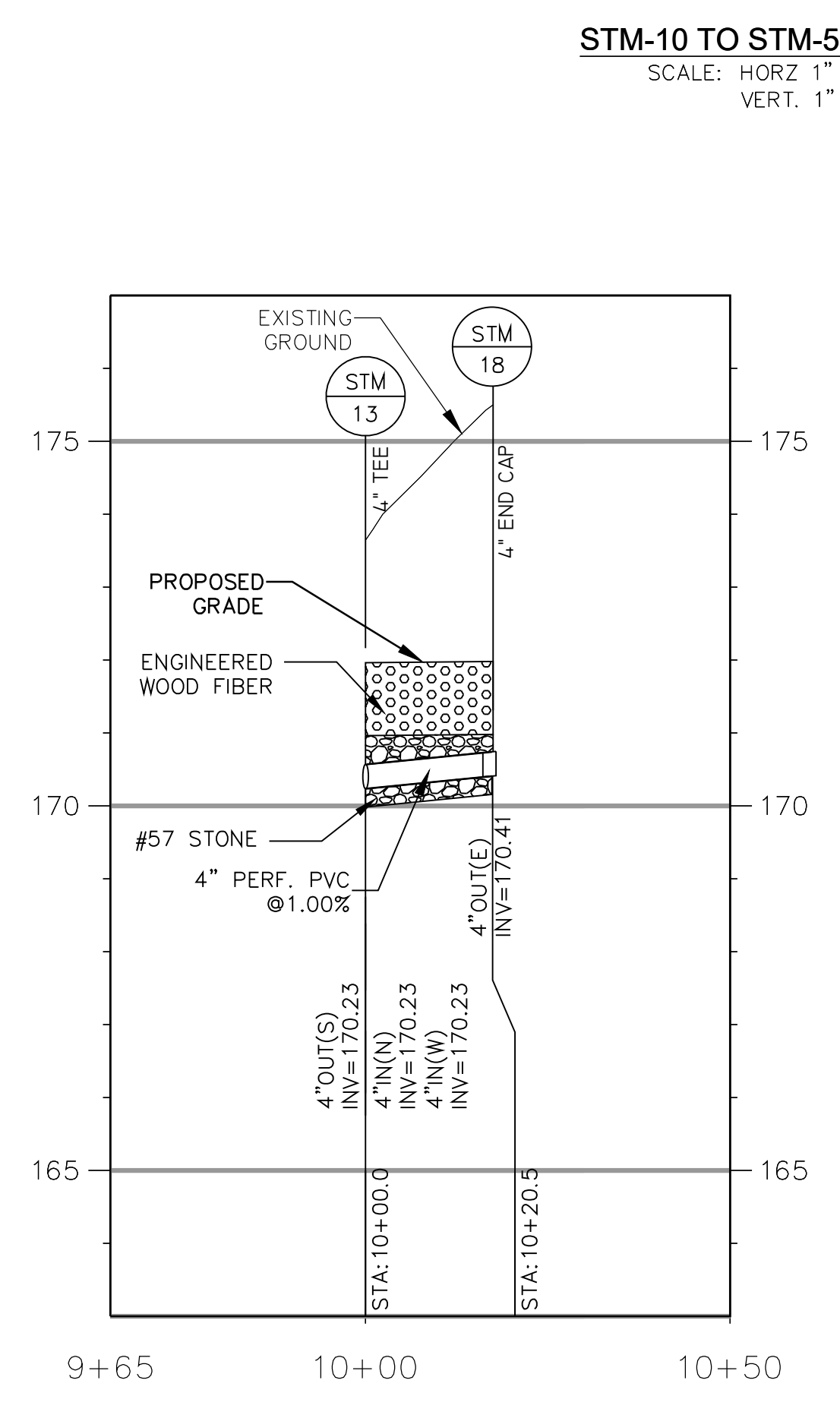
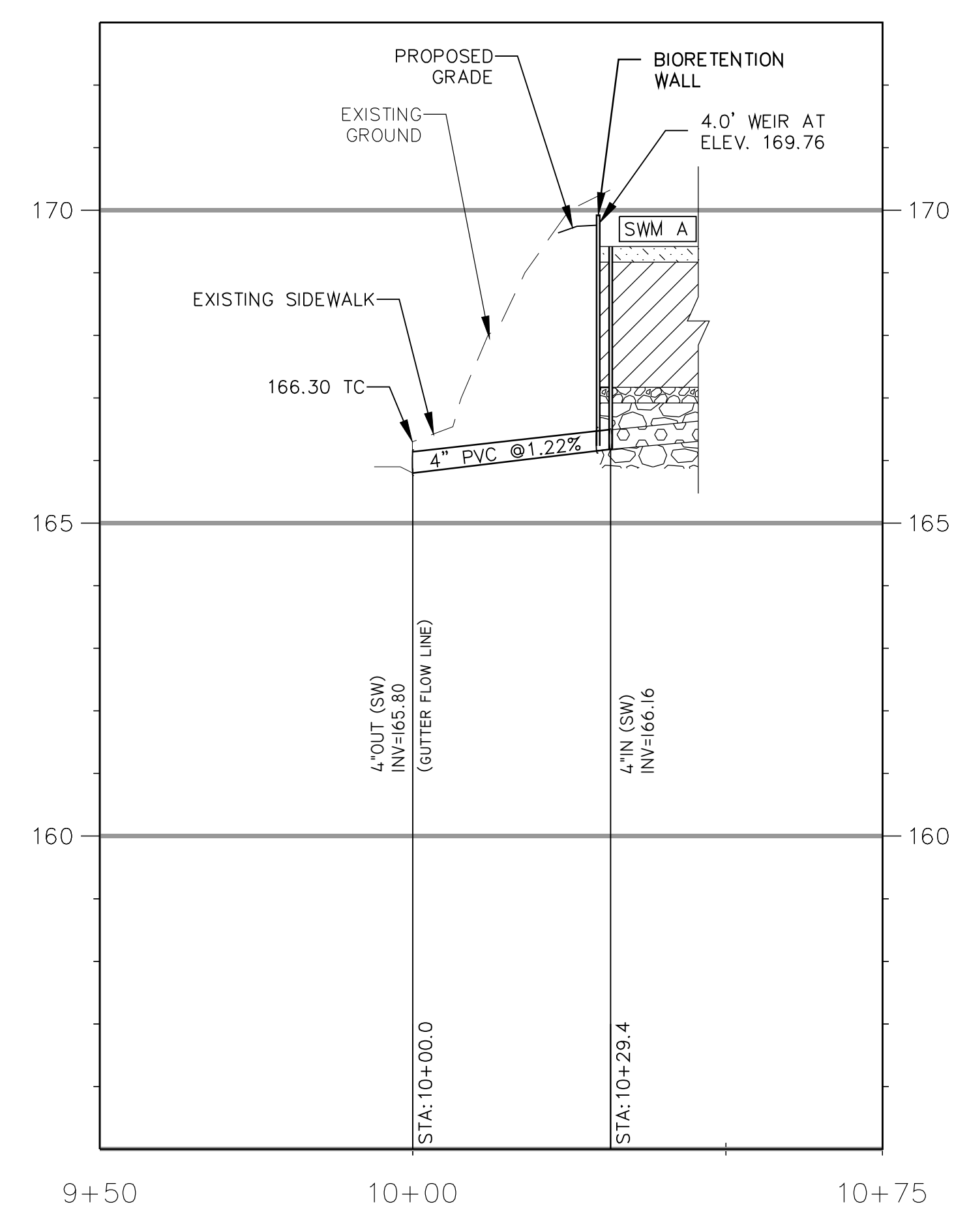
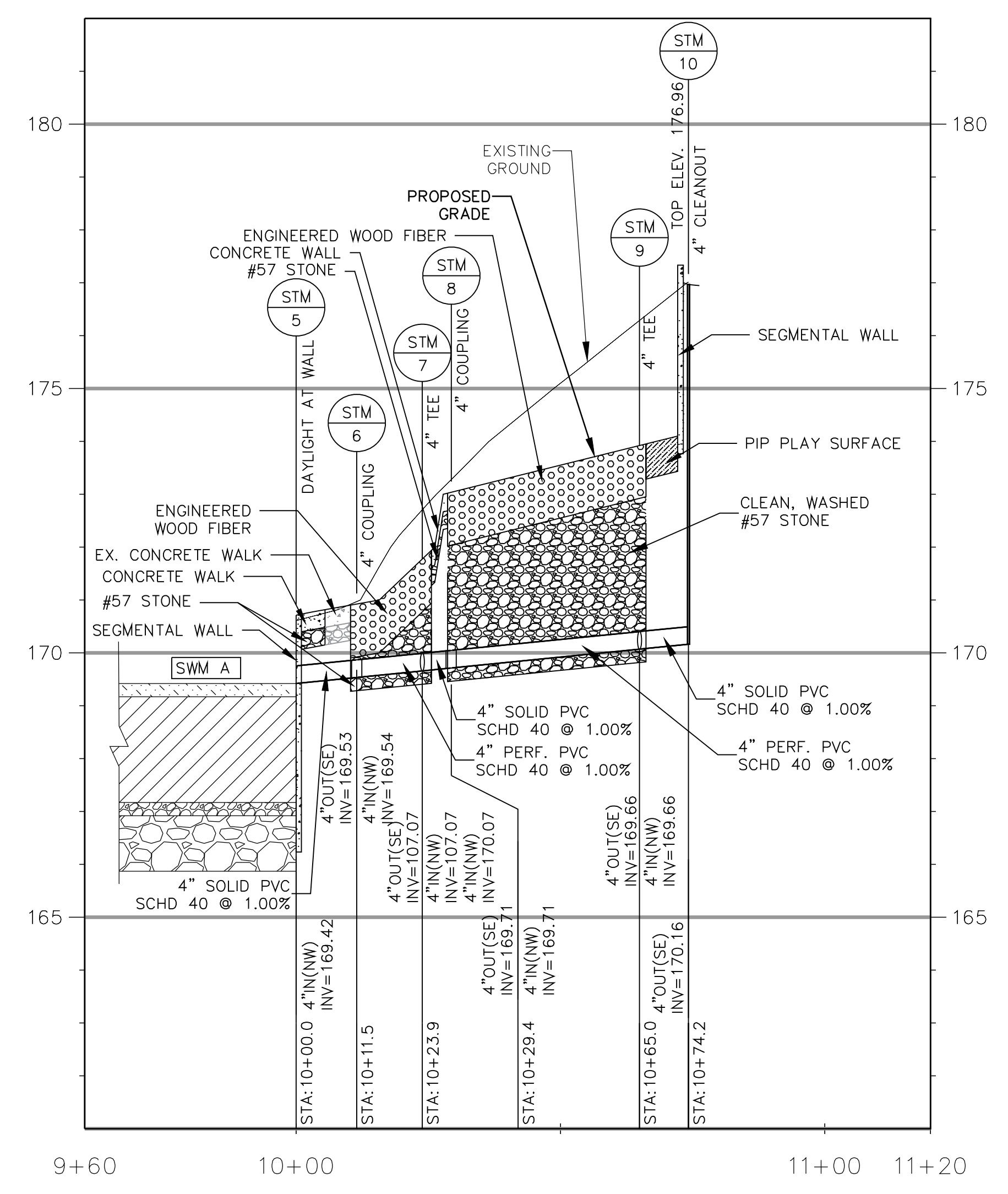
Filename: C-15-CU02-150396021.dwg
Plotted: 2020-12-23

Scale: AS SHOWN
Date: MARCH 13, 2020

Seal



Sheet **C-15**



21-DPR-ITB-639

Project Name and Location

Towers Park Playground Renovations
By Right (County Project)

801 SOUTH SCOTT STREET
ARLINGTON, VA 22204

Sheet Title

SOIL BORING LOGS

100% Construction Drawings

Approval _____ Date _____

Design Manager _____

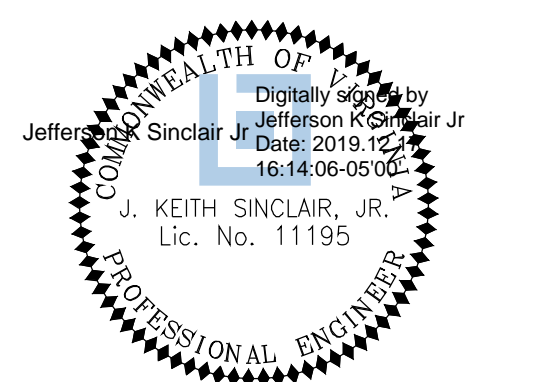
Revisions _____ Date _____

Designed: cmb
Drawn: KRF
Checked: cmb

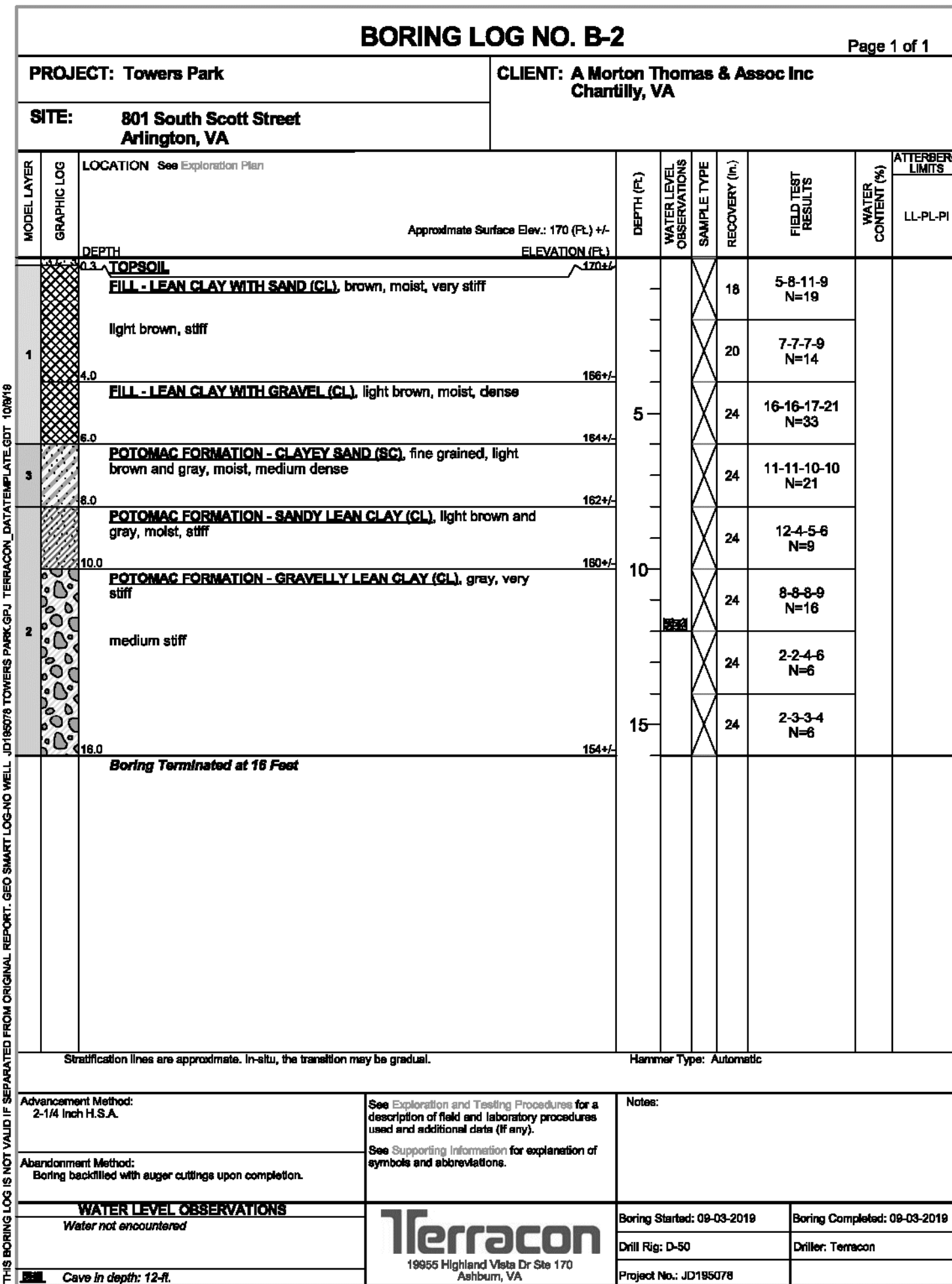
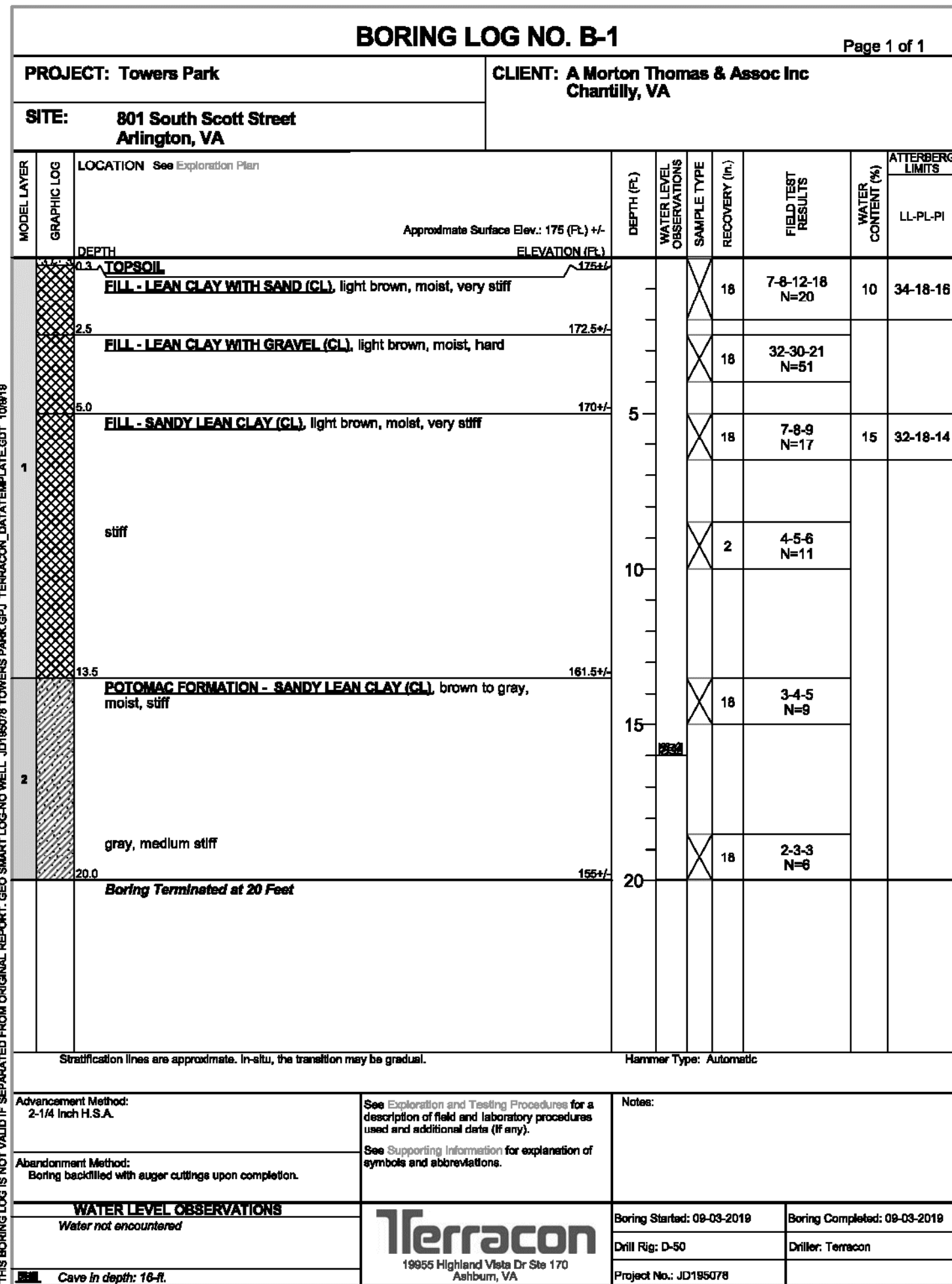
Filename: C-17-CU05-150396021.dwg
Plotted: 2019-12-17

Scale: 1" = 20'
Date: December 13, 2019

Seal



Sheet **C-16**



Test Boring No.	Approximate Test Depth (ft)	Approximate Test Elevation	Field Infiltration Rate (inches/hour)
IT-1	11	EL 160	0.5
IT-2	10	EL 160	0.2

Test Boring No.	Approximate Test Depth (ft)	USDA Soil Texture Classification	Estimated Infiltration Rate (inches/hour)
B-2	4-6	Loam	0.52
B-2	8-10	Loam	0.52



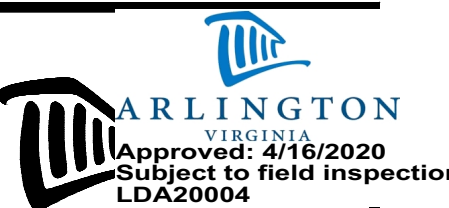
PRE-DEVELOPMENT WATER QUALITY LEGEND

SYMBOL	DESCRIPTION
	PROPERTY LINE
	RESOURCE PROTECTION AREA
	LIMITS OF DISTURBANCE/TREE PROTECTION FENCE - 15,344 SF (0.3523 AC)
	MANAGED TURF AREA - 13,916 SF (0.3195 AC)

NO EXISTING FORESTED AREA SHALL BE DISTURBED.

EXISTING IMPERVIOUS AREAS

MATERIAL	SURFACE AREA (SF)	LEGEND
CONCRETE PAVING	834	
ASPHALT PAVING	535	
TIMBER BORDER	58	
TOTAL AREA	1,427 (0.0328 AC)	
TOTAL IMPERVIOUS AREA IN RPA	584 (0.0134 AC)	



ARLINGTON VIRGINIA

DEPARTMENT OF PARKS AND RECREATION

Park Development Division
2100 Clarendon Boulevard, Suite 414
Arlington, VA 22201
Phone: 703.228.3332
Fax: 703.228.3328

21-DPR-ITB-639

Project Name and Location
Towers Park Playground Renovations
By Right (County Project)

801 SOUTH SCOTT STREET
ARLINGTON, VA 22204

Sheet Title
PRE-DEVELOPMENT WATER QUALITY PLAN

100% Construction Drawings

Approval _____ Date _____

Design Manager _____

Revisions _____ Date _____

Designed: CMB
Drawn: KRF
Checked: CMB

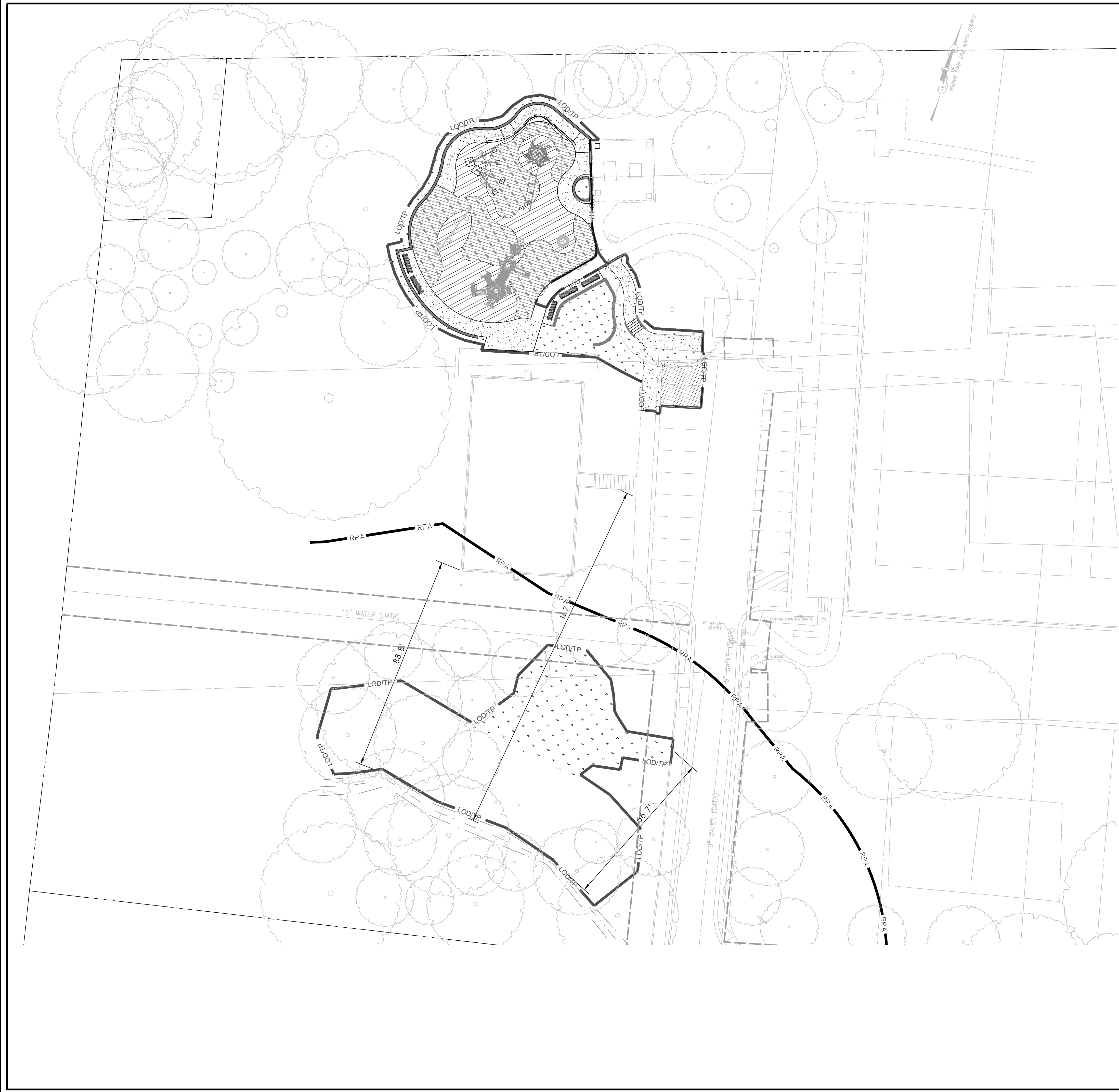
Filename: C-18-CQ01-150396021.dwg
Plotted: 2019-12-17

Scale: 1" = 20'
Date: December 17, 2019

Seal



Sheet **C-17**



POST-DEVELOPMENT WATER QUALITY LEGEND

SYMBOL	DESCRIPTION
	PROPERTY LINE
	RESOURCE PROTECTION AREA
	LIMITS OF DISTURBANCE - 15,344 SF (0.3523 AC)
	LIMITS OF DISTURBANCE/TREE PROTECTION FENCE
	TURF AREA - 4,025 SF (0.0924 AC) INCLUDING ENGINEERED WOOD FIBER - 6,087 SF (0.1397 AC)
	NEW FORESTED AREA - 4,650 SF (0.1068 AC)
	ENGINEERED WOOD FIBER - 2,062 SF (0.0473 AC)

NO EXISTING FORESTED AREA SHALL BE DISTURBED.

PROPOSED IMPERVIOUS AREAS

MATERIAL	SURFACE AREA (SF)	LEGEND
POUR-IN-PLACE PLAY SURFACE	2,116	
CONCRETE PAVING	1,933	
ASPHALT PAVING	288	
CONCRETE WALL AND CURB	270	
TOTAL AREA	4,607 (0.1058 AC)	
TOTAL IMPERVIOUS AREA IN RPA	0	



DEPARTMENT OF PARKS AND RECREATION
 Park Development Division
 2100 Clarendon Boulevard, Suite 414
 Arlington, VA 22201
 Phone: 703.228.3332
 Fax: 703.228.3328

21-DPR-ITB-639

Project Name and Location
**Towers Park
 Playground
 Renovations**
 By Right (County Project)

801 SOUTH SCOTT STREET
 ARLINGTON, VA 22204

Sheet Title
**POST-DEVELOPMENT
 WATER QUALITY
 PLAN**

100% Construction Drawings

Approval _____ Date _____

Design Manager _____

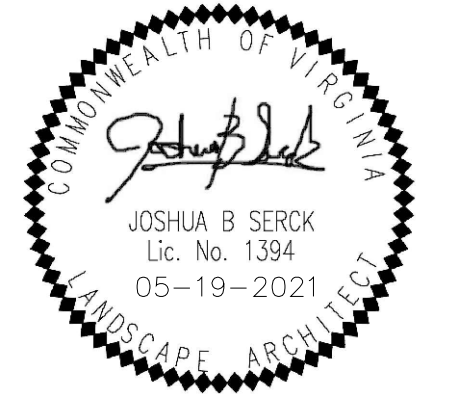
Revisions _____ Date _____

Designed: CMB
 Drawn: KRF
 Checked: CMB

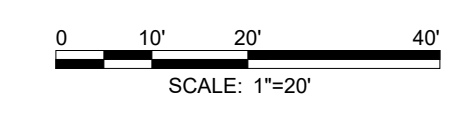
Filename: C-18-CQ11-150396021.dwg
 Plotted: 2021-05-19

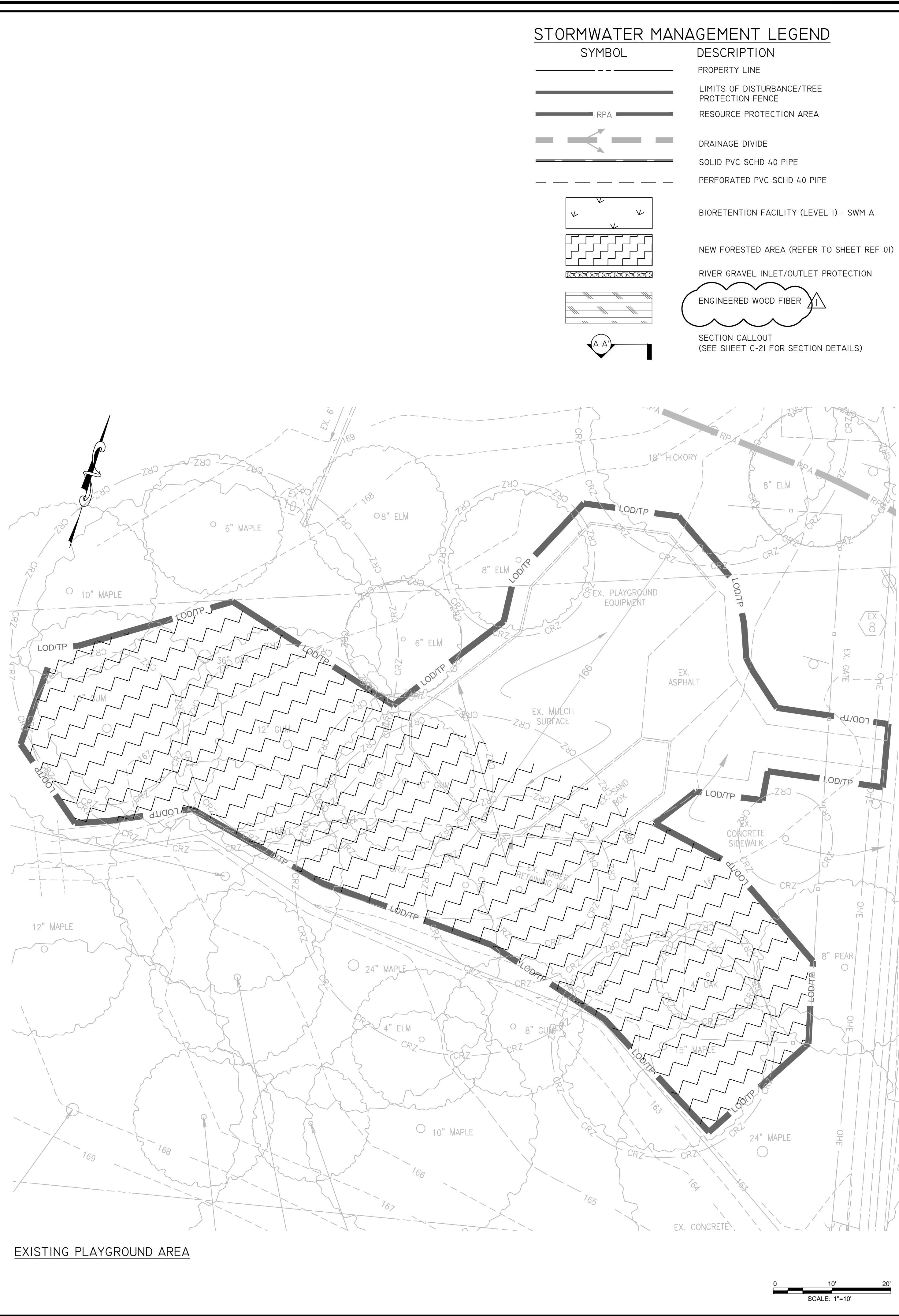
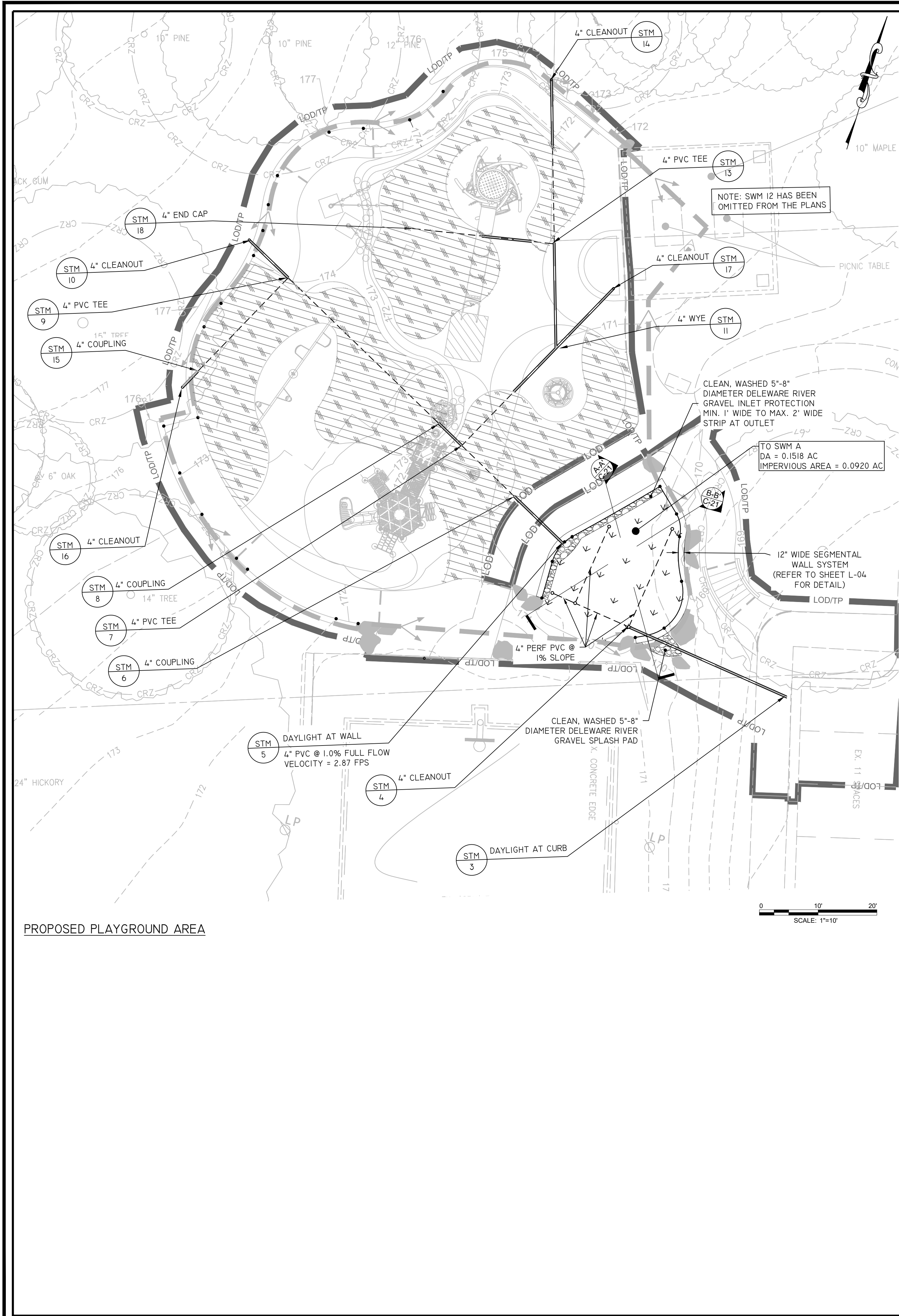
Scale: 1" = 20'
 Date: MARCH 13, 2020

Seal



Sheet **C-18**





STORMWATER MANAGEMENT LEGEND

SYMBOL	DESCRIPTION
---	PROPERTY LINE
---	LIMITS OF DISTURBANCE/TREE PROTECTION FENCE
---	RESOURCE PROTECTION AREA
---	DRAINAGE DIVIDE
---	SOLID PVC SCHD 40 PIPE
---	PERFORATED PVC SCHD 40 PIPE
---	BIORETENTION FACILITY (LEVEL I) - SWM A
---	NEW FORESTED AREA (REFER TO SHEET REF-01)
---	RIVER GRAVEL INLET/OUTLET PROTECTION
---	ENGINEERED WOOD FIBER
---	SECTION CALLOUT (SEE SHEET C-21 FOR SECTION DETAILS)



DEPARTMENT OF PARKS AND RECREATION
 Park Development Division
 2100 Clarendon Boulevard, Suite 414
 Arlington, VA 22201
 Phone: 703.228.3332
 Fax: 703.228.3328

21-DPR-ITB-639

Project Name and Location
**Towers Park
 Playground
 Renovations**
 By Right (County Project)

801 SOUTH SCOTT STREET
 ARLINGTON, VA 22204

Sheet Title
**STORMWATER
 MANAGEMENT
 PLAN**

100% Construction Drawings

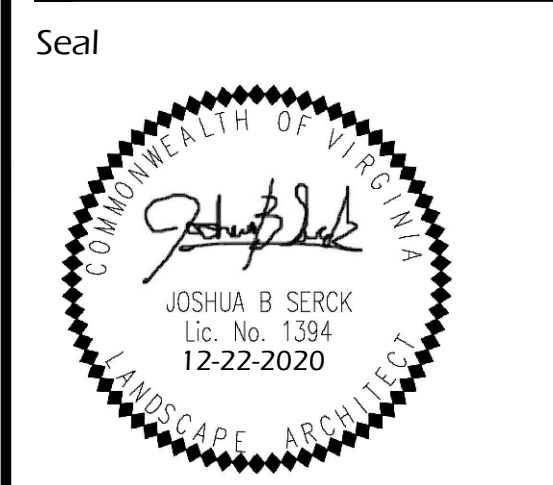
Approval _____ Date _____
 Design Manager _____

Revisions _____ Date _____
 REVISOR: _____ REVISED TEXT 6/15/21

Designed: CMB
 Drawn: KRF
 Checked: CMB

Filename: C-19-CW01-150396021.dwg
 Plotted: 2021-06-15

Scale: 1" = 20'
 Date: MARCH 13, 2020



Sheet **C-19R**



Construction Inspection Checklist: Urban Bioretention – Planter Box

Address/ Location: _____ Building Permit #: _____
 LDA Permit #: _____ SWM#: _____
 Contractor: _____ Telephone: _____
 Certifying Professional: _____ Telephone: _____
 Date Started: _____ Final Inspection Date: _____

*Certifying professional must be a licensed Professional Engineer (PE), Landscape Architect (LA), or Land Surveyor (LS).

The following checklist provides a basic outline of the anticipated items for the construction inspection of urban bioretention facilities. This checklist does not necessarily distinguish between all the design variations. Inspectors should review the plans carefully, and adjust these items and the timing of inspection verification as needed to ensure the intent of the design is met. The standard for design of this practice is based on Virginia Stormwater BMP Clearinghouse and Arlington County Stormwater Guidance Manual.

All items should be crossed off when completed. Items labeled "Certification of..." must be crossed off, dated and initialed by the certifying inspector.

PRE-CONSTRUCTION MEETING	DATE
<input type="checkbox"/> Conduct a pre-construction meeting with the contractor designated to install the planter box, the person completing this checklist, and the County DES Stormwater Specialist inspector (schedule via stormwaterreview@arlingtonva.us).	
<input type="checkbox"/> Stormwater has been diverted around the area of the bioretention practice and perimeter erosion control measures to protect the facility during construction have been installed.	

EXCAVATION AND BOX CONSTRUCTION	DATE
<input type="checkbox"/> Area is marked and the size and location conforms to plan.	
<input type="checkbox"/> Excavation has achieved proper grades and the required geometry and elevations.	
<input type="checkbox"/> Box is constructed using the material specified and to the required dimensions as shown on the approved plans. Constructed interior dimensions: _____	
<input type="checkbox"/> Waterproofing is installed on sides and bottom of interior of the box as specified.	
<input type="checkbox"/> Certification of Excavation and Box Construction Inspection: Inspector certifies the successful completion of the steps listed above and any necessary photos are attached.	
<input type="checkbox"/> Photo required of: entire interior (sides and bottom) of planter box waterproofered.	
Material ticket required of waterproofing membrane if plastic membrane is used (no receipt required for liquid membrane).	

FILTER LAYER, UNDERDRAIN, AND STONE RESERVOIR PLACEMENT	DATE
<input type="checkbox"/> All aggregates conform to specifications as certified by quarry.	
<input type="checkbox"/> Underdrain size and perforations meet the specifications (holes should be spaced 6" apart, maximum of 3 rows of holes). Placement of underdrain, observation wells, and underdrain fittings are in accordance with the approved plans.	
<input type="checkbox"/> Elevations of underdrain and outlet structure are in accordance with approved plans, or as adjusted to meet field conditions and denoted in Comments section below. Any planter boxes that are in series (drain from one to another), requires the submission of invert elevations.	

Urban Bioretention – Planter Box | July 2019

<input type="checkbox"/> Placement of remaining lift of stone reservoir layer as needed to achieve the required reservoir depth.	
<input type="checkbox"/> Certification of Filter Layer and Underdrain Placement Inspection: Inspector certifies the successful completion of the filter layer and underdrain placement steps listed above. Photos and material delivery tickets for these items are attached. Photos required include: ○ Perforated underdrain pipe with a solid vertical overflow pipe; ○ Depth of #57 stone; ○ Depth of choker stone (pea gravel or #8). Material delivery tickets required: ○ #57 stone and choker stone (pea gravel or #8)	

BIORETENTION SOIL MEDIA PLACEMENT	DATE
<input type="checkbox"/> Soil media is certified by supplier or contractor as meeting the project specifications and comes from an approved soil media vendor.	
<input type="checkbox"/> No filter fabric is to be used between the stone layer and the soil layer. Soil media is placed in 12-inch lifts to the design top elevation of the bioretention area. Elevation has been verified after settlement (2 to 4 days after initial placement).	
<input type="checkbox"/> Certification of Soil Media Placement Inspection: Inspector certifies the successful completion of the soil media steps listed above. Photos and material delivery tickets are attached.	
<input type="checkbox"/> Photo required includes a measurement of the soil media installed.	
Material delivery ticket required from an approved soil media vendor.	

PRETREATMENT AND PLANT INSTALLATION	DATE
<input type="checkbox"/> Placement of energy dissipaters and pretreatment practices (splash block/rocks, gutter guards, etc.) are installed in accordance with the approved plans.	
<input type="checkbox"/> Overflow has atrium grate installed.	
<input type="checkbox"/> Downspouts are installed in accordance with the approved plans providing the correct drainage area.	
<input type="checkbox"/> The number and spacing of plants are installed in accordance with the approved plans. If there is no approved landscape plan for the planter boxes, the plants are to be chosen from VA DEQ Stormwater Design Specification No. 9: Table 9.6 Popular Native Plant Materials for Bioretention.	
<input type="checkbox"/> A 2-3 inch layer of shredded hardwood mulch has been installed.	
<input type="checkbox"/> Certification of Pretreatment and Plant Installation Inspection: Inspector certifies the successful completion of the pretreatment, energy dissipaters, plants, overflow grates and mulch as listed above. Photos and copies of material delivery tickets are attached. Photos required for this step for each planter include: ○ Overall photo showing the number of plants installed; ○ Location of downspout/inflow pipe with the appropriate splash block/rocks; ○ Distance from the top of mulch to the top of the overflow pipe; ○ Distance from the top of mulch to the top of the planter box.	
Material delivery tickets required for this step include: ○ Approved plants listing number and species; ○ Shredded hardwood mulch.	

