

TABLE OF CONTENTS

TABLE OF CONTENTS

DOCUMENT AMENDMENT HISTORY	I
AMENDMENT NO 1 – APPROVED CHANGES.....	I
INTRODUCTION	XI
DESIGN GOALS.....	XII
TABLE OF CONTENTS	XIII
LEGEND	XX
1 GENERAL REQUIREMENTS – V01000	1-1
1.1 GENERAL.....	1-1
1.1.1 Description.....	1-1
1.1.2 Applicable Arlington County Standards, Specification and Policies.....	1-1
1.1.3 Applicable Standards and Specifications.....	1-1
1.1.4 Quality Assurance.....	1-1
1.1.5 Submittals	1-2
1.2 DESIGN	1-2
1.2.1 Design for Access	1-2
1.2.2 Design for Context.....	1-3
1.2.3 Design for Cost Effectiveness.....	1-3
1.2.4 Design for Energy Efficiency	1-4
1.2.5 Design for Excellence.....	1-5
1.2.6 Design for Innovation.....	1-5
1.2.7 Design for Safety	1-6
1.2.8 Design for Livability.....	1-6
1.2.9 Design for Sustainability	1-6
1.2.10 Document Organization and Format.....	1-6
1.2.11 Electronic Drawing Documents.....	1-7
1.2.12 Adobe PDF Deliverables:	1-8
1.2.13 Design Development Phase	1-8
1.2.14 Building Load letters and Plans	1-8
1.2.15 Bid Documents	1-8
1.2.16 Specification Standards.....	1-8
1.2.17 Internal Inspection of Building Drain and Building Sewer (lateral).....	1-8
1.3 PRODUCTS.....	1-9
1.3.1 Sole Source Specification:	1-9
2 SITE WORK – V02000	2-10
2.1 GENERAL.....	2-10
2.1.1 Description.....	2-10
2.1.2 Related Arlington County Standards, Specification and Policies	2-10
2.1.3 Applicable Standards and Specifications.....	2-10
2.1.4 Quality Assurance.....	2-11
2.1.5 Submittals	2-11
2.2 DESIGN	2-11
2.2.1 Description.....	2-11
2.2.2 Drainage.....	2-11

TABLE OF CONTENTS

2.2.3	Grading:.....	2-12
2.2.4	Storm Water Management.....	2-12
2.2.5	ADA.....	2-13
2.2.6	Landscape Development:.....	2-13
2.2.7	Screening.....	2-13
2.2.8	Walls.....	2-14
2.2.9	Pavement Design.....	2-14
2.2.10	Site Lighting.....	2-14
2.2.11	General Requirements.....	2-14
2.2.12	Sidewalks and Trails.....	2-14
2.3	PRODUCTS.....	2-15
2.3.1	Reserved.....	2-15
3	CONCRETE – V03000.....	3-16
3.1	GENERAL.....	3-16
3.1.1	Description.....	3-16
3.1.2	Related Arlington County Standards, Specification and Policies.....	3-16
3.1.3	Applicable Standards and Specifications.....	3-16
3.1.4	Quality Assurance.....	3-16
3.1.5	Submittals.....	3-16
3.2	DESIGN.....	3-17
3.2.1	Design Guidelines.....	3-17
3.2.2	Vapor Retarders over Concrete.....	3-17
3.3	PRODUCTS.....	3-18
3.3.1	Calcium Chloride - Reinforced Concrete Pipe/Drainage Structures.....	3-18
3.3.2	Expansion Joint - Building structure.....	3-18
4	MASONRY – V04000.....	4-19
4.1	GENERAL.....	4-19
4.1.1	Description.....	4-19
4.1.2	Related Arlington County Standards, Specification and Policies.....	4-19
4.1.3	Applicable Standards and Specifications.....	4-19
4.1.4	Quality Assurance.....	4-19
4.1.5	Specifications Requirements.....	4-19
4.2	DESIGN.....	4-20
4.2.1	Masonry Building Elements.....	4-20
4.2.2	Additions and alterations to existing structures.....	4-20
4.2.3	All exterior brick shall be 3000 PSI, Grade SW.....	4-20
4.2.4	Minimum Compressive Strength Mortar.....	4-20
4.2.5	Glass Block.....	4-20
4.3	PRODUCTS.....	4-20
4.3.1	Reserved.....	4-20
5	METALS – V05000.....	5-21
5.1	GENERAL.....	5-21
5.1.1	Description.....	5-21
5.1.2	Related Arlington County Standards, Specification and Policies.....	5-21
5.1.3	Applicable Standards and Specifications including.....	5-21

