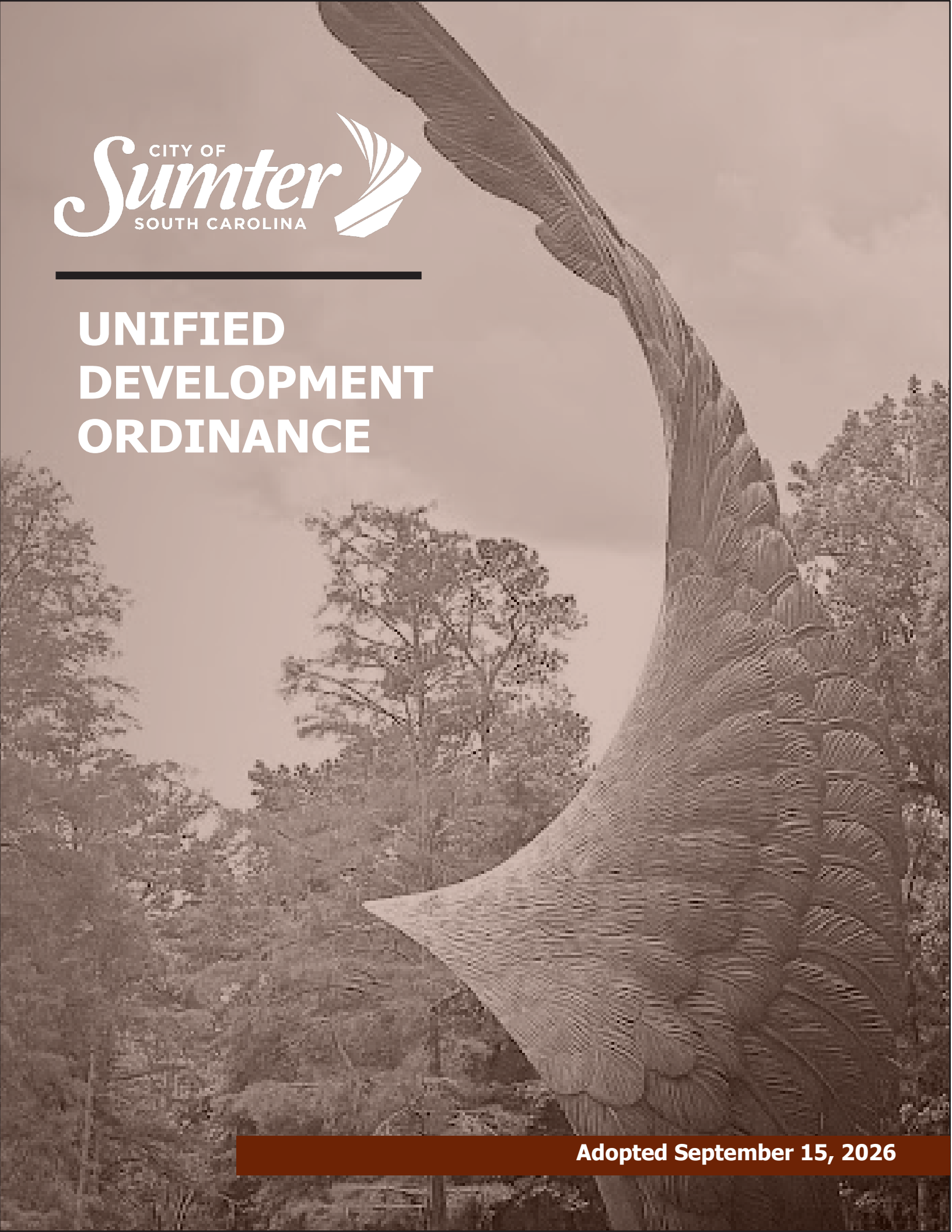


UNIFIED DEVELOPMENT ORDINANCE

Adopted September 15, 2026

MAYOR AND CITY COUNCIL

Mayor, David P. Merchant
Council Ward 1, Anthony Gibson
Council Ward 2, James B. Blassingame
Council Ward 3, Calvin K. Hastie, Sr.
Council Ward 4, Rebecca Lynn Kennedy
Council Ward 5, Colin C. Davis
Council Ward 6, Gifford M. Shaw

PLANNING COMMISSION

James Munford, Chairman
Keith Ivey, Vice Chairman
Kim Harvin
Michael Walker
James F. Price, II
Gary Brown
James Crawley
John T. Rivers, IV
Chris Sumpter

DESIGN REVIEW BOARD

Scott Horton, Chairman
Heidi Burkett, Vice Chairman
Julie M. Herlong
Randy Abbott
Lucy S. Wilson
Hyacinth Kinley
Frenche Brewer

BOARD OF ZONING APPEALS

William "Clay" Smith, Chairman
Jason Lee Reddick, Vice Chairman
Steven S. Schumpert
Frank Shuler
Todd Champion
Gene Weston
Tyler "Doc" Dunlap
William T. Bailey
Cassandra Floyd

CITY STAFF

Deron McCormick, City Manager
Howie Owens, Assistant City Manager
Mark Partin, Chief of Staff
Cecilia Newman, City Clerk
Helen Roodman, AICP/CFM, Planning Director
Jeff Derwort, AICP, Zoning Administrator/ Planning Manager
Kyle Kelly, AICP, Senior Planner
Michael Geddings, Public Services Director
Cathryn Poplin, Capital Improvement Manager
Bill Rozier, City Engineer
Charles Robbins, GIS Manager
Kellie Chapman, Executive Assistant

CONSULTANT

Kimley-Horn and Associates, Inc.

CITY OF Sumter SOUTH CAROLINA

INVEST. INVITE. SERVE.

© 2026 by the City of Sumter, South Carolina and Kimley Horn Consulting. All Photos, Images, and Text by Kimley Horn unless otherwise noted.

Reproduction Permitted with Credit in Print

TABLE OF CONTENTS

CHAPTER A – ADMINISTRATION

1.	**Introductory Provisions**		**1**
	1.1	Title	2
	1.2	Authority	2
	1.3	Jurisdiction	2
	1.4	Purpose and intent	2
	1.5	General Terms	3
	1.6	Consistency with All Adopted Plans	4
	1.7	Conformity with All Standards	4
	1.8	Annexations	4
	1.9	Conflicts and Severability	4
	1.10	Effective Date	4
2.	**Administrative Officials, Boards, and Commissions**		**6**
	2.1	Purpose and Applicability	6
	2.2	Administrative Officials and Agencies	7
	2.3	Boards and Commissions	11
	2.4	General Provisions for All Boards and Commissions	11
	2.5	Planning Commission (PC)	15
	2.6	Board of Zoning Appeals (BZA)	17
	2.7	Design Review Board (DRB)	20
3.	**UDO Review Process**		**22**
	3.1	UDO Review Processes	22
	3.2	Ordinance Amendments	31
	3.3	Development Review	36
	3.4	Variances, Special Exceptions, and Appeals	48
	3.5	Design Review (Certificates of Appropriateness)	52
	3.6	Use Review, Permits, & Interpretations	57
4.	**Enforcement**		**60**
	4.1	Compliance Required	60
	4.2	Enforcement	61
	4.3	Remedies and Penalties	64
5.	**Definitions**		**66**
	5.1	Intent	66
	5.2	Rules of Construction	66
	5.3	Definitions of Terms	66

CHAPTER B – ZONING

1. Purpose and Authority **91**

2. Zoning Districts **92**

3. Residential Districts **95**
3.1 Large Lot Residential (R-15) 96
3.2 Medium Lot Residential (R-9) 97
3.3 Small Lot Residential (R-6) 98
3.4 General Residential (GR) 99
3.5 Residential Multi-Family (RMF) 100
3.6 Supplementary Residential Development Standards 101
3.7 Supplementary Manufactured Home Development Standards 103

4. Commercial Districts **104**
4.1 Professional Office (PO) 105
4.2 Neighborhood Commercial (NC) 106
4.3 Limited Commercial (LC) 107
4.4 General Commercial (GC) 108

5. Industrial Districts **109**
5.1 Light Industrial – Warehouse (LI-W) 110
5.2 Heavy Industrial (HI) 111

6. Special Purpose Districts **112**
6.1 Agricultural Conservation (AC) 113
6.2 Conservation Preservation (CP) 114
6.3 Shaw Air Force Base (SAFB) 115

7. Mixed Use Districts **116**
7.1 Downtown Core (DTC) 117
7.2 Downtown Transition (DTT) 118
7.3 Institutional General (IG) 119
7.4 Planned Development (PD) 120

8. Permitted Uses **122**
8.1 Permitted Uses Table 122
8.2 Interpretation 122

9. Use Standards **130**
9.1 Agricultural uses 130
9.2 Residential Uses 133
9.3 Institutional and Public Uses 148
9.4 Commercial Retail Uses 153
9.5 Industrial and Manufacturing Uses 168
9.6 Personal and Professional Services Uses 182

9.7	Medical and Office Uses	185
9.8	Recreational/Open Space & Entertainment Uses	188
9.9	Utilities and Other Uses	192
9.10	Specific Conditions and Standards for Conditional Uses	198
9.11	Manufacturing Special Performance Standards	199
10.	**Reserved**	**203**
11.	**Overlay Districts**	**204**
11.1	Airfield Compatibility District (ACD)	205
11.2	Range Compatibility District (RCD)	214
11.3	Noise Attenuation District (NA)	216
11.4	Sumter County Airport Overlay District	217
11.5	Corridor Protection District	225
11.6	Residential Infill Overlay District	235
11.7	Hampton Park Design Review District	237
11.8	Downtown Design Review District	238
12.	**Dimensional Requirements**	**239**
12.1	General Applicability	239
12.2	Dimensional Standards	239
13.	**Accessory Uses and Structures**	**249**
13.1	Purpose	249
13.2	General Standards	249
13.3	Specific Standards	251
13.4	Accessory Dwelling Units (ADU)	260
14.	**Temporary Uses**	**262**
14.1	Purpose	262
14.2	Standards	263
14.3	Temporary Uses Table	269
15.	**Food Trucks & Mobile Food Vending**	**271**
15.1	Food Trucks	271
16.	**Nonconformities**	**276**
16.1	Purpose	276
16.2	Nonconforming Uses	278
16.3	Nonconforming Sites	279
16.4	Nonconforming Lots	282
16.5	Nonconforming Mobile & Manufactured Homes	283

CHAPTER C – DEVELOPMENT STANDARDS

1. Transportation, Access, and Site Circulation 286
- 1.1 Intent 286
- 1.2 Transportation Impact 286
- 1.3 Access, Cross Access, and Circulation 289

2. Parking 293
- 2.1 Intent 293
- 2.2 General Provisions 293
- 2.3 Minimum Parking Requirements 297
- 2.4 Design Requirements 303
- 2.5 Alternative Off-Street Parking Standards 305
- 2.6 Drive-Through Stacking Requirements 310
- 2.7 Off-Street Loading Facilities 312

3. Signs 315
- 3.1 Intent 315
- 3.2 General Provisions 315
- 3.3 Permanent Sign Locations 316
- 3.4 Permanent Sign General Standards 318
- 3.5 Prohibited Signs 321
- 3.6 Calculation of Sign Area 322
- 3.7 Special Purpose Signs 325
- 3.8 Permitted Sign Types (Permanent) 330
- 3.9 Special Circumstances 339
- 3.10 Permitted Area and Number of Signs 340
- 3.11 Permitted Sign Types by Zoning District 343
- 3.12 Temporary Signs 344

4. Lighting 352
- 4.1 Intent 352
- 4.2 Applicability 352
- 4.3 Maximum Illumination 353
- 4.4 Lighting Plan 353
- 4.5 General Design Standards 354
- 4.6 Exterior Building Lighting Standards 356
- 4.7 Parking Area Lighting Standards 357
- 4.8 Pedestrian Lighting Standards 358
- 4.9 Sign Lighting Standards 358
- 4.10 Athletic Field Lighting Standards 359
- 4.11 Gas Station Lighting Standards 359
- 4.12 Residential Lighting Standards 359
- 4.13 Prohibited Lighting 360

5. Landscape, Buffer, and Tree Protection 361
5.1 Intent 361
5.2 Applicability 362
5.3 Landscape Area General Standards 363
5.4 Landscaping Determination and Calculation 365
5.5 Required Landscaping Areas 366
5.6 Landscape Yard Types 368
5.7 Alternative Landscaping Plan 373
5.8 Landscape Design Standards 373
5.9 Reserved 374
5.10 Landscape Requirements for Parking and Vehicle Use Areas 374
5.11 Stormwater Facility Landscaping Requirements 378
5.12 Residential Subdivision Development Landscaping 378
5.13 Plant Materials 380
5.14 Irrigation Requirements 381
5.15 Replacement of Dead, Dying, and Damaged Vegetation 382
5.16 Screening 383
5.17 Recommended Plants 385
5.18 Tree Preservation, Credit, and Replacement 394
5.19 Tree Bank Program 401

6. Fencing, Berms, and Walls 403
6.1 Purpose 403
6.2 General Standards 403
6.3 Fence Standards 404
6.4 Berm Standards 406
6.5 Wall Standards 407

7. Parks and Open Space 408
7.1 Purpose 408
7.2 General Provisions 408
7.3 Open Space Forms 410
7.4 Ownership of Open Space 420
7.5 Maintenance of Open Space 420

8. Wetlands and Floodplains 421
8.1 Purpose 421
8.2 Applicability 421
8.3 Wetlands Delineation 422
8.4 Wetlands Notification and Wetlands Impact Certification 423
8.5 Prohibited and Exempted Activities in Wetlands Areas 423
8.6 Standards and Criteria for Approval/Disapproval of Wetlands Impact Application 424
8.7 Wetlands Buffers and Setbacks 426
8.8 Monitoring, Reporting, and Enforcement 427

CHAPTER D – ENGINEERING

1.	**Introductory Provisions**		**429**
	1.1	Introduction	429
	1.2	Roles and Responsibilities	430
2.	**Development Fees**		**434**
	2.1	Development Fees	434
3.	**Submittals and Approvals**		**438**
	3.1	Submittal and Approvals	438
4.	**Easements**		**446**
	4.1	Easements	446
5.	**Roadways**		**448**
	5.1	Roadway Design Requirements	448
	5.2	Pavement Submittal Requirements	455
	5.3	Roadway Construction and Testing	456
6.	**Drainage**		**462**
	6.1	Drainage Pipe and Basin Standard	462
7.	**Water**		**467**
	7.1	Water Distribution System Design Standards	467
	7.2	Water Distribution System Materials for Construction	478
	7.3	Water Distribution System Construction Procedures	489
8.	**Wastewater**		**501**
	8.1	Gravity Sewer Design Standards	501
	8.2	Gravity Sewer Materials for Construction	508
	8.3	Gravity Sewer Construction Procedures	514
	8.4	Force Main Design Standards	534
	8.5	Force Main Materials for Construction	536
	8.6	Force Main Construction Procedures	545
	8.7	Pump Station Design Standards	561
	8.8	Pump Station Materials for Construction	566
	8.9	Pump Station Construction Procedures	580
9.	**Inspections and Closeout**		**587**
	9.1	Inspections and Closeout	587

LIST OF FIGURES

CHAPTER A – ADMINISTRATION

Table A.1.1.	*Corresponding City & County Zoning Districts & Overlay Districts*	*5*
Table A.3.1.	*Public Notice Requirements*	*29*
Table A.3.2.	*Summary of UDO Review Procedures: Ordinance Amendments*	*35*
Table A.3.3.	*Summary of UDO Review Procedures: Development Review*	*46*
Table A.3.4.	*Flexibility and Relief Procedures*	*51*
Table A.3.5.	*Design Review Procedures*	*56*
Table A.3.6.	*Use Review, Permits, and Interpretational Procedures*	*59*

CHAPTER B – ZONING

Table B.2.1.	*Principal Zoning Districts*	*92*
Table B.3.1.	*R-15 District Development Standards*	*96*
Table B.3.2.	*R-9 District Development Standards*	*97*
Table B.3.3.	*R-6 District Development Standards*	*98*
Table B.3.4.	*GR District Development Standards*	*99*
Table B.3.5.	*RMF District Development Standards*	*100*
Table B.3.6.	*Supplementary Residential Development Standards*	*101*
Table B.3.7.	*Supplementary Manufactured Home Development Standards*	*103*
Table B.4.1.	*PO District Development Standards*	*105*
Table B.4.2.	*NC District Development Standards*	*106*
Table B.4.3.	*LC District Development Standards*	*107*
Table B.4.4.	*GC District Development Standards*	*108*
Table B.5.1.	*LI-W District Development Standards*	*110*
Table B.5.2.	*HI District Development Standards*	*111*
Table B.6.1.	*AC District Development Standards*	*113*
Table B.6.2.	*CP District Development Standards*	*114*
Table B.6.3.	*SAFB District Development Standards*	*115*
Table B.7.1.	*DTC District Development Standards*	*117*
Table B.7.2.	*DTT District Development Standards*	*118*
Table B.7.3.	*IG District Development Standards*	*119*
Table B.8.1.	*Permitted Uses*	*123*
Table B.9.1.	*Daytime/Nighttime Maximum A-Weighted Sound Levels*	*201*
Table B.11.1.	*Overlay Districts*	*204*
Table B.11.2.	*Concentrations of Persons per Acre Standard*	*207*
Table B.11.3.	*Airfield Compatibility District (ACD) Use Regulations*	*210*
Figure B.11.1.	*Design Elements Example Graphic*	*227*
Figure B.11.2.	*Blank Wall Area*	*229*
Figure B.11.3.	*Outparcel Buildings and Parking*	*232*
Figure B.11.4.	*Outparcels and Multi-Building Development*	*232*
Figure B.12.1.	*Density*	*240*

Figure B.12.2.	*Building Height Illustrations*	*241*
Figure B.12.3.	*Setback: Interior Lot*	*242*
Figure B.12.4.	*Setback: Corner Lot*	*243*
Figure B.12.5.	*Setback: Through Lot*	*244*
Figure B.12.6.	*Lot Measurement*	*245*
Figure B.12.7.	*Frontage*	*247*
Figure B.12.8.	*Encroachments*	*248*
Table B.13.1.	*Residential Accessory Structure Setbacks*	*252*
Table B.13.2.	*Maximum Square Footage of Residential Accessory Structures based on Gross Acreage*	*253*
Table B.13.3.	*Accessory Dwelling Unit (ADU) Development Standards*	*261*
Table B.14.1.	*Temporary Use Duration Limits*	*268*
Table B.14.2.	*Temporary Uses*	*270*

CHAPTER C – DEVELOPMENT STANDARDS

Table C.1.1.	*Transportation Impact Threshold*	*287*
Table C.1.2.	*Maximum Permitted Driveways*	*290*
Table C.1.3.	*Minimum Driveway Spacing*	*290*
Table C.1.4.	*Turning Radii*	*291*
Table C.2.1.	*Minimum Parking Requirements*	*297*
Table C.2.2.	*Dimensional Standards*	*304*
Figure C.2.1.	*Parking Area Dimensional Standards*	*305*
Figure C.2.2.	*Off Site Parking*	*305*
Table C.2.3.	*Accessible Parking Requirements*	*308*
Table C.2.4.	*Required Bicycle Parking*	*309*
Table C.2.5.	*Required Drive-Through Stacking Distances*	*310*
Figure C.2.3.	*Drive-Through Diagram*	*311*
Table C.2.6.	*Required Loading/Unloading Spaces*	*314*
Figure C.3.1.	*Determination of Sign Area*	*323*
Figure C.3.2.	*Diagram of Multiple Faces on a Sign*	*323*
Figure C.3.3.	*Sign Area Calculation for Multiple Signs on a Single Pole*	*324*
Figure C.3.4.	*Sign Height Diagram*	*324*
Figure C.3.5.	*Awning Signs*	*331*
Figure C.3.6.	*Monument Signs*	*332*
Figure C.3.7.	*Neighborhood or Subdivision Signs*	*333*
Figure C.3.8.	*Projecting Signs*	*334*
Figure C.3.9.	*Wall Signs*	*335*
Figure C.3.10.	*Directory Signs*	*336*
Figure C.3.11.	*Window Signs*	*337*
Figure C.3.12.	*Pole Signs*	*338*
Figure C.3.13.	*Illustrative Example of Building Signage Types*	*340*
Table C.3.1.	*Permanent Sign Area and Number by Zoning District*	*341*
Table C.3.2.	*Permitted Sign Types by Zoning District for Non-Residential Uses*	*343*
Table C.3.3.	*Temporary Signs*	*345*

Figure C.3.14.	*Sandwich Board Sign*	*345*
Figure C.3.15.	*Commercial Project Under Construction Sign*	*345*
Figure C.3.16.	*Residential Contractor Sign*	*346*
Figure C.3.17.	*Residential Subdivision Under Construction Sign*	*346*
Figure C.3.18.	*Residential Real Estate For Sale/Lease Sign*	*347*
Figure C.3.19.	*Commercial Real Estate for Sale/Lease Sign*	*347*
Table C.4.1.	*Maximum Illumination of Property Perimeter*	*353*
Figure C.4.1.	*Permitted Fixture Type*	*355*
Figure C.4.2.	*Light Fixture Height*	*356*
Figure C.4.3.	*Parking Area Lighting Examples*	*358*
Figure C.4.4.	*Bollard/Path Lighting Examples*	*358*
Table C.5.1.	*Landscape Yard Determination*	*365*
Figure C.5.1.	*Street Landscaping Examples*	*368*
Figure C.5.2.	*Type A Landscape Buffer*	*369*
Figure C.5.3.	*Type B Landscape Buffer*	*370*
Figure C.5.4.	*Type C Landscape Buffer*	*371*
Figure C.5.5	*Type D Landscape Buffer*	*372*
Figure C.5.6.	*Terminal Island Landscaping*	*375*
Figure C.5.7.	*Interior Island Landscaping*	*376*
Table C.5.2.	*Minimum Development Standards for Parking Areas*	*376*
Figure C.5.8.	*Parking Landscaping Illustrative Example*	*377*
Table C.5.3.	*Landscape Planting Minimum Standards*	*380*
Figure C.5.9.	*Service Area Screening Illustrative Example*	*384*
Table C.5.4.	*Recommended Canopy Trees*	*386*
Table C.5.5.	*Recommended Understory Trees*	*388*
Table C.5.6.	*Recommended Evergreen Trees*	*390*
Table C.5.7.	*Recommended Tall Shrubs*	*391*
Table C.5.8.	*Poor Performers*	*392*
Table C.5.9.	*Native Plants*	*393*
Table C.5.10.	*Grand Trees*	*395*
Table C.5.11.	*Credit for Preservation of Trees*	*397*
Table C.6.1.	*Fence Standards*	*404*
Figure C.6.1.	*Berms and Walls Diagram*	*407*
Table C.7.1.	*Open Space Sizes*	*409*
Figure C.7.1.	*Pocket Park*	*410*
Figure C.7.2.	*Amenity Center*	*411*
Figure C.7.3.	*Green*	*412*
Figure C.7.4.	*Plaza/Square*	*413*
Figure C.7.5.	*Linear Park*	*414*
Figure C.7.6.	*Neighborhood Park*	*415*
Table C.7.2.	*Minimum Open Space Requirement*	*416*
Table C.7.3.	*Active and Passive Features*	*419*

CHAPTER D – ENGINEERING

Table D.5.1.	*Local Street and Minor Collector Dimensions*	*449*
Table D.5.2.	*Major Collector Dimensions*	*450*
Figure D.5.1.	*Rolled Curb – Ogee Curb Detail*	*451*
Figure D.5.2.	*Barrier Curb Detail*	*451*
Table D.5.3.	*Street Classification Requirements*	*452*
Table D.7.1.	*Maximum Instantaneous Flows for Residential Areas*	*470*
Table D.7.2.	*Maximum Instantaneous Flows for Commercial Areas*	*471*
Table D.7.3.	*Maximum Instantaneous Flows for Institutions*	*472*
Table D.7.4.	*Buried Pipe Class*	*479*
Table D.8.1.	*Sewer Size and Minimum Slope*	*503*
Tabe D.8.2.	*Nominal and Manual Measurement*	*506*
Table D.8.3.	*Standard Manholes Schedule of Governing Dimensions*	*510*
Table D.8.4.	*Manhole Riser Minimum Wall Thickness*	*510*
Table D.8.5.	*Minimum Base Slab Thickness*	*510*
Table D.8.6.	*Pressure Test*	*523*
Table D.8.7.	*Specification Time Required for a 1.0 psig Pressure Drop for Size and Length of Pile Indicated for Q=0.0015*	*524*
Table D.8.8.	*Specification Time Required for a 0.5 psig Pressure Drop for Size and Length of Pile Indicated for Q=0.0015*	*525*
Table D.8.9.	*Minimum Vacuum Test Times for Various Manhole Diameters*	*527*
Table D.8.10.	*Mechanical Restraint for HDPE*	*539*
Table D.8.11.	*Buried Pipe Pressure Class*	*539*
Table D.8.12.	*Minimum Diameter and Wall Thickness of Steel Piping*	*554*
Figure D.8.13.	*Pump Station Control Panel*	*579*
Table D.9.1.	*Roadway Course Testing Requirements*	*587*

1.

INTRODUCTORY PROVISIONS

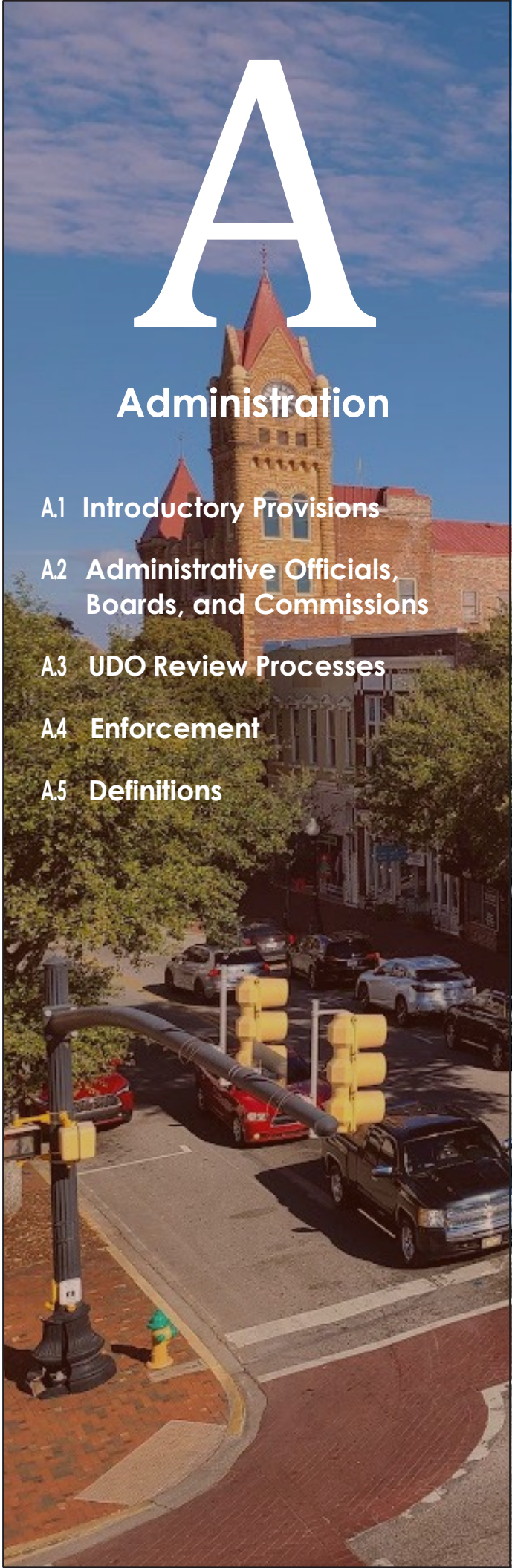
The processes described herein are detailed in the User Manual, which serves as a reference for both applicants and staff during submittal, review and approval procedures. This Chapter intends to define all development review processes of this Unified Development Ordinance (UDO) and is comprised of the following components:

A. **Introductory Provisions.** *Chapter A.1* describes the authority, jurisdiction, purposes and intent, and other general matters that pertain to the UDO.

B. **Administrative Officials, Boards and Commissions.** *Chapter A.2* describes all review and decision-making bodies with responsibilities in the UDO.

C. **UDO Review Procedures.** *Chapter A.3* describes common development review procedures that apply to multiple review processes and each individual review process in the UDO. This includes requirements for meetings, applications, hearings, and process review procedures.

D. **Enforcement.** *Chapter A.4* describes regulatory provisions applicable to review processes.



E. **Definitions.** *Chapter A.5* describes specific definitions applicable throughout the UDO.

1.1 TITLE

This document is to be known as the "*City of Sumter Unified Development Ordinance (UDO)*." It should be read in conjunction with the *Zoning Map Book* for the City of Sumter.

1.2 AUTHORITY

The development regulations contained in the UDO have been adopted pursuant to the authority conferred by the *South Carolina Local Government Comprehensive Planning Enabling Act of 1994, S.C. Code 1976, § 6-29-310 et seq.*

The enumeration of these parts of the State Code is not intended to exclude any other part of the State Code which grants or confirms authority to municipalities to promulgate ordinances, rules, or regulations similar or identical to those set forth in this Ordinance.

1.3 JURISDICTION

Pursuant to the general health, safety and welfare of the community, this Ordinance applies as relevant to all public and private development within the corporate limits of the City of Sumter in its current form and in all future extensions and configurations as shown on the official zoning map and its periodic updates.

1.4 PURPOSE AND INTENT

A. This document's general purpose is to guide development within the municipal limits:
   1. In accordance with existing and future needs;
   2. In accordance with the Comprehensive Plan;
   3. For the purposes of promoting the health, safety, and general welfare of the City;
   4. Providing safe and convenient orientation to streets and other public spaces for accessibility;
   5. Securing safety from fire;
   6. Providing adequate light and air to dwellings;
   7. Facilitating the adequate provision of transportation, water, sewerage, schools, parks, public improvements and other infrastructure; and

8. Protecting scenic and critical environmental areas.

B. Specifically, the regulations contained in the UDO and other relevant adopted plans and policies are designed to implement the following planning principles:
   1. Grow by balancing economic growth with the preservation of our natural resources and quality of life;
   2. Preserve open space in connected networks where possible;
   3. Preserve and revitalize historic buildings and spaces;
   4. Balance individual and community interests;
   5. Enhance quality of life through quality design; and
   6. Protect Shaw AFB from incompatible development.

C. Accordingly, the City Council does hereby ordain and enact into law this Unified Development Ordinance.

1.5 GENERAL TERMS

A. For the purpose of this UDO, certain terms or words used in this UDO shall be interpreted as follows:
   1. The word ‘person’ includes a firm, association, organization, partnership, trust, company, or corporation, as well as an individual.
   2. The words ‘shall” and ‘will’ are mandatory; the word ‘may’ is permissive.
   3. The words ‘used or occupied’ include the words "intended, designed or arranged to be used or occupied."
   4. The word ‘lot’ includes the words ‘plot’, ‘parcel’ and ‘tract’.
   5. The word "structure" means anything constructed or erected, exceeding 6 inches in height, the use of which requires a permanent location on land, or an addition to something having a permanent attachment to land.
   6. The word "land" includes the words "water," "marsh" and "swamp."

1.6 CONSISTENCY WITH ALL ADOPTED PLANS

In accordance with *S.C. Code 1976, § 6-29-310 et seq.,* the UDO is intended to implement the various development-related plans and policies adopted by the City Council.

1.7 CONFORMITY WITH ALL STANDARDS

No land, structure or parts thereof shall be used, occupied, constructed, erected, altered or moved, unless in conformity with all of the regulations herein specified in the UDO.

1.8 ANNEXATIONS

All territory which may hereafter be granted or annexed to the City of Sumter, shall be classified automatically into the zoning district (including zoning overlay district(s)) which most closely corresponds to the territory's zoning designation in the unincorporated portion of Sumter County, as shown in *Table A.1.1*. The applicant or owner of said property may request and/or City Council may designate a different zoning district determined to be compatible at the time of annexation. Such changes in zoning which emerge with annexation of property into the City that do not correspond to *Table A.1.1.* must follow the procedural requirements in *Chapter A.3.2*.

1.9 CONFLICTS AND SEVERABILITY

A. **Resolution Of Conflicting Regulations.** Wherever there is, or appears to be, a conflict between any provision of this Ordinance with the provisions of any other lawful ordinance regulation or resolution of the City, the requirements of this ordinance shall take precedence.

B. **Severability.** In the event any portion of the UDO is declared unconstitutional or invalid, such decision does not affect the remainder of the ordinance.

1.10 EFFECTIVE DATE

The date of adoption of this Unified Development Ordinance is recorded as September 15, 2026.

Table A.1.1 Corresponding City & County Zoning Districts & Overlay Districts	
County Zoning Districts	*City Zoning Districts*
Residential-15 (R-15)	Residential-15 (R-15)
Residential-9 (R-9)	Residential-9 (R-9)
Residential-6 (R-6)	Residential-6 (R-6)
General Residential (GR)	General Residential (GR)
Residential Multi-Family (RMF)	Residential Multi-Family (RMF)
Professional Office (PO)	Professional Office (PO)
Neighborhood Commercial (NC)	Neighborhood Commercial (NC)
Limited Commercial (LC)	Limited Commercial (LC)
General Commercial (GC)	General Commercial (GC)
Light Industrial-Warehouse (LI-W)	Light Industrial-Warehouse (LI-W)
Heavy Industrial (HI)	Heavy Industrial (HI)
Agricultural Conservation (AC)	Agricultural Conservation (AC)
Conservation Preservation (CP)	Conservation Preservation (CP)
County Overlay Districts	*City Overlay Districts*
Highway Corridor Protection District (HCPD)	Corridor Protection District (CPD)
Airfield Compatibility District (ACD) (ACD type as applicable)	Airfield Compatibility District (ACD) (ACD type as applicable)
Range Compatibility District (RCD) (RCD type as applicable)	Range Compatibility District (RCD) (RCD type as applicable)
Airport Overlay District (AP)	Airport Overlay District (AP)

2. ADMINISTRATIVE OFFICIALS, BOARDS, AND COMMISSIONS

2.1 PURPOSE AND APPLICABILITY

A. **Purpose.** In order to establish an orderly process to develop land within the jurisdiction of the City of Sumter, it is the purpose of this *Chapter* to provide a clear and understandable development process that is fair and equitable to all interests, including the applicants, affected neighbors, City staff, related agencies, and the City Council.

B. **Conformity with Code.** The applicable approved authority shall not issue a permit or license for any use, building, or purpose that conflicts with any provision of this ordinance.

2.2 ADMINISTRATIVE OFFICIALS AND AGENCIES

A. **City Staff.**

1. **Designation**. The various provisions of this ordinance shall be administered under the general direction of the City Council and City Manager and under the specific direction of the City's Department Heads. For the purposes of this ordinance, the Heads of each department and their subordinate staffs as well as the Technical Review Committee assigned with the task of plan and subdivision review are collectively referred to as "City Staff".
2. **Duties and Responsibilities**. City Staff shall serve as the intake point and first stop for all development applications and will advise applicants of the appropriate personnel to contact. Responsibilities include:
   (1) **Clerical.** To maintain permanent and current records of this Ordinance, including all maps, amendments, conditional uses, variances, special exceptions, appeals and records of hearing thereof, all of which shall be open to public inspection during regular business hours; and prepare and maintain the official copy of the zoning ordinance and zoning map and all other publications referenced in the UDO, keeping them current with all amendments and changes and have copies available for sale or free distribution to the public; and to keep a record of all such applications including plats and plans, which record shall be open to public inspection during regular business hours.
   (2) **General Administration.** To administer and enforce the provisions of this Ordinance including the issuance of various permits; to make written interpretations of the various provisions of this Ordinance as requested; and to conduct inspections of structures, land and the uses thereof to determine compliance with the provisions of this Ordinance.
   (3) **Permit Review and Issuance.** The review and processing of building permits, zoning permits and certificates of occupancy that meet the provisions of this Ordinance and of the City's building code, in collaboration with the Building Official; and the review and processing of conditional uses, temporary uses, manufactured home certifications, site plans, and subdivision plats.

(4) **Board and Commission Support.** To provide clerical, technical and consultative assistance to the various Boards and Commissions in their duties related to this Ordinance;

3. **Appeals.** Appeals from a City Staff decision shall be heard in accordance with applicable state law:
   (1) **UDO Interpretation/Determination.** Appeals by any person aggrieved by an administrative UDO Interpretation/Determination where it is alleged there is an error in an order, requirement, decision, or determination made by City Staff in the administration or enforcement of the UDO shall be heard by the BZA in accordance with the procedures outlined in *Chapter A.2.6.*
      a. An appeal shall be made within 30 days from the date of the decision rendered by City Staff by filing with the Planning Department a written notice of appeal specifying the grounds thereof.
      b. Appeals shall be submitted on application forms obtained from the Planning Department.
      c. All papers constituting the record upon which the appeal action was taken shall be transmitted to the BZA.
      d. Any communication purporting to be an application for an appeal shall be regarded as mere notice to seek relief until it is made in the form required.
      e. An appeal stays all legal proceedings in furtherance of the action appealed from, unless the Zoning Administrator certifies to the Board, after a notice of appeal has been filed, that by reason of facts stated in the certification a stay would, in the Zoning Administrator's opinion, cause imminent peril to life and property. In that case, proceedings may not be stayed otherwise than by a restraining order which may be granted by the BZA or by Circuit Court pursuant *to S.C. Code 1976 § 6-29-800.*
   (2) **Site Plans/Subdivision Plats.** If City staff is authorized to approve or disapprove a site plan or subdivision plat, such decisions shall be appealed to the Planning Commission pursuant to *S.C. Code 1976, § 6-29-1150.*

a. An appeal shall be taken within 30 days from the date of the decision rendered by City Staff by filing with the Planning Department a written notice of appeal specifying the grounds thereof.
b. Appeals shall be submitted on application forms obtained from the Planning Department.
c. An appeal shall be heard by the Planning Commission within 60 days of receipt of the appeal.
d. All papers constituting the record upon which the appeal action was taken shall be transmitted to the Planning Commission.
e. Any communication purporting to be an appeal shall be regarded as mere notice to seek relief until it is made in the form required.

(3) **Design Review (Certificate of Appropriateness).** If City staff is authorized to approve or disapprove a certificate of appropriateness, such decisions shall be appealed to the Design Review Board.

a. An appeal shall be taken within 30 days from the date of the decision rendered by City Staff by filing with the Planning Department a written notice of appeal specifying the grounds thereof.

B. **Technical Review Committee.**

1. **Designation and Responsibility.** The Technical Review Committee, who may be referred to in this UDO as the "TRC", is a technical review committee for projects that have been submitted to the City of Sumter.
2. **Technical Review.** The TRC reviews and provides recommendations on applicable development applications. *See Table A.3.2*.
3. **Meetings.** For the applicable projects, the TRC meeting schedule shall be consistent with the schedule of Planning Commission meetings. No formal approval of projects shall be made at TRC meetings.
4. **Powers and Duties.** The TRC reviews and provides recommendations on applicable development applications. See *Table A.3.2.*

C. **City Council.**

1. **Purpose and Intent.** The City Council is the elected governing body of the City of Sumter.
2. **Responsibilities.** City Council shall review and decide upon applications for:
   (1) Zoning Map Amendment
   (2) Zoning Map Amendment to Planned Development
   (3) Planned Development District Amendment (major)
   (4) UDO Text Amendment
3. **Powers and Duties.** The powers and duties of the City Council are provided within *Table A.3.2.*
   (1) **Zoning Map Amendment**: The City Council shall hear and approve, or deny proposed Official Zoning Map Amendments (rezoning) to this Ordinance after receiving comments and recommendations from the Planning Commission.
   (2) **Unified Development Ordinance Text Amendment**: The City Council shall hear and approve, approve with conditions, or deny proposed Text Amendments to this Ordinance after receiving comments and recommendations from the Planning Commission.
   (3) **Comprehensive Plan Amendment**: To initiate, adopt, and amend a Comprehensive Plan after receiving comments and recommendations from the Planning Commission.
   (4) **Historic Designation**: To designate historic landmarks and amendments to the existing historic district(s) after receiving comments and recommendations from the Design Review Board.
4. **Appointments.** The City Council shall appoint members to the Planning Commission, Board of Zoning Appeals, and Design Review Board.
5. **Other Duties.** To take such other action not otherwise designated, as the City Council, consistent with state or federal law, may deem desirable and necessary to implement the provisions of this Ordinance and the Comprehensive Plan.

2.3 BOARDS AND COMMISSIONS

The following appointed bodies have powers and duties in administering review processes in this UDO:

A. Planning Commission (PC) – *Chapter* A.2.5
B. Board of Zoning Appeals (BZA) – *Chapter* A.2.6
C. Design Review Board (DRB) – *Chapter* A.2.7

2.4 GENERAL PROVISIONS FOR ALL BOARDS AND COMMISSIONS

Unless otherwise noted in this Ordinance or any other adopted law or policy, the following shall apply to all Boards and Commissions delineated in *Chapters A.2.5, A.2.6, and A.2.7* and their members:

A. **Appointment**. All Board/Commission members shall be appointed by City Council. Members shall serve until their successors are appointed and qualified and shall meet all requirements for appointment as outlined in the City's ordinances and per applicable state law. No member of an appointed Board/Commission shall be the holder of an elected public office of the City. All appointed members of a Board/Commission shall have demonstrated independent judgment and shall be able to prepare for and attend board meetings and be otherwise qualified consistent with City Code.

B. **Terms**. All terms shall be for 4 years and shall be staggered, unless otherwise noted. All terms shall expire on December 31st of the applicable year.

C. **Vacancies**. A vacancy in a term of office shall occur whenever City Council finds that a member has resigned; not maintained required qualifications; has not attended at least 75% of properly called meetings held during any consecutive 12 month period; or has been found guilty of malfeasance or misconduct in office and in accordance with *S.C. Code of Laws of 1976*, as annotated. Any vacancy in the membership shall be filled for the unexpired term in the same manner as the initial appointment.

D. **Removal**. City Council may remove any member of a Board/Commission for cause so long as that member was appointed solely by City Council.

E. **Compensation**. Members shall serve without pay. Members may be reimbursed for actual expenses incurred in the performance of their duties from available funds approved in advance by City Staff.

F. **Officers**. Each Board/Commission shall elect a Chairperson and a Vice-Chairperson from its members who shall serve for 1 year or until reelected, or until a successor is elected. If both the Chair and Vice-Chair are absent, the Board shall vote to determine who shall serve as acting Chair for the meeting.

G. **Quorum**. A simple majority of the members of the Board/Commission must be present to constitute a quorum.

H. **Meetings**. A regular meeting schedule shall be set each year. Additional meetings shall be held at the call of the Chairperson and at such other times as the Board/Commission may determine. All meetings of the Board/Commission shall be open to the public.

I. **Notice of Meetings**. All Boards/Commissions must give written public notice of their regular meetings at the beginning of each calendar year. The notice must include the dates, times, and places of such meetings. An agenda for regularly scheduled, rescheduled, or special meetings must be posted on a bulletin board at the Planning Department Office or the Board/Commission meeting place and on the City's website at least 24 hours prior to such meetings. Such notice must include the agenda, date, time, and place of the meeting, and must be posted as early as is practicable but not later than 24 hours before the meeting. This requirement does not apply to emergency meetings. Once an agenda for a regular, called, special, or rescheduled meeting is posted pursuant to this section, no items may be added to the agenda without an additional 24 hours' notice to the public except in the following situations:

1. An item upon which action can be taken may be added to the agenda, after the start of the meeting when 2/3 of the members present vote to add said item upon a finding that an emergency or exigent circumstance exists if the item is not added to the agenda.

J. **Rules of Procedure**. Each Board/Commission shall adopt and adhere to rules of procedure for the conduct of business consistent with this Ordinance and State Code.

K. **Voting**. Unless otherwise noted, decisions or actions by a Board/Commission shall be by a majority vote of qualified members present and voting. Proxy votes or votes by email will not be permitted. Board/Commission members that have a conflict of interest or were not present to hear the entirety of a required public hearing shall not participate in discussions or vote on that specific matter.

L. **Minutes**. Each Board/Commission shall keep minutes of its proceedings, showing the vote of each member upon each question, or, if absent or failing to vote, indicating that fact and records of its examinations and other official actions.

M. **Conflicts of Interest**. A member must not participate in or vote on any matter if doing so compromises the impartiality required by due process. This includes undisclosed *ex parte* communications, close personal, familial, or business ties to an affected party, or a financial interest in the outcome. "Close familial relationship" includes spouses, parents, children, siblings, grandparents, grandchildren, and step, half, or in-law relations.

N. **Actions Subsequent to Board/Commission Approval**. Once approval by a Board/Commission or City Council is granted, the standard building permit and business license process applies. If conditions are attached to the approval, these conditions must be met prior to obtaining a building permit or business license unless otherwise stated. If construction has commenced, approval shall run with the approved permit's allowable time limits per applicable City ordinances. Should the Board/Commission approve an application with conditions that can then be accepted by staff upon further review, such action will take place before any

building permits are issued. The Board/Commission may allow the applicant to submit elements individually (i.e., architecture, site lighting).

O. **Staff**. City Staff or their designee shall serve as staff to each Board/Commission.

2.5 PLANNING COMMISSION (PC)

A. **Authority**. Pursuant to *S.C. Code 1976, §6-29-320, et seq.,* as amended, there is hereby established a joint City-County Planning Commission, which shall perform all planning functions for areas within its jurisdiction.

B. **Membership.** The Commission shall consist of 9 total members, with 3 members appointed by City Council, 3 members appointed by County Council, and 3 members appointed jointly. City Council shall consider the following factors when making appointments to the Planning Commission:
   1. Professional experience,
   2. Knowledge of the community, and
   3. Concern for the future welfare of the total community and its citizens.

C. **Duties and Responsibilities.** City Council delegates to the Planning Commission the following duties:
   1. Promote comprehensive planning within the City's jurisdiction.
   2. Review and make recommendations to City Council concerning all proposed zoning and land development regulation amendments for conformity with the goals, procedures and recommendations contained within the adopted Comprehensive Plan.
   3. Review and make recommendations to City Council in regard to amendments to the Official Zoning Map.
   4. Review and make recommendations concerning major transportation projects affecting land within the City's jurisdiction.
   5. Review and make recommendations to City Council on public projects.
   6. Review and take action on street names.
   7. Review and make recommendations on other matters delegated by City Council, or on such other matters as may appropriately come before the Commission.
   8. Review and approve Site and Subdivision Development Plans.

D. **Public Notice.** A public notice of all meetings shall be provided pursuant to *Chapter A.2.4.I*. Public hearings heard by the PC shall be noticed pursuant to *Chapter A.3.1.E*.

E. **Appeals.** Appeals from decisions of the Planning Commission are governed under state law, including *S.C. Code 1976, §6-29-1150 and §6-29-1155*.

2.6 BOARD OF ZONING APPEALS (BZA)

A. **Authority.** Pursuant to *S.C. Code 1976, § 6-29-780, et seq.*, as amended, there is hereby established a joint City-County Board of Zoning Appeals which shall review appeals and requests for variances and special exceptions in the areas within its jurisdiction.

B. **Membership.** The Board of Zoning Appeals is a joint city-county administrative body and shall consist of 9 total members with 4 appointed by City Council and 5 appointed by Sumter County Council. City-appointed members of the BZA shall be residents of the City.

C. **Duties and Responsibilities.** The BZA shall have all the powers and duties authorized by the *South Carolina Local Government Comprehensive Planning Enabling Act of 1994* (*S.C. Code § 6-29-780 through § 6-29-860),* and in the manner provided for in this UDO. Generally, such power and duties shall include, but not be restricted to, the following:

1. **Administrative Appeals:** To hear and decide appeals where it is alleged there is an error in an order, requirement, decision, or determination made by City Staff in the administration/enforcement of *Chapters A, B,* and *C* of the UDO.
2. **Special Exceptions:** To grant those Uses Permitted by Special Exception as enumerated in *Chapter B.8.* The BZA shall consider the following criteria:
   (1) Special exception uses are subject to the terms and conditions for the use set forth in the UDO.
   (2) Special Exception uses shall be evaluated by the BZA on the basis of the following criteria:
      a. That the Special Exception use complies with all applicable provisions contained elsewhere in this Ordinance, including landscaping and bufferyards, off-street parking, and dimensional requirements.
      b. The special exception use will not discourage or negate the use of surrounding property for permitted use(s).

c. In granting a special exception use, the BZA may impose such additional stipulations, conditions, or safeguards as, in its judgment, will enhance the siting of the special exception.

(3) **Variances:** To grant variances from the requirements in *Chapters B* and *C* of this UDO when strict application of the provisions will result in unnecessary hardship.

a. A variance may be granted in an individual case of unnecessary hardship if the BZA makes the following findings:

(a) There are extraordinary and exceptional conditions pertaining to the particular piece of property.

(b) These conditions do not generally apply to other property in the vicinity.

(c) Because of the conditions, the application of the UDO to the particular piece of property will effectively prohibit or unreasonably restrict the utilization of the property.

(d) The authorization of a variance will not be of substantial detriment to adjacent property or to the public good, and the granting of the variance will not harm the character of the district.

b. The BZA may not grant a variance where the effect of the variance would be to:

(a) Establish a use not otherwise permitted in a zoning district.

(b) Extend physically a nonconforming use of land.

(c) Change zoning district boundaries shown on the official zoning map.

c. The fact that property may be utilized more profitably, should a variance be approved, shall not be considered by the BZA.

d. In granting a variance, the BZA may attach to it such conditions regarding location, character, or other features of the proposed building, structure, or use as the BZA may consider advisable to promote the public health, safety, or general welfare.

F. **Public Notice.** A general public notice of all meetings shall be provided pursuant to *Chapter A.2.4.I.* and *S.C. Code 1976, §6-29-790*.

G. **Written Order.** A written order executed by the Board Chairman shall be issued disposing of a matter by granting or denying relief with such conditions as may be deemed necessary, or affirming, modifying, or reversing an administrative decision. A matter may be dismissed for lack of jurisdiction. Findings of fact and conclusions of law shall be separately stated in the written order.

H. **Appeals.** Appeals from decisions of the BZA are governed by state law, including *S.C. Code 1976, §6-29-820 through §6-29-850.*

2.7 DESIGN REVIEW BOARD (DRB)

A. **Authority.** Pursuant to *S.C. Code 1976, § 6-29-870, et seq.*, as amended, there is hereby created a Design Review Board (DRB) that protects and improves the visual and aesthetic character of development within certain designated Design Overlay Districts. Where within a designated overlay district the exterior appearance of any building or structure is involved, the City shall not issue a permit for any improvement, alteration, addition, new construction/erection, demolition, or moving of such building unless and until a project application has been submitted to the Design Review Board and a Certificate of Appropriateness is issued.

B. **Districts Subject to DRB Review.**
   1. Hampton Park Design Review District
   2. Downtown Design Review District

C. **Membership.** The Board shall consist of 7 members appointed by City Council.

D. **Required Knowledge/Competence.** Members shall have a demonstrated interest in, or competence and knowledge of architecture and design, including specific knowledge in at least one of the following areas: historic preservation, architecture, urban design, landscape architecture, planning, urban planning, engineering, law, banking and real estate.

E. **Duties and Responsibilities.** The responsibility of the Design Review Board is to:
   1. Review and recommend to the Planning Commission the designation of individual historic properties and Design Overlay Districts,
   2. Review plans and applications, as provided in this UDO, for all construction or demolition pertaining to duly designated historic properties.

   The Design Review Board shall have the power to approve, approve with modifications or deny approval for such applications in accordance with the prescribed procedures and guidelines.

F. **Public Notice:** A general public notice of all meetings shall be provided pursuant to *Chapter A.2.4.I.* and *S.C. Code 1976, § 6-29-870.*

G. **Approval of Request.** A certificate of appropriateness shall be issued for all individual design review requests approved by the DRB. The certificate of appropriateness shall list any approval conditions applied by the DRB.

H. **Denial of Request:** A denial of a certificate of appropriateness shall be accompanied by a statement of the reasons for denial. An applicant may resubmit an amended application or reapply for a building or demolition permit that takes into consideration the findings of the Board.

I. **Appeals:** Appeals from decisions of the DRB are governed by state law, including *S.C. Code 1976, § 6-29-900 through § 6-29-940*.

3. UDO REVIEW PROCESSES

3.1 UDO REVIEW PROCESSES

A. **Purpose and Intent.**

1. This Section describes the standard procedural steps and rules generally applicable to all development applications reviewed under this UDO.
2. The procedures provided in this Section are utilized by the City for the processing of applications for development permits or approvals.
3. It is the intent of this Section to establish a uniform set of procedures to make the development application process more effective and efficient for applicants, adjacent properties, elected officials and City staff.
4. No property subject to the requirements of this UDO shall be developed, used, or substantially changed (including substantial clearing, grading, or excavation), nor shall any building or other structure be used, constructed, erected, moved, or substantially altered, except in accordance with and pursuant to this UDO.
5. Any deviation from these procedures, other than those required by statute, shall not be grounds for invalidating an otherwise valid decision.

B. **Pre-Application Meeting**.

1. The purpose of a pre-application meeting is to provide an opportunity for the applicant to meet with City staff to learn about the submittal requirements, procedures, and standards applicable to a particular development application.
2. The pre-application meeting also provides an opportunity for City staff to become familiar with the proposed project and offer preliminary comments about the scope of the proposed development, as it relates to the standards in this Ordinance.

3. The Pre-Application Meeting is not always required but is encouraged. Refer to *Table A.3.2 and Table A.3.3.*

C. **Applications.**

1. City staff shall establish the content and forms required for all applications required under this UDO. Such applications shall be maintained by the Zoning Administrator. The Zoning Administrator may change requirements for submission of required information when it is the Zoning Administrator's determination that such information is otherwise available or is not necessary to review the application.
2. The City Council shall establish application fees, which shall be identified in the City's adopted fee schedule. City Council may amend and update fees as necessary.
3. No application shall be considered for review until it is deemed complete. If the application is incomplete, the Zoning Administrator shall notify the applicant of any deficiencies. A complete application shall:
   (1) Contain all information and materials as required in the application form as designated by City staff;
   (2) Provide the number of copies required per the application;
   (3) Be signed by the person with the authority to file the application;
   (4) Be legible and printed to scale;
   (5) Include information in sufficient detail to evaluate whether or not the application complies with the applicable review standards in this Ordinance; and
   (6) Include the required fee for the particular type of application.

D. **Staff Review of Applications.**

1. **Application.** City staff shall establish required application forms and associated required content. Applicants shall fully complete any required application and provide all associated required content.
2. **Fees**. The City Council shall establish and maintain required application fees. Fees may be updated as required. No formal action or approval shall be given until all required application fees are paid in full.

3. **Application Submittal**. Applications and associated fees shall be submitted to the City for staff review. An application will not be considered officially submitted unless it is deemed complete.
4. **Completeness Review**. Upon receiving an application, the authority responsible for initial review shall conduct an application completeness review within 20 business days and notify the applicant of any deficiencies. The completeness review shall determine that all of the following information has been provided in the application:
   (1) Contains all information and materials as required for submittal of the particular type of application.
   (2) Provides the number of copies required for application submittal.
   (3) Is signed by the person with the authority to file the application;
   (4) Is legible and printed to scale.
   (5) Includes information in sufficient detail to evaluate whether or not the application complies with the applicable review standards in this Ordinance.
   (6) The appropriate fee is submitted for the particular type of application.
   (7) A pre-application meeting has been held with the applicant, if required under *Table A.3.2* and *Table A.3.3*.
5. **Absence of a Completeness Determination.** If the review authority fails to provide a completeness determination within the prescribed timeframe, the application shall be considered as officially submitted. Failure to conduct a completeness review within the prescribed timeframe does not absolve the applicant from having to submit all required items for review.
6. **Formal Review**. After Staff deems an application complete, the application shall be considered as officially submitted. Staff shall begin formal review of the application.
   (1) The application shall be distributed to all appropriate review bodies within the TRC and other appropriate local agencies, if applicable.
   (2) Each appropriate review body shall review and comment on the application. If any deficiencies exist, review bodies shall contact the applicant and inform them of said deficiencies. The applicant shall be provided opportunity to

discuss any deficiencies and resubmit any required information in the form of a resubmittal.

(3) Upon receiving all required information, the appropriate review body shall summarize its findings in writing via official review comments, official determination letters, and/or staff reports to be reviewed by the decision-making body and discussed at a public meeting or public hearing (if required).

7. **Conflicts of Interest**. Any member of the staff who has a personal or financial interest, either directly or indirectly, in any property which is the subject of, or affected by, a decision by the board shall be disqualified from participating in the final decision on an administrative decision.

E. **Public Meeting and Hearing Notice Requirements.**

1. **Public Meetings and Public Hearings**. Public Meetings and Public Hearings shall comply with either the Legislative or Quasi-Judicial provisions below, as is applicable.
2. **Published Public Hearing Notice Requirements.** Published public hearing notices shall identify the date, time and place of the public meeting or public hearing, describe the subject property by address and/or tax parcel number, describe the scope of proposed development, and identify a method to contact the City for questions regarding the proposed development. In any instance where the provisions of *Table A.3.1* require a published notice, the review authority shall ensure the required notice is published in a newspaper of general circulation within the City.
3. **Posted Public Hearing Notice Requirements.** Posted public hearing notices shall identify the date, time and place of the public hearing, describe the subject property by address and/or tax parcel number, describe the scope of proposed development, and identify a method to contact the City for questions regarding the proposed development. In any instance where the provisions of *Table A.3.1* require a posted notice, conspicuous notice shall be posted on or adjacent to the property affected, with at least 1 such notice sign being visible from each public street that abuts the property.

4. **Legislative Public Hearings.** Legislative public hearings shall be held in accordance with all State laws and comply with the following requirements:
   (1) Legislative public hearings are not quasi-judicial in nature.
   (2) The legislative public hearing shall be open to the public and attendees shall be allowed opportunity to comment.
   (3) The provisions in this Chapter shall apply with respect to Oath, Conflicts of Interest and record keeping.
   (4) Decisions for legislative public hearing applications shall be decided by a simple majority vote.
   (5) The applicant may agree to modify the application, including plans and specifications submitted, in response to questions or comments by persons appearing at the public hearing or to suggestions or recommendations by the Planning staff or Planning Board. Once an application is amended and approved, modifications shall be binding.
   (6) Unless such modifications are so substantial that the approving authority cannot reasonably be expected to perceive the nature and impact of the proposed changes without revised plans before it, the approving authority may approve the application with the stipulation that permits will not be issued until plans reflecting the agreed upon changes are submitted to the Planning and Development Department.
   (7) Where deemed appropriate by City Council, modifications may be referred back to the Planning Board for review, prior to further consideration. The City Council may choose one of the following options:
      a. Continue the public hearing to a new date and time certain without further advertising; or
      b. Close the public hearing and re-publish notice of any future public hearings in accordance within this section.
5. **Quasi-Judicial Public Hearings**. Quasi-judicial hearings are conducted in a manner similar to court proceedings. Quasi-Judicial public hearings shall be held in accordance with all State law and comply with the following requirements:
   (1) **Decisions.** Decisions on these applications must be consistent with the UDO and must be supported by competent, substantial evidence in the record.

(2) ***Ex Parte* Communication**. Discussion with any party outside of the hearing is discouraged.

(3) **Appearance.** The applicant or any interested party may appear in person, or be represented by an agent or an attorney. The BZA may postpone or proceed to dispose of a matter in the absence of the applicant or representative thereof.

(4) **Criteria.** Boards and Commissions hearing quasi-judicial requests shall review requests against the applicable criteria found in this UDO or separately adopted guideline documents, as is applicable.

(5) **Public Testimony/Comment**. Interested parties either for or against a proposal shall present testimony under oath. The board or commission holding the quasi-judicial hearing shall evaluate such comments against the criteria applicable to the request.

(6) **Cross-Examination.** No party shall have the right to cross-examine witnesses; however, the opportunity to examine opposing witnesses may be freely extended when conducted in an orderly manner at the discretion of the Board/Commission Chairman.

(7) **Evidence.** Legible copies of relevant documents, photographs, maps, drawings, and other materials, will be received in the record without authentication. Relevant testimony, which is not cumulative, repetitive, or hearsay, will be received. The Board/Chairman will rule on all evidentiary matters. Evidence may be placed in the record with an objection noted.

(8) **Order of Hearing:** The normal order of hearing, subject to modification by the Board/Commission Chairman, shall be:

a. Presentation of Staff Report & Analysis (City Staff) – Sworn
b. Presentation by Applicant – Sworn
c. Opening of Public Hearing/Testimony by Board/Commission Chairman
d. Public Testimony/Comments in Support – Unsworn
e. Public Testimony/Comments in Opposition – Unsworn
f. Rebuttal by Applicant
g. The BZA may question participants at any point in the hearing.

h. Matters in which additional time is granted may be moved to the end of the agenda.

i. The Board/Commission Chairman has the discretion to limit the time participants are allowed to speak.

(9) **Board Action.** Boards and Commissions hearing quasi-judicial requests shall take action as follows:

a. Quasi-judicial requests shall be approved, approved with conditions, or disapproved no later than 120 days from receipt of the Complete Application, except the Certificates of Appropriateness for demolition shall follow the timeframes outlined in *Chapter A.3.5.C.2*

b. The action period may be extended with the Applicant's written consent or until the next regularly scheduled board or commission meeting after the 120-day period, if municipal offices are closed on a scheduled board or commission meeting date due to an unforeseen event during the action period, or if a quorum is not present.

c. Prior to the close of the public meeting, boards and commissions hearing quasi-judicial requests may hold a matter under advisement or defer a decision until the next regularly scheduled meeting.

(10) The BZA may impose such conditions and restrictions upon the approval of the application as may be necessary to reduce or minimize the injurious effect of such variation upon adjacent properties and/or to better carry out the general intent of this UDO.

TABLE A.3.1 PUBLIC NOTICE REQUIREMENTS				
APPLICATION TYPE		**APPROVING AUTHORITY**	**TYPE OF REQUIRED NOTIFICATION**	
			PUBLISHED NOTICE	**POSTED NOTICE**
Ordinance Amendments				
Zoning Map Amendment (Rezoning) – legislative public hearing		City Council	Published at least 15 days before hearing date	Posted at least 15 days before hearing date
Rezoning to Planned Development District – legislative public hearing		City Council	Published at least 15 days before hearing date	Posted at least 15 days before hearing date
PD District Amendment – legislative public hearing	Major	City Council	Published at least 15 days before hearing date	Posted at least 15 days before hearing date
Unified Development Ordinance Text Amendment – legislative public hearing		City Council	Published at least 15 days before hearing date	N/A

TABLE A.3.1 PUBLIC NOTICE REQUIREMENTS			
APPLICATION TYPE	**APPROVING AUTHORITY**	**TYPE OF REQUIRED NOTIFICATION**	
		PUBLISHED NOTICE	**POSTED NOTICE**
Flexibility and Relief			
Variance – quasi-judicial public hearing	BZA	Published at least 15 days before hearing date	Posted at least 15 days before hearing date
Special Exception – quasi-judicial public hearing	BZA	Published at least 15 days before hearing date	Posted at least 15 days before hearing date
Appeal – quasi-judicial public hearing	BZA	Published at least 15 days before hearing date	Posted at least 15 days before hearing date (for appeals involving specific property)
Street Name Change – legislative public hearing	PC	Published at least 15 days before hearing date	Posted at least 15 days before hearing date
Design Review District(s)			
Board Level Design Review – Certificate of Appropriateness – quasi-judicial public hearing	DRB	Published at least 15 days before hearing date	Posted at least 15 days before hearing date

3.2 ORDINANCE AMENDMENTS

A. **Zoning Map Amendment (Rezoning).**

1. **Applicability.** This section sets out the procedural requirements for amendments to the zoning district designation of land within the City's jurisdiction as well as for land coming into the City's jurisdiction via annexation in accordance with *Chapter A.1.8.* Prior to taking action, a Planning Commission public meeting is required and a City Council public hearing is required. City Council has final decision-making authority. Only the following shall submit an application for an amendment in each respective situation:
   (1) **Planning Commission or City Council.** The Planning Commission or City Council may initiate a rezoning.
   (2) **Owner of Property.** The landowner, contract purchaser, agent, or other person having the written consent of the owner, may institute an application for a change in the zoning classification of that particular property.
2. **Review Timeframe.** Only applications that have been certified complete as detailed in *Chapter A.3.1.D.* at least 22 days prior to the next scheduled PC meeting, shall move forward with the formal review process.
3. **TRC Review.** The TRC shall review any proposed Zoning Map Amendment for conformance to the UDO and any other relevant City ordinances and consistency with adopted plans including but not limited to the Comprehensive Plan. A staff report shall be provided to the Planning Commission and City Council in their public meetings/hearings.
4. **Planning Commission Action.** The PC shall make a recommendation to the City Council on the requested Zoning Map Amendment at a public PC meeting.
5. **City Council Action.** The City Council, at the conclusion of a public hearing, shall decide under legislative discretion, one of the following:
   (1) Approve the application as submitted.
   (2) Deny approval of the application.
   (3) Approve with a different (lesser intensive) zoning designation. Density allowed, residential lot sizes allowed, uses allowed, and other distinct district features may be used to determine whether a district is of lesser intensity.
   (4) Defer the application to an identified future meeting date.

(5) Remand the application to the Planning Commission for further study.

6. **Resubmission of Denied Application.** If a zoning map amendment request is denied, it shall not be initiated again unless at least 1 year from the time of denial has elapsed. New requests deemed by City Staff to be substantially different from the request denied may be initiated within the 1-year time frame.

B. **UDO Text Amendment.**

1. **Applicability.** This *Chapter* sets out the procedural requirements for amendments to the text of the UDO. A Planning Commission public meeting is required. A City Council public hearing is required. City Council has final decision-making authority. UDO text amendment applications shall only be initiated by the following:
   (1) City Council
   (2) Planning Commission
   (3) City Staff (at the direction of the City Manager)
2. **UDO Text Amendment Review.** UDO Text Amendments shall be reviewed by City Staff for consistency with the regulations of this UDO and any other relevant City ordinances and adopted plans. A staff report shall be provided to the Planning Commission and City Council in their public meetings/hearings.
3. **Review Timeframe.** Only applications that have been certified complete as detailed in *Chapter A.3.1.D.* at least 22 days prior to the next scheduled PC meeting, shall move forward with the formal review process.
4. **TRC Review.** At the discretion of the Zoning Administrator, the TRC shall review proposed UDO text amendments for conformance with other applicable regulations and policy documents including but not limited to the Comprehensive Plan.
5. **Planning Commission Action.** The PC shall make a recommendation to the City Council on requested UDO text amendments at a public PC meeting.
6. **City Council Action.** The City Council, at the conclusion of a public hearing, shall decide under legislative discretion, one of the following:
   (1) Approve the application as submitted.
   (2) Deny approval of the application.