DRY WELL OR CONNECTION TO STORM SEWER	DATE
<input type="checkbox"/> Dry well is constructed to the correct dimensions and proper materials including the proper geotextile, stone, and overflow mechanism (pop-up emitter) per the plan (if applicable).	

Urban Bioretention – Planter Box | July 2019

<input type="checkbox"/> Underdrain is directly tied into the public storm sewer system and the connection has been witnessed by DES inspector (if applicable).	
<input type="checkbox"/> Certification of Dry Well or Connection to Storm Sewer: Inspector certifies the successful completion of the dry well or connection to the storm sewer. Photos and material delivery tickets for these items are attached. Photos required for dry well include: ○ Excavated dry well with fabric installed on sides (no fabric on bottom); ○ Dimensions of dry well (L x W x D); ○ Perforated pipe installed inside of dry well; ○ Solid pipe for any pipe located outside of dry well (above gravel to grade); ○ Depth of #57 stone; ○ Fabric installed on top of gravel; ○ Completed dry well with turf cover and pop-up emitter installed.	
Material Tickets required: ○ Geotextile used; ○ #57 stone.	

COMMENTS (CLARIFICATION, DEVIATIONS, ETC.)	DATE

All items checked above have been inspected by me (or by an individual under my responsible charge) and have been completed to my satisfaction and meet the approved plans (or deviations are noted here).

Signature: _____ Date: _____

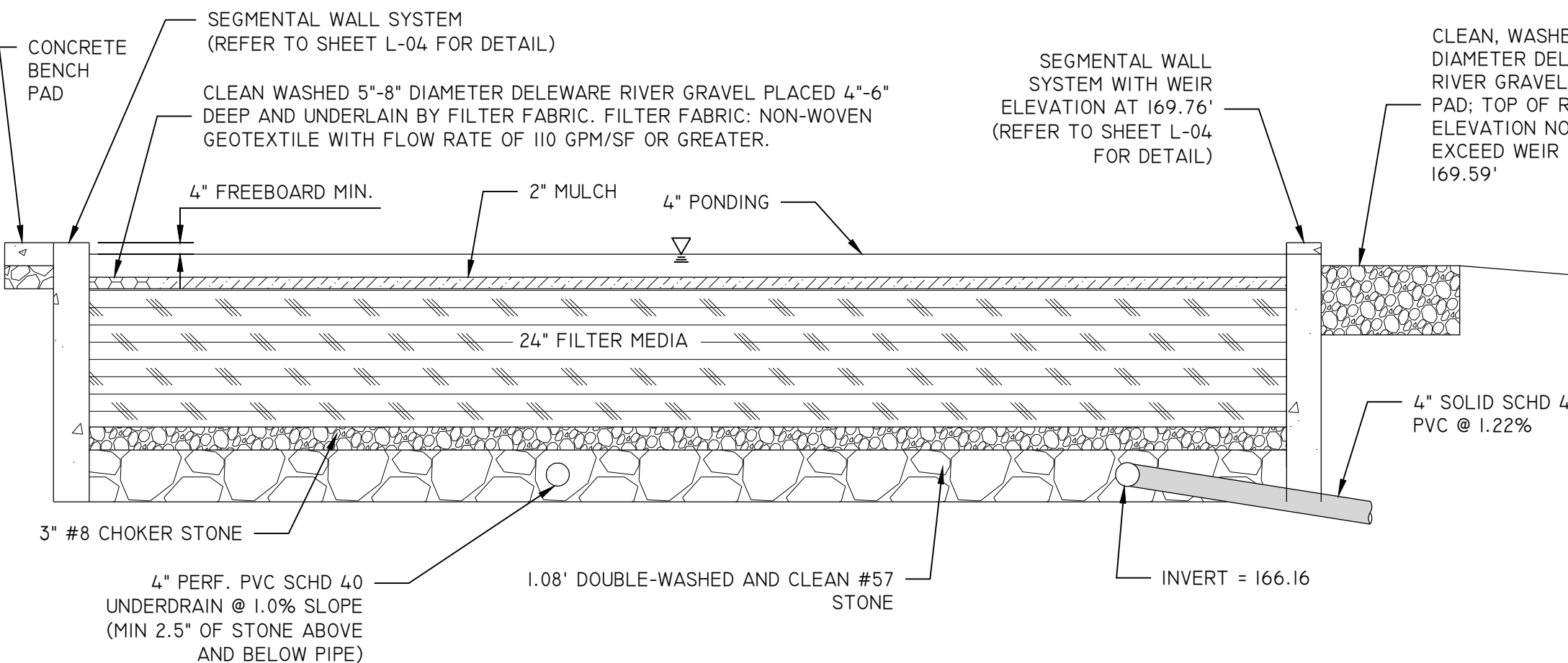
Certifying Professional's License Number (or Seal): _____

- See attached sealed final location survey with the installed stormwater management facilities appropriately labeled and certification letter

Facility name/type	Impervious Area to Facility (SF)	Pervious Area to Facility (SF)	Total Drainage Area (SF)	Total Drainage Area (acre)	Rainfall Depth (P) (in)	Rv	Target Storage (WQV) (CF)	Width (ft)	Length (ft)	Ponding depth (in)	Filter depth (in)	Gravel depth (in)	Surface Area (SF)	Ponding Volume (1.00 void) (CF)	Soil Storage Volume (0.25 void) (CF)	Gravel Storage Volume (0.4 void) (CF)	Available Storage (CF)	% Water Quality Volume Captured
Stormwater Planter Box #1	4007	2607	6614	0.1518	1.00	0.66	365.02	9.00	48.66	4	24	16"	437.94	145.98	218.97	234.74	599.69	164.29%
REFORESTATION: MINIMUM WIDTH = 35 FEET; 4,980 SF (0.1143 AC); SEE SHEET REF-01																		

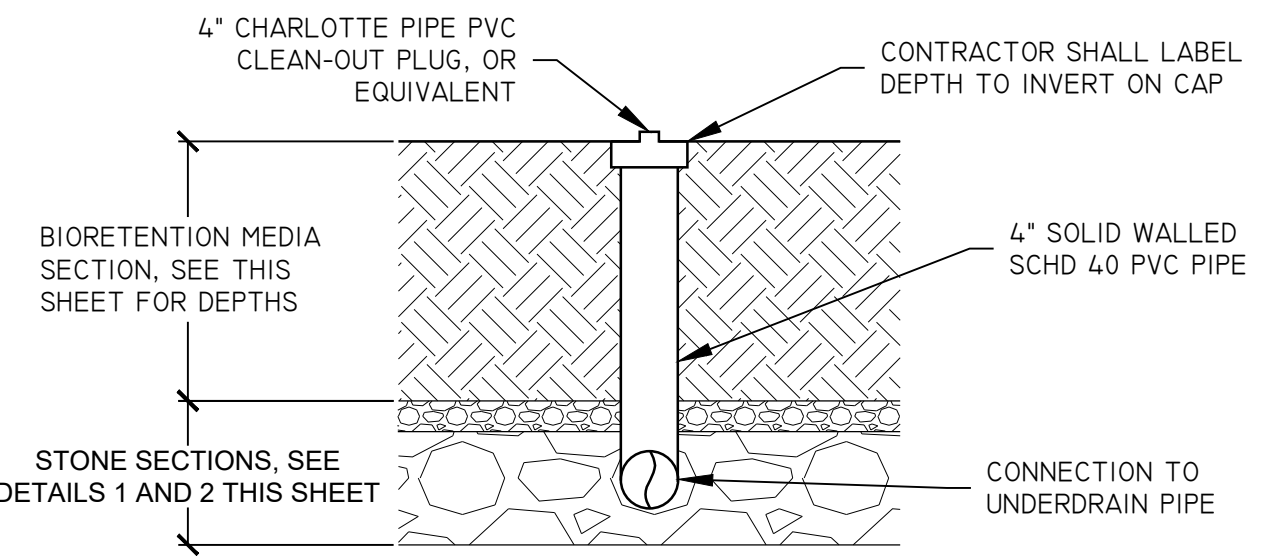
WEIGHTED C-VALUE = 0.70
 i10 = 6.83 IN./HR
 Q10 = 0.1518 AC x 6.83 IN/HR x 0.70 = .73 CFS

WEIR CALCULATION
 MAX. Q = 3.3 x P(H)^(3/2)
 H = 2"
 WIDTH = 4 FEET ; P = 8.34 FEET
 Q = 3.3 x 8.34' x (0.17)^(3/2)
 Q = 1.93 CFS > 0.73 CFS

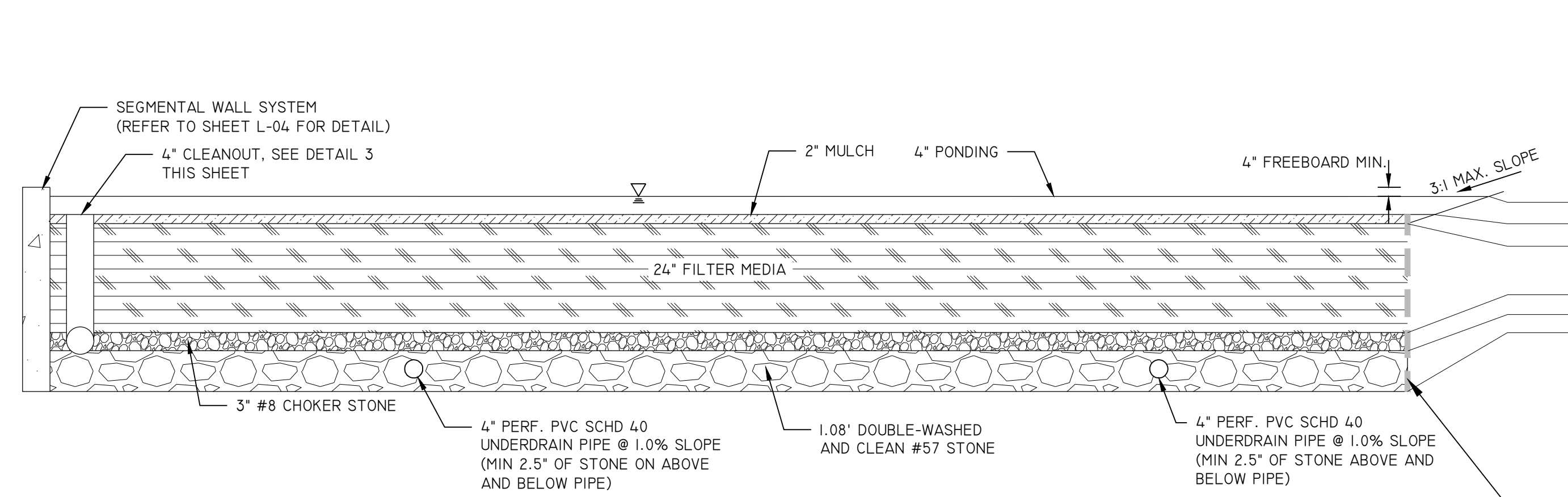


1 URBAN BIORETENTION TYPICAL SECTION A-A' SCALE: NTS

GENERAL NOTE:
 1. ALL UNDER DRAINS SHOWN IN URBAN BIORETENTION FACILITY ARE 4" PERFORATED SCHEDULE 40 PVC PIPE 3/8" PERFORATED @ 6" O/C LENGTH WISE 90° RADIALLY AROUND WITH THE EXCEPTION OF THE FIRST 5 FT WHICH IS SOLID 4" PVC.
 * SEE URBAN BIORETENTION ELEVATION TABLE TO THE RIGHT FOR ELEVATIONS



3 CLEANOUT/OBSERVATION WELL DETAIL SCALE: NTS



2 URBAN BIORETENTION TYPICAL SECTION B-B' SCALE: NTS

URBAN BIORETENTION ELEVATION TABLE	
ELEV. A	170.10 TO 170.93
ELEV. B	169.76
ELEV. C	169.42
ELEV. D	169.25
ELEV. E	167.25
ELEV. F	167.00
ELEV. G	165.91

NON-WOVEN GEOTEXTILE (FLOW RATE > 110 GPM/SF, GEOTEX 351 OR EQUIVALENT) ALONG SIDES ONLY WHERE NATIVE SOILS ARE PRESENT INSTEAD OF WALL



DEPARTMENT OF PARKS AND RECREATION
 Park Development Division
 2100 Clarendon Boulevard, Suite 414
 Arlington, VA 22201
 Phone: 703.228.3332
 Fax: 703.228.3328

21-DPR-ITB-639

Project Name and Location
Towers Park Playground Renovations
 By Right (County Project)

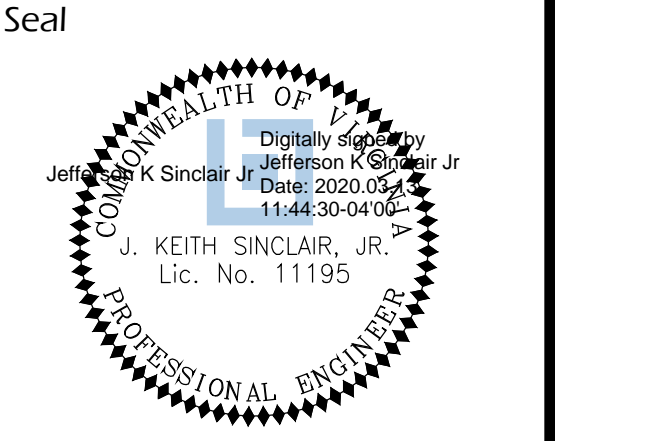
801 SOUTH SCOTT STREET
 ARLINGTON, VA 22204

Sheet Title
STORMWATER MANAGEMENT DETAILS

100% Construction Drawings

Approval	Date
Design Manager	
Revisions	Date

Designed: cMB
 Drawn: KRF
 Checked: cMB
 Filename: C-22-CW05-150396021.dwg
 Plotted: 2020-03-12
 Scale: N/A
 Date: MARCH 13, 2020



Sheet **C-21**

Appendix C. Water Quality Impact Assessment Data Sheet

Appendix C. Water Quality Impact Assessment Data Sheet form with sections: Section 1: Type of activity proposed, Section 2: Key details of the proposed activity, Section 3: Staff Use Only.

Section 3: Plan and Narrative

Section 3: Plan and Narrative. Provide a plan showing the location of the proposed activity, along with the RPA boundary. Includes Project Narrative section.

Appendix D. Exception Request Form

Appendix D. Exception Request Form. Includes Applicant information, Section 1: Brief description of exception request, Section 2: Parcel, structure, and ownership information, and Staff Use Only section.

POLLUTION PREVENTION NOTES

- 1. ONLY THE FOLLOWING NON-STORMWATER DISCHARGES ARE AUTHORIZED BY ARLINGTON COUNTY'S MS4 PERMIT. UNLESS THE STATE WATER CONTROL BOARD, THE VIRGINIA SOIL AND WATER CONSERVATION BOARD (BOARD), OR ARLINGTON COUNTY DETERMINES THE DISCHARGE TO BE A SIGNIFICANT SOURCE OF POLLUTANTS TO SURFACE WATERS...

2.0 Authorized Non-Stormwater Discharges

Table for Authorized Non-Stormwater Discharges with columns: Type of Authorized Non-Stormwater Discharge, Likely Present at Your Project Site?, Yes/No checkboxes.

5.0 Potential Sources of Pollution & Pollution Prevention Practices

Table with columns: Pollutant-Generating Activity, Likely Present at your Project Site?, Sediment, Nutrients, Heavy Metals, etc. and Responsible Party.

Pollution Prevention Practices:

- (1) Clearing, grading, excavating and un-stabilized areas - Utilize erosion and sediment controls to prevent sediment laden or turbid runoff from leaving the construction site.

7.0 Spill Prevention & Response

7.0 Spill Prevention & Response. Includes text: Most spills can be cleaned up following manufacturer specifications. Absorbent/oil dry, sealable containers, plastic bags, and shovels/brooms are suggested minimum spill response items that should be available at this location.



DEPARTMENT OF PARKS AND RECREATION
Park Development Division
2100 Clarendon Boulevard, Suite 414
Arlington, VA 22201

21-DPR-ITB-639

Towers Park Playground Renovations
By Right (County Project)

801 SOUTH SCOTT STREET
ARLINGTON, VA 22204

WATER QUALITY IMPACT ASSESSMENT AND POLLUTION PREVENTION PLAN

100% Construction Drawings

Approval Date

Design Manager

Revisions Date

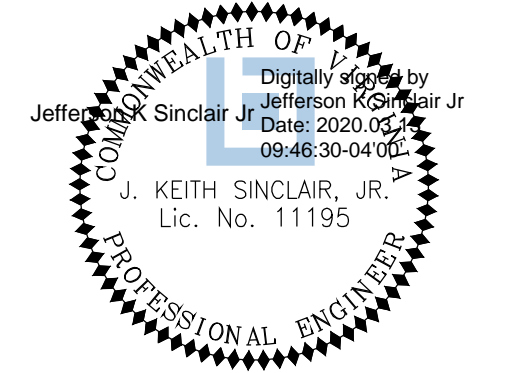
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Checked: cMB

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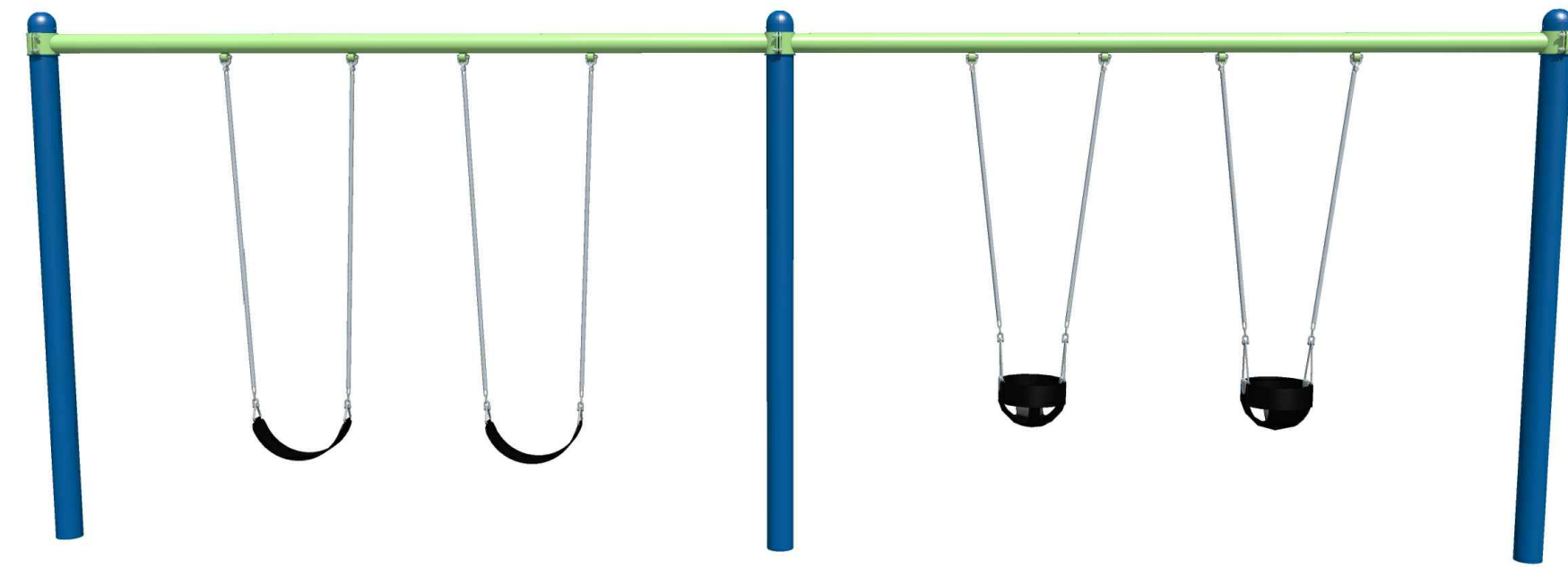
Plotted: 2020-03-12

Scale: 1" = 20'
Date: MARCH 13, 2020

Seal



Sheet C-22



ITEM: BELT SWINGS
 MODEL: ZZXX0818,0819
 MANUFACTURER: PLAYGROUND SPECIALISTS INC.
 INSTALL PER MANUFACTURERS INSTRUCTIONS AND RECOMMENDATIONS.
 COLORS TO BE SELECTED BY LANDSCAPE ARCHITECT FROM MANUFACTURER'S FULL RANGE.

PHONE: (800) 385-0075
 ADDRESS: 29 APPLES CHURCH RD THURMONT, MD 21788
 WEBSITE: WWW.PLAYSPEC.COM

1 DOUBLE BAY SINGLE POST SWING FRAME

L-01A

NTS



ITEM: BUCKET SWING SEAT
 MODEL NO: ZZXX0265
 MANUFACTURER: PLAYWORLD
 INSTALL PER MANUFACTURERS INSTRUCTIONS AND RECOMMENDATIONS.
 COLORS TO BE SELECTED BY LANDSCAPE ARCHITECT FROM MANUFACTURER'S FULL RANGE.
 PHONE: (800) 385-0075
 ADDRESS: 29 APPLES CHURCH RD THURMONT, MD 21788
 WEBSITE: WWW.PLAYSPEC.COM

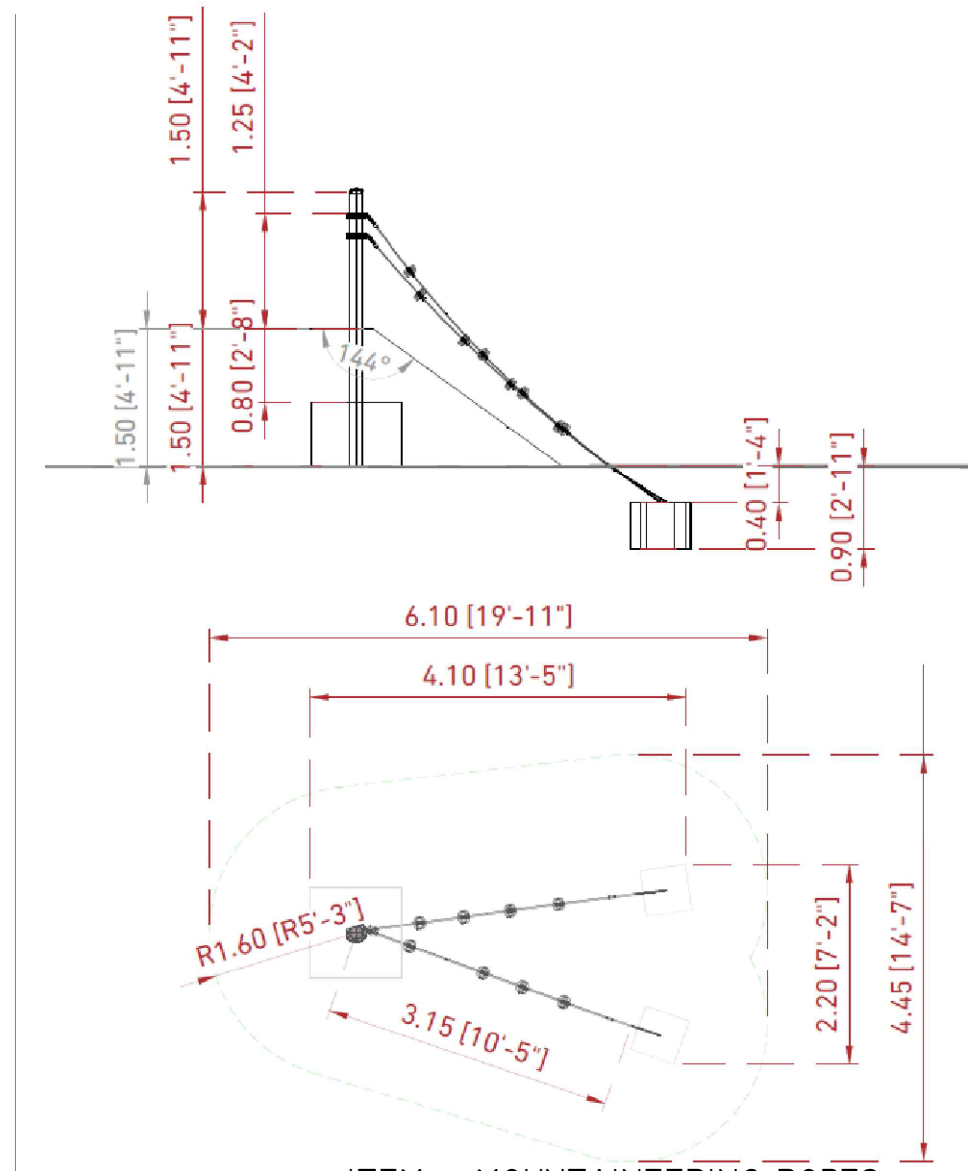
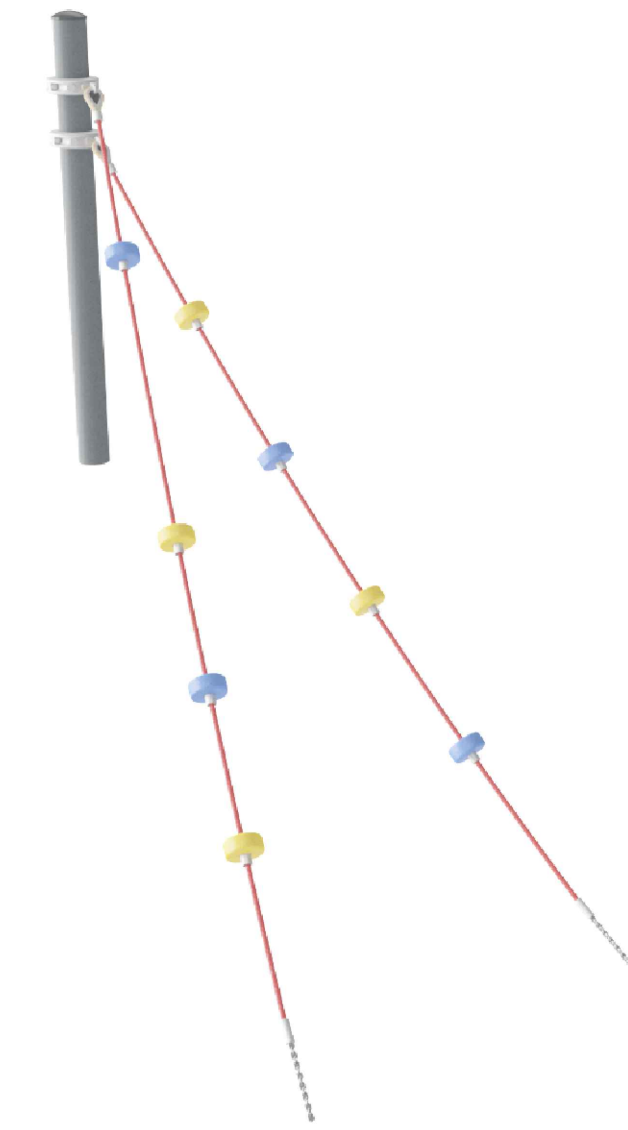


PHONE: (800) 385-0075
 ADDRESS: 29 APPLES CHURCH RD THURMONT, MD 21788
 WEBSITE: WWW.PLAYSPEC.COM

1A BUCKET & BELT SWING SEAT

L-01A

NTS



ITEM: MOUNTAINEERING ROPES

MODEL NO: COR880843

MANUFACTURER: KOMPAN

INSTALL PER MANUFACTURERS INSTRUCTIONS AND RECOMMENDATIONS.

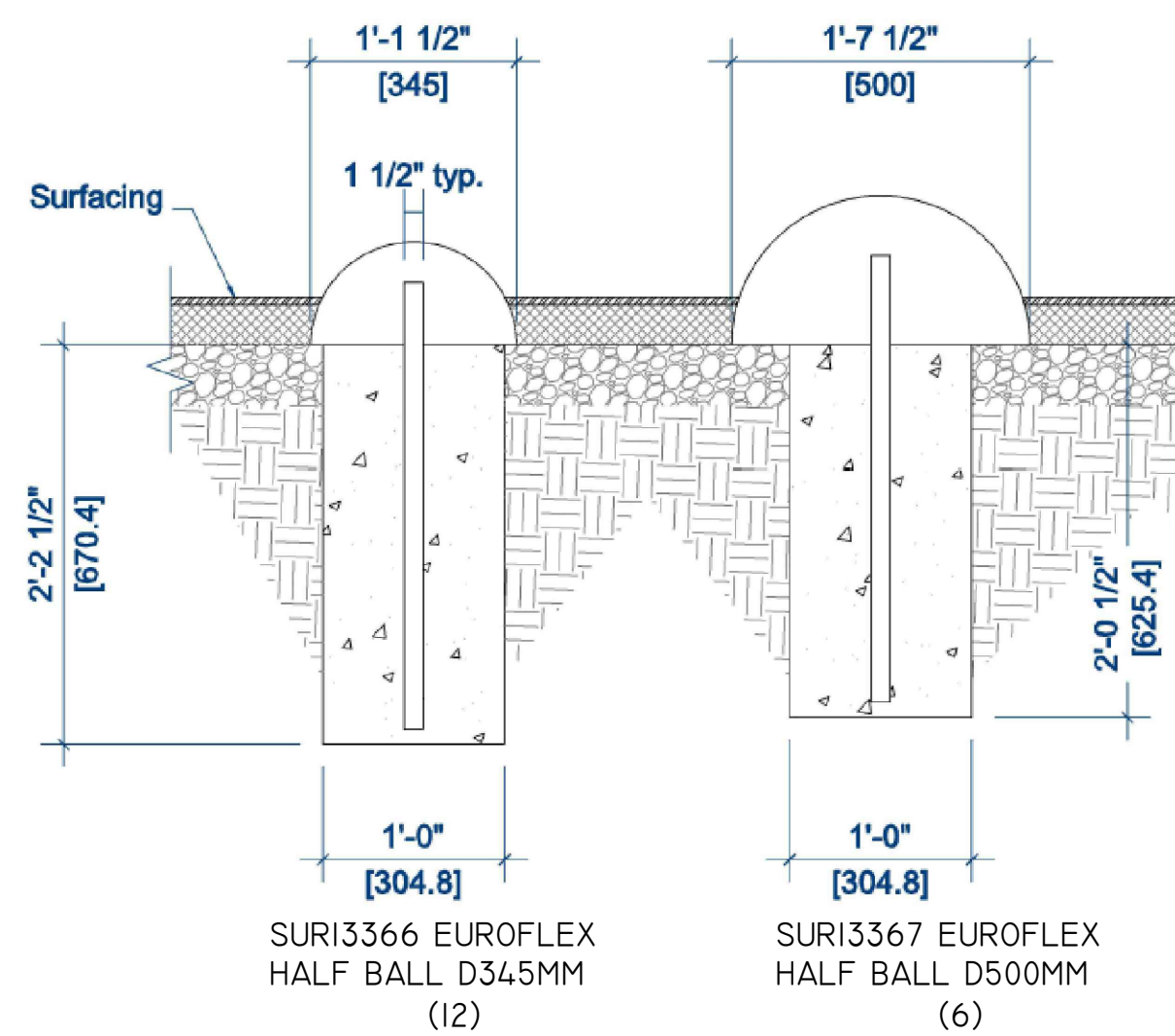
COLORS TO BE SELECTED BY LANDSCAPE ARCHITECT FROM MANUFACTURER'S FULL RANGE.

PHONE: (301) 213-6433
 ADDRESS: HOWARD LN - SUITE 101 AUSTIN, TX 78753
 WEBSITE: WWW.KOMPAN.US

2 MOUNTAINEERING ROPES

L-01A

NTS



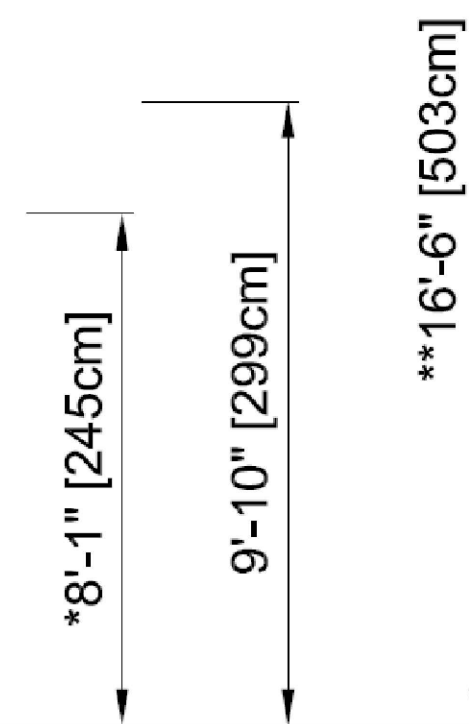
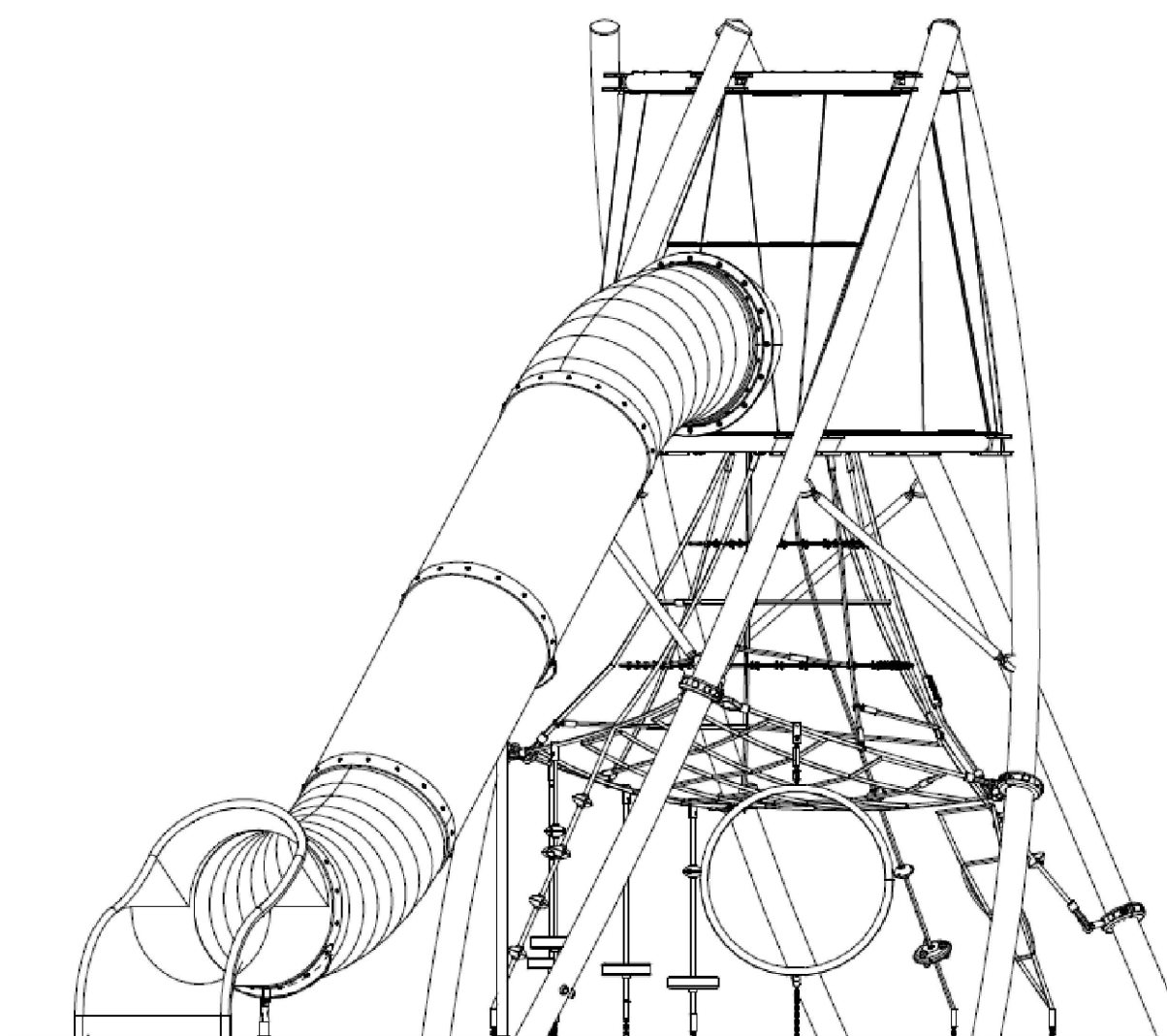
ITEM: HALF SPHERES
 MODEL NO: SURI3367 EUROFLEX HALF BALL D500MM & D345MM
 MANUFACTURER: KOMPAN
 INSTALL PER MANUFACTURERS INSTRUCTIONS AND RECOMMENDATIONS.
 COLORS TO BE SELECTED BY LANDSCAPE ARCHITECT FROM MANUFACTURER'S FULL RANGE.

PHONE: (301) 213-6433
 ADDRESS: HOWARD LN - SUITE 101 AUSTIN, TX 78753
 WEBSITE: WWW.KOMPAN.US

- NOTES:
- ALL SPHERES ARE PLACED ON SLOPE, PER GRADING PLAN & LAYOUT PLAN.
 - THERE ARE 12 D345MM & 6 D500MM, PER SITE & MATERIALS PLAN

4 EUROFLEX HALF BALL (HALF SPHERES)

L-01A



ITEM: SKY TWISTER
 MODEL NO: COR29900
 MANUFACTURER: KOMPAN
 INSTALL PER MANUFACTURERS INSTRUCTIONS AND RECOMMENDATIONS.
 COLORS TO BE SELECTED BY LANDSCAPE ARCHITECT FROM MANUFACTURER'S FULL RANGE.

PHONE: (301) 213-6433
 ADDRESS: HOWARD LN - SUITE 101 AUSTIN, TX 78753
 WEBSITE: WWW.KOMPAN.US

COR299001

3 SKY TWISTER

L-01A

NTS



ITEM: 2-5 COMBO STRUCTURE
 MODEL NO: P020821-10E
 MANUFACTURER: PLAYGROUND SPECIALISTS, INC.

INSTALL PER MANUFACTURERS INSTRUCTIONS AND RECOMMENDATIONS.

COLORS TO BE SELECTED BY LANDSCAPE ARCHITECT FROM MANUFACTURER'S FULL RANGE.

PHONE: (800) 385-0075
 ADDRESS: 29 APPLES CHURCH RD THURMONT, MD 21788
 WEBSITE: WWW.PLAYSPEC.COM

5 2-5 COMBO STRUCTURE

L-01A

NTS



ITEM: NET TWISTER
 MODEL NO: IG110 COR203001-I101
 MANUFACTURER: KOMPAN
 INSTALL PER MANUFACTURERS INSTRUCTIONS AND RECOMMENDATIONS.
 COLORS TO BE SELECTED BY LANDSCAPE ARCHITECT FROM MANUFACTURER'S FULL RANGE.

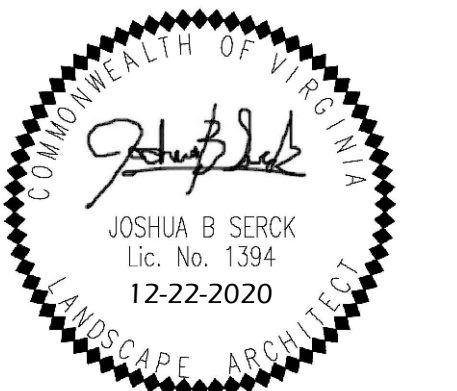
PHONE: (301) 213-6433
 ADDRESS: HOWARD LN - SUITE 101 AUSTIN, TX 78753
 WEBSITE: WWW.KOMPAN.US

6 NET TWISTER

L-01A

NTS

NOTE:
 FOUNDATION OF ALL PLAY EQUIPMENT SHALL BE PROVIDED BY CONTRACTOR, PER MANUFACTURER'S RECOMMENDATIONS.