TABLE OF CONTENTS

5.1.4	Quality Assurance.....	5-21
5.1.5	Submittals	5-21
5.2	DESIGN	5-21
5.2.1	Design Guidelines.....	5-21
5.2.2	ASTM Requirements	5-22
5.2.3	Welder Certification Requirements	5-22
5.3	PRODUCTS.....	5-22
5.3.1	Reserved	5-22
6	WOODS AND PLASICS – V06000.....	6-23
6.1	GENERAL.....	6-23
6.1.1	Description.....	6-23
6.1.2	Related Arlington County Standards, Specification and Policies	6-23
6.1.3	Applicable Standards and Specifications	6-23
6.1.4	Quality Assurance.....	6-23
6.1.5	Submittals	6-23
6.2	DESIGN	6-24
6.2.1	Millwork	6-24
6.2.2	Wood	6-24
6.3	PRODUCTS.....	6-24
6.3.1	Countertops, Splashes and Window Sills:	6-24
7	THERMAL AND MOISTURE PROTECTION - V07000.....	7-25
7.1	GENERAL.....	7-25
7.1.1	Description.....	7-25
7.1.2	Related Arlington County Standards, Specification and Policies	7-25
7.1.3	Applicable Standards and Specifications	7-25
7.1.4	Quality Assurance.....	7-25
7.1.5	Submittals	7-25
7.2	DESIGN	7-25
7.2.1	Design Guidelines.....	7-25
7.2.2	Vent Flashing.....	7-25
7.2.3	Roof Design.....	7-26
7.2.4	Green Roofs.....	7-26
7.3	PRODUCTS.....	7-27
7.3.1	Design Guidelines.....	7-27
7.3.2	Roof Pavers.....	7-27
7.3.3	Roof Hatch Railing System	7-27
8	DOORS AND WINDOWS – V08000	8-28
8.1	GENERAL.....	8-28
8.1.1	Description.....	8-28
8.1.2	Related Arlington County Standards, Specification and Policies	8-28
8.1.3	Applicable Standards and Specifications	8-28
8.1.4	Quality Assurance.....	8-28
8.1.5	Submittals	8-28