(3) Approve the application with modifications.

(4) Defer the application to an identified future meeting date.

(5) Remand the application to the PC for further study.

C. **Planned Development District (PD).**

1. **Applicability.** This section sets out the procedural requirements for the establishment of a PD, or for an amendment to an existing PD. Requests shall be reviewed by the Planning Commission. A Planning Commission public meeting is required. City Council has final decision-making authority. Amendments deemed as minor by the Zoning Administrator shall be reviewed in accordance with *Chapter* A.3.2.C.7.

   (1) Requests to establish new Planned Development Districts or requests to amend existing Planned Development districts shall only be initiated by the landowner, contract purchaser, agent or other person having the written consent of the owner.

2. **Review timeframe.** Only complete applications shall move forward with the formal review process.

3. **Pre-Application Meeting.** A pre-application meeting as described in *Chapter A.3.1.B.* is required for a complete application.

4. **TRC Review.** The TRC shall review any proposed Planned Development application for conformance to the UDO, any other relevant City ordinances, and any site specific conditions impacting the proposed Planned Development. A staff report shall be provided to the Planning Commission.

5. **Planning Commission Action.** The PC shall make a recommendation to the City Council on requested Planned Development establishment/amendments at a public PC meeting.

6. **City Council Action.** The City Council, at the conclusion of a public hearing, shall decide under legislative discretion, one of the following:

   (1) Approve the application as submitted.

   (2) Approve the application with modifications.

   (3) Deny approval of the application.

   (4) Defer the application to an identified future meeting date.

(5) Remand the application to the Planning Commission for further study.

7. **Minor Amendments.** Minor amendments to an approved Planned Development may be approved by the Zoning Administrator only upon findings identical to those required for original approval.
8. **Previously Established Planned Developments**. Planned Developments created prior to the adoption of this UDO shall be evaluated for compliance with these standards. References to prior zoning and development standards ordinance(s) shall be conformed to corresponding section(s) of this Ordinance.
9. **Resubmission of Denied Application.** If a Planned Development District request is denied, it shall not be initiated again unless at least 1 year from the time of denial has elapsed.

TABLE A.3.2 SUMMARY OF UDO REVIEW PROCEDURES: ORDINANCE AMENDMENTS							
Procedure	**Pre-Application Conference**	**Review and Decision-Making Bodies**					
		Technical Review Committee (TRC)	**Zoning Administrator**	**Design Review Board (DRB)**	**Board of Zoning Appeals (BZA)**	**Planning Commission (PC)**	**City Council**
Ordinance Amendments							
Zoning Map Amendment (Rezoning)		R				R	D
Planned Development (PD) District Rezoning	✓	R				R	D
Major PD District Amendment	✓	R				R	D
Minor PD District Amendment		*Case-by-Case Basis*	D				
UDO Text Amendment		*Case-by-Case Basis*				R	D
KEY: R = Review and Recommendation, D=Review and Decision/Action, ✓= Required							

3.3 DEVELOPMENT REVIEW

A. **Major Site Plans.**

1. **Applicability.** This section sets out the procedural requirements for major site plan application review. A Planning Commission public meeting is required. The Planning Commission has final decision-making authority.
   (1) Major site plan applications shall only be initiated by the landowner, contract purchaser, agent or other person having the written consent of the owner.
   (2) Major site plan proposals have 1 or more of the following characteristics:
      a. Involves construction of more than 20,000 sq. ft. of total building area.
      b. Involves more than 5 acres of land disturbance.
      c. Requires a minimum of 35 off-street parking spaces.
      d. Has the potential for a greater degree of impact to adjacent property and existing infrastructure as determined by the Zoning Administrator.
2. **Pre-Application Meeting.** A pre-application meeting as described in *Chapter A.3.1.B.* is required for a complete application.
3. **Review Timeframe.** Only applications that have been certified complete as detailed in *Chapter A.3.1.D.* at least 22 days prior to the next scheduled Planning Commission meeting, shall move forward with the formal review process.
4. **TRC Review.** The TRC shall review proposals for conformance to the UDO any other relevant City Ordinances as may be applicable. The TRC may identify site specific conditions or other matters that may impact the proposed development.
5. **Planning Commission Action.** Action shall be taken on a complete application at a Planning Commission public meeting. The Planning Commission may take the following actions:
   (1) Approve the application as submitted.
   (2) Approve the application with conditions of approval.
   (3) Deny approval of the application.
   (4) Defer the application pursuant to *Chapter A.3.3.A.6.*

6. **Request Deferral.** The PC, in its discretion, may defer a decision until an identified future meeting date. However, the PC must make a final decision no later than 60 days from the date the application is determined complete by City Staff unless extended by mutual agreement.
7. **Effect of Major Site Plan Approval.** Major Site Approval shall confer upon the applicant the following rights:
   (1) Approval of the development's character, intensity, layout, parking area and drive access dimensions, landscaping, and other planned features pursuant to the plans approved by the PC. Such approval permits the developer to proceed with the site and building improvements, subject to obtaining other necessary permits.
8. **Vested Right.** Major site plan approvals shall have a vested right for 2 years from the date of approval. This vested right may receive up to five 1 year extensions upon application by the landowner to the Planning Commission in writing in each year that an extension is desired.

B. **Minor Site Plans (Level 1 & 2).**

1. **Applicability.** This section sets out the procedural requirements for minor site plan application review.
2. Minor site plan applications shall only be initiated by the landowner, contract purchaser, agent or other person having the written consent of the owner.
   (1) Level 1 minor site plan proposals have all of the following characteristics:
      a. Involve construction of less than 20,000 sq. ft. of total building area.
      b. Involve less than 5.0 acres of land disturbance.
      c. Require fewer than 35 off-street parking spaces.
      d. Does not meet the criteria of a major site plan or Level 2 minor site plan.
   (2) Level 2 minor site plan proposals have all of the following characteristics:
      a. Involves a site that is already developed.
      b. Involves an addition to an existing building that is less than 1,000 sq. ft., or involves construction of a new building less than 500 sq. ft.
      c. Involves less than 1.0 acre of land disturbance.
      d. Does not involve the establishment of paved or concrete parking areas.

e. Does not involve the establishment of new or expanded stormwater facilities.

f. Will have minimal impact to adjacent property and existing infrastructure as determined by the Zoning Administrator.

3. **Pre-Application Meeting.** A pre-application meeting as described in *Chapter A.3.1.B.* is required and is a requisite for a complete application for Level 1 minor site plan applications.
4. **TRC Review.** The TRC shall review proposals for conformance to the UDO and any other relevant City Ordinances as may be applicable. The TRC may identify site specific conditions or other matters that may impact the proposed development.
5. **Review Timeframe/Staff Action.** City staff will review and will take action to approve, approve with conditions, or deny complete applications within 60 days. The 60 day time limit may be extended by mutual agreement.
6. **Effect of Minor Site Plan (level 1 & 2) Approval.** Minor Site Approval shall confer upon the applicant the following rights:
   (1) Approval of the developments character, intensity, layout, parking area and drive access dimensions, landscaping, and other planned features pursuant to the plans approved by City Staff. Such approval permits the developer to proceed with the site and building improvements, subject to obtaining other necessary permits.
7. **Vested Right.** Minor site plan approvals shall have a vested right for 2 years from the date of approval. This vested right may receive up to five 1-year extensions upon application by the landowner to the Planning Commission in writing in each year that an extension is desired.

C. **Corridor Protection Review.**

1. **Applicability.** This section sets out the procedural requirements for corridor protection application review. Such requests associated with major site plan applications or requests for alternate exterior materials shall be reviewed by the Planning Commission, where the Planning Commission has final decision-making authority. All other requests shall be reviewed by City Staff, where City

staff has final decision-making authority. A Planning Commission public meeting is required for requests associated with a major site plan and/or alternate exterior materials requests.

2. **Review Timeframe/Staff Action.**
   (1) **Major requests and alternate exterior materials requests.** Only complete applications, received a minimum of 22 days prior to the next scheduled Planning Commission meeting, shall move forward with the formal review process.
   (2) **All other requests.** City staff will review and take action on complete applications within 60 days. The 60 day time limit may be extended by mutual agreement**.**
3. **Planning Commission Action.** Action shall be taken on a complete application at a Planning Commission public meeting. The Planning Commission may take the following actions:
   (1) Approve the application as submitted.
   (2) Deny approval of the application.
   (3) Defer the application pursuant to *Chapter A.3.3.C.4*.
4. **Request Deferral.** The PC, in its discretion, may defer a decision until an identified future meeting date. However, the PC must make a final decision no later than 60 days from the date the application is determined complete by City Staff unless extended by mutual agreement.
5. **Effect of Corridor Design Review Approval.** Corridor Design Review Approval shall confer upon the applicant the following rights:
   (1) Approval of a structure's and/or site's exterior appearance, including but not limited to building exterior materials, building color, building exterior architectural features, building roof design, and other exterior site components such as exterior signs pursuant to the plans approved by Planning Commission or City Staff. Such approval permits the developer to proceed with improvements, subject to obtaining other necessary permits.
6. **Vested Right.** Commercial corridor plan approvals shall have a vested right for 2 years from the date of approval. This vested right shall receive up to five 1

year extensions upon application by the landowner to the Planning Commission in writing in each year that an extension is desired.

D. **Sketch Plan – Major Subdivision (Preliminary Plat)**

1. **Applicability.** This sets out the procedural requirements for sketch plan application review. City Staff has final decision-making authority. An approved sketch plan is a prerequisite for a complete Major Subdivision (Preliminary Plat) application.
   (1) Sketch plan applications shall only be initiated by the landowner, contract purchaser, agent or other person having the written consent of the owner.
   (2) Required for requests meeting the characteristics described in *Chapter A.3.3.E.1(2)*.
2. **Pre-Application Meeting.** A pre-application meeting is required and is requisite for a complete application. A pre-application meeting for a sketch plan application may count as meeting the mandatory pre-application meeting for the formal Major Subdivision (Preliminary Plat) application.
3. **TRC Review.** The TRC shall review proposals for conformance to the UDO and any other relevant City Ordinances as may be applicable. The TRC may identify site specific conditions or other matters that may impact the proposed development.
4. **Review Timeframe/Staff Action.** City staff will review and take action to approve, approve with conditions, or deny complete applications within 60 days. The 60 day time limit may be extended by mutual agreement.
5. **Effect of Sketch Plan Approval.** Sketch Plan approval shall confer upon the applicant the following rights.
   (1) Preliminary conceptual approval of the subdivision's character, intensity of development, layout, street dimensions, lot dimensions, open space dimensions, stormwater layout, and other planned features pursuant to the plans submitted to City Staff. Such approval permits the developer to proceed with submitting a formal Major Subdivision (Preliminary Plat) application.
6. **Vested Rights**. Sketch plan approval does not constitute a vested right.

E. **Major Subdivision (Preliminary Plat).**

1. **Applicability.** This section sets out the procedural requirements for major subdivision (preliminary plat) application review. A Planning Commission public meeting is required. The Planning Commission has final decision-making authority.
   (1) Major subdivision (preliminary plat) applications shall only be initiated by the landowner, contract purchaser, agent or other person having the written consent of the owner.
   (2) Major subdivision (preliminary plat) proposals have 1 or more of the following characteristics:
      a. Involves the establishment of 10 or more lots.
      b. Involves the construction of street or stormwater infrastructure to serve the subdivision.
2. **Pre-Application Meeting.** A pre-application meeting as described in *Chapter A.3.1.B* is required and is a requisite for a complete application.
3. **Review Timeframe.** Only applications that have been certified complete as detailed in *Chapter A.3.1.D.* at least 22 days prior to the next scheduled Planning Commission meeting, shall move forward with the formal review process.
4. **TRC Review.** The TRC shall review proposals for conformance to the UDO and any other relevant City Ordinances as may be applicable. The TRC may identify site specific conditions or other matters that may impact the proposed development.
5. **Planning Commission Action.** Action shall be taken on a complete application at a Planning Commission public meeting. The Planning Commission may take the following actions:
   (1) Approve the application as submitted.
   (2) Approve the application with conditions of approval.
   (3) Deny approval of the application.
   (4) Defer the application pursuant to *Chapter A.3.3.E.6.*
6. **Request Deferral.** The PC, in its discretion, may defer a decision until an identified future meeting date. However, the PC must make a final decision no

later than 60 days from the date the application is determined complete by City Staff unless extended by mutual agreement.

7. **Effect of Major Subdivision (Preliminary Plat) Approval.** Major Subdivision (Preliminary Plat) Approval shall confer upon the applicant the following rights:
   (1) Approval of the subdivisions character, intensity of development, layout, street dimensions, lot dimensions, open space dimensions, stormwater layout, and other planned features pursuant to the plans approved by Planning Commission or City Staff. Such approval permits the developer to proceed with the installation of site improvements, subject to obtaining other necessary permits.
   (2) The Major Subdivision (Preliminary Plat) must be approved in its entirety or in phases as shown on submitted plans and does not constitute approval of the final plat or cause the issuance of a certificate of occupancy, and accordingly, does not authorize the sale of lots or the occupancy or use of a parcel of land.
8. **Vested Right.** Major Subdivision (Preliminary Plat) approvals shall have a vested right for 2 years from the date of approval. This vested right may receive up to five 1-year extensions upon application by the landowner to the Planning Commission in writing in each year that an extension is desired.

F. **Final Plat (Not Subject To Preliminary Plat Approval).**

1. **Applicability.** This section sets out the procedural requirements for final plat requests for plats not associated with a preliminary plat approval.
   (1) Applications may be initiated by anyone authorized to make and record said plats under applicable state law.
2. **Review Timeframe/Staff Action.** City staff will review and take action to approve or deny complete applications within 60 days. The 60 day time limit may be extended by mutual agreement.
3. **Recording of Final Plat.** City staff approval on final plats shall expire if the plat is not duly recorded at the Sumter County Register of Deeds within 90 days of the date of City Staff approval.

G. **Final Plat (Subject To Preliminary Plat Approval).**

1. **Applicability**. This section sets out the procedural requirements for final plat requests for plats associated with a preliminary plat approval.
   (1) Applications may be initiated by anyone authorized to make and record said plats under applicable state law.
2. **Review Timeframe/Staff Action.** City staff will review and take action to approve or deny complete applications within 60 days. The 60 day time limit may be extended by mutual agreement. All process items for plats as identified in *Chapter D* or as is required by city policy, must be finalized before an application is complete.
3. **Recording of Final Plat.** City staff approval on final plats shall expire if the plat is not duly recorded at the Sumter County Register of Deeds within 90 days of the date of City Staff approval.
4. **Suspension of Permitting.** If at any time after final plat approval City Staff is required to suspend building permits and/or inspections for a plat that was subject to preliminary plat approval, then a written notice of the suspension shall be provided to the developer as soon as possible. The notice shall include the reason for the suspension, required action to remedy the problem, and as appropriate, a time frame to comply before the suspension takes effect. The suspension shall be released upon notice to the developer.

H. **Vacation of Right-of-Way (ROW) or Easement.**

1. **Applicability.** This section sets out the procedural requirements for Vacation of ROW or easements applications. Such applications shall be reviewed by City Council.
2. **Review Timeframe.** Complete applications will be placed on the next available City Council agenda.
3. **TRC Review.** The TRC shall review any such application for conformance to the UDO, any other relevant City ordinances, and any site specific conditions impacting the proposed request. A staff report shall be provided to City Council.
4. **City Council Action.** The City Council shall take action on the request under legislative discretion.

I. **Street Name Change.**

1. **Applicability.** This section sets out the procedural requirements for street name change applications. Such applications shall be reviewed by the Planning Commission, where the Planning Commission has final decision-making authority. A Planning Commission public hearing is required for street name change requests.
   (1) Applications shall only be initiated by a government entity or by a landowner or agent of the landowner that has property with an address on the street where a name change is proposed.
2. **Review Timeframe.** Only applications that have been certified complete as detailed in *Chapter A.3.1.D.* at least 22 days prior to the next scheduled Planning Commission meeting, shall move forward with the formal review process.
3. **Planning Commission Action.** Action shall be taken on a complete application at a Planning Commission public hearing. The Planning Commission may take the following actions:
   (1) Approve the application as submitted.
   (2) Deny approval of the application.
   (3) Defer the application to an identified future meeting date.

J. **Alternative Parking Plans/Alternative Landscaping Plans/Signage Plans**

1. **Applicability.** This section sets out the procedural requirements for alternative parking plan, alternative landscaping plan, and signage plan applications. Such plans associated with major site plan applications shall be reviewed by the Planning Commission, where the Planning Commission has final decision-making authority. Such plans associated with minor site plans shall be reviewed by City Staff, where City Staff has final decision-making authority. A Planning Commission public meeting is required for such plans associated with a major site plan application.
   (1) Applications shall only be initiated by the landowner, contract purchaser, agent or other person having the written consent of the owner.

(2) Signage plans are required for all multi-tenant complexes, in any district, including multi-family and manufactured/mobile home parks.

2. **Review Timeframe/Staff Action.**
   (1) **Major requests**. Only applications that have been certified complete as detailed in *Chapter A.3.1.D.* at least 22 days prior to the next scheduled Planning Commission meeting, shall move forward with the formal review process.
   (2) **Minor requests**. City staff will review and take action to approve or deny complete applications within 60 days. The 60 day time limit may be extended by mutual agreement.
3. **Planning Commission Action.** For major requests, action shall be taken on a complete application at a Planning Commission public meeting. The Planning Commission may take the following actions:
   (1) Approve the application as submitted.
   (2) Approve the application with approval conditions.
   (3) Deny approval of the application.
   (4) Defer the application pursuant to *Chapter A.3.3.J.4.*
4. **Request Deferral.** The PC, in its discretion, may defer a decision until an identified future meeting date. However, the PC must make a final decision no later than 60 days from the date the application is determined complete by City Staff unless extended by mutual agreement.
5. **Effect of Alternate Plan Approvals.** Alternate Plan Approvals shall confer upon the applicant the following rights:
   (1) Approval of the developments character, intensity, layout, parking area and drive access dimensions, landscaping, and other planned features pursuant to the plans approved by the Planning Commission. Such approval permits the developer to proceed with the site and building improvements, subject to obtaining other necessary permits.
6. **Vested Right.** Alternative parking plans, landscaping plans, and signage plans shall have a vested right for 2 years from the date of approval. This vested right shall receive up to five 1 year extensions upon application by the landowner to the Planning Commission in writing in each year that an extension is desired.

TABLE A.3.3. SUMMARY OF UDO REVIEW PROCEDURES: DEVELOPMENT REVIEW							
Procedure	**Pre-Application Conference**	**Review and Decision-Making Bodies**					
		Technical Review Committee (TRC)	**Zoning Administrator**	**Design Review Board (DRB)**	**Board of Zoning Appeals (BZA)**	**Planning Commission (PC)**	**City Council**
Development Review							
Major Site Plan	✓	R				D	
Site Plan Level 1	✓	R	D				
Site Plan Level 2		*Case-by-Case Basis*	D				
Major Corridor Protection			R			D	
Minor Corridor Protection			D			*Review alternate exterior materials*	
Sketch Plan (required for Major Subdivisions)	✓	R	D				
Major Subdivision (Preliminary Plat)	✓	R				D	
Final Plat – Not subject to Preliminary Plat approval			D				
Final Plat – Subject to Preliminary Plat approval	*Optional*		D				*City Council action required for infrastructure acceptance*
KEY: R = Review and Recommendation, D=Review and Decision/Action, ✓= Required							

TABLE A.3.3. SUMMARY OF UDO REVIEW PROCEDURES: DEVELOPMENT REVIEW							
Procedure	**Pre-Application Conference**	**Review and Decision-Making Bodies**					
		Technical Review Committee (TRC)	**Zoning Administrator**	**Design Review Board (DRB)**	**Board of Zoning Appeals (BZA)**	**Planning Commission (PC)**	**City Council**
Vacation of ROW or Easement		R					D
Street Name Change			R			D	
Alternative Parking Plan/Alternative Landscaping Plan/Signage Plan			D *(minor site plan)*			D *(major site plan)*	
KEY: R = Review and Recommendation, D=Review and Decision/Action, ✓= Required							

3.4 VARIANCES, SPECIAL EXCEPTIONS, AND APPEALS

A. **Variances.**

1. **Applicability.** This section sets out the procedural requirements for reviewing variances to the provisions of the UDO. A BZA public hearing is required. The BZA has final decision-making authority. Variance applications shall only be initiated by the landowner, contract purchaser, agent or other person having the written consent of the owner.
2. **Review Timeframe.** Only applications that have been certified complete as detailed in *Chapter A.3.1.D.* at least 22 days prior to the next scheduled BZA meeting, shall move forward with the formal review process.
3. **Staff Review.** City staff shall review complete applications and prepare a staff report for presentation at the BZA public hearing.
4. **BZA Action.** At the conclusion of a public hearing, the BZA shall decide under quasi-judicial process, one of the following:
   (1) Approve the application as submitted.
   (2) Approve the application with conditions.
   (3) Deny approval of the application.
   (4) Defer the application.
5. **Request Deferral.** The BZA, in its discretion, may defer a decision after the conclusion of a public hearing. However, the BZA must make a final decision pursuant to the timeframes in *Chapter A.3.1.E.5(9)*.
6. **Resubmission of Denied Application.** If a variance request is denied, it shall not be initiated again unless at least 1 year from the time of denial has elapsed. New requests deemed by City Staff to be substantially different from the request denied may be initiated within the 1-year time frame.
7. **Expiration of Variance Approval.** Variance approvals, in the manner such approvals were applied for or approved under, do not expire. Variance approvals do not establish a vested right for particular project or site specific development plan.

B. **Special Exceptions.**

1. **Applicability.** This section sets out the procedural requirements for reviewing special exception requests. A BZA public hearing is required. The BZA has final decision-making authority.

   Special exception applications shall only be initiated by the landowner, contract purchaser, agent or other person having the written consent of the owner.

2. **Review Timeframe.** Only applications that have been certified complete as detailed in *Chapter A.3.1.D.* at least 22 days prior to the next scheduled BZA meeting shall move forward with the formal review process**.**
3. **Staff Review.** City staff shall review complete applications and prepare a staff report for presentation at the BZA public hearing.
4. **BZA Action.** At the conclusion of a public hearing, the BZA shall decide under quasi-judicial process, one of the following:
   (1) Approve the application as submitted.
   (2) Approve the application with conditions.
   (3) Deny approval of the application.
   (4) Defer the application.
5. **Request Deferral.** The BZA, in its discretion, may defer a decision after the conclusion of a public hearing. However, the BZA must make a final decision pursuant to the timeframes in *Chapter A.3.1.E.5(9)*.
6. **Resubmission of Denied Application.** If a special exception request is denied, it shall not be initiated again unless at least 1 year from the time of denial has elapsed. New requests deemed by City Staff to be substantially different from the request denied may be initiated within the 1-year time frame.
7. **Expiration of Special Exception Approval.** If action is not taken within 6 months of the date of BZA approval to establish a special exception use, then such approval expires and reapplication with a new review shall be required.
8. **Vested Right.** Special exception approvals do not establish a vested right for a particular project or site-specific development.

C. **Appeals from Administrative Determination/Interpretation.**

1. **Applicability.** This section sets out the procedural requirements for appeals to an administrative determination/interpretation of *Chapters A, B*, and *C* of the UDO. A BZA public hearing is required. The BZA has final decision-making authority. Appeal applications shall be initiated by any person aggrieved by a UDO administrative determination/interpretation.
2. **Review Timeframe.** Only applications that have been certified complete as detailed in *Chapter A.3.1.D.* at least 22 days prior to the next scheduled BZA meeting shall move forward with the formal review process.
3. **Staff Review.** City staff shall review complete applications and prepare a staff report for presentation at the BZA public hearing.
4. **BZA Action.** At the conclusion of a public hearing, the BZA shall decide under quasi-judicial process, one of the following:
   (1) Affirm the determination/interpretation of City Staff.
   (2) Reverse the determination/interpretation of City Staff.
   (3) Modify the determination/interpretation of City Staff.
   (4) Defer the application.
5. **Request Deferral.** The BZA, in its discretion, may defer a decision after the conclusion of a public hearing. However, the BZA must make a final decision pursuant to the timeframes in *Chapter A.3.1.E.5(9)*.

TABLE A.3.4 FLEXIBILITY AND RELIEF PROCEDURES							
Procedure	**Pre-Application Conference**	**Review and Decision-Making Bodies**					
		Technical Review Committee (TRC)	**Zoning Administrator**	**Design Review Board (DRB)**	**Board of Zoning Appeals (BZA)**	**Planning Commission (PC)**	**City Council**
Flexibility and Relief Procedures							
Variance		*Case-by-Case Basis*	R		D		
Special Exception		*Case-by-Case Basis*	R		D		
Administrative Adjustment			D				
Appeal					D		
KEY: R = Review and Recommendation, D=Review and Decision/Action, ✓= Required							

3.5 DESIGN REVIEW (CERTIFICATES OF APPROPRIATENESS)

A. **Applicability.** This section sets out the procedural requirements for review of certificate of appropriateness requests. A Design Review Board (DRB) public hearing is required, unless specific administrative approval authority for certain request types provided for in *Chapter A.3.5.C.1* is proposed. The DRB has final decision-making authority.

1. Applications for certificate of appropriateness shall only be submitted by the landowner, contract purchaser, or other person having the written consent of the owner.

B. **Design Guidelines.**

1. **Intent.** It is the City's intent to ensure, insofar as possible, that buildings or structures designated as historic shall be in harmony with the architectural and historical character of the city. In granting a certificate of appropriateness, the board shall take into account the architectural and historical significance of the structure under consideration and the exterior form and appearance of any proposed additions or modifications to that structure as well as the effect of such change or additions upon other structures in the vicinity.
2. **Standards Used.** When considering an application for a certificate of appropriateness for new construction, alteration, repair, or restoration, the board shall use the *U.S. Secretary of Interior's Standards for Rehabilitation* as guidelines in making its decisions. In addition, City Council may adopt more specific guidelines for local historic districts and local historic buildings. These guidelines serve as the basis for determining the approval, approval with modifications, or denial of an application.

C. **Review Timeframe/Staff Action.**

1. **Board level requests.** Only applications that have been certified complete as detailed in *Chapter A.3.1.D.* at least 22 days prior to the next scheduled DRB meeting, shall move forward with the formal review process.
2. **Administrative level requests.** City staff will review and take action to approve, approve with conditions, or deny complete applications within 60 days. Action may also include referring a request for DRB action. The 60 day time limit may be extended by mutual agreement.
3. **DRB Action**. For board level requests, action shall be taken at a DRB public hearing. At the conclusion of a public hearing the DRB shall decide under quasi-judicial process, one of the following:
   (1) Approve the application as submitted.
   (2) Approve the application with conditions.
   (3) Deny approval of the application.
   (4) Defer the application.
   (5) For action on demolition requests refer to *Chapter A.3.5.D.5.*
4. **Request Deferral.** The DRB, in its discretion, may defer a decision after the conclusion of a public hearing. However, the DRB must make a final decision pursuant to the timeframes in *Chapter A.3.1.E.5(9)*.
6. **Expiration of Design Review (Certificate of Appropriateness) Approval** If action is not taken within 6 months of the date of DRB approval to commence such activities approved by the DRB, then such approval expires and reapplication with a new review shall be required. Certificate of Appropriateness approvals do not establish a vested right for particular project or site specific development.

D. **Certificates of Appropriateness.**

1. **General Standards.** A Certificate of Appropriateness for specific categories of alterations may be issued by the Zoning Administrator without referral to the DRB if the request falls within one or more of the General Certificates of Appropriateness approved by City Council**.**

2. **Establishment of new General Certificate of Appropriateness.** Proposed establishment of a new General Certificate of Appropriateness category shall be referred by the DRB to City Council for approval.
3. **Referral to Design Review Board.** In all cases, the Zoning Administrator may refer a request to the DRB for review and approval.
4. **General Certificates of Appropriateness.** The following General Certificates of Appropriateness have been approved by City Council:
   (1) Exterior paint utilizing colors consistent with the *City of Sumter Historic Preservation Color Palette*;
   (2) Awnings for buildings in the Downtown Core District;
   (3) Minor exterior architectural elements (e.g., lighting fixtures, door hardware);
   (4) Business signage under the following conditions:
      a. Signage text shall be of a font classified as Serif, Sans Serif, or Script. All fonts considered to be a mimicry font (lettering made to look like another object or foreign script) or a casual/playful font (e.g., Comic Sans, Curlz, Giddyup, Jokerman) must be referred to the Design Review Board; or,
      b. Direct application of a sign painted on the wall of a building or the painting of a mural shall be reviewed and approved by the Design Review Board.
   (5) Fencing consistent with the City of Sumter Design Review Guidelines;
   (6) Minor mechanical installations (e.g., HVAC units, generator units).
5. **Demolition.** Where a request for a demolition permit is involved in an application for a Certificate of Appropriateness, the DRB may postpone the issuance of a demolition permit for up to 120 days pending a thorough review of the matter. An additional 120 days may be authorized when the DRB is reasonably certain that an alternative to demolition can be achieved during the additional time period. The DRB shall provide a recommendation to the City Council when it is in the public interest to save valuable architectural,

cultural, and/or archeological resources which would be damaged or lost by the demolition or partial demolition or the moving of a building or structure.

TABLE A.3.5 DESIGN REVIEW PROCEDURES							
Procedure	Pre-Application Conference	Review and Decision-Making Bodies					
		Technical Review Committee (TRC)	Zoning Administrator	Design Review Board (DRB)	Board of Zoning Appeals (BZA)	Planning Commission (PC)	City Council
Design Review (Certificates of Appropriateness)							
Board Review			R	D			
Administrative Review			D				
KEY: R = Review and Recommendation, D=Review and Decision/Action, ✓= Required							

3.6 USE REVIEW, PERMITS, & INTERPRETATIONS

A. **Conditional Use.**

1. **Applicability.** This section sets out the procedural requirements for reviewing conditional use applications.
2. **Review Timeframe/Staff Action.** City staff will review complete applications within 60 days. The 60 day time limit may be extended by mutual agreement. City staff may refer a conditional use request to the BZA for action.
3. **BZA Action.** If a conditional use application is forwarded to the BZA by the Zoning Administrator pursuant to *Chapter B.9.10.* the procedures found in *Chapter A.3.4.B.* are applicable.
4. **Effect of Conditional Use Approval.** Conditional Use Approval shall confer upon the applicant the following rights:
   (1) Establishment of the proposed use on the property subject to the plans submitted and any identified approval conditions, subject to obtaining all other approvals required by the UDO, and subject to obtaining all required permits.
5. **Expiration of Approved Conditional Use.** If action is not taken within 6 months of the date of approval to establish the conditional use, then such approval expires and reapplication with a new review shall be required. Conditional use approvals do not establish a vested right for particular project or site specific development.

B. **Temporary Use Permit.**

1. **Applicability.** This section sets out the procedural requirements for reviewing temporary use applications.
2. **Staff Action.** City staff will review and take action to approve, approve with conditions, or deny complete applications within 60 days.
3. **Expiration of Temporary Use Permit.** Temporary use permits expire pursuant to *Table B.14.1*.

C. **Special Event Permits.**

1. **Staff Action.** City staff will review and take action on special event permit applications in accordance with City Administration policies and procedures.

D. **Land Disturbance Permits.**

1. **Staff Action.** City staff will review and take action on complete land disturbance permit applications. All necessary site, landscaping, tree protection, and stormwater approvals shall be in place before a land disturbance permit is issued.

E. **Zoning Verification Letters.**

1. **Staff Action.** The Zoning Administrator will prepare a requested Zoning Verification letter within 60 days of the receipt of a complete application.

F. **UDO Interpretations.**

1. **Staff Action.** The Zoning Administrator will prepare a written UDO interpretation within 60 days of the receipt of a complete application.

TABLE A.3.6 USE REVIEW, PERMITS, AND INTERPRETATION PROCEDURES							
Procedure	**Pre-Application Conference**	**Review and Decision-Making Bodies**					
		Technical Review Committee (TRC)	**Zoning Administrator**	**Design Review Board (DRB)**	**Board of Zoning Appeals (BZA)**	**Planning Commission (PC)**	**City Council**
Use Review, Permits, & Interpretations							
Conditional Use			D		Zoning Admin. may refer conditional use requests to BZA for review		
Temporary Use Permit			D				
Special Event Permit	Reviewed by City Administration via established process						
Land Disturbance Permit			D				
Zoning Verification Letter			D				
UDO Interpretation			D				
KEY: R = Review and Recommendation, D=Review and Decision/Action, ✓= Required							

4. ENFORCEMENT

4.1 COMPLIANCE REQUIRED

A. **Compliance Required.**

1. Compliance with all the procedures and standards of the UDO, and all terms and conditions of permits and development approvals is required by all persons owning, developing, managing, using, or occupying land, structures, or signs in the City.

B. **Violations Generally.**

1. Any failure to comply with a standard, requirement, prohibition, or limitation imposed by the UDO, or the terms or conditions of any permit or development approval granted in accordance with the UDO shall constitute a violation of the UDO punishable as provided in this section.
2. Permits or development approvals issued on the basis of applications approved by the City Council, Planning Commission, Board of Zoning Appeals, Design Review, or City Staff authorize only the use, arrangement, location, design, density/intensity, and development set forth in such permits or development approvals, and no other development.
3. Violations of the UDO shall run with the land where the violation occurred, and shall not be voided by sale or transfer.

C. **Specific Violations.** It shall be a violation of the UDO to do any of the following:

1. Develop, modify, occupy, or subdivide a property without first obtaining the appropriate permits or development approvals as set forth in this UDO.
2. Excavate, grade, cut, clear, or undertake any land disturbing activity without first obtaining the appropriate permits or development approvals, and complying with their terms and conditions.

3. Remove existing trees from a site or parcel of land without first obtaining the appropriate permits and development approvals, and complying with their terms and conditions. If an owner cuts all or any portion of his or her property under the claim of good faith forestry practice, and then seeks a development permit for any portion of the property within 2 years of the cut, a rebuttable presumption shall arise that the cut was done in anticipation of future development and the permit shall be denied. Any person seeking to rebut the presumption shall have the burden of proving their claim by clear and convincing evidence.
4. Reduce or diminish the requirements for development, design, or dimensional standards below the minimum required by the UDO.
5. Increase the intensity or density of development, except in accordance with the standards of the UDO.
6. Through any act or omission, failure to comply with any other provisions, procedures, or standards as required by the UDO.

4.2 ENFORCEMENT

A. **Responsibility for Enforcement.** City Staff shall be responsible for enforcing the provisions of the UDO.

B. **Complaints Regarding Violations.** Whenever a violation of the UDO occurs, or is alleged to have occurred, any person may file a complaint. Such complaint shall state fully the alleged violation and the basis for the alleged violation, and shall be filed with City Staff, who shall maintain a record of the complaint. The complaint shall be investigated promptly by City Staff as provided in *Chapter A.4.2.C.* and action taken to abate or correct the violation.

C. **Inspections to Ensure Compliance.** Upon presentation of proper credentials, City Staff may enter upon land or inspect any structure to ensure compliance with the provisions of the UDO. These inspections shall be carried out during normal business hours unless City Staff determines there is an emergency necessitating inspections at another time.

D. **Notice of Violation.**

1. When City Staff finds and determines a violation of the UDO exists, City Staff may notify the person violating the UDO, and keep documentation of such notice, including how the notice was provided (in person, email, mail, etc.) Such notification shall serve as a warning notice of a violation. The notice shall state the following, if applicable:
   (1) The address and/or TMS number of the land, structure, or sign that is in violation of the UDO;
   (2) The nature of the violation, the provisions of the UDO being violated, and the necessary action to remove or abate the violation;
   (3) The date by which the violation shall be removed or abated; and
2. The penalty for failing to remove or abate the violation, stating that if the nuisance recurs, a notice to appear in the appropriate court may be issued without further notice.
3. If no one is present or refuses to accept the notice of violation, Staff may post the warning notice on the residence or building entrance. If the land is unimproved, the notice may be placed on a tree or other similar object on the land subject to the violation. Notice may also be provided by email or mail.

E. **Failure to Correct Violation.**

1. If the person(s) to whom a warning notice has been given fails to remove or abate the violation in the time specified in the notice, designated city staff are authorized to issue a Uniform Municipal Ordinance Summons requiring appearance in the appropriate court.
2. A copy of the Uniform Municipal Ordinance Summons shall be forwarded to the Clerk of the Court for inclusion on the court's docket for the date indicated on the notice.
3. The Uniform Municipal Ordinance Summons shall be provided to all persons in violation of the UDO by personal delivery or certified mail.
4. At the City's discretion, if the person(s) to whom a warning notice has been given, fails to remove or abate the violation in the time specified in the notice and

severe conditions exist that affect health, welfare, or safety, or cause severe environmental degradation, the City through City Staff may lawfully enter upon the land where the violation remains unabated to remove or abate the violation, at the expense of the person(s) responsible for creating or maintaining the violation(s).

F. **Costs.** All costs and expenses incurred by the City in removing or abating any violation under the UDO may be assessed against the land on which the violation occurs as a lien on the property. Alternatively, the cost of removing or abating the violation may be made part of the judgment, in addition to any other penalties and costs imposed if the person(s) charged either pleads or is found guilty of causing, creating, or maintaining a violation.

G. **Repeat Violations.**

1. In instances of repeat violations, the warning notice provisions of this section need not be observed.
2. Each day a violation continues after the expiration of the warning period to abate such violation shall constitute a separate offense.

4.3 REMEDIES AND PENALTIES

A. **General.** Any person violating the UDO shall be guilty of a misdemeanor and, upon conviction, shall be punished as provided in the *Sumter City Code, Chapter 1, Sec. 1-7*. Each day during which the violation continues is a separate offense also punishable by *Sec. 1-7*.

B. **Other Remedies and Penalties.** In addition, the City may use any remedy authorized by state law, including S.C. Code 1976, § 6-29-950, or any combination of the following enforcement actions, remedies, and penalties in any particular order to correct, stop, abate or enjoin a violation of the UDO:

1. **Stop Order.** The Zoning Administrator or designee may issue and serve upon a person violating the UDO a stop order requiring that the person stop all actions in violation of the UDO, including illegal occupation of a building or structure, illegal work being done, or any other action in violation of the UDO.
2. **Permit Revocation.** Any permit, development approval, or other form of authorization required under the UDO may be revoked if City Staff determines that:
   (1) There is a failure to comply with the approved permit, development approval, plans, specifications, or terms or conditions required under the permit or development approval;
   (2) The permit or development approval was procured by false representation; or
   (3) The permit or development approval was issued in error, provided that it has not been detrimentally relied upon.
   (4) Written notice of revocation shall be served upon the landowner, the landowner's agent, or other person to whom the permit or development approval was issued, and such notice may be posted in a prominent location at the place of violation. No work or construction shall proceed after service of the revocation notice.

C. **Civil Remedies.** In addition to all other remedies and penalties outlined in this section, the City of Sumter may institute an action or proceeding for injunction or mandamus or other appropriate action or proceeding to prevent, abate, or correct a violation of the UDO, to prevent the occupancy of a structure or land or to require removal of structures or objects that are in violation of the UDO. Each day a person violates the UDO shall be considered a separate offense.

D. **Private Civil Relief.** In case a structure or land is, or is proposed to be, developed or used in violation of the UDO, an adjacent or neighboring landowner or tenant who would be specially damaged by the violation may to the extent authorized by *S.C. Code 1976, § 6-29-950*, in addition to any other remedies, institute injunction, mandamus, or other appropriate action or proceeding to prevent the unlawful development or use, to correct or abate the violation, or to prevent the occupancy of the structure or use of the land.

E. **Remedies Cumulative.** The remedies provided for violations of the UDO, whether civil or criminal, shall be cumulative and in addition to any other remedy provided by law, and may be exercised in any order.

5. DEFINITIONS

5.1 INTENT

For the purposes of interpreting this Ordinance, certain words, concepts, and ideas are defined herein. Except as defined herein, all other words used in this Ordinance shall have their everyday meaning as determined by the common dictionary definition.

5.2 RULES OF CONSTRUCTION

For the purposes of these regulations, the following rules of construction apply.

A. These regulations are construed to achieve the purposes for which they are adopted. Interpretations shall be guided by statements of intent
B. In the event of any conflict in standards applying to a project, the standard more consistent with the Comprehensive Plan shall apply
C. The words "shall", "must", and "will" are mandatory in nature, implying an obligation or duty to comply with the particular provision
D. The word "may" is permissive in nature except when used in the negative
E. The word "should" whether used in the positive or the negative, is a suggested guideline.
F. References to "days" are construed to be calendar days, unless the context of the language clearly indicates otherwise.

5.3 DEFINITIONS OF TERMS

Abandonment. The termination, relinquishment, or discontinuance of a property or use for a continuous period pursuant to the timeframes in *Chapter B.16* or other applicable sections of this UDO.

Abutting. The condition of 2 parcels of land having a common property line or boundary, including cases where 2 or more parcels of land adjoin at the corner, but not including cases where parcels of land are separated by a street, water body or right-of-way.

Accessory Dwelling Unit (ADU). An ADU is a self-contained dwelling unit—including a sleeping area, kitchen, and bathroom, as well as its own external entrance—that is constructed on a lot in addition to an existing single-family residence. The ADU use is subordinate to the principal

dwelling and can function autonomously if necessary. ADUs may also be referred to as granny flats and mother-in-law suites, but is not limited to these names.

Accessory Structure. A subordinate or incidental structure, of which the use is incidental to the principal structure and is located on the same lot as the principal structure.

Accessory Use. A use that is incidental, appropriate, and subordinate to the principal use of land or buildings and located on the same lot. Accessory uses are allowed by right in conjunction with the primary use unless stated otherwise in these regulations.

Agriculture (See *also* **Farm).** The use of land for agricultural purposes, including farming, dairying, pasturage agriculture, horticulture, floriculture, viticulture, and animal and poultry husbandry and the necessary accessory uses for packing, treating, or storing the produce; provided, however, that the operation of any such storing or packing process meets the requirements in this ordinance.

Airport. A place where aircraft may take off or land, discharge or receive cargo or passengers, be repaired or serviced, take on fuel, or be stored. The place shall include landing areas, runways, and other facilities designed, used, or intended to be used for the landing or taking off of aircraft, including all necessary taxiways, aircraft storage and tie-down areas, hangars, and other necessary buildings and open spaces, as well as terminals, parking facilities, and passenger loading and unloading areas.

Alley. A public or private street primarily designed to serve as a secondary access to the side or rear of those properties whose principal frontage is on some other street.

Alteration. Any change in the construction, repair, size, configuration, or location of a structure; or a change in the use of a structure or lot from a previously approved or legally existing size, configuration, location or use.

Amortize. To force the discontinuance of a non-conforming use within a specified period of time.

Amusement/Theme Parks. An outdoor facility designed for entertainment purposes which may include structures or buildings, motorized or non-motorized rides, games, and booths for the conduct of sporting events or games.

Animal Care. A facility where animals are provided medical care. Animals may be boarded or stay overnight within a completely enclosed building.

Animal Kennels. The use of land for the purpose of boarding animals. May include a pet resort which provides day care for pets in addition to grooming and training/classes.

Ash Garden. A parcel of land located adjacent to or as part of a religious and/or consecrated facility used for the interment of cremated remains of deceased persons. This parcel should include an area for the scattering of cremated ashes in a garden-like setting.

Application for Development. The application form and all accompanying documents required by ordinance for approval of a subdivision plat or site plan.

Approving Authority. Either City Staff, City Council, the Sumter City-County Planning Commission, the Sumter City-County Board of Zoning Appeals, or the Design Review Board as specified by the UDO, unless otherwise specifically stated by the UDO.

Artisan Food and Beverage Manufacturing. A small-scale fabrication or production use by skilled workers which involves the production or assembly of food or goods with no noxious by-products.

Automobile Wrecking Yard (*See also* Junkyard). The dismantling or wrecking of used motor vehicles or trailers, or the storage, sale, or dumping of dismantled or wrecked vehicles or their parts. The presence on any lot or parcel of land of 2 or more motor vehicles, which for a period exceeding 30 days, have not been capable of operating under their own power and from which parts have been or are to be removed for reuse or sale, shall constitute prima-facie evidence of an automobile wrecking yard.

Auxiliary Uses. Auxiliary establishments are subordinate to and serve a primary establishment or use. They may or may not be located on the same lot or parcel as a primary use, unlike accessory uses which must be located on the same lot as the principal or primary use.

A-Weighted Decibel. A-weighted decibel (dBA) is an expression of the relative loudness of sounds as perceived by the human ear. This method modifies raw sound pressure levels across the frequency spectrum to mimic human hearing sensitivity.

Bail Bonding. A licensed professional or company that provides bail bonds.

Bank/Financial Institution. Banks and financial institutions characterized by activities conducted in an office setting and generally focusing on personal or financial services.

Bar. Any premises wherein alcoholic beverages are sold at retail for consumption on the premises and minors are excluded therefrom by law. It shall not mean a premises wherein such beverages are sold in conjunction with the sale of food for consumption on the premises and the sale of said beverages comprises less than 25% of the gross receipts.

Base Flood. The flood having a 1% chance of being equaled or exceeded in any given year. Also known as the 100-year flood.

Base Flood Elevation. The crest elevation in relation to a mean sea level expected to be reached by the 1% annual chance flood, i.e., the 100-year flood.

Basement. The lowest level or story which has its floor sub grade on all sides.

Bed and Breakfast Inn. A house, or portion thereof, where short-term lodging rooms and meals are provided to guests. The operator of the inn shall live on or in adjacent premises.

Billboard. A surface whereon advertising matter is set in view conspicuously and which advertising does not apply to premises or any use of premises wherein it is displayed or posted.

Boarding House. An establishment with lodging for 5 or more persons where meals are regularly prepared and served for compensation and where food is placed upon the table family style, without service or ordering of individual portions from a menu.

Borrow Pit. Any place or premises where dirt, soil, sand, gravel, or other material is removed below the grade of surrounding land for any purpose other than that necessary and incidental to site grading or building construction.

Botanical Garden. Land where trees, shrubs, and/or other living plants are grown, exhibited or labeled for scientific, education, conservation, or passive, recreational purposes, not including the harvest of plants or their produce.

Buildable Area. That portion of any lot which may be used or built upon in accordance with the regulations governing the zoning district within which the lot is located when the front, side and rear yard and buffer requirements that have been subtracted from the total lot area.

Breweries. Any establishment where malt liquors are manufactured and packaged on-premises, manufacturing more than 15,000 barrels of malt liquor on its licensed premises each calendar year.

Breweries, Micro. Any establishment where malt liquors are manufactured and packaged on-premises or off-premises, manufacturing no more than 15,000 barrels of malt liquor on its licensed premises each calendar year.

Broadcast Facility. Any facility which deals in the broadcasting of television, radio, or satellite programming.

Building. Any structure established for the support, shelter, or enclosure of persons, animals, and property.

Building, Principal. A building in which the primary use on the site is conducted.

Buffer Area. A landscaped area intended to separate and partially obstruct the view of 2 adjacent land uses or properties from one another.

Caliper. Tree caliper, or diameter, as measured 6 inches above the ground for young and recently planted trees. Measurement of mature trees is based on Diameter at Breast Height (DBH).

Canopy. A structure which is entirely supported from the building and has at least a 9 ft. clearance between the lowest point or projection and a sidewalk immediately below.

Canopy Tree. A deciduous tree that forms the top layer of vegetation in a forest. Examples of such trees include oak, hickory, maple, and poplar.

Carwash. Commercial establishments which allow for the washing of motor vehicles and vehicle cleaning services.

Cemetery. A parcel of land used for interment of the dead in the ground or in a mausoleum.

Certificate of Appropriateness. A certificate of approval issued by the Design Review Board for alteration, construction, removal, or demolition of a structure within a Design Overlay District.

Certification of Zoning Compliance. A document issued by the Zoning Administrator which indicates that plans for a proposed development and/or use meet all applicable codes and regulations. This may include site plan approval letters, zoning approval on building permits, final zoning inspection approvals, subdivision plat approvals, zoning approval on business license requests, etc.

City Staff. All staff operating under the general direction of the City Council and City Manager and under the specific direction of the City's Department Heads to administer the provisions of this Ordinance (UDO).

Civic Organization. A non-profit organization committed to community development.

Clinic. An establishment where medical or dental patients, are not lodged overnight, but rather are given examinations and treatment.

Club, Private. An organization catering exclusively to members and their guests including buildings and grounds with commercial activities serving the membership only.

Complete Application. An application determined by the review authority to include all of the information required by the applicable application form or the minimum information as determined by City Staff.

Compost. The humus-like product of the process of composting waste.

Composting Facility. Means any facility used to provide aerobic thermophilic decomposition of the solid organic constituents of solid waste to produce a stable, humus- like material.

Condominium. A unit in a multi-unit structure owned by an individual who has use of all common areas associated with that structure.

Construction and/or Specialty Trade Contractors. Establishments whose primary activity is performing building construction services or specific activities involved in building construction. Work performed may include new work, additions, alterations, maintenance, and repairs.

Convenience Store w/ Fuel Sales. Convenience stores with fueling stations that are involved in the retail sales of fuel for motor vehicles, and convenience items including but not limited to food, beverages, tobacco products, and other similar products as its primary sales.

Convenience Store w/o Fuel Sales. Convenience stores involved in the retail sales of convenience items including but not limited to food, beverages, tobacco products, and other similar products as its primary sales.

Correctional Facility. A private or government establishment primarily engaged in managing and operating correctional institutions. This establishment is designed for the confinement, correction, and rehabilitation of adult or juvenile offenders sentenced by a court.

Cottage Court Residential Development. A cottage court residential development allows for small-lot residential development in a manner that organizes various dwelling types around a common open space, designed as a cohesive whole and maintained in shared stewardship by residents or by a common owner responsible for maintenance and upkeep.

Country Club. Privately owned club with a membership quota and admittance by application, invitation or sponsorship, that offers both a variety of recreational sports and facilities for dining, overnight lodging, or for entertaining of members. Athletic offerings include, but are not limited to, golf, tennis, and swimming.

Commercial Truck and Trailer Parking. A surface parking area or structure which contains parking space for short or long-term lease to individual customers for parking of commercial vehicles and/or trailers.

Crematorium. A facility with a furnace for cremating dead bodies, either animal or human.

Crosswalk Visibility. The degree to which a marked pedestrian crossing is clearly observable to approaching motorists and pedestrians under various conditions, including daylight, nighttime, and inclement weather. Crosswalk visibility is influenced by factors such as pavement markings,

signage, lighting, sight distance, and the presence of obstructions. Adequate visibility is essential to ensure pedestrian safety and compliance with traffic regulations.

Crop Production. The production of crops, plants, vines, and trees (excluding forestry operations), including but not limited to grain and vegetable farms, horticulture, greenhouses, orchards, tree nurseries, hydroponics, and aquaponics.

Day Care Services.

A. **Day Care, Home.** A family day care home is one in which care is given by a family member during the day only for 1 to 6 children, including the day care provider's own children. Home Day Care services are regulated by the S.C. Department of Social Services.
B. **Daycare, Licensed Child Care Service.** Licensed child care services shall mean or include any home, center, agency, or place where 1 to 12 children not necessarily related to the operator are received for custodial care, apart from their parents, whether for compensation, reward, or otherwise, during part or all of the day or night and upon any number of successive days or nights. Licensed child care services are regulated by the S.C. Department of Social Services.

Density. The number of dwelling units per acre of land developed or used for residential purposes. Unless otherwise clearly stated, density requirements in this Ordinance are expressed in dwelling units per net acre; that is, per acre of land devoted to residential use and common open space exclusive of land utilized for streets, alleys, parks, playgrounds, school grounds, or other public uses.

Developed Lot or Parcel. A developed lot or parcel is one which contains $50,000 in commercial, industrial or business improvements, according to records in the tax assessor's office or receipt of a valid building permit in said amount.

Diameter at Breast Height (DBH). The diameter of an existing tree, measured 4.5 ft. from the ground level. For multi-stemmed varieties, add the individual stem widths to calculate DBH.

Digital Sign. Means a sign or billboard that utilizes digital or light-emitting diodes (LEDs) or similar electronic methods to create a changeable image display area.

Distillery. A manufacturer who distills, blends, and bottles alcoholic liquors on the licensed premises with an alcohol content greater than 17% and who produces more than 125,000 cases per year at the licensed premises.

Distillery, Micro. A manufacturer who distills, blends, and bottles alcoholic liquors on the licensed premises with an alcohol content greater than 17% and who produces a maximum quantity of 125,000 cases per year at the licensed premises.

Donation Bin. A mobile structure that is located outside of the walls of an enclosed building and is used to receive materials including but not limited to clothing, office supplies, and other household goods donated by the public.

Drinking Place. A commercial establishment whose primary activity is the sale of alcoholic beverages to be consumed on the premises. Such establishments are properly licensed by the South Carolina Department of Revenue – Alcohol Beverage Licensing Commission. Drinking places include, but are not limited to, establishments referred to as bars, beer gardens, beer parlors, taverns, cabarets, cocktail lounges, saloons, tap rooms, and wine bars. Cigar Bars and Hookah Lounges with any on-premises consumption alcohol sales are included in this definition.

Eating places, with on-premises consumption alcohol sales where the primary activity is the sale of food are not included within this definition.

Driving Range. An area, whether public or private, designed for practicing golf techniques, specifically for driving golf balls from a central tee location.

Dry Cleaning. Establishment dedicated to onsite cleaning of clothes, offering the renting of on-site equipment for the cleaning, and washing of laundry to individual customers or pick-up dry-cleaning services. These establishments are intended to offer personal services to individual customers and not wholesale dry cleaning.

Dwelling. A building or portion of a building arranged or designed to provide living quarters for 1 or more families.

Dwelling, Cluster. A development design technique that concentrates buildings in specific areas on the site to allow the remaining land to be used for recreation, common open space, and preservation of environmentally sensitive features. It is applied principally to single-family residential subdivisions that permit a reduction in lot area provided there is no increase in the number of lots permitted under a conventional subdivision and the resultant land area is devoted to open space.

Dwelling, Group. A building or portion of a building intended for occupancy by several unrelated persons. The term "group dwelling" includes the terms "rooming house," "fraternity house," and "sorority house." This definition is not to be construed as being the same as a "group home", which is separately defined in *Chapter A.5.3.*

Dwelling, Manufactured Home/Mobile Home. A manufactured home is a transportable structure of 1 or more sections built on a permanent metal chassis and designed to be towed. The term "manufactured home" as used in this Ordinance shall not include prefabricated, modular, or unitized dwellings placed on permanent foundations, nor shall it include travel trailers, motor homes, campers, or similar units designed for recreation or other short-term use. Manufactured homes are constructed after June 15, 1976, and have a United States Department of Housing & Urban Development (HUD) label/tag certifying that the home was constructed in accordance with HUD Manufactured Home Construction and Safety Standards.

Dwelling, Multi-Family. Multi-family dwelling units are characterized by a building that contains 5 or more dwelling units on 1 parcel of land. This definition includes condominiums or multifamily apartments.

Dwelling, Single-Family Detached. A residential building containing 1 dwelling unit, to be occupied by one family. For regulatory purposes, the term is not to be construed as including manufactured/mobile homes, recreational vehicles, travel trailers, housing mounted on motor vehicles, tents, houseboats, or other forms of temporary or portable housing.

Dwelling, Single-Family Attached. A residential building consisting of 2 attached units joined along a single lot line but totally separated from the other by an unpierced common wall from ground to roof.

Dwelling, Duplex, Triplex, or Quadruplex. A residential building containing 2 dwelling units (duplex), 3 dwelling units (triplex), or 4 dwelling units (quadruplex), usually under single ownership, consolidated into a single structure. This dwelling type is on a single lot and contains common walls. For regulatory purposes, the term is not to be construed as including mobile homes,

recreational vehicles, travel trailers, housing mounted on motor vehicles, tents, houseboats, or other forms of temporary or portable housing.

Dwelling, Townhome. A series of at least 3 or more attached single-family dwelling units. Each dwelling is joined to 1 other dwelling along a single lot line but is totally separated from the other by an unpierced common wall from ground to roof.

Dwelling Unit. A single unit providing completely independent living facilities for 1 or more persons including permanent provisions for living, sleeping, eating, cooking, and sanitation.

Disposal. The discharge, deposit, injection, dumping, spilling, leaking, placing of any hazardous waste into or on any land or water so that such hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters.

Easement. The right to use or occupy real property of another owner for a purpose.

Easement, Private Access. A privately owned and maintained right-of-way created by express grant or reservation in an instrument of record at the Sumter County Register of Deeds, which connects directly to a publicly maintained and dedicated street that provides vehicular access to lots.

Electric Message Sign. A sign, display, or device, or portion thereof, which electronically changes the fixed display screen composed of a series of lights, including light emitting diodes (LED's), fiber optics, or other similar new technology where the message change sequence is accomplished immediately. Electronic changeable face outdoor advertising signs include computer programmable, microprocessor controlled electronic or digital displays that display electronic, static images, static graphics, or static pictures, with or without textual information.

Environmental Assessment. A study to determine the on-site and off-site effects on natural resources from the development of certain land uses outlined in this ordinance wherein an Environmental assessment is called for. The principal items to be investigated includes on-site and off-site water pollution; on-site and off-site soil erosion; noise; heat; glare; vibration; trash & litter; and air pollution emanating from the site.

Evergreen Tree. A coniferous or deciduous tree that remains green throughout the year.

Extended Stays. A residential or lodging facility designed and operated to accommodate guests for periods typically exceeding 1 week, but not intended for permanent residency.

Exterior Architectural Appearance. The architectural characteristics and general composition of the exterior of a structure, including but not limited to the kind, color, and texture of the building material and the type, design, and character of all windows, doors, light fixtures, signs, and appurtenant elements.

Façade. The exterior wall of a building facing a lot line or right-of-way, from the grade to the eave or highest point of a roof. Facades may be on the front, side or rear of the building.

Family. An individual, or 2 or more persons related by blood or marriage living together, or a group of individuals of not more than 6 persons who are not related by blood or marriage but are living together as a single housekeeping unit. The provisions of this definition do not apply to a group of up to 6 persons that is intended to exclusively serve individuals with protected characteristics under the Federal Fair Housing Act or to a group home of up to 9 persons that

exclusively serves individuals meeting the description contained in *S.C. Code Section 6-29-770 (E) through (H)*. Group homes serving individuals that are not protected under the *Federal Fair Housing Act* and/or *S.C. Code Section 6-29-770 (E) through (H)* shall not be considered a family for the purposes of this Ordinance and shall be treated as a non-residential use subject to the regulations outlined for each respective zoning district.

Farm or farmland (*See also* **agriculture**). A farm is a parcel of land that is used primarily for commercial, soil-dependent cultivation of agricultural crop production and/or for the raising of livestock.

Firewood Shop. Firewood shop is a business that processes timbers into fire logs and sells the wood on site.

Flex Facility. Uses which take place within a building, allowing for a mixture and/ or range of office, warehouse uses research and development uses. Flex use buildings allow for a combination of offices, wholesale, and light manufacturing with proportions of each use subject to the needs of a user.

Flood Plain. Any land area susceptible to be inundated by water from the base flood. The term refers to that area designated as subject to flooding from the base flood (100-year flood) on the "Flood Boundary and Floodway Map" prepared by the Federal Emergency Management Agency (FEMA).

Floor Area Ratio. FAR is calculated by dividing the total size of the building/structure (in square feet) by the total size (in square feet) of the lot on which the building is located.

Funeral Home w/ Crematorium. A facility used for the preparation of the deceased and the display of the deceased for funeral services. The facility includes a furnace for cremating dead bodies, either animal or human. The facility may include space and facilities for embalming and preparation of the dead for burial, performance of autopsies, the storage of caskets and funeral supplies.

Funeral Home w/o Crematorium. A facility used for the preparation of the deceased and the display of the deceased for funeral services. The facility may include space and facilities for embalming and preparation of the dead for burial, performance of autopsies, the storage of caskets and funeral supplies.

Garage. Any building, premises and land in which or upon which a business, service or industry involving the maintenance, servicing, repair, or painting of vehicles is conducted or rendered.

Garage, Private. An accessory building or portion of a principal building used for the storage of private motor vehicles and in which no business, occupation, or service for profit is in any way connected.

Garbage Container. A container used for the temporary storage of rubbish or materials to be recycled, pending collection by a sanitation truck or other means. Also referred to as a dumpster.

Gasoline and Alternative Motor Fuels Service Station. Site primarily for the sale of fuel for motor vehicles. Sites fitting this definition typically have between 2 and 20 vehicle fueling positions and a small building (less than 2,000 square feet) that houses a cashier and limited motor vehicle maintenance supplies and general convenience products.

Gasoline and Alternative Motor Fuels Service Station with Convenience Store. Sites containing a convenience store with a gross floor area between 2,000 and 5,000 square feet and 10 or more passenger vehicle fueling positions. Common convenience items available include newspapers, coffee or other beverages, and snacks. Some locations include prepared food items.

General Equipment Rental Services. The rental of supplies and large equipment primarily intended for use by construction, general, landscaping, or industrial contractors, including but not limited to hoists, lifts, forklifts, and commercial capacity generators and compressors, but not including car or truck rentals.

Golf Courses. Parks are uses of land for playing golf, improved with trees, greens, fairways, hazards, and other similar improvements.

Government Office. A building, or portion of a building, wherein government activities are performed involving predominately administrative, record keeping, professional, and/or clerical operations and where professional services are rendered. For the purpose of this ordinance "government" includes local, state, and federal government agencies.

Grocery. A store that is primarily engaged in selling food at retail for home preparation and consumption, such as grocery stores, fruit and vegetable markets, retail bakeries, and other specialty food products stores. A grocery store may sell non-food commodities, such as beverages, dairy, dry goods, fresh produce, and other perishable items, frozen foods, household products, paper goods, and may sell beer and wine for consumption off the premises with the appropriate beverage license.

Gross Floor Area (GFA). The sum of the floor area for each of the building's stories measured from the exterior limits of the faces of the structures, including basement floor area. It does not include enclosed porches or any floor space in an accessory building or in the principal building which is designed for parking or motor vehicles.

Group Home. A residence for persons requiring care or supervision. For the purposes of this Ordinance "group home" qualifying as a permitted use shall be defined as a home intended to exclusively serve individuals with protected characteristics under the Federal Fair Housing Act or to exclusively serve those individuals described in *S.C. Code § 6-29-770 (E) through (H)* as further defined and described in *Chapter B.9.2.L.* of this Ordinance.

A. The Federal Fair Housing Act defines persons with a disability to mean those individuals with mental or physical impairment that substantially limit one or more major life activities. The term mental or physical impairment may include conditions such as blindness, hearing impairment, HIV infection, mental retardation, alcoholism, drug addiction, chronic fatigue, learning disability, head injury, and mental illness. The term major life activity may include seeing, hearing, walking, breathing, performing manual tasks, caring for one's self, learning, speaking, or working. The Fair Housing Act also protects persons who have a record of such an impairment, or are regarded as having such an impairment.

   Current users of illegal controlled substances, persons convicted for illegal manufacture or distribution of a controlled substance, sex offenders, and juvenile offenders are not considered disabled under the Fair Housing Act by virtue of that status.

   The Fair Housing Act affords no protections to individuals with or without disabilities that present a direct threat to the persons or property of others. Determining whether someone poses such a direct threat must be made on an individualized basis.

B. *S.C. Code § 6-29-770 (E) through (H)* refers to a home serving 9 or fewer mentally or physically handicapped persons provided the home provides care on a 24 hour basis and is approved or licensed by a state agency or department or under contract with the agency or department for that purpose. Prior to locating the home for the handicapped persons, the appropriate state agency or department or the private entity operating the home under contract must first give prior notice to the local governing body administering the pertinent zoning laws, advising of the exact site of any proposed home. The notice must also identify the individual representing the agency, department, or private entity for site selection purposes.

Hazardous and Nuclear Waste Disposal Sites. Any site used for the underground burial of hazardous chemicals or nuclear wastes, or the processing by incineration or other methodology of disposal. This term also includes infectious waste generated in the health care community in the diagnosis, treatment, immunization, or care of human beings; generated in autopsy or necropsy; generated in research pertaining to the production of biologicals which have been exposed to human pathogens; generated in research using human pathogens where the disposal of such materials poses a hazard to environmental conditions.

Heavy. Describes a level of intensity or scale in land use or operations that typically involves substantial physical impact, large equipment, high volumes of materials, or significant environmental considerations. "Heavy" may refer to industrial, manufacturing, or transportation activities that generate noise, vibration, emissions, or traffic beyond what is typical for light or moderate uses. Examples include heavy manufacturing, heavy equipment storage, and heavy truck traffic.

Height. The vertical distance from the finished grade along the front of the structure to the highest point of the structure.

Higher Education (College, Junior College, University, Technical). Universities, colleges, or vocational schools are higher learning establishments that provide post public school (including associate, bachelor, graduate, doctoral), vocational, and technical degrees and skills.

Historic Zoning Overlay. An area designated by Ordinance of City Council containing within definable geographic boundaries 1 or more historically significant properties, buildings, or places.

Home Occupation. The use of a dwelling unit on the same lot for a commercial activity that is clearly subordinate to the principal use of the dwelling unit for residential purposes.

Home Owners Association (HOA). A corporation formed for the purpose of marketing, managing, and selling of homes and lots in a residential subdivision. It grants the developer privileged voting rights in governing the association, while allowing the developer to exit financial and legal responsibility of the organization, typically by transferring ownership of the association to the homeowners after selling off a predetermined number of lots. Membership in a home owners association by a residential buyer is typically a condition of purchase; a buyer isn't given an option to reject it.

Hospital. An establishment which primarily engages in providing medical treatment, including (but not limited to) diagnostic services, surgical services, as well as continuous nursing services.

Hotel/Motel. Transient accommodations arranged for short term stays for compensation. This does not include patient transient accommodations, shelters for the homeless, boarding homes, or short-term rentals.