21-DPR-ITB-639

Project Name and Location
TOWERS PARK PLAYGROUND RENOVATIONS

801 S Scott St
 Arlington, VA 22204

Sheet Title
**SITE DETAILS
 PLAY EQUIPMENT
 FOOTING DETAILS**

Approval _____ Date _____
 Design Supervisor _____
 Revisions _____ Date _____

Designed: _____
 Drawn: _____
 Checked: _____
 Filename: L-01_DET1-PLAYEQUIP.DWG
 Plotted: May, 18, 21
 Scale: NTS
 Date: DECEMBER 20, 2019

Seal

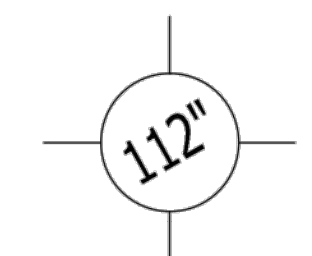
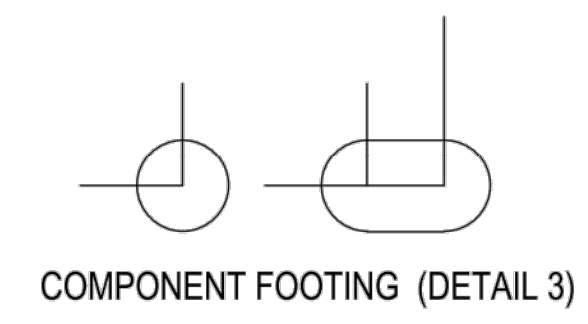
 Joshua B. Serck
 Lic. No. 1394
 12-22-2020

Sheet
L-01B
 No. 31 of 40

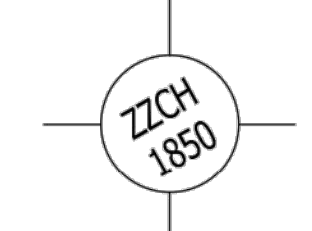


PLAYWORLD SYSTEMS, INC.
 1000 Buffalo Road
 Lewisburg, PA
 17837-9795 USA

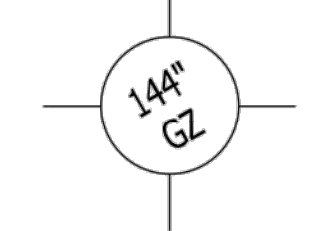
FOOTING LEGEND



112" INDICATES POST LENGTH



ZZCH 1850 INDICATES PART NUMBER



144" INDICATES POST LENGTH

FOOTING DETAIL

SCALE:
 NOT TO SCALE

DRAWN BY:
 TECH SALES

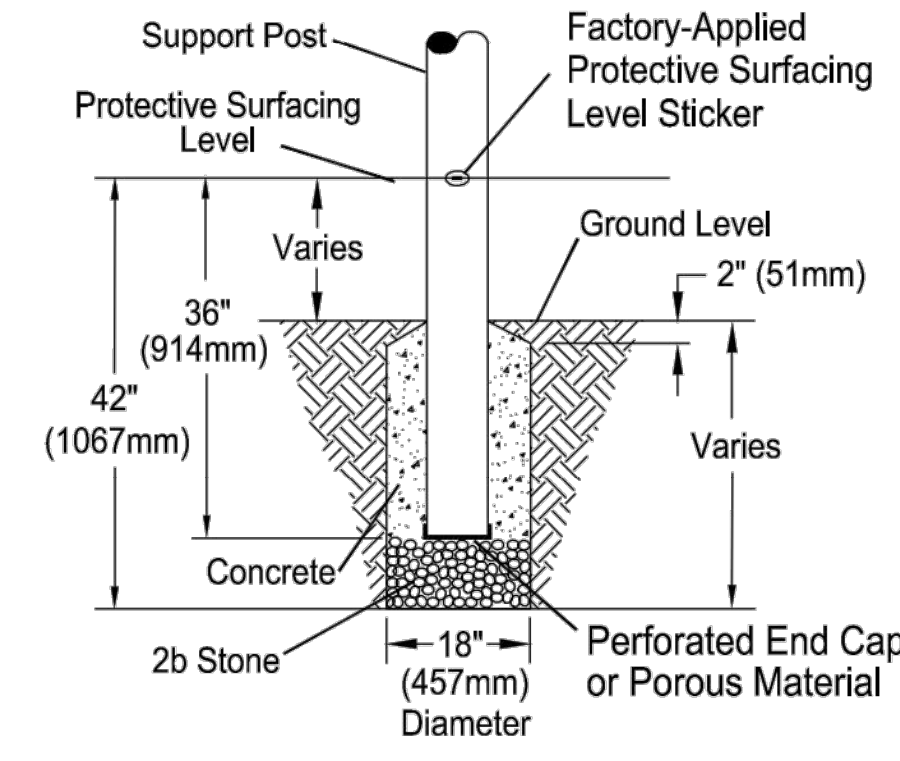
Paper Size

B

DATE:
 28-JUNE-13

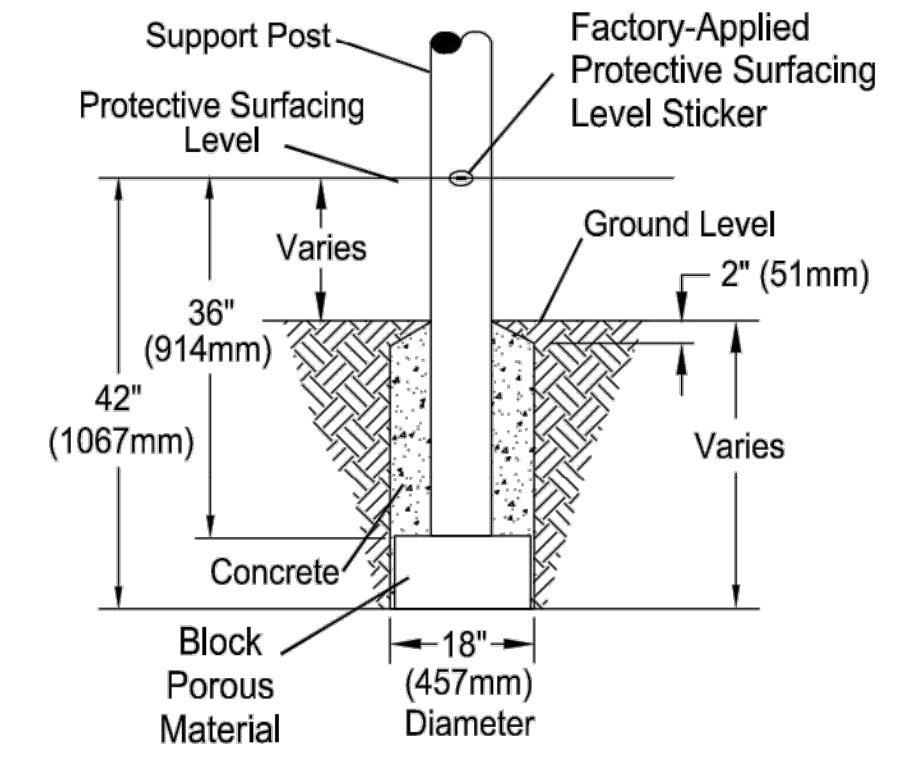
DETAIL 1

Support Post, Spiral Slide and RockBlocks Post Footing Detail



STONE OPTION

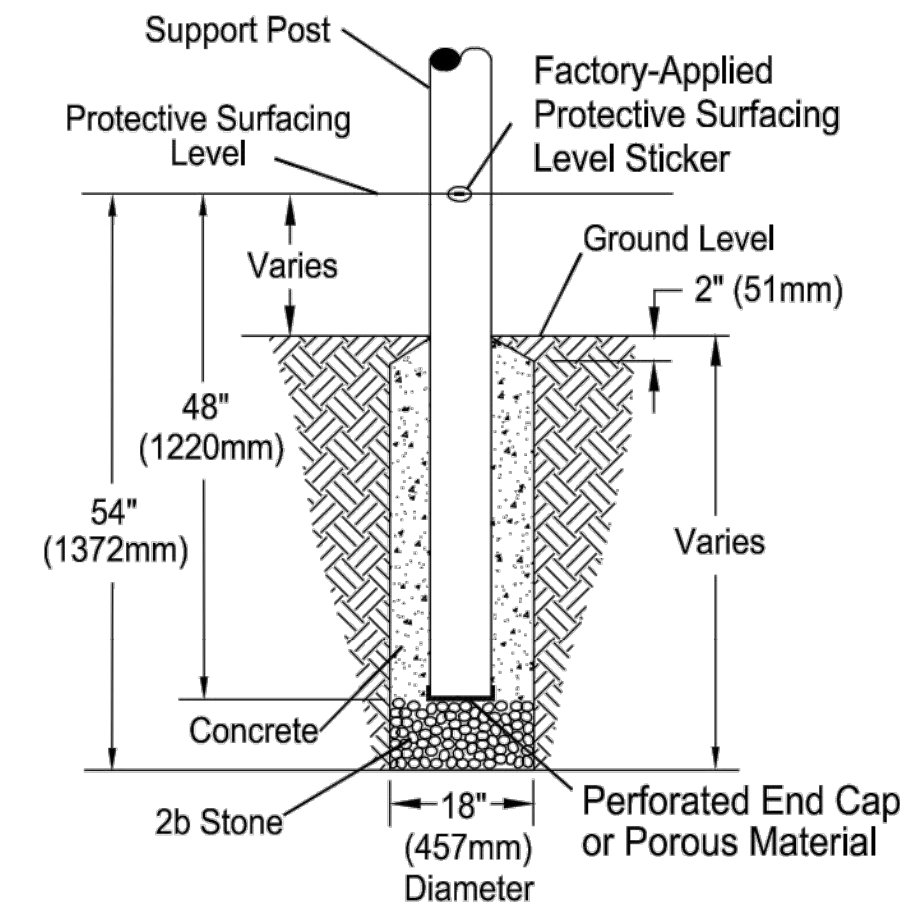
OR



BLOCK OPTION

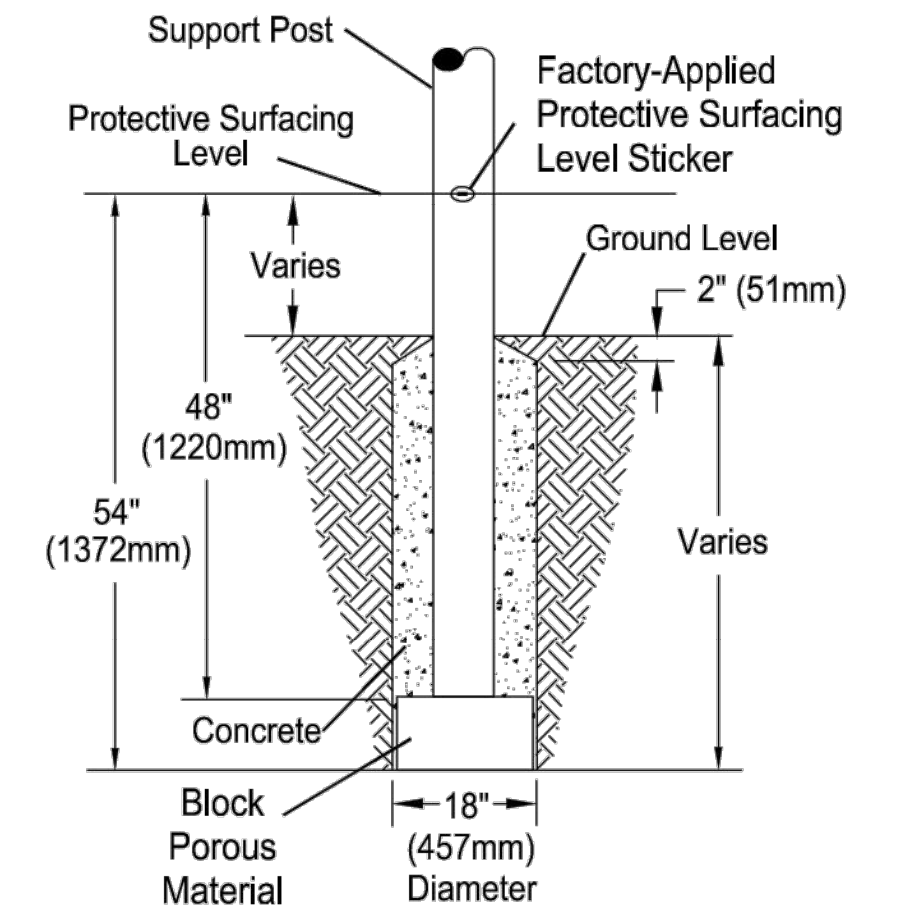
DETAIL 2

GroundZero, Cantilever and "T" Post Footing Detail



STONE OPTION

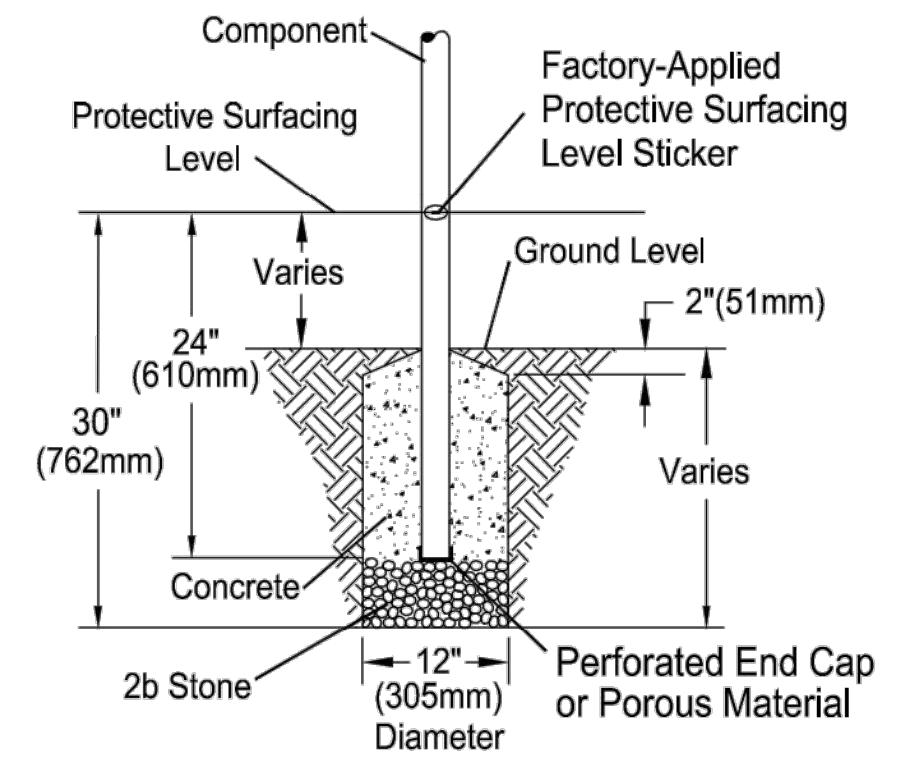
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BLOCK OPTION

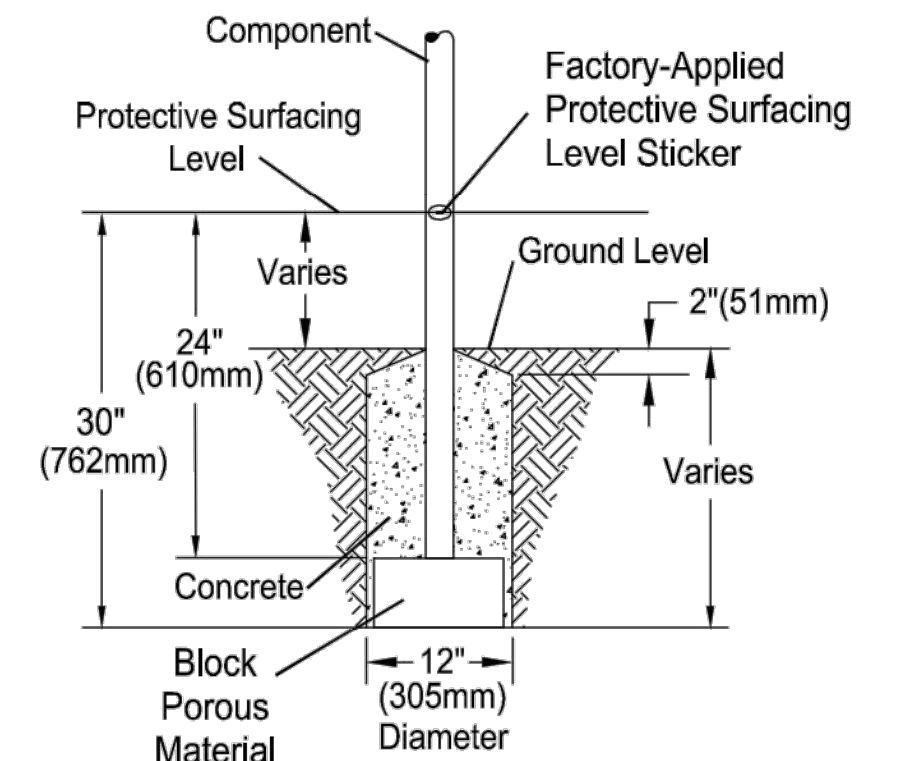
DETAIL 3

Component Footing Detail



STONE OPTION

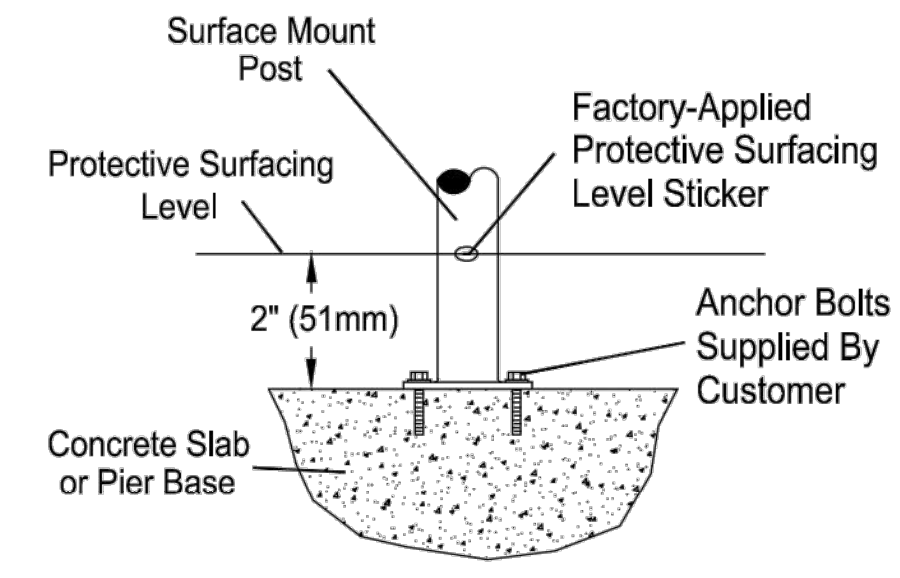
OR



BLOCK OPTION

DETAIL 4

Surface Mount Detail



- INSTALLATION NOTES:**
- 1) Paved surfaces, such as asphalt and concrete, are not acceptable for use under your structure.
 - 2) It is the consumer's responsibility to check with local utilities prior to excavating footings for any underground utility lines that may exist within the installation area.
 - 3) It is the consumer's responsibility to check local soil conditions and drainage within the site area. Inquire with local contractors for appropriate recommendations.
 - 4) If the structure is to be installed across uneven terrain, maintain the support post mark for protective surfacing level at the lowest grade. Adjust other footings accordingly.
 - 5) The base of footings must be below frost lines.
 - 6) Do not encase the bottom of support posts in concrete. Place all posts directly on packed stone.
 - 7) Assemble the entire structure before pouring concrete unless specifically instructed to do so in the individual component installation instructions.
 - 8) Read completely the installation instructions provided with your structure prior to beginning construction.

- SITE NOTES:**
- 1) The site plan provided must be checked against the actual site area to ensure that placement of your structure meets required clearances.
 - 2) The dimensions labeled are for location of footing holes, not exact placement of equipment. Assemble, plumb, and level equipment before pouring concrete.
 - 3) There must be a minimum distance of 6' (1830mm) between any obstacle, sidewalk, etc., and your structure.
 - 4) Slides must have a use zone that extends out from the lower exit section of the slide a distance that is at least 6' (1830mm) or equal to the vertical distance from the highest point of the sliding surface to the top of the protective surfacing, whichever is greater. The slide use zone should not extend greater than 8' (2438mm) from the end of the lower exit section.
 - 5) The complete area, including the space under and around the equipment, must be covered with an impact attenuating material. See the 1997 publication, "Handbook for Public Playground Safety", published by the U.S. Consumer Product Safety Commission, for guidelines and recommendations on the type and depth of surfacing material. For a copy of the "Handbook for Public Playground Safety", write to:
U.S. Consumer Product Safety Commission
 Office of Information and Public Affairs
 Washington, D.C. 20207
 - 6) Supervise children as they play.

*PLAYGROUND SUPERVISION REQUIRED



ARLINGTON VIRGINIA

DEPARTMENT OF PARKS AND RECREATION

Park Development Division
2100 Clarendon Boulevard, Suite 414
Arlington, VA 22201
Phone: 703.228.3332
Fax: 703.228.3328

21-DPR-ITB-639

Project Name and Location

TOWERS PARK PLAYGROUND RENOVATIONS

801 S Scott St
Arlington, VA 22204

Sheet Title

SITE DETAILS
PLAY EQUIPMENT
FOOTING DETAILS

Approval _____ Date _____

Design Supervisor _____

Revisions _____ Date _____

Designed: _____

Drawn: _____

Checked: _____

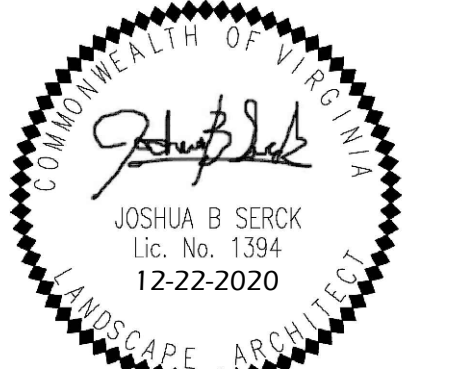
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Plotted: May, 27, 21

Scale: NTS

Date: DECEMBER 20, 2019

Seal



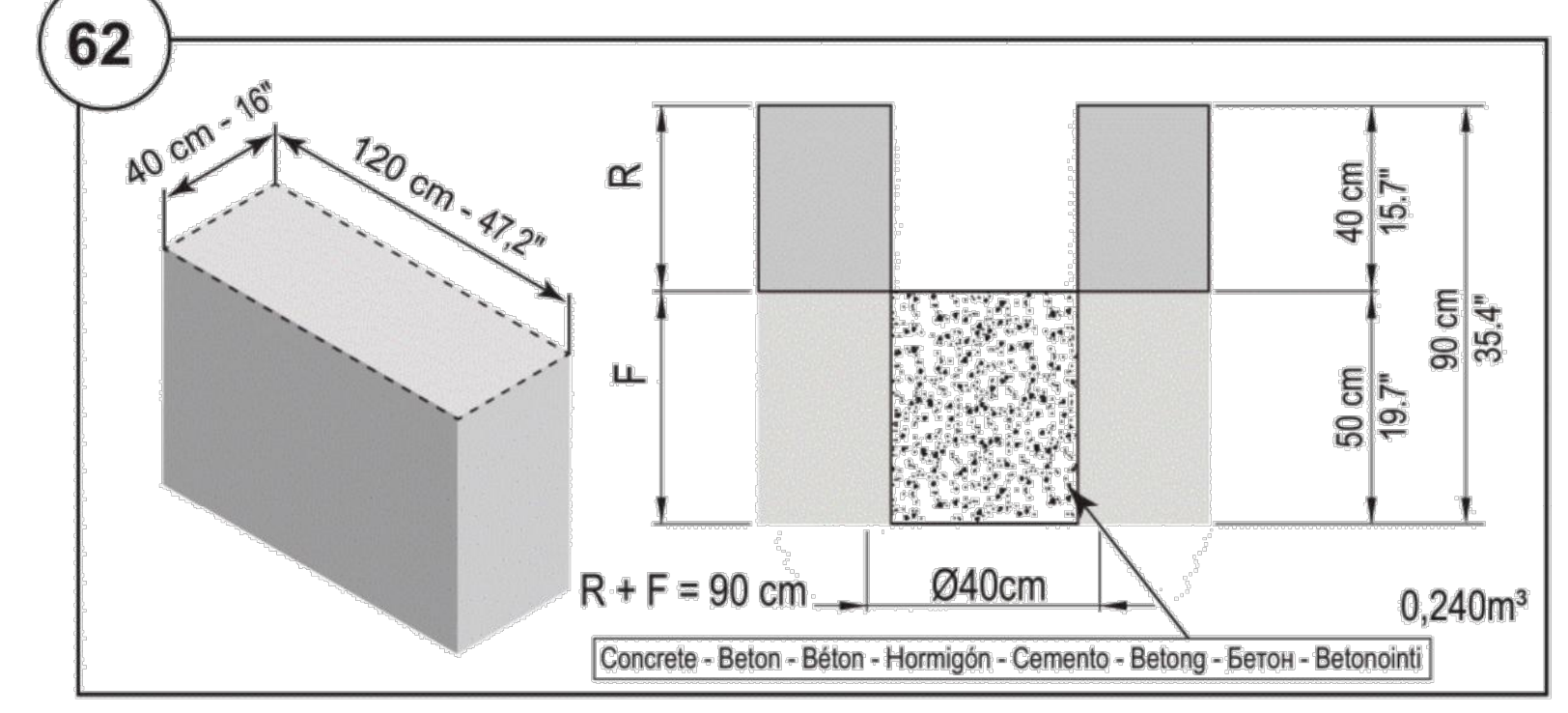
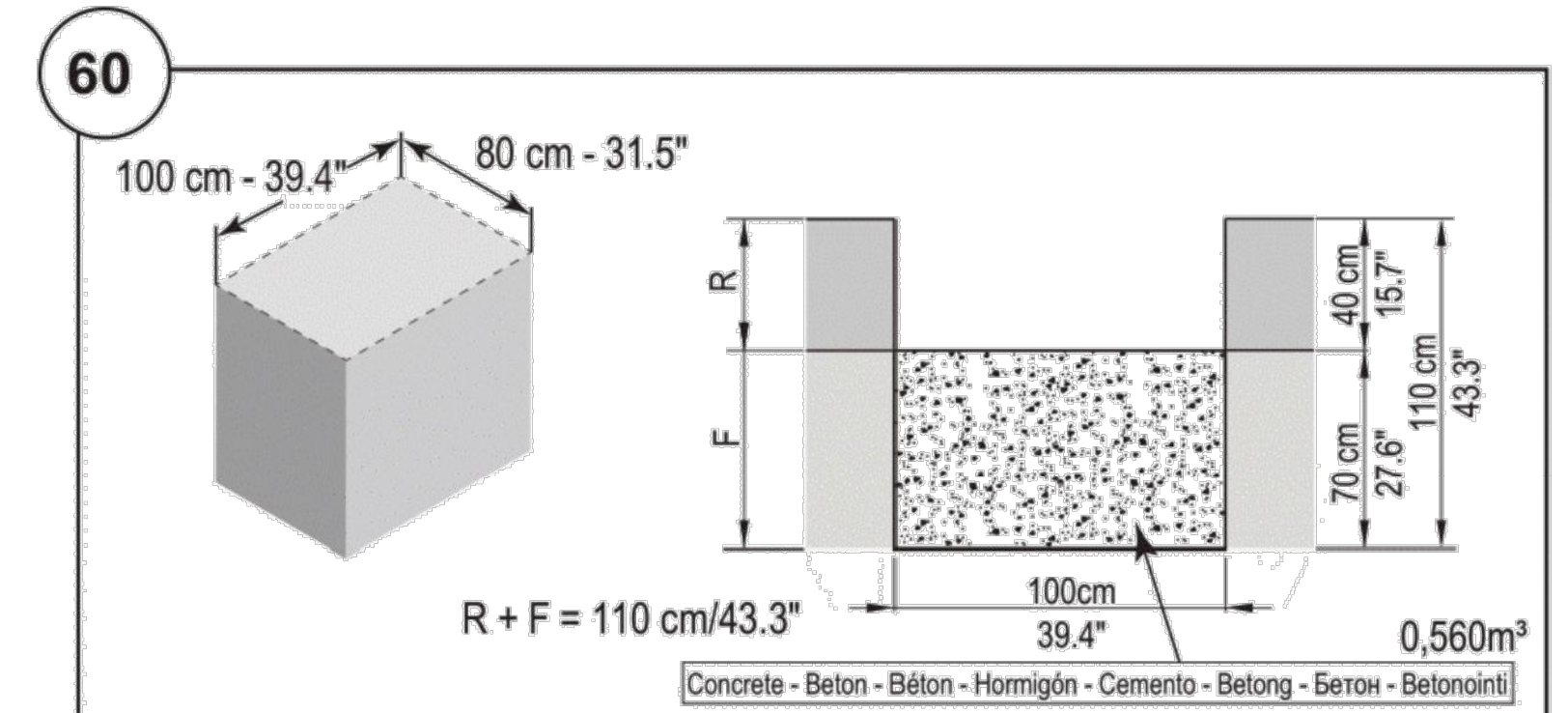
Sheet

L-01C

No. 30 of 40



COR



NOTES:

- FOOTING DETAILS ARE FOR REFERENCE ONLY.
- FOOTING OF ALL PLAY EQUIPMENT SHALL BE PROVIDED BY CONTRACTOR, PER MANUFACTURER'S RECOMMENDATIONS.
- DETAILS ARE NOT TO SCALE.

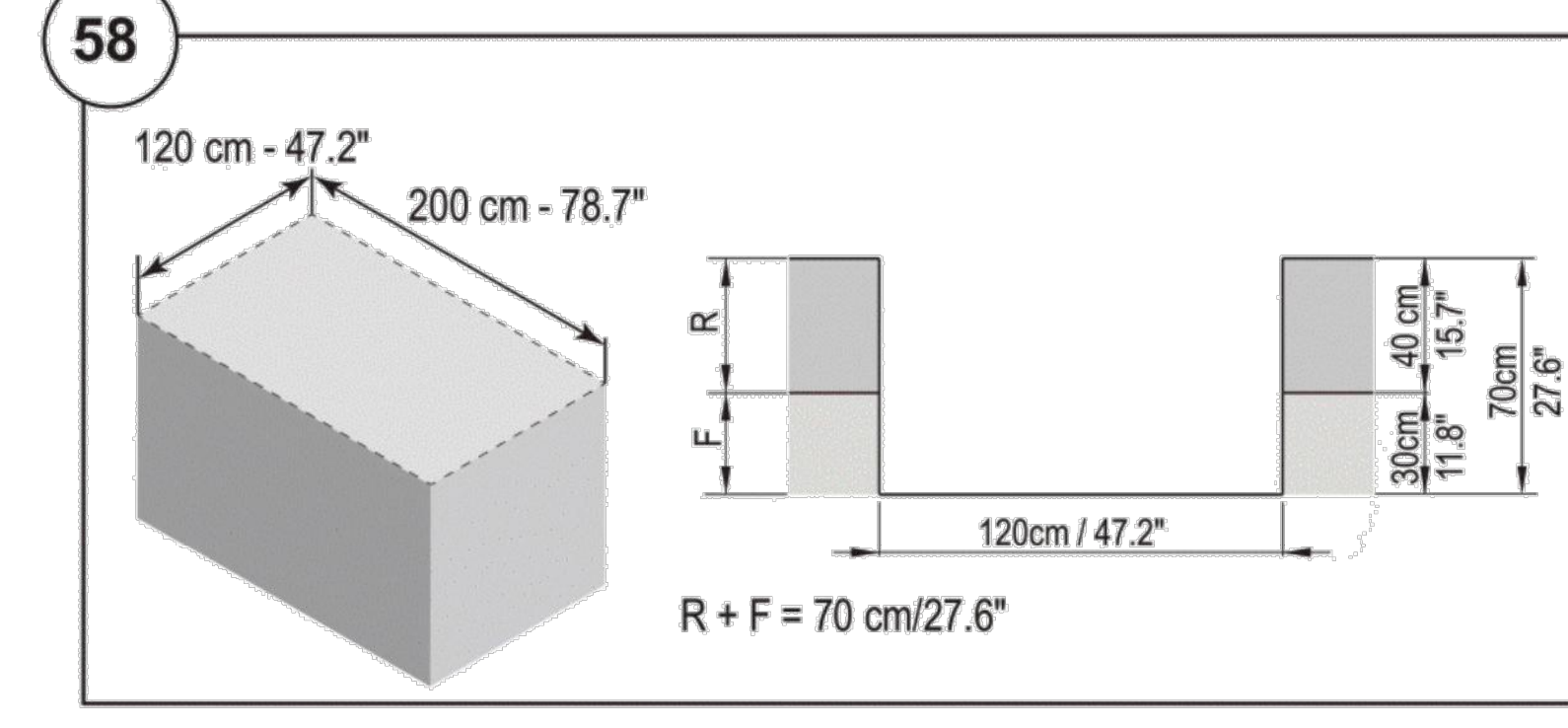
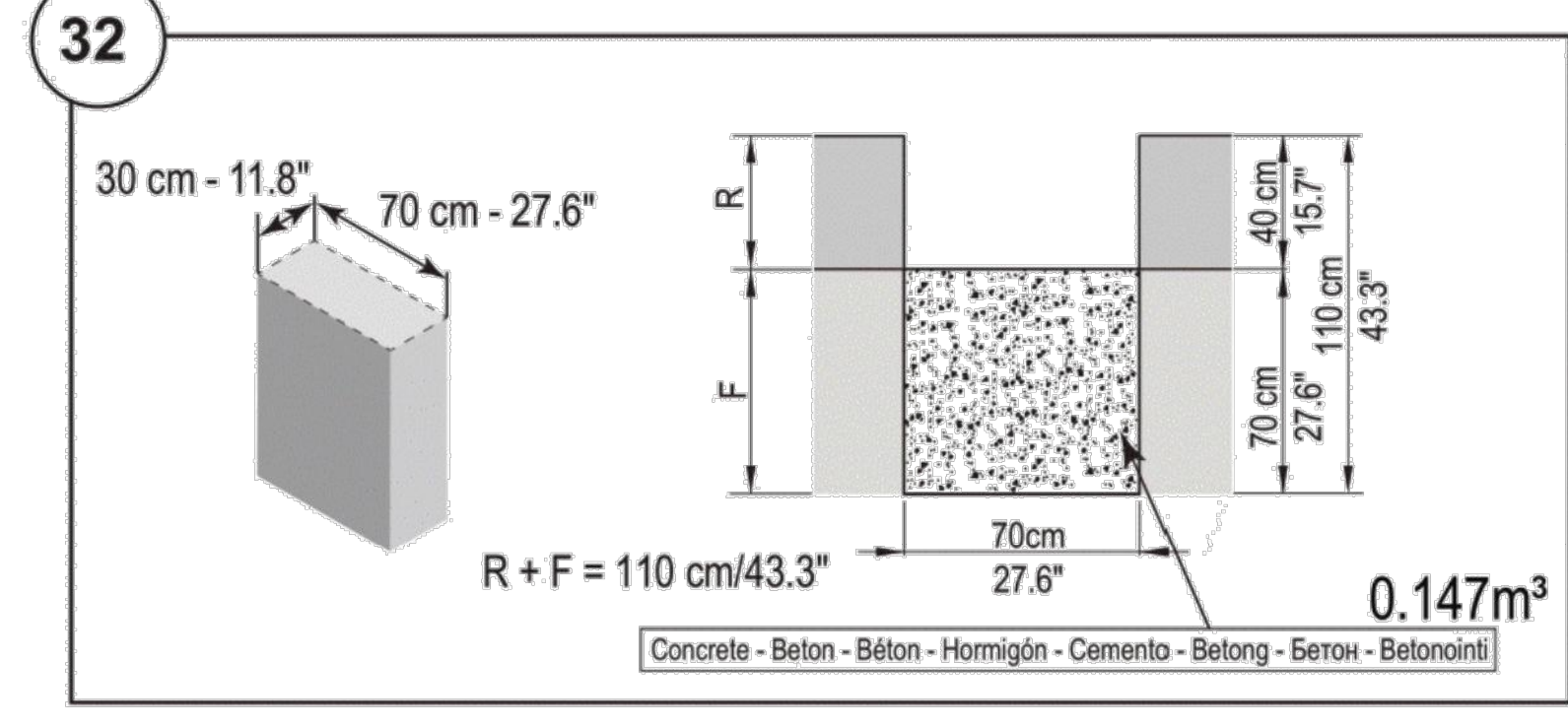
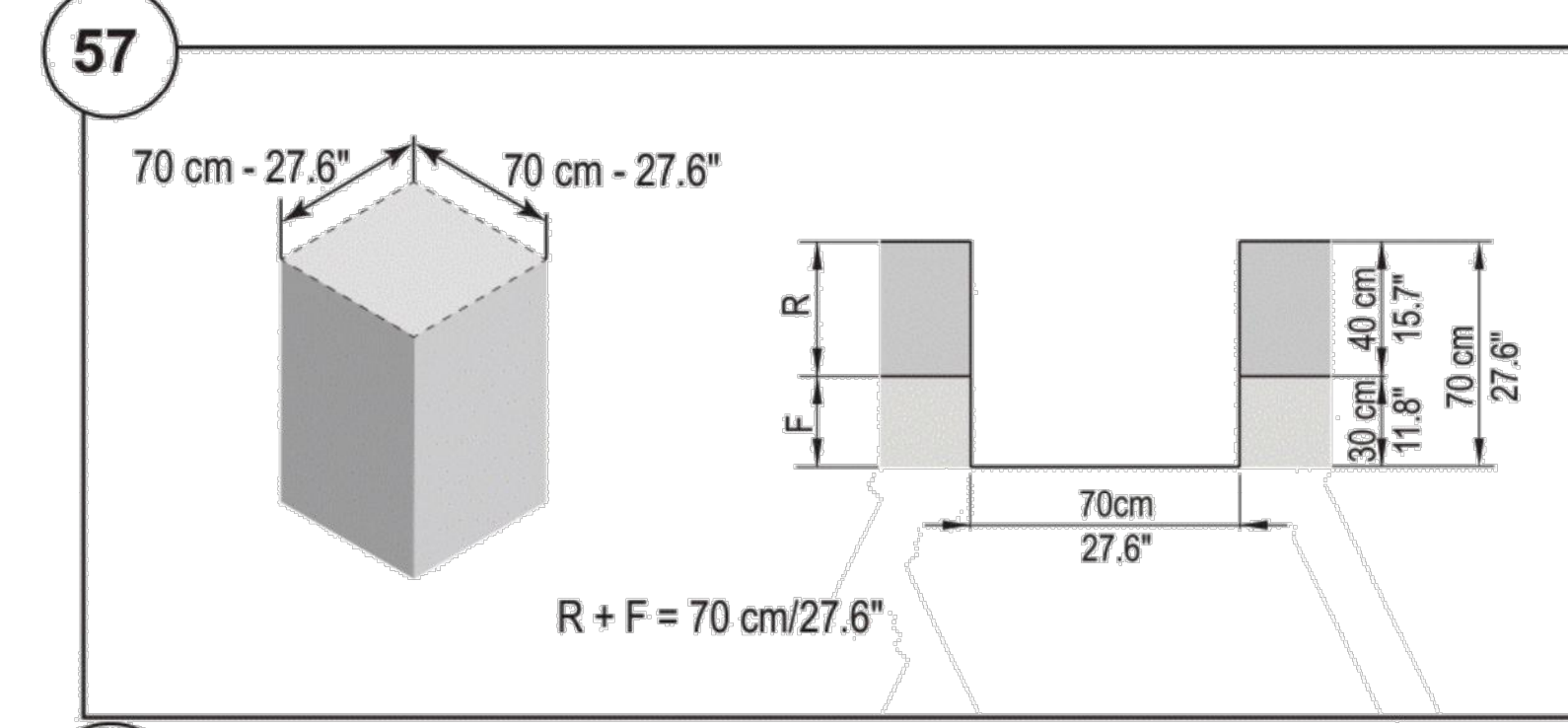
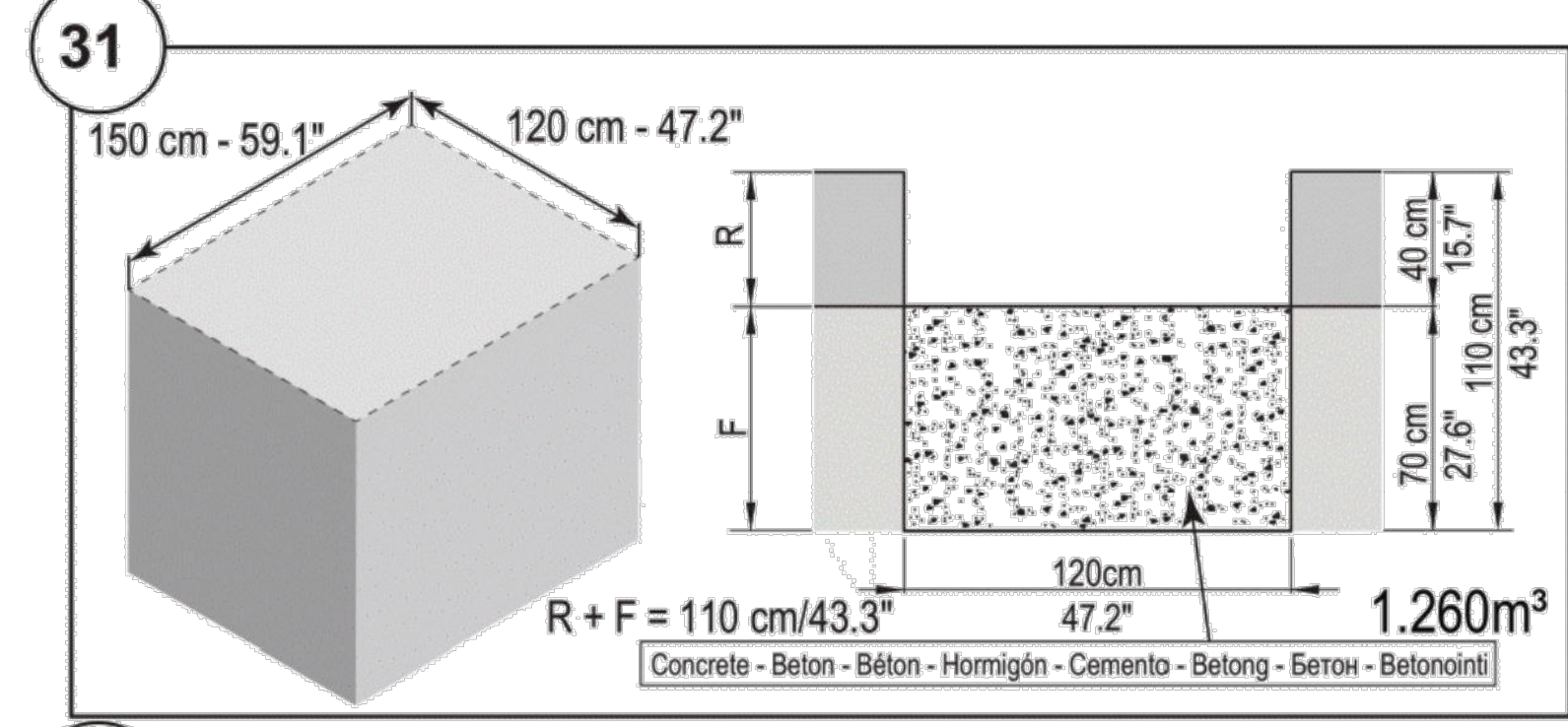
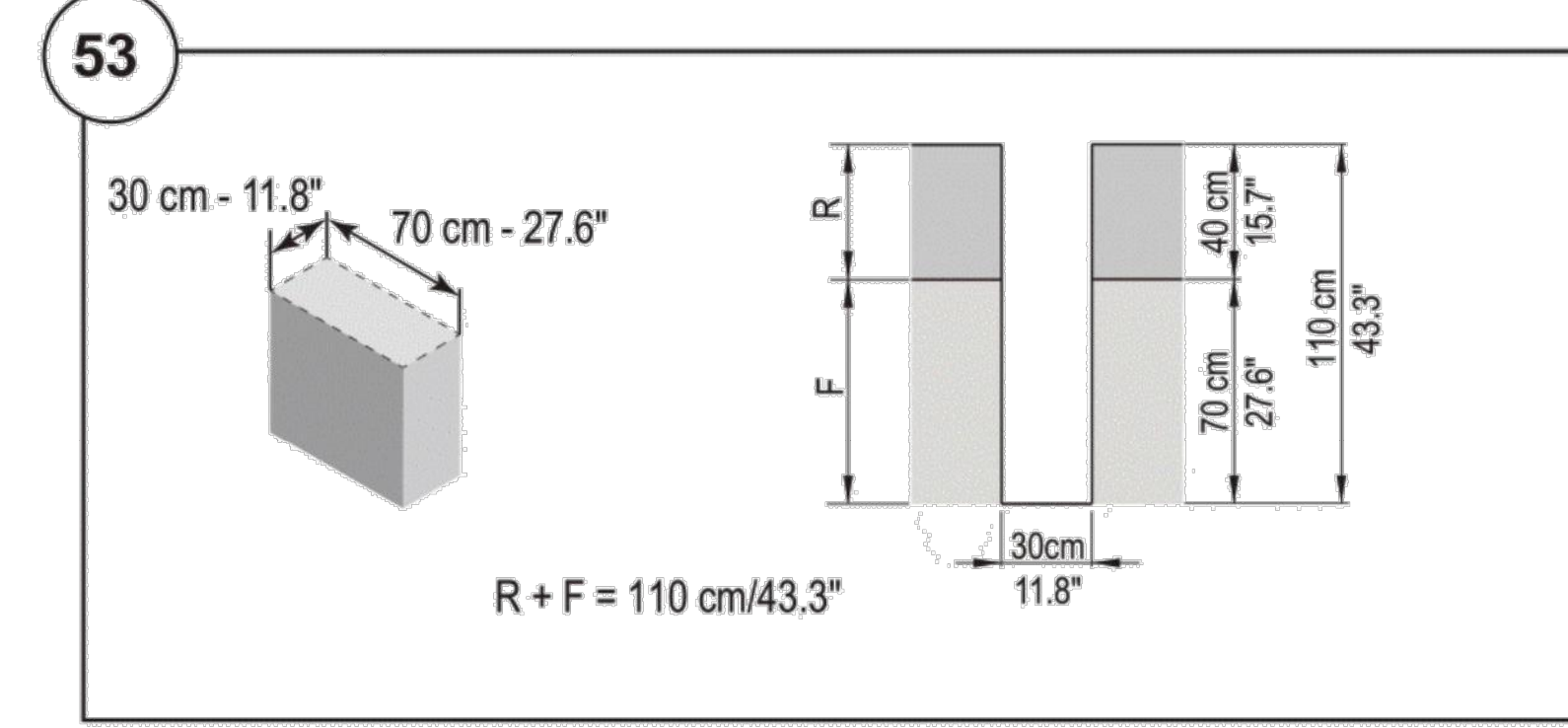
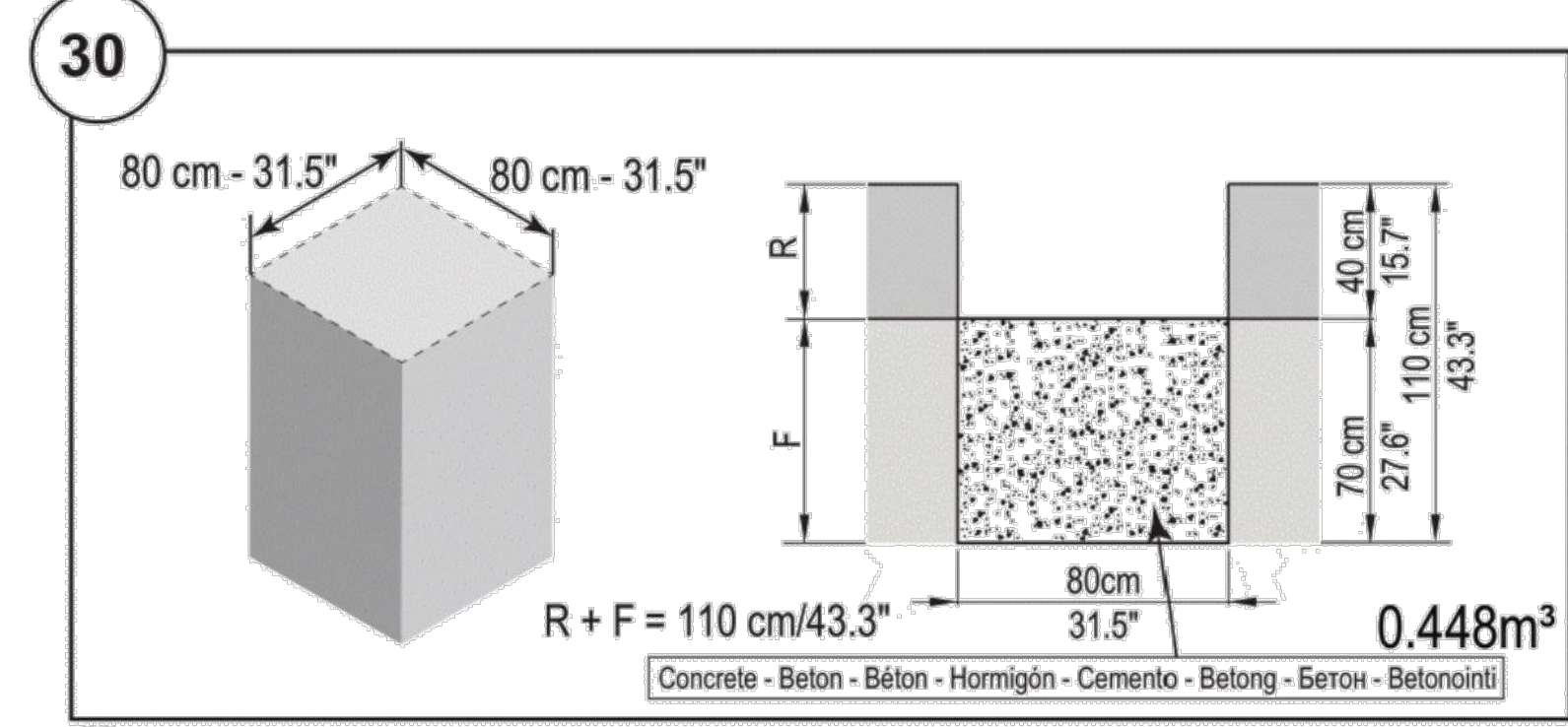
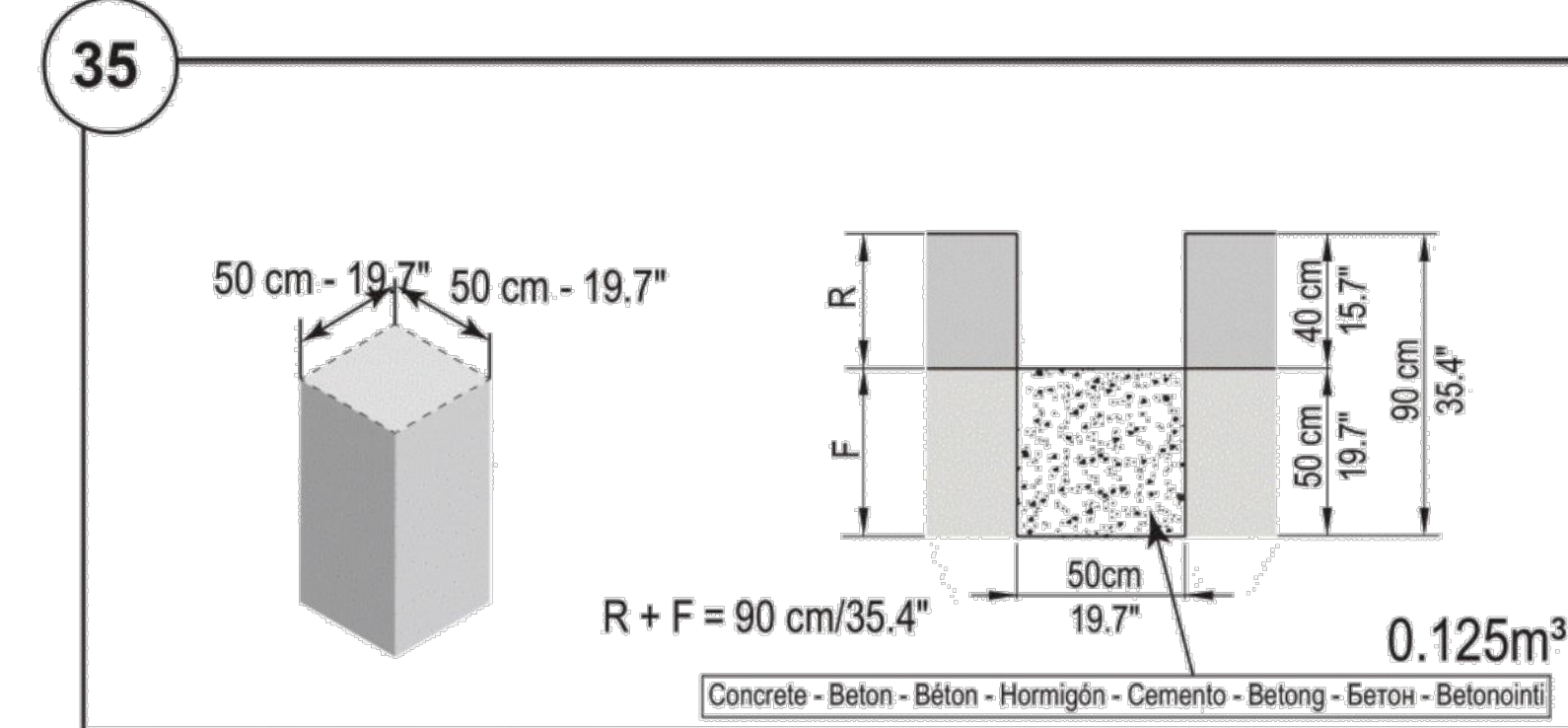
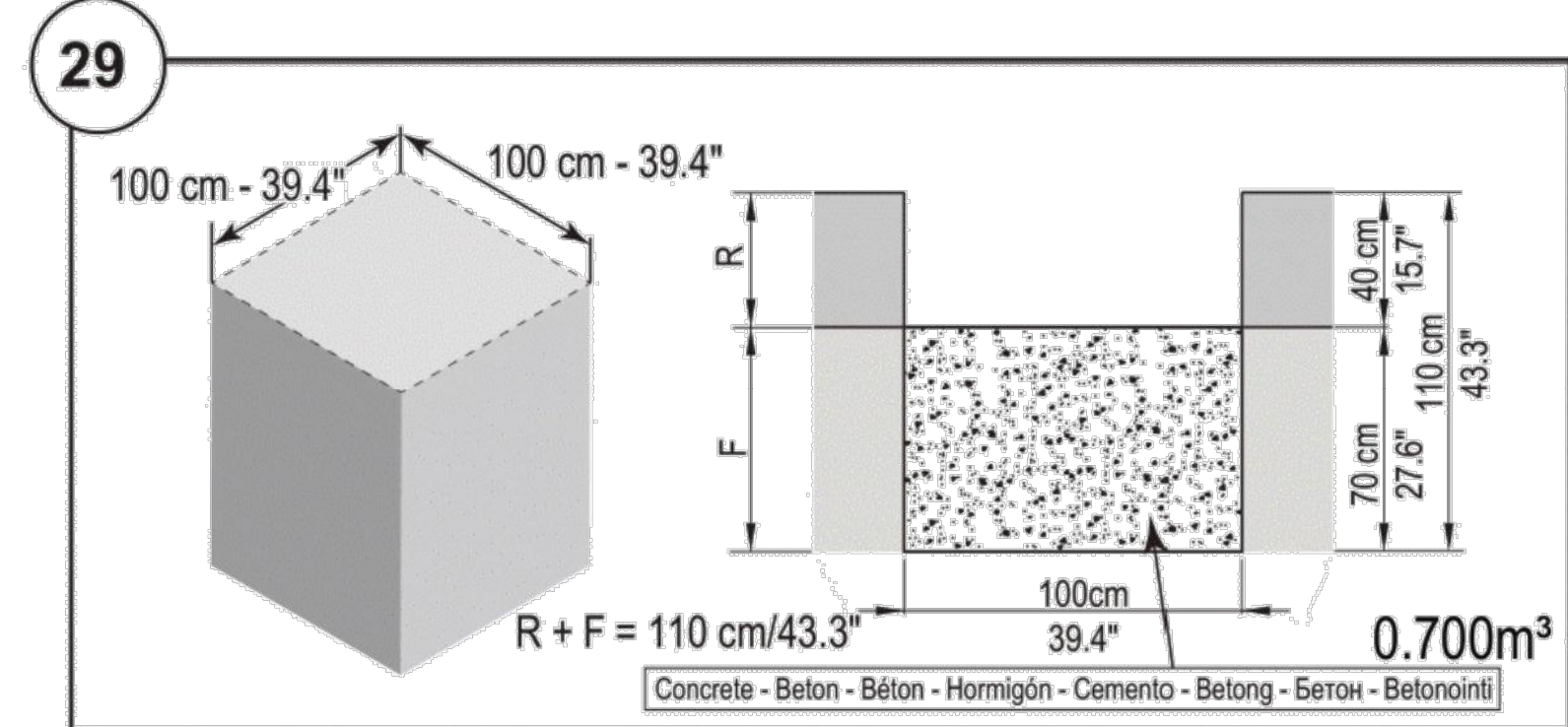
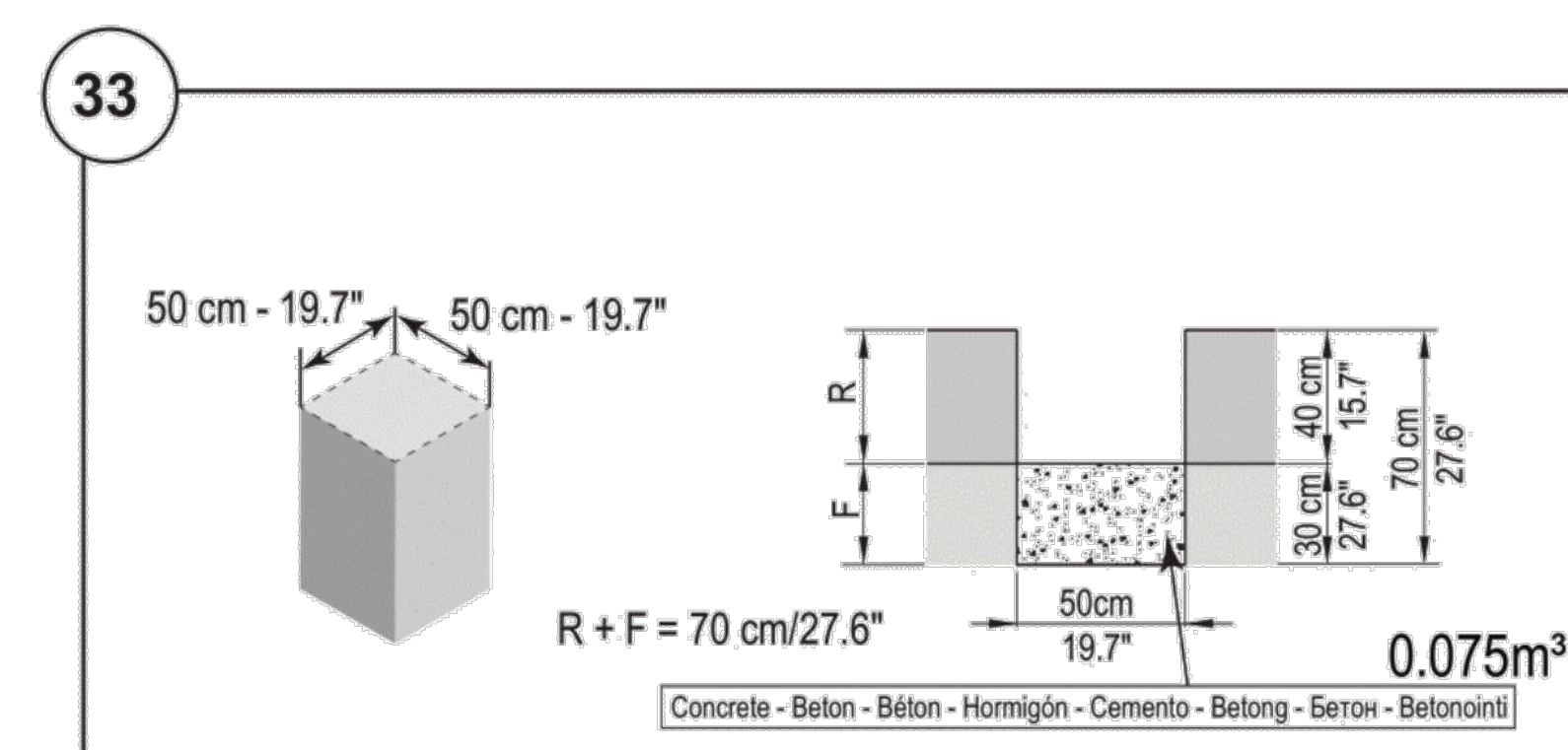
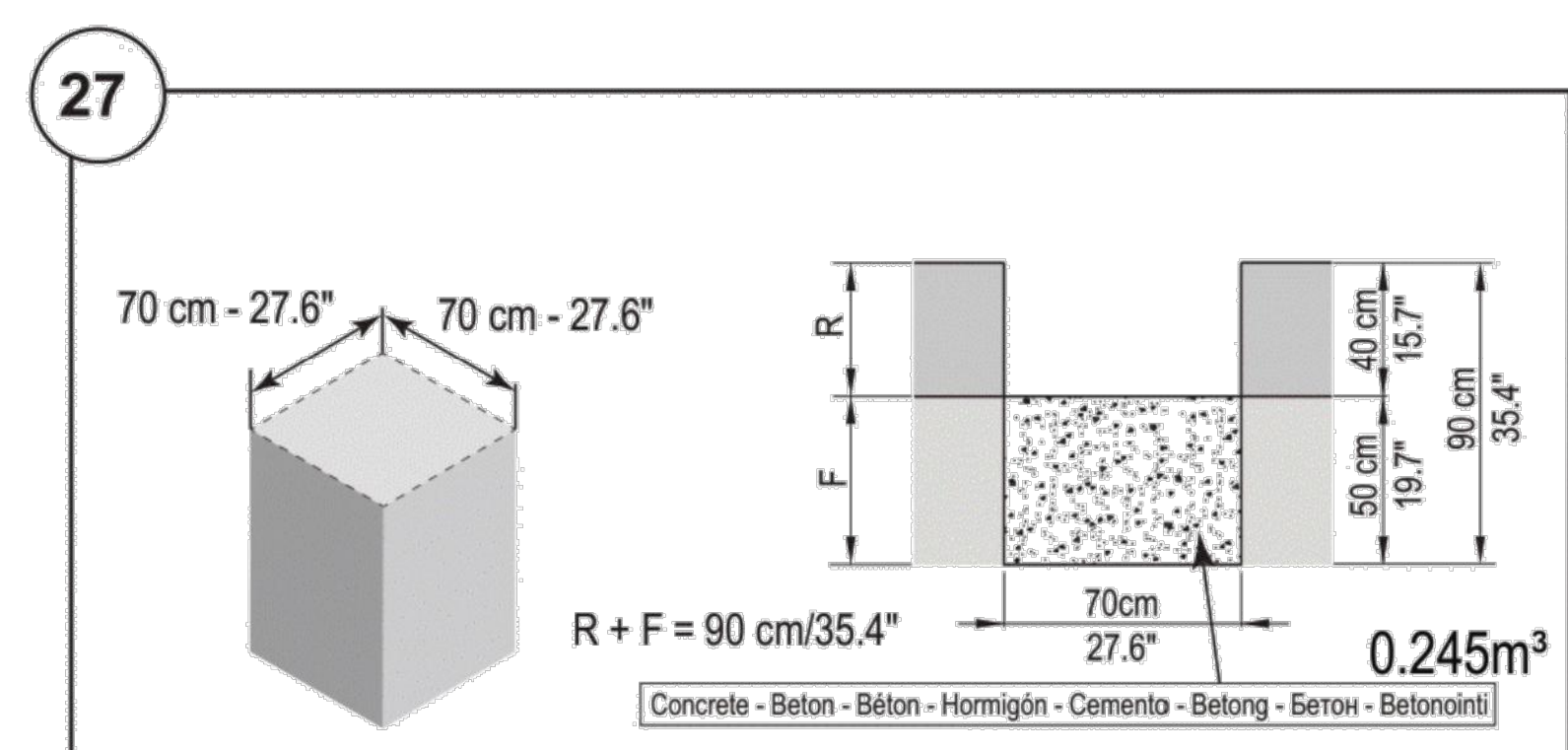
Important! The concrete (C25/30) must be sufficiently hardened before the play item may be used.
Wichtig! Vor der Inbetriebnahme des Spielgeräts muß der Beton (C25/30) ausreichend abgeunden haben.
Important! Le béton (C25/30) doit avoir suffisamment durci avant de mettre en service l'équipement de jeux.
Importante! El hormigón (C25/30) debe estar suficientemente endurecido antes de comenzar a utilizar el equipo de juego.
Importante! Prima de utilizzare le attrezzature da gioco, il cemento (C25/30) deve essere sufficientemente solidificato.
Belangrijk! Het beton (C25/30) moet voldoende gehard zijn voordat het speeltoestel in gebruik wordt genomen.
Viktigt! Betongen (C25/30) måste ha härdat tillräckligt innan lekredskapet börjar användas.
Viktigt! Betonen (C25/30) skal være tilstrækkeligt hærdet, før legeredskabet tages i brug.
Важно! Перед использованием сооружений убедитесь, что бетон (C25/30) затвердел.
HUOM! Betonivalun (C25/30) on oltava tarpeeksi kuiva, ennen kuin leikkivälinettä saa käyttää.