TABLE OF CONTENTS

8.2	DESIGN	8-28
8.2.1	Windows	8-28
8.2.2	Doors	8-29
8.2.3	<i>Architectural Door Hardware</i>	8-29
8.2.4	Keying System.....	8-30
8.3	PRODUCTS	8-31
8.3.1	<i>Architectural Door Hardware</i>	8-31
8.3.2	Doors	8-32
9	FINISHES – V09000	9-33
9.1	GENERAL	9-33
9.1.1	Description.....	9-33
9.1.2	Related Arlington County Standards, Specification and Policies	9-33
9.1.3	Applicable Standards and Specifications	9-33
9.1.4	Quality Assurance.....	9-33
9.1.5	Submittals	9-33
9.2	DESIGN	9-33
9.2.1	Lath & Plaster	9-33
9.2.2	Gypsum Board	9-33
9.2.3	Ceramic Tile.	9-33
9.2.4	Flooring	9-34
9.2.5	Wall Covering.....	9-34
9.2.6	Ceilings.....	9-34
9.2.7	Paint	9-35
9.2.8	Attic Stock	9-35
9.2.9	Maintenance Access	9-35
9.2.10	Cleanability	9-35
9.3	PRODUCTS	9-35
9.3.1	Paints, Glues and adhesives:	9-35
10	SPECIALTIES – V10000	10-37
10.1	GENERAL	10-37
10.1.1	Description.....	10-37
10.1.2	Related Arlington County Standards, Specification and Policies	10-37
10.1.3	Applicable Standards and Specifications	10-37
10.1.4	Quality Assurance.....	10-37
10.1.5	Submittals	10-37
10.2	DESIGN	10-38
10.2.1	Fire extinguishers.....	10-38
10.2.2	Partitions.....	10-38
10.2.3	Building Interior and Exterior Signage.....	10-38
10.2.4	Janitor Closets.....	10-38
10.2.5	Communication Room (OPR)	10-39
10.2.6	Mechanical and Electrical Equipment	10-39
10.3	PRODUCTS	10-39
10.3.1	Toilet Accessories.....	10-39
11	EQUIPMENT – V11000	11-40

TABLE OF CONTENTS

11.1	GENERAL	11-40
11.1.1	Description.....	11-40
11.1.2	Related Arlington County Standards, Specification and Policies	11-40
11.1.3	Applicable Standards and Specifications	11-40
11.1.4	Quality Assurance.....	11-40
11.1.5	Submittals	11-40
11.2	DESIGN	11-40
11.2.1	Isolation Valves	11-40
11.2.2	Exhausts for Dryers	11-40
11.2.3	Floor Drains	11-41
11.2.4	Voltages requirements for washing machines and dryers.....	11-41
11.2.5	Equipment Plans:.....	11-41
11.2.6	Appliances	11-41
11.2.7	EMERGENCY EYEWASHES (Plumbed Units Only):.....	11-41
11.2.8	Emergency Showers:	11-42
11.2.9	Signage and Visibility.....	11-43
11.2.10	Prohibitions around equipment.....	11-43
11.3	PRODUCTS	11-43
11.3.1	Emergency Eyewashes & Showers.....	11-43
12	FURNISHINGS (SYSTEM FURNITURE) - V12000	12-45
12.1	GENERAL	12-45
12.1.1	Description.....	12-45
12.1.2	Related Arlington County Standards, Specification and Policies	12-45
12.1.3	Applicable Standards and Specifications including.....	12-45
12.1.4	Quality Assurance.....	12-45
12.1.5	Submittals	12-45
12.2	DESIGN	12-45
12.2.1	Design Guidelines.....	12-45
12.2.2	County Office & Workstation Requirements.....	12-46
12.3	PRODUCTS	12-47
12.3.1	Systems Furniture	12-47
13	SPECIAL EQUIPMENT - V13000	13-48
13.1	GENERAL	13-48
13.1.1	Description.....	13-48
13.1.2	Related Arlington County Standards, Specification and Policies	13-48
13.1.3	Applicable Standards and Specifications including.....	13-48
13.1.4	Quality Assurance.....	13-48
13.1.5	Submittals	13-48
13.2	DESIGN	13-48
13.2.1	Security Access and Surveillance	13-48
13.2.2	Closed Circuit Television	13-49
13.2.3	Intrusion Detection (ID) System.....	13-50
13.3	PRODUCTS	13-50
13.3.1	Security Access and Surveillance	13-50