Impervious Surface. Impervious surfaces are those that do not absorb water. All buildings, paved parking areas, driveways, roads, sidewalks, and any areas in concrete and asphalt shall be considered impervious surfaces within this definition. In addition, other areas determined by the Zoning Administrator to be impervious within the meaning of this definition also will be classed as impervious surfaces.

Impervious Surface Ratio. The impervious surface ratio is a measure of the intensity of land use. It is determined by dividing the total area of all impervious surfaces within the site by the total site area.

Infill Development. Development or redevelopment of land that has been bypassed, has remained vacant, and/or is underused as a result of the continuing urban development process. Infill sites are typically served by or are readily accessible to infrastructure (services and facilities).
Industrial Uses, Heavy. Any business or establishment that involves dangerous, noxious, offensive uses. Uses may involve smoke, odor, noise, vibration, or threats to safety and general wellbeing of the public.

Industrial Uses, Light. Any business or establishment which deals in light industrial uses including light manufacturing (such as assembly, printing, repair), research and development, and self-service storage.

Inert Dump Site. A site designed and intended as a repository for material whose rate of decomposition by micro-organisms or chemical oxidation is such that environmental pollution does not result. Examples include broken brick, concrete, and asphalt.

Institutional Uses. Uses which are supportive of the residential community. They provide indoor space for recreation, hobbies, meetings, education, and worship, as well as cultural facilities, group quarters for religious groups and the infirm or elderly. While some uses may be operated for private profit, they duplicate services that are generally provided by public or non-profit groups.

Irrigation System. A water distribution system that ensures that all plant materials and landscaped areas are watered on a regular basis.

Low Impact Development (LID). Development that minimizes or eliminates pollutants in storm water through natural processes and maintaining pre-development hydrologic characteristics, such as: flow patterns, surface retention, and recharge rates.

Manned Convenience Center. A facility used for the collection and transfer of household waste and recyclable waste products, including such items as aluminum, glass, cardboard, plastics, white goods, paper, tree limbs, etc. Such centers shall have employee(s) on the site during all operating hours.

Manufactured Home/Mobile Home. See Dwelling, Manufactured Home.

Manufactured Home Park. A lot or parcel with space, improvements and utilities for the long-term parking of 3 or more manufactured homes which may include services and facilities for the residents.

Manufactured Home Space. A plot of ground within a manufactured home park designed for the accommodation of 1 manufactured home.

Manufacturing. Manufacturing includes use types involved in the manufacturing, processing, fabrication, packing, or assembly of goods. Products may be finished or semi-finished and are generally made for the whole sale market, made for transfer to the other plants, or made to order for firms or consumers.

Major Vehicle Service. Facility dealing in more than minor vehicle service as defined. Major vehicle service includes an auto body shop, vehicle painting, repair of motor vehicle components such as engines and transmissions.

Medical/Dental Facility. A facility engaged in the examination, diagnosis, and treatment of medical, dental, chiropractic, ophthalmologic, pediatric care, or other health care practices.

Mini-Warehouse. A building or group of buildings in a controlled-access and fenced compound that contains individual compartmentalized and controlled-access stalls or lockers for the dead storage of customer's goods or wares.

Minor Vehicle Service and Vehicle Part Sales. Minor vehicle service establishments are involved with body detailing, and/or mechanical repairs of automotive vehicles. These repairs shall be minor in nature and any services rendered on site shall be minor in nature as well.

Mobile Food Unit. All mobile food units shall be manufactured for the express purpose of mobile food vending. Mobile vending shall be from a commercially manufactured (not homemade) commercial grade cart or vehicle of a type outlined below.

A. **Cart.** Any portable vending device, pushcart or other wheeled vehicle or device which may be moved without the assistance of a motor and which is not required to be licensed and registered by the SCDMV, used for the displaying, storing or transporting of articles offered for sale by a vendor. Carts come in 2 varieties, those where the operator stands on the ground or those where the operator stands inside the cart. Typically there is no electric or mechanical refrigeration associated with the cart.
B. **Frozen Food Truck/Cart.** A mobile motorized or non-motorized concession on wheels that normally contains a commercial freezer. All products served are frozen and prepackaged.
C. **Soft Serve Ice Cream Truck.** A motorized vehicle that has a soft serve ice cream machine on board along with toppings and contains commercial refrigerators/freezers that are permanently affixed inside the truck; sink systems that are large enough to handle all items that must be washed/rinsed/sanitized in the concession including a 3-compartment sink with a faucet; hand washing sink with faucet, and a water system that can handle the hot water needs of the food service; there must also be adequate food/dry goods storage; and an adequate wastewater storage tank.
D. **Catering-Type Truck.** A motorized truck that carries prepackaged and non- prepackaged hot and cold type foods. Catering trucks that have a commercial grill, soup warmer, and/or undertake on-site food preparation must provide sink systems that are large enough to handle all items that must be washed/rinsed/sanitized in the concession to include a 3-compartment sink with a faucet; hand washing sink with faucet, and a water system that can handle the hot water needs of the food service, there must also be adequate food/dry goods storage, and an adequate wastewater storage tank.

Mobile Vending/Vendor. The individual and the act of selling goods from a stationary cart.

Modular Building Unit. A building including the necessary electrical, plumbing, heating, ventilating, and other service systems, manufactured off-site and transported to the point of use for installation or erection, with or without other specified components, as a finished building and not designed for ready removal to another site. This term is not to be limited to residential dwellings.

Night Club. An establishment operated as a place of entertainment, characterized by either of the following as a primary activity: (1) live, recorded, or televised entertainment, including but not limited to performance by musicians, disc jockeys, comedians, or other entertainers; and (2) dancing, where this primary activity is coupled with on-premises sale and consumption of alcoholic beverages via proper licensing by the South Carolina Department of Revenue (SCDOR) – Alcohol Beverage Licensing Commission (ABL) or on-premises consumption by patrons who bring to the establishment an alcoholic beverage(s) to be consumed on the premises in compliance with applicable state law. Such establishments may either be private or open to the public. Often, such establishments require entry cover charges or other entry considerations such as dues, membership fees, etc. Such establishments may also be referred to as discotheques, dancehalls, etc.

Non-Conforming. Lots, structures, signs, uses of land and structures, and characteristics of uses which are prohibited under the terms of this Ordinance, but were lawful at the date of the Ordinance's enactment.

Non-Conforming Use. A use which was lawful on the date it was established, but is no longer a permitted use within that zoning district.

Non-Residential Use. A principal use of land for other than residential purposes, i.e. commercial, industrial, institutional.

Nursery. An establishment whose primary function is the retail sales of live plants and trees, mulch, compost, and the like to individual customers or wholesale.

Open Space. Open space is any land area not occupied by buildings, structures, storage areas, balconies, patios, porches, or decks, excluding land within a right-of-way or easement. These areas are typically preserved for purposes such as recreation, conservation, scenic value, and ecological functions. They can be publicly or privately owned and may include parks, amenity centers, greens, greenways, and plazas/squares.

Open Space Ratio. The open space ratio is a measure of the intensity of land use. It is arrived at by dividing the total amount of open space within the site by the Total Site Area.

Ordinance. A legislative enactment.

Outdoor Storage. An outdoor area designated for the extended outdoor storage of cars, boats, other vehicles. This use is not to be confused with commercial parking, which excludes outdoor storage. Outdoor storage is for the extended storage of cars, boats, and other vehicles, machinery, and equipment or material.

Parks, Public. Parks are uses of land which allow for recreation for the general public or land intended to provide opportunities for the enjoyment, conservation or preservation of natural features and resources.

Parking Lots and Structures. A surface parking area or structure which is commercial available to the public, but may also be used to accommodate employees, customers, and clients. No extended parking beyond overnight parking is permitted unless associated with transportation facilities such as an airport, rail, or bus terminal.

Parking Space. An all-weather dust free surface area, either connected to a public or private roadway or located within the right-of-way of a roadway.

Pawn Shop. Pawn shops are involved with the retail sales of secondhand merchandise and offer personal loans secured by consumer goods or other personal property.

Personal Services. Establishments that cater to personal services for a community. May also provide personal services or entertainment or provide product repair or services for consumer and business goods.

Pervious (Permeable) Pavement. A paving system that allows water to move through the driving surface into the stone base below.

Poultry House, Commercial. A building or structure where chickens, turkeys, ducks, or other domestic birds are raised exclusively for commercial use, and where the structure(s) in which they are housed is not less than 200 sq. ft. in aggregate.

Produce. Fresh fruits, vegetables, and other edible plant materials or plant by-products such as herbs, spices, edible mushrooms and honey.

Professional Office. A building, or portion of a building, wherein activities are performed involving predominately administrative, record keeping, professional, and/or clerical operations and, where in the case of professions such as dentists, physicians, lawyers or engineers, the facility where such professional services are rendered.

Public Parking. Accessible to the general public without restriction based on membership, residency, or private affiliation. Public parking may be provided by a governmental entity or a private party and includes on-street parking, municipal lots, and publicly accessible spaces within private developments. These facilities are intended to support access to commercial, civic, recreational, and residential areas.

Public Utilities. Companies and persons generating, transmitting, distributing, transporting and/or collecting in any manner public infrastructure including but not limited to electricity (electrical utility), heat (other than means of electricity), water, sewer, communications (telephone utility) and cable to the public or any portion of for compensation.

A. **Major Public Utility.** Infrastructure services providing regional or community-wide services.
B. **Minor Public Utility.** Infrastructure services that need to be located in or near the development or use it is intended to serve. These utilities are typically unmanned and include water towers, pump stations, and service compounds.

Quasi-Judicial Action. A land use action or hearing involving the application of a set of rules or criteria to specific individuals or situations.

Recreation (Active). Recreational features, often requiring equipment and taking place at prescribed places, sites or fields, which allow for the active recreational needs of residents or users of the development in which they serve.

Recycling and Waste Related Services. Any facility which deals in the recycling, disposal, or elimination of used materials or waste.

Recreation (Passive). Recreational features that do not require prepared facilities like sports fields or pavilions and require minimal disruption to a site.

RV Parks/Campground Facilities. RV Parks/Campground Facilities are uses of land for locating trailer, tent, tent trailer, recreational vehicle, pickup camper, van or other similar device used for camping.

Recreational Vehicle. A vehicular type portable structure without a permanent foundation, which can be towed, hauled or driven and primarily designed as temporary living accommodation for recreational, camping and travel use and including but not limited to travel trailers, truck campers, camping trailers and self-propelled motor homes.

Rehabilitative and Mental Health Facility. A healthcare facility that provides substance abuse treatment and/or mental health services. Such facilities provide overnight, yet short-term, care and treatment and may include sleeping rooms for healthcare providers and members of the patients' families.

Redevelopment. Any installation of improvements, new construction, or reconstruction on a lot or site which already has pre-existing uses.

Religious Institutions. A facility intended as a house of worship that hosts organized religious services.

Restaurant, Full Service. Establishments that prepare and sell food for on-premises consumption or off premises consumption. Includes a customer service area consisting of tables, chairs, or customer counters.

Restaurant, Fast Casual. Establishments that prepare and sell food for on-premises consumption or off premises consumption may include a drive-through. Includes a customer service area consisting of tables, chairs, or customer counters.

Restaurant, w/ Drive Through. Establishments that prepare and sell food for on-premises consumption or off premises consumption including a drive-through. Includes a customer service area consisting of tables, chairs, customer counters.

Retail, Neighborhood (Maximum 5,000 sq. ft). General retail sales and service establishments involved in the sale, lease or rent of new or used products and services intended to provide for residents of the immediate area.

Retail, General (Maximum 20,000 sq. ft). General retail sales and service establishments involved in the sale, lease or rent of new or used products and services intended to provide for residents of the immediate area.

Retail, Big Box (Above 20,000 sq. ft). Big Box retail sales and service establishments involved in the sale, lease or rent of new or used products and services intended to provide for residents of the regional area.

Resource Recovery. The process of obtaining material or energy resources from solid waste which no longer have any useful life in its present form and preparing the waste for recycling.

Resource Recovery Facility. A combination of structures, machinery, or devices utilized to separate, process, modify, convert, treat, or prepare collected solid waste so that component materials or substances or recoverable resources may be used as a raw material or energy source.

Sanitary Landfill. A means of disposing of solid waste on land by spreading the waste in thin layers, compacting the waste to the smallest practical volume, and covering the waste with earth cover at the conclusion of each working day so as not to create pollution, nuisances or hazards to public health safety.

Setback. An open space that lies between the principal or accessory building or buildings and the nearest lot line. Such space is unoccupied and unobstructed from the ground upward except as may be specifically provided by this Ordinance.

A. **Setback, Front.** A yard extending the full width of the front of a lot between the front (street) right-of-way line or property line and the front building line.
B. **Setback, Rear.** A yard extending the full width of the lot in the area between the rear lot line and the rear building line.
C. **Setback, Side.** A space extending from the front yard to the rear yard and lying between each side lot line and the principal building on the lot.

Sexually Oriented Business. An adult bookstore or adult video store, an adult cabaret, an adult motion picture theater, a semi-nude model studio, or a sexual device shop.

A. **Adult Bookstore or Adult Video Store.** A commercial establishment which, as one of its principal business activities, offers for sale or rental for any form of consideration any one or more of the following: books, magazines, periodicals or other printed matter, or photographs, films, motion pictures, video cassettes, compact discs, digital video discs, slides, or other visual representations which are characterized by their emphasis upon the display of "specified sexual activities" or "specified anatomical areas." A "principal business activity" exists where the commercial establishment meets any one or more of the following criteria.
    1. At least 35% of the establishment's displayed merchandise consists of said items; or,
    2. At least 35% of the retail value (defined as the price charged to customers) of the establishment's displayed merchandise consists of said items; or
    3. At least 35% of the establishment's revenues derive from the sale or rental, for any form of consideration, of said items; or,
    4. The establishment maintains at least 35% of its floor space for the display, sale, and/or rental of said items (aisles and walkways used to access said items shall be included in "floor space" maintained for the display, sale, or rental of said items); or,
    5. The establishment maintains at least 500 sq. ft. of its floor space for the display, sale, and/or rental of said items (aisles and walkways used to access said items shall be included in "floor space" maintained for the display, sale, or rental of said items); or,
    6. The establishment regularly offers for sale or rental at least 2,000 of said items; or,
    7. The establishment regularly features said items and regularly advertises itself or holds itself out, in any medium, by using "adult," "adults-only,' "XXX," "sex," "erotic," or substantially similar language, as an establishment that caters to adult sexual interests; or,
    8. The establishment maintains an "adult arcade," which means any place to which the public is permitted or invited wherein coin-operated or slug- operated or electronically, electrically, or mechanically controlled still or motion picture machines, projectors, or other image-producing devices are regularly maintained to show images to 5 or fewer persons per machine at any one time, and where the images so displayed are characterized by their emphasis upon matter exhibiting "specified sexual activities" or "specified anatomical areas."
B. **Adult Cabaret.** A nightclub, bar, juice bar, restaurant, bottle club, or similar commercial establishment that regularly features live conduct characterized by semi-nudity. No establishment shall avoid classification as an adult cabaret by offering or featuring nudity.
C. **Adult Motion Picture Theater.** A commercial establishment where films, motion pictures, videocassettes, slides, or similar photographic reproductions which are characterized by their emphasis upon the display of "specified sexual activities" or "specified anatomical areas" are regularly shown to more than 5 persons for any form of consideration.
D. **Characterized by.** Describing the essential character or quality of an item. As applied in this ordinance, no business shall be classified as a sexually oriented business by virtue of showing, selling, or renting materials rated NC-17 or R by the Motion Picture Association of America.

E. **Floor Space.** The floor area inside a sexually oriented business that is visible or accessible to patrons for any reason, excluding restrooms.
F. **Nudity.** The showing of the human male or female genitals, pubic area, vulva, or anus with less than a fully opaque covering, or the showing of the female breast with less than a fully opaque covering of any part of the nipple and areola.
G. **Regularly.** The consistent and repeated doing of an act on an ongoing basis.
H. **Semi-Nude or Semi-Nudity.** The showing of the female breast below a horizontal line across the top of the areola and extending across the width of the breast at that point, or the showing of the male or female buttocks. This definition shall include the lower portion of the human female breast, but shall not include any portion of the cleavage of the human female breasts exhibited by a bikini, dress, blouse, shirt, leotard, or similar wearing apparel provided the areola is not exposed in whole or in part.
I. **Semi-Nude Model Studio.** A place where persons regularly appear in a state of semi-nudity for money or any form of consideration in order to be observed, sketched, drawn, painted, sculptured, photographed, or similarly depicted by other persons. This definition does not apply to any place where persons appearing in a state of semi-nudity did so in a class operated:
    1. By a college, junior college, or university supported entirely or partly by taxation; or,
    2. By a private college or university which maintains and operates educational programs in which credits are transferable to a college, junior college, or university supported entirely or partly by taxation; or,
    3. In a structure.
        (1) Which has no sign visible from the exterior of the structure and no other advertising that indicates a semi-nude person is available for viewing; and
        (2) Where, in order to participate in a class a student must enroll at least 3 days in advance of the class.
J. **Sexual Device.** Any 3 dimensional object designed for stimulation of the male or female human genitals, anus, buttocks, female breast, or for sadomasochistic use or abuse of oneself or others and shall include devices commonly known as dildos, vibrators, penis pumps, cock rings, anal beads, butt plugs, nipple clamps, and physical representations of the human genital organs. Nothing in this definition shall be construed to include devices primarily intended for protection against sexually transmitted diseases or for preventing pregnancy.
K. **Sexual Device Shop.** A commercial establishment that regularly features sexual devices. This definition shall not be construed to include any pharmacy, drug store, medical clinic, any establishment primarily dedicated to providing medical or healthcare products or services, or any establishment that does not regularly advertise itself or hold itself out, in any medium, as an establishment that caters to adult sexual interests.
L. **Specified Anatomical Areas.** Specified anatomical areas means and includes.
    1. Less than completely and opaquely covered. human genitals, pubic region; buttock; and female breast below a point immediately above the top of the areola; and
    2. Human male genitals in a discernibly turgid state, even if completely and opaquely covered.
M. **Specified Sexual Activity.** Specified sexual activity means any of the following.
    1. Intercourse, oral copulation, masturbation or sodomy; or
    2. Excretory functions as a part of or in connection with any of the activities described in a. above.

Shooting Ranges (Indoor). Facilities that are designed and operated for the use of rifles, shotguns, pistols, or any other weapons including firearms, air guns, and airsoft guns.

Sign. Any object, device, display or structure, or part thereof, situated outdoors or indoors, which is used to advertise, identify, display, direct, or attract attention to an object person, institution,

organization, business, project, service, event or location by any means, including words, letters, figures, design, symbols, fixtures, colors, illumination or projected images. The term *SIGN* includes sign structure.

Sign Area. The total square foot area of a sign area which contains the message being conveyed.

Sign Face. The part of the sign that is or can be used to identify, display, advertise, communicate information, or for the visual representation, which attracts or intends to attract the attention of the public for any purpose.

Sign Height. Vertical distance measured from ground level nearest the base of the sign to the highest point on the sign.

Sign Permit. A permit issued that authorizes the recipient to erect, move, enlarge, or substantially alter a sign.

Sign Structure. Any structure which is designed specifically for the purpose of supporting a sign, which has supports or which is capable of supporting a sign. The definition shall include any decorative covers, braces, wires, supports, or other components attached to or placed around the structure.

Sign, Abandoned. A sign associated sign structure that the sign owner has failed to operate or maintain for a period of 180 days or longer. The following conditions shall be considered as the failure to operate or maintain a sign.

A. A sign displaying advertising for a product or service which is no longer available or displaying advertising for a business which is no longer licensed; or
B. A sign which is blank.

Sign, Awning, Canopy or Marquee. A sign that is mounted or painted on, or attached to, an awning, canopy or marquee.

Sign, Banner. A temporary sign constructed of a non-rigid material that is exposed to the weather or wind, including signs that are protected by eaves, awnings, or other structures.

Sign, Flat. A single faced sign attached flush to a building or projecting no more than 12 inches.

Sign, Free-Standing. Any non-movable sign not affixed to a building.

Sign, Permanent. A sign attached to a building, structure, or the ground in some manner and made of materials intended for more than short term use.

Sign, Political. A temporary sign announcing or supporting political candidates or issues in connection with any national, state, or local election.

Sign, Portable. A sign that is not permanent, affixed to a building, structure or the ground.

Sign, Projecting. A sign attached directly to a supporting building wall and intersecting the building wall at a right angle. A projecting sign may be 2 or 3-dimensional..

Sign, Roof. A sign that is mounted on the roof of a building which is wholly dependent upon a building for support and projects above the point of a building with a flat roof, the eave line of a building with a gambrel, gable, or hip roof or the deck line of a building with a mansard roof.

Sign, Temporary. A sign or advertising display constructed of cloth, canvas, fabric, plywood or other light material and designed or intended to be displayed for a short period of time.

Sign, Wall. A sign painted on the wall of a building and has sign structure.

Sign, Window. A sign that is applied or attached to the exterior or interior of a window or located in such manner within a building that it can be seen from the exterior of the structure through a window.

Solar Farms. An area of land designated for the purpose of deploying solar power generating panels and devices to create electric energy.

Solid Waste. Any non-hazardous garbage, refuse, or sludge from a waste treatment facility, water supply plant.

Solid Waste Storage. The containment of solid waste, either on a temporary basis or for a period of years, in such manner as not to constitute disposal of such solid waste; provided however, that storage in containers by persons or solid waste resulting from their own activities on their property, leased or rented property, if the solid waste in such containers is collected at least once a week, shall not constitute "storage" for purposes of this act. The term does not apply to containers provided by or under the authority of solid waste prior to disposal.

Spa, Day. An establishment that provides wellness and beauty treatments.

Special Event Facility. A commercial facility rented to individuals, groups, or organizations, and used to host gatherings such as, but not limited to, weddings, receptions, meetings, galas, networking events, and conferences. A special events facility caters to a significant diversity of individuals, groups, and organizations on a contractual basis, with such individuals, groups, and organizations holding unique events on an irregular basis only. Such individuals, groups, and organizations contracting to rent the facility may provide alcoholic beverages for guests in accordance with state law. Land uses better described under the definitions for night club or drinking place are not Special Event Facilities.

Special Exception. A permit issued by the Board of Zoning Appeals that authorizes the recipient to make use of property in accordance with the requirements of this UDO as well as any additional requirements by the Board of Zoning Appeals.

Stock Yard. An open or closed compound where livestock is fed, graded, bought, sold, or maintained for transfer.

Street. Any vehicular way which: (1) is an existing state, county or municipal roadway; or (2) is shown upon a plat approved pursuant to law; or (3) is approved by other official action; or (4) is shown on a plat duly filed and recorded in the office of the Register of Mesne Conveyance prior to the appointment of a Planning Commission and the grant to such commission of the power to review plats; and includes the land between the street lines, whether improved or unimproved.

A. **Expressway.** A public thoroughfare with limited access that could have both at- grade intersections and grade separated interchanges.
B. **Arterial Street.** A public thoroughfare which filters traffic from local streets and conducts it to arterial streets or local traffic generators such as schools, recreation areas, and public parks.
C. **Local Street.** A public thoroughfare designed to provide access to property abutting the right-of-way.

D. **Private Street.** A vehicular way not dedicated for public use or maintenance.

Structure. Anything constructed or erected, including canopies.

Structural Alteration. Any change in the supporting members of construction, such as the bearing walls, beams or girders, or any change in the dimension or configuration of the roof of exterior walls of a building.

Subdivider. Any person, firm, corporation or other legal entity subdividing land within the jurisdiction of this Ordinance.

Subdivision. The division of a tract, parcel or lot into 2 or more lots or building sites, or other divisions of land for the purpose, whether immediate or future, of sale, legacy, or building development, and includes all division of land involving a new street or a change in existing streets and includes the re-subdivision of land.

Subdivision, Exempt. An exempt subdivision is one which meets the following conditions.

A. Combining or recombining portions of previously platted lots where the total number of lots is not increased and the resultant lots are equal to Ordinance standards;
B. Dividing land into parcels of 5 acres or more where no new street is involved;
C. Combining or recombining entire lots or record where no new streets or change in existing streets is involved;
D. A subdivision involving cemetery lots; and
E. The subdivision of property pursuant to specific directions for the divisions of the property set out in a will executed prior to December 1, 1991.

Subdivision, Major. A major subdivision is any subdivision other than an exempt or minor subdivision.

Subdivision, Minor. A minor subdivision is one which does not involve the provision of any new street for access.

Storage. Facilities providing separate storage areas for personal, or business use designated to allow private access by the tenant for storing or removing personal property.

Storage Unit, Portable. Transport trailers, cargo containers, storage trailers, mobile storage facilities, sea/land containers, and similar structures designed for conveyance and used primarily for storage of goods and materials. Portable Storage Units are not intended to be used as permanent storage facilities in residential districts.

Sports Fields. A designated outdoor area specifically designed and maintained for the purpose of playing sports such as soccer, baseball, softball, football, rugby, or similar athletic activities.

Surveyor. A person who is registered by the SC Board of Engineering Examiners to practice land surveying in South Carolina.

Tattoo Parlors. Any establishment that practices the inserting of permanent markings or coloration, or the producing of scars, upon or under human skin through puncturing by use of a needle or any other method. Micro-blading and temporary tattoos are not considered to constitute a tattoo parlor.

Temporary Dwelling. A residence (which may be a manufactured/mobile home) that is.

A. Located on the same lot as a residence made uninhabitable by fire, flood, or other natural disaster and occupied by the persons displaced by such disaster;
B. Located on the same lot as a residence that is under construction or undergoing substantial repairs or reconstruction and occupied by the persons intended to live in such permanent residence when the work is completed; or
C. Located on a non-residential construction site and occupied by persons having construction or security responsibilities over such construction site.

Temporary Use Permit. A permit that authorizes the recipient to temporarily modify the use of the property.

Tobacco Shop. An establishment that, as a substantial portion of the use, entails the retail sales of tobacco products including, but not limited to, CBD products, cigarettes, cigars, chewing tobacco, shisha, unformed or loose tobacco, or tobacco smoking apparatus, including water pipes; hookah pipes; bowls; water bongs; and/or similar products.

Towing Services. An establishment providing the service of transporting individual motor vehicles and providing temporary storage of the vehicles, whether operable or temporarily inoperable, in an impound yard or storage facility (or lot).

Tract. The term tract is used interchangeably with the term lot, particularly in the context of subdivisions, where a tract is subdivided into several "lots".

Transfer Station. A combination of structures, machinery, or devices at a place or facility where solid waste is taken from collection vehicles and placed in other transportation units with or without reduction of volume, for movement to another solid waste management facility.

Transient Accommodations. Lodging services provided for a temporary duration, typically fewer than 30 consecutive days, to guests who do not have a permanent residence at the location. Transient accommodations include hotels, motels, inns, bed and breakfasts, short-term rentals, and similar facilities. These uses are intended for travelers, tourists, or temporary visitors and may include ancillary services such as dining, meeting rooms, or recreational amenities.

Transportation Terminals. Facilities for loading and unloading areas for passenger terminals for bus or train service.

Treatment. Any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character of composition of any hazardous waste so as to neutralize such waste, or so as to render such waste as non-hazardous or less hazardous; safer to transport, store, or dispose of; or amenable for recovery, amenable for storage, reduced in volume.

Tree. A tall, long-lived perennial plant with a distinct woody trunk, branches, and a leafy crown
A. **Canopy**. Any tree that reaches a mature height in excess of 40 ft.
B. **Evergreen.** A canopy tree that does not lose its leaves, remains green in winter, and typically reaches a minimum mature height of 8 feet.
C. **Understory.** A small deciduous tree that forms the layer of vegetation under the canopy trees in a forest. Examples of such trees include dogwoods, sourwoods, fruit trees, and others.
D. **Grand.** A mature tree as defined in *Table C.5.10*.
E. **Significant Stand.** A group of trees which together form a continuous mature canopy of at least 5,000 sq. ft.

Truck Stop. An establishment that provides dedicated diesel fueling positions, is located near major roadways, and provides refueling, food and other services to truck drivers and other motorists. Sites fitting this land use can include convenience stores, showers, restaurants, and/or on-site truck parking spaces.

Urgent Care. A walk-in medical establishment offering care for injuries or illnesses requiring immediate outpatient care.

Use. The purpose or activity for which land or any building thereon is designed, arranged or intended, or for which it is occupied or maintained.

Use, Principal. The primary purpose for which land is used.

Utilities. Facilities and infrastructure used to provide essential public services including, but not limited to, water supply, wastewater treatment, stormwater management, electricity, natural gas, telecommunications, and solid waste disposal. Utilities may be publicly or privately owned and operated, and can include above-ground or underground systems, utility lines, substations, pump stations, and related support structures necessary for service delivery to residential, commercial, industrial, and institutional properties.

Utility Facilities, Government. Government utility facilities include both major utilities, which are infrastructure services providing regional or community-wide services, and minor utilities, which are infrastructure services that need to be located in or near the neighborhood where the service is provided.

Variance. A modification of the area regulations of this Ordinance granted by the Board of Zoning Appeals where such modification will not be contrary to the public interest, and where, owing to conditions peculiar to the property owner, a literal enforcement of the Ordinance would result in unnecessary and undue hardship, and where such modification will not authorize a principal or accessory use of the property which is not permitted within the zoning district in which the property is located.

Vehicle Use Area (VUA). The areas used for movement, circulation, parking, and/or display of any type of vehicle, including but not limited to parking lots, loading and unloading areas and sales service areas.

Vehicle Sales and Rental Services. Establishments that are involved with the sale or leasing of automobile (including but not limited to cars and boats), renting of motor vehicles, and display of motor vehicles for sale, lease, or rental.

Verge. An area of land located between a street curb and boundary of an adjacent property. A verge allows access from the street to private or public properties.

Waste. Materials to be disposed resulting from consumption or developmental activity.

Waste Tire Site. An establishment, site, or place of business, without a collector or processor permit, that is maintained, operated, used or allowed to be used for the disposal, storing, or depositing of unprocessed used tires, but does not include a truck service facility.

Waste Tire Treatment Site. A permitted site used to produce or manufacture usable materials, including fuel, from waste tires.

Warehouse/Distribution. A facility primarily engaged in the storage and distribution of manufactured product, supplies, and equipment with little to no sales on site. May also include

truck terminals or similar facilities where semi-trucks, trailers and or high-cube/box trucks may be utilized for the transportation of goods; may also include areas for truck, trailer, etc., parking and storage.

Watershed. The entire land area contributing surface drainage to a specific point (for example, the water supply intake).

Wetlands. Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas. The wetlands will have the following diagnostic environmental characteristics (not given in detail here). Vegetation, Soil, and Hydrology.

Wireless Communication Tower. Any tower, pole or similar structure of any size that supports wireless communication antenna for commercial or governmental use.

Wholesale Trade. Firms involved in the sale or rent of products to industrial or commercial businesses only. Not intended for private customers. Uses emphasize on-site sales or order taking.

Zoning District. The term applied to various geographical areas (districts) of the City of Sumter for the purpose of interpreting the provisions of this Ordinance, as designated on the Official Zoning Map for the City of Sumter.

Zoning Map. The official zoning map for the City of Sumter.

Zoo. A facility, indoor or outdoor, where animals are kept for viewing by the public.

(This page Intentionally Left Blank)

1. PURPOSE AND AUTHORITY

A. **Purpose.** The purpose of this Section is to define development standards for zoning districts within the City. All land within the City's zoning districts shall be developed in accordance with the standards and regulations in this Section and applicable Sections of this UDO.

B. **Districts Established.** The City of Sumter is divided into zoning districts, Traditional and Mixed Use. This Section establishes the traditional zoning districts and defines their respective standards. The zoning districts are organized into 5 generalized categories and established in *Table B.2.1*.

The 5 categories are enumerated below:

1. Residential Zoning Districts
2. Commercial Zoning Districts
3. Industrial Zoning Districts
4. Other Zoning Districts
5. Mixed Use

B

Zoning

B.1 Purpose & Authority
B.2 Zoning Districts
B.3 Residential Districts
B.4 Commercial Districts
B.5 Industrial Districts
B.6 Special Purpose Districts
B.7 Mixed Use Districts
B.8 Permitted Uses
B.9 Use Standards
B.10 Reserved
B.11 Overlay Districts
B.12 Dimensional Requirements
B.13 Accessory Uses & Structures
B.14 Temporary Uses
B.15 Food Trucks & Mobile Vending
B.16 Nonconformities

2. ZONING DISTRICTS

A. In order to implement the Comprehensive Plan and the purpose and intent of this Ordinance pursuant to *Chapter A.1.4.*, the City of Sumter is hereby divided into the principal zoning districts identified in *Table B.2.1.*

Table B.2.1 Principal Zoning Districts		
Residential		
R-15	Residential, Large Lot Single-Family	*Chapter B.3.1*
R-9	Residential, Medium Lot	*Chapter B.3.2*
R-6	Residential, Small Lot	*Chapter B.3.3*
GR	Residential, General	*Chapter B.3.4*
RMF	Residential Multi-Family	*Chapter B.3.5*
Commercial		
PO	Professional Office	*Chapter B.4.1*
NC	Neighborhood Commercial	*Chapter B.4.2*
LC	Limited Commercial	*Chapter B.4.3*
GC	General Commercial	*Chapter B.4.4*
Industrial		
LI-W	Light-Industrial-Warehouse	*Chapter B.5.1*
HI	Heavy Industrial	*Chapter B.5.2*
Special Purpose		
AC	Agricultural Conservation	*Chapter B.6.1*
CP	Conservation Preservation	*Chapter B.6.2*
SAFB	Shaw Air Force Base	*Chapter B.6.3*
Mixed Use		
DTC	Downtown Core	*Chapter B.7.1*
DTT	Downtown Transitional	*Chapter B.7.2*
IG	Institutional General	*Chapter B.7.3*
PD	Planned Development	*Chapter B.7.4*

B. **Official Zoning Map(s):** The boundaries of the principal zoning districts are shown on the official zoning map(s) maintained by the City of Sumter. The official zoning map(s) are declared to be part of this Ordinance.
   1. Regardless of the existence of purported copies of the Official Zoning Map(s) that may from time to time be made, sold, or published, the official map(s) shall be located in the Clerk of Council's office for the City of Sumter, and the offices of the Sumter City-County Planning Department. The Official Zoning Map(s) for the City of Sumter shall be the final authority as to the current zoning status of the lands, water areas, buildings, and other structures in the City of Sumter.

C. **Interpretations of the Boundaries on the Official Zoning Map(s):** Where boundaries of districts are shown on the Official Zoning Map(s), the following rules shall apply:
   1. Boundaries indicated as approximately following the center line of streets, highways, or roads, shall be construed to follow such center lines.
   2. Boundaries indicated as approximately following platted lot lines shall be construed as following platted lot lines.
   3. Boundaries indicated as approximately following political boundaries shall be construed as following political boundaries.
   4. Boundaries indicated approximately as parallel to or an extension of features shall be so construed.
   5. Boundaries indicated as following approximately the centerline of waterways, creeks, and ditches, shall be construed as following such lines.
   6. Distances not specifically indicated on the Official Zoning Map(s) shall be determined by the scale of the map(s).
   7. Where physical or cultural features existing on the ground are at a variance with those shown on the Official Zoning Map(s), or other circumstances covered in the above mentioned items, the Board of Zoning Appeals shall interpret the district boundaries.

D. **Amendments to the Official Zoning Map(s):** If, pursuant to the process requirements in *Chapter A.3.2*, changes are made in district boundaries or other matters portrayed on the Official Zoning Maps(s), then the Official Zoning Map(s) shall be promptly updated after such amendments have been made by City Council.

E. **Annexation:** Amendments to the Official Zoning Map(s) that result from annexation of new land into the City of Sumter shall follow the procedures in *Chapter A.1.8.*

3. RESIDENTIAL DISTRICTS

A. Residential zoning districts are intended to provide a safe and healthy environment for residents. Uses which are detrimental to the residential nature of these districts are discouraged. More specifically, the residential zoning districts intend to:

1. Implement the Comprehensive Plan;
2. Permit a variety of residential uses, public and institutional uses, and other supporting uses;
3. Offer a range of densities and housing stock to allow for a sustainable mix of residential development, diversity and affordability;
4. Ensure adequate light, air, and privacy for all dwellings;
5. Preserve existing community character while providing for new infill development consistent with the Comprehensive Plan; and
6. Discourage uses that would substantially interfere with or would be unsupportive of the character of the district. Compatible uses may be permitted pursuant to *Chapter B.8.*

3.1 LARGE LOT RESIDENTIAL (R-15)

The purpose of the R-15 district is to recognize the suburban character of portions of the City of Sumter where low density residential development is the predominant living environment. This district is designed to support the use of land for single-family detached homes within a suburban setting, characterized by large lot subdivisions with consistent housing types and densities. Regulations within this district aim to discourage any use which, because of its character, would be a nuisance to the development of residences and would be detrimental to the residential nature of areas included within this District.

Table B.3.1. R-15 District Development Standards

		Single Family Detached	Non-Residential
Building Height (Max) *(See Chapter B.12.C)*		35 ft.	45 ft.
Residential Density (Max) *(See Chapter B.12.A)*		2.9 Units/Acre	Not Applicable
Setbacks (Min) *(See Chapter B.12.E)*	Front (Street) [1]	35 ft. (Local/Collector) 45 ft. (Arterial)	
	Side	12 ft.	50 ft.
	Rear	25 ft.	50 ft.
Lot *(See Chapter B.12.F)*	Width (Min)[2]	100 ft.	125 ft.
	Area[2] (Individual Unit) (Min)	15,000 sf	Not Applicable
	Impervious Surface Ratio (ISR) (Max)	40%	80%
Additional Standards	[1] Refer to *Chapter B.12.E.5* for alternate method of determining the front setback. [2] Refer to *Chapter B.16.4* if non-conforming lot of record. Refer to *Table B.8.1* for permitted, conditional, and special exception uses allowed in this district. Alternate standards may be applicable if in Residential Infill Overlay District, See *Chapter B.11.6.* Refer to the SC Building Code for minimum distance between buildings.		

3.2 MEDIUM LOT RESIDENTIAL (R-9)

The purpose of the R-9 district is to recognize the character of significant portions of the City of Sumter where medium density single-family residential development is the predominant environment. This district is designed to support the use of land for a variety of housing types within a suburban setting, characterized by medium lot subdivisions. Regulations within this district aim to discourage any use which, because of its character, would be a nuisance to the development of residences and would be detrimental to the residential nature of areas within this district.

Table B.3.2. R-9 District Development Standards

		Residential		Non-Residential
		Single Family Detached	*All Other Types*	
Building Height (Max) *(See Chapter B.12.C)*		35 ft.	*See Table B.3.6:*	45 ft.
Residential Density (Max) *(See Chapter B.12.A)*		4.8 Units/Acre		Not Applicable
Setbacks (Min) *(See Chapter B.12.E)*	Front (Street)[1]	35 ft. (Local/Collector) 45 ft. (Arterial)		35 ft. (Local/Collector) 45 ft. (Arterial)
	Side	10 ft.		50 ft.
	Rear	25 ft.		50 ft.
Lot *(See Chapter B.12.F)*	Width (Min)	75 ft.		100 ft.
	Area (Individual Unit) [2] (Min)	9,000 SF per structure		Not Applicable
	ISR (Max)	40%		80%
Additional Standards	1 Refer to *Chapter B.12.E.5* for alternate method of determining the front setback. 2 Refer to *Chapter B.16.4* if non-conforming lot of record for nonresidential and single-family detached dwelling uses. All other development types must meet minimum lot area requirements upon establishment. Refer to *Table B.8.1* for permitted, conditional, and special exception uses allowed in this district. Alternate standards may be applicable if in Residential Infill Overlay District, See *Chapter B.11.6.* Refer to the SC Building Code for minimum distance between buildings.			

3.3 SMALL LOT RESIDENTIAL (R-6)

The purpose of the R-6 district is to provide for a variety of housing types on smaller lots and/or support cottage-court lots within a singular development; may also be utilized within certain limited areas of the City where pre-existing lots meet these standards and also support infill residential development. It is the intent of this district to balance higher densities with common open space requirements for subdivisions found in *Chapter C.7*. The regulations of this district are intended to discourage any use which, because of its character, would be a nuisance to the development of residences and would be detrimental to the residential nature of areas within this district.

Table B.3.3. R-6 District Development Standards

		Residential		Non-Residential
		Single Family Detached	*All Other Types*	
Building Height (Max) *(See Chapter B.12.C)*		35 ft.	*See Table B.3.6:*	45 ft.
Residential Density (Max) *(See Chapter B.12.A)*		7 Units/Acre		Not Applicable
Setbacks (Min) *(See Chapter B.12.E)*	Front (Street)[1]	35 ft. (Local/Collector) 45 ft. (Arterial)		35 ft. (Local/Collector) 45 ft. (Arterial)
	Side	8 ft.		25 ft.
	Rear	20 ft.		50 ft.
Lot *(See Chapter B.12.F)*	Width (Min)[2]	60 ft.		Not Applicable
	Area (Individual Lot) (Min)[2]	6,000 SF		Not Applicable
	ISR (Max)	45%		80%
Additional Standards		[1] Refer to *Chapter B.12.E.5* for alternate method of determining the front setback. [2] Refer to *Chapter B.16.4: Nonconforming Lots* if non-conforming lot of record for nonresidential and single-family detached dwelling uses. All other development types must meet minimum lot area requirements upon establishment. Refer to *Table B.8.1: Permitted Use Table* for permitted, conditional, and special exception uses allowed in this district. Alternate standards may be applicable if in Residential Infill Overlay District, See *Chapter B.11.6: Residential Infill Overlay District*. Refer to SC Building Code for distance minimum between buildings.		

3.4 GENERAL RESIDENTIAL (GR)

The purpose of the GR district is to accommodate higher density residential development and a variety of housing types on small lots. This district is primarily intended to support the provision of housing in older, established areas of the City. It is not intended to support new large acreage residential tract development.

Table B.3.4. GR District Development Standards

		Residential		Non-Residential
		Single Family Detached	*All Other Types*	
Building Height (Max) *(See Chapter B.12.C)*		35 ft.	See *Table B.3.6*	45 ft.
Residential Density (Max) *(See Chapter B.12.A)*		8.7 Units/Acre		Not Applicable
Setbacks (Min) *(See Chapter B.12.E)*	Front (Street)[1]	35 ft. (Local/Collector) 45 ft. (Arterial)		35 ft. (Local/Collector) 45 ft. (Arterial)
	Side	8 ft.		25 ft.
	Rear	20 ft.		50 ft.
Lot *(See Chapter B.12.F)*	Width (Min)	50 ft.		Not Applicable
	Area (Individual Lot) (Min)[2]	5,000 SF		Not Applicable
	ISR (Max)	45%		80%
Additional Standards		[1] Refer to *Chapter B.12.E.5* for alternate method of determining the front setback. [2] Refer to *Chapter B.16.4* if non-conforming lot of record for nonresidential and single-family detached dwelling uses. All other development types must meet minimum lot area requirements upon establishment. Refer to *Table B.8.1* for permitted, conditional, and special exception uses allowed in this district. Alternate standards may be applicable if in Residential Infill Overlay District, See *Chapter B.11.6* Refer to SC Building Code for distance minimum between buildings.		

3.5 RESIDENTIAL MULTI-FAMILY (RMF)

The purpose of the RMF district is to accommodate multi-family development within areas appropriately suited to, and compatible with, surrounding development. However, this district is not intended to restrict the number of dwelling units contained in a building provided there is sufficient area of lot and open space on such lot relative to the number of dwelling units thereon. The regulations of this district are intended to discourage any use which, because of its character, would be detrimental to the residential nature of areas included within this district.

Table B.3.5. RMF District Development Standards

		Residential			Non-Residential
		Single Family Detached	*Multi-Family*	*All Other Types*	
Building Height (Max) *(See Chapter B.12.C)*		35 ft.	*See Table B.3.6:*	*See Table B.3.6:*	45 ft.
Residential Density (Max) *(See Chapter B.12.A)*		10 Units/Acre			Not Applicable
Setbacks (Min) *(See Chapter B.12.E)*	Front (Street)[1]	35 ft. (Local/Collector) 45 ft. (Arterial)			35 ft. (Local/Collector) 45 ft. (Arterial)
	Side	8 ft.			25 ft.
	Rear	20 ft.			50 ft.
Lot (See Chapter *B.12.F)*	Width (Min)	45 ft.			Not Applicable
	Area (Individual Lot) (Min)[2]	5,000 SF			Not Applicable
	ISR (Max)	45%			80%
Additional Standards		[1] Refer to *Chapter B.12.E.5* for alternate method of determining the front setback. [2]Refer to *Chapter B.16.4* if non-conforming lot of record for nonresidential and single-family detached dwelling uses. All other development types must meet minimum lot area requirements upon establishment. Refer to *Table B.8.1* for permitted, conditional, and special exception uses allowed in this district. Alternate standards may be applicable if in Residential Infill Overlay District, See *Chapter B.11.6.* Refer to SC Building Code for distance minimum between buildings.			

3.6 SUPPLEMENTARY RESIDENTIAL DEVELOPMENT STANDARDS

Table B.3.6. Supplementary Residential Development Standards Table

		Attached	Duplex	Triplex/ Quad	Suburban Townhome	Urban Townhome [1]	Suburban Multi-Family	Urban Multi-Family [1]
Building Height (Max) *(See Chapter B.12.C)*		35 ft.					60 ft.	60 ft. (75 ft. by Special Exception)
Residential Density (Max) *(See Chapter B.12.A)*		14 Units/ Acre	10 Units/ Acre	16 Units/ Acre	14 Units/Acre	20 Units/Acre	16 Units/Acre	38 Units/Acre
Setbacks (Min) *(See Chapter B.12.E)*	Front (Street)[2]	35 ft. (Local/Collector) 45 ft. (Arterial)			15 ft.[3]	15 ft.	20 ft.[4]	10 ft.
	Side	0 / 8 ft.[5]	8 ft.	12 ft.	0 / 8 ft.[4]		20 ft.[6]	10 ft.
	Rear	20 ft.					25 ft.[7]	15 ft.
Lot *(See Chapter B.12.F)*	Width (Min)	30 ft.	60 ft.	80 ft.	16 ft.		200 ft.	Not Applicable
	Area (Min)	3,000 SF (per unit)	8,000 SF (per structure)	10,000 SF (per structure)	2,000 SF (per unit)		Not Applicable	Not Applicable
	Site Area (Min)	Not Applicable			2 Acres	Not Applicable	2 Acres	Not Applicable
	ISR (Max)	45%	45%	60%	65%		60%	95%
Additional Standards		[1] Urban Townhomes and Urban Multi-family uses are only permitted in the Residential Infill Overlay District.						

	[2] Refer to *Chapter B.12.E.5* for alternate method of determining the front setback. [3] 15 ft. minimum front setback applies if parking is provided to the rear of the building, if parking area/garage is recessed, or common parking area is provided in lieu of conventional driveway or garage design. 35 ft. front setback applies to local/collector streets if this criteria is not met. 45 ft. front setback applies to arterial streets if this criteria is not met. [4] 20 ft. front setback if parking is located to side of rear of building. 35 ft. front setback if parking is located in front of building. [5] 0 ft. setback between units, 8 ft. setback between end of structure and side property lines. [6] 20 ft. side setback if not adjacent to single-family residential dwellings. 50 ft. side setback if adjacent to single-family residential dwellings. [7] 25 ft. rear setback if not adjacent to single-family residential dwellings. 50 ft. rear setback if adjacent to single-family residential dwellings. Alternate standards may be applicable if in Residential Infill Overlay District, See *Chapter B.11.6.* When multiple structures are on a single parcel (i.e. multi-family development), refer to SC Building Code for distance minimum between buildings.

3.7 SUPPLEMENTARY MANUFACTURED HOME DEVELOPMENT STANDARDS

Table B.3.7. Supplementary Manufactured Home Development Standards			
		Manufactured Home On Individual Lot of Record[1]	**Manufactured Home Park[2]**
Building Height (Max) *(See Chapter B.12.C)*		See Applicable District Standard for Single Family Detached	See Applicable District Standard
Residential Density (Max) *(See Chapter B.12.A)*			8 Units/Acre
Setbacks (Min) *(See Chapter B.12.E)*	Front (Street)[3]		35 ft. (Local/Collector) 45 ft. (Arterial)
	Side		25 ft.
	Rear		25 ft.
Lot *(See Chapter B.12.F)*	Width (Min)		45 ft.
	Area (Ind. Unit) (Min)		5,000 SF
	Site Area (Min)		5 Acres
	ISR (Max)		45%
Additional Standards		[1] A manufactured home meeting the standards outlined in *Chapter B.9.2.J.* shall be considered a single family detached dwelling. An accessory dwelling unit (ADU) shall not be established on a lot where a manufactured home is the principal use. [2] Manufactured home parks must comply with the standards outlined in *Chapter B.9.2.K.* All individual manufactured homes in such parks must comply with the standards in *Chapter B.9.2.J.* [3]Refer to *Chapter B.12.E.5.* for alternate method of determining the front setback. Refer to SC Building Code for distance minimum between buildings.	

4. COMMERCIAL DISTRICTS

A. The commercial zoning districts are intended to provide a range of office, medical, retail, service, and compatible uses and to implement the Comprehensive Plan. More specifically, the commercial zoning districts intend to:
   1. Allow for the development of businesses (retail, restaurant, services, etc.) that meet the needs of residents and visitors in the City of Sumter;
   2. Provide employment opportunities;
   3. Minimize conflicts arising from different uses, such as commercial activities in residential areas; and
   4. Provide for lands that will strengthen the economic base of the City of Sumter in accordance with the Comprehensive Plan.

4.1 PROFESSIONAL OFFICE (PO)

The purpose of the PO district is to accommodate offices, institutional uses and residential uses in areas whose character is neither commercial nor exclusively residential in nature. It is intended principally for areas along major streets or for buffer areas between residential districts and more intensive commercial or industrial districts. Residential uses may be permitted as a conditional use. The regulations of this district are intended to discourage any use which, because of its character, would be a nuisance to the development of office and medical uses.

Table B.4.1. PO District Development Standards		
Residential Development Standards		
Apply standards in *Table B.3.3 or Table B.3.6* (Depending on Dwelling Type)		
Commercial Development Standards		
Building Height (Max) *(See Chapter B.12.C)*		35 ft.
Setbacks (Min) *(See Chapter B.12.E)*	Front (Street)	20 ft.[1] 35 ft. (Local/Collector)[2] 45 ft. (Arterial)[3]
	Side	25 ft. (Abutting Residential Districts and Planned Development Districts) 5 ft. (Abutting All Other Districts)
	Rear	25 ft.
Lot *(See Chapter B.12.F)*	Width (Min)	40 ft.
	Area (Min)	Not Applicable
	ISR (Max)	75%
Additional Standards	[1]20 ft. is the minimum front yard setback from all street types when off-street parking is located on the side or rear of the building(s). [2] 35 ft. is the minimum front yard setback from local/collector streets when off-street parking is located in front of the building(s). [3]45 ft. is the minimum front yard setback from arterial streets when parking is located in front of the building(s). Refer to *Table B.8.1.* for permitted, conditional, and special exception uses allowed in this district. Refer to SC Building Code for distance minimum between buildings.	

4.2 NEIGHBORHOOD COMMERCIAL (NC)

The purpose of the NC District is to allow for small-scale neighborhood commercial establishments. Specifically, the NC District is intended for commercial uses smaller than 5,000 SF. This district promotes a mix of small-scale commercial, public and institutional, office, and medical uses. Certain residential use types may be permitted as a Conditional Use. Additionally, the district is designed to provide commercial establishments within convenient travel distance from the neighborhoods they serve.

Table B.4.2. NC District Development Standards		
Residential Development Standards		
Apply Standards in *Table B.3.6* for allowed residential uses. Single Family Detached, Single Family Attached, & Duplex Dwellings are <u>not permitted</u> in the NC District.		
Commercial Development Standards		
Building Height (Max) *(See Chapter B.12.C)*		35 ft.
Setbacks (Min) *(See Chapter B.12.E)*	Front (Street)	20 ft. [1] 35 ft. (Local/Collector)[2] 45 ft. (Arterial) [3]
	Side	15 ft. (Abutting Residential Districts and Planned Development Districts) 5 ft. (Abutting All Other Districts)
	Rear	20 ft.
Lot *(See Chapter B.12.F)*	Width (Min)	40 ft.
	Area (Min)	Not Applicable
	ISR (Max)	75%
Additional Standards		[1]20 ft. is the minimum front yard setback from all street types when off-street parking is located on the side or rear of the building(s). [2] 35 ft. is the minimum front yard setback from local/collector streets when off-street parking is located in front of the building(s). [3]45 ft. is the minimum front yard setback from arterial streets when parking is located in front of the building(s). Refer to *Table B.8.1* for permitted, conditional, and special exception uses allowed in this district. Refer to SC Building Code for distance minimum between buildings.

4.3 LIMITED COMMERCIAL (LC)

The purpose of the LC District is to accommodate commercial development along major streets, while promoting land use compatibility by limiting the type and conditions of development. The LC District is designed to accommodate a mixture of commercial, public and institutional, office, and medical uses. Certain residential use types may be permitted as a Conditional Use.

Table B.4.3. LC District Development Standards		
Residential Development Standards		
Apply Standards in *Table B.3.6* for allowed residential uses. Single Family Detached, Single Family Attached, & Duplex Dwellings are <u>not permitted</u> in the LC District.		
Commercial Development Standards		
Building Height (Max) *(See Chapter B.12.C)*		35 ft.
Setbacks (Min) *(See Chapter B.12.E)*	Front (Street)	20 ft.[1] 35 ft. (Local/Collector)[2] 45 ft. (Arterial) [3]
	Side	30 ft. (Abutting Residential Districts and Planned Development Districts) 0 ft. (Abutting Nonresidential Districts)
	Rear	35 ft.
Lot *Chapter B.12.F: Lot Dimensions*	Width (Min)	40 ft.
	Area (Min)	Not Applicable
	ISR (Max)	80%
Additional Standards	[1] 20 ft. is the minimum front setback from all street types when off-street parking is located on the side or rear of the building(s). [2] 35 ft. is the minimum front setback from local/collector streets when off-street parking is located in front of the building(s). [3] 45 ft. is the minimum front yard setback from arterial streets where parking is located in front of the building(s). Refer to Table *B.8.1* for permitted, conditional, and special exception uses allowed in this district. Refer to SC Building Code for distance minimum between buildings.	

4.4 GENERAL COMMERCIAL (GC)

The General Commercial Zoning District is established to support a diverse mix of office, medical, retail, service, and compatible commercial uses that serve both residents and visitors of Sumter. This district is intended to facilitate the development of businesses such as retail stores, restaurants, and service providers that meet community needs. Additionally, the uses permitted within the GC district will promote employment opportunities and economic vitality while minimizing land use conflicts, particularly between commercial and residential areas. Certain residential use types may be permitted as a Conditional Use.

Table B.4.4. GC District Development Standards

Residential Development Standards		
Apply Standards in *Table B.3.6* for allowed residential uses. Single Family Detached, Single Family Attached, & Duplex Dwellings are <u>not permitted</u> in the GC District.		
Commercial Development Standards		
Building Height (Max) *(See Chapter B.12.C)*		60 ft.
Setbacks (Min) *(See Chapter B.12.E)*	Front (Street)	20 ft.[1] 35 ft. (Local/Collector)[2] 45 ft. (Arterial Streets) [3]
	Side	30 ft. (Abutting Residential Districts and Planned Development Districts) 0 ft. (Abutting All Other Districts)
	Rear	30 ft. (Abutting Residential Districts and Planned Development Districts) 20 ft. (Abutting All Other Districts)
Lot *(See Chapter B.12.F)*	Width (Min)	Not Applicable
	Area (Min)	Not Applicable
	ISR (Max)	92%
Additional Standards	[1]20 ft. is the minimum front yard setback from all street types when off-street parking is located on the side or rear of the building(s). [2] 35 ft. is the minimum front yard setback from local/collector streets where off-street parking is located in front of the building(s). [3] 45 ft. is the minimum front yard setback from arterial streets where parking is located in front of the building(s). Refer to *Table B.8.1* for permitted, conditional, and special exception uses allowed in this district. Refer to SC Building Code for distance minimum between buildings.	

5. INDUSTRIAL DISTRICTS

A. The industrial zoning districts are intended to provide a range of industrial and manufacturing uses. More specifically, the industrial zoning districts intend to:
   1. Strengthen the economic base of the City of Sumter;
   2. Create development standards and building and site design standards which protect neighboring uses from nuisances and potentially harmful effects; and
   3. Require landscaping requirements that screen development from the right-of-way and neighboring residential areas.

5.1 LIGHT INDUSTRIAL-WAREHOUSE (LI-W)

The purpose of the LI-W district is to permit light industrial, light manufacturing, wholesale/distribution, storage establishments, and other compatible uses of varying scales in an environment suited to such uses and operations while promoting land use compatibility both within and beyond the boundaries of the district.

Table B.5.1. LI-W District Development Standards		
All Development Types		
Building Height (Max) *(See Chapter B.12.C)*		60 ft.
Residential Density (Max) *(See Chapter B.12.A)*		Residential Uses Not Permitted
Setbacks (Min) *(See Chapter B.12.E)*	Front (Street)	45 ft. (Arterial) 35 ft. (Local/Collector)
	Side	50 ft. (Abutting Residential Districts and Planned Development Districts) 15 ft. (Abutting All Other Districts)
	Rear	50 ft. (Abutting Residential Districts and Planned Development Districts) 25 ft. (Abutting All Other Districts)
Lot *(See Chapter B.12.F)*	Width (Min)	100 ft.
	Depth (Min) [1]	250 ft.
	ISR (Max)	80%
Additional Standards	[1] Linear feet are measured from front lot line to rear lot line. Where lot lines are not parallel, measure by drawing lines from front to rear lot lines, at right angles to the front lot line, every 10 ft. and averaging the length of these lines. Refer to *Table B.8.1* for permitted, conditional, and special exception uses allowed in this district. Refer to SC Building Code for distance minimum between buildings.	

5.2 HEAVY INDUSTRIAL (HI)

The purpose of the HI district is to concentrate heavy industrial uses in areas where they will flourish without adversely affecting adjacent less intensive uses.

Table B.5.2. HI District Development Standards		
All Development Types		
Building Height (Max) *(See Chapter B.12.C)*		120 ft.
Density (Max) *(See Chapter B.12.A)*		Residential Uses Not Permitted
Setbacks (Min) *(See Chapter B.12.E)*	Front (Street)	100 ft. (Arterial) 35 ft. (Local/Collector)
	Side	100 ft. (Abutting Residential Districts and Planned Development Districts) 25 ft. (Abutting All Other Districts, Except Industrial) 15 ft. (Abutting Industrial Districts)
	Rear	100 ft. (Abutting Residential Districts and Planned Development Districts) 25 ft. (Abutting All Other Districts)
Lot *(See Chapter B.12.F)*	Width (Min)	100 ft.
	Area (Min)	1.0 Acre
	ISR (Max)	80%
Additional Standards		Refer to *Table B.8.1* for permitted, conditional, and special exception uses allowed in this district. Refer to SC Building Code for distance minimum between buildings.

6. SPECIAL PURPOSE DISTRICTS

A. Special purpose districts are intended to address unique land uses within specific geographic areas of the city, such as military bases, environmentally sensitive lands, and rural/agricultural lands.

6.1 AGRICULTURAL CONSERVATION (AC)

The purpose of the AC district is to protect and preserve areas of the City which are presently rural or agricultural in character and use, and/or are uniquely suited to agricultural use.

Table B.6.1. AC District Development Standards		
All Development Types		
Building Height (Max) *(See Chapter B.12.C)*		35 ft.
Density (Max) *(See Chapter B.12.A)*		0.2 Units/Acre
Setbacks (Min) *(See Chapter B.12.E)*	Front (Street)	45 ft. (Arterial) 35 ft. (Local/Collector)
	Side	50 ft.
	Rear	80 ft.
Lot *(See Chapter B.12.F)*	Width (Min)	Not Applicable
	Area (Min)	5 Acres
	ISR (Max)	10%
Additional Standards		Refer to *Table B.8.1* for permitted, conditional, and special exception uses allowed in this district. Refer to SC Building Code for distance minimum between buildings.

6.2 CONSERVATION PRESERVATION (CP)

The purpose of the CP district is to recognize, preserve and protect environmentally sensitive areas that may require special consideration. This district also encompasses lands and the uses of land, which may be either publicly or privately managed, that preserves natural open spaces. These spaces may or may not be legally protected as conservation areas within the CP district.

Table B.6.2. CP District Development Standards

		Single Family Detached[1]	All Other Development Types
Building Height (Max) *(See Chapter B.12.C)*		35 ft.	
Density (Max) *(See Chapter B.12.A)*		1 Unit/Acre	Not Applicable
Setbacks (Min) *(See Chapter B.12.E)*	Front (Street)	45 ft. (Arterial) 35' (Local/Collector)	
	Side	8 ft.	50 ft.
	Rear	20 ft.	80 ft.
Lot *(See Chapter B.12.F)*	Width (Min)	75 ft.	Not Applicable
	Area (Min	1 Acre	
	ISR (Max)	40%	10%
Additional Standards		[1] SF Detached uses require special exception approval by the Board of Zoning Appeals (BZA). Refer to *Table B.8.1* for permitted, conditional, and special exception uses allowed in this district. Refer to SC Building Code for distance minimum between buildings.	

6.3 SHAW AIR FORCE BASE (SAFB)

The purpose of the SAFB district is to recognize and support major facilities in the City that are owned and operated by the United States military. While military lands are not subject to the UDO and other local ordinances and codes, they occupy large land areas in the City and are therefore identified on the Official Zoning Map to differentiate them from lands that are subject to the Zoning Ordinance.

Table B.6.3 SAFB District Development Standards
No use, dimensional, or intensity standards apply in the SAFB District. If land within the SAFB is conveyed to private ownership in the future, the land will be subject to the same requirements as the IG district (*See Chapter B.7.4*) until the land is rezoned to another zoning district in accordance with *Chapter A.3.2.A*.

7. MIXED USE DISTRICTS

A. Mixed use districts aim to enhance land use efficiency, promote walkability, and create vibrant communities and/or campus environments by integrating various uses that may be located within close proximity to one another.

7.1 DOWNTOWN CORE (DTC)

The purpose of the DTC district is to promote the concentration and vitality of commercial and residential development in Downtown Sumter. This district is characterized by multi-story buildings, retail stores, professional offices, and government and health services.

Table B.7.1. DTC District Development Standards		
All Development Types		
Building Height (Max) *(See Chapter B.12.C)*		90 ft.
Residential Density[1] (Max) *(See Chapter B.12.A)*		Not Applicable
Setbacks (Min) *(See Chapter B.12.E)*	Front (Street) [2]	Not Applicable
	Side [3]	Not Applicable
	Rear	Not Applicable
Lot *(See Chapter B.12.F)*	Width (Min)	Not Applicable
	Area (Min)	Not Applicable
	ISR (Max)	100%
Additional Standards	[1] Density is not regulated by dwelling units per acre but by height and required residential off-street parking for residential uses. [2] Buildings in the DTC are intended to directly abut the sidewalk facing each building. [3] Buildings in the DTC are intended to share common walls with adjacent buildings. Refer to *Table B.8.1* for permitted, conditional, and special exception uses allowed in this district. Refer to SC Building Code for distance minimum between buildings.	

7.2 DOWNTOWN TRANSITION (DTT)

The purpose of the DTT district is to act as a gateway to the commercial and residential development in Downtown Sumter. The district allows for urban, high-quality development that features a mixture of uses including civic, entertainment, cultural, mixed-use buildings, detached and attached single-family homes, and mid-sized multi-family and commercial development. Additionally, the DTT aims to create a well-connected urban environment supporting multi-modal transportation.

Table B.7.2. DTT District Development Standards		
All Development Types		
Building Height (Max) *(See Chapter B.12.C)*		55 ft. (by-right) 75 ft. (by Special Exception)
Residential Density (Max) *(See Chapter B.12.A)*		Single Family Detached - 10 Units/Acre (by-right) w/ up to 15 Units/Acre Maximum (By Special Exception) Density for other residential development types permitted in DTT - *See Table B.3.6*
Setbacks (Min/Max) *(See Chapter B.12.E)*	Front (Street) [1]	0 ft Minimum 20 ft. Maximum
	Side[2]	0 ft Minimum 10 ft. Maximum
	Rear	20 ft.
Lot *(See Chapter B.12.F)*	Width (Min)	50 ft.
	Area (Min)	Not Applicable
	ISR (Max)	75%
FAR (Max)		2.0
Additional Standards		[1] 45 ft. may be permitted to accommodate a single row of parking and drive aisle where side and or rear parking is not available. [2] 25 ft. may be permitted to accommodate those lots without access to an alley or shared driveway in order to accommodate a driveway where rear serving parking or loading is provided. . Refer to *Table B.8.1* for permitted, conditional, and special exception uses allowed in this district. Refer to SC Building Code for distance minimum between buildings.

7.3 INSTITUTIONAL GENERAL (IG)

The purpose of the IG district is to accommodate institutional uses that require a unique approach due to their unconventional nature and/or ownership patterns. Uses in this district primarily include colleges, primary schools and secondary schools, as well as specialized uses such as cultural facilities, parks and open space, as well as government offices. Uses within the IG District are typically arranged in a campus-style setting, although such layout is not required. Development in this district may include the grouping of multiple institutional buildings, and inter-related public, private, and nonprofit development. The regulations of this district are intended to discourage any use which, because of its character, would be a nuisance to the institutional uses and surrounding residential areas. This district is not intended to restrict a campus-style approach where multiple uses or entities are organized under a unified master plan.

Table B.7.3. IG District Development Standards		
All Development Types		
Building Height (Max) *(See Chapter B.12.C)*		55 ft. 65' (By SE)
Residential Density (Max) [1] *(See Chapter B.12.A)*		6 Units/Acre
Setbacks (Min) [2] *(See Chapter B.12.E)*	Front (Street)	15 ft.
	Side	15 ft. (Interior Lot) 10 ft. (Corner Lot)
	Rear	10 ft. (Interior Lot)
Lot [3] *(See Chapter B.12.F)*	Width (Min)	75 ft.
	Area (Min)	7,500 SF
	ISR (Max)	50%
Additional Standards		[1] Where dormitories or similar are provided as part of the use (and approved as part of a master plan there shall be no density limit. All other residential uses in this district are limited to 6 Units/Acre and the R-9 development standards shall apply. [2] For projects involving campuses where multiple uses or entities are organized under a unified master plan, setback requirements for common interior lot lines between the identified multiple uses or entities are not required. Written consent from all affected owners constituting the campus is required. [3] Lot width, lot area, ISR requirements only apply to residential dwellings. Refer to *Table B.8.1* for permitted, conditional, and special exception uses allowed in this district. Refer to SC Building Code for distance minimum between buildings.