R: Resilient surfacing - Fallschutzbelag
 Revêtement amortissant - Recubrimiento amortiguador - Materiale ammortizzante
 Veiligheidsondergrond - Fallunderlag
 Faldunderlag - Безопасное покрытие
 Turva-alusta

F: Foundation - Fundament - Fondement
 Fondazione - Fundamento - Fonden - Stiftelsen
 Perustus - Stichting - Фонд

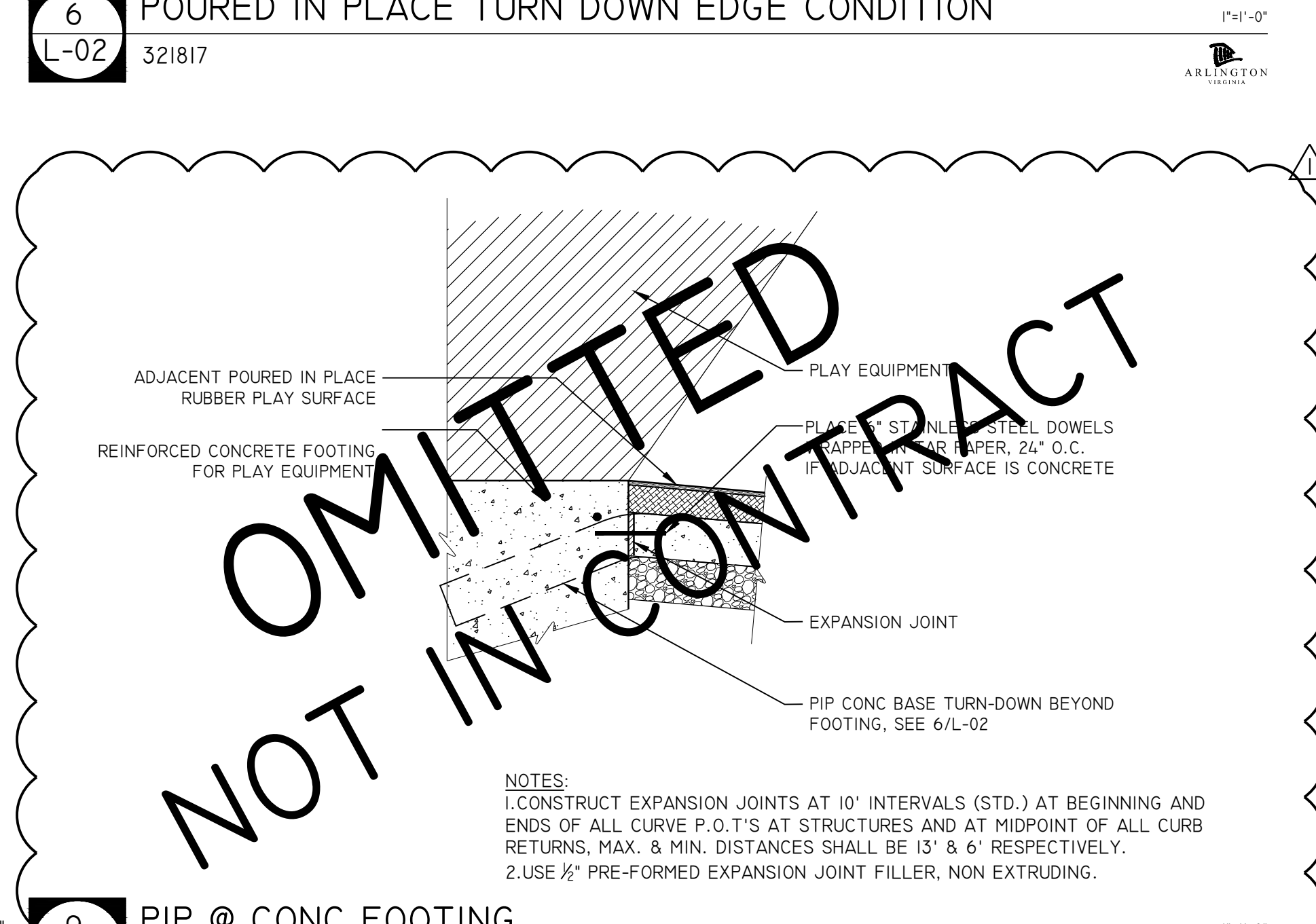
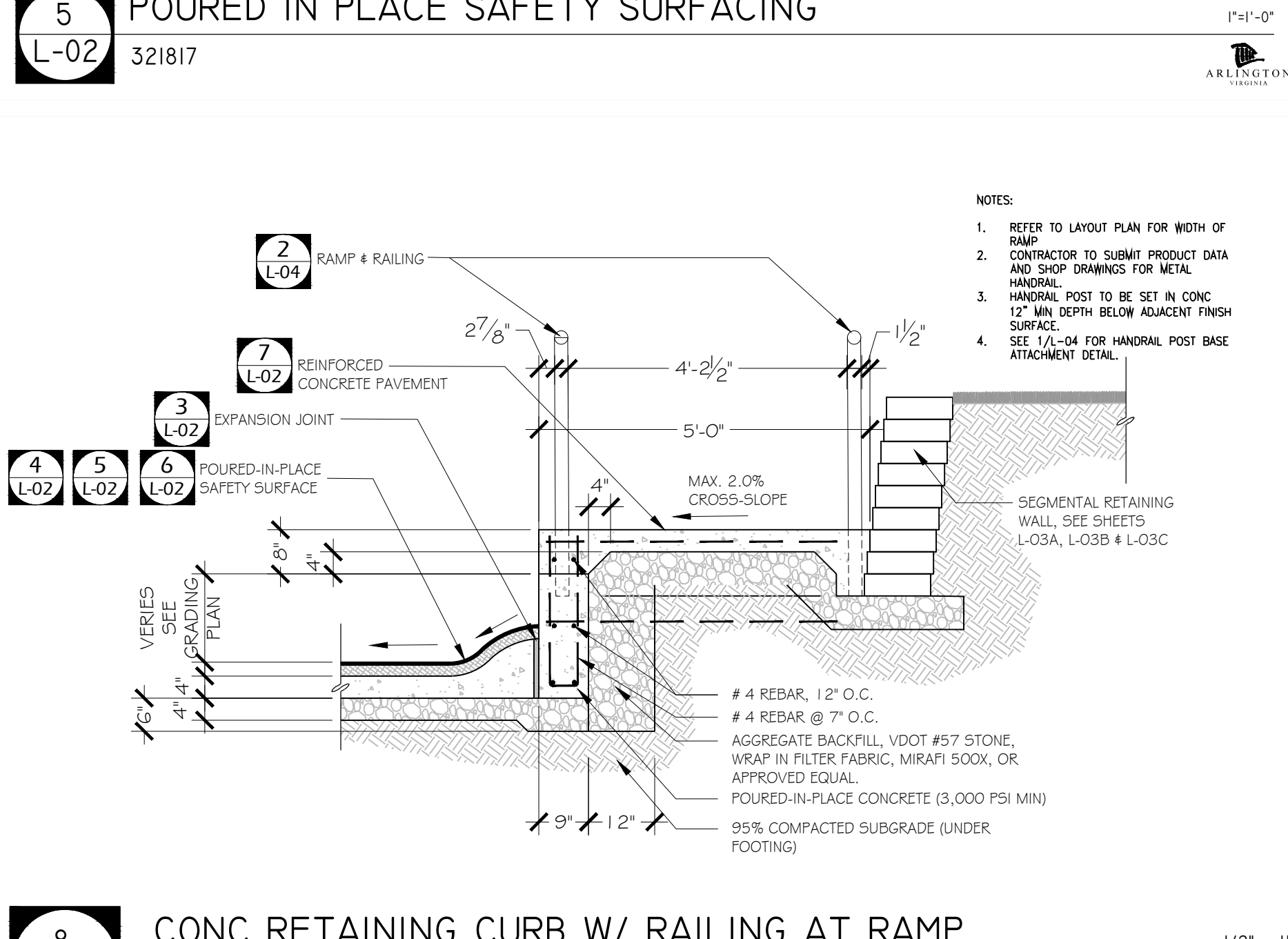
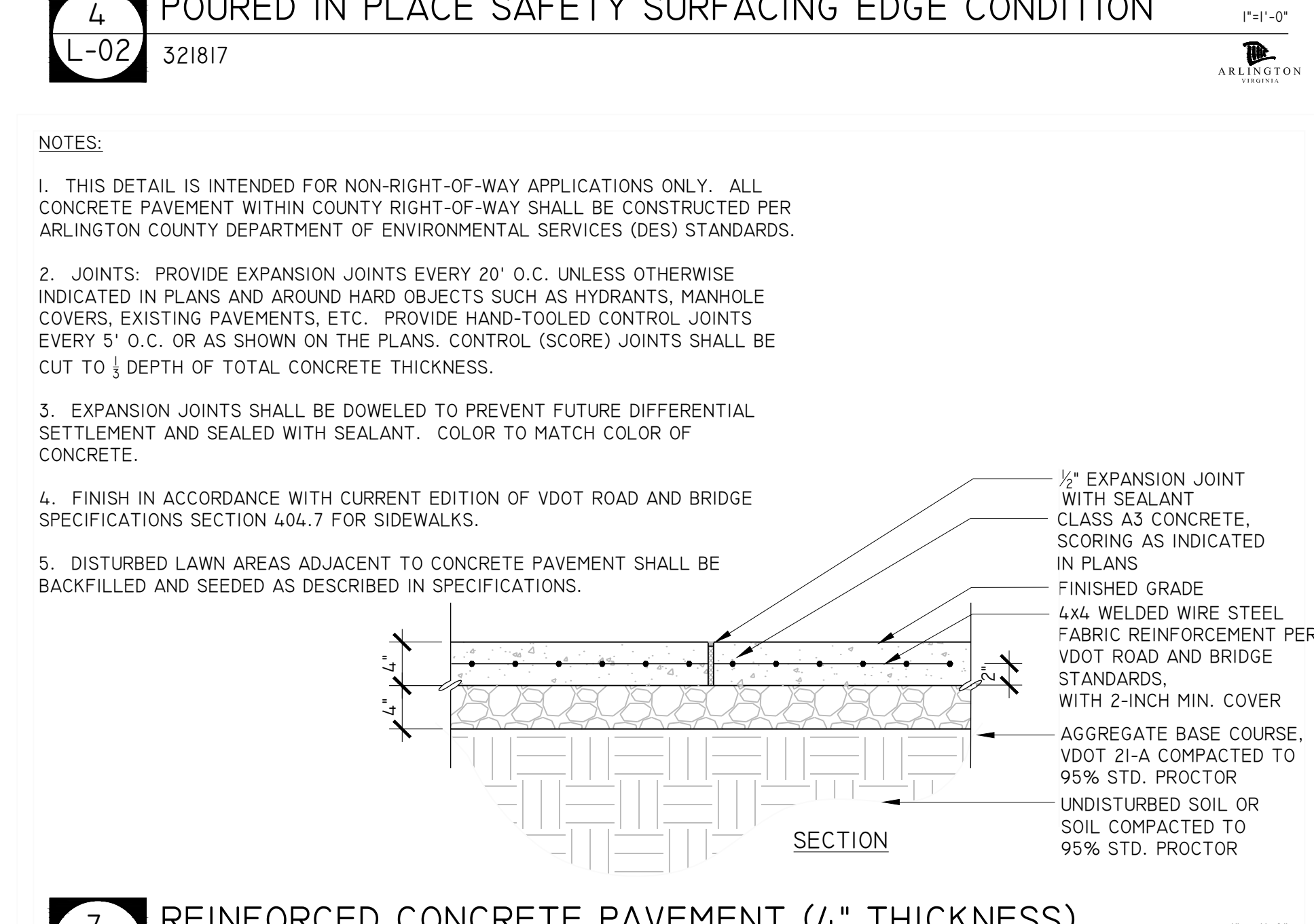
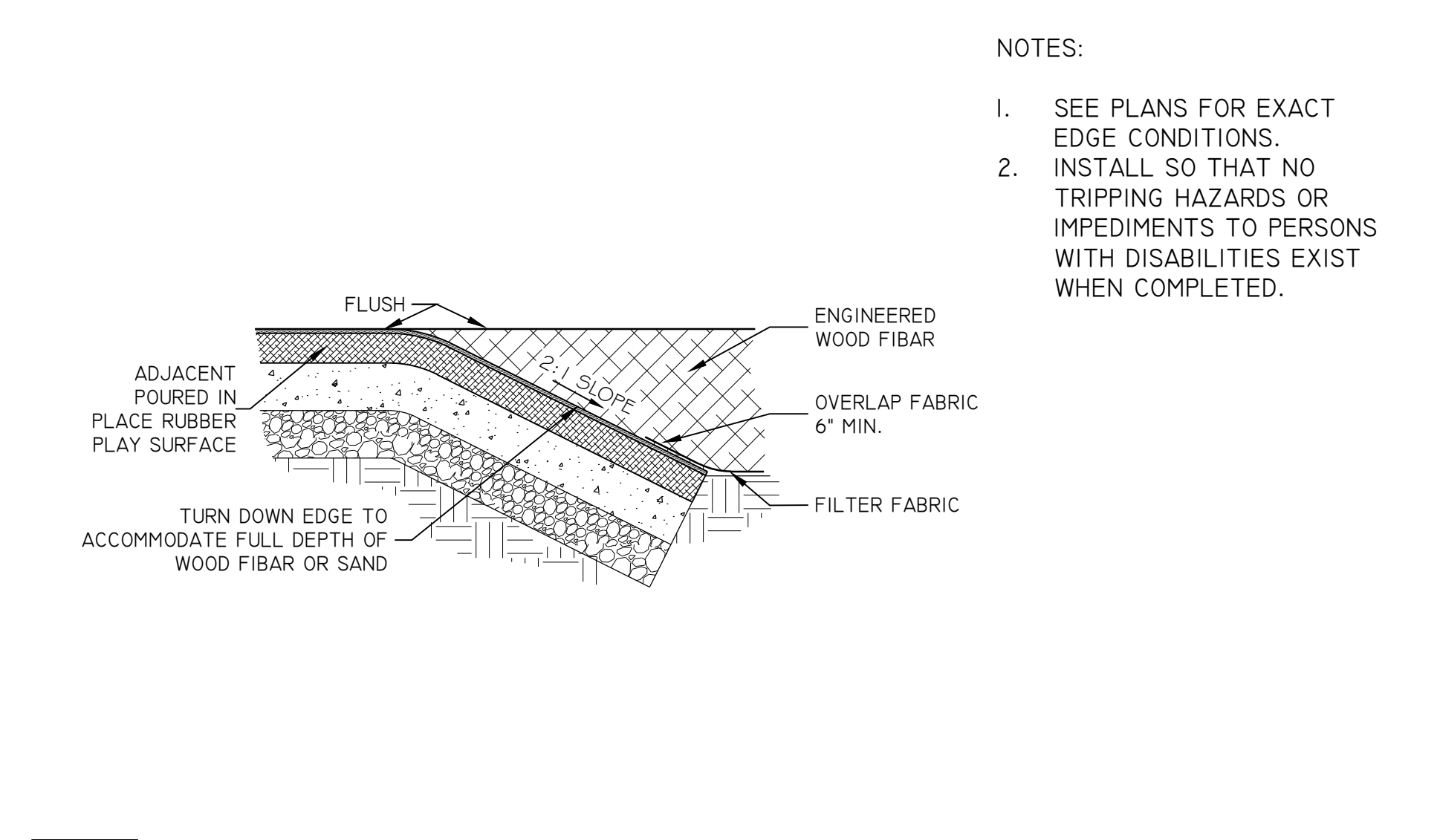
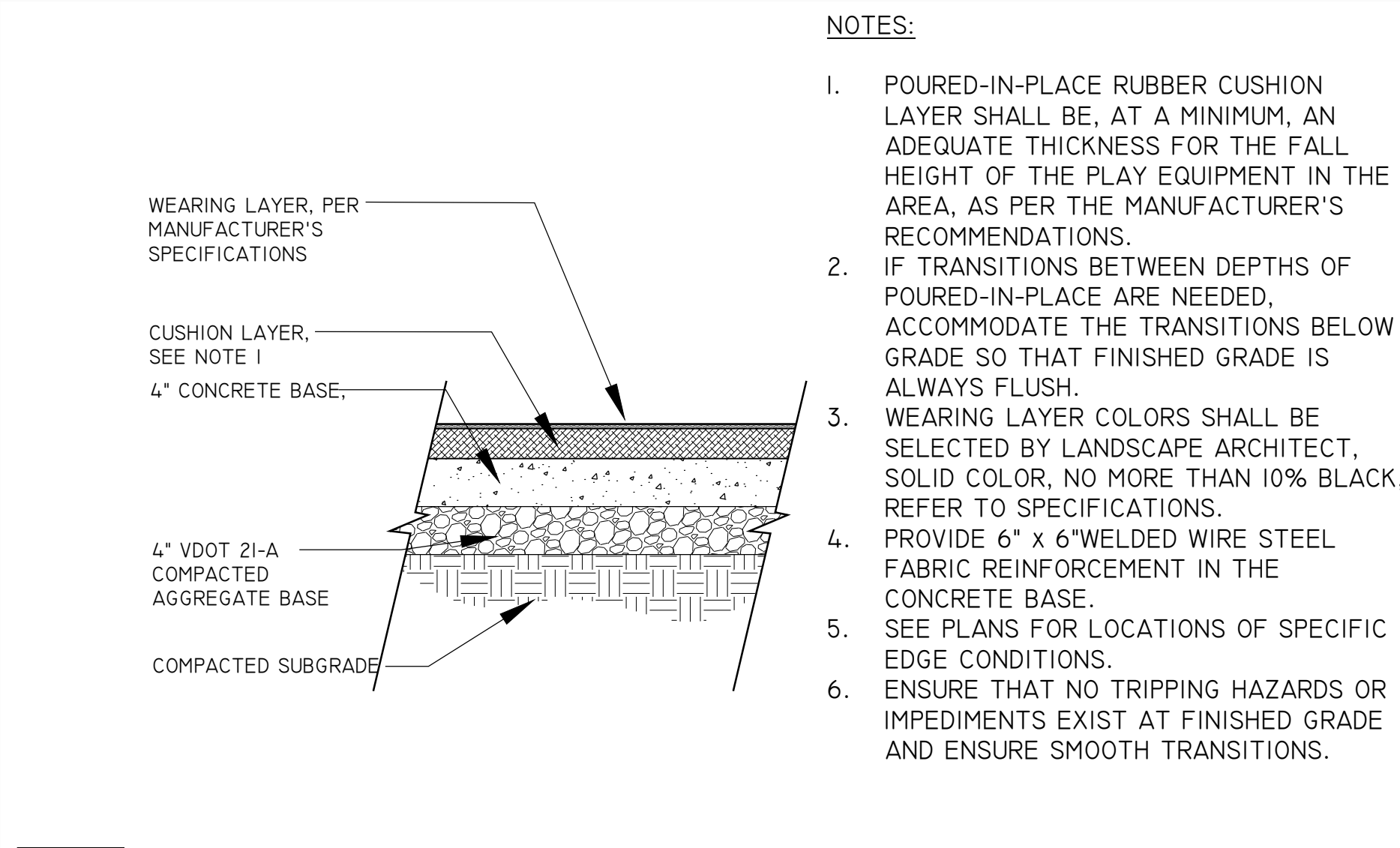
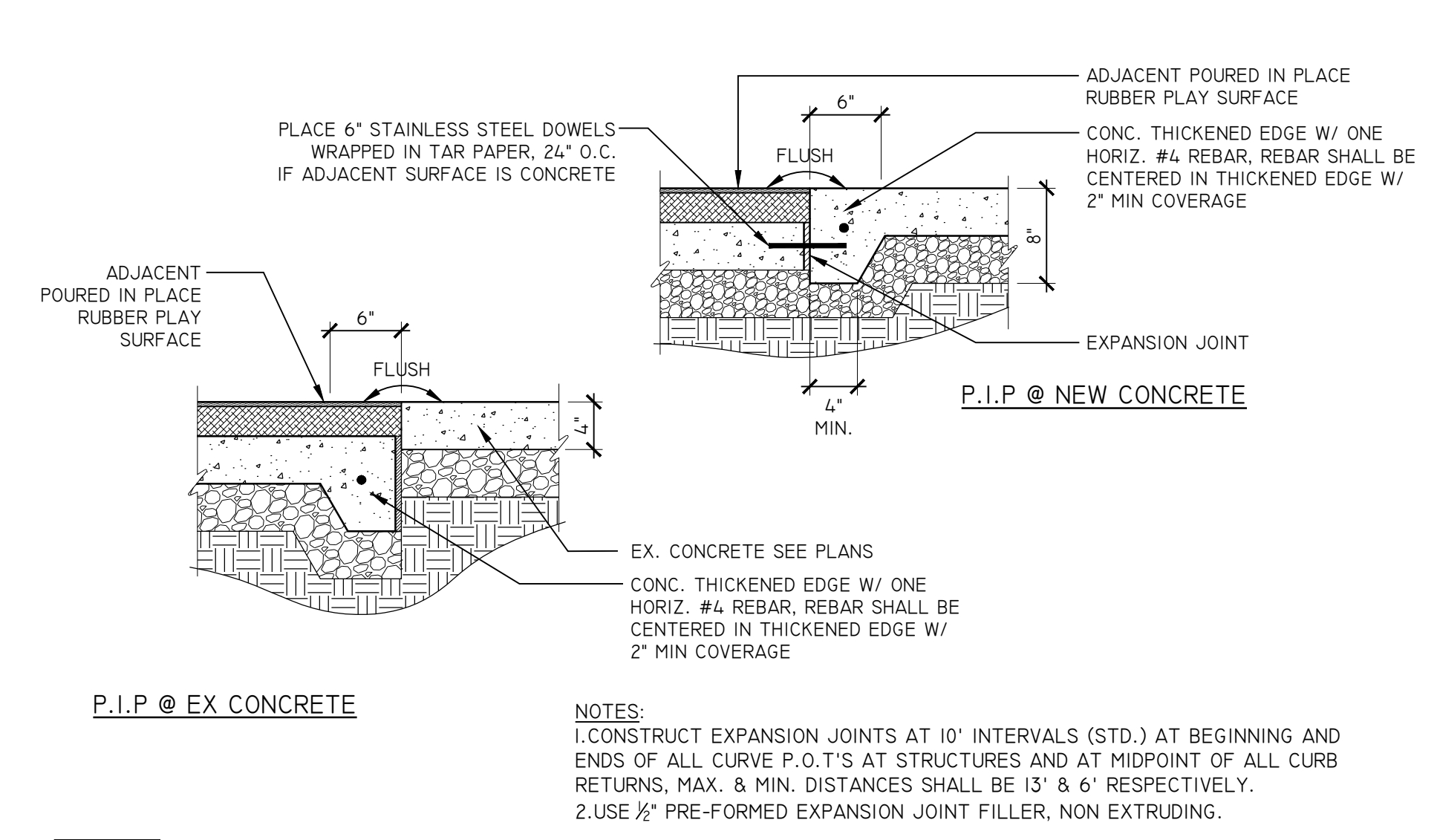
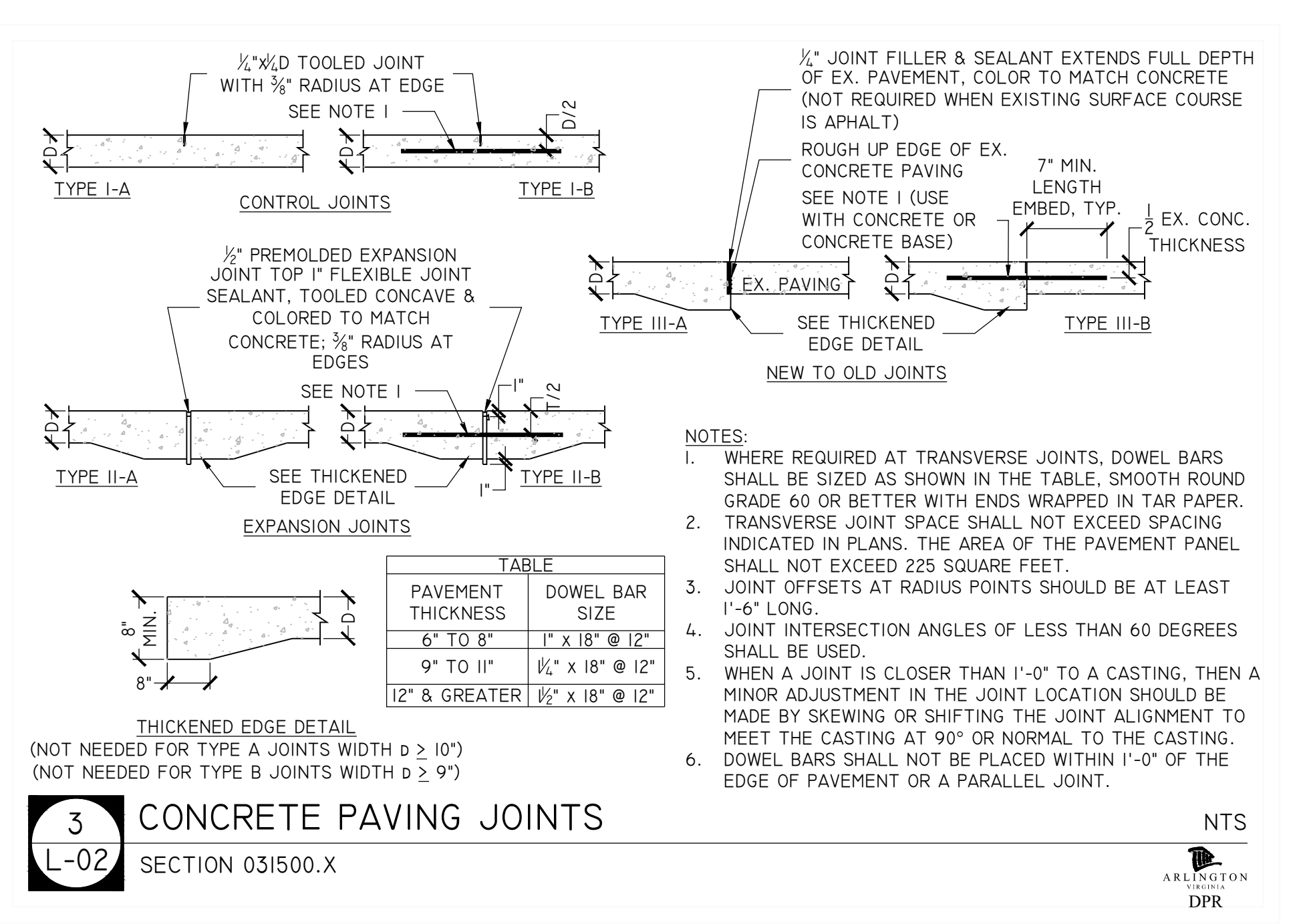
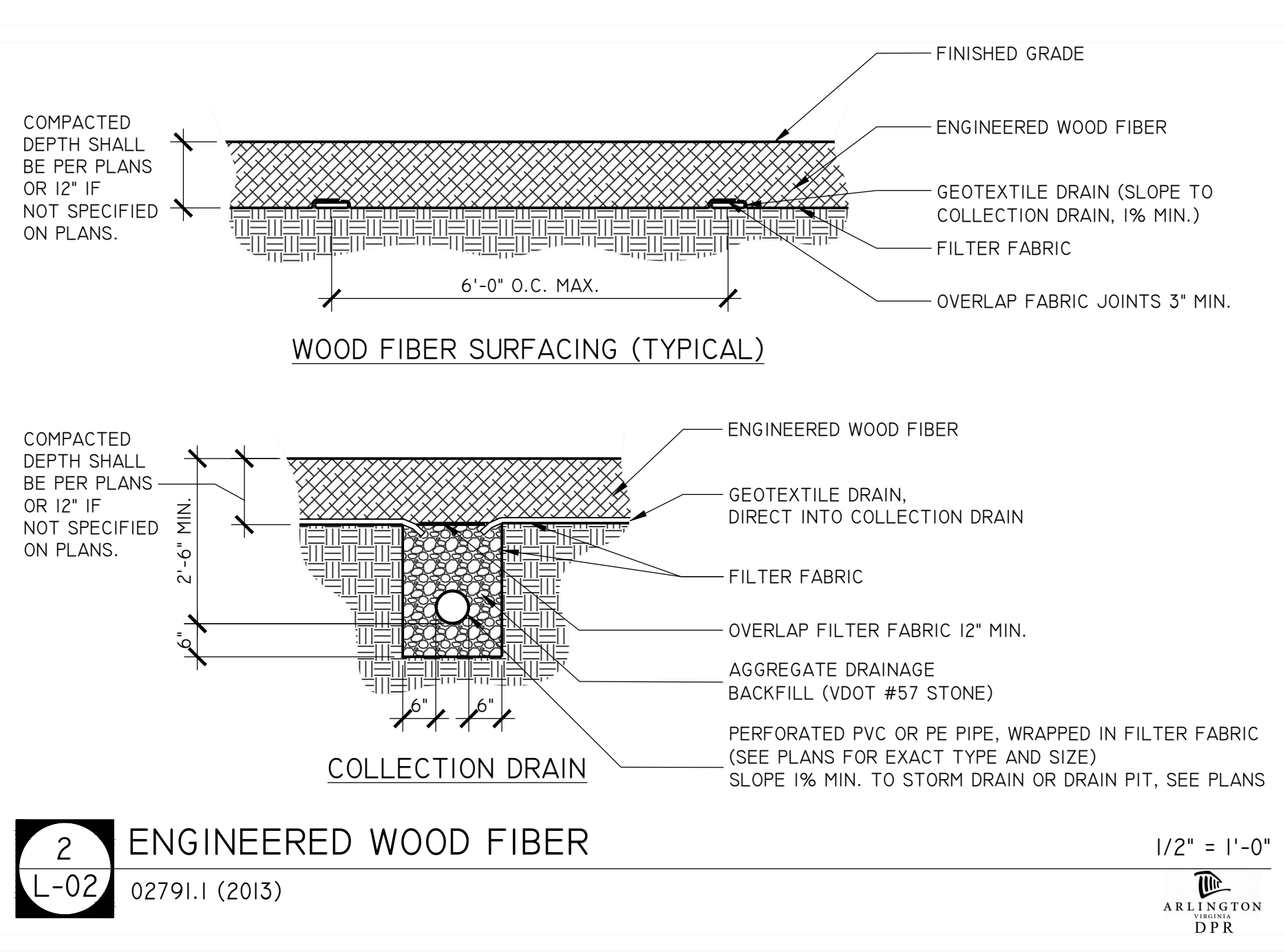
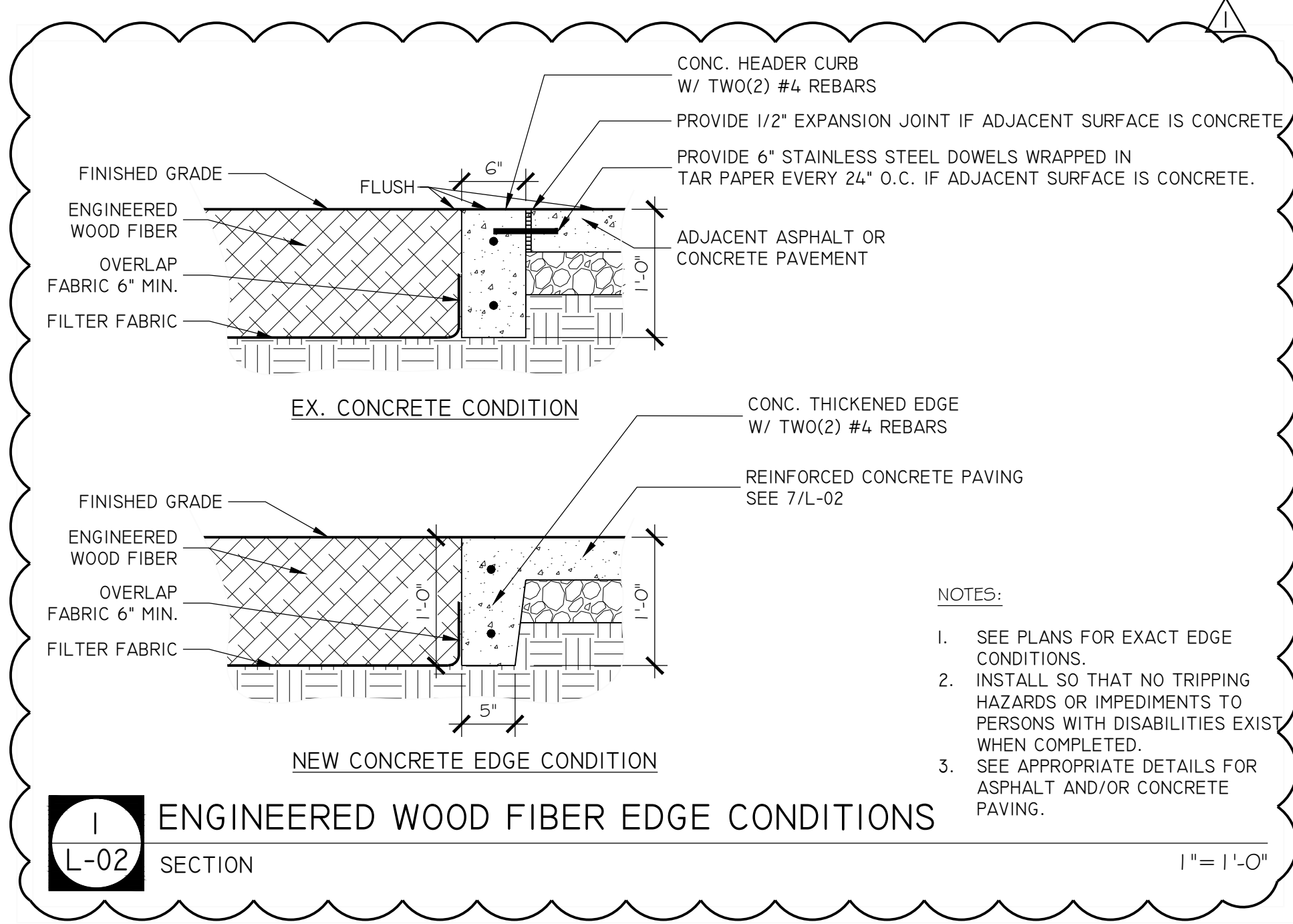
Copyright©KOMPAN A/S