TABLE OF CONTENTS

14	CONVEYING SYSTEMS - V14000	14-51
14.1	GENERAL	14-51
14.1.1	Description	14-51
14.1.2	Related Arlington County Standards, Specification and Policies	14-51
14.1.3	Applicable Standards and Specifications	14-51
14.1.4	Quality Assurance	14-51
14.1.5	Submittals	14-51
14.2	DESIGN	14-51
14.3	PRODUCTS	14-52
14.3.1	Reserved	14-52
15	MECHANICAL (PLUMBING - V15000	15-53
15.1	GENERAL	15-53
15.1.1	Description	15-53
15.1.2	Related Arlington County Standards, Specification and Policies	15-53
15.1.3	Applicable Standards and Specifications	15-53
15.1.4	Quality Assurance	15-53
15.1.5	Submittals	15-53
15.2	DESIGN	15-54
15.2.1	Registered Design Professional Coordination	15-54
15.2.2	Submission Requirements	15-56
15.2.3	Plumbing	15-57
15.2.4	Heating, Ventilation and Air Conditioning System Selection	15-59
15.2.5	Heating, Ventilation and Air Conditioning Design Criteria	15-60
15.2.6	Accessibility and Maintainability	15-61
15.2.7	Heating, Ventilation and Air Conditioning Specifications	15-62
15.2.8	Energy Management and Control Systems (EMCS)	15-64
15.2.9	Commissioning	15-65
15.3	PRODUCTS	15-66
15.3.1	Mechanical Equipment	15-66
15.3.2	Plumbing Equipment	15-68
16	ELECTRICAL - V16000	16-69
16.1	GENERAL	16-69
16.1.1	Description	16-69
16.1.2	Related Arlington County Standards, Specification and Policies	16-69
16.1.3	Quality Assurance	16-69
16.1.4	Applicable Standards and Specifications	16-69
16.1.5	Submittals	16-69
16.2	DESIGN	16-70
16.2.1	Registered Design Professional Coordination	16-70
16.2.2	Submission Requirements for Electrical Drawings	16-71
16.2.3	Generator & Transfer Switches	16-71
16.2.4	Roll Up Generators	16-76
16.2.5	Lighting	16-76
16.2.6	Grounding, Bonding and Lightning Protection	16-78
16.2.7	Communication Room	16-78
16.2.8	Exterior Conduits	16-78

TABLE OF CONTENTS

16.2.9 Housekeeping Pads	16-79
16.3 PRODUCTS.....	16-79
16.3.1 Emergency Standby Generator	16-79
16.3.2 Electrical Main Service.....	16-79
17 FIRE PROTECTION V17000	17-81
17.1 GENERAL.....	17-81
17.1.1 Description.....	17-81
17.1.2 Related Arlington County Standards, Specification and Policies	17-81
17.1.3 Applicable Standards and Specifications	17-81
17.1.4 Quality Assurance.....	17-81
17.1.5 Submittals	17-81
17.2 DESIGN	17-81
17.2.1 Fire Protection	17-81
17.2.2 Fire Alarm System.....	17-83
17.2.3 Fire Department Access.....	17-84
17.2.4 Fire Lanes and Signage.....	17-85
17.2.5 Markings and Signs	17-85
17.2.6 Location	17-85
17.2.7 Hydrants and Fire Connections.....	17-85
17.3 PRODUCTS.....	17-86
17.3.1 FIRE ALARM SYSTEM.....	17-86
17.3.2 Fire Alarm Annunciator Panels	17-87
17.3.3 Fire Alarm Control Panel.....	17-87
APPENDIX A - LIST OF ABBREVIATIONS.....	A-88
APPENDIX B - APPLICABLE STANDARDS & SPECIFICATIONS.....	B-90
APPENDIX C - DAS TECHNICAL SPECIFICATIONS.....	C-92
APPENDIX D - COMMUNICATION ROOM STANDARDS.....	D-112
APPENDIX E - DEFINITIONS (DEFINED TERMS).....	E-118
APPENDIX F - PUBLICATION IMPROVEMENT REQUEST	F-124
APPENDIX G - BRAND NAME JUSTIFICATIONS (WARREN)	G-125
APPENDIX H - BRAND NAME JUSTIFICATIONS (TURNER).....	H-130
APPENDIX I - BRAND NAME JUSTIFICATIONS (BEVIS)	I-132
APPENDIX J - INDEX.....	J-134