7.4 PLANNED DEVELOPMENT (PD)

A. **Purpose.** The intent of the Planned Development District (PD) is to encourage flexibility in the development of land that will result in improved design, character and quality of new mixed-use development; to facilitate the provision of streets and utilities; and to preserve the natural and scenic features of open space.

B. **Area and Ownership.** A request for a new PD designation shall meet the following ownership and size requirements:
   1. The site shall be in single ownership or control, or if in several ownerships, the application for new PD shall be filed jointly by all of the owners. Amendments to PDs shall be filed by the individual owners of land where the change is proposed.
   2. A PD must consist of at least 2.0 acres of contiguous land area.

C. **Map Designation.** The adopted site plan and associated standards constitute the zoning map and zoning requirements for the property.

D. **Planning Requirements.** A conceptual level site layout plan meeting the minimum submission requirements stated on the PD application shall be submitted. Requests shall be processed pursuant to *Chapter A.3.C*. Formal site plan or subdivision submissions pursuant to *Chapter A.3.3* are required for development within an approved PD district.

E. **Site Plan/Subdivision Plat Required**. In addition to this requirement, a detailed site plan or subdivision plat (preliminary) shall be required prior to a request for a building or development permit.

F. **Permitted Uses.** Any use proposed by the developer and considered by the Planning Commission as being compatible to other nearby uses within and beyond the proposed PD district may be permitted in such district, upon approval of the Sumter City-County Planning Commission and the City Council. A listing of proposed uses, including type and number of dwelling units within a particular PD District, shall be adopted as part of the regulations applying to that District. After approval, the list of

permitted uses (or portion thereof) shall be adopted as part of the regulations applying to that particular PD district. Thereafter, the uses permitted in the District shall be restricted to those listed, approved and adopted.

G. **Private Streets.** Private streets may be permitted in an approved PD District, provided such streets meet the design and construction standards for public streets as required in *Chapter D*.

H. **General Design Criteria and Development Standards:**

1. Overall site design shall be harmonious in terms of landscaping, enclosure of principal and accessory uses, sizes of structures, streets and street patterns, and use relationships.
2. The PD must include a mix of 2 or more general use types – residential, institutional, commercial/office, or industrial.

8. PERMITTED USES

8.1 PERMITTED USES TABLE

Table B.8.1 Permitted Uses Table details the Permitted Uses in each district. Each use is given one of the following designations.

A. **Permitted ("P").** These Uses are permitted subject to applicable use specific requirements of *Chapter B.9*.

B. **Conditional ("C")**. These uses are subject to applicable use specific requirements of *Chapter B.9*, and the conditional use criteria in *Chapter B.9.10*.

C. **Special Exception ("S").** These uses are subject to applicable use specific requirements of *Chapter B.9.*, and BZA review and approval pursuant to *Chapter A*, as is applicable.

D. **Not Permitted.** Boxes that do not contain a letter designation are not permitted in the corresponding zoning district.

8.2 INTERPRETATION

A. The Zoning Administrator shall have the authority to make determinations pertaining to uses not expressly listed in *Table B.8.1*. In such instances, the Zoning Administrator may determine which listed use classification a proposed non-listed use most closely aligns with for the purposes of administering this UDO. The Zoning Administrator may use available resources, including but not limited to industrial classification codes, to make such determinations. The Zoning Administrator may refer a use determination to the BZA. Appeals to Zoning Administrator determinations shall be made pursuant to *Chapter A.3.4.C*.

TABLE B.8.1 PERMITTED USES																	
Key: *P = Permitted Use;* *C = Conditional Use;* *S = Special Exception*	**Section**	**R-15**	**R-9**	**R-6**	**GR**	**RMF**	**PO**	**NC**	**LC**	**GC**	**DTC**	**DTT**	**IG**	**LI-W**	**HI**	**AC**	**CP**
Agricultural Uses																	
Farming – Crop Production	*B.9.1(A)*	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Commercial Livestock	*B.9.1(B)*															P	
Personal Use Livestock	*B.9.1(C)*	P	P	P	P	P	P	P	P	P				P	P	P	P
Stockyards, Poultry Houses, Pig/Hog Farming, slaughterhouses, and Animal Auction Houses	*B.9.1(D)*															S	
Forestry and Logging *(Exempt Activities Under S.C. Code 1976 §48-23-205 Only)*	*B.9.1(E)*	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Nursery, Plant & Landscaping	*B.9.1(F)*								C	P				P		C	
Residential Uses																	
Single Family Detached Dwelling	*B.9.2(A)*	P	P	P	P	C	C				C	C	C			P	S
Single Family Attached Dwelling * *(R-9 District – Residential Infill Overlay District Only)*	*B.9.2(B)*		C*	C	C	C	C				C	C	C				
Suburban Townhomes * *(R-9 District – Residential Infill Overlay District Only)*	*B.9.2(C)*		C*	C	C	C	C	C	C	C			C				
Urban Townhomes *(All Districts – (Residential Infill Overlay District Only)*	*B.9.2(D)*		C	C	C	C	C	C	C	C	C	C	C				
Duplex Dwelling * *R-9 District – (Residential Infill Overlay District Only)*	*B.9.2(E)*		C*	C	C	C	C					C	C				
Triplex and Quadruplex Dwelling * *R-9 District – (Residential Infill Overlay District Only)*	*B.9.2(F)*		C*	C	C	C	C	C	C	C	C	C	C				
Suburban Multi-Family	*B.9.2(G)*					P			P	P			P				

TABLE B.8.1 PERMITTED USES																	
Key: *P = Permitted Use;* *C = Conditional Use;* *S = Special Exception*	**Section**	**R-15**	**R-9**	**R-6**	**GR**	**RMF**	**PO**	**NC**	**LC**	**GC**	**DTC**	**DTT**	**IG**	**LI-W**	**HI**	**AC**	**CP**
Dwelling																	
Urban Multi-Family Dwelling *(All Districts - Residential Infill Overlay District Only)*	*B.9.2 (H)*					P			P	P	P	P	P				
Cottage Courts *(In Residential Infill Overlay District Only)*	*B.9.2(I)*		C	C	C	C						C					
Manufactured Home	*B.9.2(J)*				P											P	
Manufactured Home Park	*B.9.2(K)*				C					C							
Group Home	*B.9.2(L)*	P	P	P	P	P											
Home Occupation	*B.9.2(M)*	P	P	P	P	P	P	P	P	P	P	P	P			P	
Upper story Residential	*B.9.2(N)*									P	P	P					
Group Dwelling	*B.9.2(O)*					C	C	C	C	C	C	C	P				
Fraternity/Sorority Dwellings	*B.9.2(P)*		S	S	S	C	C	C	C	C		C	P				
Public and Institutional Uses																	
Post Office (Mail and Packages)	*B.9.3(A)*					C	P	P	P	P	P	P	P	P	P	P	
Elementary/Primary Schools	*B.9.3(B)*	C	C	C	C	C	C	C	C	C		P	P			C	
Secondary Schools	*B.9.3(C)*	C	C				C	C	C	C		P	P			C	
Higher Education *(College, Junior College, University, Technical)*	*B.9.3(D)*		C	C	C	C		C	C	C	P	P	P			C	
Other Educational Facilities	*B.9.3(E)*						C	C	C	C	P	P	P			C	
Commercial Cemetery	*B.9.3(F)*	C	C	C	C		C		P	P				C	P	P	P
Religious Cemetery	*B.9.3(G)*	C	C	C	C		C		P	P				C	P	P	P
Private Cemetery	*B.9.3(H)*	C	C	C	C		C		P	P				C	P	P	P
Religious Institutions	*B.9.3(I)*	C	C	C	C	C	P	P	P	P	P	P	P	C		C	
Cultural, Library and Museum Facility	*B.9.3(J)*	C	C	C	C		P	P	P	P	P	P	P	C			
Government Offices	*B.9.3(K)*	C	C	C	C	C	P	P	P	P	P	P	P	P	P	C	
Public Safety	*B.9.3(L)*	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

TABLE B.8.1 PERMITTED USES																	
Key: *P = Permitted Use;* *C = Conditional Use;* *S = Special Exception*	**Section**	**R-15**	**R-9**	**R-6**	**GR**	**RMF**	**PO**	**NC**	**LC**	**GC**	**DTC**	**DTT**	**IG**	**LI-W**	**HI**	**AC**	**CP**
Correctional Facility	*B.9.3(M)*													S	S	S	
Mobile Classrooms	*B.9.3(N)*	C	C	C	C	C	C	C	C	C		C	C			C	
Charitable, Professional, Fraternal, Veteran & Social Advocacy Organizations	*B.9.3 (O)*		C	C	C		P	P	P	P	P	P	P	P			
Commercial Retail Uses																	
Animal Kennels	*B.9.4(A)*								C	C				C	C	C	
Vehicle Sales and Rental Services	*B.9.4(B)*								C	P		C		C			
General Equipment Rental Services *(No Outside Storage)*	*B.9.4(C)*								P	P		P		P	P		
General Equipment Rental Services *(w/Outside Display Areas)*	*B.9.4(C)*									P				P	P		
Bar/Tavern/Night Club/Private Club	*B.9.4(D)*								S	S	S	S		S			
Bed and Breakfast Inn	*B.9.4(E)*	S	S	S	S		C	C	C	C	C	C					
Broadcast Facility	*B.9.4(F)*				S	S	P	P	P	P	P	P	P	P	P	P	P
Convenience Store w/ Fuel Sales	*B.9.4(G)*								C	C		C		C	C		
Convenience Store w/o Fuel Sales	*B.9.4(H)*							C	P	P	P	P		C	C		
Crematorium	*B.9.4(I)*						C		P	P	C	P		P	P		
Funeral Home	*B.9.4(J)*						C		P	P	C	P		P	P		
Grocery	*B.9.4(K)*							P	P	P	P	P	P	P	C	C	
Hotel/Motel	*B.9.4(L)*							C	C	P	P	P		C			
Extended Stays	*B.9.4(M)*						C	C	C	P	C	P		C			
Liquor Store	*B.9.4(N)*								S	S	S	S		S			
Major Vehicle Service	*B.9.4(O)*									C		C		C	P		
Minor Vehicle Service and New Vehicle Part Sales	*B.9.4(P)*								C	P	C	C		C	P		
Motor Vehicle Fuel Dealers	*B.9.4(Q)*									P				P	P		

TABLE B.8.1 PERMITTED USES																	
Key: *P = Permitted Use;* *C = Conditional Use;* *S = Special Exception*	**Section**	**R-15**	**R-9**	**R-6**	**GR**	**RMF**	**PO**	**NC**	**LC**	**GC**	**DTC**	**DTT**	**IG**	**LI-W**	**HI**	**AC**	**CP**
Outdoor Storage	*B.9.4(R)*													C	P		
Pawn Shop	*B.9.4(S)*								C	P		C		C			
Restaurant, Full Service	*B.9.4(T)*						C	P	P	P	P	P		P			
Restaurant, Fast Casual	*B.9.4(U)*							C	C	P	P	P		C			
Restaurant, w/Drive Through	*B.9.4(V)*								C	P		P		C			
Sexually Oriented Business	*B.9.4(W)*													P	P		
Special Events Facilities	*B.9.4(X)*								S	S	C	S		S			
Towing Service	*B.9.4(Y)*									C				C	C		
Tobacco/Vape Shop	*B.9.4(Z)*								S	S		S		S			
Retail, Neighborhood *(Up to 5,000 sq. ft)*	*B.9.4(AA)*							P	P	P	P	P	P	P			
Retail, General *(5,000 to 20,000 sq. ft)*	*B.9.4(BB)*								P	P	P	P					
Retail, General *(20,000 to 250,000 sq. ft. sq. ft)*	*B.9.4(CC)*								C	P	C	C					
Retail, General *(more than 250,000 sq. ft.)*	*B.9.4(DD)*									S							
Wholesale Trade	*B.9.4(EE)*									C				P	P		
Automatic Merchandising Machine Operators	*B.9.4(FF)*									C				P	P		
Industrial and Manufacturing Uses																	
Artisanal Manufacturing	*B.9.5(A)*								C	C	C	C		P	P		
Brewery	*B.9.5(B)*													S	P		
Brewery, Micro	*B.9.5(C)*									C	C	C		P	P		
Distillery	*B.9.5(D)*													S	P		
Distillery, Micro	*B.9.5(E)*									C	C	C		P	P		
Flex Facility	*B.9.5(F)*										C	C		P	P		
Industrial- Light	*B.9.5(G)*													P	P		
Industrial- Heavy	*B.9.5(H)*														P		
Manufacturing	*B.9.5(I)*													C	P		
Sanitary Land Fills, Inert Dump Sites	*B.9.5(J)*														S		

TABLE B.8.1 PERMITTED USES																	
Key: *P = Permitted Use;* *C = Conditional Use;* *S = Special Exception*	**Section**	**R-15**	**R-9**	**R-6**	**GR**	**RMF**	**PO**	**NC**	**LC**	**GC**	**DTC**	**DTT**	**IG**	**LI-W**	**HI**	**AC**	**CP**
Hazardous Waste, Nuclear Waste Transfer, Storage, and Treatment and/or Disposal Sites	*B.9.5(K)*														S		
Resource Recovery Facilities, Solid Waste Storage and Transfer Facilities, Waste Tire and Treatment Sites, Composting Facilities, Manned Convenience Centers, Incinerators, and Recycling Facilities	*B.9.5(L)*													S	S		
Salvage Yards	*B.9.5(M)*														S		
Self-Storage Facilities	*B.9.5(N)*								C	C				P	P		
Data Center *(10,000 sf of total structure area or less)*	*B.9.5(O)*						C	C	C	C	C	C	C	P	P		
Data Center *(more than 10,000 sf of total structure area)*	*B.9.5(P)*														S		
Solar Farms	*B.9.5(Q)*													S	P		
Warehouse/Distribution	*B.9.5(R)*													P	P		
Mining and Extraction Operations	*B.9.5(S)*														S		
Personal and Professional Services Uses																	
Bank/Financial Institution	*B.9.6(A)*						P	P	P	P	P	P	C	C			
Car Wash	*B.9.6(B)*								C	P		C		P			
In-Home Day Care	*B.9.6(C)*	P	P	P	P	P	P	P	P	P	P	P				P	
Daycare (Adult and Child)	*B.9.6(D)*		C	C	C	C	P	P	P	P	C	P	C			C	
Dry Cleaning/Laundromat	*B.9.6(E)*							P	P	P	P	P		P	P		
Spa, Day/Nail Salon/Hair Salon/Barber Shop	B.9.6(F)						P	P	P	P	P	P		P			
Tattoo Parlor	B.9.6(G)									S				P			

TABLE B.8.1 PERMITTED USES																	
Key: *P = Permitted Use;* *C = Conditional Use;* *S = Special Exception*	**Section**	**R-15**	**R-9**	**R-6**	**GR**	**RMF**	**PO**	**NC**	**LC**	**GC**	**DTC**	**DTT**	**IG**	**LI-W**	**HI**	**AC**	**CP**
Personal Services	B.9.6(H)						P	P	P	P	P	P		C			
Bail Bonding	B.9.6(I)									P		P		P			
Construction and/or Specialty Trade Contractors	B.9.6(J)						C		C	C	C	C		P	P		
Medical and Office Uses																	
Animal Care (includes urgent and veterinary services)	*B.9.7(A)*						C		P	P		P	P	P		P	
Residential Care	*B.9.7(B)*					P	P	P	P	P	P	P					
Nursing Home	*B.9.7(C)*					P	P	P	P	P	P	P					
Hospital	*B.9.7(D)*									P	P	P	P	C			
Medical/Dental Facility	*B.9.7(E)*						P	C	P	P	P	P	P	C			
Professional Office	*B.9.7(F)*			S			P	P	P	P	P	P	P	P	P	C	
Rehabilitative and Mental In-Patient Health Facility	*B.9.7(G)*								C	C				C			
Urgent Care	*B.9.7(H)*							C	P	P	C	C	S	C			
Recreation/Open Space + Entertainment Uses																	
Sports Fields	*B.9.8(A)*	C	C	C	C	P	P			P			P			P	P
Amusement/Theme Parks	*B.9.8(B)*									S	S			S			
Golf Courses	*B.9.8(C)*	C	C	C	C					P			P	P		C	C
Driving Range	*B.9.8(D)*	C	C	C	C					P			P	P		C	C
Motor Vehicle Race or Testing Track	*B.9.8(E)*									S				S	S		
Outdoor Concert Venues	*B.9.8(F)*									S	S	S	C	S	S		
Parks, Public	*B.9.8(G)*	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
RV Parks/Recreation Camping Facilities	*B.9.8(H)*								C	C			C			C	C
Shooting Ranges (Indoor Only)	*B.9.8(I)*									S			S	S	S		
Botanical Garden	*B.9.8(J)*	C	C	C	C		P		P	P	P	P	P	C		P	P
Zoo	*B.9.8(K)*									S			S	S		P	

TABLE B.8.1 PERMITTED USES																	
Key: *P = Permitted Use;* *C = Conditional Use;* *S = Special Exception*	**Section**	**R-15**	**R-9**	**R-6**	**GR**	**RMF**	**PO**	**NC**	**LC**	**GC**	**DTC**	**DTT**	**IG**	**LI-W**	**HI**	**AC**	**CP**
Bingo Parlor	*B.9.8(L)*									S				S			
Pool Hall	*B.9.8(M)*									S				S			
Fairgrounds	*B.9.8(N)*								S	S			P	S			
Utilities and Other Uses																	
Airport	*B.9.9(A)*												P		P		
Wireless Communication Towers	*B.9.9(B)*	S	S	S	S	S	C	C	C	C	S	S	C	C	C	C	
Transportation Terminals	*B.9.9(C)*								P	P	P	P	P	P	P		
Utility Facilities, Government *(except Sewer Treatment Plants, & Electrical Substations)*	*B.9.9(D)*	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Sewer Treatment Plants	*B.9.9(E)*						S	S	S	S			S	S	S	S	
Electric Substations	*B.9.9(F)*	S	S	S	S	S	S	S	S	S		S	S	S	S	S	
Parking Lots and Structures	*B.9.9(G)*						P	P	P	P	C	C	P	P	P		
Commercial Truck and Trailer Parking	*B.9.9(H)*									C				C	P		

Key

P = Permitted use subject to applicable use specific requirements of Chapter B.9.

C = Conditional use subject to applicable use specific requirements of Chapter B.9, and the conditional use criteria in Chapter B.9.10.

S = Special exception use subject to applicable use specific requirements of Chapter B.9, and BZA review and approval pursuant to Chapter A, as is applicable.

9. USE STANDARDS

9.1 AGRICULTURAL USES

A. **Farming, Crop Production**. The production of crops, plants, vines, and trees (excluding forestry operations), including but not limited to grain and vegetable farms, horticulture, greenhouses, orchards, tree nurseries, hydroponics, and aquaponics.

1. **Uses Not Included:**

(1) Incidental vegetable gardening or landscaping.

B. **Commercial Livestock.** An open-space land use dedicated to the commercial raising and breeding of livestock, which may include associated buildings and shelters.

1. **Uses Not Included:**

(1) Stockyards, Poultry Houses, Slaughterhouses, Animal Auction Houses.

2. **Use Specific Standards:**

(1) The minimum lot area upon which livestock may be kept is 1 acre. Not applicable to fowl.

(2) No more than 1 head of livestock shall be permitted for each 0.5 acre of lot area for large livestock (horses, cows, etc.). No more than 8 head of livestock for each 0.5 acre of lot area for medium sized livestock (sheep, goats, etc.). No requirement for fowl.

(3) Areas where livestock are kept shall be enclosed with a fence

(4) Structure for livestock sheltering/housing is required.

(5) No structure shall be closer than 50 ft. to the property line.

C. **Personal Use Livestock.** An open space use dedicated to keeping livestock that are not being used for commercial purposes.

1. **Examples:** Keeping of horses, sheep, goats, etc. for subsistence/personal use and purposes only.

2. **Uses Not Included:**
   (1) Breeding livestock. Commercial Livestock. Fowl.
   (2) Fowl regulated by *City Code of Ordinances Article 1, Section 14.2*.
3. **Use Specific Standards:**
   (1) The minimum lot area upon which livestock may be kept is 1 acre. Not applicable to fowl.
   (2) No more than 1 head of large livestock (horses, cows, etc.) shall be permitted for each 0.5 acre of lot area. Not applicable to fowl. No more than 8 total head of medium sized livestock (sheep, goats, etc.)for each 0.5 acre of lot area regardless of species. No requirement for fowl.
   (3) Areas where livestock are kept shall be enclosed with a fence.
   (4) *Structure for livestock sheltering/housing is required.*
   (5) No livestock sheltering/housing structure shall be closer than 50 ft. to any property line.

D. **Stockyards, Poultry Houses, Pig/Hog Farming, Slaughterhouses, and Animal Auction Houses**. Commercial livestock uses deemed as potentially hazardous or disruptive land use activity.
   1. **Use Specific Standards***:*
      (1) Stockyards, Poultry Houses, Slaughterhouses, and Animal Auction Houses shall not be located closer than 1,000 ft. to any adjacent residential use (animal enclosure to structure) on a separately platted parcel of land under separate ownership. No incineration of animals or animal refuse shall be permitted on-site.
      (2) Use requires a minimum site area of 10 contiguous acres.
      (3) Areas where livestock are kept shall be enclosed with a fence.
      (4) Structure for livestock sheltering/housing is required.
      (5) No structure shall be closer than 50 ft. to the property line.

E. **Forestry and Logging**. The use of land whereby forests are tended, harvested for commercial purposes, and reforested either by natural or artificial reforestation, and where timber is cut and sorted on-site.
   1. **Use Specific Standards:**

(1) Forestry and Logging activities covered under *S.C. Code 1976, §48-23-205* are exempt from regulations contained in this Ordinance and permitted in all zoning districts.

(2) Forestry and Logging activities not covered under *S.C. Code 1976, §48-23-205* must obtain tree protection approvals pursuant to *Chapter C.5.16* prior to forestry and logging activities taking place.

2. *Exceptions:*

(1) Removal of trees on an individual lot of record with an established residential use is not considered forestry and logging.

F. **Nursery, Plant and Landscaping.** An establishment whose primary function is the retail sales of live plants and trees, mulch, compost, and the like to individual customers or wholesale.

1. **Accessory Uses***:* The sale of landscape supplies.
2. **Examples:** A plant nursery or tree farm.
3. **Use Specific Standards:**

(1) Live plants (including ornamentals, fruit and nut crops, and herbaceous plants) included within a nursery shall not be considered outdoor storage.

(2) Outdoor storage yards of bulk material (i.e. mulch, compost) shall comply with the standards of *Chapter B.9.4.R*. Mulch is defined as any material used as ground covering for the protection and enhancement of the soil.

(3) Heavy machinery sales are not permitted.

9.2 RESIDENTIAL USES

A. **Dwelling, Single-Family Detached.** A residential building containing 1 dwelling unit, to be occupied by 1 family. For regulatory purposes, the term is not to be construed as including manufactured/mobile homes, recreational vehicles, travel trailers, housing mounted on motor vehicles, tents, houseboats, or other forms of temporary or portable housing.

1. **Accessory Uses:** Accessory uses commonly found are recreational facilities, piers, and docks and accessory structures such as a garage or shed. Any Permitted home occupation shall be clearly incidental and subordinate to the residential use of the dwelling and shall not change the residential character of the dwelling.
2. **Use Specific Standards:**
   (1) All accessory uses shall be clearly incidental to permitted principal use. All accessory buildings and pools shall be located in the side or rear yard.
   (2) All new buildings (primary and accessory) in the CP district shall submit all information required for special flood hazard area (SFHA) review in accordance with *the City of Sumter Flood Damage Prevention Ordinance* at time of application for special exception approval. Such items may include:
      a. Pre-construction elevation certificate
      b. Flood vent specifications and engineer certifications
      c. Zone A modeling data, if necessary
      d. House plans
      e. Plot plan

B. **Dwelling, Single-Family Attached**. A structure with 2 attached single-family dwelling units, with each dwelling joined to at least 1 other dwelling along a single lot line and separated from the other attached dwelling by an unpierced common wall from ground to roof.

1. **Accessory Uses:** Accessory Uses commonly found are recreational facilities, parking of motor vehicles for the occupants, piers and docks, and accessory structures such as a garage or shed. Any permitted home occupation shall be

clearly incidental and subordinate to the residential use of the dwelling and shall not change the residential character of the dwelling.

2. **Use Specific Standards:**
   (1) Single-Family attached buildings shall be limited to 2 dwelling units per building.
   (2) All accessory buildings and uses shall be clearly incidental to permitted principal use. All accessory buildings and pools shall be located in a side or rear yard.
   (3) Submission of a floor plan and plot plan are required.

C. **Dwelling, Suburban Townhouse**. A series of 3 to 8 single-family dwelling units, with each dwelling joined to at least 1 other dwelling along a single lot line and separated from other attached dwellings in the series by an unpierced common wall from ground to roof. Suburban townhome dwellings are intended to be established where the suburban form is a primary characteristic of the surrounding area.

1. **Accessory Uses:** Accessory uses commonly found are recreational facilities, parking of motor vehicles for the occupants, piers and docks, home occupations, and accessory structures such as a garage or shed. Any permitted home occupation shall be clearly incidental and subordinate to the residential use of the dwelling and shall not change the residential character of the dwelling.
2. **Use Specific Standards:**
   (1) Suburban Townhomes shall have a minimum of 3 units and a maximum of 8 units.
   (2) All townhome units shall front either a public street or a private street that is part of a Planned Development.
   (3) All accessory buildings and uses shall be clearly incidental to permitted principal use.
   (4) Maximum of 1 accessory building is permitted per unit.
   (5) All accessory buildings and pools shall be located in a rear yard.
   (6) Minimum site area to establish a suburban townhome development is 2 acres.

(7) Auxiliary parking at the rate of 1 space per 4 units must be provided.

(8) A common landscaping plan identifying the location, species, caliper (trees), gallon size (shrubs), sodding area, and height at time of planting for all plantings to be installed at the front and sides of all units. Sodding must be used for ground cover for all pervious area to the front and sides of all townhome structures, except for planted landscape bed areas.

(9) Submission of a site plan and a floor plan is required.

D. **Dwelling, Urban Townhouse**. A series of at least 3 to 8 single-family dwelling units, with each dwelling joined to at least 1 other dwelling along a single lot line and separated from other attached dwellings in the series by an unpierced common wall from ground to roof.

1. **Accessory Uses***:* Accessory uses commonly found are recreational facilities, parking of motor vehicles for the occupants, piers and docks, home occupations, and accessory structures such as a garage or shed. Any permitted home occupation shall be clearly incidental and subordinate to the residential use of the dwelling and shall not change the residential character of the dwelling.

2. **Use Specific Standards:**

(1) Urban Townhomes shall have a minimum of 3 units and a maximum of 8 units.

(2) All townhome units shall front either a public street or a private street that is part of a planned development.

(3) Individual front driveway access for urban townhome units is prohibited.

(4) All accessory uses shall be clearly incidental to permitted principal use.

(5) All accessory buildings and pools shall be located in the rear yard.

(6) Auxiliary parking at the rate of 1 space per 4 units must be provided.

(7) Provision of a common parking area(s) to the rear or side of units is required.

(8) A common landscaping plan identifying the location, species, caliper (trees), gallon size (shrubs), sodding area, and height at time of planting for all plantings to be installed at the front and sides of all units. Sodding must be used for ground cover for all pervious areas to the front and sides of all townhome structures, except for planted landscape bed areas.

(9) Submission of site plan and floor plan is required.

(10) Shall only be established in the Residential Infill Overlay District (*Chapter B.11.6.*) subject to zoning district-specific use regulations found in *Table B.8.1*.

E. **Dwelling, Duplex.** A single building on 1 parcel of land that is designed, constructed, and used for 2 separately contained dwelling units. The term is not to be construed as including mobile homes, recreational vehicles, travel trailers, housing mounted on motor vehicles, tents, houseboats, or other forms of temporary or portable housing.

1. **Accessory Uses:** Accessory uses commonly found are recreational facilities, parking of motor vehicles for the occupants, piers and docks, and accessory structures such as a garage or shed. Any permitted home occupation shall be clearly incidental and subordinate to the residential use of the dwelling and shall not change the residential character of the dwelling.
2. **Use Specific Standards:**
   (1) All accessory buildings and uses shall be clearly incidental to permitted principal use.
   (2) All accessory buildings and pools shall be located in a side or rear yard.
   (3) Submission or a floor plan and plot plan are required.

F. **Dwelling, Triplex or Quadruplex.** A residential building containing 3 or 4 separately contained dwelling units on 1 parcel of land. For regulatory purposes, the term is not to be construed as including mobile homes, recreational vehicles, travel trailers, housing mounted on motor vehicles, tents, houseboats, or other forms of temporary or portable housing.

1. **Accessory Uses:** Accessory uses commonly found are recreational facilities, parking of motor vehicles for the occupants, piers and docks, and accessory structures such as a garage or shed. Any permitted home occupation shall be clearly incidental and subordinate to the residential use of the dwelling and shall not change the residential character of the dwelling.
2. **Use Specific Standards:**

(1) All accessory buildings and uses shall be clearly incidental to permitted principal use. All accessory buildings and pools shall be located in a side or rear yard.
(2) Maximum 1 driveway access to public street permitted per structure.
(3) No additional driveway access shall be permitted for structures being converted to triplex/quadruplex use where a driveway has already been established.
(4) Parking areas shall be provided to the side or rear of the structure, not located in the front yard area
(5) Floor plan and site plan submission required.

G. **Dwelling, Suburban Multifamily.** Multi-family dwelling units are characterized by a building that contains 5 or more dwelling units on 1 parcel of land. This definition includes condominiums or multifamily apartments. Suburban multi-family dwellings are intended to be established where the suburban form is a primary characteristic of the surrounding area.

1. **Accessory Uses**: Accessory uses commonly found are recreational facilities, parking of motor vehicles for the occupants and guests, piers and docks, and accessory structures such as garage or shed. Any permitted home occupation shall be clearly incidental and subordinate to the residential use of the dwelling and shall not change the residential character of the dwelling.
2. **Examples:** Uses include living in apartments, and condominiums.
3. **Use Specific Standards:**
   (1) All multi-family developments shall be required to provide bulk waste containers such as dumpsters based on the schedule below:
      a. 0 – 30 Units – Minimum 8 cubic yards of bulk waste containment area serviced on a weekly basis.
      b. 31 – 60 Units – Minimum16 cubic yards of bulk waste containment area serviced on a weekly basis.
      c. 61 – 90 Units – Minimum 24 cubic yards of bulk waste containment area serviced on a weekly basis.
      d. 91 – 120 Units – Minimum 32 cubic yards of bulk waste containment area

serviced on a weekly basis.

e. For every 30-unit increment over 120 units add 8 additional cubic yards of bulk waste containment area serviced on a weekly basis.
f. Exceptions: Developments containing 8 units or less are not required to provide bulk waste containers if approved by the Sanitation Director.

Note: *If bulk waste container(s) are serviced more than once a week, then the cubic yards of said container(s) are counted for each weekly service.* ***Example:*** *If a 50-unit development having one 8 cubic yard container serviced twice a week is proposed, then the development meets the minimum criteria.*

H. **Dwelling, Urban Multifamily.** Urban multi-family dwelling units are characterized by a building that contains 5 or more dwelling units, or may consist of upper-story residential in a mixed-use building (i.e. a building that contains a separate use on the bottom floor, and dwelling units on the floors above). Urban multi-family dwellings are an infill development housing type employed within the Residential Infill Overlay District.

1. **Exceptions:** Units located in a vertical mixed-used situation within the DTC or DTT district are considered Urban Multi-Family Dwellings regardless of the number of units.
2. **Accessory Uses:** Accessory uses commonly found are recreational facilities, parking of motor vehicles for the occupants and guests, piers and docks, and accessory structures such as garage or shed. Any permitted home occupation shall be clearly incidental and subordinate to the residential use of the dwelling and shall not change the residential character of the dwelling.
3. **Examples***:* Uses include living in apartments and condominiums.
4. **Use Specific Standards:**
   (1) All multi-family developments shall be required to provide bulk waste containers pursuant to *Chapter B.9.2.G.3.1*.

I. **Cottage Court Residential Development.** A cottage court residential development allows for small lot residential development in a manner that organizes various dwelling types around a common open space, designed as a cohesive whole and maintained in shared stewardship by residents or by a common owner responsible for maintenance and upkeep. Cottage court residential developments are an infill development housing type employed within the Residential Infill Overlay District.

1. **Use Specific Standards:**

(1) Cottage court residential development may take one of two forms:

a. A development may be subdivided into individual lots.

b. A development may also be used as a multi-dwelling development on a single common parcel.

(2) Single-family (attached or detached), duplex, triplex, quadraplex, and townhome dwellings are permitted in a cottage court residential development. No more than 4 dwelling units are permitted in any individual townhome structure.

(3) Design of individual structures shall be consistent with the new residential construction guidelines as outlined in Chapter 6, Section 2 of the City of Sumter Design Review Guidelines.

(4) Accessory dwelling units (ADUs) are prohibited within a cottage court development.

(5) 1 accessory structure, not to exceed 600 sf in area shall be permitted for each structure within the cottage court residential development. Such structures shall meet setback standards in *Chapter B.13.* and shall be located to the rear of the principal structure(s) the building is serving.

(6) The minimum total area required for a cottage court residential development shall be determined by calculating the cumulative lot area required by the base zoning district for the number and type of primary structures to be constructed and reducing the result by 50%. For the purposes of calculating the cumulative lot area required, there shall be no instance where the minimum required area for an individual principal structure is less than 3,000 sf.

(7) A cottage court residential development shall not exceed 3.0 acres in size.

(8) Individual lots or building sites within the cottage court residential development are exempt from the base zoning district standards for lot area, lot width, setback, street frontage, and impervious surface ratio (ISR) requirements. However, lot area, lot width, setback, street frontage and ISR apply to the cottage court development parcel as a whole.

(9) The minimum and maximum number of units allowed are as follows:

a. Cottage court residential development shall include at least 4 principal structures. Individual structures may include more than 1 dwelling unit as is otherwise allowed by the base zoning district and the use specific standards for cottage court residential development.

b. The total number of units shall not exceed a gross density of 15 units per acre.

(10) The fronts of all primary structures within a cottage court development shall be oriented towards the common open space area.

(11) Must include a common landscape design plan and pedestrian circulation system.

(12) Common open space areas shall meet the following standards:

a. The minimum size of the common open space area shall be 3,000 sf or 500 sf per dwelling, whichever is greater.

b. The common open space area shall maintain a minimum width of 30 ft., shall be contiguous and centrally located to the front of all principal structures in the development, and shall front onto a public street.

c. A maximum of 30% of the common open space area may be hardscape.

(13) Dwellings shall provide a 5 ft. minimum setback from the common area. This setback does not count toward minimum common open space area requirements.

(14) Vehicular access and parking for a cottage court shall meet the following standards:

a. Required off-street parking may be provided on individual development sites for each dwelling within the cottage court or in a shared parking area serving multiple dwellings on-site.

b. Each provided common parking area shall contain no more than 10 spaces.
c. Parking areas shall be located to the rear or sides of primary structures.
d. Internal drives may be private. However, recorded shared access easements and associated plats (in accordance with the approved layout) shall be submitted prior to development permit issuance.
e. Private internal drives intended for two-way traffic shall be a minimum of 15 ft. in width. The Technical Review Committee (TRC) and the Planning Commission may require additional drive width to address context sensitive site conditions and Fire Code requirements.
f. Private internal drives intended for 1-way only traffic shall be a minimum of 10 ft. in width. The Technical Review Committee (TRC) and the Planning Commission may require additional drive width to address context sensitive site conditions and Fire Code requirements.
g. Private internal drives shall be located no closer than 5 ft. to side and/or rear property lines.

(15) Cottage court residential development shall be reviewed and approved by the Planning Commission as a Major Subdivision.

J. **Manufactured Home.** A manufactured home is a transportable structure of 1 or more sections built on a permanent metal chassis and designed to be towed. This term shall not include modular dwellings placed on permanent foundations, nor shall it include travel trailers, motor homes, campers, or similar units designed for recreation or other short-term use. Manufactured homes are structures constructed after June 15, 1976, and have the United States Department of Housing & Urban Development (HUD) label/tag certifying that the home is constructed in accordance with HUD Manufactured Home Construction and Safety Standards.

1. **Accessory Uses:** Accessory uses commonly found are recreational facilities, parking of motor vehicles for the occupants, and accessory structures such as a garage or shed. Any permitted home occupation shall be clearly incidental and subordinate to the residential use of the dwelling and shall not change the residential character of the dwelling.

2. **Use Specific Standards:**
   (1) No manufactured home older than 20 years at the date of an executed manufactured home certification for new placement is permitted. Manufactured homes being moved from one location within the jurisdictional limits of the City of Sumter to another location within the jurisdiction of the City of Sumter are exempt from the 20 year age requirements – provided they meet all other standards in this Section.
   (2) All manufactured homes shall be attached to a foundation and securely underpinned and/or anchored in accordance with manufacturer's specification. The securing of a unit to a foundation must be inspected and approved by the Sumter City-County Building Department.
   (3) All manufactured homes shall have an unpierced solid curtain wall consisting of brick, stone, stucco, vinyl, wood. The curtain wall must match or be compatible with the color of the exterior siding of the manufactured home. Unfinished wood exterior material, such as plywood or similar materials, is not permitted for use to meet this requirement.
   (4) All manufactured homes in the AC district shall be placed with the longest dimension parallel to the lot frontage.
   (5) Mobile home units that are not certified by HUD are prohibited.

K. **Manufactured Home Park.** Any area, lot parcel, or tract held in common ownership that has been planned and improved for the placement of manufactured homes and on which individual portions of said area, lot, parcel, or tract are leased for the placement of manufactured homes as a primary residence. Manufactured Home Parks shall have no less than 4 manufactured homes within the manufactured home park area.
   1. **Use Specific Standards:**
      (1) A manufactured home park shall be served by a community water and sewer system, storm drainage system, and a refuse facility;
      (2) Internal paved roadways shall be required, with have a minimum travel width of 18 ft., exclusive of parking;

(3) No manufactured home shall have direct access to a collector or arterial street.

(4) Each manufactured home shall meet the off-street parking requirements for a single-family detached dwelling.

(5) A minimum of 10% of the park shall be developed for recreational purposes, with no recreation area having less than 500 sq. ft. in area.

(6) All on-site roadway intersections shall be provided with a streetlight, and interior lights shall be provided at not less than 400 ft. intervals.

(7) Each manufactured home site shall be at least 15 ft. from any other manufactured home, at least 15 ft. from the right-of-way of any internal drive which provides common circulation, at least 25 ft. from any side or rear property line, and shall meet the front yard setbacks for the street upon which it is located.

L. **Group Home.** A residence of persons requiring care or supervision. For the purposes of this Ordinance "group homes" shall only be defined as a home intended to exclusively serve individuals with protected characteristics under the Federal Fair Housing Act or to exclusively serve those individuals described in *S.C. Code 1976, § 6-29-770 (E) through (H)* as further defined in *Chapter A.5.*

1. **Use Specific Standards:**

(1) A group home use application shall be submitted.

(2) Maximum of 6 facility residents (9 for qualifying group homes under the state statute), not including on-site staff. Under no circumstances shall there be more than 2 residents per bedroom.

(3) A minimum 1,500 ft. separation (structure to structure) from any other group home facility.

(4) A structure with an existing attached garage shall not convert the attached garage into conditioned, habitable living space.

(5) The facility shall provide on-site parking that gives the visual appearance of a single-family dwelling. This shall include a driveway of a residential scale with no on-street parking permitted to accommodate minimum required

parking. Any additional parking beyond the minimum numbers listed below shall be located to the rear of the dwelling.

a. A minimum of 1 parking space shall be provided for each vehicle operated by the facility.
b. A minimum of 1 parking space per staff member shall be provided for the maximum number of staff on duty during daytime hours.
c. Parking shall be reviewed in a manner similar to that of a single-family dwelling where driveway length, width, and garage space will count toward required parking areas.

(6) No commercial garbage collection containers/collection services shall be permitted for any group home facility located in a single-family residential dwelling in a residential zoning district.

(7) A scaled site plan based on an as-built survey of the property showing building placement, parking, access, garbage collection areas, and similar features shall be submitted in conjunction with use application.

(8) Scaled building floor plan depicting sleeping area, eating areas, sanitary facilities, recreation areas, office/employee areas, kitchen/pantry space, and laundry/utility spaces shall be submitted in conjunction with use application.

M. **Home Occupation.** Any occupation within a dwelling, and clearly incidental thereto, carried on by a member of the family residing on the premises.

1. **Use Specific Standards:**

(1) The home occupation shall be an activity which is accessory and clearly incidental to the primary residential use of the premises.

(2) Only the residents of the dwelling unit and no more than 1 nonresident employee may be employed by or engaged in the conduct of the home occupation on the premises. For the purpose of this Section, "nonresident employee" shall include an employee, business partner, independent contractor, or other person affiliated with the home occupation who is not a resident of the dwelling unit or rooming unit, but who visits the premises as part of the home occupation. Not more than 1 nonresident employee shall

be permitted per dwelling unit or rooming unit, regardless of the number of home occupations.

(3) The maximum floor area used for a home occupation shall not exceed 750 sq. ft. or 25% of the gross floor area of the principal structure, whichever is lesser. This limitation applies to accessory buildings used as part of the home occupation.

(4) An accessory building used in the conduct of a home occupation must be in compliance with applicable accessory structure setback requirements.

(5) Exterior alterations or modifications that change the residential appearance of the residential use, any accessory building, or the zoned lot, are expressly prohibited.

(6) Interior alterations or modifications that eliminate the kitchen, living room, all of the bathrooms, or all of the bedrooms of the residential use are expressly prohibited.

(7) There shall be no exterior indication of a business use operating on the site. Outdoor storage or display of materials, goods, supplies, or equipment related to the conduct of a home occupation shall be prohibited, except that 1 light-duty commercial class truck (Classes 1-3 as defined by FHWA) and/or trailer not to exceed 18 ft. in length may be parked on the property in a location compliant with the City Code of Ordinances.

(8) All parking necessary to accommodate the home occupation shall be located on the zoned lot, and on-street parking is expressly prohibited.

(9) The following uses do not meet the definition of a home occupation and are expressly prohibited:

a. Automobile repair.
b. Automobile Sales.
c. Manufacturing and processing uses, except handcrafts, sewing, tailoring, quilting, or other similar activities where goods are not manufactured for stock sale or distribution.
d. Construction trades where there is on-site activity other than a home office.

e. Transportation and service trades with more than 1 vehicle or with a vehicle(s) not in compliance with this Section.
f. On-premises retail.
g. Any home occupation that does not meet the full criteria of *Chapter B.9.2.M.1*.

N. **Upper Story Residential.** Dwelling units located on floors above a non-residential use within the same building. These units are typically part of a mixed-use structure where the ground floor is occupied by a permitted commercial, retail, office, public or institutional uses.
   1. **Examples.** Accessory uses include mixed-use buildings featuring a separate use on the bottom floor, with residential above.
   2. **Use Specific Standards:**
      (1) Ground floor must remain active with commercial, retail, office, public or institutional uses; the residential use cannot dominate street frontage.
      (2) Dwelling units located above a permitted non-residential use within the same building shall not be counted toward the calculation of residential density for the zoning district in which they are located.

O. **Group Dwelling.** A building or portion of a building intended for occupancy by several unrelated persons, where individual rooms may be rented out for situations that do not meet the definition of family or other defined residential classifications. This is not to be construed as being the same as group home pursuant to *Chapter B.9.2.L*.
   1. **Examples:** Boarding and rooming houses.
   2. **Uses Not Included:**
      (1) Fraternity/Sorority Dwellings
      (2) Group Homes

P. **Fraternity/Sorority Dwelling.** A building or portion of a building intended for sleeping accommodations (with or without accessory common rooms, cooking, and eating facilities) for groups of students who are members of a recognized or sanctioned

fraternity or sorority by a specified education institution and where such living arrangements do not meet the definition of family.

1. **Uses Not Included:**
   (1) Group Dwellings
   (2) Group Homes

9.3 INSTITUTIONAL AND PUBLIC USES

A. **Post Office (Mail and Packages).** This category includes any facility that allows customers to mail or deliver letters, packages, and goods. May be publicly or privately owned.
   1. **Accessory Uses:** Accessory uses may include a cafeteria for staff, parking for workers and customers, and a parking area for mail or delivery trucks.
   2. **Examples:** United States Postal Service facilities and commercial mail and delivery services such as storefront FedEx and UPS operations.
   3. **Uses Not Included:** Mail kiosks, lockers, and mailboxes are not subject to use standards and may be permitted as accessory structures.

B. **Elementary/Primary Schools.** This category includes public and private schools, including charter and grades K-6, that provide state-mandated basic education.
   1. **Accessory Uses:** Accessory uses include play areas, cafeterias, recreational and sport facilities, auditoriums, and before- or after-school care.
   2. **Use Specific Standards:**
      (1) Must meet the curricular teaching certification of instruction approved by the State Board of Education.
      (2) All mobile or portable classrooms shall be located in rear yards. Administrative approval by the Planning Department may allow the placement inside front or side yards if placement in the rear cannot be accommodated.

C. **Secondary Schools.** This category includes public and private schools grades 7-12, including charter school, technical high schools, and vocational technical high schools.
   1. **Accessory Uses:** Accessory uses include play areas, cafeterias, recreational and sport facilities, auditoriums, and before- or after-school care.
   2. **Use Specific Standards:**
      (1) All mobile or portable classrooms shall be located in rear yards. Administrative approval by the Planning Department may allow the

placement inside front or side yards if placement in the rear cannot be accommodated.

D. **Higher Education (College, Junior College, University, Technical).** Universities, colleges, or vocational schools are higher learning establishments that provide education after high school (including associate, bachelor, graduate, doctoral), vocational, and technical degrees and skills.

1. **Accessory Uses:** Accessory uses may include associated offices, parking, cafeteria, fitness facility, student union facilities, on and off campus dormitories owned and operated by the school.
2. **Examples:** Examples include a trade school, career center, vocational college, college, university, satellite campus or satellite branch of a university, college or vocational school.
3. **Use Specific Standards:**
   (1) All activities associated with a vocational school (or trade school) that cause excess noise or nuisance shall be within a completely enclosed building.
   (2) University, college, or vocational schools may occur in existing buildings suitable for commercial activity, such as a shopping center.

E. **Other Educational Facilities.** Educational Facilities include but are not limited to test prep, tutoring, professional licensing, or similar. Uses are understood to be limited in nature both in size and number of students.

F. **Commercial Cemetery.** A place used, dedicated, or designated for cemetery purposes including any one or combination of perpetual care cemeteries, burial parks for earth interment; mausoleums; columbariums. A commercial cemetery is a licensed burial ground operated by a cemetery company under *S.C. Code 1976, §40-8 (South Carolina Perpetual Care Cemetery Act)*.

1. **Accessory Uses.** Accessory uses may include associated facilities for perpetual care, mausoleum buildings, columbariums, administration, and parking. As used herein, "cemetery" may include perpetual-care cemeteries, burial parks, mausoleums, or columbariums as defined in *S.C. Code 1976, §40-8 (South Carolina Perpetual Care Cemetery Act)*.

2. **Use Specific Standards:**
   (1) Proposed cemetery sites must meet the minimum development standards for the zoning district in which it is to be located.
   (2) A site plan is to be submitted with the application.
   (3) Cemetery sites must be at least 30 acres.

G. **Religious Cemetery.** A parcel of land used, dedicated, or designated for cemetery purposes as a use associated with a religious institution, including any one or combination of burial parks for earth interment, mausoleums, or columbariums. Such cemeteries shall be located on private property, established without commercial intent, and used exclusively for the interment of members of the affiliated religion, religious congregation, their families, heirs, or descendants.

H. **Private Cemetery.** A place used, dedicated, or designated for cemetery purposes including any one or combination of perpetual care cemeteries, burial parks for earth interment; mausoleums; columbariums on private property, established without commercial intent, used exclusively for the interment of the property owner's family, heirs, or descendants. Not open to the general public and without perpetual commercial operation.
   1. **Use Specific Standards:**
      (1) Proposed cemetery sites must meet the minimum development standards for the zoning district in which it is to be located.
      (2) A site plan is to be submitted with the application.

I. **Religious Institutions.** A facility intended as a house of worship that hosts organized religious services.
   1. **Accessory Uses:** Accessory uses may include daycare facilities, schools, and recreational facilities.
   2. **Examples:** A church, synagogue, temple, mosque, or similar religious house of worship.

J. **Cultural, Library and Museum Facility.** A facility or site open to the public for cultural services and events operated by the government or a certified non-profit entity.
   1. **Accessory Uses***:* Accessory uses may include cafeterias, snack bars, parking, ancillary assembly, retail, or restaurant.
   2. **Examples:** Examples include community centers, libraries, museums, and historical societies.

K. **Government Office.** A building, or portion of a building, wherein government activities are performed involving predominately administrative, record keeping, professional, and/or clerical operations and where professional services are rendered. For the purpose of this ordinance "government" includes local, state, and federal government agencies.
   1. **Accessory Uses:** Accessory uses may include cafeterias, day care facilities, health facilities, parking, or other amenities primarily for the use of employees in the firm or building.
   2. **Examples:** Examples include city hall buildings, government offices, court houses, public work facilities, municipal government buildings.

L. **Public Safety.** Facilities operated by a public safety agency, commonly governmental, for the purpose of providing safety related services including fire and police, to the general public.
   1. **Accessory Uses:** Accessory uses may include parking, cooking facilities, or holding cells within a police station.
   2. **Examples:** Public safety facilities including fire stations, police stations, and emergency communication broadcast facilities.

M. **Correctional Facility.** A private or government establishment primarily engaged in managing and operating correctional institutions. This establishment is designed for the confinement, correction, and rehabilitation of adult or juvenile offenders sentenced by a court.
   1. **Accessory Uses:** Accessory uses include offices, meeting rooms, cafeteria facilities designed for the use of workers or inmates.

2. **Examples:** Examples may include a correctional institution, penitentiary, detention center, prison, and a jail.

N. **Mobile Classrooms.** A prefabricated, relocatable structure designed to provide temporary classroom space accessory to a school or place of worship. Such units shall be installed on a permanent foundation, and have all transport-related hardware removed.

1. **Accessory Allowance.** Mobile Classroom units shall be allowed accessory to any School and/or Place of Worship uses only.
2. **Use Specific Standards.**
   (1) Screening shall be provided for Mobile Classrooms.
   (2) Mobile Classroom units shall be placed on a masonry foundation, and all wheels, axles, hitches, and other mobile appurtenances shall be removed.
   (3) Mobile Classroom units shall be located to the rear or interior side of the principal building.
   (4) A maximum of 9 Mobile Classroom units shall be allowed on a school and/or place of worship site concurrently.
   (5) Connectivity. Mobile Classroom units shall be connected to the principal building via pedestrian walkways.

O. **Civic, Charitable, Professional, & Social Advocacy Organizations.** Various organizational types, typically not for profit, that have a specific mission and purpose. Such uses are low impact and resemble a professional office use type.

1. **Examples:** Examples may include professional business associations, social advocacy non-profit organizations, charitable organizations, etc.

9.4 COMMERCIAL RETAIL USES

A. **Animal Kennels.** The use of land for the purpose of boarding animals. May include a pet resort which provides day care for pets in addition to grooming and training/classes.

1. **Accessory Uses***: Outdoor play areas for animals, office, indoor storage, limited retail sales of pet associated items.*
2. **Examples:** *Animal kennel or boarding facility, animal shelter.*
3. **Use Specific Standards:**
   (1) Animal Kennels shall not be located closer than 500 ft. to adjacent residential uses (outdoor animal enclosure to structure) on a separately platted parcel of land under private ownership. Urban/Suburban multi-family uses are exempt from this separation requirement.
   (2) All outdoor areas intended for animal use shall be fenced with a minimum 6-foot fence.
   (3) Animals shall be kept within an enclosed building between the hours of 10:00 pm and 6:00 am.
   (4) Animal waste shall not be stored closer than 10 ft. from the property line.

B. **Vehicle Sales and Rental Services.** Establishments that are involved with the sale or lease of automobiles (including but not limited to cars and boats), renting of motor vehicles, and display of motor vehicles for sale, lease, or rental.

1. **Accessory Uses:** Accessory uses may include showroom, associated office and storage, vehicle fueling (only for vehicles for sale or lease, not open to the general public), car wash (only for vehicles for sale or lease, not open to the general public), and limited retail sales of items associated with motor vehicles.
2. **Examples:** Examples include but are not limited to car dealerships, boat dealerships, motor vehicle dealerships dealing in recreational vehicles, car rental establishments, moving vehicle rental establishments.
3. *Use Specific Standards:*
   (1) Vehicle display areas shall be an improved surface.
   (2) Vehicles shall not be displayed in any required buffer.

(3) The use of loudspeakers or similar noise amplifying devices shall be prohibited.

C. **General Equipment Rental Services (Indoor and Outdoor).** The rental of supplies and large equipment primarily intended for use by construction, general, landscaping, or industrial contractors, including but not limited to hoists, lifts, forklifts, and commercial capacity generators and compressors, but not including car or truck rentals.

D. **Drinking Place/Nightclub/Private Club.** Any such establishments meeting the applicable definitions outlined in *Chapter A.5*.

1. **Accessory Uses***:* Ancillary indoor storage, associated office, outdoor patron areas (if permitted under the State A.B.C. regulations), and parking.
2. **Examples:** Bars, taverns, cocktail lounges, dancehalls, private clubs.
3. **Use Specific Standards:**
   (1) Outdoor entertainment is limited to the hours between 8:00 a.m. - 10:00 p.m., except in the DTC District.
   (2) This use shall not be within 300 ft. (measured in a straight line from structure to structure) of a residential use, religious institution, elementary or secondary school or public playground on a separately platted parcel, except in the DTC District where required separation is exempted.
   (3) A 6 ft. high fence that is a visual screen shall be installed to separate this use from residential uses, where such residential uses are directly adjacent to the property or site containing the use.

E. **Bed and Breakfast.** A house, or portion thereof, offering short-term lodging and meals to guests. Accommodations are limited to a maximum of 6 guestrooms. This type of establishment is primarily a private home offering lodging and meals to guests. The appearance and primary function of the home shall remain as a residence, not as a lodging establishment.

1. **Accessory Use:** Accessory uses customary to single-family residences are permitted.
2. **Use Specific Standards:**

(1) The owner-operator shall reside on premises.
(2) Limit exterior alterations to those necessary to assure safety of the structure or enhance compatibility of the bed and breakfast with the surrounding area.
(3) A maximum of 1 bed and breakfast inn shall be permitted on any one parcel.
(4) Operation of the Bed and Breakfast shall involve no exterior storage of materials or supplies.
(5) The principal use of any such structure shall be residential.
(6) Rooms for sleeping shall be part of the primary residential structure.
(7) Owner must demonstrate that adequate space is available for required off street parking (1 space per bedroom).
(8) The resident owner shall keep a current guest register including names, addresses and dates of occupancy for all guests.
(9) Meals may only be served to registered guests.
(10) A bed and breakfast may not be used as a special events facility as defined in this Section.

F. **Broadcast Facility.** Any facility which deals in the broadcasting of television, radio, or satellite programming.
1. **Accessory Uses:** Accessory uses may include (but are not limited to) associated office and parking.
2. **Example:** TV broadcasting station.
3. **Use Specific Standards:**
(1) Communication Towers associated as an accessory use to the broadcast facility use shall be permitted in accordance with *Chapter B.9.9.B.*

G. **Convenience Store w/ Fuel Sales.** Convenience stores with fueling stations are involved in the retail sales of fuel for motor vehicles, and convenience items including but not limited to food, beverages, tobacco products, and other similar products as its primary sales.
1. **Accessory Uses:** Accessory uses may include offices, storage or repackaging of goods for on-site sale, parking, and car wash.

2. **Examples***:* Motor vehicle fuel stations with 1 or more fuel pump selling fuel for motor vehicles and selling items which generally serve the day-to-day retail needs of travelers (i.e. gas station).
3. **Use Specific Standards:**
   (1) All accessory car washing, waxing, and machine powered drying shall be in an enclosed building. Hand washing and drying may be conducted outside of an enclosed building.
   (2) Requires a state-issued permit for the sale and distribution of beer and/or wine if selling such items**.**
   (3) Contains less than 3,200 square feet of retail space**.**

H. **Convenience Store w/o Fuel Sales.** Convenience stores involved in the retail sales of convenience items including but not limited to food, beverages, tobacco products, and other similar products as its' primary sales.
1. **Accessory Uses:** Accessory uses may include offices, storage or repackaging of goods for on-site sale, parking, and car wash.
2. **Use Specific Standards:**
   (1) Requires a state-issued permit for the sale and distribution of beer and/or wine if selling such products**.**
   (2) Contains less than 3,200 square feet of retail space.

I. **Crematorium.** A facility with a furnace for cremation of the deceased, either animal or human.

J. **Funeral Home.** A facility used for the preparation of the deceased and the display of the deceased for funeral services. The facility may include a furnace for cremation of the deceased , either animal or human. The facility may include space and facilities for embalming and preparation of the dead for burial, performance of autopsies, and the storage of caskets and funeral supplies.
1. **Accessory Uses:** Accessory uses may include ancillary indoor storage, associated office and meeting space, parking, storage of funeral vehicles.

K. **Grocery.** A store that is primarily engaged in selling food at retail for home preparation and consumption, such as grocery stores, fruit and vegetable markets, and retail bakeries and other specialty food products stores. A grocery store may sell non-food commodities, such as beverages, dairy, dry goods, fresh produce, and other perishable items, frozen foods, household products, and paper goods; may sell beer and wine for consumption off the premises with the appropriate beverage license.

L. **Hotel/Motel.** Transient accommodations arranged for short-term stays for compensation. This does not include patient transient accommodations, shelters for the homeless, boarding homes, or short-term rentals.

1. *Accessory Uses:* Attached meeting rooms, dining facilities, bar or lounge, restaurant, laundry facility, swimming pool, other recreational facilities.
2. *Examples:* Examples include hotels and motels.

M. **Extended Stays.** A residential or lodging facility designed and operated to accommodate guests for periods less than 90 consecutive days per *S.C. Code 1976, §12-36-920* not intended for permanent residency. These facilities may include amenities such as kitchenette, laundry services, and workspace areas to support longer-term occupancy.

1. **Accessory Uses:** Accessory uses may include (but are not limited to) recreational facilities, parking lots, garages, and sheds.
2. **Use Specific Standards:**
   (1) Off-street parking must be provided in accordance with *Chapter C.2*.
   (2) Controlled access through a central lobby is encouraged; external individual room access may be restricted depending on district.

N. **Liquor Store.** A retail establishment engaged in the sale of packaged alcohol including beer, wine, and/or spirits for consumption off premises.

1. **Accessory Uses:** Accessory uses include temporary, indoor, promotional display and the sale of prepackaged food, tobacco products, and lottery.
2. **Use Specific Standards:**

(1) This use shall not be within 300 ft. (measured in a straight line from structure to structure) of a residential use, religious institution, elementary or secondary school or public playground on a separately platted parcel, except in the DTC District where required separation is exempted.

O. **Major Vehicle Service.** Facility dealing in more than minor vehicle service as defined. Major vehicle service includes an auto body shop, repair of motor vehicles components such as engines and transmission.

1. **Accessory Uses:** Accessory uses may include (but are not limited to) associated office, ancillary indoor storage, towing, outdoor storage of vehicles.
2. **Examples:** Examples include auto collision repair shops and paint shops.
3. **Use Specific Standards:**
   (1) If located in the GC or DTT district or abutting a residential use, a Type B Buffer shall be provided.
   (2) No stockpiling of parts or salvaging of vehicle parts.
   (3) No storage of impounded vehicles.
   (4) All storage of vehicles shall be fenced and prevented from view.
   (5) The minimum lot size of 20,000 square feet.

P. **Minor Vehicle Service and Vehicle Part Sales.** Minor vehicle service establishments are involved with limited service including such uses as oil changes, tire replacement, cleaning/detailing, and the like. Uses including vehicle repairs, autobody repair, painting, engine repair and replacement or similar are understood to be defined as major vehicle service. Vehicle parts sales include the sale of vehicle goods.

1. **Accessory Uses:** Accessory uses may include limited sale of parts or vehicle accessories, towing, associated office, parking, repackaging of goods for on-site sale or use.
2. **Examples:** Examples include quick service such as (but not limited to) lubrication, battery sales and installation, auto detailing, minor scratch and dent repair, tire alignment, and fluid replacement.
3. **Use Specific Standards:**
   (1) No stockpiling of parts or salvaging of vehicle parts.

(2) If located in the GC or DTT district or abutting a residential use, a Type B Buffer shall be provided. Vehicle storage area shall be screened from the public right-of-way and from adjacent residential uses from ground level to a height of 6 ft above ground level. This may be accomplished by a combination of fence/wall and landscaping.

(3) No storage of impounded vehicles in front yard.

(4) Vehicle storage areas shall be completely enclosed by a fence not to exceed 8 ft. in height.

(5) minimum lot size of 10,000 square feet is required.

Q. **Motor Vehicle Fuel Dealer.** An establishment primarily engaged in the retail sale of bottled or bulk liquefied petroleum gas, fuel, oil, coal, wood, or other fuel.

R. **Outdoor Storage Yards.** An outdoor area designated for the extended outdoor storage of cars, boats, and/or other vehicles. This use is not to be confused with commercial parking, which excludes outdoor storage. Outdoor storage is for the extended storage of cars, boats, and other vehicles, machinery, and equipment or material.

1. **Accessory Uses***:* Accessory uses may include associated office, parking.
2. **Use Specific Standards:**

(1) Must be fully screened from public rights-of-way, parking areas, and adjacent properties. Screening may include fences, hedges, or plant material.

(2) Screening:

a. Screening must be opaque and constructed of durable materials

b. Screening must be maintained in good condition and free of damage or deterioration.

c. Landscaping buffers may be required based on adjacent land uses.

1. All outdoor storage areas must be clearly shown on site plans submitted for review.
2. Plans must include screening details, setback compliance, and buffering provisions.

3. Non-compliance may result in enforcement actions or revocation of permits.

(3) *Exemptions:*

a. Property that is within the HI and LI-W zoning district and located outside of the Corridor Protection District are exempt from the use specific standards pertaining to this use.

S. **Pawn Shop.** Pawn shops are involved with the retail sales of secondhand merchandise and offer personal loans secured by consumer goods or other personal property.

1. **Accessory Uses:** Accessory uses may include limited retail sales.
2. **Examples:** Pawn shops that may deal in items such as coins, jewelry, and secondhand merchandise and deal in personal loans secured by personal property.

T. **Restaurant, Full Service.** Establishments that prepare and sell food for on-premises consumption or off-premises consumption. Includes a customer service area consisting of tables, chairs, and/or customer counters.

1. **Accessory Uses:** Ancillary indoor storage, associated office, deck, patio for outdoor seating or dining and entertainment, parking valet parking facility, bar seating, and limited catering.
2. **Examples:** Examples include sit down restaurants such as a diner, café or fine dining restaurants.
3. **Uses Not Included:**

(1) Drive-throughs are classified in Restaurant, with drive-through.

U. **Restaurant, Fast Casual.** Establishments that prepare and sell food for on-premises consumption or off-premises consumption may include a drive-through. Includes a customer service area consisting of tables, chairs, and/or customer counters.

1. **Accessory Uses:** Ancillary indoor storage, associated office, deck, patio for outdoor seating.
2. **Examples:** Examples include pizza delivery shops, takeout eating places, fast-food restaurants, takeout sandwich shops, limited-service restaurants.

V. **Restaurant, w/ Drive Through.** Establishments that prepare and sell food for on-premises consumption or off premises consumption including a drive-through. Includes a customer service area consisting of tables, chairs, and/or customer counters.

1. **Accessory Uses:** Ancillary indoor storage, associated office, deck, patio for outdoor seating.
2. **Examples:** Examples include fast casual, fast food restaurants and any restaurant featuring a drive-through lane.
3. **Use Specific Standards:**
   (1) Menu boards shall be a maximum of 32 square feet.
   (2) Drive-throughs shall comply with the standards of *Chapter C.13.3.J.* and the stacking requirements in *Table C.2.5.*
   (3) Accessory structures such as canopies shall comply with building setback standards per the respective district standards.
   (4) Crosswalks and crosswalk markings shall be required if pedestrians can cross the drive-through lane between the building and parking areas.

W. **Sexually Oriented Business.** As defined in *Chapter A.5* this category includes nightclubs, bars, restaurants, or other similar establishments in which a person appears in a state of sexually explicit nudity or semi-nudity in the performance of their duties. Additionally, a business offering its patrons goods of which a substantial portion are sexually oriented materials. A business in which more than 10% of the display space is used for sexually oriented materials is presumed to be a sexually oriented business. Refer to *City Ordinance No. 2451* explaining the purpose, findings, and rationale used to develop specific standards for Sexually Oriented Businesses.

1. **Accessory Uses:** Accessory use may include an associated office.
2. **Use Specific Standards:**
   (1) Buffer Distance:
      a. *LI-W Zoning District:* At least 1,000 ft. from any dwelling, church or religious institution, school and/or educational facility, public park or recreational facility, a residential zoning district (R-15, R-9, R-6, GR, RMF), or any other sexually oriented business.

b. *HI Zoning District:* At least 750 ft. from any dwelling, church or religious institution, school and/or educational facility, public park or recreational facility, a residential zoning district (R-15, R-9, R-6, GR, RMF), or any other sexually oriented business.