V00117 20200624 PetruJu



SKY_TWISTER_FOOTING_DETAIL
L-01C

FILE
NTS



21-DPR-ITB-639

Project Name and Location
TOWERS PARK PLAYGROUND RENOVATIONS

801 S Scott St
Arlington, VA 22204

Sheet Title
SITE DETAILS

Approval _____ Date _____

Design Supervisor _____

Revisions _____ Date _____
▲ REVISED DETAIL 6/15/21

Designed: _____
Drawn: _____
Checked: _____

Filename: L-02_DETLDWG
Plotted: Jun. 16, 21

Scale: VARIES
Date: DECEMBER 20, 2019

Seal
COMMUNITY OF VIRGINIA
LANDSCAPE ARCHITECT
JOSHUA B SERCK
Lic. No. 1394
12-22-2020

Sheet
L-02R
No. 32 of 40

GEOGRID-REINFORCED SOIL MODULAR BLOCK RETAINING WALLS

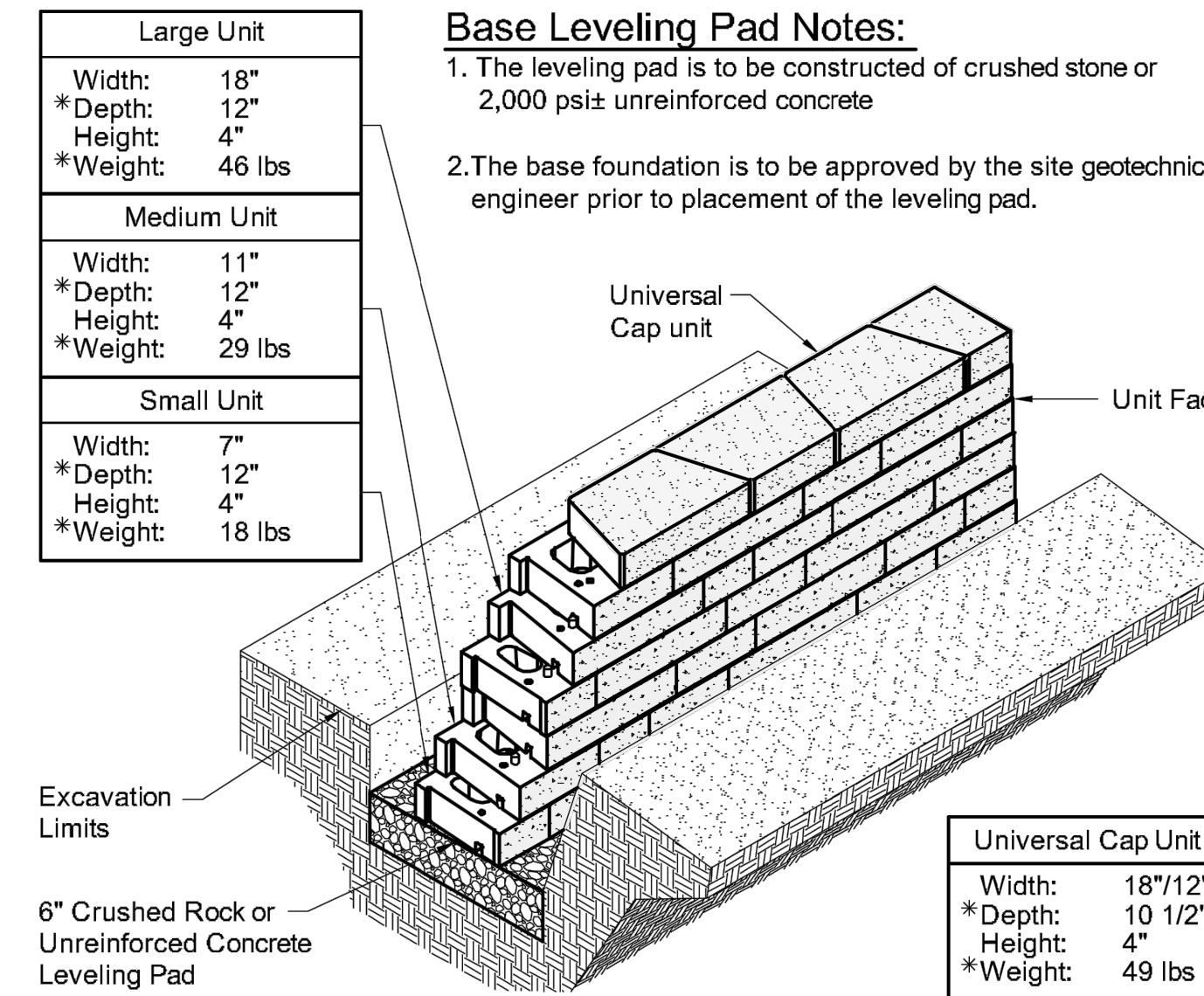
KEYSTONE® 4" CENTURY SEGMENTAL RETAINING WALL SYSTEM, OR EQUIVALENT

SEGMENTAL BLOCK RETAINING WALLS GENERAL NOTES:

- PROPERTIES OF THE RETAINING WALL FACING UNITS SHALL CONFORM TO THOSE PRESENTED IN THE PRODUCT LITERATURE FOR THE SELECTED PRODUCT.
- THE RETAINING WALL FACING UNITS SHALL HAVE A GRANITE COLOR.
- REINFORCEMENT FOR THIS SEGMENTAL BLOCK RETAINING WALL SYSTEM, SHALL BE MIRAFIXT GEOGRIDS, OR EQUIVALENT, AS APPROVED BY THE ENGINEER.
- GEOTEXTILE FILTER FABRIC SHALL MEET THE REQUIREMENTS OF AASHTO M-288-06, CLASS III (e.g., MIRAFI 140N OR EQUIVALENT).
- THE GRANULAR LEVELING PAD SHALL CONSIST OF VDOT #21A CRUSHED STONE, VDOT No. 57, OR EQUIVALENT. AN OPTIONAL UNREINFORCED CONCRETE LEVELING PAD MAY BE USED IN LIEU OF A GRANULAR LEVELING PAD.
- CONSTRUCTION OF THE RETAINING WALL COMPONENTS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION RECOMMENDATIONS. PRIOR TO START OF WALL CONSTRUCTION, THE CONTRACTOR SHALL REVIEW THE MANUFACTURER'S INSTALLATION MANUAL FOR GEOGRID-REINFORCED, AND GRAVITY, SEGMENTAL BLOCK RETAINING WALLS.
- THE RETAINING WALL DESIGN WAS PERFORMED USING THE KEYWALLPRO DESIGN SOFTWARE).
- THE RETAINING WALL DESIGN WAS PERFORMED IN ACCORDANCE WITH THE NCMA DESIGN METHOD (3RD EDITION), THE 2015 IBC, AND THE 2015 VUSBC.
- THESE DRAWINGS HAVE BEEN PREPARED BY AFS Geo Consultants, LLC SOLELY FOR THE USE OF RECOMMENDED SEGMENTAL BLOCK WALL INSTALLATION CONTRACTORS.
- GEOGRIDS SHALL BE ORIENTED WITH THE ROLL/ STRENGTH DIRECTION PERPENDICULAR TO THE WALL FACE.
- SLOPE THE FIRST GEOGRID LAYER (LOWEST) ON ALL SECTIONS 5 DEGREES DOWNWARD AND AWAY FROM THE WALL FACE. ALL OTHER LAYERS MAY BE HORIZONTAL.
- REINFORCED BACKFILL, IF USED, SHALL BE PLACED IN HORIZONTAL LIFTS NOT EXCEEDING 8 INCHES IN COMPACTED LIFT THICKNESS AND COMPACTED TO A MINIMUM OF 95 PERCENT MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-698. COMPACTION OF THE NO. 57 AGGREGATE, IF USED WITHIN THE REINFORCED ZONE, MAY BE ACHIEVED BY A MINIMUM OF TWO PASSES OF A VIBRATORY ROLLER OR UNTIL THERE IS NO VISIBLE MOVEMENT OF THE AGGREGATE, AS DETERMINED BY THE ENGINEER. COMPACTION TESTING IS NOT REQUIRED FOR THE NO. 57 STONE BACKFILL.
- HEAVY COMPACTION EQUIPMENT SHALL NOT BE OPERATED WITHIN THREE FEET OF THE WALL FACE. HAND OPERATED EQUIPMENT SHALL BE USED WITHIN THREE FEET OF FACING UNITS. IMPACT TYPE COMPACTORS SHALL BE KEPT CLEAR OF THE WALL FACE. A REDUCED LIFT THICKNESS OF 4 INCHES SHALL BE USED WITHIN THREE FEET OF THE WALL FACE.
- ALL WALL DIMENSIONS, WALL STEPS, ETC. ARE APPROXIMATE. CONTRACTOR SHALL ADJUST DIMENSIONS AS REQUIRED TO MEET ACTUAL FIELD CONDITIONS.
- TO THE BEST OF OUR KNOWLEDGE, THE INFORMATION CONTAINED HEREIN IS ACCURATE. AFS Geo Consultants CAN NOT ASSUME ANY LIABILITY WHATSOEVER FOR THE ACCURACY OR COMPLETENESS THEREOF. FINAL DETERMINATION OF THE SUITABILITY OF ANY INFORMATION OR MATERIAL FOR THE USE CONTEMPLATED, IS THE SOLE RESPONSIBILITY OF THE USER.
- THE CONTRACTOR SHALL CONSTRUCT THE RETAINING WALL(S) BASED ON THE LINES, GRADES, AND DIMENSIONS SHOWN ON THE APPROVED CIVIL/SWM PLANS. THE CONTRACTOR SHALL ADJUST THE WALL GRADES AND DIMENSIONS TO MEET ACTUAL FIELD CONDITIONS, AS APPROVED BY THE PROJECT CIVIL ENGINEER. AFS Geo Consultants, LLC SHALL BE GIVEN THE OPPORTUNITY TO REVIEW ANY CHANGES TO THE PROPOSED GRADING IN THE VICINITY OF THE RETAINING WALL, TO DETERMINE IF REDESIGN OF THE WALL IS REQUIRED.
- ALL TEMPORARY EXCAVATIONS SHALL COMPLY WITH OSHA REGULATIONS (BY OTHERS).
- DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING THE FOUNDATION SOILS, REINFORCED BACKFILL, RETAINED BACKFILL, GRANULAR LEVELING PAD, AND DRAINAGE AGGREGATE AGAINST POTENTIAL EROSION AND SCOUR, UNTIL THE FINAL GROUND COVER (ON BOTH SIDES OF EACH WALL) HAS BEEN INSTALLED/FINISHED. STORM WATER RUNOFF SHOULD GENERALLY BE COLLECTED AND DIVERTED AWAY FROM THE RETAINING WALL AREA DURING CONSTRUCTION.
- THE CONTRACTOR SHALL ENSURE ALL SURROUNDING STRUCTURES/EXISTING SLOPES/ROADWAYS ARE PROTECTED FROM THE EFFECTS OF WALL EXCAVATION. STABILITY OF EXISTING STRUCTURES, DURING CONSTRUCTION, IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR SITE SAFETY.
- THE FOLLOWING SOIL PARAMETERS HAVE BEEN USED FOR THE DESIGN OF THIS RETAINING WALL:

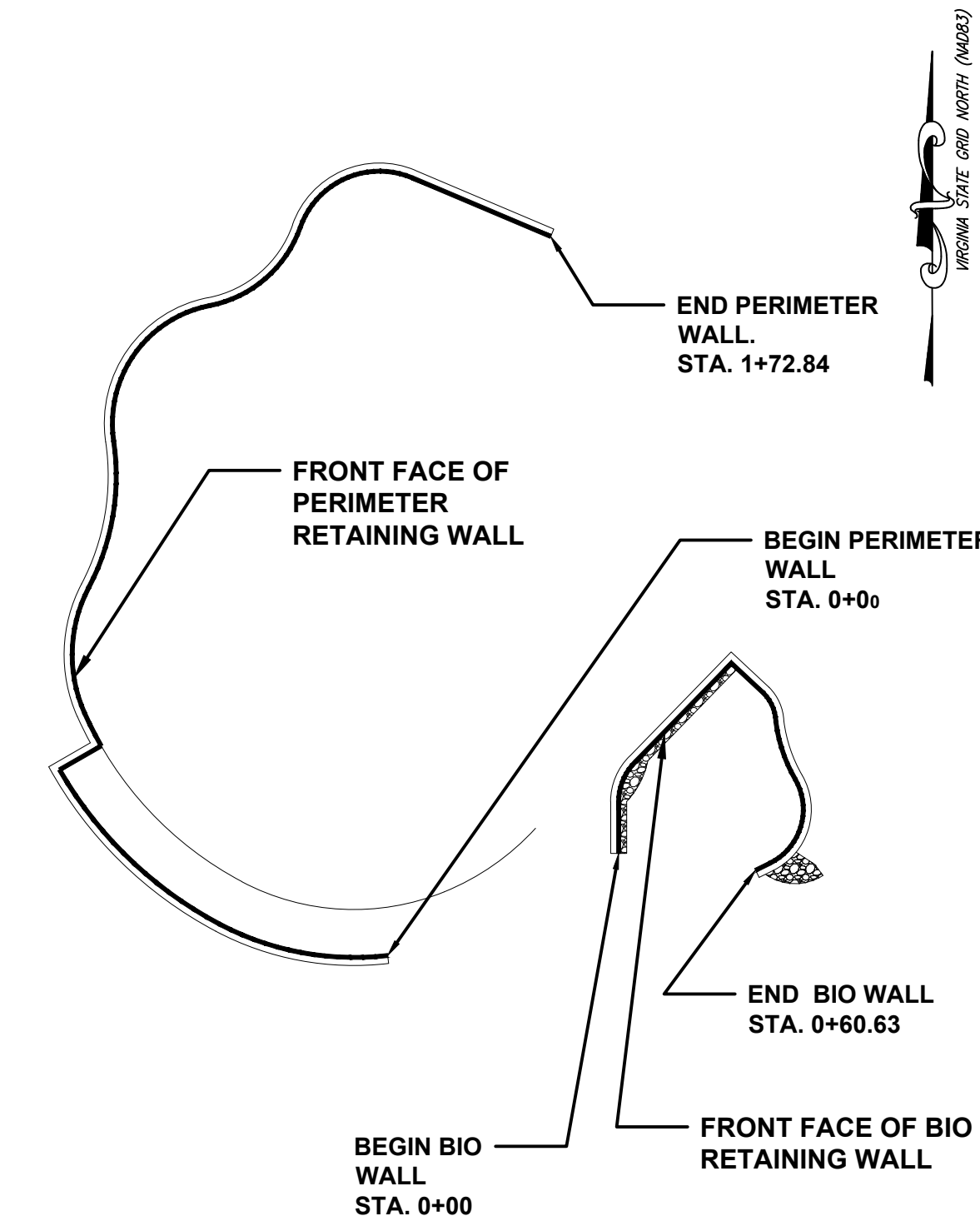
Soil Design Parameters Segmental Block Retaining Wall					
Material	Description	γ (pcf)	ϕ (degrees)	C (psf)	Max. Applied Bearing Pressure
Foundation Soils (Note c.)	Approved/Firm Natural Soils, or Approved/Firm Existing Fill	120	$\phi_f = 27$	0	1,000 psf
Retained Backfill/Soil	Undisturbed Natural Soils, or Approved Fill	120	$\phi_r = 27$	0	N/A
Reinforced Backfill (Note d.)	Compacted Fill (Sandy ML, SM, or more granular per ASTM D-2487) LL < 45, PI < 20 5 < p < 9 %Fines = 70 Max. Max. Aggregate Size = 3"	120	$\phi_{re} = 27$	0	N/A

- NOTES:
- DESIGN PARAMETERS ARE BASED ON THE RESULTS OF THE GEOTECHNICAL REPORT PREPARED BY TERRACON, DATED OCTOBER 17, 2019.
 - C = COHESION, ϕ = FRICTION ANGLE, G = MOIST UNIT WEIGHT, N/A = NOT APPLICABLE, LL = LIQUID LIMIT, AND PI = PLASTICITY INDEX.
 - MODERATELY TO HIGHLY PLASTIC CLAY AND SILT SOILS (CL/CH AND ML/MH SOIL CLASSIFICATION, WITH A LL \geq 45), IF ENCOUNTERED AT THE FOUNDATION SUBGRADE LEVEL, SHALL BE UNDERCUT A MINIMUM OF 18" BELOW THE BOTTOM OF THE LEVELING PAD AND REPLACED WITH A COMPACTED GRANULAR FILL MATERIAL, OR NO. 57 CRUSHED AGGREGATE, FOR THE ENTIRE WIDTH OF THE REINFORCED ZONE, UNDER THE DIRECTION OF THE GEOTECHNICAL ENGINEER/TESTING AGENCY.
 - THE REINFORCED BACKFILL MATERIAL SHALL BE SUBSTANTIALLY FREE OF SHALE OR OTHER SOFT, POOR DURABILITY PARTICLES. IF PROCESSED MATERIAL/AGGREGATE IS USED, THE MATERIAL SHALL HAVE A MAGNESIUM SULFATE SOUNDNESS LOSS OF LESS THAN 30 PERCENT AFTER FOUR (4) CYCLES, AS DETERMINED BY ASTM C88-13.
 - BEARING CAPACITY AND SETTLEMENT OF THE FOUNDATION SOILS IS THE RESPONSIBILITY OF THE GEOTECHNICAL ENGINEER. ANY UNSUITABLE/LOOSE SOILS AND/OR UNDOCUMENTED EXISTING FILL, ENCOUNTERED AT THE RETAINING WALL'S SUBGRADE SHALL BE REMOVED AND REPLACED UNDER THE DIRECTION OF THE GEOTECHNICAL ENGINEER/TESTING AGENCY.



Century Wall Unit/Base Pad Isometric Section View

*Dimensions & Weight May Vary by Region



SEGMENTAL BLOCK WALLS LAYOUT PLAN
SCALE 1" = 20'

AFS Geo Consultants, LLC
Geotechnical Consulting and Retaining Wall Design

7820 LakeLand Valley Dr.
Springfield, VA 22153
Tel: (703) 249-4655
Fax: (703) 249-4656



DEPARTMENT OF PARKS
AND RECREATION

Park Development Division
2100 Clarendon Boulevard, Suite 414
Arlington, VA 22201
Phone: 703.228.3332
Fax: 703.228.3328

21-DPR-ITB-639

Project Name and Location

**TOWERS
PARK
PLAYGROUND
RENOVATIONS**

801 S Scott St
Arlington, VA 22204

Sheet Title

**SITE DETAILS -
SEGMENTAL
RETAINING WALL**

Approval Date
DESIGN SUPERVISOR DS_DATE
Design Supervisor

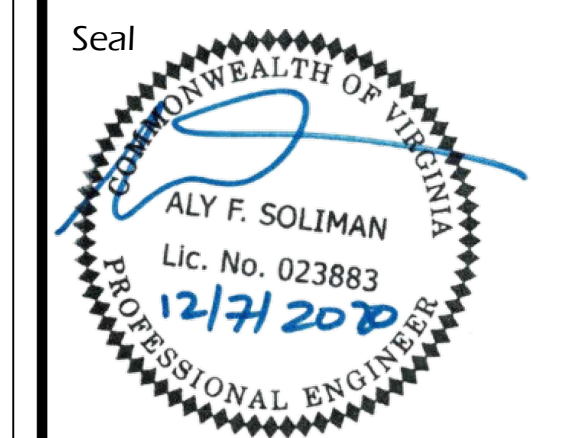
Revisions Date
REV 1 REV 1 DATE
REV 2 REV 2 DATE
REV 1 REV 3 DATE
REV 1 REV 4 DATE
REV 5 REV 5 DATE

Designed:
Drawn:
Checked:

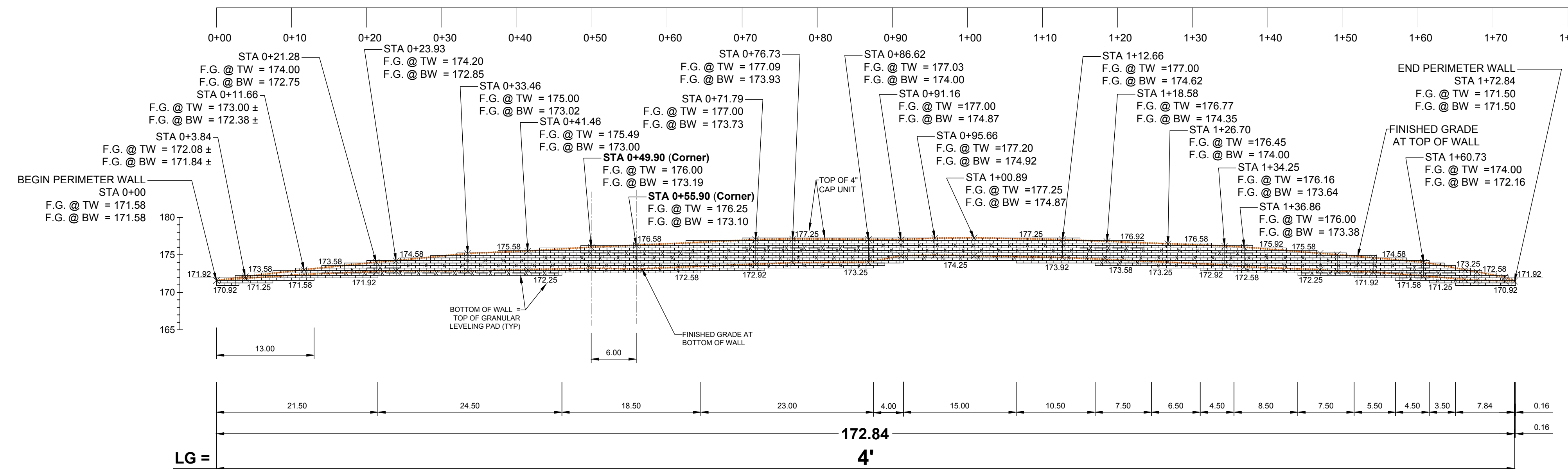
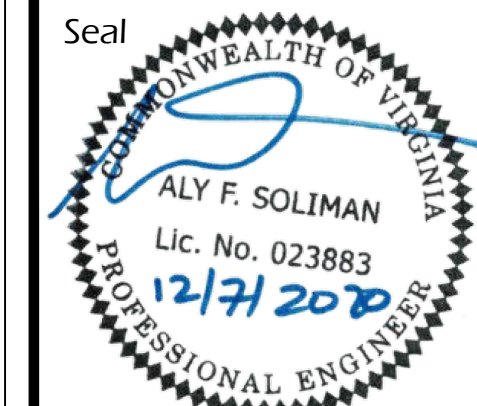
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Plotted: Dec. 9, 20

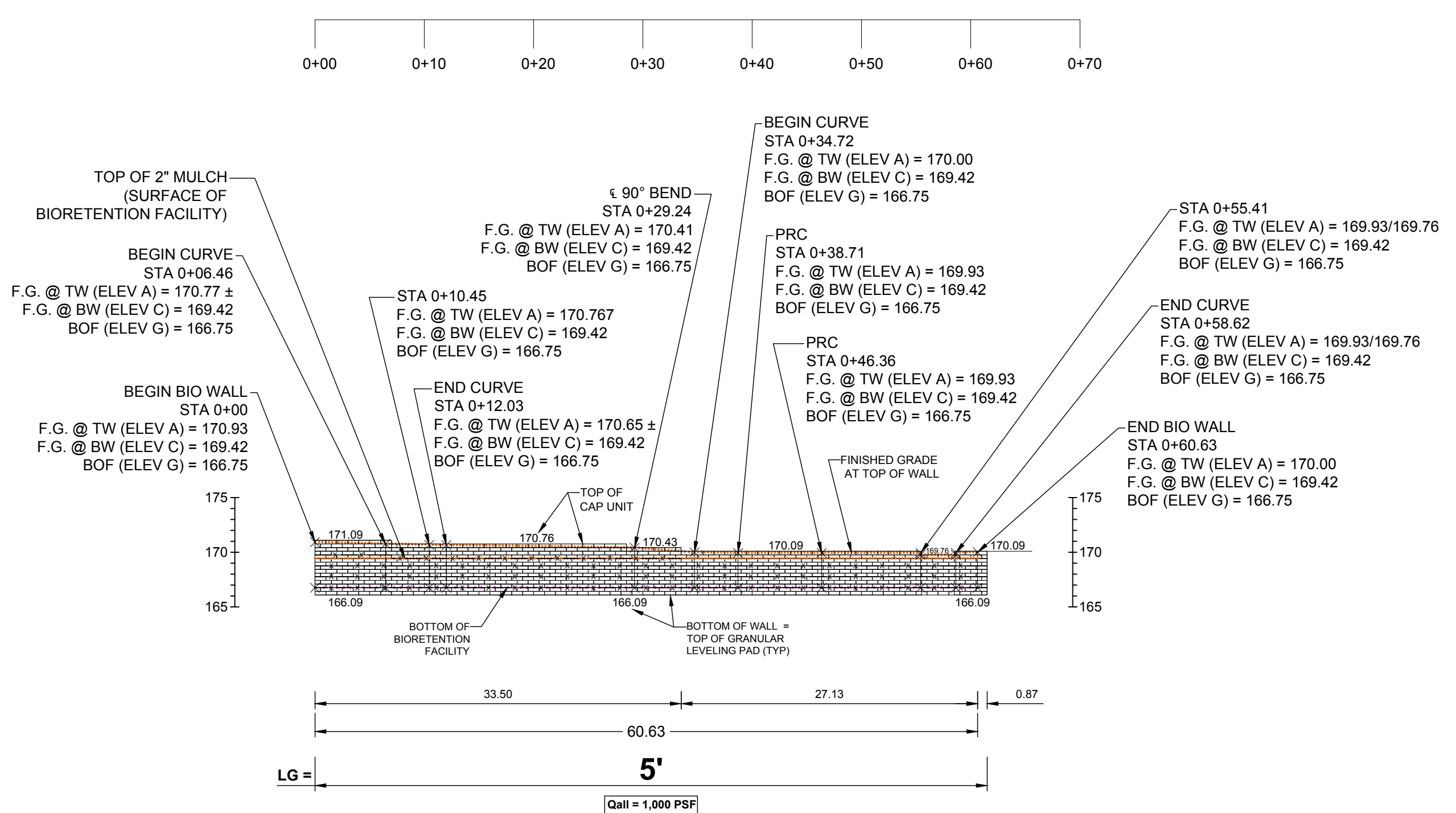
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Sheet
L-03A



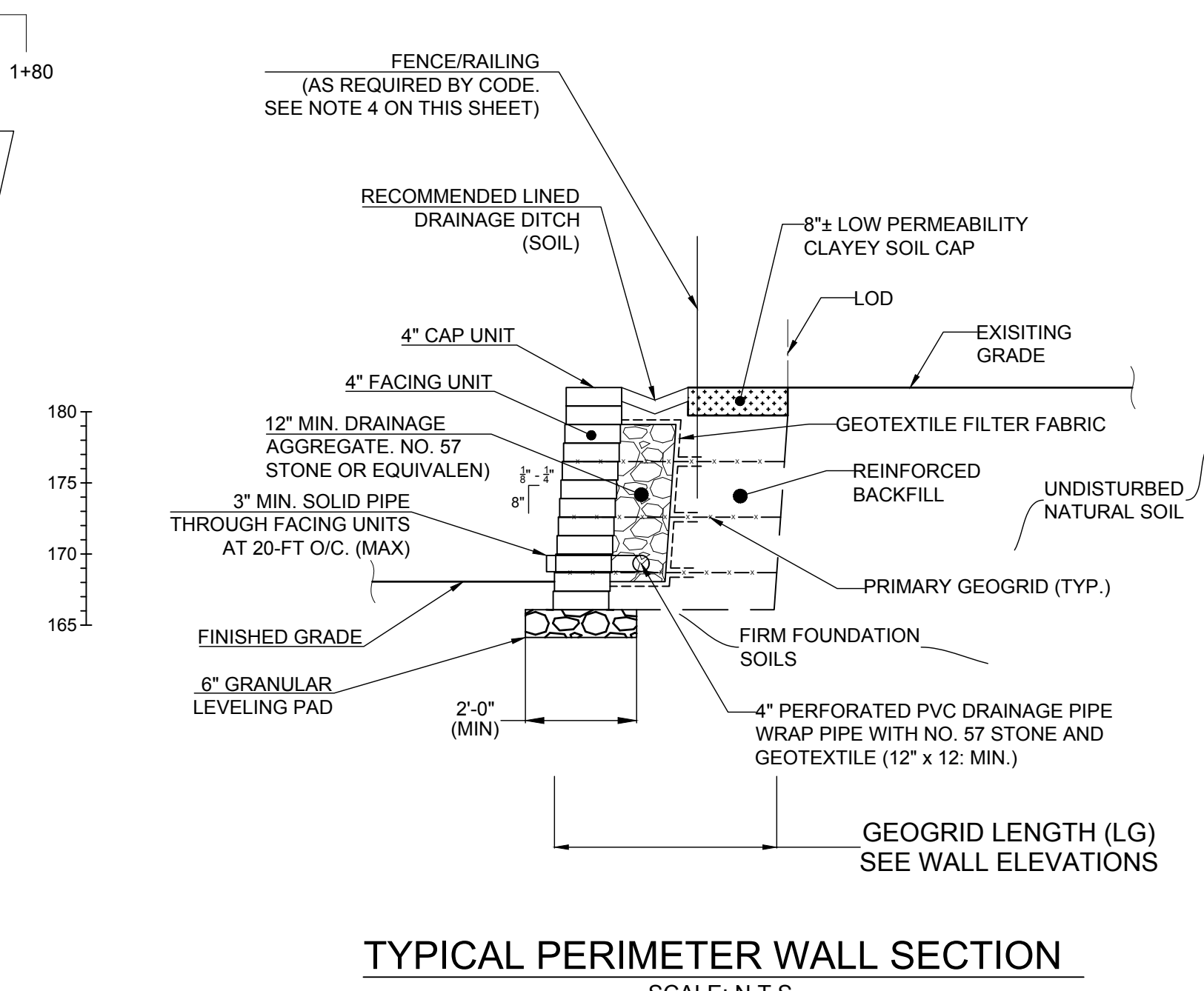
ELEVATION - PERIMETER RETAINING WALL - FRONT FACE
SCALE 1"=10'



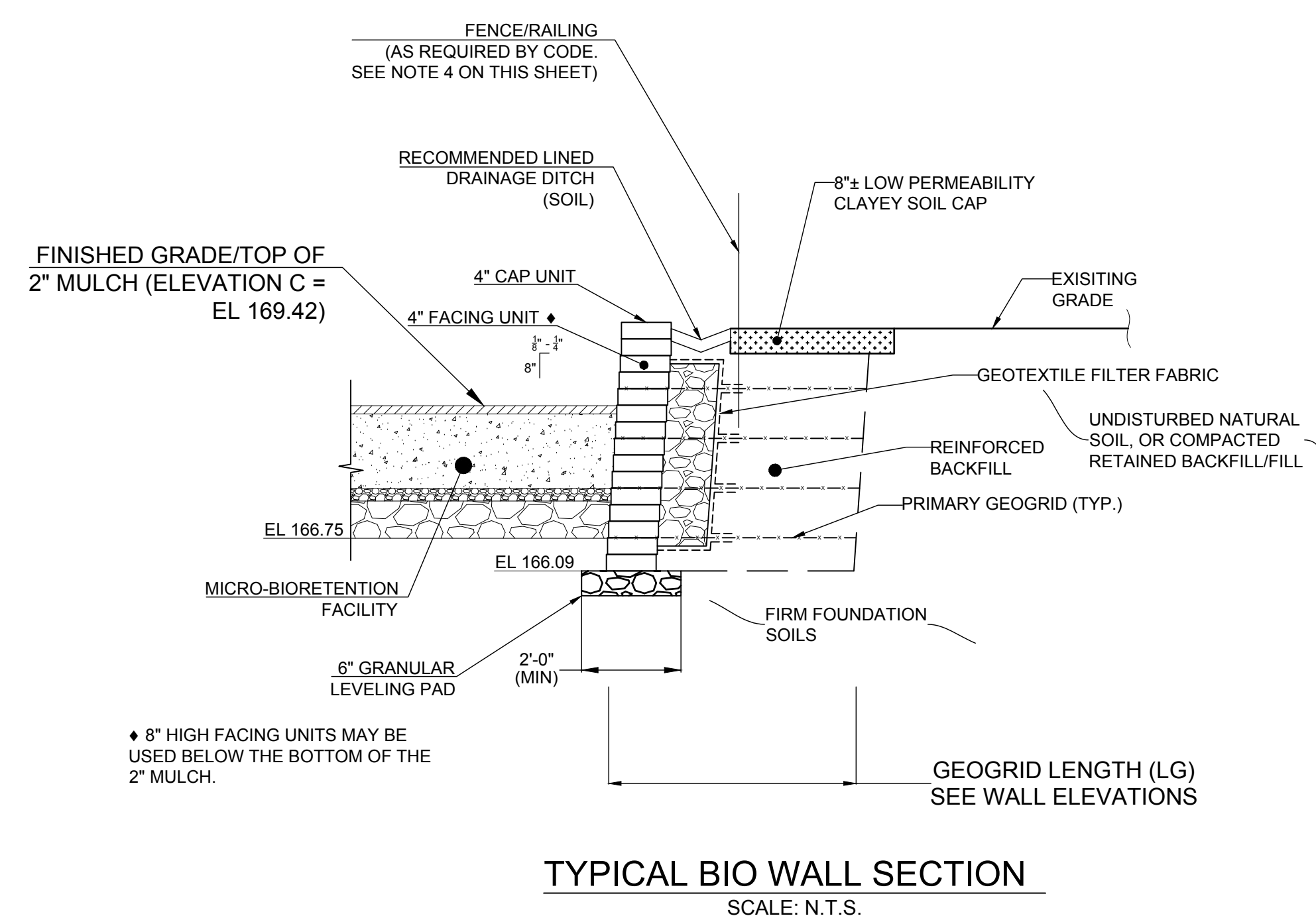
ELEVATION - BIO RETAINING WALL - FRONT FACE
SCALE 1"=10'

LEGEND:
 -x-x- MIRAFAX 3XT GEOGRIDS.
 Qall APPLIED VERTICAL BEARING PRESSURE
 F.G. @TW FINISHED GRADE AT TOP OF WALL
 F.G. @BW FINISHED GRADE AT BOTTOM OF WALL
 BOF BOTTOM OF BIO RETENTION FACILITY
 LG LENGTH OF PRIMARY GEOGRIDS (FEET) - REINFORCED WALL

ALL DIMENSIONS ARE IN FEET
 ALL STATIONS ARE ALONG FRONT FACE OF WALL



TYPICAL PERIMETER WALL SECTION
SCALE: N.T.S.



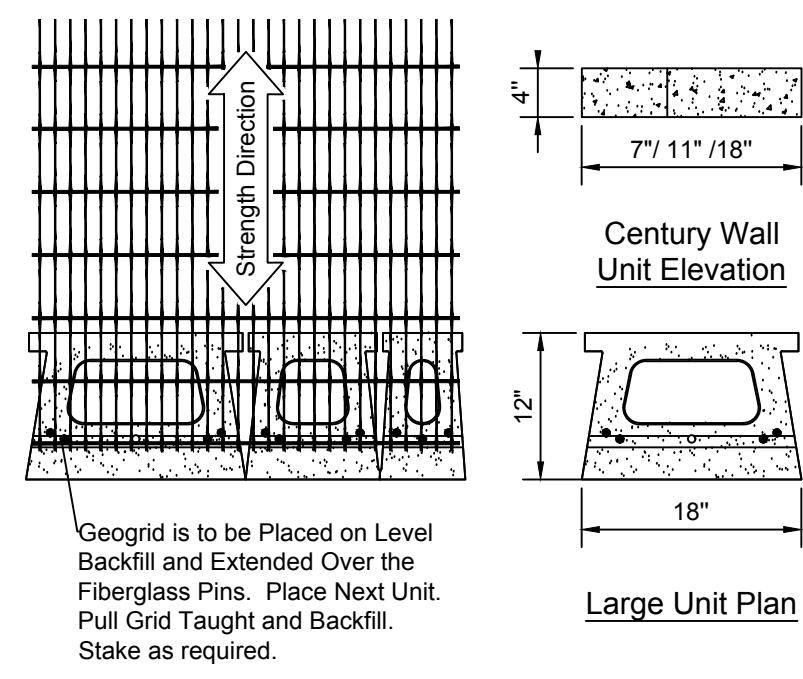
TYPICAL BIO WALL SECTION
SCALE: N.T.S.