(2) Measurement Method: measurement shall be made in a straight line in all directions without regard to intervening structures or objects, from the closest part of the structure containing the sexually oriented business to the closest point on a property boundary of any church or religious institution, school and/or educational facility, public park or recreational facility, a residential district (R-15, R-9, R-6, GR, RMF), or any other sexually oriented business. Measurements shall be made in a straight line in all directions without regard to intervening structures or objects, from the closest part of the structure containing the sexually oriented business to the closest part of the structure of a dwelling that is not in a residential zoning district (R-15, R-9, R-6, GR, RMF).

X. **Special Events Facility.** A commercial facility rented to individuals, groups, and/or organizations, and used to host gatherings such as, but not limited to, weddings, receptions, meetings, galas, networking events, and conferences. Special Events Facilities cater to a significant diversity of individuals, groups, and organizations on a contractual basis, with such individuals, groups, and organizations holding unique events on an irregular basis only. Such individuals, groups, and organizations contracting to rent the facility may provide alcoholic beverages for guests in accordance with state law.

1. **Uses Not Included:**
   (1) Bar/Tavern/Nightclub.
2. **Use Specific Standards:**
   (1) *On-Site Manager.* An on-site manager shall be present and available for the duration of all events occurring at the facility. Updated contact information shall be provided to the Zoning Administrator anytime the on-site manager's contact information changes.
   (2) *Parking.* All parking shall be contained on-site with 1 parking space for every 4 occupants, with maximum occupancy determined via applicable building

or fire codes used to determine the maximum total number of occupants. An alternative parking plan pursuant to *Chapter C.2.5* may be submitted in lieu of this requirement.

(3) *Hours of Operation.* Special event facilities shall only operate between the hours of 6:00 am to 11:00 pm, not to include event set-up and clean-up activities. Events on New Years Eve may operate until 1:00 am.

(4) *Insurance.* Valid liability insurance covering special event facility operations is required for the Owner, Property Management Company, or any other entity.

(5) *On Premise Sale/Consumption of Alcohol.* Disclosure of plans for on-premises sale and consumption of alcohol, including the responsible party(s) to be securing necessary SC Dept. of Revenue licensing and the type of licensing being sought.

(6) *Compliance Inspections.* Inspections for compliance with the requirements of this Section, for compliance with additional approval conditions placed on the property by the Sumter City-County Board of Zoning Appeals, and for compliance with any other applicable City Codes may be performed by the City if deemed necessary and with 24-hour notice to the business owner and/or property owner/property manager.

(7) *Operational Plan.* An operation plan shall be submitted with the use application describing generally how the facility will operate. Substantive changes to the operational plan shall require additional Zoning Administrator approval. The operational plan shall include, at a minimum, the following items:

a. Maximum capacity of the facility, based on building and fire code;
b. Contact information for the on-site facility manager;
c. Types of events anticipated/marketed;
d. Anticipated annual number of events;
e. How solid waste will be disposed of;
f. A floor plan of the facility showing the square footage and use of each room;

g. A plot plan showing building footprint, property lines, parking areas, delineated outdoor event space (if applicable). A formal site plan submission may be required by the Zoning Administrator; and

h. Vehicular access to the site shall be adequate in terms of width, vertical clearance, and construction to support emergency vehicles in accordance with applicable Fire Code, as determined by the Sumter City-County Fire Inspector.

Y. **Towing Services.** An establishment providing the service of transporting individual motor vehicles and providing temporary storage of the vehicles, whether operable or temporarily inoperable, in an impound yard or storage.

1. **Uses Not Included:**
   (1) Junk or salvage yard.
2. **Use Specific Standards:**
   (1) The number of vehicles stored on-site shall be limited to 10 vehicles.
   (2) Vehicles shall not be stored for more than 90 days.
   (3) Vehicles shall be stored to the rear of the principal structure behind a wooden or vinyl fence or masonry wall that is at least 8 ft. in height.

Z. **Tobacco/Vape Shop.** An establishment that, as a substantial portion of the use, entails the retail sales of tobacco products including, but not limited to, CBD products, cigarettes, cigars, chewing tobacco, shisha, unformed or loose tobacco, vaping products, and/or similar products. For the purpose of this definition, a substantial portion of the use is established if:

1. **Use Specific Standards:**
   (1) At least 20% of the establishment's floor area open and accessible to customers is used for the display and/or stocking of tobacco products as provided herein; or
   (2) At least 40% of the sign area of the establishment's on-site signage that is visible from public rights-of-way advertises tobacco products as provided herein.
   (3) No tobacco shop shall be located within a 500-foot radius of an existing or approved elementary or secondary school or childcare facility. This

measurement shall be made from the exterior wall of the proposed tobacco shop to the nearest exterior wall of any existing or approved elementary or secondary school or childcare facility.

AA. **Retail, Neighborhood (Maximum 5,000 sq. ft).** General retail sales and services establishments involved in the sale, lease or rent of new or used products and services intended to provide for residents of the immediate area. Neighborhood retail shall be a maximum 5,000 square feet for a single use.

1. **Accessory Uses:** Accessory uses may include offices, storage or repackaging of goods for on-site sale, and parking.
2. **Examples:** Establishments selling, leasing, or renting consumer, home, and business goods including general merchandise, art supplies, bicycles, clothing, dry goods, electronic equipment, furniture, garden supplies, groceries, hardware and home improvement goods, household products, jewelry, pet food, printed material, stationery, and similar retail consumer goods.

BB. **Retail, General (5,000 to 20,000 sq. ft).** General retail sales and services establishments involved in the sale, lease or rent of new or used products and services intended to provide for residents of the immediate area. General retail shall be a maximum 20,000 square feet for a single use.

1. **Accessory Uses:** Accessory uses may include offices, storage or repackaging of goods for on-site sale, and parking.
2. **Examples:** Establishments selling, leasing, or renting consumer, home, and business goods including general merchandise, art supplies, bicycles, clothing, dry goods, electronic equipment, furniture, garden supplies, groceries, hardware and home improvement goods, household products, jewelry, pet food, printed material, stationery, and similar retail consumer goods.

CC. **Retail, General (20,000 to 250,000 sq. ft.).** retail sales and services establishments, sometimes referred to as "Big Box" retailers, involved in the sale, lease or rent of new or used products and services intended to provide for residents of the regional area. Big Box retail shall permit a range of uses and sizes; however, no single use may exceed 250,000 square feet.

1. **Accessory Uses:** Accessory uses may include offices, storage or repackaging of goods for on-site sale, and parking.
2. **Examples:** Large retail stores, shopping malls, shopping centers.

DD. **Retail, General (more than 250,000 sq. ft).** retail sales and services establishments involved in the sale, lease or rent of new or used products and services intended to provide for residents of the regional area. These large-scale retail facilities shall permit a range of uses and sizes; however, no single use may exceed 250,000 square feet.

1. **Accessory Uses:** Accessory uses may include offices, storage or repackaging of goods for on-site sale, and parking.
2. **Examples:** Large retail stores, shopping malls, shopping centers.
3. **Use Specific Standards:**
   (1) Retail uses over 250,000 sq. ft. shall be considered as Special Exceptions.

EE. **Wholesale Trade.** Firms involved in the sale or rent of products to industrial or commercial businesses only. Not intended for private customers. Uses emphasize on-site sales or order taking. Firm may or may not be open to the general public. Sales to private customers and general public are not permitted.

1. **Accessory Uses:** Accessory uses may include (but are not limited to) accessory medical clinic, ancillary indoor storage, associated office, cafeteria, day care for employee use, parking, repackaging of goods, showroom, warehouse, residential unit for security purposes.
2. **Examples:** Sale of machinery, janitorial supplies, restaurant equipment supplies.
3. **Use Specific Standards:**
   (1) Outdoor storage yards shall comply with the standards of *Chapter B.9.4.Q*. Outdoor storage yards are not intended to include junkyards or scrap or salvage operations.

FF. **Automatic Merchandising Machine Operators, vending machines.** Any unattended self-service device that, upon payment made, dispenses anything of value including ice, food, beverage, goods, wares, merchandise, or services.

1. **Accessory Uses***:* None.

2. **Use Specific Standards:** *(Note: Not applicable to indoor vending machines or vending machines located next to buildings in pedestrian walkways.*
   (1) *General Commercial (GC):* In the GC district there shall be sufficient lot area to meet principal setbacks for the structure as required in *Chapter B.4.4*, in addition to the areas required for landscaping/buffering, parking, site access and drive aisles.
   (2) *Light Industrial-Warehouse (LI-W):* proposed development in the LI-W district shall comply with the full standards as outlined in *Chapter B.5.1*.
   (3) *Heavy Industrial (HI):* proposed development in the HI district shall comply with the full standards as outlined in *Chapter B.5.2)*.
3. Landscape/Buffering: Landscaping shall be provided in accordance with *Table C.5.1*. For landscaping and buffering purposes this use is classified as "Commercial". All submitted plans shall meet the full requirements of *Chapter C.5*.
4. Parking Access: Site access shall be limited to one access driveway per street frontage. All parking areas shall be paved with concrete curb and gutter to meet the full development standards of *Chapter C.2*.
5. Sidewalks: Sidewalks shall be installed along the street frontage of the development site where existing sidewalks are adjacent.
6. Exterior Appearance: All rooftop mechanical equipment shall be screened on all four sides with an all-weather, durable material. Vending units located within the Corridor Protection District (CPD) shall be veneered with materials that comply with *Chapter B.11.5.* Any stair units constructed to access the interior of the vending unit shall be painted to match the exterior of the unit.
7. Signage:
   (1) Wall signage shall be capped at 10% of the front wall area. The front wall is defined as the face of the vending unit from which merchandise is dispended.
   (2) Freestanding Signage. Stand-alone vending units are permitted 1 freestanding sign per street frontage and must comply with standards set forth for the General Commercial (GC) district as outlined in *Chapter C.3*.

9.5 INDUSTRIAL AND MANUFACTURING USES

A. **Artisan Food and Beverage Manufacturing.** A small-scale fabrication or production use by skilled workers which involves assembly of food or goods with no noxious by-products. May include a showroom or ancillary sales of products.

1. **Accessory Uses:** Accessory uses may include (but are not limited to) associated showroom, ancillary indoor storage, associated office, parking or similar; residential unit(s) for employees and or associated services (i.e., night watchman) may not exceed 1 dwelling unit per acre and shall only be allowed for employees or associated services and not rental to the general community.
2. **Examples:** Small scale fabrication of arts, 3D printing, crafts, food or beverages for packaged sales, welding, sculpting, arts and crafts, pottery, and small-batch bakeries.
3. **Use Specific Standards:**
   (1) Manufacturing activities may be no larger than 20,000 sq. ft. GFA.
   (2) Accessory retail and/or wholesale sales, training, and/or education, are allowed.
   (3) All production activities must be located within a completely enclosed structure adequately constructed to limit emission of odor, noise or vibration detrimental to other uses or properties in the area.
   (4) All storage shall be within an enclosed building, tank, or silo, or screened from view by fences, walls, or landscaping. Stored items shall not be stacked to a height that exceeds the height of the screening.
   (5) Sales, service, product consumptions, and outdoor activities shall only occur between 6:00 a.m. and 10:00 p.m. if the establishment is adjacent to a residential use.
   (6) Shipping and receiving activities shall only occur during operating hours between 6:00 a.m. and 10:00 p.m.

B. **Breweries.** Any establishment where malt liquors are manufactured and packaged on-premise, manufacturing more than 15,000 barrels of malt liquor on its licensed premise each calendar year.

1. **Accessory Uses:** Ancillary indoor storage, associated office, deck/patio for outdoor seating and/or entertainment, beer garden, parking, valet parking facility, tasting room.
2. **Use Specific Standards:**
   (1) Outdoor entertainment is limited to 10:00 PM.

C. **Breweries, Micro.** Any establishment where malt liquors are manufactured and packaged on-premises or off-premises, manufacturing no more than 15,000 barrels of malt liquor on its licensed premise each calendar year.
1. **Accessory Uses:** Ancillary indoor storage, associated office, deck/patio for outdoor seating and/or entertainment, beer garden, parking, valet parking facility, tasting room.
2. **Use Specific Standards:**
   (1) Outdoor entertainment is limited to 10:00 PM in all zoning districts other than the DTC.

D. **Distillery.** A manufacturer who distills, blends, and bottles alcoholic liquors on the licensed premises with an alcohol content greater than 17% and who produces more than 125,000 cases per year at the licensed premises.
1. **Accessory Uses:** Ancillary indoor storage, associated office, deck/patio for outdoor seating and/or entertainment, parking, valet parking facility, tasting room.
2. **Use Specific Standards:**
   (1) Outdoor entertainment is limited to 10:00 PM in the GC and DTC zoning districts.

E. **Distillery, Micro.** A manufacturer who distills, blends, and bottles alcoholic liquors on the licensed premises with an alcohol content greater than 17% and who produces a maximum, quantity of 125,000 cases per year at the licensed premises.
1. **Accessory Uses:** Ancillary indoor storage, associated office, deck/patio for outdoor seating and/or entertainment, parking, valet parking facility, tasting room.
2. **Use Specific Standards:**

(1) No noxious odors or noise may escape the parcel on which the use is situated;
(2) A tasting room is provided;
(3) No "cover" or similar admission charge is collected for entrance; and
(4) No music is permitted in outdoor seating and bar areas after 10:00 PM.

F. **Flex Facility.** Uses which take place within a building, allowing for a mixture and/ or range of office, warehouse uses research and development uses. Flex use buildings allow for a combination of offices, wholesale, and light manufacturing with proportions of each use subject to the needs of a user.
   1. **Accessory Uses:** Accessory uses may include (but are not limited to) associated showroom, ancillary indoor storage, associated office, cafeteria, parking, on-site repair facility, residential unit for security purposes, outdoor storage associated with principal use.
   2. **Examples:** Flex use buildings typically in an industrial park or business park environment.

G. **Industrial – Light.** Any business or establishment which deals in light industrial uses including light manufacturing (such as assembly, printing, repair), research and development, and self-service storage.
   1. **Accessory Uses:** Accessory uses may include (but are not limited to) associated showroom, ancillary indoor storage, associated office, cafeteria, parking, on-site repair facility, residential unit for security purposes, outdoor storage associated with principal use.
   2. **Examples:** Monument sales and manufacturing, landscaping contractor, clothing manufacturing, publishing firm, bottling, lawn or tree service, sheet metal, stone, or concrete products (but not concrete manufacturing), commercial packing for fruits and vegetables, trailer storage or freight facility, sale or rental of machinery and heavy equipment.
   3. **Exemptions:** Heavy industrial or noxious uses such as concrete manufacturing.
   4. **Use Specific Standards:**

(1) Storage shall be in an enclosed building or an outdoor storage area which is screened/fenced. A minimum 6 ft. tall opaque screen or fence is required around the outdoor storage area.

H. **Industrial – Heavy.** Any business or establishment that involves dangerous, noxious, offensive uses. Uses may involve smoke, odor, noise, vibration, or threats to safety and general wellbeing of the public.

1. **Accessory Uses:** Accessory uses may include (but are not limited to) associated showroom, ancillary indoor storage, associated office, cafeteria, parking, on-site repair facility, residential unit for security purposes, outdoor storage associated with principal use.
2. **Examples:** *Salvage yards, junkyards, automobile graveyards, crematorium, slaughterhouse, concrete plant, outdoor storage as a primary use, commercial feed lot, lumberyard, primary metal manufacturing, towing yard for vehicles, pulp mill, rubber manufacturing, paper manufacturing or production.*
3. **Use Specific Standards:**
   (1) Outdoor storage yards shall not be located closer than 25 ft. to any public street or property line. Outdoor storage yards shall be completely enclosed by an opaque fence or wall not less than 8 ft. Outdoor storage yards are not intended to include junkyards or scrap or salvage operations.

I. **Manufacturing.** Manufacturing includes use types involved in the manufacturing, processing, fabrication, packing, or assembly of goods. Products may be finished or semi-finished and are generally made for the wholesale market, made for transfer to the other plants, or made to order for firms or consumers.

1. **Accessory Uses:** May include limited retail sales and wholesale sales, offices, cafeterias/eating establishments, warehouses, storage area, repair facilities, truck fleets, parking for employees.

J. **Sanitary Land Fills and Inert Dump Site.** A site designed and intended as a repository for material whose rate of decomposition by micro-organisms or chemical oxidation is such that environmental pollution does not result.

1. **Use Specific Standards:**

(1) No such uses shall be located within 1,000 ft. (measured in a straight line) of any existing residential, religious, educational, medical, or public use.

(2) An engineering firm with specific land fill expertise shall render a written opinion that, to the best of their professional judgement, the rock formations and/or artificial liners being used to contain the waste are impermeable and that the surrounding ground water sources will not be contaminated. A permit from the South Carolina Department of Environmental Services (DES) shall accompany use request.

(3) A drainage and sedimentation plan shall accompany the use request, detailing how run-off will be addressed.

(4) All uses within this category shall be screened in such a fashion as not to be visible from off-site. Screening may be accomplished by any combination of fencing, walls, berms, or landscaping approved by the BZA upon the recommendation of the Zoning Administrator.

(5) No material shall be placed in open storage or areas in such a manner that it is capable of being transported by wind, water, or other causes.

K. **Hazardous Waste and Nuclear Waste Transfer, Storage, and Treatment and/or Disposal Sites.** Any facility which deals in the transfer, storage, treatment, or disposal of hazardous or nuclear waste.

1. **Use Specific Standards:**

(1) No such uses shall be located within 1,000 ft. (measured in a straight line) to any existing residential, recreational, religious, educational or public use; no closer than 1,500 ft. to any navigable stream (measured in a straight line); no closer than 2,500 ft. to any lake, pond or reservoir used or scheduled to be used as a direct or connecting source of public drinking water, and disallowed in any water source, wetland, or floodplain areas.

(2) The facility shall be effectively buffered and screened in accordance with an approved method sanctioned by the BZA upon the recommendation of the Zoning Administrator.

(3) The use request shall be accompanied by an environmental impact statement, prepared by an engineering firm with specific expertise in

environmental safety and environmental quality issues and approved by the South Carolina Department of Environmental Services (DES).

(4) The use requests shall include written documentation disclosing the hazardous waste materials to be handled and the approximate quantity to be accommodated over the life of the facility.

L. **Resource Recovery Facilities, Solid Waste Storage/Transfer Facilities, Waste Tire Storage/Treatment Sites, Composting Facilities, Manned Convenience Centers, and Incinerators.**

1. **Use Specific Standards:**

(1) No such uses shall be located within 1,000 ft. (measured in a straight line) to a residential district, church, elementary or secondary school, historical place, or public park, except manned convenience centers which shall not be located within 100 ft. (measured in a straight line) to a residential district, church, elementary or secondary school, historical place, or public park.

(2) No such uses shall be located within 400 ft. (measured in a straight line) to a residential use not in a residential district, except manned convenience centers which shall not be located within 100 ft. (measured in a straight line) to a residential use not in a residential district.

(3) Manned convenience centers shall have gravel or paved surfaces in all driving, parking and loading areas, and must be located on and have direct access from an arterial or collector road.

(4) Manned convenience centers must be entirely enclosed within an 8 ft. high security fence.

(5) All uses within this category shall be screened in such a fashion as not to be visible from off-site. Screening may be accomplished by any combination of fencing, walls, berms, or landscaping approved by the BZA upon the recommendation of the Zoning Administrator.

(6) No material shall be placed in open storage or areas in such a manner that it is capable of being transported by wind, water, or other causes.

M. **Salvage Yards.** Any use dedicated to the storage and dismantling of vehicles, scrap metal and associated waste.

1. **Accessory Uses:** Accessory uses may include (but are not limited to) associated office, cafeteria, parking.
2. **Use Specific Standards:**
   (1) All buildings shall be setback a minimum of 50 ft. from property line
   (2) Outdoor storage yards shall not be located closer than 25 ft. to any public street or property line.
   (3) Outdoor storage yard, automobile crushing/shredding areas, and automobile fluid drainage/storage areas shall not be located closer than 500 ft. to a residential use, church, elementary or secondary school, historic structure/site/district listed on the National Register of Historic Places, or a locally designated historic structure/site/district.
   (4) Automobile crushing and/or shredding shall occur between the hours of 8:00 am to 6:00 pm only.
   (5) Stacking automobiles on top of one another for any purpose is not permitted.
   (6) Outdoor storage yards shall be completely enclosed by an opaque fence, wall, or berm not less than 6 ft.
   (7) No material, refuse or items within storage yard shall be visible from a public street.
   (8) No material because it is discarded and incapable of being re-used in some form shall be placed in open storage.
   (9) No material shall be placed in open storage in such a manner that it is capable of being transported by wind, water, or other causes.

N. **Self-Storage.** A structure or premises where the principal use is the indoor storage of personally owned items and goods, for a fee or charge.

1. **Examples:** Includes self-storage facilities.
2. **Use Specific Standards:**
   (1) Self-storage facilities shall be located on a maximum lot size of 4 acres in commercial districts. Facilities may exceed 4 acres in industrial zoning districts outside of the Corridor Protection District.

(2) Building height shall be limited to 2 stories when adjacent to residential zoning districts.

(3) Commercial activity which offers the sale of any item, personal property, or service and/or the conducting of any business other than the leasing of storage units is prohibited. The sale of customary equipment for moving and loading/unloading of supplies such as tape, straps, boxes, and similar items may be permitted in the main office only.

(4) Residential use (i.e. dwelling) within storage units is prohibited.

(5) Outdoor storage is prohibited (other than the storage of recreational vehicles and boats).

(6) Required parking spaces shall not be utilized for the storage of recreational vehicles.

O. **Data Center (10,000 sf of total building area or less).** A commercial operation (not exceeding 10,000 sf of total floor area) designed to house and operate computer servers, data storage equipment, and associated networking and telecommunications systems, together with supporting infrastructure necessary for their continuous operation. Supporting infrastructure may include electrical service and distribution equipment, backup power supplies (such as batteries or emergency generators), cooling systems, fire suppression, and security systems.

1. **Examples:**

(1) *Enterprise Data Centers – Facilities operated by individual businesses and used to solely support that company's data and technology needs, including crypto mining.*

(2) *Managed Data Centers – Third party service facilities that manage another company's computer hardware, data, and infrastructure.*

(3) *Colocation Data Centers* – Facilities typically owned by third parties where hardware is run and managed by a cloud-based company.

(4) *Edge Data Centers* – Smaller facilities located close to the populations they serve to increase data processing speed and decrease transmission delays. Such facilities typically deliver cloud computing resources and cached

content to end users and typically connect to a larger central data center or multiple data centers.

2. **Use Specific Standards:**

(1) *Maximum Noise Levels:*

a. Through the utilization of noise dampening features or configuration methods, a data center shall be engineered to a maintain a maximum threshold of 60 dBA or less at all times, as measured at the lot line.

b. The Zoning Administrator may require a noise study prepared by an independent third-party acoustical engineer at the applicant's expense at any time to demonstrate compliance with the maximum noise threshold. Post construction failure to meet the maximum noise threshold is a violation this Ordinance and may result in permit revocation, stop work order issuance, or any other remedy available pursuant to *Chapter A.4*.

(2) *Electrical Utility Usage:* In cases where a data center utilizes electricity in any amount from a public or private electricity provider, including for uses and/or activities incidental to the data center itself, the following standards apply:

a. The data center applicant shall provide written verification signed by the applicable electricity provider stating the following:

1. Adequate capacity is available on existing supply lines and substations to ensure there is or will be adequate electrical capacity available to serve the proposed use at peak operational levels while also serving the needs of other electricity users in the service area.
2. Existing utility supply equipment and related infrastructure are sufficiently sized and can safely accommodate the proposed use.
3. The use will not cause electrical interference or fluctuations in line voltage on or off the premises.

(3) *Water Utility Usage:* Data centers shall meet the following water utility usage standards:

a. Data centers must be served by public or private water utility providers and shall not be served by a private ground water well or surface water intake facility built specifically to serve the project.

b. The data center applicant shall provide written verification signed by the public or private water utility provider stating the following:
    1. Adequate capacity is available from existing water sources to ensure there is adequate water capacity available to serve the proposed use at peak operational levels while also serving the needs of other users in the service area.
    2. Existing water supply equipment and related infrastructure are sufficiently sized and can safely accommodate the proposed use.
    3. The use will not cause a loss in water pressure necessary to maintain functional fire protection and general service needs of the service area.

(4) *Power Generation Devices:* On-site power generation devices, whether permanent or temporary, shall comply with the following standards:
    a. Such devices, including fuel storage areas, shall be fully enclosed within a building or by a masonry wall of a minimum height exceeding the height of the tallest portion of the device. Walls enclosing power generation devices shall be considered part of the principal structure and subject to principal structure zoning district setback requirements. Such walls shall not be subject to maximum height requirements for walls/fences in *Chapter C.6*.
    b. Such devices, including associated fuel storage, shall comply with all applicable fire codes.
    c. Such devices shall secure all required state and federal permits prior to operation.

P. **Data Center (More than 10,000 sf of total building area).** A commercial operation (exceeding 10,000 sf of total floor area) designed to house and operate computer servers, data storage equipment, and associated networking and telecommunications systems, together with supporting infrastructure necessary for their continuous operation. Supporting infrastructure may include electrical service and distribution equipment, backup power supplies (such as batteries or emergency generators), cooling systems, fire suppression, and security systems.

1. **Examples:**
   (1) Enterprise data centers, managed data centers, colocation data centers, and edge data centers as described in *Chapter B.9.5.O.1*.
   (2) Hyperscale Data Centers – Large facilities that house critical computing and network infrastructure that provides scalability and high-speed processing for large volumes of data. Such centers may need large acreage tracts and millions of square feet of building space.
2. **Use Specific Standards:**
   (1) Maximum Noise Levels:
      a. Through the utilization of noise dampening features or configuration methods, a data center shall be engineered to maintain a maximum threshold of 60 dBA or less at all times, as measured at the lot line.
      b. A pre and post construction noise study prepared by an independent third-party acoustical engineer at the applicant's expense is required. A post construction noise study shall be submitted within 90 days of certificate of occupancy/completion of data center. Post construction failure to meet the maximum noise threshold is a violation of this Ordinance and may result in permit revocation, stop work order issuance, or any other remedy available pursuant to *Chapter A.4*.
   (2) Required Setbacks:
      a. Except for off-street parking spaces, vehicular accessways, and underground utilities, all structures and development associated with a data center shall maintain a minimum setback of 100 ft. from any lot line.
      b. Principal structures associated with a data center (including generators) shall be located no less than 500 linear feet from any lot line shared with a residential zoning district or an approved residential dwelling unit.
      c. Principal structures associated with a data center (including generators) shall be located no less than 1,000 linear feet (structure to structure) of an existing or approved elementary or secondary school.
   (3) Electrical Utility Usage:

a. Shall meet the standards in *Chapter B.9.5.O.2.2.*

(4) Water Utility Usage:

a. Shall meet the standards in *Chapter B.9.5.O.2.3.*

(5) Power Generation Devices:

a. Shall meet the standards in *Chapter B.9.5.O.2.3.*

Q. **Solar Farms.** An area of land designated for the purpose of deploying solar power generating panels and devices to create electric energy.

1. **Accessory Uses:** Associated office, parking, outdoor storage of related equipment.
2. **Uses Not Included:**
   (1) Solar energy systems for private residential dwelling unit use or commercial rooftop installation are permitted as an accessory use.
3. **Use Specific Standards:**
   (1) A minimum setback of 50 ft. from all property lines.
   (2) A minimum 50 ft. wide landscape buffer containing evergreen vegetation screening is required to obscure solar energy systems from public rights of way and residential uses on adjacent parcels.
   (3) No portion of the solar farm or array shall exceed 15 ft. in height.

R. **Warehouse/Distribution.** A facility primarily engaged in the storage and distribution of manufactured products, supplies, and equipment with little to no sales on site. May also include truck terminals or similar where semi-trucks, trailers and or high-cube/box trucks may be utilized for the transportation of goods; may also include areas for truck, trailer, etc., parking and storage.

1. **Accessory Uses:** Accessory uses may include (but are not limited to) associated showroom, ancillary indoor storage, associated office, cafeteria, parking, on-site repair facility, residential unit for security purposes, outdoor storage associated with principal use.
2. **Examples:** Warehousing, distribution centers, truck terminals, fulfillment centers for online retailers, fulfillment centers are intended to provide deliveries to homes.
3. **Use Specific Standards:**
   (1) The parking and storage of medium and/or heavy-duty commercial class trucks (Classes 4-8 as defined by FHWA) and location of loading docks must be located to the rear or side of the facility;
   (2) Landscape requirements outlined in *Chapter C.5.*
   (3) Facilities must have direct access to an arterial or collector roadway. Access for medium and/or heavy-duty commercial class trucks (Classes 4-8 as defined by FHWA) via local roads is prohibited.

S. **Mining and Extraction Operations.** Facilities dedicated to the mining or extracting of materials, minerals, fossil fuels from the earth.

1. **Examples:** Sand mines, gold mines, coal mines, oil/gas extraction.
2. **Use Specific Standards:**
   (1) Zoning use approval request shall be accompanied by a reclamation and reuse plan once mining or extraction operations are completed.
   (2) Zoning use approval request shall be accompanied by proposed operating hours. Specific times for use of explosive shall be detailed.
   (3) Mining and extraction operations shall not be located within 300 ft. of any residential use (measured from property line to residential structure), unless explosives are used for operations.

(4) Mining and extraction operations that use explosives shall not be located within 2,500 ft. of any residential use (measured from property line to residential structure). The BZA may grant reductions to this distances upon submission of detailed plan outlining measures to mitigate external impacts.

(5) Access to a mining or extraction site shall be from a paved road meeting the criteria of a collector or arterial road.

(6) Mining and extraction uses that are non-conforming but which were previously permitted by agencies of the State of South Carolina prior to the enactment of this Ordinance, or mining and extraction activities, or business on such a parcel or contiguous parcel where the mineral or the surface rights which are under the same ownership or control on the effective date of the Ordinance shall be exempt from the requirements of this Section.

9.6 PERSONAL AND PROFESSIONAL SERVICES USES

A. **Bank/Financial Institution.** Banks and financial institutions characterized by activities conducted in an office setting and generally focusing on personal or financial services. Drive-throughs are permitted.
   1. **Accessory Uses:** Accessory uses may include parking for use of employees and customers.
   2. **Examples:** Bank, financial institution, credit unions, and similar financial establishments.
   3. **Use Specific Standards:**
      (1) Crosswalks and crosswalk markings shall be required if pedestrians can cross the drive-through lane between the building and parking areas.

B. **Carwash.** Commercial establishments which allow for the washing of motor vehicles and vehicle cleaning services.
   1. **Accessory Uses:** Accessory uses may include parking, retail sales of items associated with the cleaning of motor vehicles.
   2. **Examples:** Full-service carwash, self-service carwash facilities
   3. **Use Specific Standards:**
      (1) All washing, and machine powered drying shall be in an enclosed building.
      (2) No vehicle bays or openings shall face a residential use.

C. **In-Home Day Care.** An establishment dedicated to the care of 5 or fewer adults or children in a protected, supervisory setting in a residential dwelling. In-Home Day Care facilities are not Group Living facilities. May require additional state permits.
   1. **Accessory Uses:** Accessory uses may include ancillary indoor storage, outdoor play areas, associated office, parking,
   2. **Use Specific Standards:**
      (1) Includes In-Home Daycare as a Home Occupation, subject to the following:
         a. Care provision shall not include overnight accommodation; and
         b. Must be primary dwelling of business operator.
      (2) Outdoor recreation areas or playgrounds shall be fenced with a minimum 6 ft. high fence.

D. **Daycare (Adult or Child).** A commercial establishment dedicated to the care of adults or children in a protected, supervisory setting. Daycare facilities are not Group Living Facilities. May require additional state permits

1. **Accessory Uses:** Accessory uses may include ancillary indoor storage, outdoor play areas, associated office, parking, cafeteria.
2. **Use Specific Standards:**
   (1) Areas dedicated for drop off and pick up must be included for any site plan or permit request for a day care.
   (2) Outdoor recreation areas or playgrounds shall be fenced with a minimum 6 ft. high fence.

E. **Dry Cleaning/Laundromat.** Establishment dedicated to onsite cleaning of clothes, offering the renting of on-site equipment for the cleaning, and washing of laundry to individual customers or pick-up dry-cleaning services. These establishments are intended to offer personal services to individual customers and not wholesale dry cleaning.

1. **Accessory Uses:** Accessory uses may include ancillary indoor storage, associated office, parking.

F. **Spa, Day.** An establishment that provides wellness and beauty treatments.

1. **Use Specific Standards:**
   (1) All employees performing services to customers shall be a licensed professional with the state.
   (2) All employees' licenses shall be displayed in the establishment or provided on request.

G. **Tattoo Parlors**. Any establishment that practices the inserting of permanent markings of coloration, or the producing of scars, upon or under human skin through puncturing by use of a needle or any other method. Micro-blading and temporary tattoos are not considered to constitute as a tattoo parlor.

1. **Use Specific Standards:**
   (1) A Tattoo Parlor cannot be operated within 500 ft. of:
      a. A religious institution.

b. Elementary or secondary school.
c. Public playground.
d. All residential structures except multi-family apartments.

H. **Personal Services.** Establishments that cater to personal services for a community. May also provide personal services or entertainment or provide product repair or services for consumer and business goods.
   1. **Accessory Uses:** Accessory uses may include offices, storage or repackaging of goods for on-site sale, and parking.
   2. **Examples:** Examples include barbers, hair salons, nail salons, tanning facilities, day spa, personal care services, animal grooming, product repair or services for consumer and business goods (i.e. computer repair shop, watch repair).

I. **Bail Bonding.** A state licensed professional or company that provides bail bonding services.
   1. **Use Specific Standards:**
      (1) Bail bonding uses must be licensed by SC Department of Insurance.

J. **Construction and/or Specialty Trade Contractors**. Establishments whose primary activity is performing building construction services or specific activities involved in building construction. Work performed may include new work, additions, alterations, maintenance, and repairs.
   1. **Use Specific Standards:**
      (1) DTT and DTC Districts Only - Construction and/or Specialty Trade Contractors may not store material or equipment outdoors or park trailers or heavy trucks overnight.
      (2) PO, LC, and GC Districts Only - All outdoor storage of equipment and/or materials must be screened and obscured from public view elsewhere

9.7 MEDICAL AND OFFICE USES

A. **Animal Care.** A facility where animals are provided medical care. Animals may be boarded or stay overnight within a completely enclosed building.
   1. **Accessory Uses:** Accessory uses may include parking, limited retail sales of animal goods, limited sale of medicine and prescriptions for animal use, associated office, ancillary indoor storage.
   2. **Examples:** Vet clinic, private veterinarian practice, animal hospital.
   3. **Use Specific Standards:**
      (1) Sheltering and boarding of animals shall be clearly incidental to the veterinary services offered in the facility whether specializing in large or small animals.
      (2) All outdoor areas for animals must be fenced.
      (3) Outdoor activity is permitted only during the day.

B. **Residential Care:** A facility that provides primarily non-medical resident services to individuals in need of personal assistance essential to sustaining the activities of daily living, or for the protection of the individual, on a 24-hour-a-day basis.

C. **Nursing Home:** A use providing bed care and inpatient services for persons requiring regular medical attention but excluding a facility providing surgical or emergency medical services and excluding a facility providing care for alcoholism, drug addiction, mental health disorders, or communicable disease.

D. **Hospital.** An establishment which primarily engages in providing medical treatment, including (but not limited to) diagnostic services, surgical services, as well as continuous nursing services.
   1. **Accessory Uses:** Accessory uses may include cafeterias, day care facilities, health facilities, parking, pharmacy, other amenities primarily for the use of employees.
   2. **Examples:** Examples may include a hospital or freestanding emergency room with ambulatory care.

E. **Medical/Dental Facility.** A facility engaged in the examination, diagnosis, and treatment of medical, dental, psychiatric, chiropractic, ophthalmologic, pediatric care, or other health care practices.

1. **Accessory Uses:** Accessory uses may include parking and office.
2. **Examples:** Examples include dentist or orthodontics offices, doctor offices, medical clinics, medical labs, mental health counseling offices, and dental surgery centers.
3. **Uses Not Included:**
   (1) Overnight facilities for patients.
4. **Use Specific Standards:**
   (1) Indoor waiting area is required so that patients are not allowed to queue for services outdoors.

F. **Professional Office.** A building, or portion of a building, wherein activities are performed involving predominately administrative, record keeping, professional, and/or clerical operations and, where in the case of professions such as dentists, physicians, lawyers or engineers, the facility where such professional services are rendered.

1. **Accessory Uses:** Accessory uses may include cafeterias, day care facilities, health facilities, parking, or other amenities primarily for the use of employees in the firm or building.
2. **Examples:** Examples include professional services such as lawyers, accountants, engineers, architects, real estate agents, travel agencies, employment agencies, data processing, sales offices, and similar uses.
3. **Uses Not Included:**
   (1) Offices that are part of and/or located with a firm in another category are considered accessory to the firm's principal activity.
   (2) Contractors and others who perform services off-site are included in the office category if equipment and materials are not stored on the site and fabrication, services, or similar work is not carried on at the site.

G. **Rehabilitative and Mental Health In-Patient Facility.** A healthcare facility that provides substance abuse treatment and/or mental health services. Such facilities provide overnight, yet short-term, care and treatment and may include sleeping rooms for healthcare providers and members of the patients' families.

1. **Accessory Uses:** Accessory uses commonly found are recreational activities, cafeteria, café, dining hall, hobbies, parking of the occupants' vehicles, facilities for staff.
2. **Examples:** Examples include inpatient drug and alcohol treatment facilities and inpatient mental health services.

H. **Urgent Care.** A walk-in medical establishment offering care for injuries or illnesses requiring immediate outpatient care.

1. **Accessory Uses:** Accessory uses may include cafeterias, day care facilities, health facilities, parking, or other amenities primarily for the use of employees in the firm or building.
2. **Examples:** Examples include urgent care facilities without ambulatory care. If ambulatory care is included, the use will be considered a hospital use.

9.8 RECREATIONAL/OPEN SPACE & ENTERTAINMENT USES

A. **Sports Fields.** A designated outdoor area specifically designed and maintained for the purpose of playing sports such as soccer, baseball, softball, football, rugby, or similar athletic activities.

B. **Amusement/Theme Parks.** An outdoor facility designed for entertainment purposes which may include structures or buildings, motorized or non-motorized rides, games, and booths for the conduct of sporting events or games.

1. **Accessory Uses:** Accessory uses may include office, retail and other commercial uses commonly established in such facilities and related parking facilities.

C. **Golf Courses.** Golf courses are uses of land for playing golf, improved with trees, greens, fairways, hazards, and other similar improvements.

1. **Accessory Uses:** Accessory uses may include a driving range and lodging.

D. **Driving Range.** An area, whether public or private, designed for practicing golf techniques, specifically for driving golf balls from a central tee location.

1. **Uses Not Included:**
   (1) Miniature golf courses and full golf courses.
2. **Use Specific Standards:**
   (1) The depth of a driving range along the driving axis shall be not less than 350 yards measured from the location of the tees and the breadth not less than 200 yards at a distance of 350 yards from the tees. The depth of the driving range may be reduced to 300 yards if a fence designed to stop rolling balls is installed at the far end of the driving axis.
   (2) Any lighting shall be oriented away from adjacent residential properties.

E. **Motor Vehicle Race or Testing Track.** A facility consisting of a paved or unpaved roadway used primarily for automobile racing or testing. Such a facility may include seating, concession area, suites, and parking facilities.

1. **Use Specific Standards:**

(1) No such use shall be located within 1,500 ft. of any residential use (measured in a straight line).
(2) Use shall have direct access off a paved road that is functionally classified as an arterial or collector road.

F. **Outdoor Concert Venues.** Use of open-air venues for hosting musical performances or concerts.
1. **Examples:** Examples include stadiums, amphitheaters, and parks designed for hosting musical performances in open-air setting
2. **Use Specific Standards:**
(1) Performance hours: Sun–Thu end by 10:00 p.m.; Fri–Sat end by 11:00 p.m.
(2) Off-premise alcohol sales prohibited. On-premise consumption of alcohol must meet state licensing and venue security requirements.
(3) Stage and speaker arrays oriented away from residential uses; berms or acoustic barriers required where feasible.
(4) A Sound Plan shall be required and prepared by a qualified audio professional; identifies system specs, array orientation, limiters, monitoring locations, and complaint response.

G. **Parks, Public.** Parks are uses of land which allow for recreation for the general public or land intended to provide opportunities for the enjoyment, conservation or preservation of natural features and resources.
1. **Accessory Uses:** Accessory uses may include maintenance facilities, concessions, caretaker's quarters, and parking.
2. **Examples:** Examples include parks, preservation areas, playgrounds, and recreational trails.

H. **RV Parks/Campground Facilities.** RV Parks/Campground Facilities are uses of land for locating trailer, tent, tent trailer, recreational vehicle, pickup camper, van or other similar device used for camping.
1. **Examples:** Examples include campgrounds, trailer parks, and camps.
2. **Accessory Structures:** Management headquarters, recreational facilities, toilets, dumping stations, showers, coin operated laundry facilities, recreational vehicle and boat storage areas, stores, restaurants, and personal services.

I. **Shooting Ranges (Indoor Only).** Facilities that are designed and operated for the indoor use of rifles, shotguns, pistols, or any other weapons including firearms, air guns, and airsoft guns.

1. **Use Specific Standards:**

(1) All shooting activities must be indoor only.

(2) Must be located in stand-alone building, cannot be in planned center, strip developments, share walls or parking.

(3) All indoor shooting ranges shall be of soundproof construction so that the sound from firearm discharge and the impact of projectile shall not be plainly audible across any adjoining property line.

(4) Sale and consumption of alcoholic beverages on-site is prohibited.

(5) Any structure intended for use as an indoor shooting range shall meet all building code and construction standards for an indoor shooting range.

J. **Botanical Garden.** Land where trees, shrubs, and/or other living plants are grown, exhibited or labeled for scientific, education, conservation, or passive, recreational purposes, not including the harvest of plants or their produce.

K. **Zoo.** A facility, indoor or outdoor, where animals are kept for viewing by the public.

1. **Accessory Uses:** Accessory uses may include office, retail, and other commercial uses commonly established in such facilities and related parking structures.

L. **Bingo Parlor:** A facility used primarily for the conduct of bingo games, open to the public and not in a subsidiary nature to another use.

1. **Use Specific Standards:**

(1) This use shall not be within 150 ft. (measured in a straight line from structure to structure) of a church, elementary or secondary school or public playground that is on a separately platted parcel under different ownership.

M. **Pool Hall:** A business establishment where the principal use is that of a billiard facility. Typically, such establishments have 2 or more billiard tables.

1. *Uses Not Included:* Drinking place, bar, tavern.
2. **Use Specific Standards:**
   (1) This use shall not be within 150 ft. (measured in a straight line from structure to structure) of a church, elementary or secondary school or public playground that is on a separately platted parcel under different ownership.

N. **Fairground:** An area wherein buildings, structures, and land are used for agricultural related offices, animal shows and judging, carnivals, circuses, community meetings, food booths and stands, rodeos, and similar uses associated with public festivals.

9.9 UTILITIES AND OTHER USES

A. **Airport.** A place from which aircraft may take off or land, discharge or receive cargo or passengers, be repaired or serviced, take on fuel, or be stored. The place shall include landing areas, runways, and other facilities designed, used, or intended to be used for the landing or taking off of aircraft, including all necessary taxiways, aircraft storage and tie-down areas, hangars, and other necessary buildings and open spaces, as well as terminals, parking facilities, and passenger loading and unloading areas.

1. **Accessory Uses:** Accessory uses include offices, eating establishments, eating and drinking establishments, convenience stores, and similar uses.

B. **Wireless Communication Tower.** Any tower, pole or similar structure of any size that supports wireless communication antenna for commercial or governmental use.

1. **Use Specific Standards:**

(1) Districts in which communication towers and antennas are conditionally permitted with specified height limitations:

a. Residential Districts: All towers require special exception approval regardless of height.

b. Commercial Districts: Free-standing or guyed tower with maximum height of 180 ft. Towers of height exceeding 180 ft. require Special Exception.

c. Mixed Use:

(a) Towers in the DTC and DTT Districts are strongly discouraged, and require special exception use approval. Towers located in these districts may be subject to more stringent landscaping and fencing standards as required by the Board of Zoning Appeals and/or Design Review Board.

(b) Towers in the IG and PD Districts are conditional with height not to exceed 120 ft. Towers with height exceeding 120 ft. require Special Exception.

d. Industrial Districts: Free-standing or guyed tower with maximum height of 200 ft. Towers with height exceeding 200 ft. require special exception.

e. Special Purpose Districts:

(a) Free-standing or guyed tower in the AC District with maximum height of 200 ft. Towers with height exceeding 200 ft. require special exception.

2. **Permitted Height Above Structures in All Districts:** Tower and/or antenna mounted on buildings, water tanks, or structures other than a free-standing or guyed communications tower must not extend more than 30 ft. above the highest part of a structure.
3. **Application Requirements:** The applicant for a permit for construction of a communications tower or the placement of a communications antenna on an existing structure other than a tower previously permitted must file an application with the Zoning Administrator:
   (1) Specifications: typical specifications for the proposed structure and/or antenna, including description of design characteristics and materials;
   (2) Site Plan: Scaled drawing showing property boundaries, tower location, tower height, guide wires and anchors, existing structures, elevation drawings depicting typical design of proposed structures, parking, fences, landscape plan, and existing land uses on adjacent property;
   (3) Tower Location Map: A current map, or updated existing map showing the location of the applicant's antenna, facilities, existing towers, and proposed towers which are reflected in the public records serving any property within the City of Sumter;
   (4) Antenna Capacity – Wind Load: A report from a structural engineer registered in South Carolina showing the tower antenna capacity by type and number and a certification that the tower is designed to withstand wind in accordance with ANSI/EIA/TIA 222 (latest revision) standards;
   (5) Antenna Owners: Identification of the owners of all antennae and equipment to be located on site;
   (6) FCC License: Confirmation that an FCC license for the proposed activity has been issued;
   (7) Visual Impact Analysis: A line of site analysis showing visual impacts on adjacent residential districts;

(8) Removal Agreement: A written agreement to remove the tower and/or antenna within 180 days following cessation of use;

4. **Conditions:** Applicant must show that all of the following conditions are met:
   (1) Location and Visual Impact: The proposed tower, antenna or accessory structure will be placed on site in such a manner that it will minimize the visual impact on the surrounding properties;
   (2) Inability to locate on existing structures: The applicant must show that a proposed antenna and equipment cannot be accommodated and function as required by applicable regulations and the applicants' technical design requirements without unreasonable modifications on any existing structure or tower under control of applicant, or to locate on an available and suitable nearby tower at reasonable costs (i.e., at or below local area rent average);
   (3) Distance from existing tower: Applicant must certify that no existing tower within 1,000 ft. meets the applicant's structural specifications and design requirements, or certify that a co-location agreement could not be obtained;
   (4) Design for multiple use: Applicants must show that a new tower is designed to accommodate additional antennae equal to applicant's present and future requirements;
   (5) Paint and illumination: tower shall not be painted or illuminated unless required by state or federal regulations;
   (6) Minimum Setbacks:
      a. Residential Zones: Towers in residential zones must be set back from all lot lines by distances equal to the zoning district setback requirement or 100% of the tower height, whichever is greater.
      b. Non-Residential Zones: Towers in non-residential zones properties must be set back from all property lines by a distance equal to the district's setback requirement or the tower's engineered fall zone, whichever is greater. Fall zones less than the full height of the tower shall be confirmed by an engineer licensed in South Carolina via letter that includes the engineer's signature and seal.

C. **Transportation Terminals.** Facilities for loading and unloading areas for passenger terminals for bus or train service.

1. **Examples:** Examples include airports, helicopter landing facilities, bus passenger terminals, and train depots.
2. **Uses Not Included:**
   (1) Bus passenger stations for local service such as mass transit stops and park-and-ride facilities (see Utility Facilities, Government).

D. **Utility Facilities, Government.** Utility facilities both major utilities, which are infrastructure services providing regional or community wide services, and minor utilities, which are infrastructure services that need to be located in or near the neighborhood where the service is provided.

1. **Examples:** Examples include water towers, pump stations, lift stations, public transit park and ride facilities, and electrical substations.
2. **Use Specific Standards:**
   (1) Public Utilities and Public Service Companies provide needed local services including water, sewer, electricity, gas, telephone, and cable services. In order to have a minimum impact on their operating costs and maintain the maximum tax base, the following provisions/exemptions apply to those utilities and service companies as defined in this Section.
   (2) Minor support facilities for public utilities will be allowed in all zoning districts provided Planning staff has reviewed plans for compliance with the Comprehensive Plan as required under *S.C. Code 1976, §6-29-540.*
   (3) Minor Site Criteria. No minimum lot area requirement for minor utility stations as long as criteria below can be met:
      a. The minimum setback on all sides is 5 ft.
      b. The maximum impervious surface ratio is 75%.
      c. Maximum height will be in accordance with zoning district regulations.
      d. Each site must be reviewed by the Planning Staff for sight-triangle compliance and visibility before final approval of the above is approved.
      e. All utilities required to be secured with a fence (minimum 6-foot-high opaque).

f. A Type B buffer shall be required that screens the area from public view. If area is wooded, applicant shall preserve the natural vegetation to the maximum extent possible and to meet buffering requirement.
g. The site may be served via a private access easement or driveway.
h. The site may be owned by the utility provider or may be on leased land from the property owner with a utility easement.

(4) Exclusions from requirement. Distribution lines and underground utilities are exempt from the above-mentioned criteria.

E. **Sewer Treatment Plants.** A facility designed to collect, treat, and discharge wastewater from a defined service area, including domestic sewage, industrial effluent, and sometimes stormwater runoff, to meet applicable environmental and public health standards.

1. **Use Specific Standards:**

(1) Site review must include an Environmental Assessment and disclosure of emergency procedures.

F. **Electric Substations.** A facility that serves a key component of the electrical generation, transmission, and distribution system. These facilities are used to transform voltage levels, switch power flows, and protect electrical equipment, enabling the delivery of electricity from generation sources to consumers.

1. **Use Specific Standards:**

(1) Site review must include an Environmental Assessment and disclosure of emergency procedures.

G. **Parking Lots and Structures.** A surface parking area or structure which is commercially available to the public, but may also be used to accommodate employees, customers, and clients. No extended parking beyond overnight parking is permitted unless associated with transportation facilities such as an airport, rail, or bus terminal, or living accommodations such as hotels and apartments.

1. **Accessory Uses:** Valet parking, parking booth, vehicle charging units.
2. **Examples:** Examples include a commercial parking lot or parking garage.
3. **Uses Not Included:**

(1) Outdoor storage of vehicles, boats, other vehicles, machinery, or equipment (see outdoor storage.)

4. **Use Specific Standards:**

(1) A parking structure may feature additional accessory uses such as first floor retail, or rooftop amenities such as a restaurant in mixed-use districts.

(2) No extended parking beyond overnight parking is permitted unless associated with transportation facilities such as an airport, rail, or bus terminal, or living accommodations such as hotels and apartments.

H. **Commercial Truck and Trailer Parking.** A surface parking area or structure which contains parking space for short or long-term lease to individual customers for parking of commercial vehicles and/or trailers.

1. **Use Specific Standards:**

(1) Property must be of sufficient size to allow for movement and turning of the design vehicle(s) that the parking lot is intended to serve.

9.10 SPECIFIC CONDITIONS AND STANDARDS FOR CONDITIONAL USES

1. **Criteria for Review.** The following general guidelines and criteria shall be implemented by the Zoning Administrator and/or the Sumter City-County Board of Zoning Appeals if a case is referred to the Board by the Zoning Administrator. Additionally, the Board shall be guided by *Chapter A* as is applicable, in addition to the requirements set forth herein.
    1. That ingress and egress to the proposed use be provided with reference to automotive and pedestrian safety and convenience, traffic generation flow and control, and access in case of fire or catastrophe, such as not to be detrimental to existing or anticipated uses, either adjacent to or in the vicinity of the proposed use;
    2. The off-street parking and loading areas, where required or proposed by the applicant, be designed and provided in harmony with adjacent properties;
    3. That refuse and service areas be adequately screened so as not to be visible from adjacent property or public rights-of-way and shall be located in such a way as not to create a nuisance to adjacent properties;
    4. That screening, buffering or separation of any nuisance or hazardous feature be provided with reference to type, dimensions and character, and be fully and clearly represented on the submitted plans, to protect adjacent properties;
    5. That proposed signs and exterior lighting be provided so as not to create glare, impair traffic safety, or be incompatible with adjacent properties;
    6. That the affected site shall be suitable in terms of size, shape and topographic conditions to accommodate the proposed use, building or project and to ensure compatibility and the safety and welfare of area residents.

9.11 MANUFACTURING SPECIAL PERFORMANCE STANDARDS

1. **Purpose**. The purpose of this Section is to prevent land or buildings from being used or occupied in any manner so as to create any dangerous, injurious, noxious or otherwise objectionable or hazardous condition. As a practical matter, the enforcement of this Section must result as a response to compliance because a violation cannot be known or remedied before it occurs. Therefore, industries shall be made cognizant of the following standards and shall be required to sign a "compliance guarantee" as a condition for the issuance of a building permit.

2. **Applicability**. This Section is applicable to all new uses, and expansions of existing uses, that meet the criteria of *Chapter B.9.5.I*, including food processing uses. Uses meeting the criteria of *Chapter B.9.5.A.*, *Chapter B.9.5.B.*, *Chapter B.9.5.C.*, *Chapter B.9.5.D.* and *Chapter B.9.5.E* are exempt from the standards of this Section.

3. **Standards.**
   A. **Vibration**. No vibration shall be produced which is transmitted through the ground and is discernible without the aid of instruments or at any point beyond the lot line. In industrial parks vibration beyond the lot line within the industrial parks, which only affects neighboring industries or commercial enterprises, shall not be a violation of this Section. Vibration emanating from construction activities between 7:00 to 9:00 pm shall be exempt from the regulations.
   B. **Fire and Explosives**. All activities and all storage of flammable and explosive materials shall be provided with adequate safety devices against the hazards of fire and explosions, including adequate firefighting and fire suppression equipment.
   C. **Noise**. All noise shall be muffled so as not to be objectionable due to intermittence, beat frequency or shrillness. In no event shall the sound pressure level of noise radiated continuously from a facility exceed at the lot line the values established in *Table B.9.1*.
      1. Noise shall be measured in A-weighted decibels (dBA).

2. The following methods shall be applied when measuring noise pursuant to this Section:
   a. Weighted sound levels shall be measured with an integrated sound level meter (SLM) that meets or exceeds American National Standard Institute S1.43-1997 for Type 1 SLMs. The response of such SLM shall be set to FAST, and a time period of 15 seconds shall be used. The operator may select another time between a minimum of 10 seconds and maximum of 1 minute if a 15 second time period cannot adequately capture A-weighted sound level.
   b. Samples shall be taken only when the subject sound can be clearly heard and identified by the operator without any extraneous sounds such as passing traffic, birds' songs, etc.
   c. The operator shall take a minimum of 3 samples that demonstrate the repeatability and consistency of the subject sound. The operator shall also take at least 1 sample when the subject sound is not heard for the purposes of comparison
   d. The arithmetic average of all samples that demonstrate the repeatability and consistency of the subject sound shall be used to determine compliance with the maximum A-weighted sound levels in *Table B.9.1*.
   e. Sound shall be taken from the point on the receiving property line that is located the closest to the source of the subject sound. The microphone of the SLM shall be aimed toward the source of the subject sound, and standard microphone height of 5 ft. above grade shall be used.
   f. Exemptions. The maximum A-weighted sound levels in *Table B.9.1* shall not apply to the following:
      (a) All aircraft sound.
      (b) Sounds created by the operation of power equipment, such as lawn mowers, chain saws, and similar equipment, and construction, demolition, and/or maintenance activities.

(c) Sounds created by generators and accessory equipment operating during an emergency or the request of a utility, and the testing of said generators and associated equipment. Emergency, for the purposes of this Section, is defined as any occurrence or set of circumstances involving actual or imminent physical trauma, property damage or loss of electric or phone services, which requires immediate action.

(d) Sounds created by utilities and public uses, including but not limited to, utility substations, utility transmission lines, sanitary landfills, public sewer, and public water.

Table B.9.1: Daytime/Nighttime Maximum A-Weighted Sound Levels (decibels)	
Daytime (7:00 am to 9:00 pm)	80 dBA
Nighttime (Any time outside of daytime hours shown above)	60 dBA

D. **Air Pollution.** The emission of visible smoke, dust, dirt, fly ash, particulate matter from any pipes, vents, or other openings, or from any other source into the air, shall comply with the regulations of the SC Department of Environmental Service (SCDES) and any other government agency requirements applicable to air quality.

E. **Odor**. There shall be no emission of odorous gases or other odorous matter in such quantities as to be offensive at the property line. In industrial parks, odor beyond the lot line within the industrial park only affecting neighboring industries and commercial enterprises shall not be a violation of this Section. Notwithstanding, any process which may involve the creation or emission of any such odor shall be provided with both a primary and secondary safeguard system so that control may be maintained in the event of failure of the primary system.

F. **Glare**. There shall be no direct or sky reflected glare, whether from floodlights, high temperature processing, combustion, welding or otherwise, so as to be visible in any residence.

G. **Fumes and Vapor**. There shall not be emission of any fumes or vapors of a noxious, toxic, or corrosive nature which can cause damage or irritation to health, animals, vegetation, or to any form of property.

H. **Heat, Cold, Dampness or Movement of Air**: Activity which could produce any adverse effects on the temperature, motion, or humidity of the atmosphere beyond the lot line shall not be permitted.

I. **Toxic Matter**. The measurement of toxic matter shall be at the ground level or habitable elevation and shall be the average of any 24-hour sampling period. The release of any airborne toxic matter shall not exceed the quantities permitted for those toxic materials currently list in threshold limit values established by the SCDES or any other government entity involved in the regulation of airborne toxic matter.

J. **Exterior Illumination**. All operations and activities shall comply with *Chapter C.4: Lighting*.

K. **Compliance Guarantee**. The applicant for a permit for a use meeting the applicability criteria in *Chapter B.9.11.B.* shall acknowledge in writing their understanding of the standards in *Chapter B.9.11*. The applicant shall also indicate their agreement to conform with such standards at all times. Any violation after the fact of *Chapter B.9.11.* shall constitute a violation of the UDO and shall be treated accordingly.

10. RESERVED

11. OVERLAY DISTRICTS

A. Overlay districts aim to protect or enhance the unique characteristics of a specific geographic area. Overlay districts provide additional and/or flexible regulatory standards to be applied in conjunction with primary zoning district requirements within the identified overlay district. The City of Sumter hereby establishes the following overlay districts.

Table B.11.1 Overlay Districts	
Airfield Compatibility District (ACD)	*Chapter B.11.1*
APZ-1, Accident Potential Zone 1 (subdistrict)	
APZ-2, Accident Potential Zone 2 (subdistrict)	
DNL-1, Day-Night Noise Level 1 (subdistrict)	
DNL-2, Day-Night Noise Level 2 (subdistrict)	
DNL-3, Day-Night Noise Level 3 (subdistrict)	
NA, Noise Attenuation (subdistrict)	*Chapter B.11.3*
Range Compatibility District (RCD)	*Chapter B.11.2*
DNL-1, Day-Night Noise Level 1 (subdistrict)	
DNL-2, Day-Night Noise Level 2 (subdistrict)	
NA, Noise Attenuation (subdistrict)	*Chapter B.11.3*
Sumter County Airport Overlay District (AP)	*Chapter B.11.4*
Corridor Protection District (CPD)	*Chapter B.11.5*
Residential Infill Overlay District (RI)	*Chapter B.11.6*
Hampton Park Design Review District	*Chapter B.11.7*
Downtown Design Review District	*Chapter B.11.8*

11.1 AIRFIELD COMPATIBILITY DISTRICT (ACD)

A. **Purpose.** The intent of the ACD is to prevent incompatible land uses or the creation of flight hazards which would impair the utility and public investment of the Shaw Air Force Base and the Sumter Airport. It is understood the Sumter Airport is located in unincorporated Sumter County, and the following would apply at such a time as the airport and/or lands generally adjacent may be impacted. In the event of a conflict between the following standards and Chapter 7, Article 3 of the Sumter City Code regarding Airport Hazard Regulations, then Chapter 7, Article 3 shall take precedence.

B. **Types of Districts.** With the ACD there are several overlay districts which are shown on the Official Zoning Map(s) as follows:
   1. APZ-1, Accident Potential Zone I
   2. APZ-2, Accident Potential Zone II
   3. DNL-1, Day-Night Noise Level Zone I
   4. DNL-2, Day-Night Noise Level Zone II
   5. DNL-3, Day-Night Noise Level Zone III
   6. NA, Noise Attenuation District – Refer to *Chapter B.11.3.*

C. **Restrictions Within the Airfield Compatibility Districts:** Land designated APZ-1, APZ-2, DNL-1, DNL-2, or DNL-3 may not be used for any purpose other than those indicated by *Table B.11.3.*, and under the conditions attached thereto. Property owners or land users should consult both the text of this Section and the Official Zoning Map to determine the location of properties in question and the limitations imposed thereon by this Section.

D. **Land Use.** The use of land within these zones shall be subject to the following safety and performance standards and the requirements of *Table B.11.3.* Where permitted uses listed in *Table B.11.3.* are at variance with the applicable residential or non-residential zoning districts within which they are proposed, the more restrictive shall apply.

1. Safety Standards – the concentration of persons per use shall be in compliance with *Table B.11.2*.
   (1) Maximum Number of Persons – The maximum number of persons per use shall be a function of the number of hours of operation per day of the use and shall be expressed on an acre per hour basis. Furthermore, a structure or use or contiguous structure or use, shall not accommodate a gathering of individuals, including employees and non-employees, that would result in an average density of greater than 25 persons per acre per hour during a 24-hour period or that would exceed 50 persons per acre at any given time.

   Such limitations shall be a special condition of the issuance of the building permit and the certificate of occupancy. The occupant of any such premises shall not permit such limitations to be exceeded. The premises shall thereafter continuously be posted with a form of notice of such limitations, as prescribed by the Planning Commission.

Table B.11.2 Concentrations of Persons Per Acre Standard	
Hours of Operation Per Days	**Maximum Persons Allowed Per Acre/During the Day**
24	25
23	26
22	27
21	28
20	30
19	31
18	33
17	35
16	37
15	40
14	42
13	46
12 or less	59
Additional Standards	Concentration of persons per acre cannot exceed 50 persons per acre at any time. Fractions in the maximum persons allowed column are rounded to the lowest whole number

2. **Formula.** The maximum persons per acre per hour for the duration of time that persons are expected to be on site during a 24-hour period may be determined as follows:

   (1) Average densities of persons per hour during a 24-hour period are determined by calculating the number of persons per acre expected on a site, multiplying by the number of hours they will be on the site, and dividing the total by 24.

   a. Example #1: One 8-hour shift of 30 workers on a 1 acre site.

      30 persons expected x 8 hours on site = 240

      240 people ÷ 24 hours = 10

      Average density of 10 persons per acre per hour during a 24-hour period.

   b. Example #2: Two 8-hour shifts of 30 workers on a 1 acre site.

      30 persons expected x 16 hours on site = 480

      480 people ÷ 24 hours = 20

      Average density of 20 persons per acre per hour during a 24-hour period.

(2) The maximum number of persons allowed per acre per hour is calculated by dividing 24 hours by the number of hours persons will be on the site, and multiplying the results by 25 persons per acre per hour.

a. Example #1: A use on a 1 acre site has two 8-hour shifts.
(24 hours ÷ 16 hours) x (25 persons x 1 acre) = 37.5
The maximum number of people per acre per hour is 37.

b. Example #2: A use on a 1.5 acre site has two 8-hour shifts.
(24 hours ÷ 16 hours) x (25 persons x 1.5 acres) = 56.25
The maximum number of people permitted on the 1.5 acre parcel per hour is 56.

E. **Performance Standards.** Height and size requirements shall be evaluated in accordance with the Sumter County Code "Ordinance Regulating the Height of Structures and other Activities in the vicinity of Shaw Air Force Base," as adopted October 13, 1981.

1. Off-Street Parking: Off-street parking for uses within this district shall comply with *Chapter C.2.* as appropriate.

F. **Prohibited Uses.** All uses indicated by a "NO" in the applicable subzone column of *Table B.11.3* are expressly prohibited.

G. **Existing Uses:** Any existing non-conforming use or structure may be replaced, substantially altered, or rebuilt in accord with the permit requirements in *Chapter B.16.*; provided such non-conforming use will not:

1. Create a flight hazard or use not authorized by this Ordinance, or
2. Permit a non-conforming use or structure to be made or become a greater hazard to air navigation or less compatible in use than it was on December 30, 1991, or than it is when the application for a permit is made.

H. **Variances.** The Sumter City-County Board of Zoning Appeals shall have the power to grant variances to the Safety Requirement Standards and/or the Performance Standards Regulations of this Section and to authorize the issuance of variance therefore as defined in *Chapter A* of this Ordinance; provided that the

Commander of Shaw Air Force Base, or his designee, shall be notified of any variance being requested and shall be asked for comments on such requests.

I. **Other Ordinance.** Adoption of this Ordinance shall not invalidate any existing Ordinance, and shall be used in addition to such Ordinances, such as the "Ordinance Regulating the Height of Structures and other Activities in the Vicinity of Shaw Air Force Base," as adopted on October 13, 1981.

Table B11.3. Airfield Compatibility District (ACD) Use Regulations					
Land Use Category	APZ-I	APZ-2	DNL-1 65-75	DNL-2 75-80	DNL-3 80+ dB
RESIDENTIAL					
Single-Family	NO	NO	30 (14)	30 (14)	30 (14)
Manufactured Homes*	NO	NO	30 (14)	30 (14)	30 (14)
Single-Family**	NO	NO	30 (14)	30 (14)	30 (14)
Multi-Family***	NO	NO	30 (14)	30 (14)	30 (14)
Manufacture Home Parks	NO	NO	30 (14)	30 (14)	30 (14)
Hotels, Motels	NO	NO	30(14)	35 (14)	35 (14)
INDUSTRIAL/MANUFACTURING					
Food & Kindred Products	NO	YES[1]	(10)	(12)	(13)
Textile Mill Products	NO	YES[1]	(10)	(12)	(13)
Apparel	NO	NO	(10)	(12)	(13)
Lumber & Wood Products	YES[1]	YES[1]	(10)	(12)	(13)
Furniture & Fixtures	YES[1]	YES[1]	(10)	(12)	(13)
Paper & Allied Products	YES[1]	YES[1]	(10)	(12)	(13)
Printing, Publishing	YES[1]	YES[1]	(10)	(12)	(13)
Chemicals & Allied Products	NO	NO	(10)	(12)	(13)
Petroleum Refining & Related Industries	NO	YES[1]	(10)	(12)	(13)
Rubber & Plastics	NO	NO	(10)	(12)	(13)
Stone, Clay & Glass	NO	YES[1]	(10)	(12)	(13)
Primary Metals	NO	YES[1]	(10)	(12)	(13)
Fabricated Metals	NO	YES[1]	(10)	(12)	(13)
Professional, Scientific Control Instruments	NO	NO	(10)	(12)	(13)
Misc. Manufacturing	YES[1]	YES[1]	(10)	(12)	(13)

LAND USE CATEGORY	APZ-1	APZ-2	DNL-1 65-75 dB	DNL-2 75-80 dB	DNL-3 80+dB
TRANSPORTATION, COMMUNICATIONS, UTILITIES					
Railroad, Rapid Rail	YES [2]	YES	(10)	(12)	(13)
Motor Vehicle Transportation	YES [2]	YES	(10)	(12)	(13)
Aircraft Transportation	YES [2]	YES	(10)	(12)	(13)
Highway & Street ROW	YES [2]	YES	(10)	(12)	(13)
Auto Parking	YES [2]	YES	(10)	(12)	(13)
Communications	YES [2]	YES	(10)	30 [(14)]	30 [(14)]
Utilities	YES [2]	YES	(10)	(12)	(13)
Landfills & Hazardous	NO	NO	(10)	(12)	(13)
COMMERICIAL/RETAIL TRADE					
Wholesale Trade	YES[1]	YES[1]	30	(12)	(13)
Building Materials—Retail	YES[1]	YES[1]	30	(12)	(13)
General Merchandise—Retail					
<10,000 sq. ft./acre	YES[1,11]	YES[1,11]	30	(12)	(13)
>10,000 sq. ft./acre	NO	NO	30	(12)	(13)
Food Retail—Groceries	NO	NO	30	(12)	(13)
Other Food Retail	YES[1]	YES[1]	30	(12)	(13)
Automotive, Marine, Aviation--Retail	YES[1]	YES[1]	30	(12)	(13)
Apparel & Accessories—Retail	NO	YES[1]	(10)	(12)	(13)
Furniture—Home	NO	YES[1]	30	(12)	(13)
Furniture—Retail	NO	YES[1]	30	(12)	(13)
Eating & Drinking Places	NO	YES[1]	30	(12)	(13)
SERVICES					
Finance, Insurance, Real Estate	YES[1]	YES[1,3]	30	30	(13)
Personal Services	YES[1]	YES[1,3]	30	30	(13)
Cemeteries	YES[1,3,4]	YES[1,3,4]	NA	NA	NA
Business Services	YES[1]	YES[1,3]	30	30	(13)
Warehousing & Storage Services	YES[1]	YES[1]	30	(12)	(13)

LAND USE CATEGORY	APZ-1	APZ-2	DNL-1 65-75 dB	DNL-2 75-80 dB	DNL-3 80+dB
Explosive Storage	NO	NO	30	(12)	(13)
Repair Services	YES[1,3]	YES[1,3]	30	(12)	(13)
Medical & Other Health Services	NO	NO	30	25	25
Hospitals	NO	NO	30	25	25
Legal Services	YES[1]	YES[1,3]	30	30	30
Other Professional Services	YES[1]	YES[1,3]	30	30	30
Contract Construction Services	YES[1]	YES[1,3]	30	30	30
Government Services	NO	YES[1,3]	30	30	30
Educational Services	NO	NO	30	30	30
Religious Activities	NO	NO	30	30	30
CULTURAL, ENTERTAINMENT AND RECREATION					
Cultural Activities	NO	NO	25	30	30
Nature Exhibition	YES[5]	YES[5]	NA	(12)	(13)
Entertainment Facilities Indoor/Outdoor	NO	NO	NA	(12)	(13)
Sports Activities Indoor/Outdoor	NO	YES[5,6,7]	NA	(12)	(13)
Water & Other Recreation Areas	YES[5]	YES[5]	NA	(12)	(13)
Resort & Group Camps	NO	NO	NA	(12)	(13)
Parks & Golf Courses	YES[5]	YES[5]	NA	(12)	(13)
RESOURCE PRODUCTION, EXTRACTION, AND OPEN LAND					
Agricultural Related Activities	YES	YES	NA	(12)	(13)
Dairy & Livestock Farms	YES	YES	NA	(12)	(13)
Forestry & Mining	YES	YES	NA	(12)	(13)
Fishing, Hunting, and Water Areas	YES	YES	NA	(12)	(13)
Permanent Open Space	YES	YES	NA	(12)	(13)

Notes:

1. Uses compatible only if they do not result in a large concentration of people. A large concentration of people is defined as a gathering of individuals in an area that would result in an average density of greater than 25 people per acre per hour during a 24-hour period, or a single event that would result in the gathering of 50 persons per acre at any time (See Safety Requirement Standards). In addition, the following factors need to be considered: Labor intensity, structural coverage, explosive characteristics, air pollution, size of establishment, peak period (including shopper/visitor) concentrations.
2. No passenger terminals and no major above ground transmission lines.
3. Meeting places, auditoriums, etc. are not allowed.
4. Excludes chapels.
5. Facilities must comply with Safety Requirements Standards and no high-intensity use of facilities, such as structured playgrounds, ballfields, or picnic pavilions.
6. Clubhouses are not allowed.
7. Concentrated rings with large classes not allowed.
8. Includes livestock grazing but excludes feedlots and intensive animal husbandry.
9. Includes feedlots and intensive animal husbandry.
10. Measures to achieve Noise Level Reduction (NLR) of 25 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.
11. General Merchandise – Retail compatible provided that individual shops do not exceed 2,500 sq. ft. and that not more than 4 shops per acre are allowed.
12. Measures to achieve Noise Level Reduction (NLR) of 30 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas, or where the normal level is low.
13. Measure to achieve Noise Level Reduction (NLR) of 35 dB must be incorporated into the design and construction of portion of these buildings where the public is received, office areas, noise sensitive areas, or where the normal level is low.
14. Mitigation measures to reduce noise within structures in noise contour zones.

11.2 RANGE COMPATIBILITY DISTRICT (RCD)

A. **Purpose.** The intent of the RCD is to prevent incompatible land uses or the creation of flight hazards, which would impair the utility and public investment of Poinsett Electronic Combat Range (PECR).

B. **Subdistricts**. Within the RCD, there are several overlay districts, as follows:
   1. DNL-1, Day-Night Noise Level Zone 1
   2. DNL-2, Day-Night Noise Level Zone
   3. NA, Noise Attenuation District – Refer to *Chapter 11.3.*

C. **Restrictions Within the Range Compatibility Districts.** Land designated DNL-1, and DNL-2 may not be used for any purpose other than those indicated by *Table B.11.3.* and under the conditions attached thereto. Property owners or land users should consult both the text of this Section and the Official Zoning Map to determine the location of properties in question and the limitations imposed thereon by this Section.

D. **Land Use.** The use of land within these zones shall be subject to the safety and performance standards specified in this Section.

E. **Performance Standards.** Height and size requirements shall be evaluated in accord with the "Ordinance Regulating the Height of Structures and other Activities in the vicinity of Shaw Air Force Base," as adopted October 13, 1981.
   1. **Noise Hazard Signs.** Developers for all new major subdivisions will install at their expense a noise notification /warning sign (same as installed by Sumter County on the boundary of the NA Zone) at each entrance to the subdivision before building permits may be issued.
   2. **Prohibited Uses.** As indicated in *Table B.11.3* for appropriate districts.
   3. **Non-Conforming Uses.** The regulations prescribed by this section shall not be construed to require the removal, lowering of the height, or other changes or alterations of any structure or use conforming to the regulations as of December 31, 2002, or otherwise interfere with the continuance of any non-conforming use. Nothing herein contained shall require any change in the construction or alteration of which has begun or plans or residential plats which have been filed in the Planning Commission Office prior to December 31, 2002.

4. **Variances.** The Sumter City-County Board of Zoning Appeals shall have the power to grant variances to the Safety Requirements Standards and/or the Performance standards Regulations of this Section and to authorize the issuance of variances therefore as defined in *Chapter A*; provided that the Commander of Shaw Air Force Base, or his designee, shall be notified of any variance requested and shall be asked for comments on such requests.
5. **Other Ordinance.** Adoption of this Ordinance shall not invalidate any existing Ordinance, and shall be used in addition to such Ordinances, such as the "Ordinance Regulating the Height of Structures and other Activities in the Vicinity of Shaw Air Force Base," as adopted on October 31, 1981.
6. **DNL Lines.** No manufactured home may be placed inside the DNL lines as developed by the US Air Force and published by the Sumter City-County Planning Commission.
7. **Existing Subdivisions and Mobile Home Parks.** Existing, approved major subdivisions, and manufactured home parks with current city business licenses that have infrastructure in place will be allowed to continue to develop any/all remaining parcels/lots. No new parcels/lots may be added to the subdivision or manufactured home park after the adoption of this revision. However, all existing lots/parcels may be fully used/reused or developed. This note applies to both APZ-2s and the DNL restriction. Any subdivision and/or manufactured home parcels started after the adoption of these changes must be developed in accordance with all the new regulations.

11.3 NOISE ATTENUATION (NA) DISTRICT

A. **Purpose.** The intent of this district is to define areas by physical features, which are prone to exposure to airport and range operations noise and changes in the patterns thereof. Therefore, the purpose of the district is to reduce the noise, which may accrue to the benefit of the health, safety, and welfare of the occupants of or those associated with the uses of land therein.

B. **Noise Notification Zone.** Noise Notification Zone is hereby created by map action, which depicts the area adjacent to Shaw Air Force Base and/or Poinsett Range. This notification shall be shown on all plats / building permits and other correspondence regarding construction within the area so designated.

C. **Performance Standards.**

1. Noise Hazard Signs: A noise notification/warning sign meeting city street sign specifications shall be installed at each entrance to the subdivision prior to final plat approval for any lot within the subdivision.

11.4 SUMTER COUNTY AIRPORT OVERLAY DISTRICT

A. **Purpose.** It is hereby found that an obstruction has the potential for endangering the lives and property of users of Sumter Airport, and property or occupants of land in its vicinity; that an obstruction may affect existing or future instrument approaches of Sumter Airport; and that an obstruction may reduce the size of areas available for landing, take-off, and maneuvering of aircraft, thus tending to destroy or impair the unity of Sumter Airport and the public investment therein. Accordingly, it is declared:

1. That the creation or establishment of an obstruction has a potential of being a public nuisance and may injure the region served by Sumter County Airport.
2. That it is necessary in the interest of the public health, public safety, and general welfare that the creation or establishment of obstructions that are a hazard to air navigation be prevented.
3. The prevention of these obstructions should be accomplished, to the extent legally possible, by the exercise of police power without compensation.

It is further declared that the prevention of the creation establishment of hazards to air navigation, the elimination, removal, alteration or mitigation of hazards to air navigation or the marking and lighting of the obstructions are public purposes for which a political subdivision may raise and expend public funds and acquire lands or interest inland.

B. **Definitions.** As used in this Section, unless the context otherwise requires, the following definitions apply:

1. **Airport** - Sumter County Public Airport
2. **Airport Elevation** - The highest point of an airport's usable landing area measured in feet from mean sea level. (182 ft. at Sumter Airport)
3. **Airport Hazard** - Any structure or object of natural growth located on or in the vicinity of a public airport, or any use of land near such airport, which obstructs the airspace required for the flight of aircraft in landing or takeoff at such airport or is otherwise hazardous to such landing or takeoff of aircraft.
4. **Airport Height** - For the purpose of determining the height limits in all zones set

forth in this Ordinance and shown on the Airspace Plan Map, the datum shall be mean sea level elevation unless otherwise specified.

5. **Approach Surface** - A surface longitudinally centered on the extend runway centerline, extending outward and upward from the end of the primary surface and at the same slope as the approach zone height limitation slope set forth in this Section.
6. **Conical Surface** - A surface extending outward from the periphery of the horizontal surface at a slope of 20:1 for a horizontal distance of 4,000 ft.
7. **Horizontal Surface** - A horizontal plane 150 ft. above the established airport elevation, the perimeter of which in plane coincides with the perimeter of the horizontal zone.
8. **Non-Precision Instrument Runway** - A runway having an existing instrument approach procedure utilizing air navigation facilities with only horizontal guidance, or area type navigation equipment, for which a straight-in non-precision instrument approach procedure has been approved or planned, and for which no precision approach facilities are planned or indicated on a Federal Aviation Administration (FAA) planning document or military service's military airport planning document.
9. **Obstruction** - Any structure, growth or other object, including a mobile object, which exceeds the limited height set forth in this Section.
10. **Person** - An individual, firm, partnership, corporation, company, association, joint stock association, or governmental entity. It includes a trustee, receiver, assignee, or similar representative of any of them.
11. **Precision Instrument Runway** - A runway having an existing instrument approach procedure utilizing air navigation facilities with both vertical and horizontal guidance, for which a straight-in precision instrument approach procedure has been approved or planned on a Federal Aviation Administration (FAA) planning document or military service's military airport planning document.
12. **Primary Surface** - A surface longitudinally centered on a runway. When the runway has a specially prepared hard surface, the primary surface extends 200 ft. beyond each end of that runway; but when the runway has no specially prepared hard surface, or planned hard surface, the primary surface ends at

each end of that runway. The width of the primary surface of a runway will be that width prescribed in Part 77 of the Federal Aviation Regulations (FAR) for the most precise approach existing or planned for either end of that runway. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline.

13. **Runway** - A defined area on an airport prepared for landing and takeoff of aircraft along its length.
14. **Structure** - An object, including a mobile object, constructed or installed by man, including but not limited to buildings, towers, smokestacks, earth formations and overhead transmission lines.
15. **Transitional Surfaces** - Surfaces extending outward at 90-degree angles to the runway centerline and extending at a slope of 7 ft. horizontally for each foot vertically from the side of the primary and approach surfaces to where they intersect the horizontal surfaces.
16. **Tree** - Any object of natural growth**.**
17. **Visual Runway**- A runway intended solely for the operation of aircraft using visual approach procedures, with no straight-in instrument approach procedure and no instrument designation indicated on an FAA approved airport layout plan, a military service approved military airport layout plan, or by any planning document submitted to the FAA by competent authority.
18. **Approach, Transitional, Horizontal, and Conical Zones** - These zones apply to the area under the approach, transitional, horizontal, and conical surfaces defined on the Sumter Airport Airspace Plan Map**.**

C. **Airport Zones.** In order to carry out the provisions of this Ordinance, there are hereby created and established certain zones which include all of the land lying within the approach zones, transitional zones, horizontal zones, and conical zones as they apply to a particular airport. Such zones are shown on the Sumter Airport Airspace Plan Map. An area located in more than one (1) of the following zones is considered to be only in the zone with the more restrictive height limitation. The various zones are hereby established and defined as follows:

1. **Approach Zone** - The inner end of this approach zone coincides with the width of

the primary surface and is 1,000 ft. wide for Runway 5/23. The Approach Zone for Runway 5 expands outward uniformly to a width of 3,500 ft. at a horizontal distance of 10,000 ft. from the primary surface. Its centerline is the continuation of the centerline of the runway. The Approach Zone for Runway 23 has an inner width of 1,000 ft., an outer width of 16,000 ft., and a horizontal distance of 50,000 ft. from the edge of the primary surface (200 ft. from the runway threshold). The Approach Zones for Runways 14 and 32 are the same dimensions and they begin at the edge of the primary surface which is the same as the runway threshold for a non-hard surface. The Approach Zones for runways 14 and 32 have an inner width of 250 ft., an outer width of 1,250 ft., and a horizontal distance of 5,000 ft.

2. **Transitional Zones** - These zones are hereby established as the area beneath the transitional surfaces. These surfaces extend outward and upward beginning at the sides of the primary surface and extend at a slope of 7:1 to a height of 150 ft. (332 ft. MSL) above airport elevation. The surface extends at a slope of 7 ft. horizontally for each foot vertically (7:1) from the sides of the primary and approach surfaces to where they intersect the horizontal and conical surfaces. Transitional zones for those portions of the precision approach zones which project through and beyond the limits of the conical surface, extend a distance of 5,000 ft. measured horizontally from the edge of the approach zones and at 90-degree angles to the extended runway centerline.
3. **Horizontal Zone** - The horizontal zone is hereby established at 150 ft. (332 ft. MSL) above airport elevation and defined by swinging arcs of 10,000 ft. radii from the center of each end of the primary surface of each runway and connecting the adjacent arcs by drawing lines tangent to those arcs. The horizontal zone does not include the approach and transitional zones.
4. **Conical Zone** - The conical zone is hereby established as the area that commences at the periphery of the horizontal zone and extends outward there from a horizontal distance of 4,000 ft. at a slope of 20:1 and to a height of 200 ft. above the elevation of the horizontal zone. The conical zone does not include the precision instrument approach zones and the transitional zones.

D. **Airport Zone Height Limitations.** Except as otherwise provided in this Ordinance, no structure or tree shall be erected, altered, allowed to grow, or be maintained in any zone created by this Ordinance to the height in excess of the applicable height limit herein established for such zone. Such applicable height limitations are hereby established for each of the zones in question as follows:

1. **Approach Zone** - Slopes upward 34 feet horizontally for each foot vertically beginning at the end of and at the same elevation as the primary surface and extending to a horizontal distance of 10,000 ft. along the extended runway centerline. Slopes upward one foot vertically for a distance horizontally as described in the Sumter Airspace Plan beginning at the end of and the same elevation as the primary surface and extending to a horizontal distance as described in the Sumter Airport Hazard Zoning Map.
2. **Transitional Zones** - Slopes upward and outward 7 feet horizontally for each foot vertically beginning at the sides of and at the same elevation as the primary surface and the approach zones and extending to a height of 150 ft. above the airport elevation which is 332 ft. above mean sea level. In addition to the foregoing, there are established height limits sloping upward and outward 7 ft. horizontally for each foot vertically beginning at the sides of and at the same elevation as the approach zones and extending to where they intersect the conical surface.
3. **Horizontal Zone** - 150 ft. above the airport elevation or a height of 332 feet above mean sea level.
4. **Conical Zone** - Slopes upward and outward 20 ft. horizontally for each foot vertically beginning at the periphery of the horizontal zone and at 150 ft. above the airport elevation and extending to a height of 350 feet above the airport elevation.
5. **Excepted Height Limitation** - Nothing in this Ordinance shall be construed as prohibiting the growth, construction, or maintenance of any tree or structure to a height up to 35 ft. above the surface of the land.
6. **Conflicts**. Where an area is covered by more than1 height limitation, the more restrictive limitation shall prevail.

E. **Use Restrictions.** Notwithstanding any other provisions of this Ordinance, no use may be made to land or water within any zone established by this Ordinance in such a manner as to create electrical interference with navigational signals or radio communication between the airport and aircraft, make it difficult for pilots to distinguish between airport lights and others, result in glare in the eyes of pilots using the airport, impair visibility in the vicinity of the airport or otherwise in any way create a hazard or endanger the landing, takeoff, or maneuvering of aircraft to use the airport.

F. **Nonconforming Uses.** The requirements of *Chapter B.16.* are applicable to any use or site not in conformance with this Section, except that:

1. If a nonconforming tree or structure is abandoned or more than 60% torn down, physically deteriorated, or decayed as determined by the Zoning Administrator, then no permit shall be granted that would allow such structure or tree to exceed the applicable height limit or otherwise deviate from the requirements of the Section.
2. The owner of any existing legally established nonconforming structure or tree is hereby required to permit the installation, operation, and maintenance thereon of such markers and lights as shall be deemed necessary by the Sumter County Airport Commission to indicate to the operators of aircraft in the vicinity of the airport, the presence of such airport hazards.

G. Permits.

1. *Future Uses*. No material change shall be made in the use of land and no structure or tree shall be erected, altered, planted, or otherwise established in any zone hereby created unless a permit therefore shall have been applied for and granted by the Zoning Administrator upon determination that no provisions of this Section and this Ordinance are violated.
   (1) However, a permit for a tree or structure of less than 75 ft. of vertical height above the ground shall not be required in the horizontal and conical zones or in any approach and transitional zones beyond a horizontal distance of 4,200 ft. from each end of the runway except when such a tree or structure, because of terrain, land contour, or topographic features, would extend

above the height limit prescribed for the respective zone.

(2) Each application for a permit shall indicate the purpose for which the permit is desired with sufficient particulars to determine whether the resulting use, structure, or tree would conform to the regulations herein prescribed. If such determination is in the affirmative, the permit shall be granted.

2. *Existing Uses. No permit shall be granted that would allow the establishment or creation of an airport hazard or permit a nonconforming use, structure, or tree to become a greater hazard to air navigation than it was on the effective date of this Ordinance or any amendments thereto or than it is when the application for a permit is made. Except as indicated, all applications for such a permit shall be granted.*

3. *Variances.* Any person desiring to erect or increase the height of any structure, or permit the growth of any tree, or use his property not in accordance with the regulations prescribed in this Ordinance, may apply to the Board of Zoning Appeals for a variance from such regulations. Such variances shall be allowed where it is duly found that a literal application or enforcement of the regulations would result in practical difficulty or unnecessary hardship and relief granted would not be contrary to the public's interest but will do substantial justice and be in accordance with the spirit of this Unified Development Ordinance.

4. *Exceptions.*

(1) In the area lying within the limits of the horizontal zone and conical zone, no permit shall be required for any tree or structure less than 75 ft. in vertical height above the ground, except when, because of terrain, land contour or topographical features, such as tree or structure would extend above the height limits prescribed for such zones.

(2) In areas lying within the limits of the approach zones, but at a horizontal distance of not less than 4,200 ft. from each end of the runway, no permit shall be required for any tree or structure less than 75 ft. in vertical height above the ground, except when, because of terrain, land contour or topographical features, such as tree or structure would extend above the height limits prescribed for such zones.

(3) In areas lying within the limits of the transitional zones, no permit shall be required for any tree or structure less than 75 ft. above the ground, except when such tree or structure, because of terrain, land contour or topographical features, would extend above the elevation prescribed for such transition zones.

11.5 CORRIDOR PROTECTION DISTRICT

A. **Purpose.** The purpose of the Corridor Protection District is to promote development that is compatible with the function, capacity, and design of major roadways, while remaining sensitive to the relationship of the roads to abutting residential, commercial, and industrial development. The implementation of the Corridor Protection District shall be fulfilled in the manner of an overlay zone.

B. **Applicability**. The Corridor Protection District encompasses lands within 300 ft. measured from the centerline (or the depth of the lot to be developed, whichever is greater) on both sides along specific roadways, as identified on the Official Zoning Map.

C. **Exemptions.** The standards of this Section shall not apply to the following:
   (1) Residential uses and/or developments, excluding multi-family developments.

D. **General Standards.** The following standards are applicable to all development projects not exempted by Chapter B.11.5.C.:
   1. Development and dimensional standards of the primary zoning district apply.
   2. Siting and orientation of commercial, multi-family residential, and industrial buildings and structures, on a lot should be parallel to the street, existing lot configuration notwithstanding.
   3. Off-street parking should be located to side and/or rear of buildings, or screened by vegetation or berms if located in the front yard area, in addition to any other requirements in *Chapter C.5*.
   4. Outdoor sales lots and open storage areas for commercial or industrial uses are not permitted unless adequately screened or removed from public view. Car dealerships, mobile home sales lots, accessory structure sales lots, and trailer sales lots are exempted from this provision, but shall meet all requirements for landscaping and buffering as set forth in *Chapter C.5*.

E. **Architectural Plans.** All projects in the Corridor Protection District shall submit architectural plans which show exterior elevations of all portions of buildings with

relationship to public views and vistas, indication of construction materials, photographs and/or perspective drawings indicating visual relationships to adjoining properties and spaces, paint and color schemes, and any other exhibits and reports as may be required to convey the design of the project.

F. **Architectural Standards.** All projects in the Corridor Protection District shall meet the following additional standards:

1. **Fences and Walls.** All proposed fences and/or walls proposed for the front and/or side yards shall be reviewed as part of the Corridor Design Approval Request, in addition to the standards provided in *Chapter C.6.* shall be constructed using the following materials:

(1) **Fences.** All fencing in front of a building and to front and exterior street facing side for corner lots shall be constructed of black vinyl-coated chain link, wrought iron, or extruded aluminum material. Coating must fully cover the metal to prevent rust and maintain a professional finish.

(2) **Walls.** Walls shall be built using brick masonry or split face block. Color and style should complement surrounding architecture and meet any applicable design guidelines for consistency.

2. **Building Design Standards.**

(1) **Images.** This Section utilizes figures, images, and rendered photographs for illustrative purposes only; the text, dimensions and/or standards shall apply in all cases where there is a conflict.

(2) **Repairs, Renovations, and Additions.**

a. Exterior renovations to a building, including change of material types or structural design, and/or additions require review except where otherwise waived by the Zoning Administrator or their designee.

b. A building may be repaired without complying with the requirements of this Section. Additions may be constructed of the same material as the existing structure to maintain consistency with original architectural design. The introduction of new materials shall be reviewed for compatibility.

c. Notwithstanding any standards of this Section to the contrary, any additions to a building which is constructed in compliance with the

standards of this Section may continue the design of the existing building, including building materials, colors, textures, architecture, roofs, façades, and other detailing.

(3) **Required Design Elements.** The following design elements are required for all buildings:

a. Consistent architectural style, detail and trim;
b. Facades which break down large elements of mass and scale where appropriate;
c. Architectural details and articulation;
d. Material changes reflective of function and appropriately placed;
e. Canopies, porches, stoops, roof overhangs or other pedestrian friendly features;
f. Shade and weather protection for ground floor entrances;
g. Design elements such as cornice lines, columns, arches; and various fenestration and transparency elements.

Figure B.11.1 Design Elements Example Graphic

(4) **Prohibited Design Elements**. The following design elements, which do not promote high-quality development or redevelopment, are prohibited:

a. Large, unarticulated blank wall surfaces;
b. Exposed and untreated block walls;
c. barbed wire;

d. Mirror window glazing;
e. False fronts;
f. Loading bays or loading doors on primary facades;
g. Lack of architectural features;

(5) **Façade Colors.** Building façade colors shall help unify buildings within a development. Building façade colors should be similar and consistent within a development. Building colors shall comply with the following standards:
a. Primary colors shall be earth tones, muted, subtle, or neutral colors. Fluorescent colors are prohibited. Exterior color schemes that attract undue attention, or that cause the building to appear as a sign or advertisement, are not permitted.
b. The exterior wall area of each side of the building may contain non-fluorescent highlighting trim or dark contrasting features that use bright, dark, or vivid colors, but are restricted to no more than 10% of the façade.
c. Color is integral to the materials. The use of complementing hues is required where painted or applied finishes are utilized.
d. Traditional and standard franchise colors shall also comply with this Section.

(6) **Façade Design.** Building facades shall be designed with a consistent architectural style, detail, and trim. All sides of a building shall require architectural detailing that complement the primary façade. Facades greater than 100 ft. in length shall require a repeating, consistent pattern of change in color, texture, and material. Facades shall comply with the following additional standards:

(7) **Building Blank Wall Area.** Buildings shall be designed to limit blank wall areas. Blank wall areas are portions of an exterior façade that do not include windows, doors, columns, pilasters, architectural features greater than 1 ft. in depth, or a substantial material change. Blank wall area shall be limited in building designs and comply with the following standards:
a. Paint is not considered a substantial material change.
b. Blank wall area applies in both a vertical and horizontal direction and applies to ground floors and upper floors.

c. The maximum continuous blank wall area for any building shall be a maximum 50 sq. ft. without a break by windows, doors, architectural features greater than 1 ft. in depth, or a substantial material change, unless explicitly stated elsewhere in this UDO.
d. When necessary to meet Fire Code requirements, blank wall area requirements may be waived by the Zoning Administrator.

Figure B.11.2 Blank Wall Area

(8) **Rooftop Equipment**. Mechanical equipment or stacks shall be screened from public view. This provision is applicable to new building construction only.

(9) **Parapets**. Parapets may extend up to 3 ft. above the roof line.

(10) **Roof Treatments.** Roofs may have architecturally significant roof treatments including, but not limited to, cornices, brackets, roof overhangs, and textured materials. Compatible color materials are required.

(11) **Entrances.** Building entrances should be differentiated architecturally to create a sense of human scale.

a. Architectural elements like openings, sills, bulkheads, columns, and other architectural features should be used to establish human scale at the street level.
b. All commercial and mixed-use buildings should accommodate active street level uses on all pedestrian-oriented frontages.

c. Large buildings fronting multiple streets should provide multiple entrances**.**

(12) **Buildings on Corners.**

a. Buildings that exist on a corner lot shall incorporate additional architectural features, utilize massing techniques, or implement other features to emphasize their prominent location and create a visual assist to turn the corner.

b. Corner buildings should utilize massing techniques and architectural treatments to create an inviting pedestrian environment where a building wraps a street corner.

G. **Site Design Standards.**

(1) **Building Siting**. Buildings shall be sited so that they support a walkable public realm and are generally aligned and compatible with one another. Parking should be placed to the side or rear of buildings. Furthermore, building siting shall comply with the following:

(1) Large-scale, single-use buildings, to the maximum extent practicable, should be located behind or above habitable street front space and outparcel buildings.

(2) Spaces between buildings on outparcels or pad sites shall include enhanced pedestrian features or amenities such as plazas, paver walkways, seating areas, and gathering places in addition to off-street parking spaces.

(3) Outparcel buildings, to the maximum extent practicable, shall be clustered along the street in order to define street edges and entry points, and promote a pedestrian scale. Outparcel buildings should help define street edges, development entry points, and spaces for gathering between buildings.

(4) Outparcel buildings should include a consistent level of architectural detail on all sides of the building and consist of similar exterior materials and compatible colors of the primary building in the development.

(5) Buildings shall be located to break up the site into a series of smaller blocks defined by streets and pedestrian walkways, and to frame and enclose parking areas, outdoor dining areas, and/or gathering spaces for pedestrians between buildings.

(6) If a parking lot separates the principal building from an outparcel building, a pedestrian path/sidewalk should be provided connecting the two through a direct link as illustrated in *Figure B.11.5*.

(2) **Multi-Building Developments.**

(1) Sites comprised of multiple buildings shall be configured such that no more than 60% of the provided off-street parking shall be located between a building's primary building façade and the street it faces, unless the principal building(s) and/or parking lots are screened from view by outparcel development.

(2) Buildings within multiple-building developments shall be clustered to maximize organized open space opportunities.

(3) Developments with multiple buildings shall break up the development area into a series of distinguishable smaller blocks which include on-site streets, vehicle accessways, pedestrian walkways and features, and provide interior circulation.

(4) Buildings that abut streets shall be oriented parallel to the street. Buildings shall not be oriented at an angle to the street.

(3) **Internal Connections.** Within developments including the construction of new streets, an interconnected network of streets shall be provided. Streets shall connect to adjacent existing streets outside of the development.

(4) **Accessory Facilities.**

(1) Uses, structures, and mechanical equipment that are accessory to the principal building (i.e., loading and unloading areas, trash collection areas, maintenance and storage, and mechanical equipment areas) shall be incorporated into the overall design, architecture, and landscape of the development.

(2) Colors and materials used in accessory uses and structures shall be consistent with the principal structure.

(3) Visual impacts of these areas shall be fully contained and out of view from streets and public rights-of-way.

(4) Accessory structures shall not exceed the height of the principal structure.

Figure B.11.3 Outparcel Buildings and Parking

Figure B.11.4 Outparcels and Multi-Building Development

(5) **Architectural Styles.**

(1) In developments with multiple buildings, a consistent level of architectural style shall be maintained.

(2) Where dissimilar architectural styles are required, building designs shall be made more consistent through the use of consistent architectural features, similar scale and proportions, and consistent location of signage.

(6) **Equipment and Loading Areas**. Equipment and loading areas shall comply with the following standards:

(1) Cooling towers, HVAC and ventilation fans, mechanical units, etc., shall be either screened using a roof façade, parapets, or constructed adjacent to the building and properly screened from view by either landscaping or the use of similar building materials.

(2) Ground-mounted equipment and mechanical equipment visible from a public right-of-way shall be screened from view by an opaque wall, landscaping, or combination thereof.

(3) Except where regulated otherwise, walls and landscaping shall have a minimum opacity of 85% and shall be the height of the equipment or facility plus a minimum of 6 in.

(4) Where the configuration of the building or site makes it impractical to locate the loading areas in the rear of the building, front or side loading areas may be proposed with additional screening or landscape requirements.

H. **Prohibited Elements.** The following design elements are prohibited:

(1) Reflective surfaces;

(2) Exposed and untreated block walls; and

(3) Barbed wire, unless required by law for security or safety purposes.

I. **Approval Authority.** Prior to applying for a building permit in the Corridor Protection District, applicants shall obtain Corridor Protection District approval as outlined in *Chapter A*. The Zoning Administrator may refer applications to the Planning

Commission for approval that otherwise could be approved at staff level. The Planning Commission retains authority to approve alternative design plans that do not meet all *Chapter B.11.5.* standards upon referral from the Zoning Administrator.

11.6 RESIDENTIAL INFILL OVERLAY DISTRICT

A. **Purpose.** The purpose of the Residential Infill Overlay District is to accommodate and encourage compatible development and redevelopment in existing residential neighborhoods, while reinforcing the established character of the neighborhood and mitigating potential adverse impacts on adjacent properties. These regulations are intended to respect the historic development patterns within neighborhoods with respect to building orientation, frontage, scale and massing, setback, and access/parking location.

B. **Applicability.** The standards contained within this Section apply to residential uses pursuant to *Chapter B.8.* within the Residential Infill Overlay District area as identified on the Official Zoning Map

C. **Setbacks**.

1. Alternative setbacks for principal buildings in the Residential Infill Overlay District shall be determined by conducting a **Comparative Sample Analysis.**
   (1) A comparative sample is defined as a group of existing homes within the immediate vicinity – typically along the same block face or within 300 ft. – used to establish baseline measurements for key design elements including:
      a. Setbacks (minimum and maximum street and side setbacks)
      b. Building orientation and massing.
      c. Encroachments and access (driveway) patterns.
   (2) For the purposes of determining alternative setbacks, a comparative sample shall include at least 4 principal buildings within 300 ft. of and oriented toward the same street as the subject lot. The comparative sample is not required to be equally distributed on either side of the subject lot. When a comparative sample cannot be derived, then historic structure data, including footprints, aerial photography and/or survey records may be used. If no such data exists, the underlying zoning district setbacks apply.

2. In the application of determining alternative setbacks in the Residential Infill Overlay District, the following minimum requirements are applicable:

(1) **Front:** The proposed building may be located no closer than the smallest primary street setback in the comparative sample but no less than 10 ft.

(2) **Side:** no closer than 5 ft.

a. Side setback reduction only applies to existing lots of record that do not meet the underlying zoning district's minimum dimensional standards for width.

b. Where a building addition is proposed to a detached or attached house, the established side setback for the existing principal building shall prevail.

c. At least one side must meet the district's minimum setback requirement.

(3) **Rear:** no closer than the smallest rear setback in the comparative sample but no less than 10 ft.

a. Rear setback reduction only applies to existing lots of record that do not meet the underlying zoning district's minimum dimensional standards for depth and/or area.

D. **Conversions of Single-Family Detached Structures.**

1. Where allowed pursuant to *Chapter B.8.*, existing residential dwellings that have received Certificate of Occupancy approval on or prior to November 7, 2023, may be converted to a duplex, triplex, or quadraplex provided that the lot of record and structure meet all required development standards for single-family detached dwelling.
2. This provision does not exempt conversions from complying with the minimum off-street parking requirements in *Chapter C.2*.

E. **Parking**

1. When locating closer than the district minimum front setback, parking must be provided to the side or rear of the structure, with no parking in the front yard.

11.7 HAMPTON PARK DESIGN REVIEW DISTRICT

A. Purpose. The purpose of the Hampton Park Design Review District is to promote the educational, cultural, economic and general welfare of the public by providing a mechanism for the identification, recognition, preservation, maintenance, protection, and enhancement of this historic and architecturally valuable district which serves as a visible reminder of the social, cultural, economic, political and/or architectural history of the City of Sumter.

B. **Applicability.** The standards contained within this Section apply to the exterior appearance any improvement, alteration, addition, renovation, new construction/erection, demolition, or moving of any building or structure within the Hampton Park Design Review District as identified on the Official Zoning Map.

C. **Standards.**

1. The City shall not issue a permit for any applicable item referenced in *Chapter B.11.7.B.* unless and until a project application has been submitted to the Design Review Board and a Certificate of Appropriateness is issued.
2. Project applications shall be reviewed for appropriateness in accordance with *Chapter A.3.5.*
3. Permitted uses shall be determined by the primary zoning district. The uses of land and the uses of buildings are not regulated by this overlay district.

11.8 DOWNTOWN DESIGN REVIEW DISTRICT

A. **Purpose.** The purpose of the Downtown Design Review District is to promote the educational, cultural, economic and general welfare of the public by providing a mechanism for the identification, recognition, preservation, maintenance, protection, and enhancement of this historic and architecturally valuable district which serves as a visible reminder of the social, cultural, economic, political and/or architectural history of the City of Sumter.

B. **Applicability.** The standards contained within this Section apply to the exterior appearance of any improvement, alteration, addition, renovation, new construction/erection, demolition, or moving of any building or structure within the Downtown Design Review District. This overlay district is identified on the Official Zoning Map.

C. **Standards.**

1. The City shall not issue a permit for any applicable item referenced in *Chapter B.11.8.B* unless and until a project application has been submitted to the Design Review Board and a Certificate of Appropriateness is issued.
2. Project applications shall be reviewed for appropriateness in accordance with *Chapter A.3.5.*
3. Permitted uses shall be determined by the primary zoning district. The uses of land and the uses of buildings are not regulated by this overlay district.

12. DIMENSIONAL REQUIREMENTS

12.1 GENERAL APPLICABILITY

A. **General Applicability.** Dimensional Standards include the subsections below. These standards are defined and comprise the requirements of each district's development standards table. Measurements may be expressed differently throughout this Ordinance or with symbol (e.g. "feet" many be expressed as "ft.").

12.2 DIMENSIONAL STANDARDS

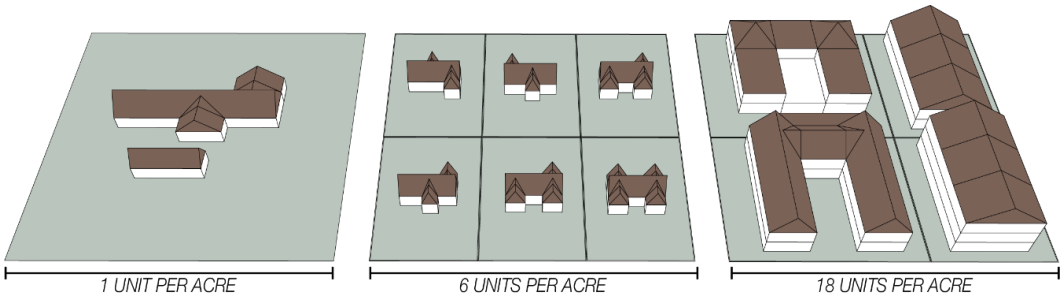
A. **Calculation of Density.** Residential density shall be measured by dwelling units per gross acre (du/ac).

(1) The City's Comprehensive Plan Housing Policy encourages moderate to high density residential development to be located in areas with existing infrastructure.

(2) Subdivision, zoning and site plan review criteria and procedures shall ensure that density is consistent with established residential development patterns and provides equitable use of the land.

(3) Residential density is calculated as gross density, where the gross acreage includes all lands within the parcel boundaries.

Figure B.12.1 Density



B. **Impervious Surface Ratio (ISR)**. Means the ratio of all nonpermeable surfaces, including ground floor area of structures and all paved surfaces, to the total area of a parcel. ISR is expressed as a decimal number to the nearest hundredth, i.e., a 10,000-square-foot parcel having 4,000 square feet of paved area and a 1,500-square-foot structure would have an ISR of 0.55 (4,000 + 1,500 ÷ 10,000 = 0.55). Parking and maneuvering areas surfaced with turf block or similar permeable materials shall not be considered impervious in the context of this definition.

C. **Building Height**. Building height shall be defined by the stories of a building and maximum height to allow greater flexibility. Height is also expressed as a measure of "habitable" space(s) primarily and also provide for certain additional, limited heights to allow for appurtenances, architectural features, and similar features *(See Figure B.12.2)*. Each story shall have a maximum height limitation expressed in feet. The measurement of a "story" shall be defined in *Chapter B.11.D*. Height will be limited to a maximum story allowance in each district's standard development except where otherwise noted.

1. Standards of general applicability shall include the subsections below. These standards shall be defined and make up the requirements of each district's development standards table.

Figure B.12.2. Building Height Illustrations

D. **Measurement of a Story.**

1. For calculating height of a story, the ground floor (i.e. first story) of a structure shall be a maximum of 20 ft. Additional stories shall be a maximum of 15 ft. for each individual story. It is understood certain limited uses including but not limited to single-family detached homes, industrial uses, warehouse distribution, certain flex uses or similar are not limited to the 20 ft. first story height standard.
2. Habitable Space.
   (1) Stories are understood to also include the habitable space of a building excluding rooflines, architectural features or similar. If there is habitable space on the rooftop of a structure (i.e. an active eating area, pool, or rooftop lounge), it is understood this shall constitute a story as defined in this UDO.

E. **Building Placement (Setbacks).** Setbacks shall be measured from the exterior wall of the building or structure, perpendicular to the lot line or street right-of-way line. Awning overhangs may encroach up to 2 ft. into the required setback, except that overhangs shall not extend outside of the property boundary unless allowed pursuant to in *Chapter B.12.2.J*. Setbacks are designated by a front setback requirement, side setback requirements, and a rear setback requirement. Provisions for setbacks for accessory structures are made in each respective district or in *Chapter B.13.* for each

respective use. It is understood, for the purpose of calculating setback requirements and yards, 3 configurations of lots exist: interior lots, corner lots, and through lots.

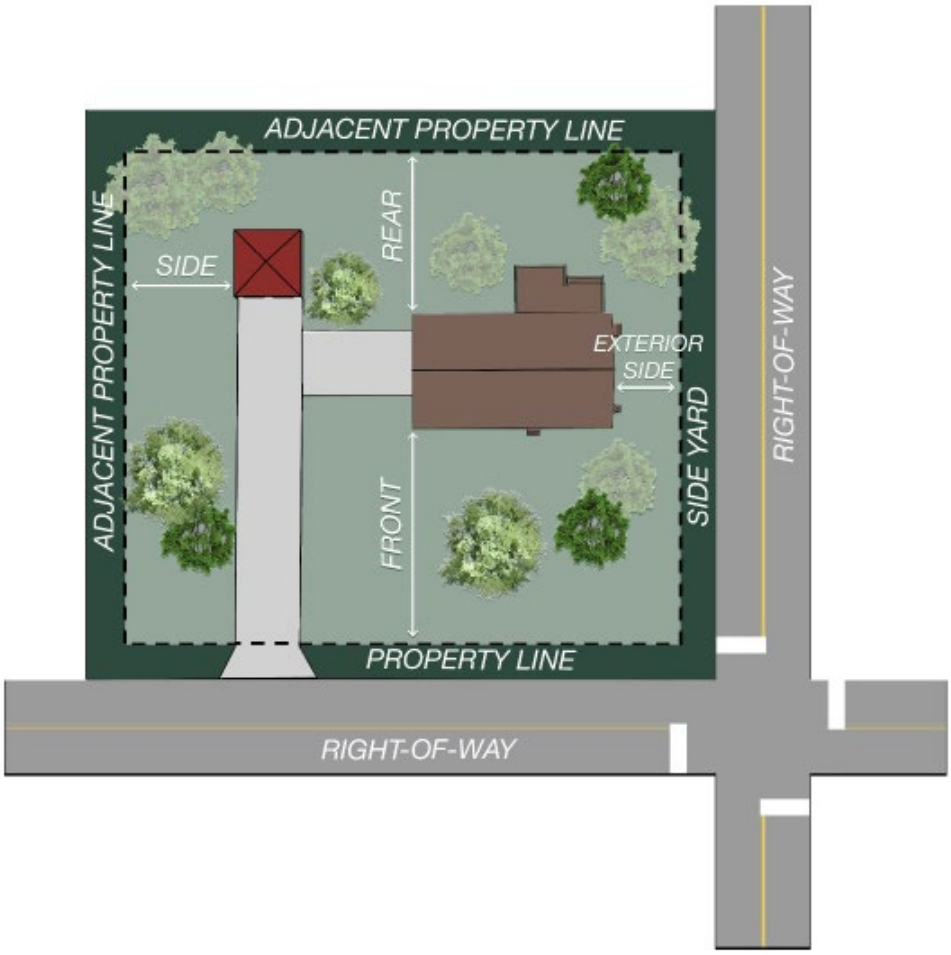
1. **Cul-de-sac.** A lot which abuts a cul-de-sac street design, featuring a radial primary street yard, shall measure its primary street setback at the point in which the side and front lot lines would have met without rounding.

2. **Interior Lot.** A lot bounded by a street on only one side. For the purpose of setbacks and yards, the street yard shall be recognized as the primary (i.e. front) yard. An interior lot shall have 1 primary front yard, 2 side yards, and 1 rear yard. Orientation of the home, driveway and entrances shall be required respective of the primary front yard.

Figure B.12.3 Setback: Interior Lot

3. **Corner Lot.** A lot located at the intersection of 2 or more streets. In such instances, a primary street frontage shall be identified. The minimum front setback shall be applied to an identified primary street frontage. The minimum setback for the secondary (exterior) side street frontage shall be at least 50% of the minimum required front setback. Alternative front setback determinations made pursuant to *Chapter B.12.2.E.5.* shall not be used to determine the required secondary street (exterior) side setback.
   (1) **Exceptions.**
      a. In all commercial districts, the minimum setback for secondary street (exterior) side setback shall be no less than 20 ft.

Figure B.12.4 Setback: Corner Lot



4. **Through Lot.** A lot that has frontage on 2 or more streets that do not intersect at the lot. In such instances, applicable front setback requirements shall be applied to all street frontages. Alternative front setback determinations made pursuant to *Chapter B.12.2.E.5* shall only apply to 1 street frontage on a through lot.

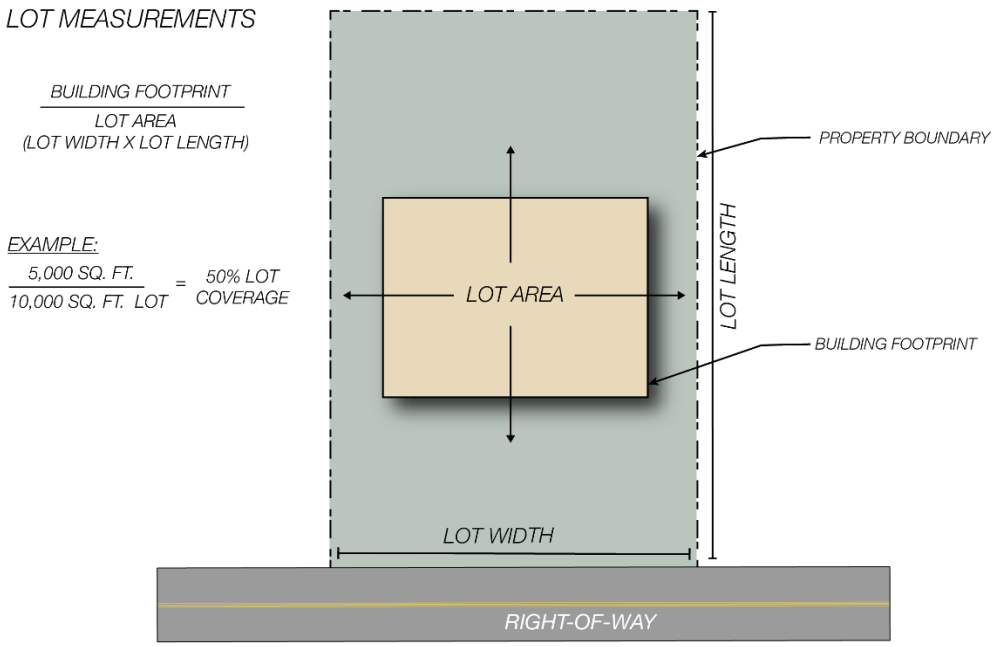
Figure B.12.5 Setback: Through Lot

5. **Alternative Front Setback Determinations.** An alternate front yard setback may be determined in situations where the average setback of existing buildings located wholly or in part within 200 ft. on each side of such lot within the same block and district and fronting on the same side of the street, is less than the minimum required setback for the district. In such cases, the setback on such lot may be less than the required setback from the district, but not less than the average of setbacks for the aforementioned existing buildings. This method shall not be used for determining front setback requirements in the following instances:
    (1) Setbacks for non-residential buildings and structures.
    (2) Alternative setback determinations for any residential building or structure in the Residential Infill Overlay District. Refer to *Chapter B.11.6.C*. for alternative setbacks in the Residential Infill Overlay District.

F. **Lot Measurements.** Lot requirements (*Figure B.12.6.*) shall include the following terms defined herein:

1. **Lot.** Lots are parcels of land, either vacant or occupied intended as a unit for the purpose of, whether immediate or for the future transfer of ownership or possession or for development.
2. **Lot Width.** Lot width is the distance between the side lot lines measured at the front setback line.
3. **Lot Depth.** Lot depth is the distance between the front and rear property lines measured along a line midway between the side property lines.

Figure B.12.6 Lot Measurement



G. **Other Lot Requirements.**

1. All lots shall be accessible by a public street, with the following exceptions:
   (1) Lots within a Planned Development on an approved private street.
   (2) Lots within an approved Cottage Court Development (*See Chapter 9.2.I*).
   (3) Multi-space or building commercial and/or industrial site with a common,

jointly maintained driveway(s) and parking areas.

2. The lot size, width, shape, grade, and orientation shall be in proper relationship to the fronting street, to the existing and proposed topographical conditions, and for the type of development and use contemplated.
3. All lots shall have no less than 60 ft. of frontage on a street unless a lesser standard is allowed elsewhere in the UDO. District minimum lot width requirements less than 60 ft. qualify as a lessor standard. These standards may vary in a cul-de-sac upon approval of the Planning Commission.
4. Side lot lines shall be approximately at right angles to the straight street lines and radial to the curved street lines.
5. Lots created as a result of an Exempt Subdivisions as defined in *Chapter* A.5 Definitions shall fully comply with *S.C. Code 1976, §6-29-1110.*

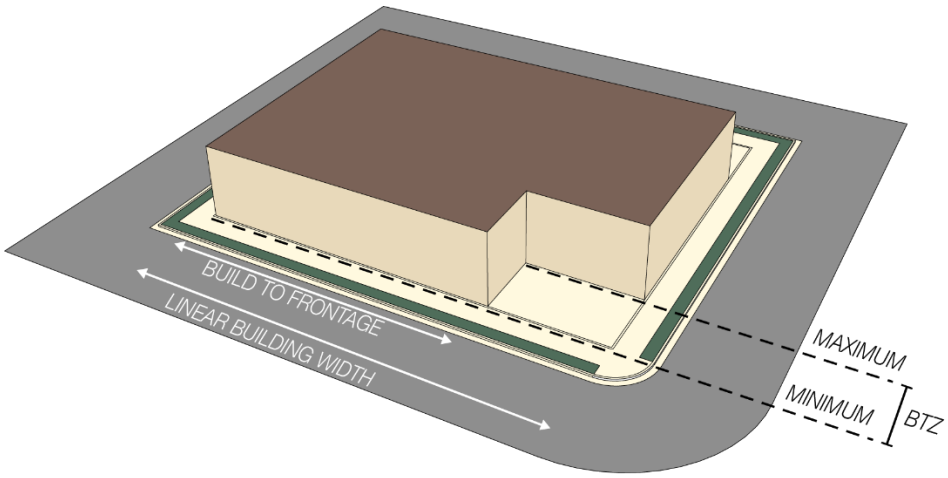
H. **Equipment Considerations.**

1. If an identified utility, drainage, or similar easement is present, all equipment may abut without encroaching into the easement.

I. **Frontage.** Also known as the Build To Percentage Requirement, frontage defines the percentage of the width of the building in relationship to the width of the lot. Frontage dictates what percentage of the linear distance of the building façade that must be located along the lot width.

1. **Active Use Areas.** Active Use Areas are defined as those areas along a frontage that provide for active uses such as a forecourt, courtyards, opportunities for outdoor dining, merchandise display, and/or shared gardens. These areas are encouraged and should adhere to the frontage requirements.

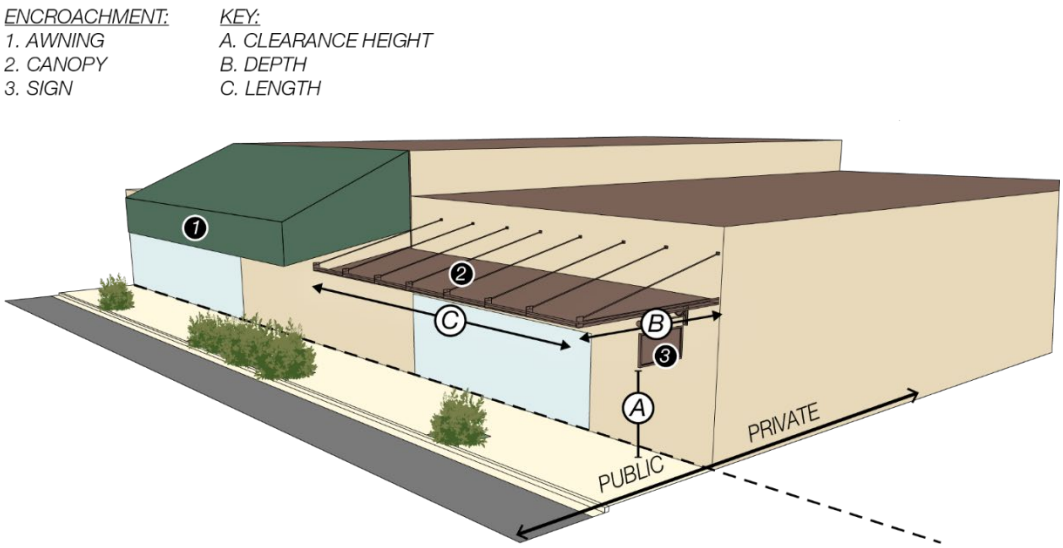
Figure B.12.7 Frontage



J. **Encroachments.** Encroachments are building elements that are attached to a building and are permitted to exist within the public realm (*Figure: B.12.8*). Encroachments described in this Section are only permitted in the DTT and DTC district. Encroachments may include architectural elements that are intended to bring the public realm closer to the building.

1. Awnings, canopies, and projecting signs are the only allowable encroachments into the public realm, provided the encroachment is over a paved or concrete walkway, does not extend into the travel lanes of any roadway, and said encroachment is approved by the agency that controls the public realm being encroached upon.
2. Encroachments are required to comply with a minimum required clearance height (A), maximum encroachment depth (B), and maximum allowed length (C) as displayed in *Figure B.12.8*.
3. For reasons of public safety and accessibility, step ramps may also be permitted as encroachments but do not need to meet the requirements of this Section.

Figure B.12.8. Encroachments



13. ACCESSORY USES & STRUCTURES

13.1 PURPOSE

The purpose of this Section is to authorize the establishment of accessory uses and structures that are incidental, customarily associated with, and subordinate to principal uses. The city's intent is to allow a broad range of accessory uses provided such uses are located on the same lot as the principal use and comply with the performance criteria set forth in this Section.

13.2 GENERAL STANDARDS

A. **District Standards Applicable**. Accessory uses shall be consistent with all standards in the district for the principal use.

B. **Uses and Structures**, with the exception of Accessory Dwelling Units (ADUs), shall:

1. Be accessory and clearly incidental and subordinate to permitted uses and structures;
2. Be located on the same lot as the permitted uses or structures and structures shall be placed to the rear or side of the principal structure;
3. Not involve operations or structures inconsistent with the character of the principal use or principal structure served; and
4. Not likely to attract visitors in larger numbers than would normally be expected.

C. **Setback**. No accessory structure shall be erected within 5 ft. of property lines.

D. **Accessory Use Only**. An accessory use or structure shall only be allowed when a principal use and structure exists.

E. **Building Coverage**. Accessory structures shall contribute to maximum building coverage requirements.

F. **Maximum Height**. Accessory structures, are limited to a maximum 25 ft. in height.

G. **Common Walls**. An accessory structure sharing one or more common walls with the principal building shall be considered part of the principal building for purposes of this ordinance and must meet all yard requirements applied to the principal building.

H. **Mailboxes**. Mailboxes and any structure less than 1 ft. above grade are exempt from accessory use standards.

13.3 SPECIFIC STANDARDS

A. **Residential Accessory Structures.** Residential accessory structures shall comply with the following conditions:

1. Conditions & Exceptions:
   (1) No accessory building or structure shall be constructed on any residential lot prior to the time of construction of the principal building to which it is accessory.
   (2) Accessory buildings attached to the principal structure by a common roofline or breezeway shall be treated as part of the principal structure and shall meet all principal setbacks for the zoning district in which it is located.
   (3) Any accessory building 120 sq. ft. in size or smaller (i.e. playhouses, well pump houses, and other similar uses) will not be counted as accessory structures, however they must comply with accessory structure 5 ft. minimum setbacks and shall be limited to 2 per parcel.

2. Development Standards without Site Plan Review:
   (1) Maximum Height – No accessory structure shall exceed height of 25 ft; the height is the vertical distance between the finished grade along the front of the structure to the highest point of the structure.
   (2) Number – No residential parcel shall have more than 2 accessory structures. The combined area of both structures shall not exceed the maximum area as determined in Table B.13.2.
   (3) Location Requirements – Detached garages shall only be located in the side or rear yard of a parcel and shall be located no further forward on the lot than the principal structure; storage shall be located in the rear yard only.
   (4) Setbacks – setbacks are outlined in *Table B.13.1*.
   (5) Maximum Size – the maximum size of residential accessory structures shall be governed by *Table B.13.2* and shall be based on the gross acreage of the parcel of land on which it is located.

3. Development Standards with Site Plan Review:
   (1) Maximum Height – No accessory structure shall exceed height of 25 ft; the

height is the vertical distance between the finished grade along the front of the structure to the highest point of the structure.

(2) Setbacks – setbacks shall be as indicated in *Table B.13.1*.

(3) Number – The number of structures shall not be limited, however; all structures shall be shown on the scaled site plan prepared by a design professional.

(4) Location Requirements – Detached garages shall be placed only in the side or rear yard of a parcel and shall be located no further forward on the lot than the principal structure; storage shall be located in the rear yard only.

(5) Maximum Size – There shall be no maximum size restriction for the residential accessory structure however all structures shall observe the required setback based on the building size.

(6) Impervious Surface – Under no circumstances shall a parcel be permitted to exceed the established impervious surface ratio based upon the zoning district impervious surface ratio standards established in *Chapter B.2*.

(7) Accessory Dwelling Units. See *Chapter B.13.4*.

Table B.13.1 Residential Accessory Structure Setbacks		
All accessory structures <= 1,200 sq ft in total area		
	Interior Lot	**Corner Lot**
Front	N/A	N/A
Side	5 ft	5 ft
Exterior Side ***(not applicable to interior lots)***	N/A	15 ft
Rear	5 ft	5 ft
All accessory structures > 1,200 sq ft in total area		
	Interior Lot	**Corner Lot**
Front	N/A	N/A
Side	10 ft	10 ft
Exterior Side ***(not applicable to interior lots)***	N/A	15 ft
Rear	10 ft	10 ft

Table B.13.2 Maximum Square Footage of Residential Accessory Structures Based on Gross Acreage										
Acreage	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
**** < 0.5[1]**										
0.5	1100	1120	1140	1160	1180	-	-	-	-	-
1.0	1200	1225	1250	1275	1300	1325	1350	1375	1400	1425
2.0	1450	1475	1500	1525	1550	1575	1600	1625	1650	1675
3.0	1700	1725	1750	1775	1800	1825	1850	1875	1900	1925
4.0	1950	1975	2000	2025	2050	2075	2100	2125	2150	2175
>5.0[2]	Exempt									

[1] Maximum size for accessory structures on all parcels less than 0.5 acres in size is 1,000 sq. ft.
[2] All parcels 5 acres in size or greater in size are exempt from maximum square footage requirements, however, each zoned parcel shall not exceed the maximum impervious surface ratio for the zoning district in which the parcel is located, and there shall not be more than 2 detached residential accessory structures over 120 sq. ft. in area

B. **Off-street parking.** May be located in required yards in all zoning districts. Off-street parking shall not be allowed in any required buffer yard.

C. **Signs.** Must comply with the development standards established in *Chapter C.3.*

D. **Portable on Demand Storage (PODS) units or other similar portable on demand storage containers such as sea vans.** Permitted as a temporary use only See *Chapter B.14.* for guidelines.

E. **Swimming pools, tennis courts and recreational uses.** May be located in all side and rear yards, provided said uses shall be no closer than 10 ft. to the nearest property line, and shall not be located in any required buffer yard, and shall have all lighting shielded or directed away from adjoining residences.

F. **Satellite dishes, ham radio towers, and ground supported TV antennas.** May be located in required rear yards setbacks in all districts; provided such uses shall be located no closer than 10 ft. from all property lines, the foundation shall be approved by the Building Official, and said uses shall not be located in any required buffer yard. Furthermore, digital TV dishes shall be allowed on roofs and exterior walls of buildings within all districts.

G. **Agricultural accessory buildings.** All Agricultural Accessory buildings constructed for the exclusive use of sheltering agricultural machinery or storage of agricultural products shall be exempt from the accessory building standards;

1. All agricultural structures shall be treated as principal structures for the purpose of this Ordinance; agricultural structures shall meet non-residential setbacks and shall meet all other non-residential development criteria for a given zoning district to include maximum height, distance between buildings, and impervious surface ratio requirements.

H. **Commercial accessory buildings.** Commercial accessory buildings shall meet the principal setbacks, shall not exceed the maximum height for the zoning district and shall be treated as principal structures for zoning purposes;

1. Site Plan Requirement
   (1) Any accessory building exceeding 200 square feet in gross floor area must be clearly shown on a site plan and is subject to formal review and approval through the Site Plan Review Process administered by the local planning authority.
2. Exemption for Small Structures
   (1) Accessory structures that are 200 square feet or less in gross floor area do not require site plan approval, provided they meet all applicable zoning and setback requirements and adhere to the following:
      a. Are limited to a maximum of 2 such structures per parcel.
      b. Must be located in the rear or side yard and not within any easement or required buffer zone.

I. **Drive-through Facilities.**

1. Drive-through facilities shall be designed to avoid obstructions to pedestrian circulation along sidewalks or between parking spaces.
2. Canopies, awnings, or roofs over drive-through lanes shall be similar in appearance and consist of the same building materials as the principal building.
3. Drive-through facilities shall comply with all stacking requirements of *Table C.2.5.*

J. **Bicycle Parking.** Bicycle parking racks may be in any district. No advertising signs shall be permitted on such structures. Bicycle parking racks are not required to meet setbacks.

K. **Donation Boxes.** Donation boxes may be in any district and are limited to 1 donation box per lot. Donation boxes shall not be located within 500 ft. of each other. Donation boxes shall not be located on vacant lots.

L. **Outdoor Entertainment.** Outdoor entertainment may be permitted as an accessory use for restaurants and also establishments where the principal use is the manufacturing of malt liquor or alcoholic liquors intended for sale and consumption on the premises. Outdoor entertainment may also be permitted as an accessory use of outdoor principal uses including Farmers' Markets and Parks. The use of parking areas, driveways, loading/unloading facilities, public sidewalks, or similar shall not be permitted.

M. **Outdoor Display.** Outdoor display, defined as the outdoor display of products available for sale, including soft drink dispensing machines, propane gas storage racks, outdoor merchandise is permitted as an accessory use for commercial uses. Outdoor display shall comply with the standards below:
   1. Outdoor display shall only be displayed in front or on the side of the primary façade and may not extend more than 20 ft. from the building unless otherwise approved through a Site Plan approval process. Outdoor display areas shall not be placed in any drive aisles, required parking spaces, loading zones, or fire lanes.
   2. No more than 25% of the horizontal length of the façade, shall feature outdoor display items. Outdoor display areas shall not inhibit pedestrian travel paths (i.e. sidewalks). ADA accessibility shall be maintained.

N. **Outdoor Dining on Private Property.** Outdoor seating may be permitted as an accessory use for any eating establishment, subject to the following standards:
   1. Hours of operation for the outdoor seating area shall be the same as the restaurant.
   2. Food preparation shall take place within the enclosed building and not in the

open air.

3. No objects may be placed along publicly traversed sidewalks which form a barrier to pedestrian movement.
4. The visual design of tables, chairs, umbrellas, canopies, or similar furnishings for outdoor seating areas shall be of high-quality design, craftsmanship, be retained in good condition, and shall be compatible with adjacent uses.

O. **Outdoor Dining Facilities on Public Property.** The City of Sumter seeks to encourage outdoor dining in the DTC zoning district. Sidewalk cafes and sidewalk dining areas are indicators of a vibrant downtown. Because the sidewalks and other desirable open spaces are owned by the City, care is necessary to ensure that pedestrian access is preserved and that the welfare of all citizens is protected. The following policy is established to achieve this purpose.