NOTES:

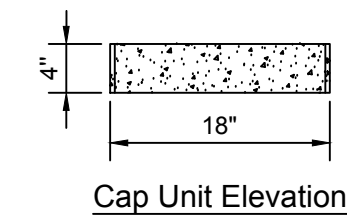
1. TEMPORARY EXCAVATION SLOPES (IF APPLICABLE) SHALL MEET OSHA REQUIREMENTS. STABILITY OF TEMPORARY EXCAVATION SLOPES IS THE RESPONSIBILITY OF THE CONTRACTOR.
2. OUTLET PERFORATED DRAINAGE PIPES INTO A NEARBY STORM STRUCTURE, OR DAYLIGHT AT LOW ENDS OF WALL, OR USE WEEP HOLES THROUGH THE FACING UNITS (AS SHOWN), AS APPLICABLE. OUTLET DESIGN/SELECTION BY CONTRACTOR SUBJECT TO APPROVAL OF THE ENGINEER.
3. WRAP ALL PERFORATED DRAINAGE PIPES SURROUNDED BY SOIL BACKFILL WITH NO. 57 STONE AND GEOTEXTILE (12" x 12" MIN.), AS APPLICABLE. ALL OUTLET PIPES SHALL BE SOLID/NON-PERFORATED.
4. A FENCE, A HANDRAIL, OR OTHER MEANS OF PERMANENT FALL PROTECTION MAY BE INSTALLED ALONG THE TOP OF THE RETAINING WALL(S) WHERE THE EXPOSED RETAINING WALL HEIGHT IS 30 INCHES OR GREATER, OR AS REQUIRED BY LOCAL AUTHORITIES. RAILING HEIGHT IS 3'-6". AS DICTATED BY THE OWNER
5. THE CONTRACTOR SHALL ENSURE ALL SURROUNDING STRUCTURES/EXISTING SLOPES/ROADWAYS ARE PROTECTED FROM THE EFFECTS OF WALL EXCAVATION. STABILITY OF EXISTING STRUCTURES, DURING CONSTRUCTION, IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR



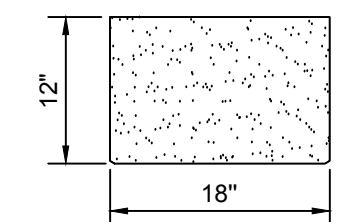
7820 LakeLand Valley Dr.
Springfield, VA 22153
Tel: (703) 249-4655
Fax: (703) 249-4656



Grid & Pin Connection



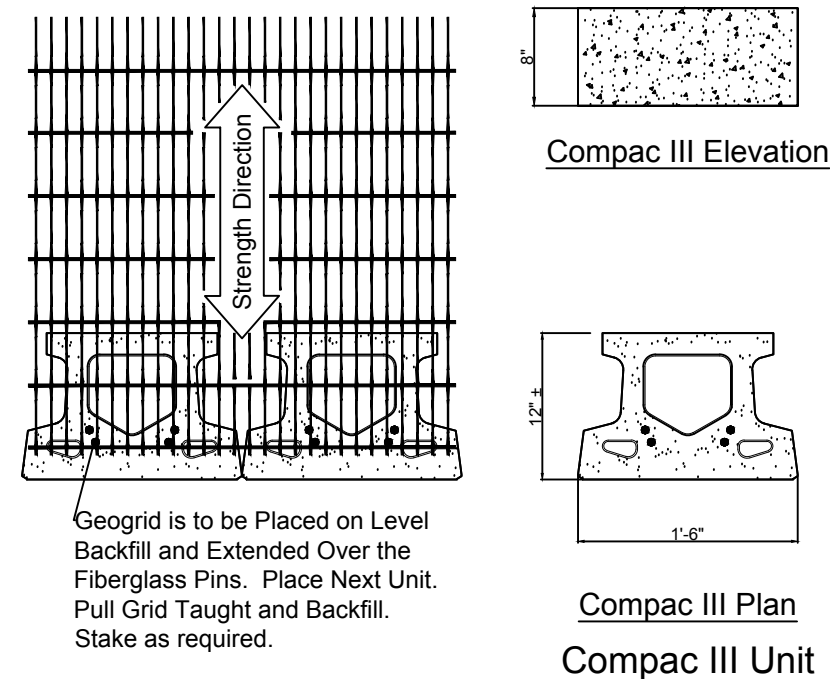
Cap Unit Elevation



Cap Unit Plan

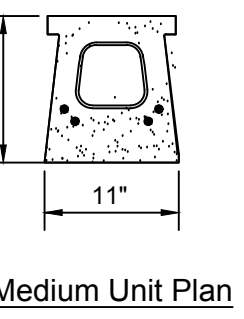
Straight Split Cap Unit

4" High Units

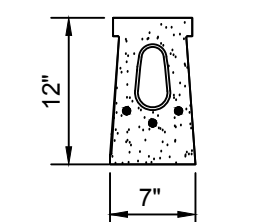


Grid & Pin Connection

**8" High Units
(MAY ONLY BE USED BELOW GRADE)**



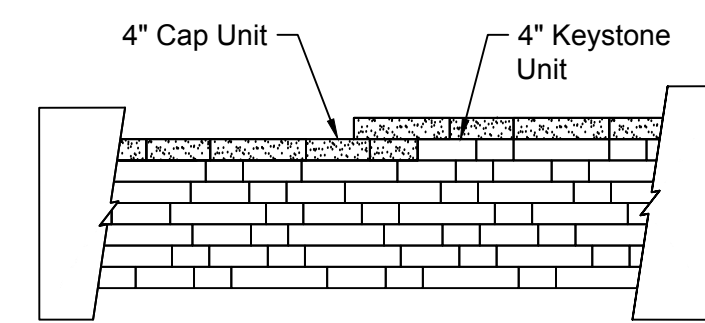
Medium Unit Plan



Small Unit Plan

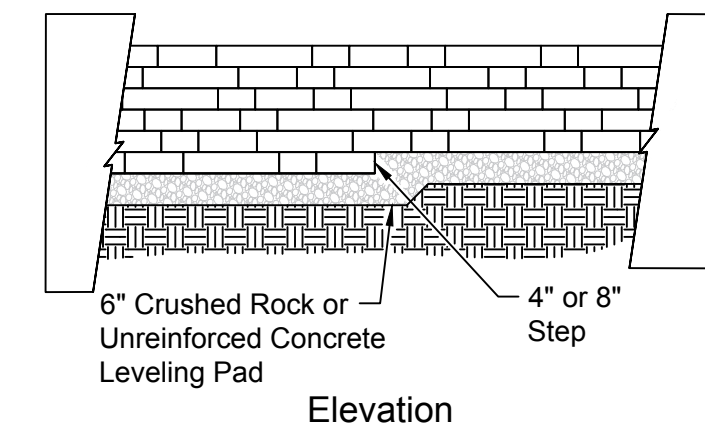
Century Wall Unit
* Dimensions & Availability Will Vary by Region

**MODULAR BLOCK UNITS DETAILS
N.T.S**

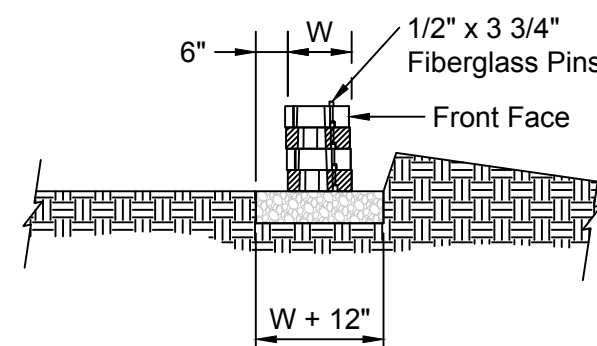


Note:
1. Secure all cap units with Keystone Kapseal or equal.

Top of Wall Steps

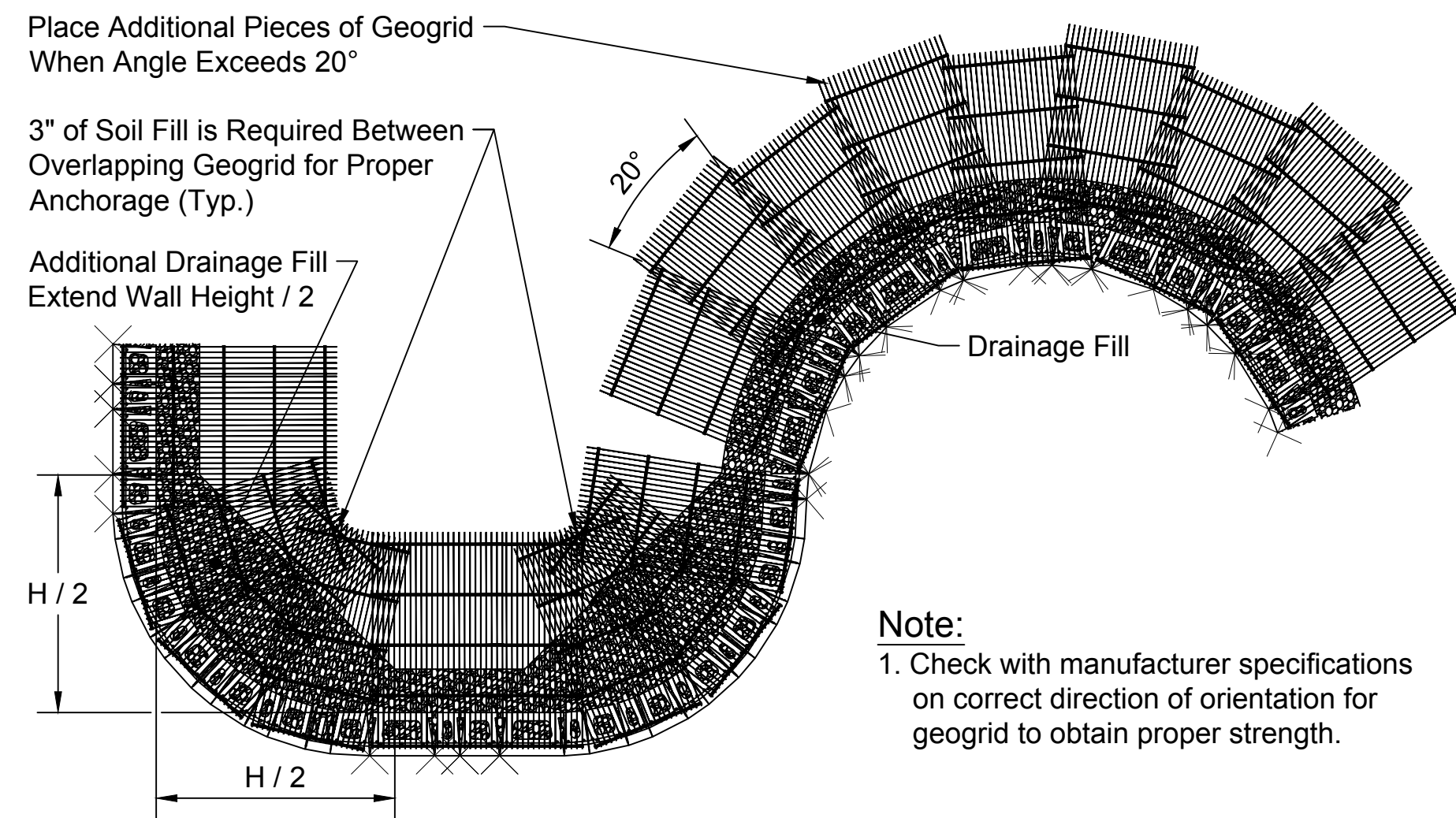


Note:
1. The leveling pad is to be constructed of crushed stone or 2000 psi ± unreinforced concrete.



Section
Leveling Pad Detail

**TOP AND BOTTOM OF WALL DETAILS
N.T.S**



**GEOGRID INSTALLTION ON CURVES
N.T.S**

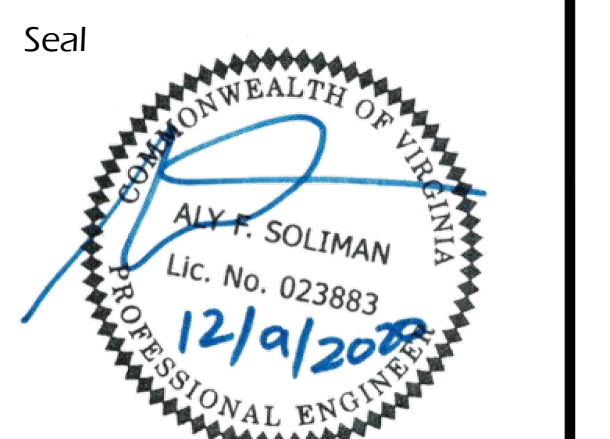
Approval	Date
DESIGN SUPERVISOR	DS_DATE
Design Supervisor	

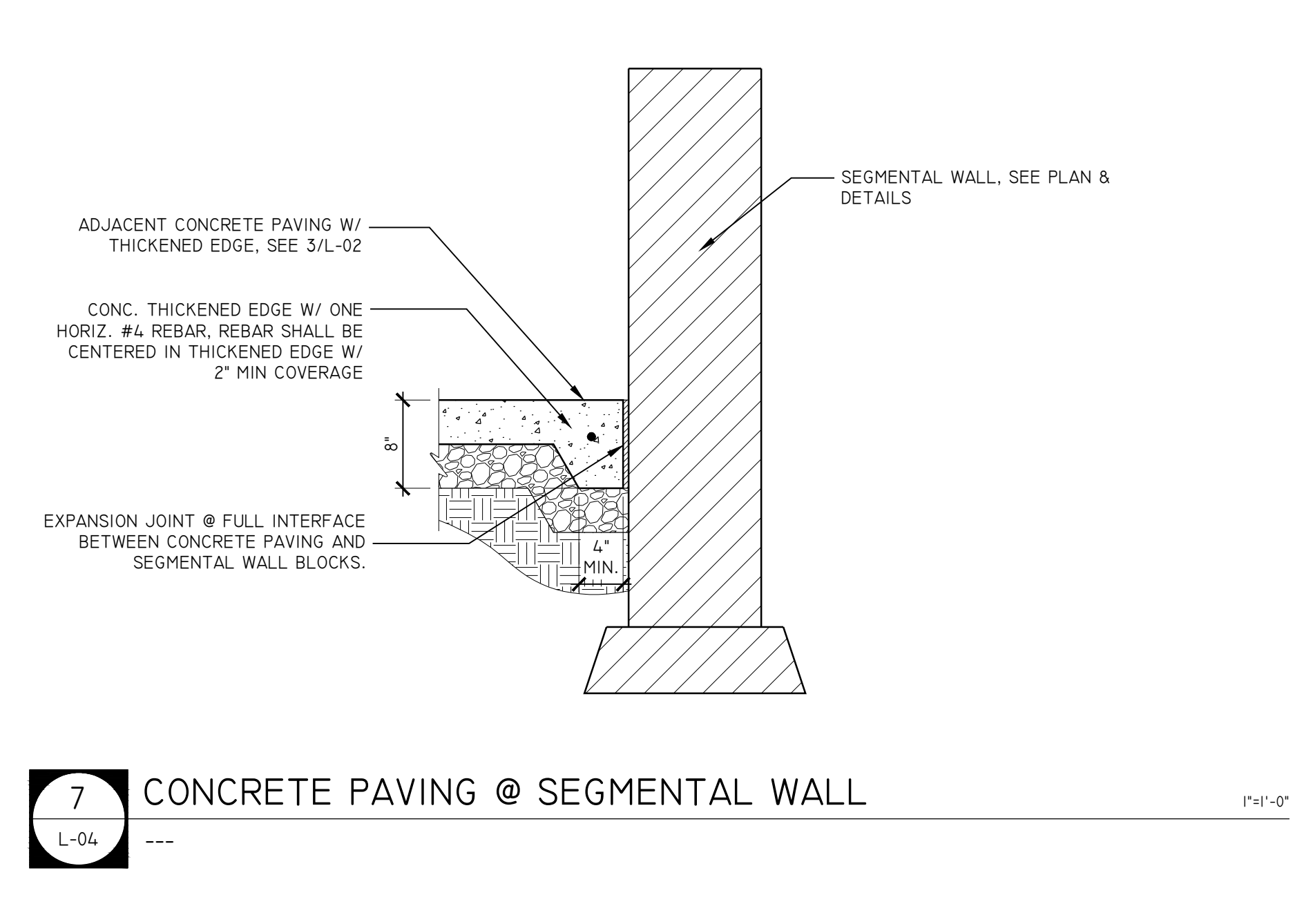
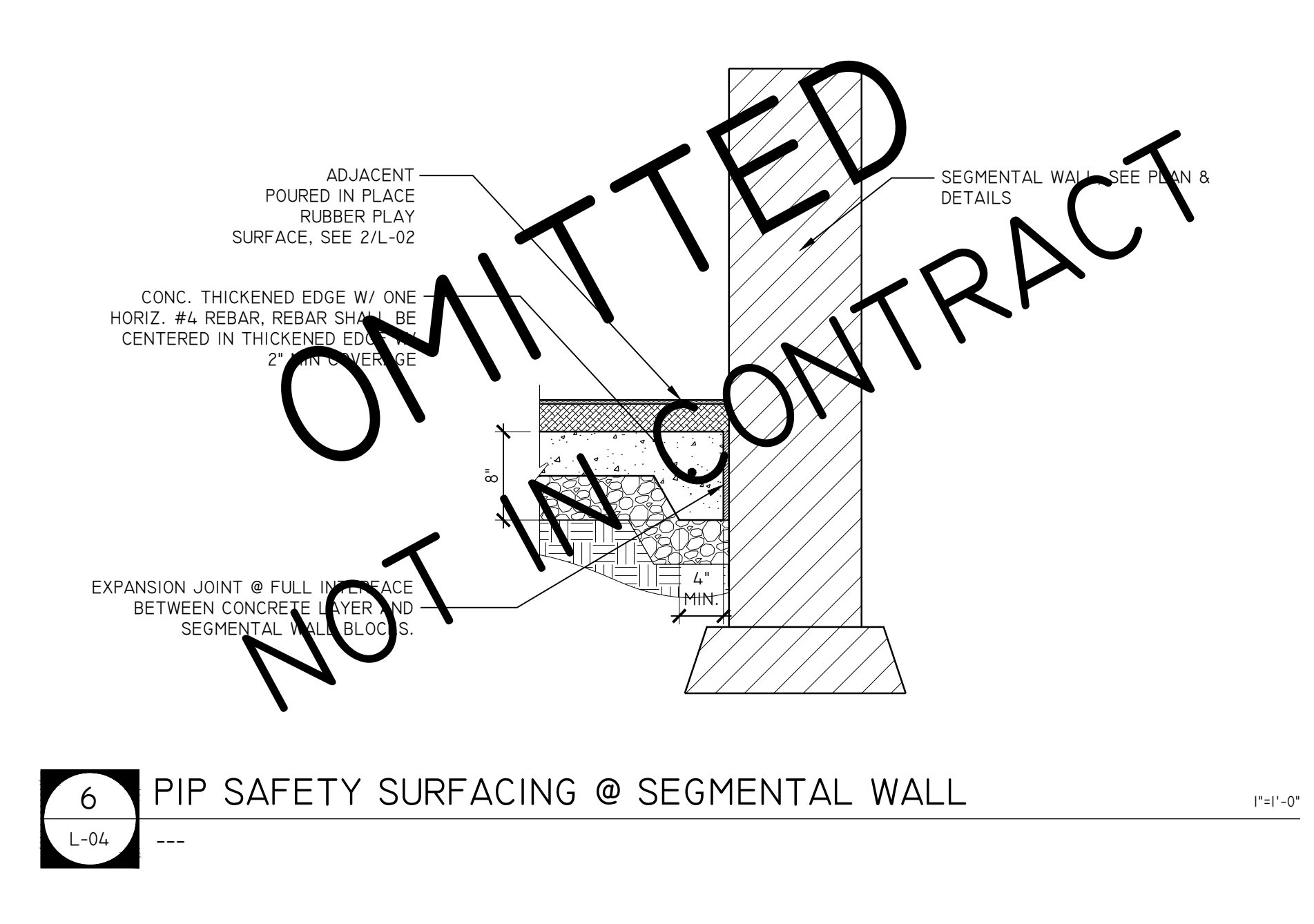
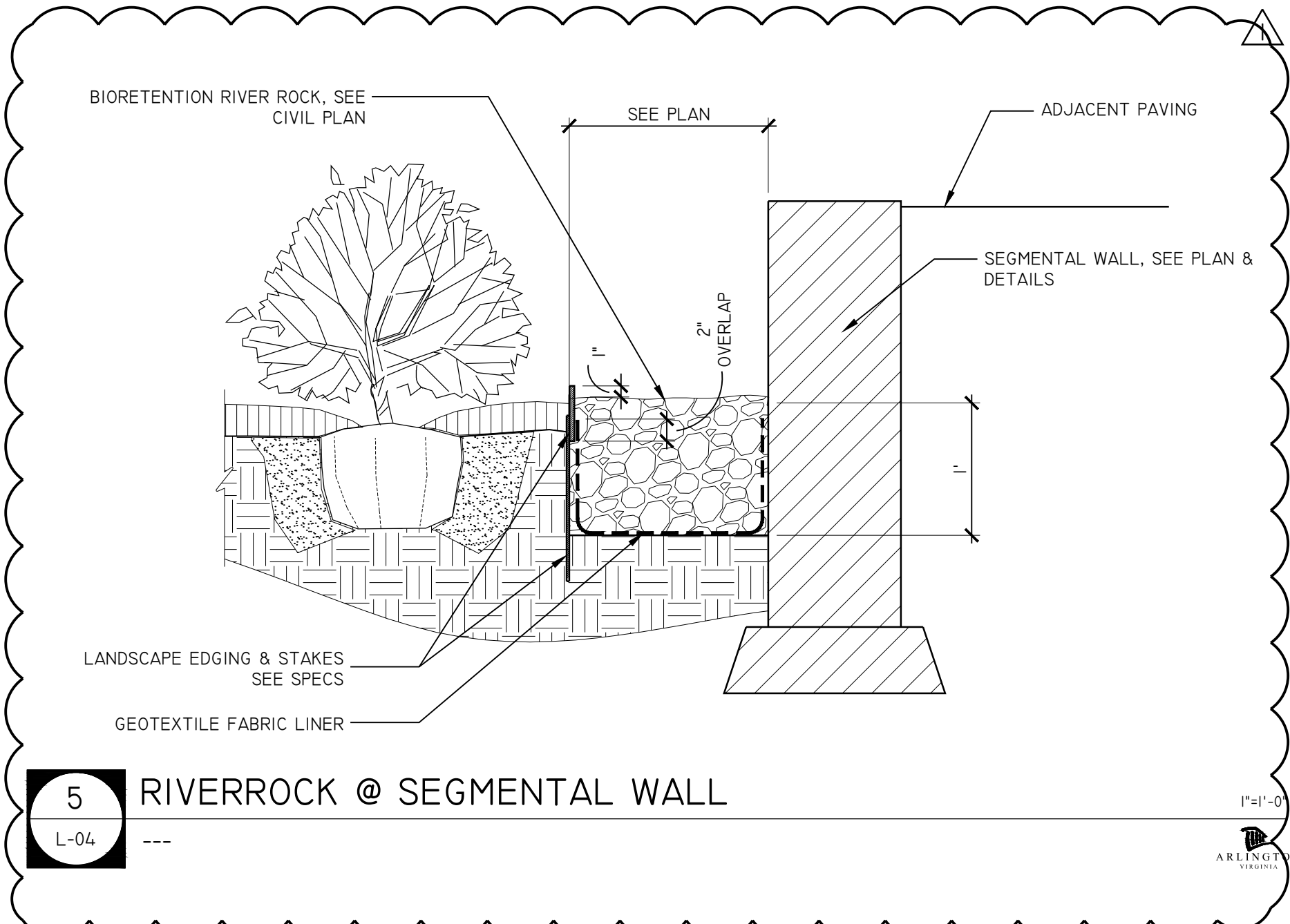
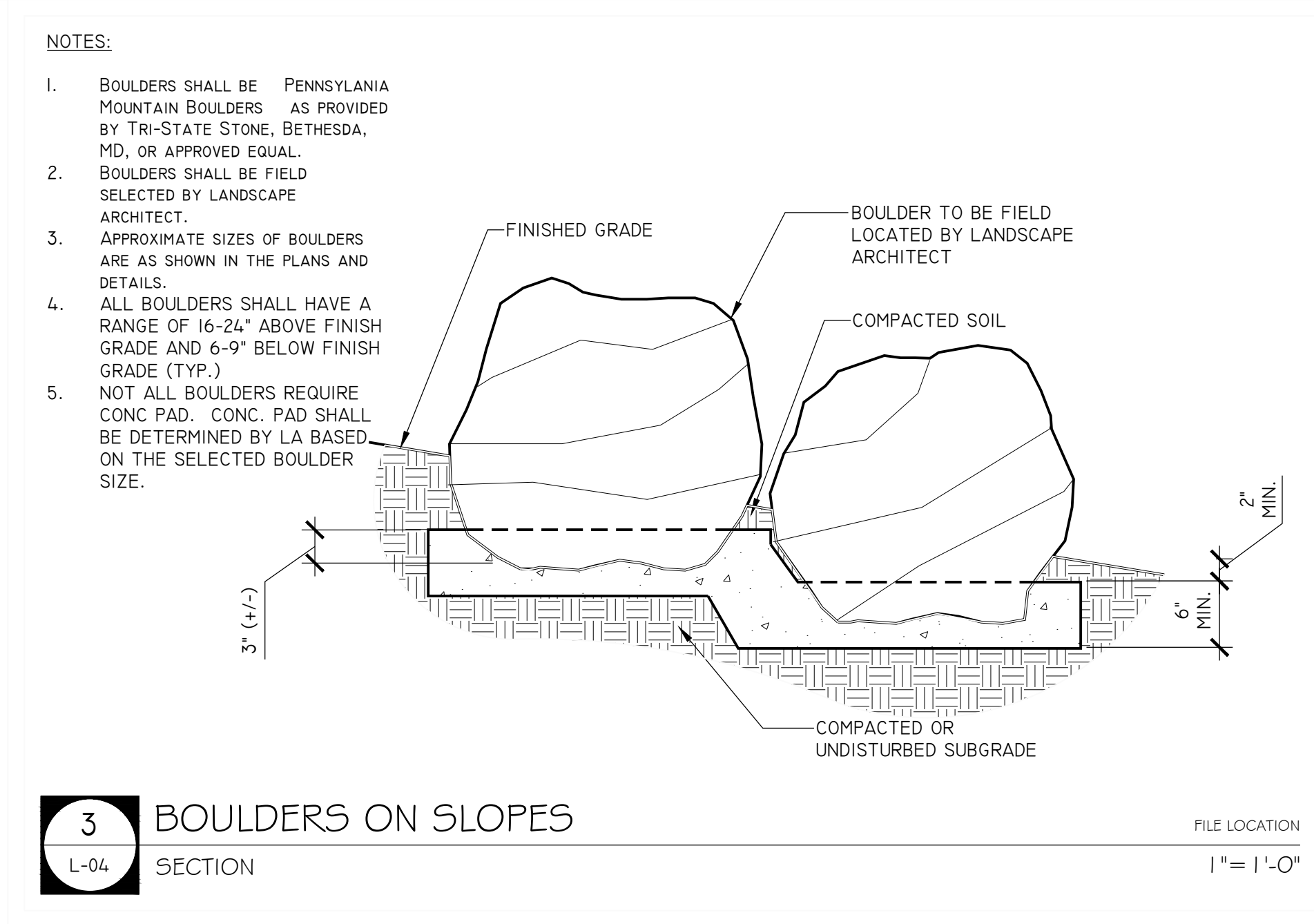
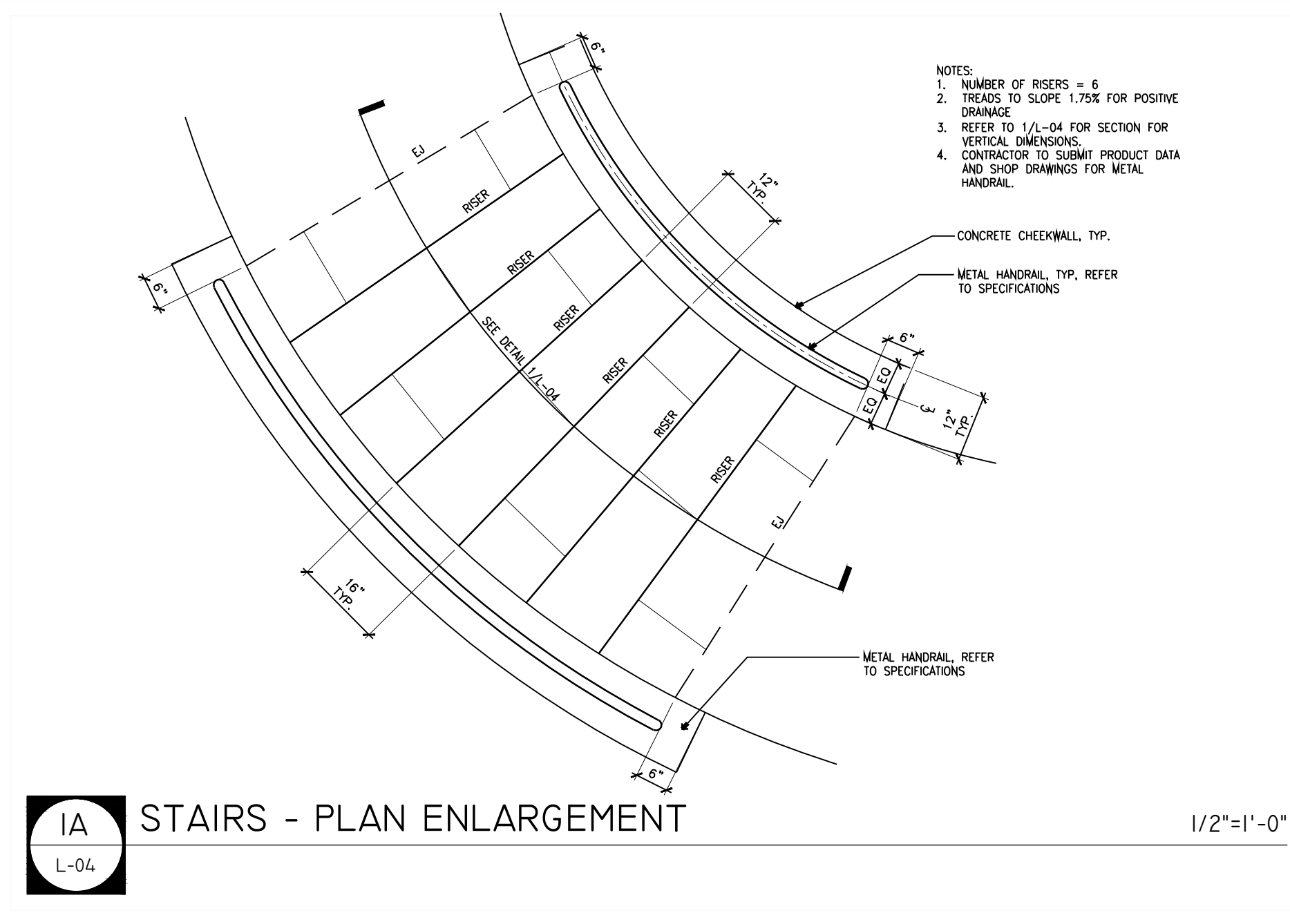
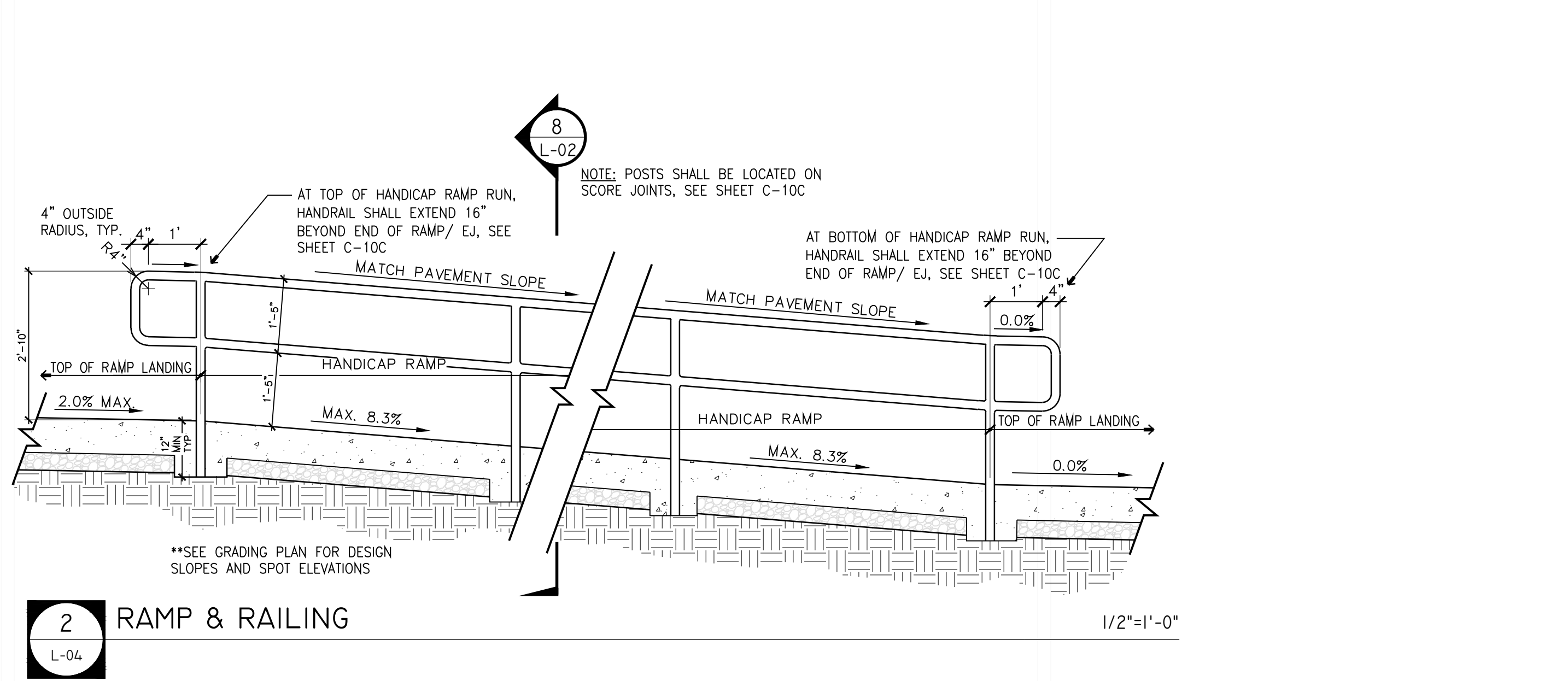
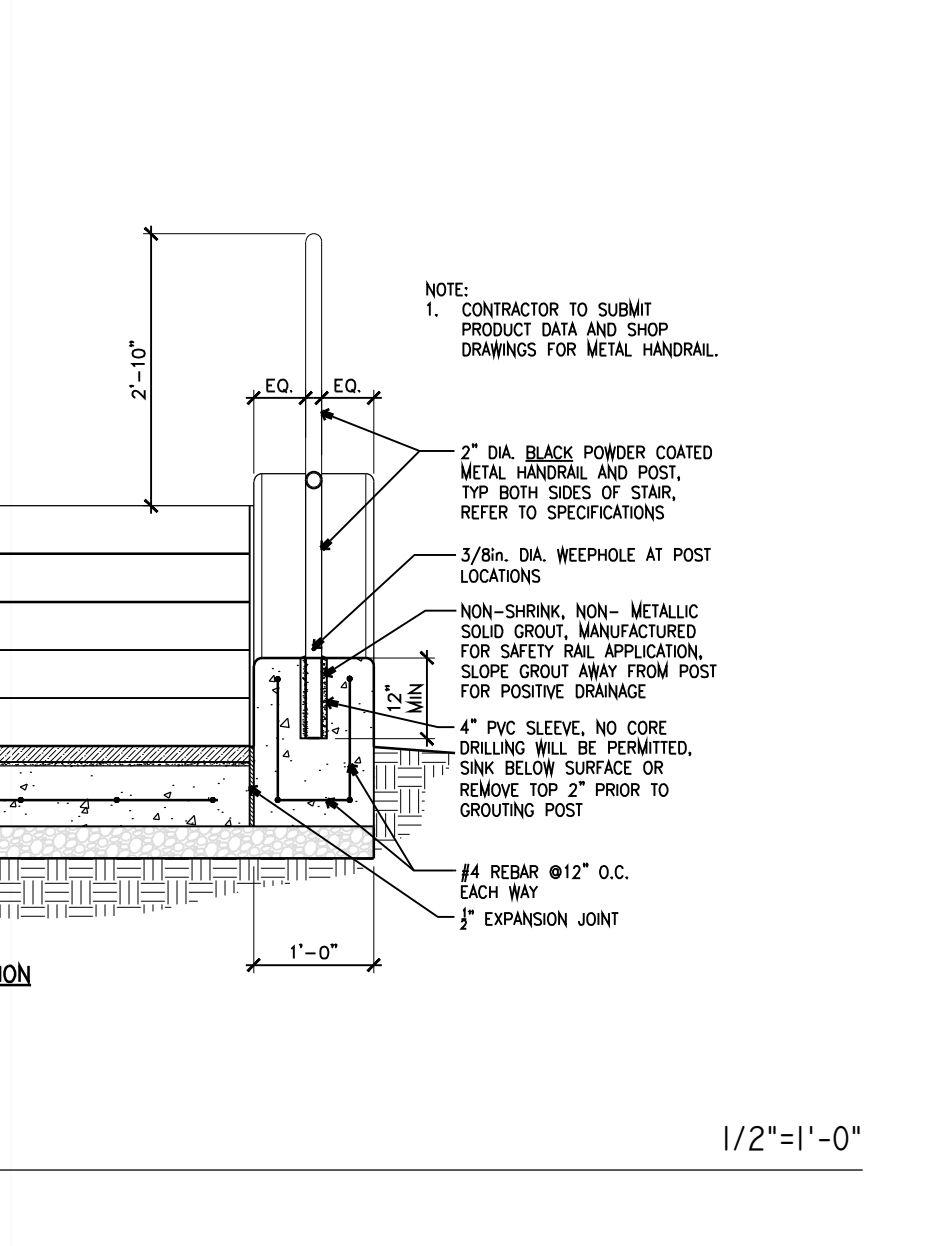
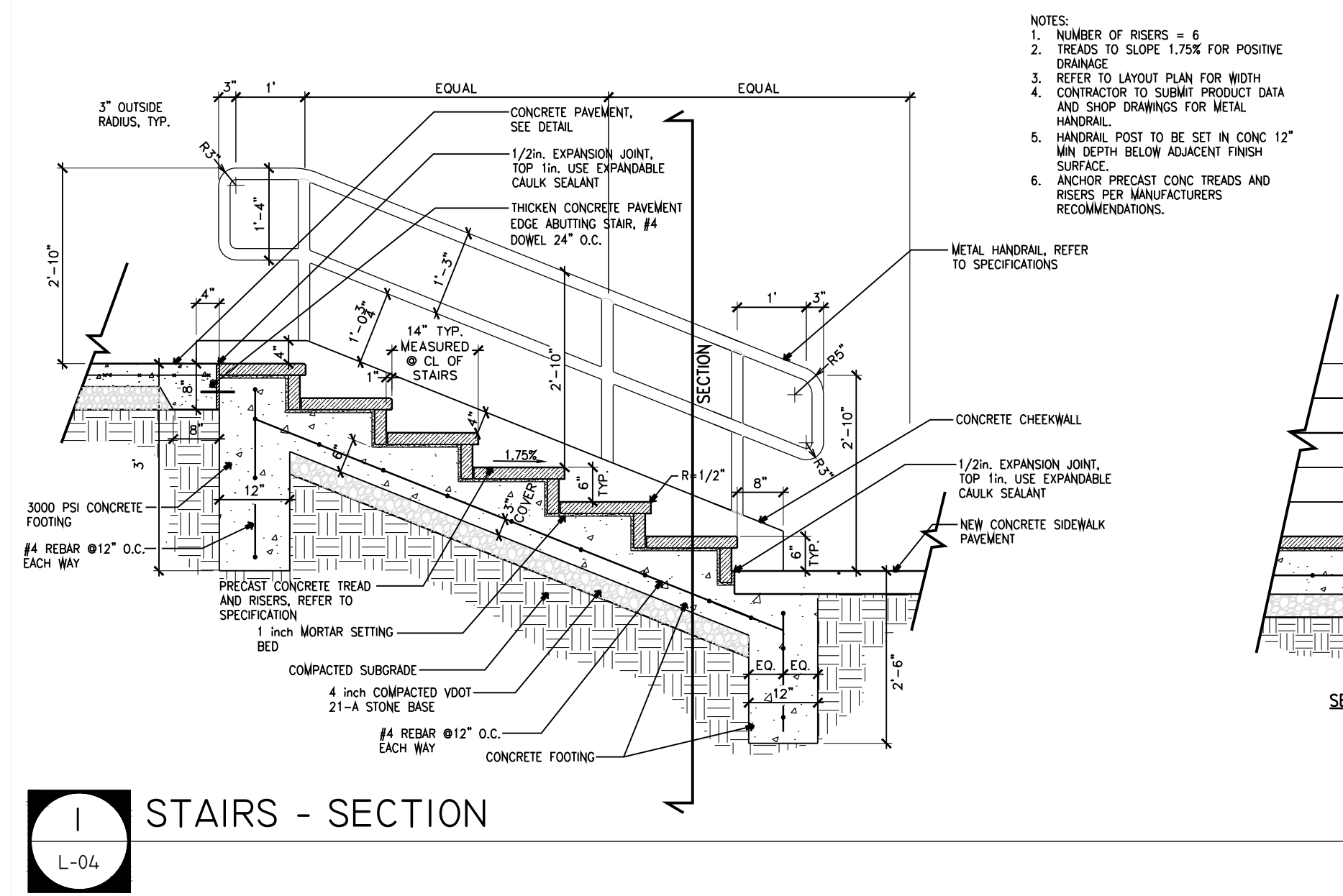
Revisions	Date
REV 1	REV 1 DATE
REV 2	REV 2 DATE
REV 1	REV 3 DATE
REV 1	REV 4 DATE
REV 5	REV 5 DATE

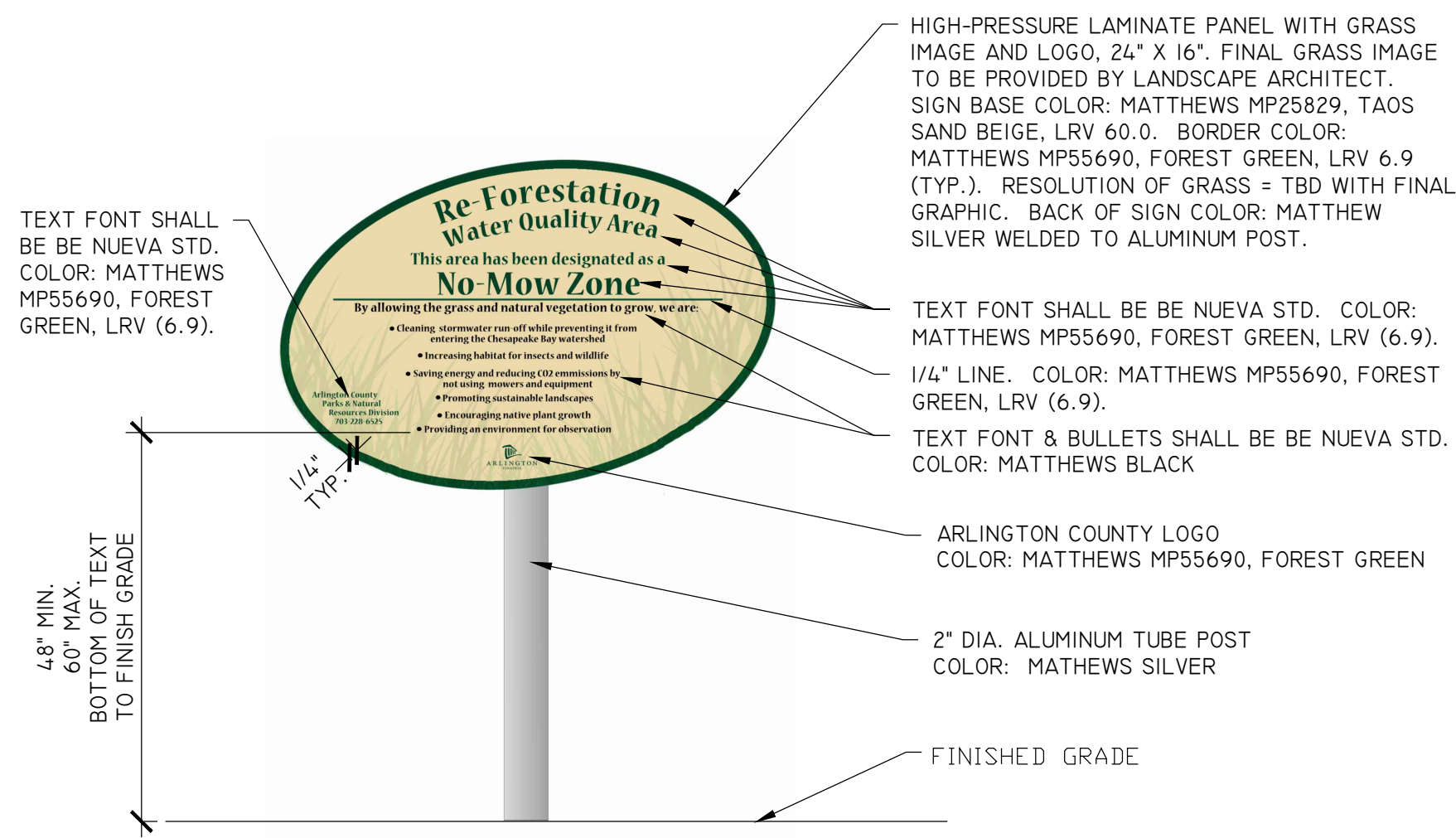
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Drawn:
Checked:

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Plotted: Dec. 9, 20

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Date: DECEMBER 8, 2020

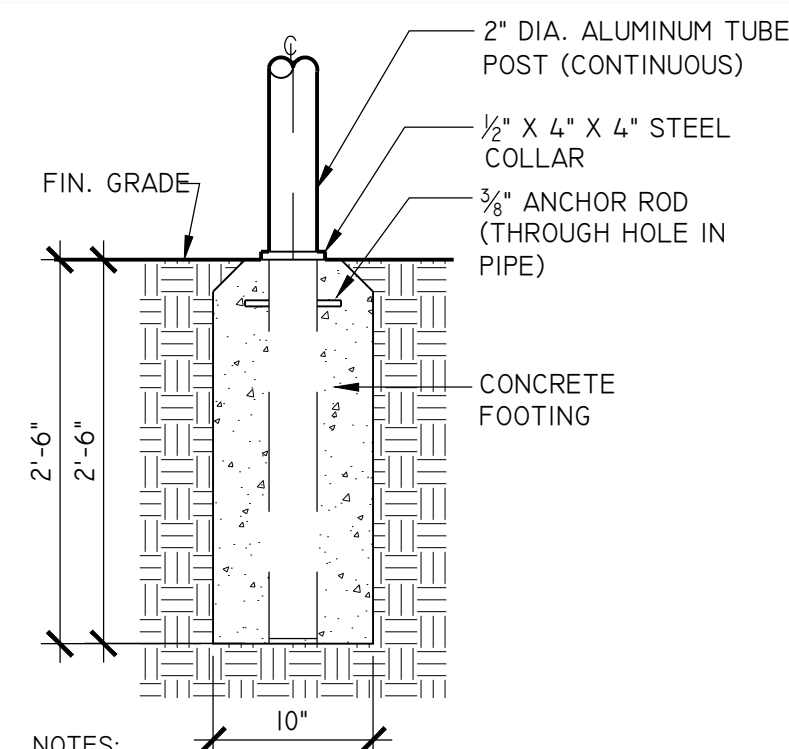






1 REFORESTATION SIGN
L-05 10430.x (2018)

1" = 1'-0"
ARLINGTON DPR



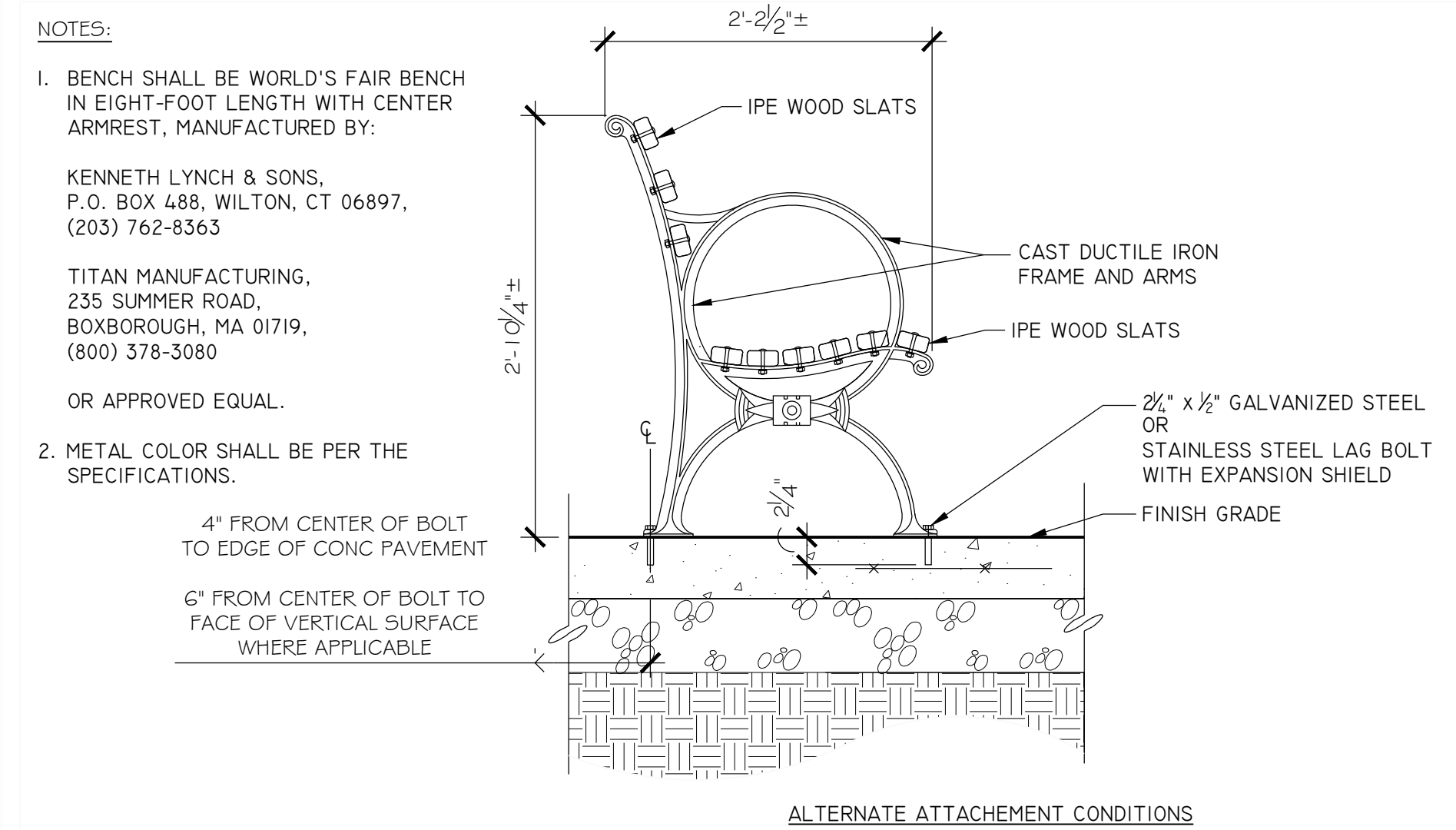
- NOTES:
1. PROVIDE SHOP DRAWINGS PRIOR TO ANY FABRICATION.
 2. SEE LAYOUT PLAN FOR LOCATIONS.
 3. FINAL COLORS SHALL BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO ANY FABRICATION.
 4. SIGNS SHALL BE AS FABRICATED BY ENGRAPHIX ARCHITECTURAL SIGNAGE OR APPROVED EQUAL. SEE SPECIFICATIONS.
 5. ENSURE PROPER MOUNTING WITH WELDED BRACKET.
 6. WHEN SIGN IS IN POURED-IN-PLACE PLAYGROUND SURFACING, SURFACING SHALL BE ABOVE CONCRETE SIGN FOOTING.