1. Process Overview. Sidewalk dining approval happens in three stages:
   (1) Application, review and approval by the City Planning Department.
   (2) Signed Outdoor Dining License Agreement with the City of Sumter.
   (3) Application for and issuance of a Building Permit (for construction of semi-permanent facilities).
2. Eligible Applicants. Property owners or proprietors of eating and drinking establishments are eligible to submit an application for the installation of outdoor dining facilities on the public sidewalk, on property owned by the City of Sumter, and/or within the public right-of-way.
3. Application Process. The following shall be included in the Application.
4. Application and prescribed fee
5. Scaled site plan showing:
   (1) Adjacent building outline
   (2) Property boundaries
   (3) Sidewalk width
   (4) Existing parking stalls, trees, hydrants, light poles, and other street furnishings
   (5) Outdoor seating boundary, seating area placement, and seating plan
   (6) Elevation, perspective drawings and/or pictures
   (7) Proof of Insurance, Indemnity, and Hold Harmless Statement

(8) Construction details, including:

a. platform materials and design

b. decorative fencing, barriers, light posts, planter boxes

c. Tables and chairs

d. Other design elements

6. Design Standards for Outdoor Dining Facilities.

(1) The proposed outdoor dining area may occupy and / or displace a maximum of 2 parking spaces for outdoor dining. The spaces must be a minimum 20 ft. from a corner and protected by planters, bollards, barriers, soft hit posts, sidewalk bulb-out, or other similar features acceptable to the City.

(2) The outdoor dining area must provide a minimum clearance of 1 ft. from the edge of any existing parking apron, where there is parallel, diagonal, or perpendicular parking;

(3) Raised Flooring or Decking is required when using a parking space for dining, shall be flush with the curb, and not extend more than 6 ft. into the parking space. The area shall be constructed and/or installed to conform to the applicable provisions, rules, regulations and guidelines of the adopted building code and the Americans with Disabilities Act (ADA). The cross slope on the dining area surface may not exceed 2.0% in any direction;

(4) A building permit is required for construction;

(5) The applicant shall maintain all tables, chairs, sidewalk, parking space (including areas under the decking), and all other design elements in a safe, clean, and attractive manner at all times. All outdoor dining furnishings located on a sidewalk or in a parking space such as tables, chairs and parking space barriers shall be removed during closed business hours and may not be stored outside, unless otherwise approved by the City. Decking with barriers may remain but must be removed when directed by the City;

(6) For dining areas parallel to the street (on sidewalk or in parking space) alcohol shall be served only to patrons seated in the designated outdoor dining area; for other outdoor dining areas alcohol shall be served to patrons in a defined and enclosed outdoor dining area;

(7) Smoking is prohibited within the outdoor dining area;

(8) Rectangular planters (when used) shall be 2 ft. wide x 3 ft. long; round planters shall be 2 ft. in diameter;

(9) A minimum 5 ft. wide sidewalk corridor must be maintained at all times for public pedestrian circulation;

(10) Warm white table lighting and under umbrella lighting is permitted. Glare falling outside of the outdoor dining area is prohibited. No other outdoor lighting is permitted. Flood lights are NOT permitted;

(11) Furnishings

a. Tables and Chairs: Wrought iron, cast aluminum, cane, teak, or other styles pre-approved by the City.

b. Umbrellas shall be canvas only.

7. Other Requirements and Provisions.

(1) Insurance.

a. The Owner shall maintain in effect throughout the term of the License Agreement public liability insurance providing for a minimum of $1,000,000 combined single limit, which insurance shall cover any accident, injuries, or damage suffered on, about, or within the Licensed Area or as a result of rights granted pursuant to this License Agreement. The City shall be named as an additional insured on such insurance policy.

b. The Owner shall deliver proof of such insurance to the City at the time of application submission. Such proof will be attached to the License Agreement. Proof shall be in the form of a certificate from an insurance company authorized to do business in the State of South Carolina, which certificate shall contain the provision that such insurance shall be non-cancelable except after 15 days written notice to the City, and which names the City as co- insured.

(2) Indemnification.

a. The Owner shall at all times indemnify, defend, and hold the City and its elected officials, employees, and agents harmless against any and all liability, loss, cost, damage, or expense sustained by the City, including attorney's fees and other expenses of litigation arising therefrom, (i) on account of or through the use of public property affected by this License

Agreement, improvements constructed thereon, and/or the exercise of any rights granted pursuant to this License Agreement by Owner or by any other person; or (ii) out of, or directly or indirectly due to, any failure of the Owner in any respect promptly and faithfully to satisfy its obligations under this License Agreement or under any applicable law, regulation, rule, or bylaw of any governmental authority.

b. The Owner also shall at all times indemnify, defend, and hold the City harmless against all liens and charges of any and every nature that may at any time be established against the Licensed Area or any improvements thereon or therein or any part thereof as a consequence, direct or indirect, of any act or omission of Owner as a consequence, direct or indirect, of the Owner's interest under this License Agreement.

(3) Termination

a. The City has the right to suspend or prohibit the operation of outdoor dining allowed under the permit at any time because of anticipated or actual problems or conflicts in the use of the sidewalk and/or parking space area.

b. The City has the right to revoke the License Agreement at any time for any reason.

13.4 ACCESSORY DWELLING UNITS (ADU)

A. **Purpose and Intent.** The ADU housing pattern provides for the development of accessory dwelling units on a lot as an accessory use to a principal use.

B. **Definition.** An ADU is a self-contained dwelling unit that includes a sleeping area, kitchen, and full bathroom, as well as its own external entrance - that is constructed on a lot in addition to an existing single-family residence. The ADU use is subordinate to the principal dwelling and can function autonomously if necessary. ADUs may also be referred to as granny flats or mother-in-law suites, but are not limited to these names.

C. **ADU Standards.** In accordance with this Section, an ADU shall conform with the following development standards:
   1. An ADU shall be located on the same lot as a principal dwelling and shall be affixed to or constructed on a permanent foundation
   2. A manufactured home or moveable structure may not be used as an ADU;
   3. There shall be no more than 1 ADU on the same lot as a principal dwelling;
   4. Minimum of 1 parking space required in addition to required parking for principal dwelling unit;
   5. The ADU must be accessed by a separate external entrance from the principal dwelling;
   6. Ownership of an ADU shall not be transferred separate from its principal dwelling unit;
   7. An ADU may not be placed on the same lot as a manufactured home or mobile home.

D. **Development Standards.** All ADUs shall conform to the development standards in *Table B.13.3.*

Table B.13.3. Accessory Dwelling Unit (ADU) Development Standards				
Lot Area		**Greater than 15,000 sf**	**9,000 sf to 15,000 sf**	**Less than 9,000 sf**
Building Specifications				
Gross Floor Area (Max) [1]		1,000 sf or 45% of principal structure, whichever is greater	800 sf	600 sf
Detached ADU Setbacks				
Setbacks (Min)	From primary street	Must be located at or behind the front wall of the house		
	From exterior lot line	15 ft	15 ft	15 ft
	From interior side lot line	5 ft	5 ft	5 ft
	From rear lot line	5 ft	5 ft	5 ft
From Alley (Min)		4 ft without parking / 20' with parking	4 ft without parking / 20' with parking	4 ft without parking / 20' with parking
Height (Max)		35 ft (or height of principal dwelling unit, whichever is less)		

[1] ADU gross floor area shall include all conditioned space.

14. TEMPORARY USES

14.1 PURPOSE

A. **Purpose.** The intent of this Section is to permit the temporary uses customarily accompanying the erection of permitted structures, or the establishment of permitted uses, or the accomplishment of permitted operations, as necessary to such work not substantially injurious to the public health, safety, or welfare. It is also the intent to permit customary uses of open land and of existing buildings and surrounding land which are temporary in nature, while protecting the health, safety, and welfare of the City of Sumter.

B. **General Provisions.**

1. Any temporary use that in the judgement of the Zoning Administrator is creating a nuisance or is disruptive to the surrounding properties will have its temporary use permit revoked and shall receive 10 days' notice of such action.
2. Structures associated with a temporary use shall be removed from the site after the temporary use permit has expired.
3. Temporary uses are subject to the specific standards of *Chapter B.14.2, Table B.14.1.*, and *Table B.14.2*.

14.2 STANDARDS

A. **Religious Meeting**

1. Use Standards:

(1) Submission of use details to include (as applicable)– site layout plans, parking plans, dates/times of operation, property owner permission letters, documentation of police and fire department notification, and any other items deemed necessary at the discretion of the Zoning Administrator to uphold the purpose of protecting the health, safety, and general welfare of the City of Sumter.

B. **Firework Stands**

1. Use Standards:

(1) A minimum of 5 off-street parking spaces shall be required. Additional parking may be required by the Zoning Administrator as deemed necessary to uphold the purpose of this Section.

(2) Operations must occur from a structure that is secured and affixed to the ground.

(3) No display of goods outside the structure.

C. **Contractor's Office/ Equipment Shed/Construction Site Trailers.**

1. Use Standards:

(1) Contractors' Office and Trailers are allowed when accessory to a construction project or a new development.

(2) Such use shall be limited to a period not to exceed the duration of the active building permit or development permit, which defines the active construction phase of such project, or the active selling and leasing of space in such development.

(3) No such use shall contain any sleeping or cooking accommodations.

(4) No such trailer, unit, or office shall be used as the general office or headquarters of any firm.

D. **Caretaker Manufactured Home.** In order to provide continuous security for commercial and industrial uses as long as occupancy is limited to security personnel associated with the principal use. Occupancy may not occur until a temporary use permit is issued.

1. Use Standards:
   (1) Security personnel occupying said caretaker manufactured home may include the caretaker and his immediate family.
   (2) Only 1 manufactured home shall be allowed for each commercial or industrial property.
   (3) The manufactured home shall be located in such a fashion as to be generally screened from public view. The Zoning Administrator shall determine the acceptability of the screening.
   (4) The caretaker manufactured home shall be located on the premises only as long as the associated commercial or industrial use occupies the site.
   (5) The caretaker manufactured home shall meet the manufactured home standards in *Chapter B.9.2.J*.

E. **Temporary On-Site Storage Units/ Portable on Demand Storage (POD).** Any container designed for the storage of personal property and for transport by commercial vehicle that is typically rented to owners or occupants of property for their temporary use. A temporary on-site storage unit is not a building or structure and shall not be used as an accessory structure on a permanent basis in a residential district.

1. Use Standards:
   (1) No more than 2 temporary on-site storage unit may be located on a lot at a time.
   (2) No portion of any container temporary on-site storage unit may extend onto the public right-of-way, including but not limited to sidewalks, parkways, streets, or alleys.
   (3) Temporary on-site storage units may be located in a driveway, a designated parking area or behind a dwelling. Units placed on residential lots shall be

setback at least 5 ft. from property lines unless located in a driveway, a designated parking area.

(4) The temporary on-site storage unit shall not exceed 8 ft. in width, 16 ft. in length and 8 ft. in height, or 1,024 cubic feet.

(5) Every temporary on-site storage unit must be locked and secured when not being loaded or unloaded.

(6) **Associated with a Building Permit**. A temporary on-site portable storage unit may be located on a residential property without a temporary use permit while the property is the job address listed on an active building permit.

(7) **Not Associated with a Building Permit.** A temporary portable on-site storage unit shall require a temporary use permit and may be placed on residential property for no more than 120 days. Temporary Use Permit may be renewed once with approval from the Zoning Administrator.

F. **Portable On-Site Site Temporary Dumpster.**

1. **Temporary Dumpster.** A temporary dumpster is for the sole purpose of collecting and removing refuse generated from the same property as the dumpster's location.

(1) Associated With a Building Permit. A temporary dumpster may be located anywhere on a residential property without a temporary use permit while the property is the job address listed on an active building permit.

(2) Not Associated with a Building Permit. A temporary dumpster shall require a temporary use permit and may be placed on a residential property for no more than 120 days. Only 1 dumpster shall be allowed per residence.

G. **Sidewalk Sales (Retail).** Temporary outdoor display and sale of merchandise (i.e., sidewalk sales) by businesses not otherwise approved to do so, are permitted, subject to the following standards:

1. Allowed on the property of existing legal businesses only.
2. Display and sale of merchandise shall not be left outside during non-operating hours.
3. Display and sale of merchandise shall not be conducted in established parking

and drive areas.

4. Display and sale of merchandise shall not block required emergency access lanes.
5. Display and sale of merchandise shall occur within 10 ft. of the building the business is located in.
6. Sufficient space for pedestrian accessibility on sidewalks, walkways, and paths shall be maintained.
7. Submission of details to include (as applicable) - site layout plans, parking plans, dates/times of outdoor display.

H. **Outdoor Sales, Seasonal Sales.** Temporary outdoor seasonal sales are permitted, subject to the following standards:

1. Seasonal sales shall be limited to seasonal agricultural products such as Christmas trees, pumpkins, and living plants.
2. Outdoor seasonal sales shall be limited in duration to a maximum of 60 continuous days from the date the temporary use permit is issued, with no more than 2 separate temporary use permits totaling 120 total days permitted for an individual business/operator on the same property.
3. All products, equipment and related materials shall be removed from the site within 5 days following the end of the sale period.
4. Seasonal Sales areas shall not block vehicular circulation and movement of emergency vehicles.
5. Seasonal Sales areas shall not block pedestrian walkways in a manner which reduces the width of that walkway to less than 5 ft.
6. Seasonal Sales hours of operations shall be limited to between 8:00 am and 9:00 pm.
7. Seasonal Sales shall not be located in a fire lane.
8. Submission of details to include (as applicable) - site layout plans, parking plans, dates/times of event operations, property owner permission letters, vendors lists, police and fire department event notification documentation and any other items deemed necessary at the discretion of the Zoning Administrator to uphold

the purpose of protecting the health, safety, and general welfare of the City of Sumter.

I. **Special Events.** Special events include, but are not limited to, temporary outdoor events such as temporary farmer's markets, arts and craft shows, cultural events, musical events, concerts and stage shows, celebrations, festivals, fairs, carnivals, and circuses, or other non-governmental or events on private property. Religious organizations holding events on property owned by said religious organization are exempt from these requirements.

1. Use Standards.
   (1) A special event shall receive special event permit approval via the City Administration Department.
   (2) Events details shall be submitted. Event details shall include– site layout plans, parking plans, dates/times of event operations, property owner permission letters, vendors lists, police and fire department event notification documentation and any other items deemed necessary at the discretion of the Zoning Administrator to uphold the purpose of protecting the health, safety, and general welfare of the City of Sumter.
   (3) Circuses and carnivals, on a temporary basis, not to exceed 7 days, subject to special events ordinance application. Special events must obtain final approval from the City Manager.

Table B.14.1. Temporary Use Duration Limits			
Temporary Use	**Maximum Duration per Period**	**Maximum Separation of Periods**	**Maximum Duration per Year**
Religious Meetings	60 days	n/a	60 days
Fireworks Stands	30 days	n/a	60 days
Contractor's Office/ Equipment Shed	1 year Must be removed prior to issuance of C.O. or project completion		
Caretaker Mobile Home	Must be removed after associated commercial or industrial use no longer occupies the site		
Construction Site Trailers/ Temporary Office Trailers	Must be removed prior to C.O. or project completion		
Temporary On-Site Storage Units/ Portable on Demand Storage (POD)	120 days	n/a	Renewable once for a total of 240 days
Sidewalk Sales (Retail)	120 days	n/a	Up to 4 periods per year totaling 120 days
On-site storage/ Temporary Dumpster	120 days	n/a	120 days
Outdoor Sales, Seasonal Sales, Produce Stands	60 days	n/a	Up to 2 periods per year totaling 120 days
Special Events	As determined by Special Event Permit	As determined by Special Event Permit	As determined by Special Event Permit

14.3 TEMPORARY USES TABLE

A. *Table B.14.2.* details the permitted Temporary Uses in each district. Each use is given one of the following designations.

1. **Permitted ("P").** These Temporary Uses are permitted by right in the districts in which they are listed in accordance with approved temporary use permit.
2. **Special Event Permit Use Exception ("SP").** These Temporary Uses may be established in the districts in which they are listed in accordance with an approved special event permit, with final approval from the City Manager.

B. **Not Permitted.** Boxes that do not contain a letter designation are not permitted in the corresponding zoning district.

TABLE B.14.2 TEMPORARY USES																	
Key: P = Permitted with Temporary Use Permit; SP = Special Event Permit	**R-15**	**R-9**	**R-6**	**GR**	**RMF**	**PO**	**NC**	**LC**	**GC**	**DTC**	**DTT**	**IG**	**LI-W**	**HI**	**AC**	**CP**	**Notes**
Religious Meetings in a Tent							P	P	P				P	P			Not to exceed 60 days
Firecracker/Firework Stands							P	P	P				P	P			Not to exceed 30 days
Contractor's Office/Equipment Shed	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		For period covering a construction phase of a project not to exceed 1 year
Caretaker Manufactured Home							P	P	P				P	P			To provide continuous security for commercial and industrial uses; requires annual renewal of temporary use permit
Construction Site Trailers/Temporary Office Trailers	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		Must be removed prior to C.O. or project completion.
Temporary On-Site Storage Units/ Portable on Demand Storage (POD).	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
Food Trucks/Mobile Vendors/Concession Operators								P	P		P	P	P	P			Subject to provisions of *Chapter B.15.1: Food Trucks*
Farmer's Market – Outdoor Seasonal Sales					SP		SP	SP	SP	SP	SP	SP					
Produce Stand – Outdoor Seasonal Sales							P	P	P				P	P	P		
On-Site Storage/ Temporary Dumpster	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
Sidewalk Sales (retail)							P	P	P	P	P	P					
Outdoor Sales (seasonal sales)							P	P	P	P	P	P	P	P	P		
Other Special Events	SP	SP	SP	SP	SP	SP	SP	SP	SP	SP	SP	SP	SP	SP	SP		

Key: *P = Permitted with Temporary Use Permit, SP = Permitted with Special Event Permit*

15. FOOD TRUCKS & MOBILE FOOD VENDING

15.1 FOOD TRUCKS

A. **Purpose**. The purpose of this Section is to regulate mobile food trucks and food vending in the City of Sumter to ensure the health, safety, and general welfare of residents and visitors.

B. **Definitions**

1. **Food truck.** A licensed, motorized vehicle or mobile food unit licensed by the state that is designed and equipped to serve food and beverages.
2. **Mobile Food Vendor.** Any person or persons who operate or sell prepared food and/or beverages from a stationary cart, food truck, or trailer. Mobile food vendors shall not mean selling from a stand or booth.
3. **Signage.** For purposes of this Ordinance, signage means a manufactured banner or rigid sign which is attached to a food truck and may not exceed 32 square feet.

C. **License and Permit Required**

1. **License.** It shall be unlawful for a person, firm, or corporation to engage in the business of a mobile food vendor within the City of Sumter, without the appropriate licensing as required by SC Department of Agriculture (SCDA) and the Sumter City-County Business License Department including a background check and any other requirements for mobile vendor operations for the City of Sumter and State of South Carolina.
2. **Zoning Approval.** As part of the zoning review process required prior to business license issuance, the following must be submitted:

(1) Valid SCDA Permit. The applicant must provide a current permit issued by the SCDA.

(2) Photographic Documentation. Clear photographs of the food truck or cart, showing all sides and any branding or signage.

(3) Compliance Agreement. The applicant must agree in writing to comply with all requirements outlined in this Section of the ordinance.

3. **Display Sticker.** A display sticker required for operation within city jurisdiction in accordance with this Section of the ordinance will be issued upon zoning approval.

D. **Duration of Zoning Approval**

1. Each Mobile Food Vendor approval shall be issued for 1 calendar year, and renewed on an annual basis, coterminous with the vendor's City of Sumter business license. A change of business address must be reported to the Sumter City-County Business License Department prior to operating from the new business address. Failure to obtain the approval of change of address shall invalidate an active zoning approval held by a mobile food vendor.

E. **Permitted Locations and Hours of Operation**

1. **Location.** Food trucks shall be eligible for Temporary Use under the following conditions:

(1) To operate on private property or designated public property in accordance with *Table B.14.2*.

(2) To operate only on a property on which there is located at least one active, permitted Primary Use. Under no circumstances shall a mobile food vendor be issued a permit to operate on property that is uninhabited, vacant, or the primary permitted use is residential.

2. **Hours of Operation.** The operation of food trucks is limited to the hours between 7:00 am and 11:00 pm, unless a special events permit has been issued.

F. **Prohibited Locations.** Mobile Food Vendors are prohibited from operation on or within public rights-of-way, including streets, sidewalks, and alleyways.

G. **Permitted Food and Beverages**

1. Permitted food and beverages shall be limited to edibles and hot and/or cold beverages containing no alcohol content, unless a special license has been obtained from the South Carolina Department of Revenue. Edibles with alcohol which are not regulated by the South Carolina Department of Revenue alcoholic beverage licensing, including alcohol suspended in frozen form, gelatin, fruit, or other food product are prohibited to be sold from food trucks.
2. Items specifically banned from being sold by mobile vendors include vaping products to include apparatuses and cartridges, cigarettes, cigars, and any product containing tobacco.

H. **Requirements**

1. **Accessory Elements.** Accessory elements include (but are not limited to) chairs, tables, tents, and shade structures. Accessory structures must be:
   (1) Temporary in nature and removed daily at the close of business.
   (2) Located within 10 ft of the food truck and must not obstruct pedestrian pathways or ADA access.
   (3) Kept clean and free of debris, grease, and trash throughout operating hours.
   (4) Placement and Safety
      a. May not be placed within 15 ft. of any fire hydrant.
      b. Block sight triangles, required parking spaces, or emergency access routes.
      c. May not be located in easements, required buffers, or setback areas as defined by zoning.
2. **Parking.** Required parking for the Primary Use shall be minimally impacted by mobile vending operations. In addition:
   (1) Mobile vending units and any associated equipment or accessory items shall not block drive aisles, fire lanes, loading zones, or access to designated parking spaces.

(2) All operations must maintain clear and unobstructed vehicular circulation throughout the site.

(3) Placement of the vending unit must comply with site-specific traffic flow and safety requirements.

3. **Prohibition of Operations on Municipal Property.**

(1) Mobile vending operations are prohibited on municipally owned property unless one of the following conditions is met:

a. The operation occurs as part of an approved event officially sanctioned by the City of Sumter.

b. The vendor has received explicit written approval to operate on a designated municipal site.

(2) Any vending activity conducted outside of these conditions shall be considered unauthorized and subject to enforcement actions, including revocation of permits and fines.

4. **Solid Waste Disposal.** The Mobile Food Vendor shall keep all areas within 10 ft. of the food truck and any associated customer or dining areas clean of grease, trash, paper, cups, cans or other debris associated with the vending operation.

(1) Each operator is responsible for properly disposing of solid waste associated with food truck operation and any outdoor dining areas prior to leaving a location. City maintained trash receptacles shall not be used for this purpose.

(2) Garbage and/or recycling receptacles must be made available for patron use and removed from the site daily by the mobile food vendor.

5. **Signage.** Signage shall be permitted on the vehicle only to identify the name of the product or vendor, and the posting of prices and is not to exceed 32 square feet.

(1) Unattached banners or rigid signs are not permitted.

(2) Words and decorations painted onto a food truck are not considered signage for the purpose of this ordinance.

6. **Department of Agriculture requirements.** Food trucks must meet all applicable Department of Agriculture regulations for mobile food units and possess a valid Department of Agriculture permit where applicable.

7. **Routine Inspections.** Any food truck that has been issued a notice of health violation by any department of the State of South Carolina, which remains uncorrected upon a subsequent inspection, shall have its license revoked.
8. **Prohibited Conduct.** No mobile food vendor of a food truck shall:
   (1) Leave any vehicle unattended or overnight;
   (2) Leave from a location without disposing of all remaining trash or refuse remaining from sales and/or any items related to operation;
   (3) Sell anything other than that for which a license to vend has been issued;
   (4) Discharge fat, oil, grease, or wastewater into the sanitary sewer system. All waste shall be properly disposed of at a designated disposal location; or
   (5) Operate any loudspeaker, public address system, radio, sound amplifier, or similar device to attract the attention of the public.

16. NONCONFORMITIES

16.1 PURPOSE

A. **Purpose.** The purpose of this Section is to regulate and limit the continued existence of nonconforming uses of land, vacant lots, structures and improvements that were lawfully established before the effective date of this Ordinance, or a subsequent amendment thereto, but that do not conform to the standards and requirements of this Ordinance or subsequent amendment. Such uses of land, vacant lots, structures and improvements are collectively referred to as "nonconformities." It is the general policy of the City to allow nonconformities to continue to exist. The purpose and intent of this Section is to recognize the interests of property owners in continuing to use the land, but to preclude the expansion of a nonconformity and establish reasonable parameters for the reconstruction or reestablishment of a substantially destroyed or discontinued nonconformity.

B. **Applicability.** This Section applies to nonconformities created by initial adoption of, or amendments to, this Ordinance unless otherwise expressly provided by provisions in this Ordinance. Any use of land or a building is considered nonconforming if:
   1. The use is not permitted in the zoning district in which it is located; and,
   2. Existed as of Effective Date. Legally existed as of the effective date of this Ordinance and the effective date of subsequent amendments thereto.

C. **Determination of a Nonconformity**. The burden of establishing that a nonconformity lawfully exists shall be the responsibility of the person who owns or rents the property upon which the nonconformity exists. Evidence that may be used to prove the legal status as a lawful nonconformity may include proof of business license, utility statements, business transaction receipts, tax returns, or other documentation. The Zoning Administrator shall determine whether a nonconformity is lawful.

D. **Ownership Changes.** No change of title or possession of property shall be construed to prevent the continuance of the nonconformity.

E. **Increases in a Nonconformity.** A nonconformity shall not be expanded, intensified, or enlarged except as provided by this Section and or applicable State Law.

16.2 NONCONFORMING USES

A. **Definition.**

1. **Nonconforming Use.** A nonconforming use is a use of land, buildings, and/or structures that was lawfully established before the effective date of this Ordinances, or a subsequent amendment thereto, but does not comply with the use standards applied by this Ordinance or the subsequent amendment.

B. **Required Alterations or Remodeling.** In the interest of the public safety and health, structural alterations or remodeling required by any public law, and so ordered by a public officer in authority, shall be permitted. This shall not be construed to permit any structural alterations that will increase the floor area of the structure.

C. **Discontinuance of Nonconforming Uses.**

1. **Applicability.** Any nonconforming use which has been discontinued shall not thereafter be reestablished. Any structure or land formerly devoted to a nonconforming use, which has been discontinued, shall not again be devoted to any use other than those uses permitted in the applicable district.
2. **Definition.** The term "Discontinuance", as it pertains to nonconforming uses, shall mean the termination or cessation of a use for a continuous period of not less than 6 months.

D. **Accidental Destruction.** If a Nonconforming use is discontinued due to fire or other natural causes, the Nonconforming Use may be reestablished within 12 months after the fire or other natural cause.

E. **Change of Nonconforming Use.** If no structural alterations are made, a nonconforming use of a building may be changed to another nonconforming use of the same classification. Wherever a nonconforming use of land or buildings has changed to a more restricted use or to a conforming use, such use shall not thereafter be changed back to a less restricted or nonconforming use.

16.3 NONCONFORMING SITES

A. **Definition.**

1. **Nonconforming Site.** Any structure, building, house, shed, accessory dwelling, or improvement on real property, or any parcel, lot, or unimproved real property, that does not comply with Development Standards.
2. **Project.** Any improvement, upfit, renovation, rehabilitation, restoration, removal, or addition to a structure or lot that occurs after a discontinuance and within 12 months following the resumption of operations or business activity at such structure or lot.

B. **Discontinuance of Nonconforming Sites**

1. **Applicability.** Any nonconforming site which has been discontinued shall comply with this Section.
2. **Definition.** The term "Discontinuance", as it pertains to nonconforming sites, shall mean the termination or cessation of a use or activity on a nonconforming site for a continuous period of not less than 18 months.

C. **Projects at Nonconforming Sites.**

1. Any Project at a Nonconforming Site subject to discontinuance and not subject to the more stringent requirements of *Chapter B.16.3* must comply with the following requirements:
   (1) Any Project with a total cost of 25% or less of the most current fair market value of the structure, dwelling, or improvement, as determined by the Sumter County Tax Assessor, shall not be required to increase their compliance with Development Standards, but must establish compliance with all Fire and Building Codes.
   (2) Any Project with a total cost of between 25% and 75% of the most current fair market value of the structure, dwelling, or improvement, as determined by the Sumter County Tax Assessor, must achieve a comparable percentage compliance with Development Standards as determined by the Zoning Administrator, and must establish compliance with all Fire and Building Codes.

(3) Any Project with a total cost of greater than 75% of the most current fair market value of the structure, dwelling, or improvement, as determined by the Sumter County Tax Assessor, must achieve full compliance with Development Standards, and must establish compliance with all Fire and Building Codes.

(4) A private fair market assessment prepared by a qualified fee appraiser and acceptable to the zoning administrator may be utilized in lieu of the Tax Assessor determination.

D. **Accidental Destruction.** A Nonconforming Site may be altered, extended, or replaced if razed by fire or other natural cause up to 36 months after the date of the fire or other natural cause, provided such alteration, extension, or replacement does not increase the degree of nonconformity with Development Standards in any respect, except where not applicable to certain non-conforming sites subject to *Chapter 16.3.E.*

E. **Required Improvements for Certain Nonconforming Structures and Improvements.** If the structures and improvements devoted to the following identified uses are or become nonconforming with respect to use or site standards by virtue of adoption of this ordinance or subsequent amendments thereto, and where such uses are subject to a discontinuance as specifically defined for each use below, then such nonconforming situations shall be made to fully comply with all applicable UDO requirements. specified below:

1. **Manufactured Home Park**

(1) Discontinuance

a. This use is discontinued with respect to use and site standards when 50% or more of the homes in the park become uninhabitable as determined by the Sumter Building Official or remain vacant for a period of 6 months or longer. Resumption of the use of the property as a manufactured home park is permitted if the use is permitted in the underlying zoning district and if the manufactured home park is made to comply with all standards in *Chapter B.9.2.K*.

2. **Salvage Yard**

   (1) Discontinuance

   a. This use is discontinued when there is a termination or cessation of the use for a continuous period of not less than 6 months. Resumption of the use of the property is permitted if the use is permitted in the underlying zoning district and if the use is made to comply with all standards in *Chapter B.9.5.M*.

3. **Resource Recovery Facilities, Solid Waste Storage/Transfer Facilities, Waste Tire Storage/Treatment Sites, Composting Facilities, Manned Convenience Centers, and Incinerators.**

   (1) Discontinuance

   a. This use is discontinued when there is a termination or cessation of the use for a continuous period of not less than 6 months. Resumption of the use of the property is permitted if the use is permitted in the underlying zoning district and if the use is made to comply with all standards in *Chapter B.9.5.L.*

16.4 NONCONFORMING LOTS

A. **Definition**

1. **Nonconforming Lot.** A nonconforming lot is a lot that was lawfully created before the effective date of this Ordinance, or a subsequent amendment thereto, but does not conform to the lot standards applied by this Ordinance or the subsequent amendment.

B. **Use of Nonconforming Lots**

1. Nonconforming Lots may be used subject to the following requirements:
   (1) If an existing lot of record is not of sufficient size to conform to the dimension requirements of the zoning district (minimum lot area, minimum lot width) such lot may be used as a building site without need for a variance from the Board of Zoning Appeals provided all other minimum development standards including setbacks can be met, with the following noted exceptions:
   (2) Nonconforming Lots in the Residential Infill Overlay District may be used pursuant to *Chapter B.11.6.D*.

C. **Changes to Nonconforming Lots.** The boundaries, lot lines, shape, or size of a nonconforming lot may only be changed if it makes the lot more conforming.

D. **Common Ownership of Adjacent Lots.** If a project on a nonconforming lot cannot meet minimum building setback requirements, and the owner of said nonconforming lot also owns an adjacent lot that shares a common parcel boundary unseparated by public right-of-way that could be combined with the nonconforming lot in such a manner as to allow compliance with building setback requirements, the owner must combine the 2 lots into a single lot prior to undertaking a building project.

16.5 NONCONFORMING MOBILE & MANUFACTURED HOMES

A. **Nonconforming Manufactured Homes.** Any legally established manufactured home located within the City may be moved to another property, parcel, or lot within jurisdiction of the City in accordance with applicable zoning district development standards or may remain in continuous use on the property in which they are currently located.

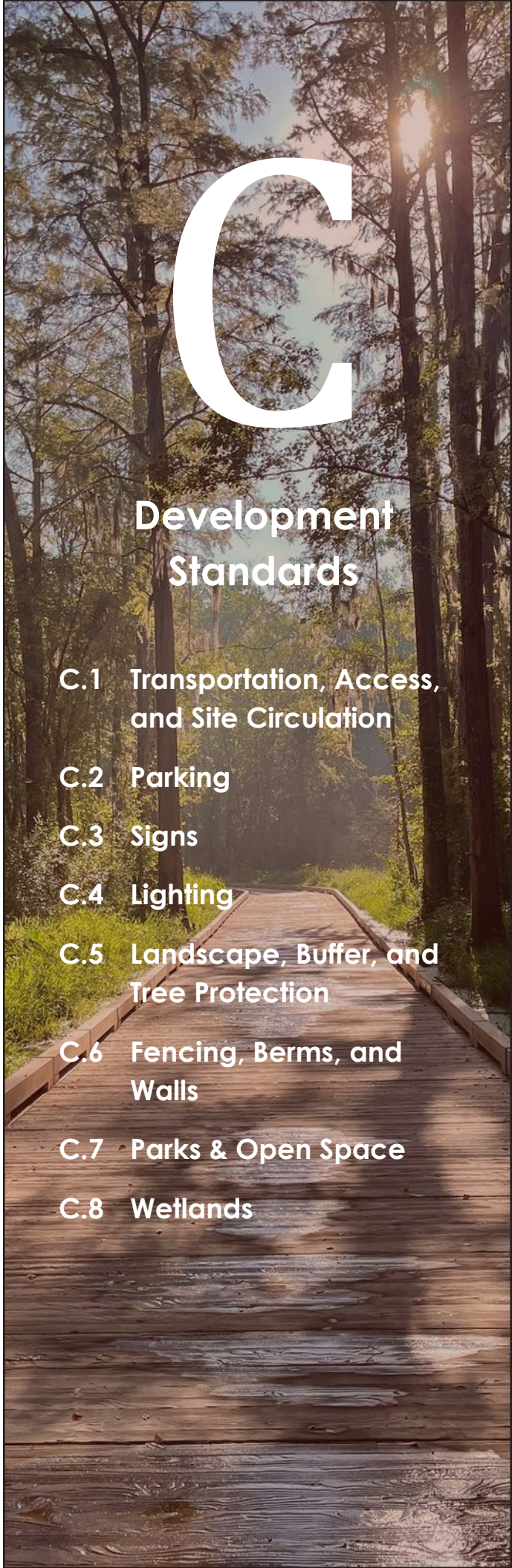
Note: Manufactured homes that do not conform with the age and design standards in Chapter B.9.2J may be moved to another property, parcel, or lot within jurisdiction of the City of Sumter subject to all other applicable zoning district development standards.

B. **Nonconforming Mobile Homes.** Mobile homes, as defined by *Chapter* A.5, may not be installed on any property, parcel, or lot within the jurisdiction of the City of Sumter. Existing mobile homes may remain in continuous use on the property at which they are currently located

(This page Intentionally Left Blank)

PURPOSE

A. **Purpose.** The purpose of this Section is to define development standards for commercial, industrial, and residential developments within the City. All land within the City's zoning districts shall be developed in accordance with the standards and regulations in this Section and applicable Sections of this UDO.



C

Development Standards

C.1 Transportation, Access, and Site Circulation

C.2 Parking

C.3 Signs

C.4 Lighting

C.5 Landscape, Buffer, and Tree Protection

C.6 Fencing, Berms, and Walls

C.7 Parks & Open Space

C.8 Wetlands

1. TRANSPORTATION, ACCESS, AND SITE CIRCULATION

1.1 INTENT

The purpose of this Section is to support the creation of a highly connected transportation system to protect the public health, safety, and welfare by ensuring adequate access for emergency and service vehicles, connecting neighborhoods to each other and to local destinations such as schools, parks, and shopping centers, reducing vehicle miles traveled and travel times; improving air quality; reducing emergency response times; encouraging connections to developable property; and aligning arterial road capacity to regional long distance travel needs.

1.2 TRANSPORTATION IMPACT

A. **Purpose**. The purpose of Transportation Impact evaluation is to assess potential impacts to the transportation system associated with development and redevelopment activities.

B. **Application of Standards.** All development and redevelopment projects shall be evaluated on the basis of their relationship to the transportation network. Where a proposed project will impact the operation of one or more corridors and/or intersections in the City, modifications to the site plan or subdivision plan or mitigation of impacts may be required based upon review of a submitted Transportation Impact Analysis (TIA) or Transportation Impact Study (TIS).

C. **Analysis Threshold**. A TIA or TIS prepared by an engineer licensed in the State of South Carolina shall be submitted at the time of application for development projects that meet at least one of the following thresholds:

Table C.1.1. Transportation Impact Threshold

Type	Intent	Threshold
Minor **Transportation Impact Analysis (TIA)** (refer to Development Request Applications for Minor TIS submission requirements)	Used for proposed development that is anticipated to generate small increases in peak hour trips and/or average daily traffic, and which would have minimal impact on existing Levels of Service. If the City of Sumter determines that analysis provided via minor TIS does not support a determination of minimal impact, the applicant may be required to conduct a Major Traffic Impact Study.	1. Project generates between 200-400 ADT, or 2. Project generates 50-99 peak hour trips for the project's peak hour
Major **Transportation Impact Study (TIS)** (refer to Development Request Applications for Major TIS submission requirements)	Used to identify system and immediate area impacts associated with proposed development that is anticipated to generate a large number of peak hour trips and/or average daily traffic, and which would have significant impact on existing Levels of Service.	1. Project generates more than 400 ADT; or 2. Project generates 100 or more peak hour trips for any peak hour; or 3. Project located in immediate vicinity of an intersection known to be operating at or below Level of Service C; or 4. Project is of a nature or in a location that causes a concern for traffic safety; or 5. Project is a residential subdivision containing 30 or more lots.

D. **Mitigation Measures and Alternatives.**

1. Where a proposed development is expected to degrade the Level of Service (LOS) for a street segment or intersection as evaluated in an approved TIS, the TIS shall identify improvements required at the developer's expense to ensure that development-related traffic demands do not cause a reduction in LOS

below the acceptable standard for the area evaluated, and identify additional improvements needed to maintain or raise the LOS to the standard.

i. Where additional improvements are needed to maintain or raise the LOS to the acceptable standard, the developer will be required to contribute a percentage of funding equal to the percentage of delay increase for the segment or intersection towards transportation improvements within reasonable distance of the study area.

ii. If the delay increase for a segment or intersection is 80% or higher, all recommended improvements to mitigate traffic generated by the proposed development will be the responsibility of the developer.

2. Cost estimates for transportation improvements and the percentage to be contributed by the developer must be approved by both the City of Sumter and SCDOT if the improvement includes a state-maintained road.
3. The City of Sumter reserves the right to obtain a third-party estimate for the cost of transportation improvements. The third-party estimate will prevail over the estimate received from the developer.

E. **Expiration.** An approved TIA or TIS is considered valid unless:

1. The build year date is exceeded by more than 12 months, or;
2. Transportation improvements identified in the TIS to achieve the desired LOS and mitigate impacts of the proposed development or change distribution of traffic within the study area are not completed within the timeframe projected in the TIS, or;
3. The developer proposes to increase the number of residential units by more than 10% or increase square footage of commercial gross floor area by more than 20%, or;
4. A change in use or scale of the development is proposed that may result in an increase in trip generation, a change in traffic distribution, change in access points, or additional reduction in LOS.
5. If a proposed development is not completed within the timeframe stated in the TIS, or if a change in land use or access is proposed that deviates from that approved in the TIS, an updated TIS analysis is required.

F. **Waiver of Requirement**. The Zoning Administrator may waive a TIA or TIS (or elements thereof) if:
   1. Justification is provided that a project's impact on adjacent streets and intersections will be minimal and insignificant, or
   2. The applicant commits to constructing transportation improvements that mitigate the proposed development's expected impacts.

1.3 ACCESS, CROSS ACCESS, AND CIRCULATION

A. **Intent**. Any use that requires a driveway connection to the public street network shall be subject to the provisions of this Section. All new driveways must be approved by the City. Driveways shall be reviewed and approved as part of a subdivision or site plan approval, or as an independent Encroachment Permit if connecting to a City-owned street.

B. **Right-of-Way Encroachment for Driveways (Lots less than 0.25 acres).** The following standards shall apply to residential lots less than 0.25 acres:
   1. Lots of 60 feet or less in width: One driveway of no more than 16 feet in width may be used to provide access to garages or off-street parking areas.
   2. Lots of 60 Feet or More in Width
      (1) The maximum curb cut for a driveway shall be 16 feet wide.
      (2) Alley-accessed garages shall be set back 15 feet from the alley centerline.
      (3) Off-street parking areas on lots served by alleys shall be constructed of pervious materials.

C. **Off Street Parking Access/Driveways for All Other Lots.**
   1. Driveways shall be minimized in width and number in order to limit interruption to the public sidewalk, streetscape and perimeter landscaping.
   2. Maximum Permitted Number: The maximum number of driveways allowed for any property shall be as specified in *Table C.1.2*.

Table C.1.2. Maximum Permitted Driveways	
FRONTAGE WIDTH	**MAXIMUM PERMITTED DRIVEWAYS**
50 ft. or less	1
51 ft. to 200 ft.	2
Greater than 200 ft.	2 (additional driveways may be allowed as determined by the Zoning Administrator)

D. **Location**. Driveways shall be located at a point along the frontage where drivers entering the street have sufficient sight distance in both directions to enter the roadway safely .

1. Visibility: A 15-ft. by 15-ft. sight distance triangle shall be maintained at all intersections between driveways and streets. Within the sight distance triangle, no fence, wall, sign (except regulatory and street name signs), embankment, landscaping or structure shall be placed, erected or maintained which will obstruct visibility.
2. Minimum Separation: Driveways shall have a minimum spacing as specified in *Table C.1.3.*

Table C.1.3. Minimum Driveway Spacing (General Features)	
FEATURE	**MINIMUM SEPARATION***
Adjacent Property Line (does not apply to shared or joint-use driveways)	5 ft
Another Curb Cut (driveway or street intersection) on a local road	25 ft
Another Curb Cut (driveway or street intersection) on Arterial and Collector Roads	50 ft

*As measured from centerline of the driveway or street

E. **Width**. To maintain pedestrian comfort and calm the speed of entering traffic, driveways to parking areas shall not exceed 24 feet in width (2 lanes) or 12 feet in width (1 lane), except those with turn lanes required by the City or other approving agency or when required for adequate turning radius.

F. **Turning Radii**.

Table C.1.4. Turning Radii	
USE	**MINIMUM/MAXIMUM TURNING RADII**
Commercial	15 ft / 20 ft
Industrial	25 ft / 30 ft
Residential	5 ft / 10 ft

G. **Commercial Driveway Spacing**. Lot entrance and exit drive curb cuts shall be no more than 30 feet in width. Curb cuts shall be not less than 25 feet apart, provided, however, that this distance shall be increased should the lot frontage on a street permit such increase. Entrance and exit drives shall be located at least 250 feet from a street intersection's closest edge of travel lane. Where feasible, business establishments on contiguous lots are encouraged to consolidate entrance and exit points. Suitable provisions shall be made to prevent entrances or exits other than those made at designated entrance or exit drives.

H. **Street Network Connection for residential developments**. In order to create a more connected transportation system and accommodate emergency and service vehicles, the following standards shall apply:

1. Developments where the number of dwelling units exceeds 30 shall be provided with at least 2 separate and approved points of access to the public roadway network.
2. At no point in the developed subdivision area may more than 30 lots have less than 2 full access points.
3. Where 2 points of access are required, they shall be placed a distance apart equal to not less than 50% of the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between accesses.

I. **Site Access for Multifamily Residential Developments**. In order to create a more connected transportation system and accommodate emergency and service vehicles, the following standards shall apply to Multifamily Residential developments:

1. Multifamily residential projects having more than 50 dwelling units shall provide at least 2 separate and approved points of access to the public roadway network.
2. At no point in the developed subdivision area may more than 30 lots have less than 2 full access points.

J. **Cross Access**. The City of Sumter may require cross access between adjacent developments (residential and/or non-residential) or to designate cross-access corridors on properties adjacent to arterial and major collector roadways. Such requirement or designation may be made in connection with the approval of any subdivision or site plan within the affected area, or as part of an overall planning program.
   1. Each site plan or subdivision plan shall provide appropriate street connections to support cross access between adjacent subdivision developments.
   2. If the adjacent parcel to the proposed development is vacant, an access easement shall be executed and recorded with the Register of Deeds.

2. PARKING

2.1 INTENT

The provisions of this Section apply wherever off-street parking is required by this Ordinance as identified in *Chapter C.2.5.*

2.2 GENERAL PROVISIONS

A. **General Provisions.** These regulations are designed to:

1. Ensure an appropriate level of parking; loading; and storage to support a variety of uses, including the avoidance of unnecessarily high amounts of excess parking including appropriate design and development standards
2. Provide appropriate site design standards regarding access (ingress and egress) to mitigate the impacts of parking lots on adjacent land Uses and Zoning Districts
3. Allow for alternative parking options in certain defined circumstances.

B. **Review of Parking Requirements**. Parking requirements shall be reviewed whenever a building or use increases in floor area, seating capacity, number of dwelling units, number of employees, or any other capacity-related metric that would generate parking demand.

1. If the change results in an increase of 10% or more over the existing approved capacity or number of parking spaces, the site shall be required to provide additional parking in accordance with the requirements of this Ordinance.
   (1) The Zoning Administrator may waive this requirement if an Alternate Parking Plan (APP) demand study demonstrates that the existing parking is sufficient, or if shared parking, transit access, or other factors mitigate the increased demand.

C. **Computation.** Off-street parking spaces shall be calculated using the following information. Area Measurements. The following units of measurement shall be utilized

to calculate parking requirements. Other units of measurement may be identified in *Table C.2.1*.

1. **Dwelling Unit.** Parking standards for residential uses and buildings shall be computed using a Dwelling Unit as the unit of measure.
2. **Room.** Parking standards for transient accommodations, or any place in which rooms, lodging, or sleeping accommodations are furnished to transients for a consideration, shall be computed using Room as the unit of measure.
3. **Gross Floor Area (GFA).** Unless otherwise expressly stated, parking standards for nonresidential Uses shall be computed based on the entire square footage of a building (Gross Floor Area) in square feet.
4. **Occupancy- or Capacity-Based Measurements.** Parking spaces required per available seat or per employee, student, or occupant shall be based on the greatest number of persons on the largest shift, the maximum number of students enrolled, or the maximum fire-rated capacity, whichever measurement is the greatest unless otherwise approved as part of the standards provided in *Chapter C.2.5*.
5. **Fractions**. When computation of the number of required off-street parking spaces results in a fractional number, any result of 0.5 or more shall be rounded up to the next consecutive whole number. Any fractional result of less than 0.5 may be rounded down to the previous consecutive whole number.
6. **Multiple Uses on a Lot (Separate Buildings).** When there are multiple Uses on a Lot in separate buildings, required spaces shall be calculated as an amount equal to the total requirements for all Uses or Buildings (pursuant to Chapter C.2.2.7) on the Lot, unless the Uses qualify for Alternative Parking Plans (APP) or other credits to reduce parking.
7. **Existing Multitenant Buildings.** If an existing multitenant building has off-street parking spaces in an amount that equal to or exceed 1 space per 300 sf of GFA where such spaces meet the surface material standards in *Chapter C.2.4.A.1*. and have stall dimensions equal to or exceeding 8 ft. in width and 18 ft. length, then the individual use of minimum off-street parking requirements in *Table 2.3.*

are not applicable to uses locating within the existing multitenant building, except for the following uses:

(1) Bar/Tavern/Night Club/Private Club
(2) Special Event Facilities/Conference Centers
(3) Movie Theaters
(4) Amusement Facilities/Theme Parks
(5) Concert Venues
(6) Pool Halls
(7) Bingo Parlors

8. **Requirements for Unlisted Uses.** Upon receiving a Site Plan, occupancy permit, or other permit application for a Use not specifically addressed in this Section, the Zoning Administrator is authorized to apply off-street parking standards specified for the Use deemed most like the proposed Use. In instances where an equivalent may not be clearly determined, the Applicant shall submit a parking study and other evidence that will help determine the appropriate requirements. A parking study must include:
   (1) The size, type, and use(s) of the development;
   (2) anticipated peak parking;
   (3) anticipated normal parking amounts; and
   (4) a narrative and data as to why the parking requirements of the UDO do not accurately reflect the needs of the proposed development.
9. **Maximum Allowable Vehicular Spaces.** No use shall provide greater than 25% more than the minimum parking requirement without incorporating at least 1 of the following mitigating design features, subject to approval by the Zoning Administrator:
   (1) Apply Type C side and rear buffer regardless of adjacent uses (refer to *Chapter C.5.*).
   (2) Increase interior parking lot landscaping by 10% over the minimum requirements.
   (3) Utilize pervious surface (e.g. porous asphalt, paver blocks, or large aggregate concrete) for additional parking over the minimum.

(4) An additional mitigation method reviewed and approved by the Zoning Administrator or their designee.

In no case, shall a Use provide over 50% more parking spaces than the requirement unless approved as part of an APP.

10. **Exceptions to Parking Requirements.**

(1) No off-street parking is required for development in the Downtown Core (DTC) District.

2.3 MINIMUM PARKING REQUIREMENTS

TABLE C.2.1 MINIMUM PARKING REQUIREMENTS		
USES	**MINIMUM SPACES**	**ADDITIONAL STANDARDS**
AGRICULTURAL		
Farming-Crop Production	None	
Commercial Livestock	None	
Domestic Livestock	None	
Stockyards, Poultry Houses, Pig/Hog Farming, slaughterhouses, and Animal Auction Houses	None	
Forestry and Logging	None	
Nursery, Plant & Landscaping	1 per 500 sq. ft. GFA	GFA of office and indoor customer areas only.
RESIDENTIAL		
Single Family Detached Dwelling	2 per dwelling unit	
Single Family Attached Dwelling	2 per dwelling unit	
Suburban Townhouse	1 per dwelling unit	
Urban Townhouse	1 per dwelling unit	
Duplex Dwelling	2 per dwelling unit	
Triplex and Quadruplex Dwelling	1 per dwelling unit	
Suburban Multi-Family Dwelling	1 per dwelling unit	
Urban Multi-Family Dwelling	1 per dwelling unit	
Manufactured Home	2 per dwelling unit	
Manufactured Home Park	2 per dwelling unit	
Group Living (Group Home, Group Dwelling, & Fraternity/Sorority Houses)	0.5 per bedroom	
PUBLIC AND INSTITUTIONAL		
Elementary Schools	1 per classroom/1 per office	
Secondary Schools	2 per classroom/1 per office	
Higher Education (College, Junior College, University, Technical)	5 per classroom/1 per office	

USES	MINIMUM SPACES	ADDITIONAL STANDARDS
Other Educational Facilities	1 per classroom/1 per office	
Commercial Cemetery	0.5 spaces per seat in chapel	
Religious Cemetery	0.5 spaces per seat in chapel	
Cultural, Library, and Museum Facility	3 per 1,000 sq. ft. GFA	
Government Offices	1 per 500 sq. ft. of office/public space	
Post Office	2 per 1,000 sq. ft. GFA or 1.5 per 3 employees	
Public Safety	1 per 500 sq. ft. of office/public space	
Correctional Facility	1 per 500 sq. ft. of administration space	
Mobile Classrooms	None	
COMMERCIAL		
Animal Kennels	1 per 500 sq. ft. GFA	
Bar/Tavern/Night Club/Private Club	1.25 per 100 sq. ft. GFA	
Bed & Breakfast	1.25 per bedroom	
Broadcast Facility		
Convenience Store w/ Fuel Sales	1 per 300 sq. ft. GFA	
Convenience Store w/o Fuel Sales	1 per 300 sq. ft. GFA	
Crematorium	0.25 per seat	
Funeral Home w/ Crematorium	0.25 per seat	
Funeral Home w/o Crematorium	0.25 per seat	
Grocery	1 per 300 sq. ft. GFA	
Hotel/Motel, Extended Stays	1.1 per unit	Plus secondary/accessory uses at 50% of the adopted parking rate
Liquor Stores	2 per 500 sq. ft. GFA	
Vehicle Service, Major	2 per repair bay	
Vehicle Service, Minor and Vehicle Part Sales	1 per 350 sq. ft. GFA	

USES	MINIMUM SPACES	ADDITIONAL STANDARDS
Motor Vehicle Fuel Dealers	1 per 500 sq. ft. GFA	Filling station/gas pump must not constitute parking
Vehicle Sales and Rental Services, General Equipment Rental Services	1 per 500 sq. ft. GFA	
Outdoor Storage	1 per 1,000 sq. ft. GFA	Only office facilities must be included in calculation
Pawn Shops, Flea Markets	1.5 spaces per stall	
Restaurant, Full Service, Fast Casual, & Drive Through	1 per 200 sq. ft. GFA	
Retail, Neighborhood (Maximum 5,000 sq. ft)	1 per 300 sq. ft. GFA	
Retail, General (Maximum 20,000 sq. ft)	1 per 300 sq. ft. GFA	Shopping center (i.e., multi-tenant buildings) parking is based on an aggregate of square feet to determine required parking
Retail, Big Box (Above 20,000 sq. ft)	1 per 300 sq. ft. GFA	Shopping center parking is based on an aggregate of square feet to determine required parking
Sexually Oriented Business	1 per 50 sq. ft. GFA	
Special Event Facilities	1 per 4 persons based on maximum occupancy or by individual review if outdoor space is the primary events area	
Wholesale Trade	1 per 5,000 sq. ft. GFA	
Automatic Merchandising Machine Operators (Vending Machines)	See Additional Standards Column	Minimum 1 regular parking spaces and 1 handicap van accessible parking space per vending unit; 2 regular parking spaces and 1 handicap accessible parking space per 5 machines

USES	MINIMUM SPACES	ADDITIONAL STANDARDS
INDUSTRIAL, WAREHOUSE, AND MANUFACTURING		
Artisanal Manufacturing	1 per 1,000 sq. ft. GFA	
Brewery, Micro	5 per 1,000 sq. ft. of seating area	Only customer service areas and outdoor seating areas must be included in calculation
Distillery, Micro	5 per 1,000 sq. ft. of seating area	Only customer service areas and outdoor seating areas must be included in calculation
Hazardous Waste, Nuclear Waste Transfer, Storage, and Treatment and/or Disposal Sites	1 per employee on largest shift + 1 per 1,000 sq. ft. administrative area	
Resource Recovery Facilities, Solid Waste Storage and Transfer Facilities, Waste Tire and Treatment Sites, Composting Facilities, Manned Convenience Centers, Incinerators, and Recycling Facilities	1 per employee on largest shift + 2 visitor spaces	
Flex Facility	See Additional Standards Column	1 space per every 2 employees according to the maximum employment number; and 1 space for each managerial staff member; and, 1 space for each company vehicle that will be operating from the premises.
Industrial, Light		
Industrial, Heavy		
Manufacturing		
Warehouse/Distribution		
Salvage yards	1 per 1,000 sq. ft. GFA (office/operations area) + 1 per employee on largest shift	
Self-Storage Facilities	1 per 100 storage units + 1 per employee on largest shift	
Solar Farms	2 spaces per site + 1 per employee on largest shift	
Mining and Extraction Operations	1 per employee on largest shift	

USES	MINIMUM SPACES	ADDITIONAL STANDARDS
PERSONAL SERVICES		
Bail Bonding	1 per 250 sq. ft. GFA	
Bank/Financial Institution	1 per 400 sq. ft. GFA	
Car Wash	2 spaces per site + required stacking spaces	
Daycare, In-Home (Adult and Child)	1 per use	
Daycare (Adult and Child)	1 per 350 sq. ft. GFA	
Dry Cleaning/Laundromat	1 per 250 sq. ft. GFA	
Personal Services	1 per 350 sq. ft. GFA	
Spa, Day	1 per 250 sq. ft. GFA	
Tattoo Parlor	1 per 250 sq. ft. GFA	
MEDICAL AND OFFICE		
Animal Care (includes urgent and vet services)	1 per 350 sq. ft. GFA	
Residential Care	1 per unit/bed + 1 per employee on largest shift	
Nursing Home	1 per 3 beds + 1 per employee on largest shift	
Hospital	0.5 per room plus 50% of the required parking for accessory uses	Accessory uses include but are not limited to restaurants, medical/physician offices, and physical therapy
Medical/Dental Facility	1 per 200 sq. ft. GFA	
Professional Office	1 per 400 sq. ft. GFA	
Rehabilitative and Mental In-Patient Health Facility	1 per 3 beds + 1 per employee on largest shift	
Urgent Care	1 per 200 sq. ft. GFA	

USES	MINIMUM SPACES	ADDITIONAL STANDARDS
RECREATION/OPEN SPACE +ENTERTAINMENT		
Sports Fields, Public Parks, and Botanical Gardens	by individual site/use review	
Amusement/Theme Parks/Zoo	1 per 100 sq. ft. GFA	
Golf Courses	4 Spaces per hole	
Driving Range	1 per tee station	
Motor Vehicle Racetrack	1.5 per 1,000 sq. ft. GFA	
Outdoor Concert Venues	1 per 3 seats	
RV Parks/Recreation Camping Facilities	1 per RV site + 1 per employee on largest shift	
Shooting Ranges (Indoor)	1.2 per bay	
Bingo Parlor	1 per 3 seats or 1 per 50 sq. ft. of assembly area	
Pool Hall	1 per 200 sq. ft. GFA	
Fairgrounds	1 per 4 persons capacity or as determined by site-specific parking study	
UTILITIES AND OTHER USES		
Airport	1 per 3 seats in waiting areas + 1 per employee on largest shift	
Wireless Communication Towers	1 per site	
Transportation Terminals	1 per 3 seats in waiting areas + 1 per employee on largest shift	
Utility Facilities, Government	1 per 500 sq. ft. GFA	
Sewer Treatment Plants	1 per employee on largest shift	
Electric Substations	1 per employee on largest shift	
Parking Lots and Structures	No minimum required	

2.4 DESIGN REQUIREMENTS

A. **Definition.** For the purpose of these regulations a parking space is an all-weather dust free surface area, either connected to a public or private roadway or located within the right-of-way of a roadway.

1. **Surfacing and Drainage.** Off-street parking facilities shall be properly graded for drainage to prevent damage to abutting property and/or public streets and alleys. Parking lots shall be surfaced with asphalt or concrete. Parking facilities shall include concrete curb and gutter or curb stops. Where otherwise noted or permitted, the required parking spaces may be constructed using an alternative surface material. The Planning Commission may approve alternate materials by individual project.
2. **Use.** Parking lots may not be used for the sale, repair or the dismantling or servicing of any vehicles or equipment unless specifically authorized.
3. **Maintenance**. Parking lots shall be maintained in a clean, orderly and dust-free condition
4. **Ingress and Egress.** All off-street parking and loading facilities shall open directly onto an alley, or driveway designed to provide safe access to such facilities. Dimensional standards are found in *Chapter C.1.3.* of this Ordinance.
5. **Shared Access.** Standards are found in *Chapter C.1.3.* of this Ordinance.
6. **Curb Cuts.** Standards are found in *Chapter C.1.3.* of this Ordinance.
   Dimensional Standards: Parking facilities including drive aisles shall meet the standards found in *Table C.2.2*. and Figure C.2.1.
7. **Residential Driveways and Parking Areas.** Driveways and off-street parking areas serving 1 and 2-family residential dwellings shall be constructed and maintained with a surface material that controls erosion and dust, protects adjoining streets, sidewalks, and stormwater facilities from sediment, and provides a stable, all-weather surface for vehicular access.

Table C.2.2 Dimensional Standards				
Angle of Parking (Degrees)	**Minimum Width of Stall**	**Stall Depth (Stall Length)**	**Aisle Width**	**Curb Length per Car**
30	10 ft.	17 ft, 4 in.	11 ft.	18 ft.
45	10 ft.	19 ft, 10 in.	13 ft.	12 ft., 9 in.
60	10 ft.	21 ft	18 ft.	10 ft., 5 in.
90	9 ft.	18 ft	24 ft.	9 ft.

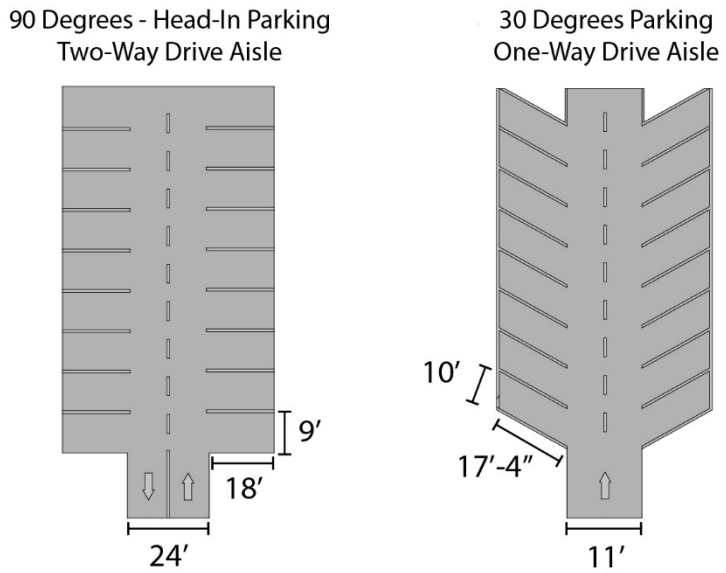
Additional Standards:

A. Minimum driveway widths must be maintained to the point of intersection with the adjoining public or private right-of-way.

B. In 90-degree parking stalls, the depth of the stall may be reduced to 18 ft where a grass or landscaped median, with a minimum 2 ft width per row of parking stalls, has been provided for automobile overhang. Wheel-stops or curbing must be provided to protect and delineate the median from the parking stalls.

C. Compact spaces may be designed with widths of 8 ft and lengths of 16 ft.

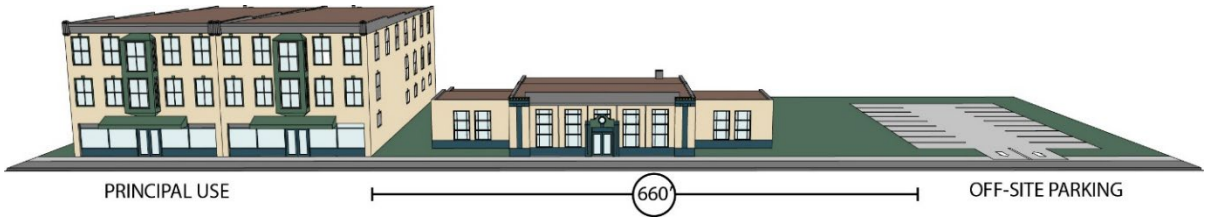
Figure C.2.1 Parking Area Dimensional Standards



2.5 ALTERNATIVE OFF-STREET PARKING STANDARDS

A. **Location on Other Property (Off-Site).** If the number of off-street parking spaces required in *Chapter C.2.3.* cannot be provided on the same lot as the principal use, such spaces may be provided on other property under the same ownership, or on other property rented or leased, provided such property lies within 660 ft. walking distance of the main entrance to the principal use. No more than 25% of parking space requirements may be provided off-site and shall not consist of any required parking of another use unless a shared parking arrangement exists. A written agreement specifying the joint use arrangement of parking spaces shall be filed with the application for a building permit or business license. Off-site parking must be under the same ownership as the principal use or leased by a term no less than the term of lease for the principal use.

Figure C.2.2 Off Site Parking



B. **Public Parking Credit.** Public parking within 660 feet of any Property Line may be credited against the parking requirement at a rate of 1 credit for every 3 public parking spaces within 660 feet.

C. **Shared Parking.** Use of shared parking arrangements is permitted in accordance with the standards below. Shared parking arrangements may qualify for a 10% reduction in required minimum off-street parking pursuant to the requirements of *Chapter C.2.5.D*.

1. **Establishment of Peak Demand by Use**. Proposed uses served by the shared parking arrangement shall have different peak parking demands or operate

in a manner that the uses sharing parking have access to the required minimum number of off-street parking spaces when in operation.

2. **Location of Shared Parking.** Shared parking shall be within 660 feet, measured from the entrance of the Use to the closest parking space within the shared parking lot along measured along a dedicated pedestrian path.
3. **Reserved Parking Spaces.** A significant amount of reserved parking is not permissible when utilizing shared parking.
4. **ADA Compliance**. ADA compliant spaces shall be provided for each separate use and shall not be part of a shared parking arrangement.
5. **Dedicated Pedestrian Path Design.** The sites involved in the shared parking agreement shall be connected by a dedicated pedestrian pathway.
6. **Legal Instruments Required.**
   (1) Cross access agreements, if required, for the subject property and adjacent properties to ensure shared parking can function shall be provided to the Zoning Administrator or their Designee.
   (2) Shared parking arrangements shall be a formal legal instrument and be provided to the Zoning Administrator or their Designee.
7. **Signage.** Signage shall be provided in appropriate locations, directing the driver to the appropriate parking lot. Signage proposed in public rights-of-way must be approved by the unit of government that owns the right-of-way.

D. **Shared Parking Analysis.** Applicants wishing to use shared parking as a means of reducing the total number of required spaces must submit a shared parking analysis. The shared parking analysis, at minimum, shall include and comply with the following:
   1. Identification of proposed uses within the development.
   2. Calculation of the 10% shared parking reduction that will be applied, per proposed use.
   3. Proposed uses served by the shared parking arrangement shall have different peak parking demands or operate in a manner that the uses sharing parking

have access to the required minimum number of off-street parking spaces when in operation.

4. Narrative and calculations shall be provided as part of the shared parking analysis explaining the merit of the shared parking arrangement.
5. Cross access agreements (i.e. legal instruments), if required, for the subject property and adjacent properties to ensure shared parking can function shall be provided to the Zoning Administrator or their Designee.
6. Shared parking arrangements shall be a formal legal instrument and be provided to the Zoning Administrator or their Designee.

E. **Alternative Parking Plan (APP).** The parking requirements set forth in *Table C.2.1.* may be modified through an Alternative Parking Plan (APP). The Zoning Administrator may accept an APP in place of the parking requirement for a use if the requirements below are met:

1. A parking study must be submitted that is prepared by a Professional Engineer or Land Use Planner.
2. The study must include the size, type, and use(s) of the development; anticipated peak parking; anticipated normal parking amounts; and a narrative and data as to why the parking requirements of the Ordinance do not accurately reflect the needs of the proposed development.
3. An APP may be requested concurrently with Site Plan Review.
4. Applicants wishing to request an APP as a means of reducing the total number of required spaces must submit an APP. The APP, at minimum, shall include and comply with the following:
   (1) Identification of proposed uses within the development.
   (2) Calculation of the 10% shared parking reduction that will be applied, per proposed use.