2 SIGNAGE FOOTING
L-05 10430.x (2018)

1" = 1'-0"
ARLINGTON DPR

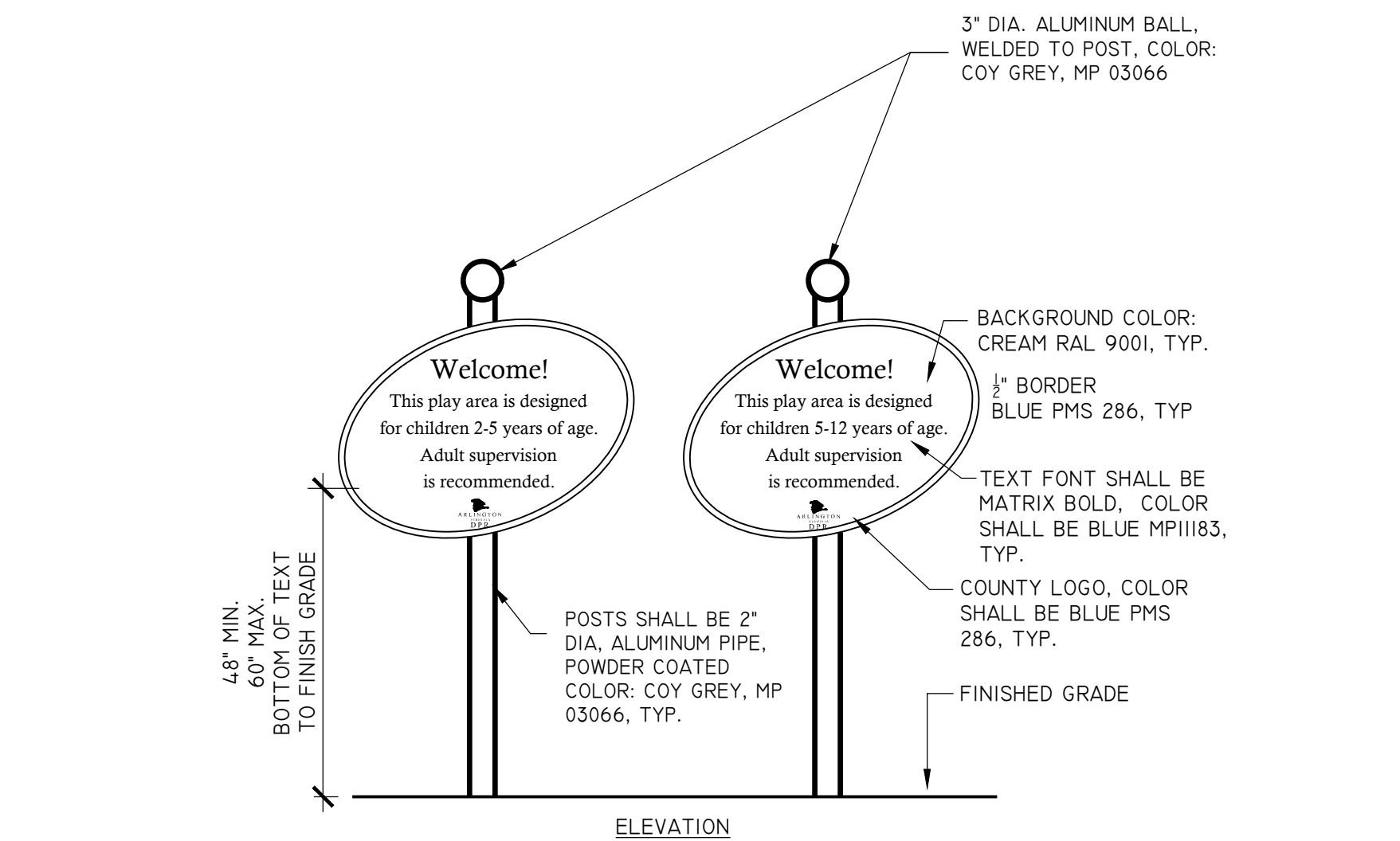
3 1939 WORLD'S FAIR BENCH
L-05 02870.x (2013)

3/4" = 1'-0"
ARLINGTON DPR



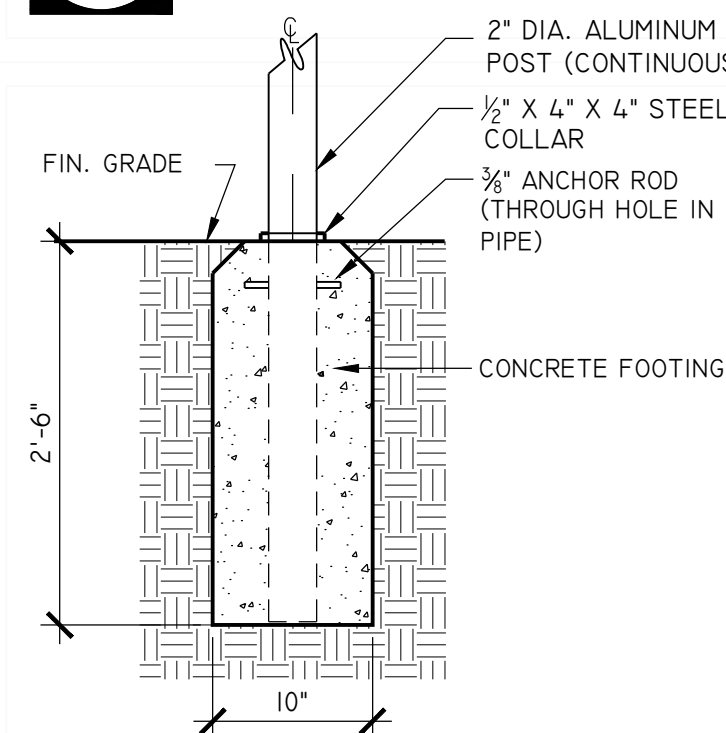
3 1939 WORLD'S FAIR BENCH
L-05 02870.x (2013)

3/4" = 1'-0"
ARLINGTON DPR



4 AGE-APPROPRIATE PLAYGROUND SIGNS
L-05 10430.4 (2018)

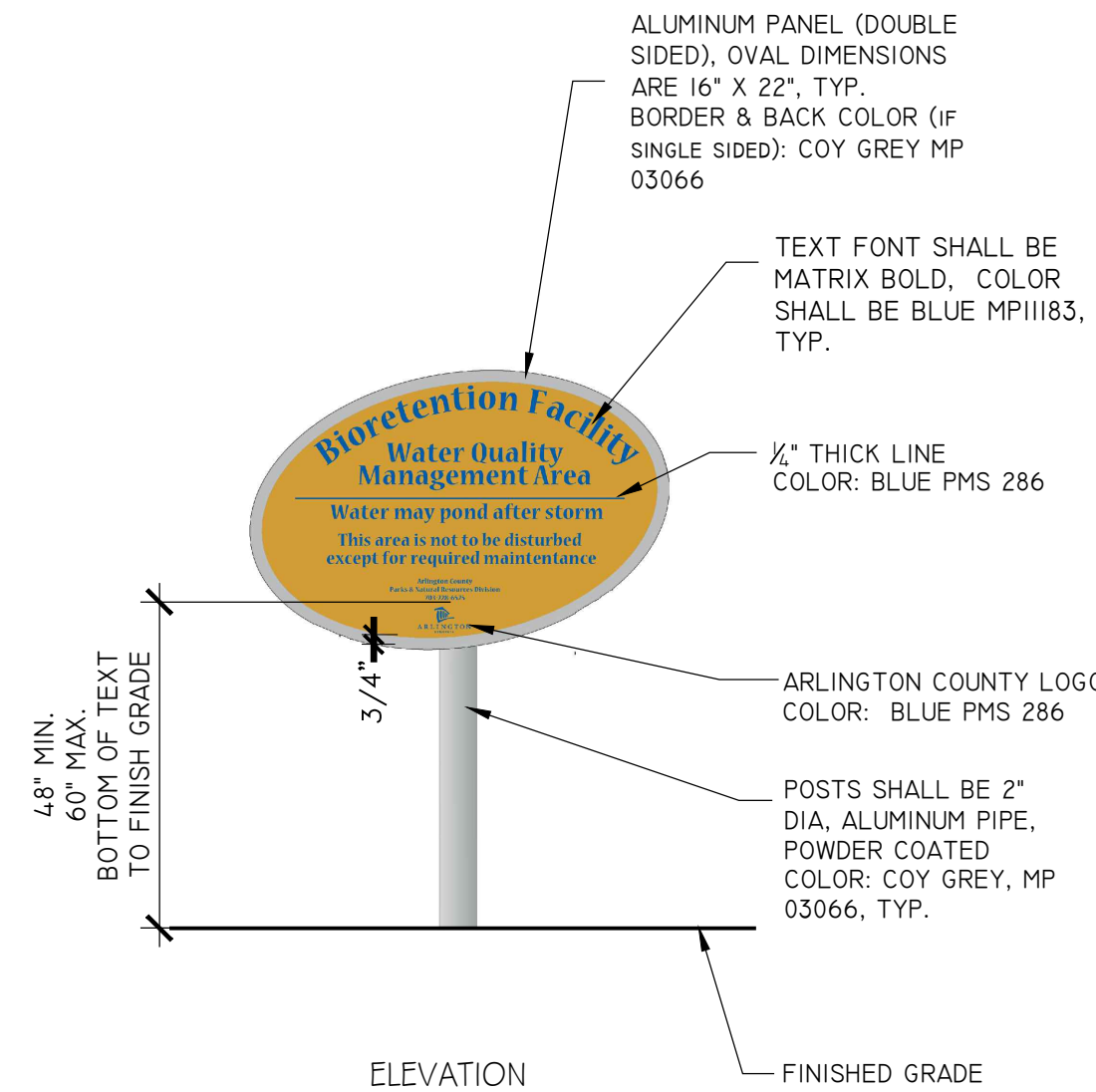
1" = 1'-0"
ARLINGTON DPR



- NOTES:
1. PROVIDE SHOP DRAWINGS PRIOR TO ANY FABRICATION.
 2. SEE LAYOUT PLAN FOR LOCATIONS.
 3. FINAL COLORS SHALL BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO ANY FABRICATION.
 4. SIGNS SHALL BE AS FABRICATED BY ENGRAPHIX ARCHITECTURAL SIGNAGE OR APPROVED EQUAL. SEE SPECIFICATIONS.
 5. ENSURE PROPER MOUNTING WITH WELDED BRACKET.
 6. WHEN SIGN IS IN POURED-IN-PLACE PLAYGROUND SURFACING, SURFACING SHALL BE ABOVE CONCRETE SIGN FOOTING.

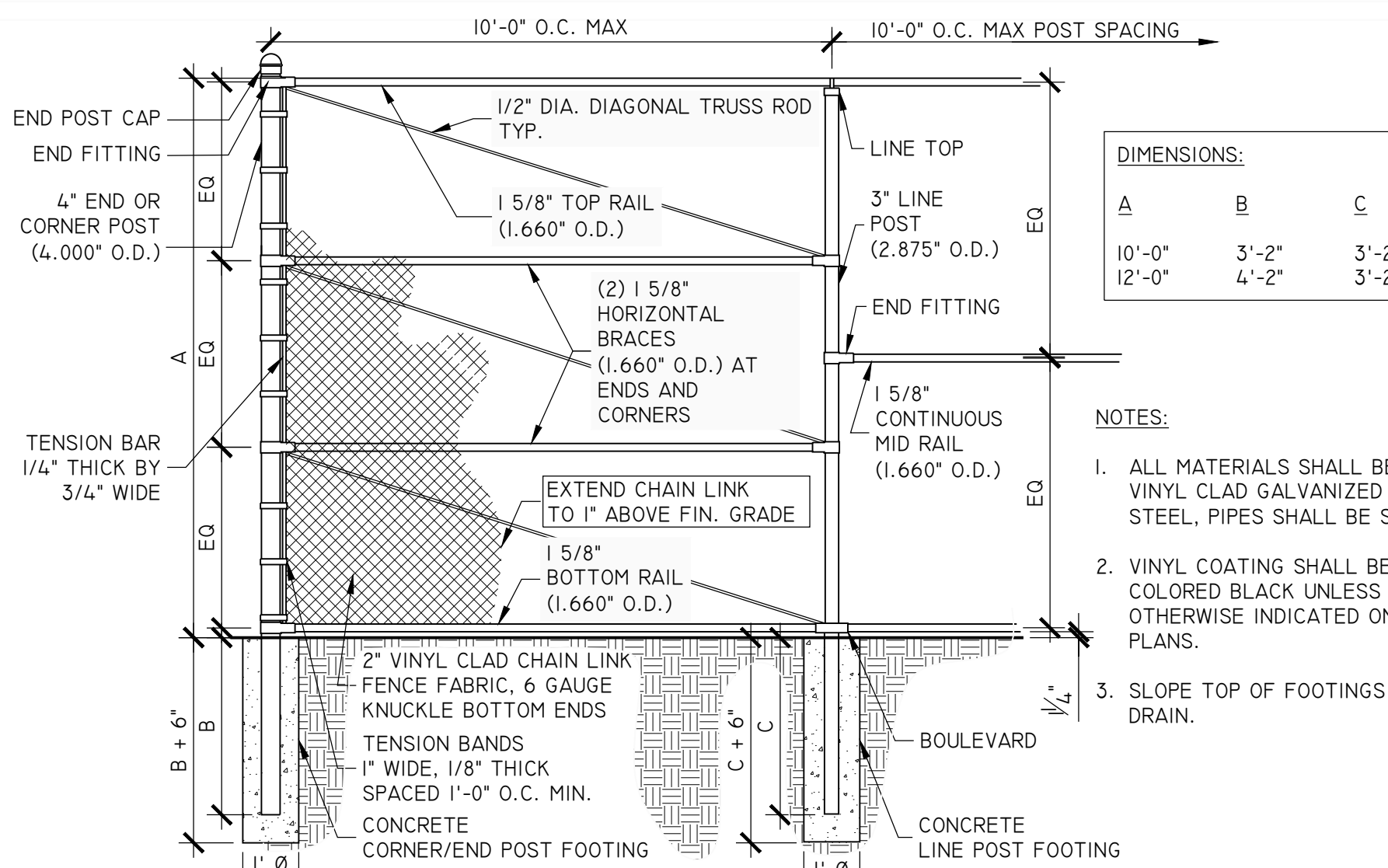
5 BIORETENTION SIGN
L-05 10430.x (2018)

1" = 1'-0"
ARLINGTON DPR



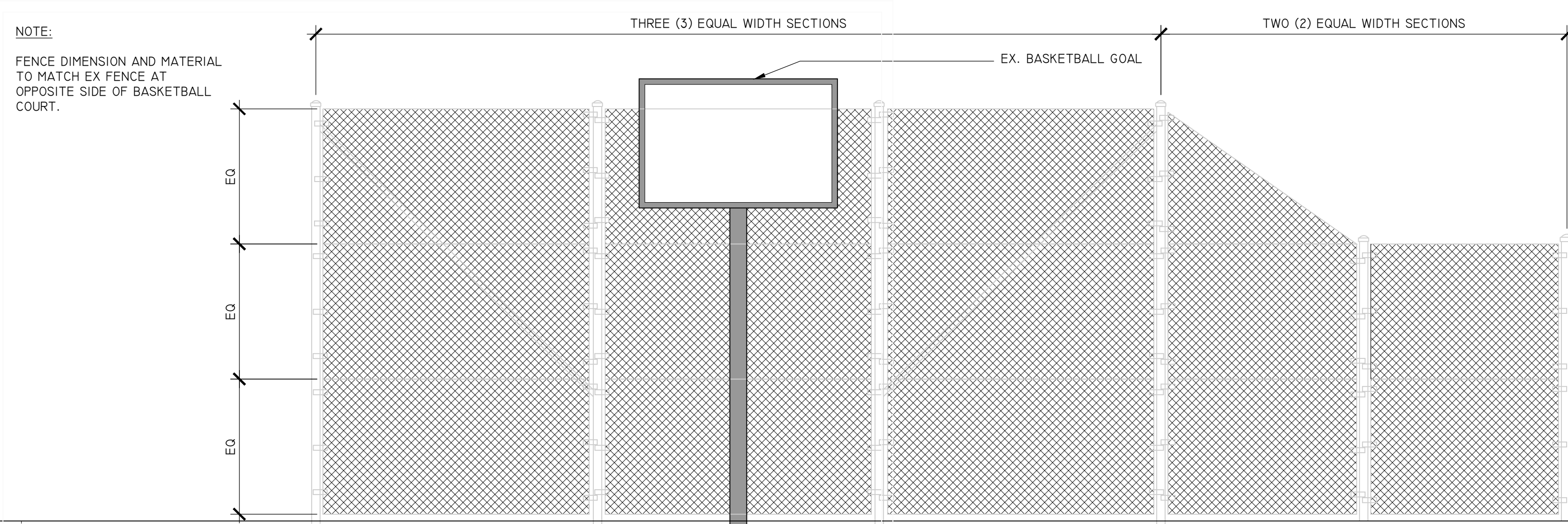
5 BIORETENTION SIGN
L-05 10430.x (2018)

1" = 1'-0"
ARLINGTON DPR



7 CHAIN LINK FENCE @ BASKETBALL COURT
L-05 02820.x (2013)

3/8" = 1'-0"
ARLINGTON DPR



8 CHAIN LINK FENCE @ BASKETBALL COURT - ELEVATION
L-05 02820.x (2013)

3/8" = 1'-0"
ARLINGTON DPR



21-DPR-ITB-639

Project Name and Location
**TOWERS
PARK
PLAYGROUND
RENOVATIONS**

801 S Scott St
Arlington, VA 22204

Sheet Title
**LANDSCAPE
CONSERVATION
PLAN & NOTES**

Approval _____ Date _____

Design Supervisor _____

Revisions _____ Date _____

Designed: _____

Drawn: _____

Checked: _____

Filename: L-06-07_LA CONSERVATION.DWG

Plotted: May, 18, 21

Scale: 1"=10'-0"

Date: DECEMBER 20, 2019

Seal _____

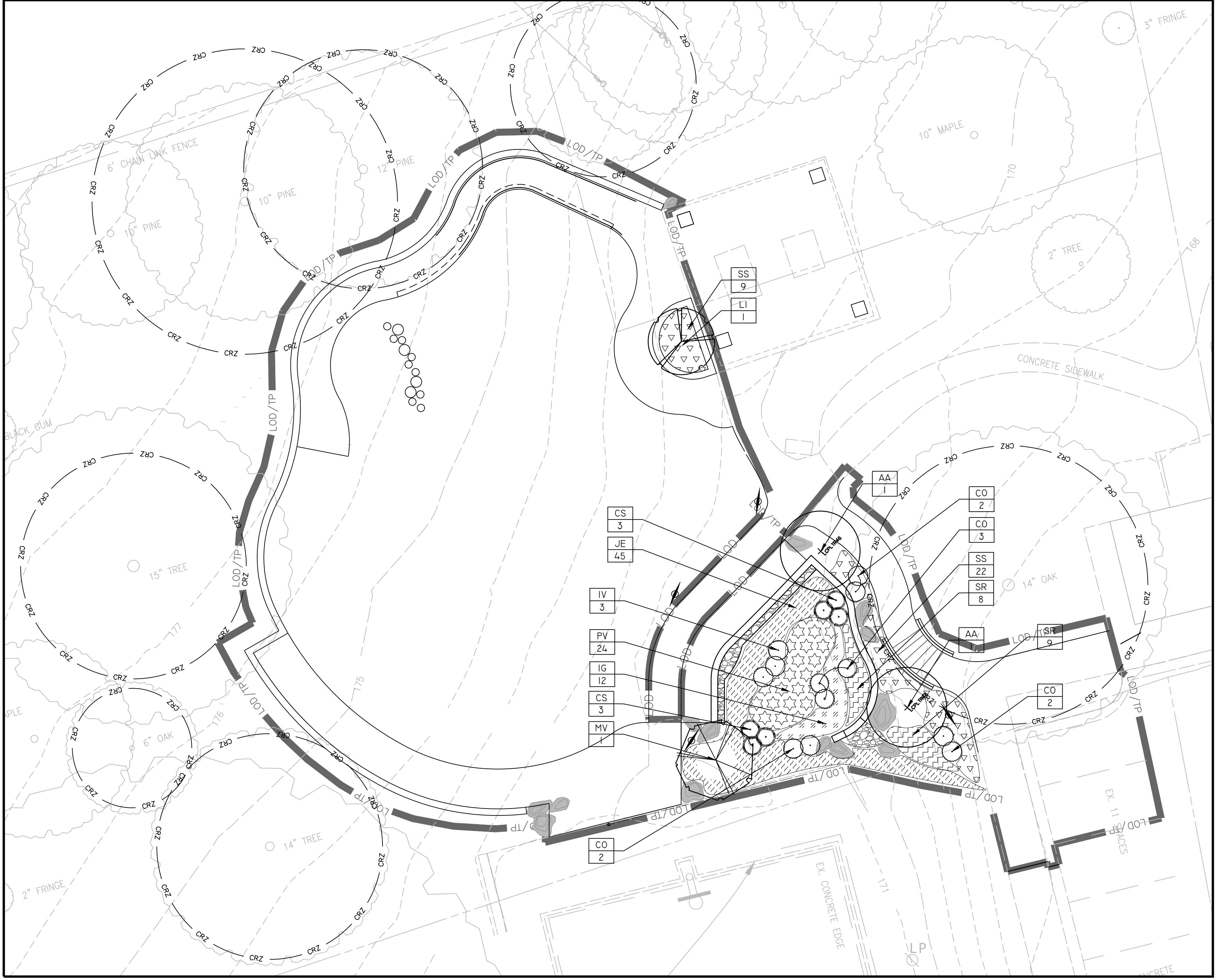


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L-06

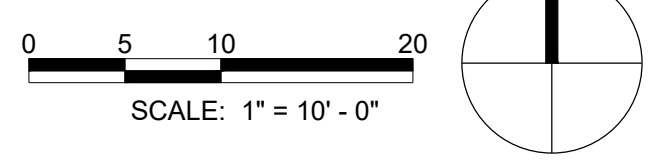
NOTES

- PLANTS SHALL BE FURNISHED AND INSTALLED AS INDICATED ON THE APPROVED LANDSCAPE PLAN.
- PLANTS SHALL BE TYPICAL OF SPECIES AND VARIETY, AND COMPLY WITH THE MOST RECENT ANSI Z60.1 STANDARDS.
- TREES SHALL BE NURSERY GROWN SPECIMENS THAT MEET THE LATEST EDITION OF THE AMERICAN STANDARDS FOR NURSERY STOCK (ANSI Z60). BALLED AND BURLAPPED TREES SHALL BE SECURELY HELD IN PLACE BY UNTREATED BURLAP AND STOUT ROPE (NYLON ROPE IS NOT ACCEPTABLE). LOOSE, BROKEN OR MANUFACTURED BALLS ARE UNACCEPTABLE.
- CALL MISS UTILITY AT (800) 552-7001 FOR UTILITY LOCATIONS PRIOR TO EXCAVATION.
- AT TIME OF PLANTING PRUNE ONLY CROSSING LIMBS, BROKEN OR DEAD BRANCHES, AND ANY BRANCHES THAT POSE A HAZARD TO PEDESTRIANS. THE LEADER OF THE TREE SHALL NOT BE CUT BACK. DO NOT PRUNE INTO OLD WOOD ON EVERGREENS. INURED ROOTS SHALL BE PRUNED TO CLEAN ENDS WITH CLEAN, SHARP TOOLS PRIOR TO PLANTING.
- PLANTS SHALL BE PLANTED ON THE DAY OF DELIVERY. IF THIS IS NOT POSSIBLE, THE CONTRACTOR SHALL PROTECT STOCK NOT PLANTED AND NOTIFY PROJECT OFFICER. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE-DAY PERIOD AFTER DELIVERY. ANY PLANTS NOT INSTALLED DURING THIS PERIOD SHALL BE REJECTED. ALL PLANTS KEPT ON SITE FOR ANY PERIOD SHOULD BE WATERED AND CARED FOR USING ANSI A300 STANDARDS.
- PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME. PLANTS SHALL BE HANDLED FROM THE BOTTOM OF THE ROOT BALL ONLY. REMOVE ALL TAGS AND TAPE FROM THE PLANTS AFTER PLANTING.
- SITE CHARACTERISTICS, SUCH AS OVERHEAD POWER LINES, EXISTING VEGETATION, AND INFRASTRUCTURE ITEMS SUCH AS CURBS, SIDEWALKS AND UTILITIES SHALL BE CONSIDERED. TREES THAT GROW TALLER THAN 25 FEET SHOULD NOT BE PLANTED DIRECTLY UNDER POWER LINES. WHEN POSSIBLE THE TREE LEADER SHALL BE OFFSET FROM POWER LINES. PLANTS, OTHER THAN GROUNDCOVER, SHALL NOT BE PLANTED WITHIN 2 FT OF A SIDEWALK. TREE SHALL NOT BE PLANTED WITHIN 5 FT OF A FENCE OR 10 FT OF A BUILDING.
- BACKFILL SOIL MIXTURE SHALL BE 3/4 EXISTING SOIL CLEANED OF DEBRIS (GRAVEL, ROCKS, STICKS, TRASH, ETC.) AND MIXED WITH 1/4 ORGANIC MATERIAL (COMPOSTED BARK, LEAF MOLD, OR OTHER PLANT DEBRIS PROCESSED TO A POINT OF DECAY AND APPROVED BY THE COUNTY URBAN FORESTER. PEAT MOSS MAY NOT BE USED. PLANTS SHALL BE PLANTED IN HEALTHY, UNCOMPACTED SOIL.
- REFER TO PLANTING DETAILS AND SPECIFICATIONS FOR SPECIFIC INSTRUCTIONS. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH LOCAL ACCEPTED PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOP SOIL THAT IS MUDDY OR IN FROZEN CONDITION. TREES AND SHRUBS SHALL BE INSTALLED BETWEEN SEPTEMBER 15TH AND DECEMBER 15TH OR BETWEEN MARCH 15TH AND JUNE 15TH. CONTACT THE ARLINGTON COUNTY FORESTER TO OBTAIN A DEFERRAL OR APPROVAL FOR PLANTING OUT OF SEASON.
- TREES PLANTED SHALL RECEIVE A 3-INCH LAYER OF SHREDDED HARDWOOD MULCH, IN A 6-FOOT RING SURROUNDING THE TREES, WITH A 6-INCH CLEAR AREA NEAR THE TRUNK. REFERENCE TREE PLANTING DETAIL. TREES PLANTED WITHOUT THE TRUNK FLARE VISIBLE WILL BE REJECTED.
- TREES MAY ONLY BE STAKED IF REQUIRED BY THE COUNTY URBAN FORESTER. REFER TO ARLINGTON COUNTY STANDARD STAKING DETAILS.
- MULCH SHALL BE CLEAN, SCREENED, DOUBLE-HAMMERED HARDWOOD BARK MULCH, UNIFORM IN SIZE AND FREE OF STONES, CLODS, NON-ORGANIC DEBRIS AND OTHER FOREIGN MATERIAL.
- ALL PLANTS SHALL BE WATERED TWICE: ONCE AT INSTALLATION AND AGAIN WITHIN 48-HOURS OF INSTALLATION. EACH WATERING WILL CONSIST OF 20 GALLONS PER TREE.
- CONTRACTOR SHALL LEGALLY REMOVE EXCESS SOIL & DEBRIS FROM SITE.
- AT PROJECT COMPLETION, PRIOR TO FINAL ACCEPTANCE, PRESERVED AND PLANTED TREES SHALL BE INSPECTED BY AN ARLINGTON COUNTY URBAN FORESTER.

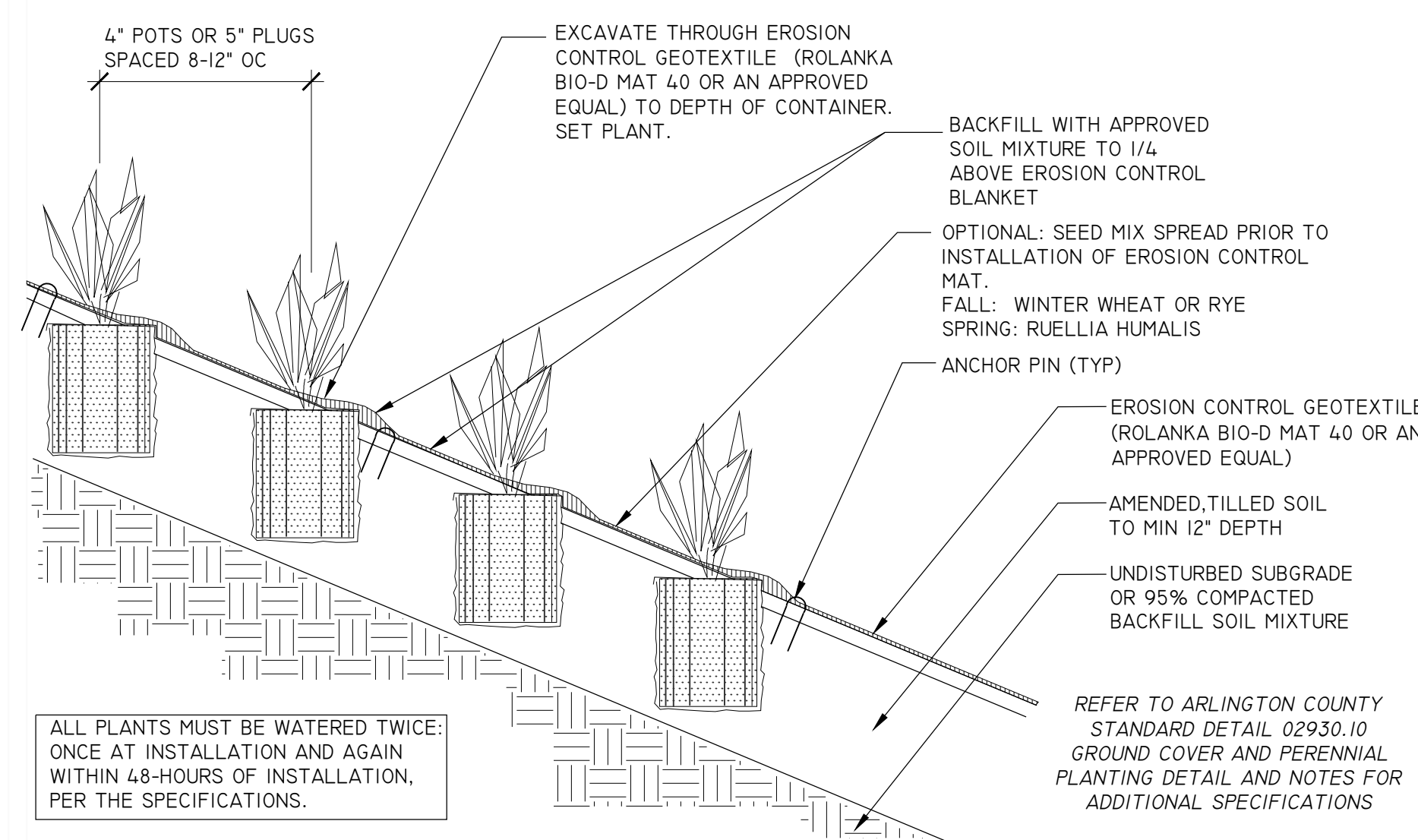
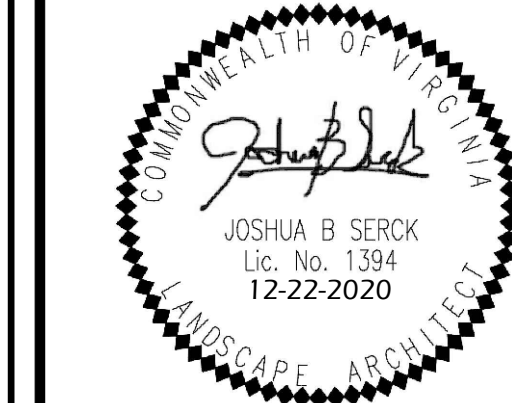


LEGEND:

- EXISTING TREE TO REMAIN
- PROPOSED TREE
- PROPOSED SHRUB
- PROPOSED GRASS / PERENNIAL
- CRITICAL ROOT ZONE OF EXISTING TREES (>3\"/>

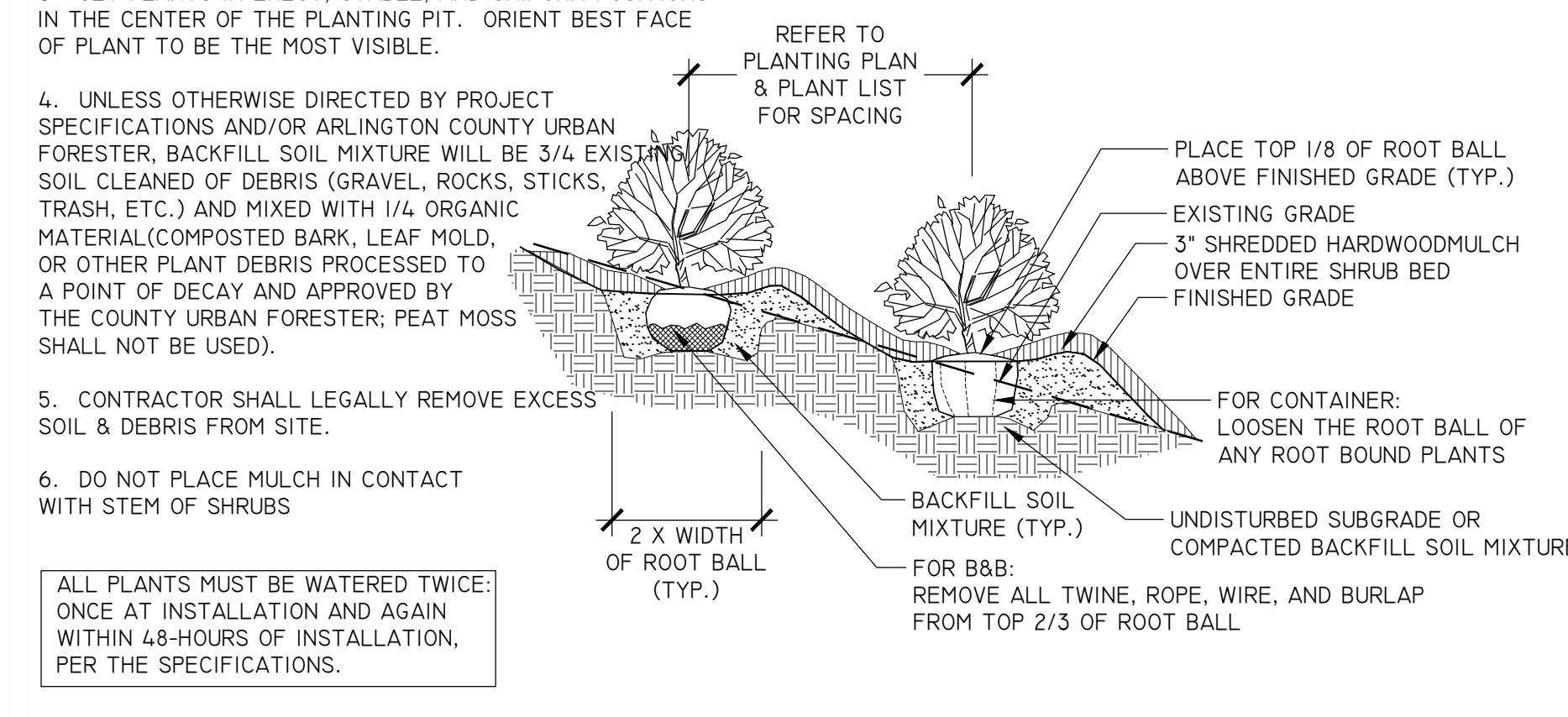


PLANTING SCHEDULE						
KEY	QTY.	LATIN NAME	COMMON NAME	SIZE	SPACING	NOTE
TREES						
AA	2	<i>Amenlanchier arborea</i>	Downy Serviceberry	2" Cal.	As shown	B&B, SINGLE STEM, SPECIMEN
LI	1	<i>Lagerstroemia indica 'moskooee'</i>	Crape Myrtle	7'-8'	As shown	B&B, 3 STEM MAX., SPECIMEN
MV	1	<i>Magnolia virginiana</i>	Sweetbay Magnolia	2" Cal.	As shown	B&B, SPECIMEN
SHRUBS						
CS	6	<i>Cornus sericea 'Cardinal'</i>	Red Twig Dogwood	18"-24"	2'-6" O.C.	See Plan
IV	3	<i>Ilex 'Sparkleberry'</i>	Winterberry	18"-24"	2'-6" O.C.	See Plan
CO	9	<i>Cephalanthus occidentalis</i>	Buttonbush	18"-24"	2'-6" O.C.	See Plan
GRASSES						
PV	24	<i>Panicum virgatum</i>	Switch Grass	#1 Cont.	15"-18" O.C.	
SS	31	<i>Schizachyrium scoparium</i>	Little Bluestem	#1 Cont.	15"-18" O.C.	
PERENNIALS						
IG	12	<i>Iris versicolor</i>	Blue Flag Iris	#1 Cont.	15"-18" O.C.	
JE	45	<i>Juncus effusus</i>	Common Rush	#1 Cont.	15"-18" O.C.	
SR	17	<i>Solidago rugosa 'Fireworks'</i>	Rough Goldenrod	#1 Cont.	15"-18" O.C.	



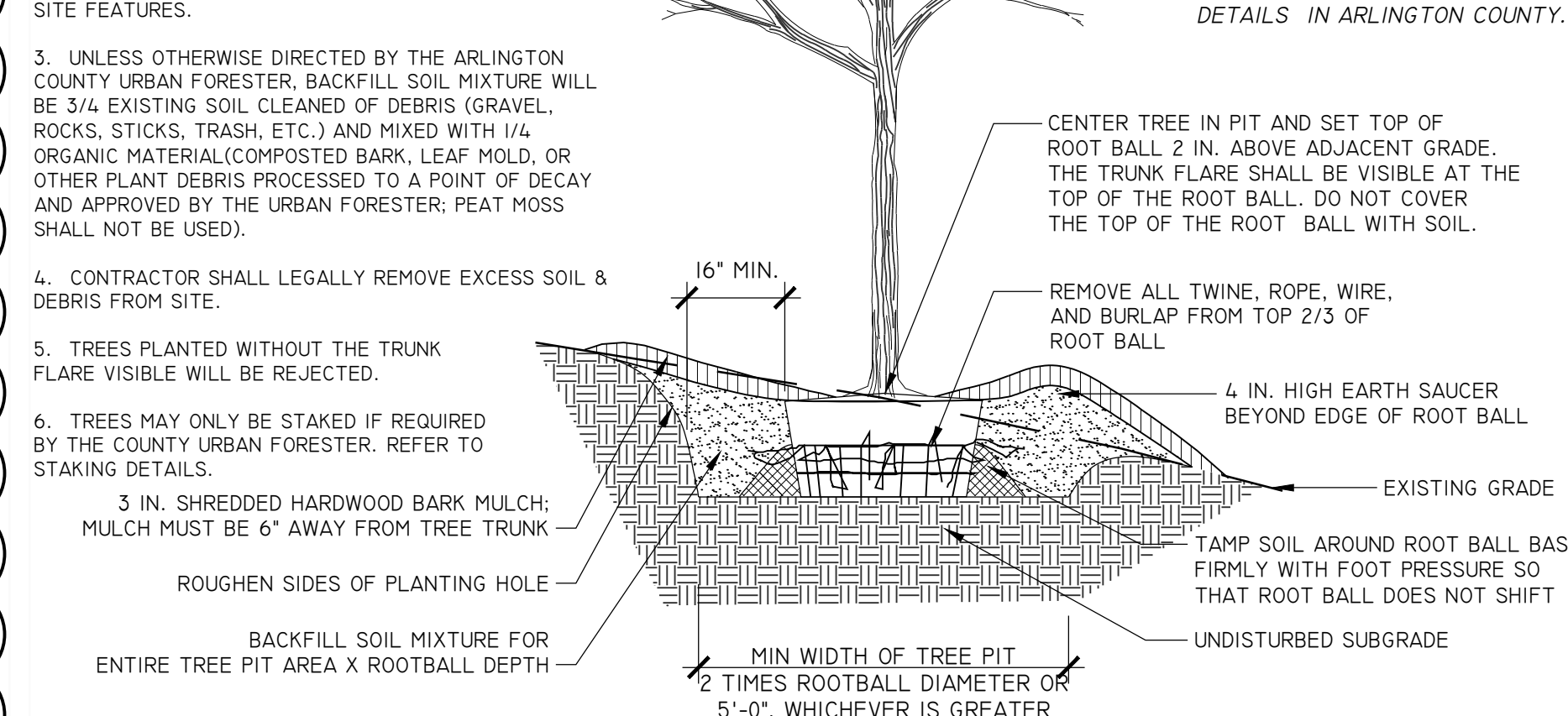
1 GROUND COVER & PERENNIAL PLANTING ON SLOPE NOT TO SCALE
ELEVATION 329300.12 (2016)

NOTES
1. AT PLANTING PRUNE ONLY BROKEN OR DEAD BRANCHES
2. PLANTING PIT/TRENCH SHALL BE DUG DEEP ENOUGH TO ALLOW AT LEAST 1/8TH OF ROOT BALL TO SET ABOVE EXISTING GRADE.
3. SET PLANTS IN ERECT, STABLE, AND UNIFORM POSITIONS IN THE CENTER OF THE PLANTING PIT. ORIENT BEST FACE OF PLANT TO BE THE MOST VISIBLE.
4. UNLESS OTHERWISE DIRECTED BY PROJECT SPECIFICATIONS AND/OR ARLINGTON COUNTY URBAN FORESTER, BACKFILL SOIL MIXTURE WILL BE 3/4 EXISTING SOIL CLEANED OF DEBRIS (GRAVEL, ROCKS, STICKS, TRASH, ETC.) AND MIXED WITH 1/4 ORGANIC MATERIAL (COMPOSTED BARK, LEAF MOLD, OR OTHER PLANT DEBRIS PROCESSED TO A POINT OF DECAY AND APPROVED BY THE COUNTY URBAN FORESTER; PEAT MOSS SHALL NOT BE USED).
5. CONTRACTOR SHALL LEGALLY REMOVE EXCESS SOIL & DEBRIS FROM SITE.
6. DO NOT PLACE MULCH IN CONTACT WITH STEM OF SHRUBS



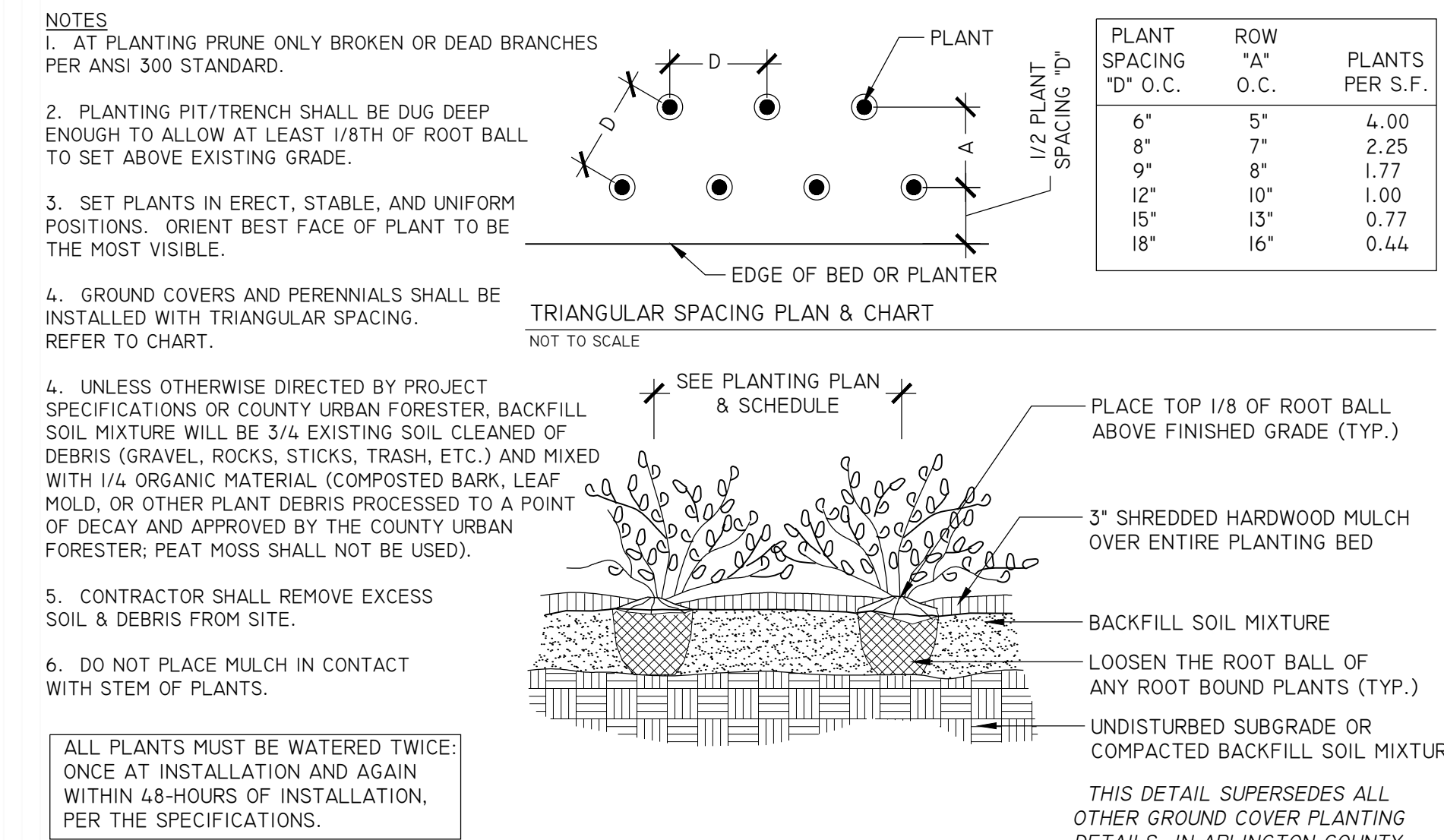
3 SHRUB PLANTING ON SLOPE NOT TO SCALE
ELEVATION 329300.9 (2019)

NOTES
1. AT PLANTING PRUNE ONLY CROSSING LIMBS, BROKEN OR DEAD BRANCHES, AND ANY BRANCHES THAT POSE A HAZARD TO PEDESTRIANS PER ANSI STANDARD A300. DO NOT PRUNE INTO OLD WOOD ON EVERGREENS.
2. CONTRACTOR SHALL MAXIMIZE EXCAVATED AREA FOR TREE PIT WITHOUT ADVERSELY IMPACTING ADJACENT SITE FEATURES.
3. UNLESS OTHERWISE DIRECTED BY THE ARLINGTON COUNTY URBAN FORESTER, BACKFILL SOIL MIXTURE WILL BE 3/4 EXISTING SOIL CLEANED OF DEBRIS (GRAVEL, ROCKS, STICKS, TRASH, ETC.) AND MIXED WITH 1/4 ORGANIC MATERIAL (COMPOSTED BARK, LEAF MOLD, OR OTHER PLANT DEBRIS PROCESSED TO A POINT OF DECAY AND APPROVED BY THE URBAN FORESTER; PEAT MOSS SHALL NOT BE USED).
4. CONTRACTOR SHALL LEGALLY REMOVE EXCESS SOIL & DEBRIS FROM SITE.
5. TREES PLANTED WITHOUT THE TRUNK FLARE VISIBLE WILL BE REJECTED.
6. TREES MAY ONLY BE STAKED IF REQUIRED BY THE COUNTY URBAN FORESTER. REFER TO STAKING DETAILS.



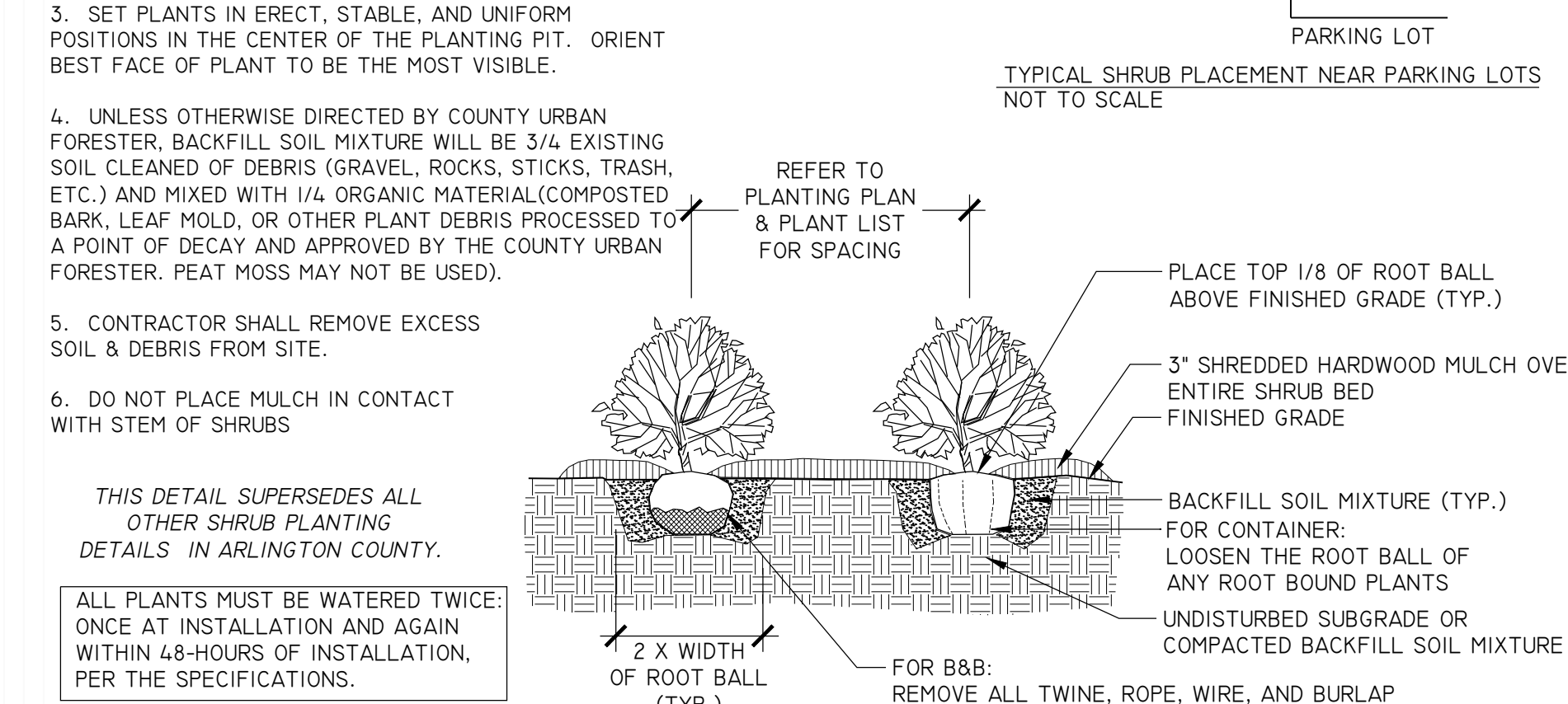
5 TREE PLANTING ON SLOPE NOT TO SCALE
ELEVATION 329300.2 (2019)

FOR OPEN PLANTING AREAS FREE OF PAVING OR GRATES



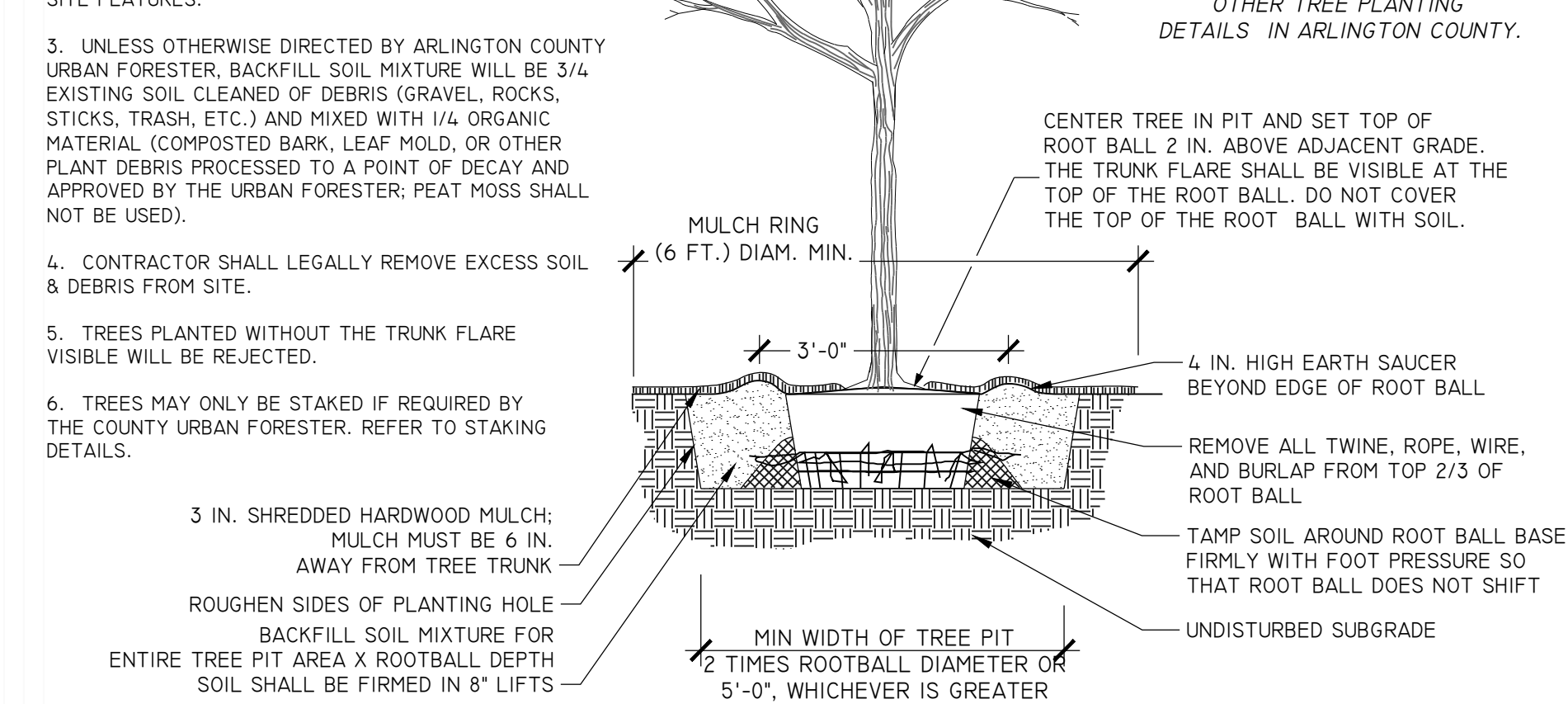
2 GROUND COVERS & PERENNIAL PLANTING NOT TO SCALE
ELEVATION 329300.10 (2019)

NOTES
1. AT PLANTING PRUNE ONLY BROKEN OR DEAD BRANCHES PER ANSI 300 STANDARD.
2. PLANTING PIT/TRENCH SHALL BE DUG DEEP ENOUGH TO ALLOW AT LEAST 1/8TH OF ROOT BALL TO SET ABOVE EXISTING GRADE.
3. SET PLANTS IN ERECT, STABLE, AND UNIFORM POSITIONS IN THE CENTER OF THE PLANTING PIT. ORIENT BEST FACE OF PLANT TO BE THE MOST VISIBLE.
4. UNLESS OTHERWISE DIRECTED BY COUNTY URBAN FORESTER, BACKFILL SOIL MIXTURE WILL BE 3/4 EXISTING SOIL CLEANED OF DEBRIS (GRAVEL, ROCKS, STICKS, TRASH, ETC.) AND MIXED WITH 1/4 ORGANIC MATERIAL (COMPOSTED BARK, LEAF MOLD, OR OTHER PLANT DEBRIS PROCESSED TO A POINT OF DECAY AND APPROVED BY THE COUNTY URBAN FORESTER; PEAT MOSS MAY NOT BE USED).
5. CONTRACTOR SHALL REMOVE EXCESS SOIL & DEBRIS FROM SITE.
6. DO NOT PLACE MULCH IN CONTACT WITH STEM OF SHRUBS



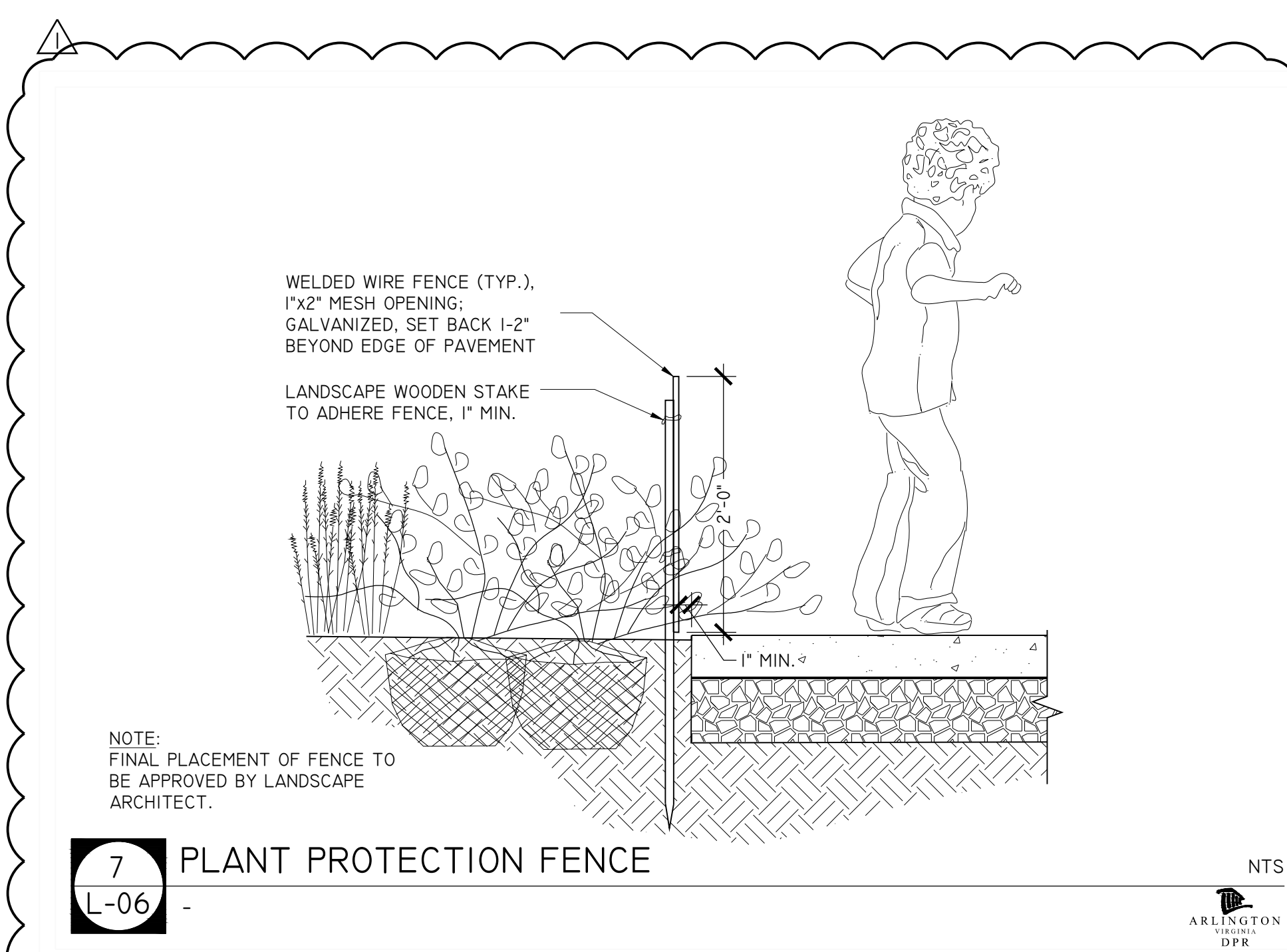
4 SHRUB PLANTING NOT TO SCALE
ELEVATION 329300.8 (2019)

NOTES
1. AT PLANTING PRUNE ONLY CROSSING LIMBS, BROKEN OR DEAD BRANCHES, AND ANY BRANCHES THAT POSE A HAZARD TO PEDESTRIANS PER ANSI STANDARD A300. DO NOT PRUNE INTO OLD WOOD ON EVERGREENS.
2. CONTRACTOR SHALL MAXIMIZE EXCAVATED AREA FOR TREE PIT WITHOUT ADVERSELY IMPACTING ADJACENT SITE FEATURES.
3. UNLESS OTHERWISE DIRECTED BY ARLINGTON COUNTY URBAN FORESTER, BACKFILL SOIL MIXTURE WILL BE 3/4 EXISTING SOIL CLEANED OF DEBRIS (GRAVEL, ROCKS, STICKS, TRASH, ETC.) AND MIXED WITH 1/4 ORGANIC MATERIAL (COMPOSTED BARK, LEAF MOLD, OR OTHER PLANT DEBRIS PROCESSED TO A POINT OF DECAY AND APPROVED BY THE URBAN FORESTER; PEAT MOSS SHALL NOT BE USED).
4. CONTRACTOR SHALL LEGALLY REMOVE EXCESS SOIL & DEBRIS FROM SITE.
5. TREES PLANTED WITHOUT THE TRUNK FLARE VISIBLE WILL BE REJECTED.
6. TREES MAY ONLY BE STAKED IF REQUIRED BY THE COUNTY URBAN FORESTER. REFER TO STAKING DETAILS.



6 TREE PLANTING DETAIL NOT TO SCALE
ELEVATION 329300.1 (2019)

FOR OPEN PLANTING AREAS FREE OF PAVING OR GRATES



7 PLANT PROTECTION FENCE NOT TO SCALE
ELEVATION 329300.1 (2019)

MAINTENANCE NARRATIVE

THE REFORESTATION PLOT WILL BE ON PUBLIC LAND MANAGED BY ARLINGTON COUNTY DEPARTMENT OF PARKS AND RECREATION. THIS WILL INCLUDE A LONG-TERM MANAGEMENT PARTNERSHIP BETWEEN PARKS AND NATURAL RESOURCES, CONSISTENT WITH THE PROVISIONS OF THE VSMP REGULATIONS TO ALLOW INSPECTION AND MAINTENANCE. THE PARK AND PLAYGROUND AREAS WILL BE MAINTAINED TO PROVIDE CONTROL OF SEDIMENT RUNOFF AND/OR EROSION AREAS. A LONG TERM VEGETATION MANAGEMENT PLAN, INCLUDING AN INVASIVE MANAGEMENT PLAN, AND A PLANTING LIST IS PROVIDED ON THIS SHEET.

ANNUAL INSPECTIONS ARE REQUIRED AND SHOULD BE CONDUCTED IN THE NON-GROWING SEASON TO MAKE IT EASIER TO SEE THE FLOW PATH. THE INSPECTIONS SHOULD CHECK TO ENSURE THAT:

- DEBRIS AND SEDIMENT DOES NOT BUILD UP AT THE TOP OF THE REFORESTATION AREA
- SCOUR AND EROSION DO NOT OCCUR WITHIN THE REFORESTATION AREA.
- VEGETATED DENSITY EXCEEDS A 90% COVER IN THE REFORESTATION AREA (WITH AN 80% COVER BY THE END OF CONSTRUCTION).
- NO MOWING IS PERMITTED IN THE REFORESTATION AREA AND EDUCATIONAL SIGNAGE AND PHYSICAL DEMARCATION OF THE AREA TO PREVENT ACCIDENTAL MOWING WILL BE PROVIDED.
- STABILITY/MAINTENANCE OF PERIMETER CONTROLS (TREE PROTECTION FENCE, SILT FENCE).

CONSTRUCTION NARRATIVE

THE ENTIRE CONSTRUCTION SEQUENCE CAN BE FOUND ON THE "SEQUENCE OF CONSTRUCTION NARRATIVE" ON THE EROSION AND SEDIMENT CONTROL PLANS. ADDITIONAL NOTES:

- ONLY VEHICULAR TRAFFIC NECESSARY FOR THE REFORESTATION AREA CONSTRUCTION SHOULD BE ALLOWED WITHIN THE DEMOLISHED PLAYGROUND FOOTPRINT OF THE REFORESTATION AREA.
- VEHICULAR ACCESS FOR THE PLANT INSTALLATION SHALL OCCUR FROM THE DEMOLISHED PLAYGROUND ENTRANCE AREA AT SOUTH SCOTT STREET.
- IF EXISTING TOPSOIL IS STRIPPED DURING GRADING, IT SHALL BE STOCKPILED AND STABILIZED FOR LATER USE.
- THE PROPOSED REFORESTATION AREA SHALL HAVE SILT FENCE (SEE EROSION & SEDIMENT CONTROL PLANS) AND TREE PROTECTION FENCE (SEE TREE PRESERVATION PLANS) AROUND THE PERIMETER.

REFORESTATION NOTES:

REFORESTATION IN TOWERS PARK
 REFORESTATION AREA: 4,980 SQUARE FEET ± 0.11 ACRES
 RPA DELINEATION: DETERMINATION IS 100' FROM STREAM BANK

REFORESTATION NOTES:

1. TURF GRASS IN RESTORATION AREA WILL BE TREATED WITH A FOLIAR APPLICATION OF HERBICIDE IN SPRING 2020.
2. IN THE FOLLOWING FALL, AREA WILL BE PLANTED TO 80% DENSITY. REFORESTATION PLANTINGS SHALL BE LAID OUT IN THE FIELD BY CONTRACTOR WITH PROJECT OFFICER AND COUNTY LANDSCAPE ARCHITECT ONSITE. CARE SHALL BE TAKEN TO AVOID ROOTS FOR EXISTING TREES THAT ARE TO BE PRESERVED.
3. INVASIVE PLANT MANAGEMENT (IMP) WILL BE CARRIED OUT FOR 5 YEARS AFTER INSTALLATION OF REFORESTATION PLANTING. REPLACEMENT PLANTINGS WILL BE CARRIED OUT AS NEEDED TO MEET THE COVER GOALS OUTLINED BELOW. THE IMP PLAN WILL BE PERFORMED BY ARLINGTON COUNTY PARKS AND NATURAL RESOURCES DIVISION (PNR) FOR A TOTAL OF 10 VISITS WITHIN 5 YEARS AND THE BI-ANNUAL VISIT WILL INCLUDE INSPECTION AND REPLACEMENT OF PLANTINGS INCLUDING SEEDS. TARGET SPECIES TO BE REMOVED IN THE IMP PLAN WILL BE FROM ARLINGTON COUNTY'S INVASIVE PLANT LIST LOCATED HERE:
<https://environment.arlingtonva.us/trees/invasive-plants/invasive-plant-program/>
4. IN REFORESTATION, TREES MAY BE SPACED SLIGHTLY CLOSER THAN OPTIMAL SPACING FOR STREET TREES AS IS NOTED ON PLANTING LIST TO ENCOURAGE LESS VEGETATION COMPETITION AND MAINTENANCE. THIS SPACING WILL BE DETERMINED IN THE FIELD.
5. STRAW/COCO DOUBLE BIO MAT (ECS-2B) SHALL BE INSTALLED AROUND ALL NEW PLANTINGS WITHIN REFORESTED AREA TO SUPPRESS COMPETING VEGETATION GROWTH, RETAIN SOIL MOISTURE AND REDUCE EROSION.
6. REFORESTED ARE PLANTINGS SHALL BE PLANTED IN *IN SITU* SOIL AND SHALL BE THOROUGHLY WATERED.
7. ACCESS TO THE REFORESTED PLANTING AREA WILL BE FROM SOUTH SCOTT STREET. THIS ACCESS LOCATION WILL BE VERIFIED AT THE PRE-CONSTRUCTION MEETING.
8. REFORESTATION AND ASSOCIATED SITE WORK SHALL BE PERFORMED BY THE TOWERS PARK PLAYGROUND RENOVATIONS GENERAL CONTRACTOR.
9. LANDSCAPE ARCHITECT WILL PROVIDE A CERTIFICATION INDICATING THAT THE REFORESTATION AREA HAS BEEN INSTALLED PER PLAN AND THAT THE COVERAGE IS 80% PRIOR TO CLOSE OF PERMIT.

- COVER GOALS:**
1. NO BARE SOIL AND 80% NON-TURF COVER BY THE END OF CONSTRUCTION.
 2. SHALL MAINTAIN NO BARE SOIL OR TURF COVER WITH (GROUND LAYER TO BE VEGETATED OR WITH NATURAL MATERIALS SUCH AS LEAF LITTER AND MULCH) 90% DENSITY THROUGHOUT THE 5 YEARS.

PLAN NARRATIVE:
 THE PURPOSE OF THIS PROJECT IS TO REFOREST A 0.11 ACRE AREA WITHIN THE RPA, WHICH PARTIALLY OVERLAP WITH THE EXISTING TOWERS PARK PLAYGROUND. A SWING SET, A SAND BOX AND A PLAY STRUCTURE SURROUNDED BY TIMBER CURBS AND COVERED ON THE GROUND WITH MULCH AND ASPHALT CURRENTLY OCCUPIES THE SPACE, WHERE THE REFORESTATION WILL OCCUR. AS PART OF THE TOWERS PARK PLAYGROUND RENOVATIONS, THE EXISTING PLAYGROUND WILL BE REMOVED ENTIRELY.
 THE REMAINING GROUND SURFACE AND ANY SURROUNDING TURF GRASS/INVASIVE SPECIES THAT ARE WITHIN THE LIMITS OF DISTURBANCE SHALL UNDERGO A FOLIAR HERBICIDE APPLICATION TO KILL THE REMAINING UNDESIRABLE VEGETATION. THE AREA WILL BE DENSELY PLANTED WITH NATIVE TREES, SHRUBS AND UNDERSTORY PLANTS.
 THE REFORESTATION GOALS INCLUDE ESTABLISHING 80% NATIVE COVER BY THE END OF CONSTRUCTION, 90% NATIVE COVER BY THE END OF SUBSEQUENT GROWING SEASON AND MAINTAINED THROUGHOUT 5 YEARS. THE INVASIVE PLANT MANAGEMENT PLAN INCLUDES TREATMENT OF PRIORITIZED INVASIVE PLANT SPECIES IDENTIFIED BY COUNTY STAFF, WITH TWO ANNUAL HERBICIDE TREATMENTS.
 FUNDING FOR 5 YEARS OF MAINTENANCE WILL NOT BE INCLUDED IN THE COST OF THE PROJECT. MAINTENANCE IS TO BE PERFORMED BY PNR. OVERALL RESPONSIBILITY IS BY PNR. INFORMATIONAL SIGNAGE AND PERIMETER FENCING IS INCLUDED IN THE PROJECT.

LONG-TERM VEGETATION AND INVASIVE MANAGEMENT PLAN:

PNR WILL PROVIDE THE MAINTENANCE OF THE TOWERS PARK REFORESTATION AREA, AS DEFINED BY THE REFORESTATION PLAN FOR OVERALL FIVE (5) YEARS FOLLOWING THE PROJECT COMPLETION. THERE WILL BE THREE (3) YEARS OF TREATMENT FOR INVASIVE CONTROL CURRENTLY SPECIFIED BY THE INVASIVE CONTROL CONTRACTOR FOR THE TOWERS PARK SITE. IN THE SUBSEQUENT TWO (2) YEARS, THE SITE WILL BE INSPECTED TWICE ANNUALLY AND TREATED AS NEEDED BY PNR. FUNDING AND ACTIVE MAINTENANCE WILL BE PROVIDED BY DPR TO ADDRESS THE INVASIVE CONTROL NEEDS DURING ALL FIVE (5) YEARS FOLLOWING THE PROJECT COMPLETION.

TREATMENT RECOMMENDATIONS AND ASSUMPTIONS

- RECOMMENDATIONS ARE BASED ON TWO TREATMENTS PER YEAR.
- CUTTING AND TREATMENT OF LARGE BUSHES AND CLIMBING VINES
 - LARGE TREES WILL BE GIRDLED AND LEFT STANDING
 - GROUNDCOVER INVASIVES WILL BE FOLIAR SPRAYED
 - NATIVE PLANTED WITH APPROPRIATE DISTRIBUTION ON SITE
 - TURF GRASSES SPRAYED PRIOR TO PLANTING
 - PNR WILL RETRIEVE AND PLANT THE PLANTS (SPECIES LIST PROVIDED BY ARLINGTON COUNTY)
 - NATIVE GRASS SEEDING IS NOT ACCOMMODATED BY THIS ESTIMATE.

BOTANICAL/COMMON	QTY	CONTAINER	CALIPER/SIZE	SPACING
OVERSTORY/CANOPY TREES				
QUERCUS RUBRA	1	B & B	2 - 2.5" CAL	15' O.C.
* NYSSA SYLVATICA	1	B & B	2 - 2.5" CAL	15' O.C.
CARYA TOMENTOSA / MOCKERNUT HICKORY	1	B & B	2 - 2.5" CAL	15' O.C.
TOTAL	3			
UNDERSTORY/ORNAMENTAL TREES				
AMELANCHIER CANADENSIS / CANADIAN SERVICEBERRY	6	B & B	7-8" HEIGHT	10-12' O.C.
SASSAFRAS ALBIDUM / SASSAFRAS	6	B & B	7-8" HEIGHT	10-12' O.C.
CERCIS CANADENSIS / EASTERN REDBUD (SINGLE STEM)	5	B & B	7-8" HEIGHT	10-12' O.C.
CORNUS FLORIDA / FLOWERING DOGWOOD	5	B & B	7-8" HEIGHT	10-12' O.C.
TOTAL	22			
SHRUBS				
ARONIA MELANOCARPA / CHOKEBERRY	3	3 GAL	15-18"	4-6' O.C.
HAMAMELIS VIRGINIANA / COMMON WITCH HAZEL	3	3 GAL	15-18"	10' O.C.
* CEPHALANTHUS OCCIDENTALIS / BUTTONBUSH	3			
ILEX VERTICILLATA / WINTERBERRY	3	3 GAL	15-18"	8' O.C.
* SAMBUCUS CANADENSIS / AMERICAN BLACK ELDERBERRY	3	3 GAL	15-18"	8' O.C.
PHYSCARPUS OPULIFOLIUS / NINEBARK	3	3 GAL	15-18"	4-6' O.C.
* LINDERA BENZOIN / SPICEBUSH	3	3 GAL	15-18"	8' O.C.
VACCINIUM ANGUSTIFOLIUM / LOWBUSH BLUEBERRY	3	3 GAL	15-18"	4-6' O.C.
VIBURNUM DENTATUM / VIBURNUM	3	3 GAL	15-18"	5-7' O.C.
TOTAL	27			
HERBACEOUS PERENNIALS AND GRASSES				
ANDROPOGON VIRGINICUS / BROOMSEDGE BLUESTEM	7	DP -50 PLUG	2.25" X 5" PLUG	18-20" O.C.
* JUNCUS EFFUSUS	8	DP -50 PLUG	2.25" X 5" PLUG	18-20" O.C.
* JUNCUS TENUIS	8	DP -50 PLUG	2.25" X 5" PLUG	18-20" O.C.
* SCIRPUS CYPERINUS	8	DP -50 PLUG	2.25" X 5" PLUG	18-20" O.C.
ASCLEPIAS SYRIACA / COMMON MILKWEEED	7	DP -50 PLUG	2.25" X 5" PLUG	18-20" O.C.
ASCLEPIAS INCARNATA	7	DP -50 PLUG	2.25" X 5" PLUG	18-20" O.C.
ASCLEPIAS VERTICILLATA	7	DP -50 PLUG	2.25" X 5" PLUG	18-20" O.C.
ASCLEPIAS TUBEROSA	7	DP -50 PLUG	2.25" X 5" PLUG	18-20" O.C.
ECHINACEA PURPUREA / PURPLE CONEFLOWER	7	DP -50 PLUG	2.25" X 5" PLUG	18-20" O.C.
ELYMUS VIRGINICUS / VIRGINIA WILD RYE	7	DP -50 PLUG	2.25" X 5" PLUG	18-20" O.C.
* PACKERA AUREA / GOLDEN RAGWORT	8	DP -50 PLUG	2.25" X 5" PLUG	18-20" O.C.
* ONOCLEA SENSIBILIS	8	DP -50 PLUG	2.25" X 5" PLUG	18-20" O.C.
* IRIS VERSICOLOR / BLUE FLAG	8	DP -50 PLUG	2.25" X 5" PLUG	18-20" O.C.
TOTAL	97			
* WET TOLERANT SPECIES				

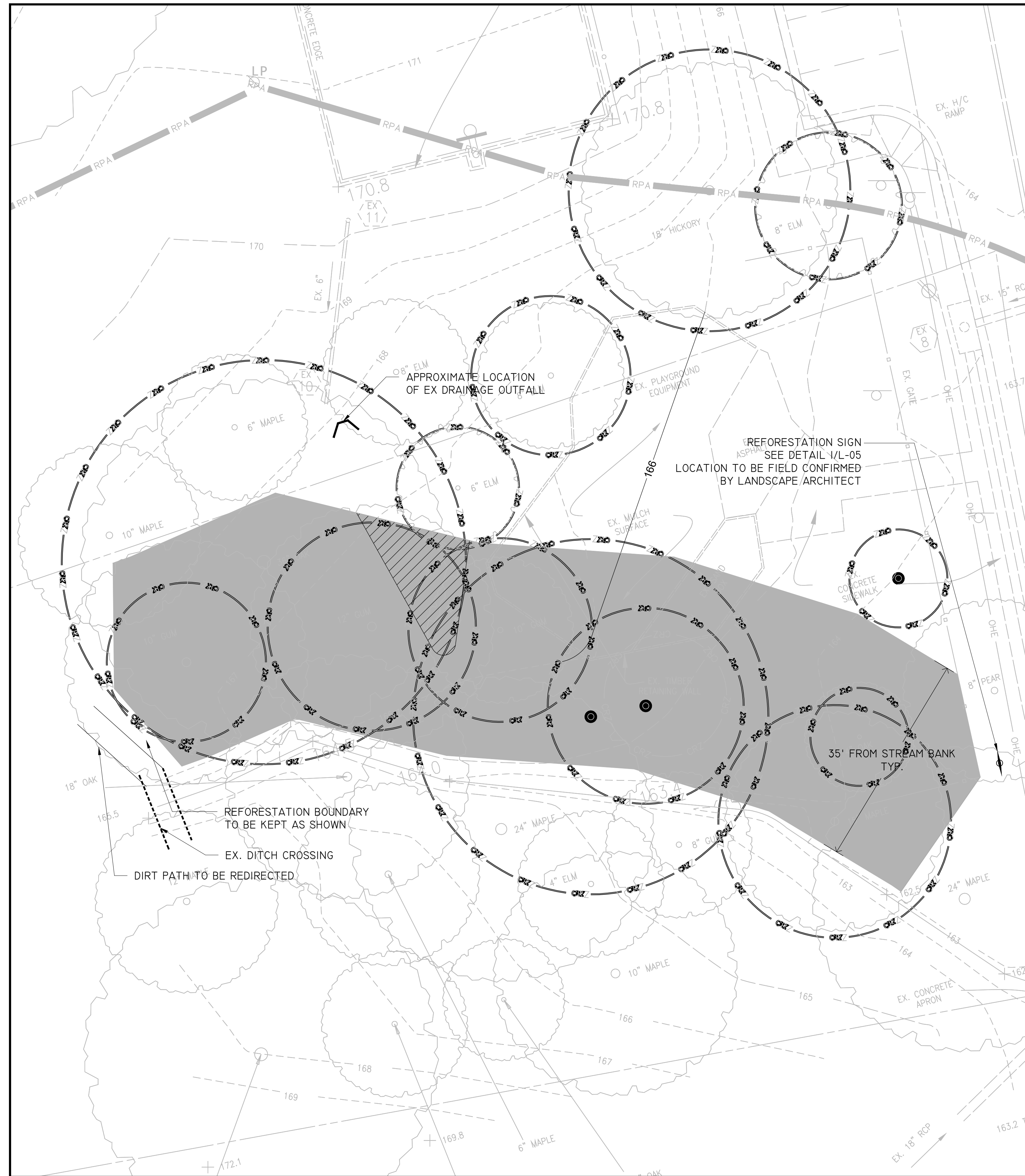
MINIMUM REFORESTATION PLANTING REQUIREMENTS:
 TOWERS PARK REFORESTATION

REFORESTATION CALCULATIONS:
 0.11 ACRES TO BE PLANTED FOR REFORESTATION

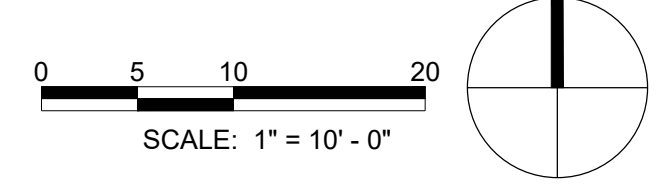
CANOPY TREE REQUIREMENT:
 100 x .11 = 11 (LESS 8 EXISTING) = 3

UNDERSTORY TREE REQUIREMENT:
 200 x .11 = 22

SHRUB/GRASS/PERENNIAL REQUIREMENT:
 1089 x .11 = 120



AREA OF REFORESTATION TO BE PLANTED WITH WET TOLERANT SPECIES



NOTE: SEE PLANTING PLAN FOR ARLINGTON COUNTY STANDARD PLANTING DETAILS.



ARLINGTON VIRGINIA
 DEPARTMENT OF PARKS AND RECREATION
 Park Development Division
 2100 Clarendon Boulevard, Suite 414
 Arlington, VA 22201
 Phone: 703.228.3332
 Fax: 703.228.3328

21-DPR-ITB-639

Project Name and Location
TOWERS PARK PLAYGROUND RENOVATIONS

801 S Scott St
 Arlington, VA 22204

Sheet Title
REFORESTATION PLAN & NOTES

Approval	Date
Design Supervisor	
Revisions	Date

Designed:
 Drawn:
 Checked:
 Filename: REF-01_REF.DWG
 Plotted: May, 27, 21
 Scale: 1"=10'-0"
 Date: DECEMBER 20, 2019



Sheet
REF-01
 No. 40 of 40