F. **Valet Parking.** Required off-street parking may be located on a separate lot or parcel from which the principal use is located and operated by a valet service only if the valet operations and parking comply with the following standards:

1. The valet service provider must have the same ownership as the principal use, the lessee of the principal use, or a third-party valet service provider that has been contracted by the principal use owner or principal use lessee.
2. If valet operations are discontinued at any time, the owner must submit an Off-Street Parking Plan to the Zoning Administrator, if the proposed parking configuration does not meet the standards for Private Off-Premises Parking, the owner must submit an Alternative Parking Plan to the Director or their designee.
3. Valet stands are not permitted within the public right-of-way.
4. Valet operators may utilize facilities that adhere to the standards of *Chapter C.2.5.* for Shared Vehicular Parking if proposed uses are served by the shared parking arrangement have different peak parking demands.

Table C.2.3. Accessible Parking Requirements

Number of Required Spaces	Number of Spaces reserved for ADA Persons
Up to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 and over	2% of total required

G. **Accessible Parking Spaces:** When off-street parking is required for any non-residential use, accessible parking shall be included when calculating the overall parking requirements for a building or use, based on the following formula:

1. All ADA parking and accessibility will be designed in accordance with the adopted Building Code and *ANSI A117.1*. The surface shall be paved with concrete or asphalt.

H. **Bicycle Parking.** *Table C.2.4.* indicates the minimum bicycle parking required for a given Use.

1. Bicycle parking is required only for uses listed in *Table C.2.4.*
2. Bicycle parking shall be located no further than 50 feet from the primary pedestrian entrance.
3. The maximum number of bicycle parking spaces required for any use is 10.
4. **Dimensions.** Required bicycle parking spaces shall have minimum dimensions of 2 feet in width and 6 feet in length.
5. **Secure Spaces.** All bicycle parking spaces shall allow for secure storage for the bicycle.
   (1) Indoor spaces shall be lockable or provide a permanently affixed rack for securing each bicycle.
   (2) Outdoor spaces shall provide a permanently affixed rack for securing each bicycle.
6. **Signage.** If required bicycle parking is not visible from the street, signs shall be posted indicating its location.
7. **Maintenance and Lighting.** Areas used for required bicycle parking shall be lighted and have sufficient stormwater drainage.

Table C.2.4 Required Bicycle Parking

Use	Bicycle Space Required
Multifamily Apartment	1 per 2 Vehicular Spaces for buildings with more than 8 units
Civic/Institutional	1 per 5 Vehicular Spaces, min of 4
Retail & Restaurant	1 per 5 Vehicular Spaces
Service	1 per 5 Vehicular Spaces
Office	1 per 5 Vehicular Spaces
Neighborhood Open Space / Civic Open Space	By Individual Review
General Open Space	By Individual Review
Large Scale Open Space	1 per 5 Vehicular Spaces

2.6 DRIVE-THROUGH STACKING REQUIREMENTS

A. **General Requirements.** Stacking space for vehicles shall be provided according to the requirements in *Table C.2.5.*

Table C.2.5 Required Drive-Through Stacking Distances	
Use	**Stacking Spaces Required**
Bank – Drive Through Teller	4 per Window or Kiosk
Bank – Drive Through ATM	2 per Window or Kiosk
Car Wash	4 per Window or Kiosk
Gas Station	2 per Pump
Restaurant – Drive Through	4 behind Menu Board & 4 behind First Window

B. **Location.** Stacking spaces for drive-through and other similar Uses shall be located in accordance with *Chapter B.9.* and shall not block the travel lane, emergency access, or parking spaces.

Figure C.2.3. Required Drive-Through Stacking Distances

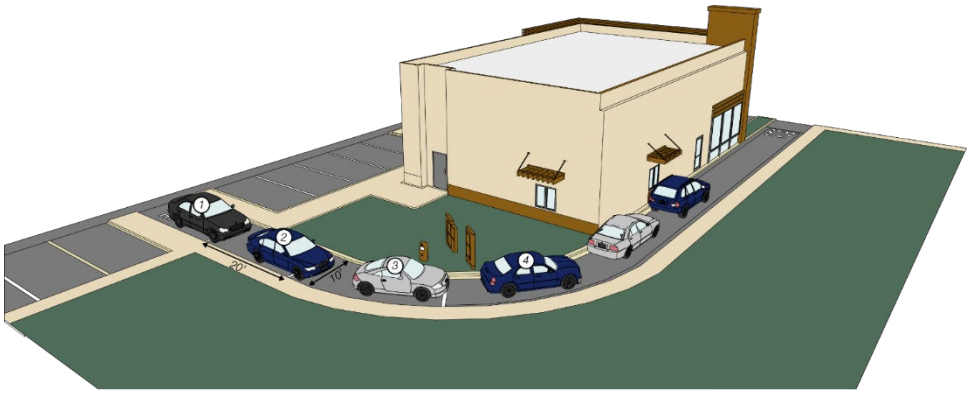


Figure C.2.3. Drive Through Diagram

C. **Deviation from Standard.** Minimum standards shall be adhered to unless a traffic impact study (refer to the appendix for details) provides verifiable evidence to allow a reduction. Reductions may be approved through Site Plan review as specified in Chapter A.3. to allow for an Escape Lane or Pedestrian Crossing.

2.7 OFF-STREET LOADING FACILITIES

A. **General Requirements.** Off-street loading facilities are required to prevent vehicles engaged in unloading from encroaching on or interfering with public use of streets and pedestrian areas. Adequate space shall be provided for unloading and loading of goods, materials, or other items for delivery and shipping.

B. **Off-Street Loading Facilities and Parking**. Off-street parking facilities may not be used or counted as meeting off-streetloading requirements.

C. **Uninterrupted Flow.** If loading/unloading is proposed within a street travel lane, at least one travel lane shall be preserved to ensure uninterrupted flow oftraffic.

D. **Change of Use.** When the use of a structure or land or any part thereof is changed to a use requiring off-street loading facilities, the full amount of required off-street loading space shall be provided.

E. **Change in Size of Structure.** When any structure is enlarged or any use extended so that the size of the resulting occupancy requires off-street loading space, the full amount of such space shall be provided for the structure or use in its enlarged or extended size.

Accessibility and Location. Loading/unloading areas shall be convenient to the use t services. Each off-street loading space shall be directly accessible from a street or alley without crossing or entering any other required off-street loading space. Such loading space shall be accessible from the interior of the building it serves and shall be arrangedfor convenient and safe ingress and egress by motor truck and/or trailer combination.

F. **Required Loading/Unloading Information.** Loading and unloading locations and sizes shall be included on any required parking plan. If no parking plan is required, but a building permit for any use or structure is required, then the development is required to provide off-street loading facilities. The applicant shall provide proof

of loading and unloading locations and sizes and conformity with this Section.

G. **Design.** Service areas including loading/unloading spaces, or similar areas that serve commercial delivery trucks, semi-trailers, and similar vehicles that are not located within the interior of the building shall be designed to include screen walls, landscaping, and other treatments to limit the visibility of the service area to the adjacent boundary or public street.

H. **Right-of-way.** Service areas shall be located outside public right-of-way and indicated by signage.

I. **Size.** Loading and unloading space for vehicles which can fit in parking space sizes outlined in *Chapter C.2.4.* shall be the same size as the minimum parking space. For uses that require commercial delivery trucks or semi-trailers and similar vehicles which cannot fit into the minimum parking space size, loading/unloading spaces shall be made to accommodate the typical commercial delivery vehicle. The expected typical size of vehicles shall be included with any loading/unloading plan. Provisions shall be made to accommodate the range of anticipated vehicles.

J. **Combined Off-street Loading.** Collective, joint, or combined provisions for off-street loading facilities for two or more buildings or uses may be made, provided that such off-street loading facilities are equal in size and capacity to the combined requirements of the several buildings or uses and are designed, located, and arranged to be usable thereby.

K. **Number of Spaces.** Minimum off-street loading/unloading spaces are outlined in *Table C.2.6.*

Table C.2.6 Required Loading/Unloading Spaces	
Gross Floor Area (Square Feet)	**Number of Spaces**
Multi-family buildings (per building basis)	Less than 20 units per building = 0 21+dwelling units per building = 1
5,000 to 25,000	1
Over 25,000 to 60,000	2
Over 60,000 to 120,000	3
Over 120,000 to 200,000	4
Over 200,000 to 290,000	5
Notes: One additional off-street loading space for each 90,000 sq. ft. over 290,000 sq. ft. or major fraction thereof is required. Provisions shall be made to ensure anticipated sizeof vehicles for loading/unloading can be accommodated in the required number of spaces.	

3. SIGNS

3.1 INTENT

The purpose of sign regulations is to encourage the effective use of signs as a means of communication in the City of Sumter. Sign regulations also serve to maintain and enhance the aesthetics of the community, minimize the possible adverse effects of signs on nearby properties, and enable fair and consistent enforcement of these regulations. A sign may be erected, placed, created, or maintained in the City only in conformance with the standards, procedures, and requirements of these regulations.

3.2 GENERAL PROVISIONS

A. **General Provisions.** These regulations are designed to:

1. Establish a permit system that allows a variety of types of signs in the City's districts.
2. Provide for temporary signs in limited circumstances;
3. Prohibit all signs not expressly permitted in these regulations;
4. Require a sign plan to be submitted along with each site plan as part of the initial steps in the planning process;
5. Require all on-premise non-conforming signs on a zoned lot to come into compliance with the Sign Ordinance when abandoned, as specified in *Chapter C.3.8.A.* regardless of any other provisions established elsewhere for amortization. No sign shall be altered, replaced, converted, changed, or modified except in accordance with the requirements of this UDO, unless otherwise exempted. Specific standards for overlays may also be required, as specified in Chapter B.11.

3.3 PERMANENT SIGN LOCATIONS

A. **Permanent Signs Allowed on Private Property.**

1. **Sign types**: Sign types allowed on private property in the City of Sumter are set forth in *Chapter C.3.10.*
2. **Public Signage**: Permanent signs erected by or on behalf of the City of Sumter, Sumter County, the State of South Carolina, the Federal Government or public educational institutions (including universities, colleges, and school districts) are allowed under the following conditions:
   (1) **Public Purpose.** Signage must serve a public purpose, such as identifying government facilities, providing public information, or supporting civic engagement.
   (2) **Exemption from Size and Quantity Limits.** Signage erected by or on behalf of a public entity shall not be counted against the total number or square footage of signs otherwise allowed for a parcel.
   (3) **Safety Placement.** Signage must be placed outside of sight triangles to ensure visibility and traffic safety.
3. **Transit Signage:** Transit signage may be mounted on poles or attached to shelters, benches, or other structures/amenities to indicate transit stop locations, hours of operation, routes, contact information, and off-premises marketing panels. 1 off-premises marketing panel is permitted per transit stop location and shall not exceed 14 sq. ft. for a standalone bench or 88 sq. ft. for a transit shelter.

B. **Permanent Signs Allowed on Public Property or Public Street Right-of-Way.**

1. **Government**. Permanent signs erected by or on behalf of the City of Sumter, Sumter County, the State of South Carolina, or the Federal Government identifying public property, public information, and directing or regulating pedestrian or vehicular traffic;
2. **Public Utilities.** Informational signs of a public utility regarding its poles, lines, pipes, or facilities;
3. **Public Educational Institutions.** For the purposes of this ordinance, public educational institutions shall be considered public entities. Signage erected by or

on behalf of such institutions must comply with the above standards and may include wayfinding, campus identification, and event promotion signage, provided it meets applicable zoning and safety requirements.

4. **Transit Signage.** Transit agency signage mounted on a pole and/or attached to shelters, benches, or other structures/amenities that indicate transit stop locations, hours of operation, routes, contact information, and off-premises marketing panels for the exclusive use of the Authority. 1 off-premises marketing panel is permitted per transit stop location which contains a bench or shelter and shall not exceed 14 sq. ft. in area for a stand-alone bench or 88 sq. ft. in area for a transit shelter.

3.4 PERMANENT SIGN GENERAL STANDARDS

A. **Design**. Signs shall be constructed from weather resistant long-lasting materials specifically engineered for signage to ensure longevity and performance. All signs shall be constructed in a professional manner. Fluorescent, metal flake or iridescent colors are prohibited. Ground signs shall include base, cap and column in their design. Signs within overlays shall be subject to additional standards including architectural styles, treatments/finishes, color(s), location, and size. Refer to *Chapter B.11.* for additional standards.

(1) Fluorescent colors except where part of a logo, trademark or similar, are prohibited.

(2) All signs shall be erected in compliance with building, electrical, and fire codes, and shall comply with the following standards:

(1) Supports and braces shall be designed as an integral part of the sign structure and be hidden from public view to the extent technically feasible.

(2) Audio components are prohibited as part of any sign with the exception of drive-through menu signs.

(3) Signs shall be securely fastened per building code requirements so that the sign cannot be moved by wind or other forces of nature.

(4) Signs cannot have intentional moving components, i.e. spinning restaurant signs.

B. **Signage Plan.** Signage plans, as may be required, intend to allow an orderly process to provide for signs which are integrated and contextually designed to enhance the buildings and site which they occupy.

C. **Location.** Types of signs authorized by this Section are permitted in zoning districts as provided in *Table C.3.1.* and *Table C.3.2.*

1. No sign structure shall obstruct any cross-visibility (see *Chapter A.5)* area or traffic control device.
2. In the visibility sight triangle, no ground sign may exceed 30 inches in height above the established grade of the street property line, unless the sign is setback

a minimum of five feet from the street right-of-way. No sign shall impede pedestrians or motorists on or off the premises.

D. **Illumination.** Outline or strip lighting, neon tube, animated, flashing or changeable illumination shall not be permitted. Illumination in signs may not impair the vision of motor vehicle drivers. All permanent signs may be non-illuminated or illuminated by internal or external illumination.

1. **External Illumination.**
   (1) Supports and braces shall be designed as an integral part of the sign structure and be hidden from public view to the extent technically feasible.
   (2) Only stationary and shielded light sources directed solely onto the sign are permitted.
   (3) External illumination shall not shine or provide glare directly on rights-of-way or adjacent residential uses.
   (4) Flashing and intermittent lights are prohibited. Window signs, interior tube lighting, and/or illumination along windows or signs located within an establishment are exempt from this requirement only if the illuminated area of the sign or lighting feature is less than 4 square feet in total surface area. Square footage shall be measured as the cumulative illuminated surface visible from the exterior, including any portion of the sign or lighting that emits light through a window or transparent surface.
   (5) Outline, strip lighting, and neon tube lighting on the exterior of sign structures, corners, eaves, ridges, fascia or other portions of buildings or structures is prohibited. Temporary decorative signs associated with federally recognized holidays shall be exempt from this standard.

2. **Internal Illumination**.
   (1) Only illumination with a designation of "white" or "daylight" shall be emitted.
   (2) Poles and other supporting structures shall not be internally illuminated.
   (3) Illumination in signs shall not impair the vision of motor vehicle drivers.
   (4) Signs shall not exceed 0.2 footcandles at the property line.

E. **Landscaping.** Ground signs shall be placed in a landscaped setting appropriate to the size and scale of the sign, and character of the site. Landscaping shall comply with *Chapter C.5.*

F. **Design Alternatives.** The Planning Commission may grant design alternatives to a sign design standard set forth in this Ordinance if:

1. The request is included as part of a signage plan for a development. A signage plan shall be submitted concurrently with a site and development plan and shall, at minimum, include the number of signs, types of signs, sizes of signs, heights of signs, setbacks for signs, location of signs, sign designs, and illumination of signs.
2. The design alternative is consistent with the stated intent of the design standard at issue;
3. The design alternative achieves or implements the stated intent to the same degree or better than strict compliance with the standard would achieve; and
4. The design alternative will not result in adverse impacts on properties abutting the site.
5. The design alternative utilizes a sign type and/or feature that is historic.

3.5 PROHIBITED SIGNS

A. **Prohibited Signs:**

1. Any sign displaying intermittent or flashing illumination or lights of changing degrees of intensity. However, reader boards may communicate an electronic message provided that the message does not change more than every 2 seconds.
2. Signs placed or painted/wrapped on a motor vehicle, trailer**,** or other object and parked with the primary purpose of providing a sign not otherwise allowed by this Ordinance;
3. Inflatable signs;
4. Pennants and fluttering devices, except feather flags as regulated in *Chapter C.3.12.*
5. Any sign erected in such a manner as to obstruct the vision of or constitute a hazard to motorists and or pedestrians.
6. Signs which contain or are an imitation of signs used in a public safety warning or traffic signs as regulated by the current edition of the *Manual on Uniform Traffic Control Devices (MUTCD)*.
7. Portable signs other than sandwich board signs which are permitted as a temporary sign in this Section.
8. Signs displaying an obscene or pornographic message.
9. Signs erected in the right-of-way of any street, road or public way, or signs overhanging or infringing upon the right-of-way of any street, road, or public way, except as specifically provided by this Section.
10. Signs erected on public property unless otherwise authorized by this Section.
11. Signs that prevent free ingress or egress into or from any door, passable window or fire escape. No sign shall be attached to a standpipe or fire escape.
12. Roof signs that are constructed upon a roof or roof-mounted structure, except where specifically permitted by terms of this Section. Those signs that are placed or mounted on a mansard roof are not considered prohibited roof signs but may be permitted as a building sign.

3.6 CALCULATION OF SIGN AREA

A. **Calculating Sign Area.** The area of a sign shall include all lettering, wording, designs and symbols, together with the background, whether open or enclosed, on which they are displayed. The supporting structure or bracing of a sign shall be omitted in measuring the area of the sign unless such structure or bracing is made part of the message or face of the sign. Calculating sign area shall comply with the following standards:

1. Where a sign consists of individual letters, words or symbols attached to a building, canopy, awning or wall and all such elements are located in the same plane, the sign area shall be the area of the smallest rectangle which completely encompasses all such letters, words or symbols and any accompanying background of a color different than the natural color of the wall. Where such sign includes multiple words, each word located in the same plane shall be computed separately.
2. Channel letter signs, mounted logos, and similar devices are treated differently than signs in cabinets. The wall area between multiple elements does not count as sign area.
3. The area for a sign with more than 1 face shall be computed by adding together the area of all sign faces, except where the angle at which the two sign faces are placed does not exceed 60 degrees.
4. It is presumed that where sign faces are placed less than 60 degrees apart, both faces are not readable from any one point.
5. The entire surface area of a multitenant sign that depicts the names of the individual tenants shall count toward the total aggregate area of the sign.
6. The height of a sign shall be computed as the distance from the ground at the base support of the sign to the top of the highest attached component of the sign.

Figure C.3.1 Determination of Sign Area

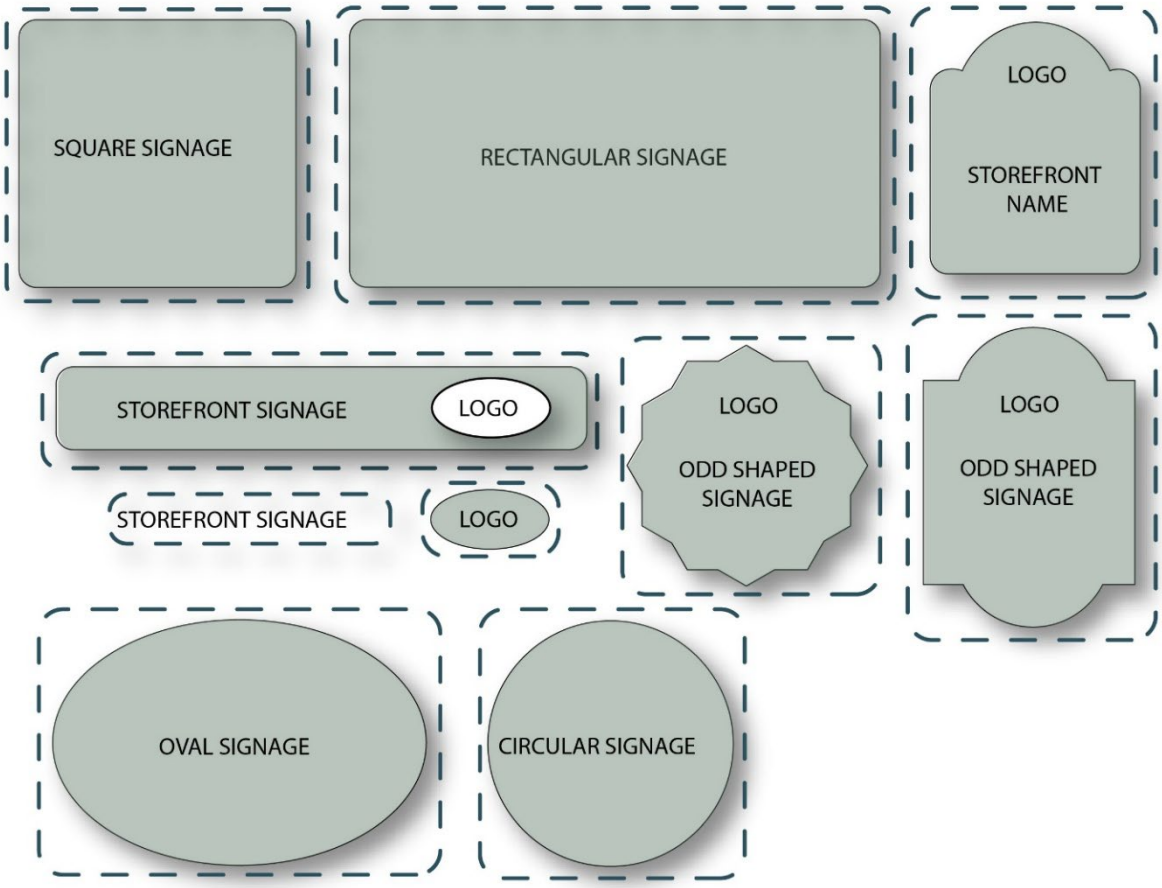
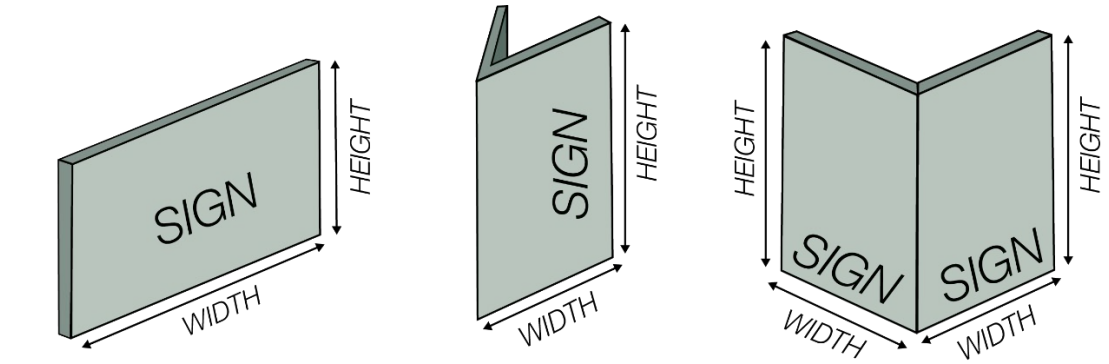


Figure C.3.2 Diagram of Multiple Faces on a Sign



2 SIDED FLAT SIGN (WIDTH x HEIGHT = SIGN AREA)

2 SIDED ANGLED SIGN (WIDTH x HEIGHT = SIGN AREA)

2 SIDED ANGLED SIGN (WIDTH x HEIGHT = SIGN AREA)

Figure C.3.3 Sign Area Calculation for Multiple Signs on Single Pole

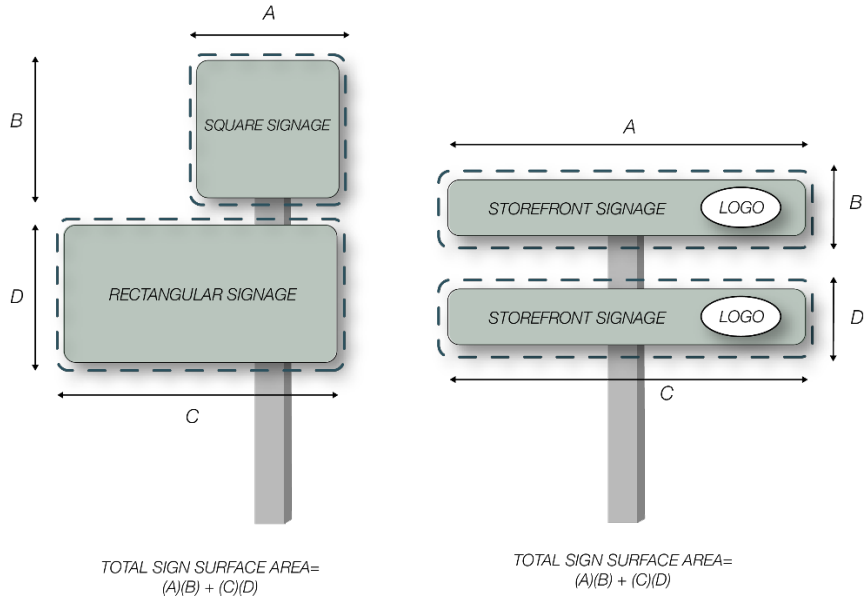
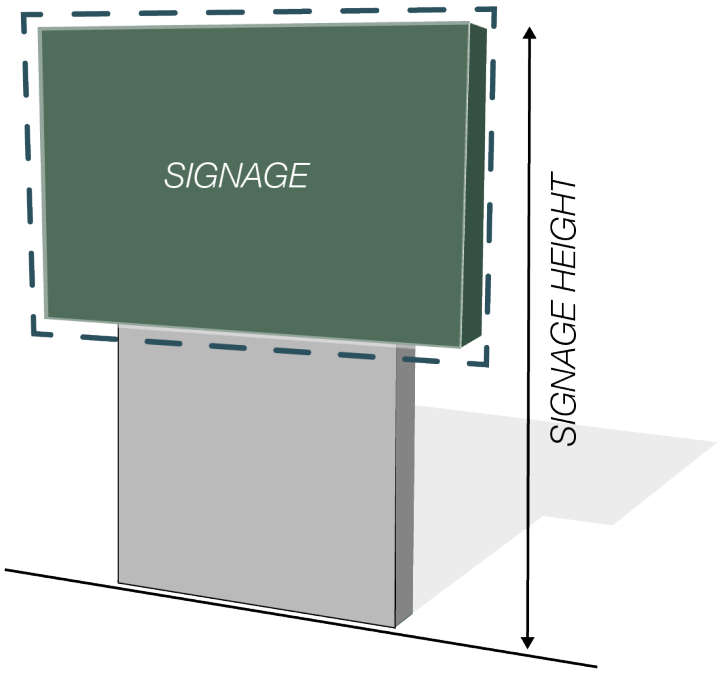


Figure C.3.4 Sign Height Diagram



3.7 SPECIAL PURPOSE SIGNS

A. Special purpose signs are permitted in accordance with the following guidelines.

B. **Fueling Canopy Signs:** Permanently attached Fueling Canopy Signs, provided the sign:
   1. Covers no more than 20% of the canopy's surface area, or
   2. Covers no more than 10% of the ground floor area beneath the canopy, whichever is less.

C. **Commercial/Industrial Site Directional Signs.** Directional signs for commercial/ industrial sites are allowed and shall not count against the total signage allowed on a lot. The total sign area shall not exceed 8 sq. ft per sign and the maximum height shall not exceed 6 feet above grade.

D. **Automobile Franchise Signs:** In addition to the number of free-standing signs otherwise permitted on a lot, automobile dealerships shall be allowed 1 additional freestanding sign per new vehicle franchise or brand sold on the premises, subject to the following conditions:
   1. Each franchise sign shall be limited to a maximum area of 200 sq ft.
   2. All franchise signs shall comply with the height, setback, and design standards established in this Ordinance for freestanding signs.
   3. Reader boards, digital displays, or changeable copy panels shall not be permitted on automobile franchise signs.
   4. Each automobile franchise sign shall clearly identify only the brand or franchise it is intended to represent.

E. **Canopy Signs**. Canopy Signs may include permanently attached signage that exceeds the standard signage limits for the lot, as long as the sign:
   1. Covers no more than 20% of the canopy's surface area, or
   2. Covers no more than 10% of the ground floor area beneath the canopy, whichever is less.
   3. In all cases, the total signage on the canopy must not exceed 130 square feet.

F. **Drive-Through Menu Signs.** For each establishment that utilizes a drive-through lane, a maximum 2 drive-through menu signs shall be allowed for each drive-through lane.
   1. Each drive-through sign may be either a freestanding monument sign or an attached sign and shall not exceed 40 square feet in sign area and 10 feet in height.
   2. Drive-through signs shall be in addition to the freestanding and attached signage otherwise allowed pursuant to the other provisions of this Section.
   3. Drive-through signs shall require a permit.

G. **Off-Premise Outdoor Advertising Structures (Billboards).** Defined as a sign that communicates the availability of goods, services and ideas not necessarily available on the premises on which the sign is located.
   1. **Permitted Locations**. Off-premise advertising signs (a.k.a. billboards) are permitted only in LI-W and HI districts. The Planning Commission may also allow off-premise advertising signs within the Corridor Protection District (CPD) regardless of zoning district.
   2. **Design**. Structures shall be designed and constructed with single steel pole structural support designed to meet the wind load requirements of the latest adopted building codes;
   3. **Digital and Electronic Changing Messages**. Digital and Electronic Changing message signs are permitted subject to the provisions in *Chapter C.3.C.H.*
   4. **Spacing between Billboards.** Billboards must be separated by at least 1,000 ft. on the same side of the street or 700 ft. on the opposite side of the street. The distance between advertising signs shall be measured along the centerline of the street or highway on which the signs have common frontage, and between perpendiculars to such centerline drawn from the sign to the centerline of each street.
   5. **Size**. Maximum square footage of billboard signs shall be 300 ft. regardless of zoning district. An additional 60 sq. ft. of sign face area will be allowed for embellishments.
   6. **Setback.** Leading edge of sign must be a minimum of 10 ft. from all property lines.

7. **Height**. Maximum height shall not exceed 35 ft. above the average roadway grade level. Sign embellishments may extend up to 4 ft. above the highest point of any existing sign and up to 2 ft. from the sides of any existing sign but may not project into the setback.
8. **Lighting**. Lighting for outdoor advertising signs shall be indirect, non-flashing.
9. **Separation Criteria**. All new billboards in the City shall not be closer than 1,000 ft. measured in a direct line to any entrance to a residential subdivision, locally designated design overlay district, historic building, Downtown Transition (DTT) district or the Downtown Core (DTC) district.

H. **Digital and Electronic Changing Message Signs.**

1. Digital and Electronic Changing message signs are permitted subject to the following provisions:
   (1) **Change Interval.** All messages, images or displays on a digital sign or electronically changing message sign shall remain unchanged for a minimum of 6 seconds.
      a. The time interval used to change from one complete message, image or display to the next complete message, image or display shall be a maximum of 1 second.
   (2) **Fading.** There shall be no appearance of a visual dissolve or fading, in which any part of 1 message, image or display appears simultaneously with a part of a 2nd message, image or display.
   (3) **Motion.** There shall be no appearance of flashing or sudden bursts of light, and no appearance of video motion, animation, movement or flow of the message, image or display within the sign.
   (4) **Intensity and Contrast.** The intensity and contrast of light levels shall remain constant throughout the sign face.
   (5) **Day/Night Dimming.** Each digital sign or electronically changeable message sign shall be equipped with automatic day/night dimming software, to reduce the illumination intensity of the sign from 1 hour after sunset to 1 hour prior to sunrise.

(6) **Lighting Levels.** The following are the criteria for lighting levels for digital display signs and electronically changing message signs:

a. Lighting Levels may not increase by more than 0.3 foot candles over ambient levels as measured using a foot candle meter at a distance of 150 ft. from the sign face.

b. Each digital display or electronically changing message sign shall include a light-sensing device that will adjust the brightness as ambient light conditions change.

I. **Flagpoles and Flags.**

1. The term "flag" in this Section shall mean a piece of fabric or other flexible material solely containing distinctive colors, patterns, standards, words, or emblems used as a symbol of an organization or entity, including but not limited to political jurisdictions, such as the United States. References to flagpole height in this Section refer to vertical flagpoles and shall be measured from ground level. References to the number of flags and flagpoles and flag dimensions refer to both vertical flagpoles and mast arm flagpoles (for example, staffs extending at an angle from a building).
2. Except as otherwise provided herein, flags shall be displayed on flagpoles. Such poles in all zoning districts shall not exceed the allowed building height of the zoning district. 3 flags per lot may be displayed by hanging or painting on the exterior of a structure in addition to flags permitted on flagpoles. No permits or fees are required for flags.
3. The maximum dimensions of any flag shall be proportional to the flagpole height. The hoist side of the flag shall not exceed 20% of the vertical height of the pole.
4. Mast arm flagpoles shall not exceed 10 ft. in length, and the hoist side of the flag shall not exceed 40% of the length of the pole. Mast Arm poles are from 10 degrees from vertical to horizontal.
5. A maximum of 9 flagpole flags may be displayed on one lot. Not more than 3 flags may be displayed per pole, not more than 3 flagpoles on one lot.
6. Noncommercial flags permitted by this Section are allowed in addition to the maximum sign area permitted by applicable district regulations.

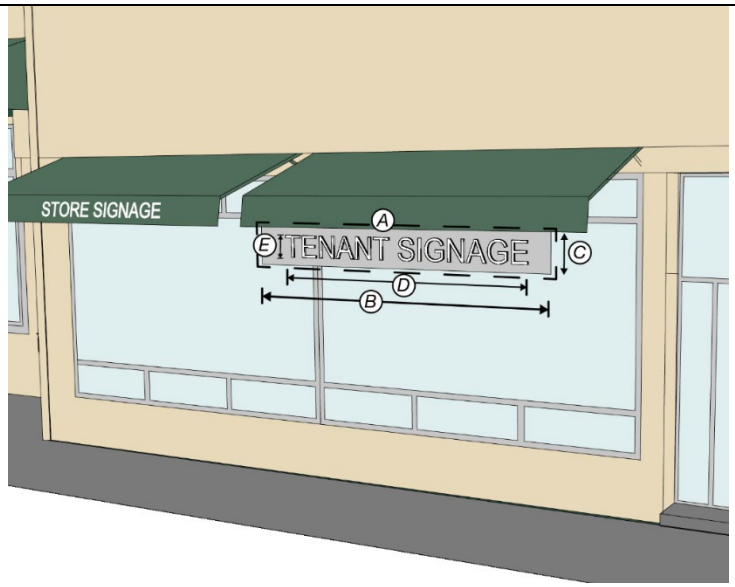
7. A Flag displaying a logo, message, statement, or expression relating to commercial interests is subject to all applicable sign regulations.
8. A vertical flagpole must be setback from all property boundaries a distance which is at least equal to the height of the pole.
9. Flags and flagpoles shall be maintained in good repair. Flagpoles with broken halyards shall not be used and flags which are torn or frayed shall not be displayed. The flagpoles shall be made of durable, structurally sound materials.
10. No permit or fee is required for flags meeting the requirements of this Section.
11. There shall be no maximum flag size, or number, or other limitations on manner of display on Federal and/or State-designated holidays other than public safety restrictions set forth elsewhere for visual clearance and at intersections.
12. Federal, State, and Local Government buildings and uses are exempt from all standards outlined in *Chapter C.3.6.H.*

3.8 PERMITTED SIGN TYPES (PERMANENT)

Permitted Sign Types. This Section provides description, locational standards, size standards, and any other required information for each sign type. Graphic illustrations for permitted signs are provided for reference and context; illustrations are for example purposes only. Text shall take precedence over any conflict with illustrations. All permitted sign types require a permit.

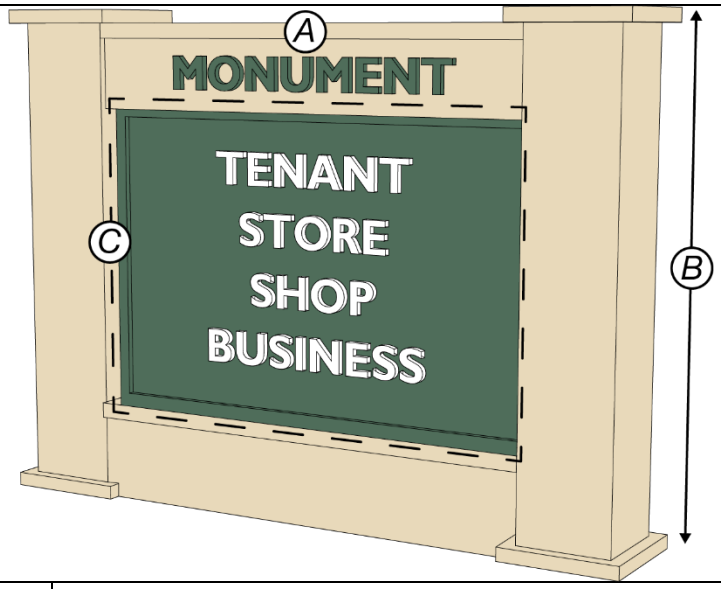
A. Awning Signs (*Figure C.3.5.)*
B. Monument Signs (*Figure C.3.6.)*
C. Neighborhood or Subdivision Signs *(Figure C.3.7.)*
D. Projecting Signs *(Figure C.3.8.)*
E. Wall Signs *(Figure C.3.9.)*
F. Directory Signs *(Figure C.3.10.)*
G. Window Signs *(Figure C.3.11.)*
H. Pole Signs *(Figure C.3.12.)*

Figure C.3.5 Awning Signs



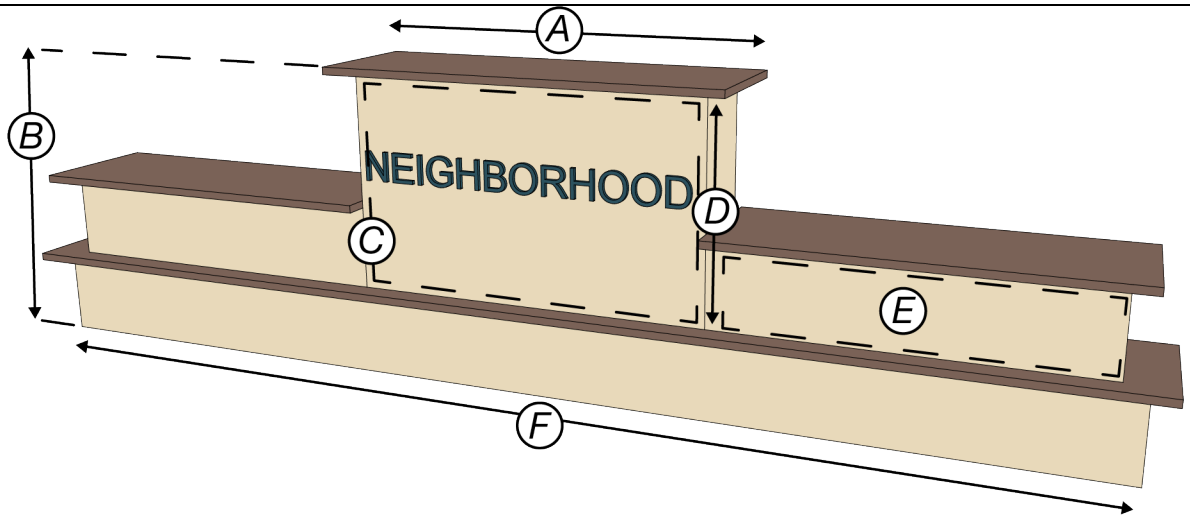
1. Description	An on-premise attached awning extending from the building with attachedsignage.
2. Location	Awning signs shall have a minimum clearance of 8 ft from the surface below and a maximum height of 4 ft. above the clearance.
3. Size	Sign Area and Height: A. Sign Area: Maximum 20% of awning. B. Clearance: Minimum 8 ft. C. Length: Maximum 12 ft. Subject to encroachmentstandards in *Chapter B.12.i.*
4. Miscellaneous	Signs shall not extend outside the overall length or width of an awning orextend above the height of the building wall that the awning is attached. Shall not be illuminated or back-lit.

Figure C.3.6 Monument Signs



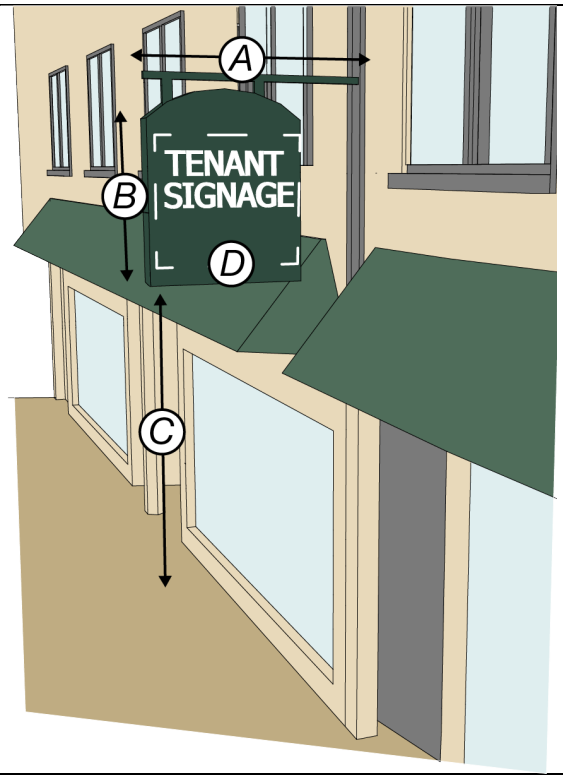
1. Description	A freestanding ground sign with a supporting structure. A monument sign is not attached, supported or suspended to orfrom any building or structure. All monument signs shall include base, cap, and columns. All ground signs shall be in the form of monument signs and include the physical address on the sign.
2. Location	1 sign per frontage maximum.
3. Size	Sign Area and Height: A. Sign Width: Maximum 10 ft. B. Column Height: Maximum 15 ft. C. Sign Area: Maximum 75 sq. ft. D. Column Width: Maximum 16 in. E. Column Length: Maximum 18 in..

Figure C.3.7 Neighborhood or Subdivision Signs



1. Description	A freestanding ground sign identifying entry to a mixed-use district, neighborhood, or a residential subdivision. All neighborhood or subdivisionsigns shall be in the form of monument signs.
2. Location	1 sign per entrance (e.g. median sign) or 2 wall signs either side of entrance.Additional signs may be permitted as a design alternative. ROW Encroachment allowed with administrative approval.
3. Size	Sign Area and Height: A. Sign Area Width: Maximum 8 ft. B. Total Sign Height: Maximum 7 ft. C. Sign Area: Maximum 40 sq. ft. D. Sign Height: Maximum 5 ft. E. Sign Exposed Material: Maximum 80 sq. ft. per side. F. Sign Structure Overall Width: Maximum 25 ft.
4. Wall/Fence Signs	Neighborhood or subdivision signs may be placed on a subdivision wall orfence. The sign area is not to exceed 40 sq. ft. per face.

Figure C.3.8 Projecting Signs

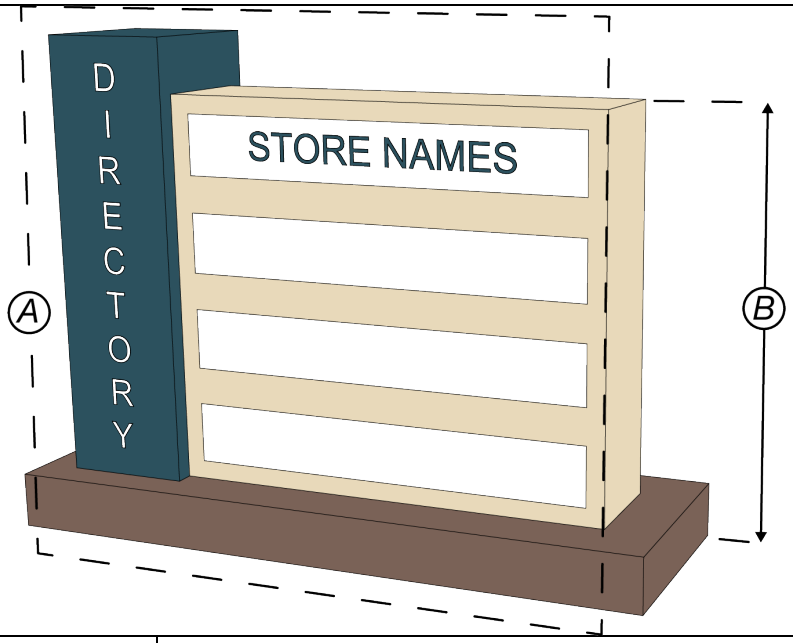


1. Description	A sign attached directly to a supporting building wall and intersecting the buildingwall at a right angle. A projecting sign may be 2 or 3-dimensional.
2. Location	1 projecting sign per business.
3. Size	Sign Area and Height: A. Sign Length: Maximum 3 ft. B. Sign Height: Maximum 3 ft. C. Clearance: Minimum 8 ft. D. Sign Area: Maximum 9 sq. ft.
2. Miscellaneous	Projecting signs erected at building corners may intersect at a 45-degree angle tothe corner of the building, in which case only 1 projecting sign is allowed. No projecting sign is allowed to extend above the roof line or the parapet wall. Buildings with 2 or more stories may not have a projecting sign located higherthan the second story.

Figure C.3.9 Wall Signs

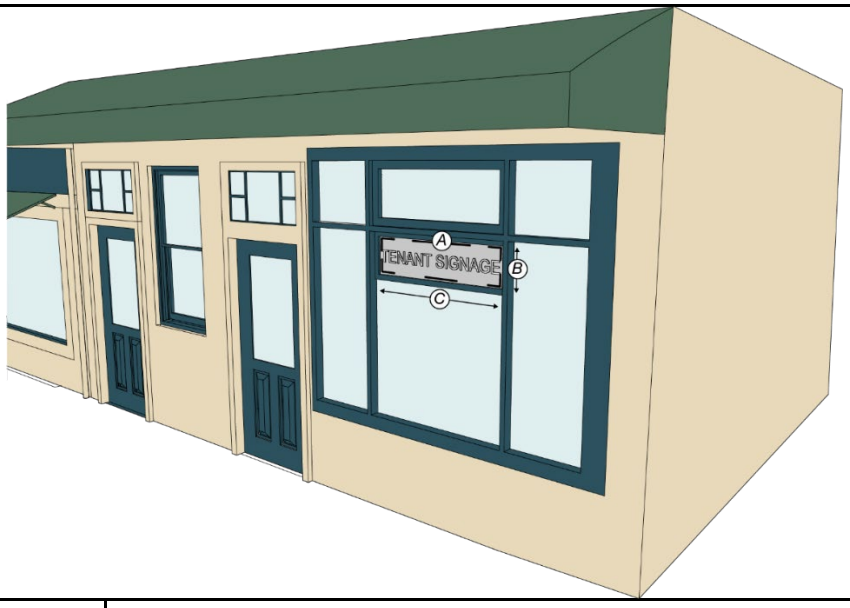
1. Description	An on-premise sign attached directly to a building wall above the given store front place. A wall sign shall include murals conveying the name ofa business or a commercial message. A wall sign shall not extend more than 18 inches from the building.
2. Location	Directly above store located on the supporting building wall. Wall signsare not allowed to extend above the roof line or the parapet wall.
3. Size	Sign Area and Height: A. Sign Area: 1.5 sq. ft. for each linear foot of building frontage,maximum 400 sq. ft. B. Length: 1 ft. Per Linear Foot of Building Frontage, up to amaximum of 100 ft. C. Height: Maximum 4 ft.

Figure C.3.10 Directory Signs



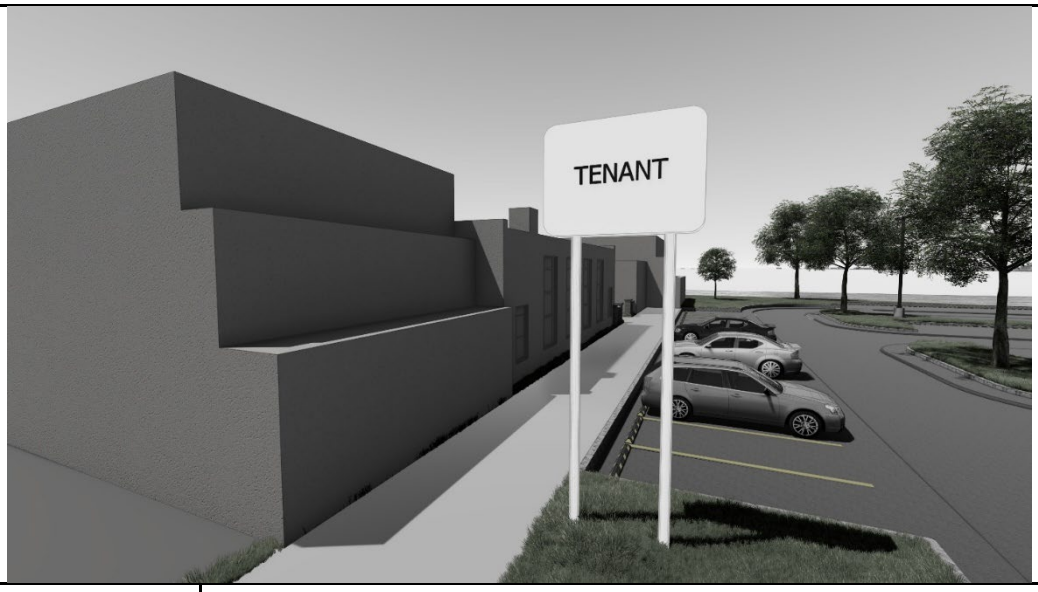
1. Description	A directory sign is a freestanding ground sign, located at the beginning or end of a commercial area, listing the store names and/or a directional sign. Adirectory sign is not attached, supported or suspended to or from any building or structure. A directory sign is intended primarily for pedestrian orientation, dissimilar to a monument sign which is intended primarily for vehicular orientation.
2. Location	Developments less than 10 acres in size may have up to 2 directory signs;developments greater than 10 acres in size may have one additional Directory Sign for each 10 acres.
3. Size	Sign Area and Height: A. Area: Maximum 20 sq. ft. for directory signs. Directional signs maybe a maximum 4 sq. ft. B. Height: Maximum 4 ft.

Figure C.3.11 Window Signs



1. Description	A window sign is an on-premise sign attached flat but parallel to the inside of awindow or is within 1 ft. of the inside of the window.
2. Location	Window signs may only be placed on windows with primary street frontage.
3. Size	Sign Area and Height: A. Area per business (max combination of all windows covered by sign): 25%. B. 2 ft. in height C. 10 ft. in width
4. Miscellaneous	No more than 2 total are permitted for any building/tenant. Window signs located along the same building frontage shall be limited to the maximum size provided in Sign Area (A) total. Window signs located in the upper story(s) may increase A and B by 10%

Figure C.3.12 Pole Signs



1. Description	A pole sign is a detached sign elevated in the air by a 1 or 2 pole support structure.
2. Location	No portion of a pole sign may extend into the public right-of-way
3. Size	Sign Area and Height: A. Maximum sign area: 40 sq. ft. per pole sign B. Maximum height: 15 ft., measured from grade and including: 1. Pole 2. Base or apron 3. Supporting structures 4. Trim or architectural features
4. Miscellaneous	1 freestanding sign per lot. With an approved sign plan: A. 2 freestanding signs may be permitted B. Only 1 may be a pole sign

3.9 SPECIAL CIRCUMSTANCES

A. **Nonconforming Signs.** Standards for Nonconforming Signs. Nonconforming signs in any district shall not be altered or moved except as otherwise permitted by this Section. Normal maintenance of signs, including repainting or repair of the existing sign face and/or sign structure, shall not be considered an alteration. Any other changes to the sign face or sign structure shall constitute an alteration of the sign. Any nonconforming sign structure which is moved, removed, or altered voluntarily or involuntarily, must be brought up to the standards of permitted sign types in this Section.

B. **Abandoned and Unsafe Signs.** Any abandoned and unsafe sign shall be repaired or removed within 30 days of written notification from the Zoning Administrator or their designee.
   1. No longer advertises a bona fide business or product,
   2. Is abandoned or unsafe, or
   3. Is visibly deteriorated, broken, or damaged—including missing or shattered sign faces on active business premises.

C. **Severability.** Each provision in *Chapter C.3.* is intended to be individually severable, such that, if any portion of *Chapter C.3. is* determined by a court of competent jurisdiction to be invalid, such determination shall not affect the validity of the remaining portions of *Chapter C.3.*

3.10 PERMITTED AREA AND NUMBER OF SIGNS

The maximum area of all building signs shall not exceed the standards outlined in this Section. Additional specific standards are required for each sign type per *Chapter C.3.7.*

A. **Non-Residential Districts.** All permitted building signs in non-residential districts shall not exceed the standards in *Table C.3.1.* are required for each sign type per *Chapter C.3.*

B. **Residential Districts.** All permitted building signs in residential districts shall not exceed the following standards:

   1. Building signs for permitted uses in residential districts shall not exceed 25 square feet in sign area.

Figure C.3.13 Illustrative Example of Building Signage Types

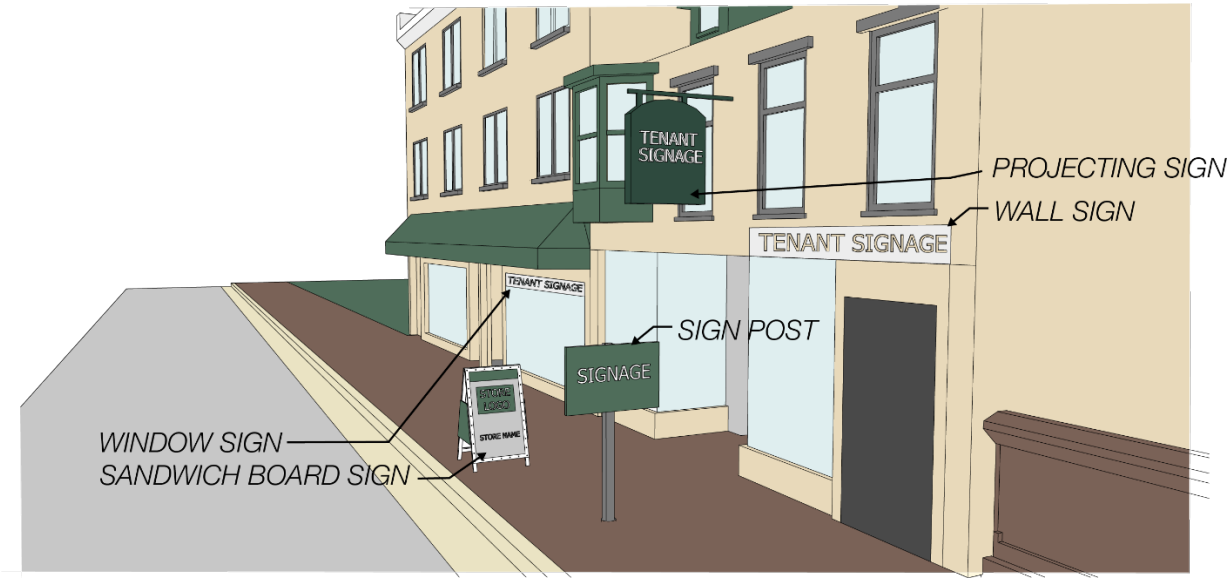


Table C.3.1 Permanent Sign Area and Number By Zoning District					
	Free-Standing Signs				Wall Signs
Zoning Districts	Max Area (per sign)	Number [1,2,3]	Height	Setbacks	Max Area (Percentage of Wall Area)
R-15, R-9, R-6, GR, RMF	40 sq. ft. (non-residential use, subdivision, multi-family apartment, group housing, attached housing, cluster housing, or manufactured home park)	1	20 ft	5 ft.	10%
PO	1 sq. ft. per linear foot of street frontage (max 50 sq. ft.)	1	15 ft	10 ft	10%
NC	1 sq. ft. per linear foot of street frontage, (max 200 sq. ft.)	1	15 ft	5 ft	10%
LC	1 sq. ft. per linear foot of street frontage (max 200 sq. ft.)	1	30 ft	10 ft	10%
GC	1 sq. ft. per linear foot of street frontage (max 200 sq. ft.)	1	30 ft	10 ft	10%
LI-W	1 sq. ft. per linear foot of street frontage (max 150 sq. ft.)	1	15 ft	10 ft	5%
HI	1 sq. ft. per linear foot of street frontage (max 150 sq. ft.)	2	15 ft	10 ft	5%
AC	1 sq. ft. per linear foot of street frontage (max 100 sq. ft.)	1	10 ft	10 ft	10%
CP	1 sq. ft. per linear foot of street frontage (max 36 sq. ft.)	1	10 ft	10 ft	10%
DTC	1 sq. ft. per linear foot of street frontage (max 50 sq. ft.)	1	15 ft	5 ft	25%
DTT	1 sq. ft. per linear foot of street frontage (max 50 sq. ft.)	1	15 ft	5 ft	25%
IG	1 sq. ft. per linear foot of street frontage (max 100 sq. ft.)	2	15 ft	5 ft	25%

Notes:

1. **Corner Lots:** Lots fronting on 2 or more streets are allowed the permitted free-standing signage for each street frontage but permitted signage area cannot be accumulated and used on 1 street in excess of that allowed for lots with only 1 street frontage.
2. **Combination of Wall Signage Prohibited**: Permitted wall signage area cannot be accumulated or pro-rated for any single wall that would permit wall signage more than the stated wall area % maximum.
3. **Shopping Centers**: Shopping Centers shall be allowed 2 free-standing signs per street front; provided that the gross floor area of the buildings which comprise the center is at least 50,000 sq. ft., and the property has at least 200 ft. of frontage on the secondary street front earning the second sign. Each freestanding shopping center sign shall not exceed 350 sq. ft. Wall-mounted signs shall be limited to 10% of the storefront to which the sign is attached.
4. **Industrial Zoned Sites**: Industrial sites shall be allowed 2 free-standing signs per street front for parcels with more than 200 linear feet of frontage.

3.11 PERMITTED SIGN TYPES BY ZONING DISTRICT

Table C.3.2 Permitted Sign Types By Zoning District for Non-Residential Uses

	ZONING DISTRICTS																			
PERMITTED SIGNS		R-15	R-9	R-6	GR	RMF		PO	NC	LC	GC		LI-W	HI		AC	CP		DTC	IG	DTT
BUILDING SIGNS	RESIDENTIAL DISTRICTS						COMMERCIAL DISTRICTS					INDUSTRIAL DISTRICTS			SPECIAL PURPOSE			MIXED USE DISTRICTS			
Wall		P	P	P	P	P		P	P	P	P		P	P		P			P	P	P
Canopy/ Awning		P	P	P	P	P		P	P	P	P		P						P	P	P
Projecting											P								P	P	P
FREESTANDING																					
Monument		P	P[2]	P	P[2]	P[2]		P	P	P	P		P	P		P	P		P	P	P
Subdivision		P	P	P	P[2]	P[2]		P	P	P	P		P	P		P	P		P	P	P
Pole/Pylon		P	P	P	P[2]	P[2]		P	P	P	P		P	P		P	P			P	
OTHER SIGNS																					
Sandwich		P	P	P	P	P		P	P	P	P		P	P		P	P		P	P	P
Window						P		P	P	P	P		P	P					P	P	P

3.12 TEMPORARY SIGNS

A. **Temporary Signs.** Allowed in accordance with the following requirements:

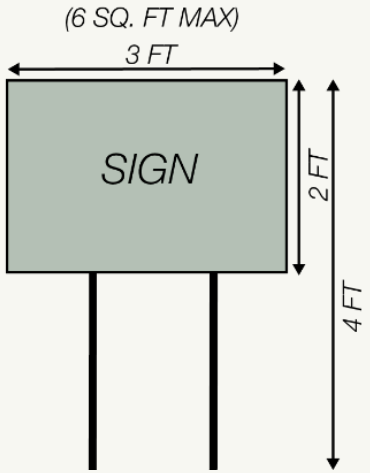
1. Minimum ground clearance is 2 feet.
2. All surfaces must be painted or laminated.
3. No temporary sign shall be illuminated, directly or indirectly
4. Shall not interfere with any cross-visibility as specified in *Chapter C.3.2*.
5. 1 sign allowed for each business per street frontage; properties which front multiple streets, shall not aggregate the temporary signs along one street frontage.
6. Minimum setbacks are 5 ft. from all property lines and outside all sight triangles.

B. **Temporary Sign Types.**

1. Sandwich Board Signs
2. Construction Signs
3. Commercial Banners
4. Campaign Signs
5. Feather Flags

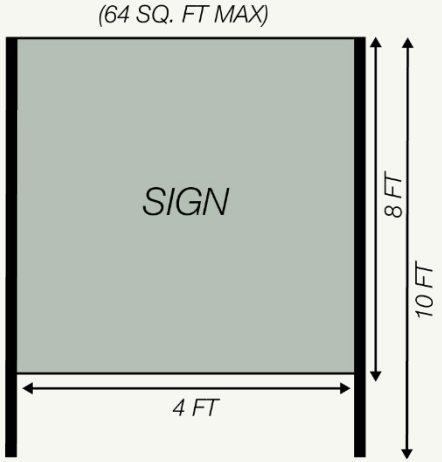
Table C.3.3. Temporary Signs	
Sign Type	**Standards**
Figure C.3.14 Sandwich Board Sign 	allowed as a temporary sign on property with a permitted commercial use. The maximum allowed sign is 6 sq. ft. per sign face (1 sign allowed per street front).
Construction Signs	
Figure C.3.15 Commercial Project Under Construction Sign 	A. **Commercial Projects.** 1 non-illuminated sign per street frontage not exceeding 32 sq. ft. with a maximum height of 10 ft. in during an active construction, alteration, or renovation project. Sign may display all project contractors, vendors, developers, architects, etc.

Figure C.3.16 Residential Contractor Sign



B. **Individual Residential Lots.** For any project under construction, alteration or renovation, individual contractor signs are permitted on premises at a rate of one 6 sq. ft. sign. Such sign(s) shall be removed no more than 30 days after a certificate of occupancy is issued for the project.

Figure C.3.17 Residential Subdivision Under Construction Sign



C. **Residential Subdivisions Under Construction.** Subdivisions under construction are allowed additional signage beyond the permanent subdivision signage subject to the following requirements:

1. Location – 1 sign at the primary subdivision entrance.
2. Size – not to exceed 64 sq. ft.
3. Maximum Height – 10 ft.
4. Illumination – signs shall not be illuminated.
5. Duration – Signs must be removed once 90% of the approved lots in the subdivision have received Certificate of Occupancy.

Figure C.3.18 Residential Real Estate For Sale/ Lease Sign

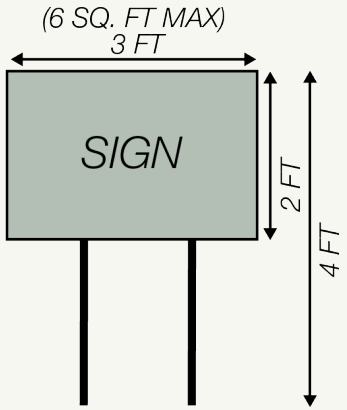
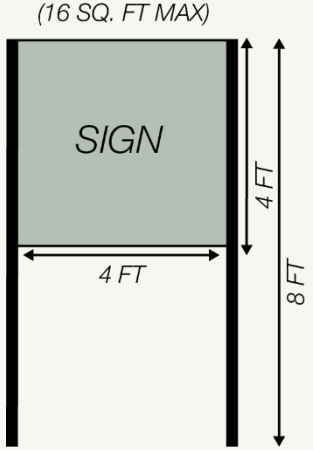


Figure C.3.19 Commercial Real Estate For Sale/Lease Sign



D. **Real Estate for Sale/Lease Signs.** Real Estate marketing signs are permitted subject to the following requirements:

1. Location: 1 sign per parcel, per street frontage.
2. Size: in residential districts (R-15, R-9, R-6, and GR), signs shall not exceed 6 sq. ft. In the AC and CP districts, parcels over 5 acres in size are permitted 1 sign per street frontage, not to exceed 16 sq. ft. In commercial and industrial districts signs shall not exceed 16 sq. ft.
3. Maximum Height: Commercial and industrial real estate signs are limited to a maximum height of 8 ft. All residential real estate signs are limited to a maximum height of 4 ft.
4. Real estate signs advertising a developer's sale of vacant residential lots shall be limited to entrances to the subdivision from a public street and limited to 16 sq. ft area and 8 feet in height.
5. All individual real estate marking signs shall be removed upon sale of the unit.
6. Signs advertising individual available tenant space in multi-tenant buildings shall not be freestanding. For multi-tenant or shopping center locations, a banner not exceeding 10 sq. ft. is permitted.
7. Duration: Real Estate marketing signs may remain for as long as the property is available for sale/lease as long as they are

	maintained in good condition and pose no threat to public safety. (1) Model Home Signs: Signs designed to indicate demonstration homes for marketing purposes in a subdivision are permitted in lieu of real estate signs and are subject to this Section. 8. Illumination: Real Estate signs shall not be illuminated. 9. All real estate signs shall be wood or metal with permanent professional copy placed on the signs. The sign structure shall be painted 1 color. Stabilizing legs may be used but may not project beyond the plane of the sign face.
Commercial Banners	A. **General Requirements (Applicable in All Districts).** 1. Banners shall not obstruct established sight triangles. 2. Maximum banner size shall not exceed 60 sq. ft. 3. Banners shall be maintained in good repair at all times. 4. Banners shall be located a minimum of 10 ft. from all property lines, except for wall-mounted banners in the DTC. 5. A maximum of 1 banner per business may be displayed at any given time. 6. A valid Temporary Sign Permit is required for all banner installations. 7. Banners shall be used for on-premises advertising only. B. **Downtown Core (DTC) and Downtown Transition (DTT).**

	1. Banners shall be affixed to building walls. 2. Banners must be maintained in a state of good repair. (1) Banners may not be used in lieu of a permanent business identification sign. (2) The display of a banner shall be limited to a period beginning no more than 30 days before the associated event and ending no more than 15 days after the event has concluded. (3) Banner shall be reviewed and approved administratively by the Director or their designee. Banners exceeding 32 sq ft shall require a SUP. (4) All banners shall comply with the general requirements set forth in *Chapter C.3.1*. B. **Commercial and Industrial Districts.** 1. Banners are allowed as a Temporary Use. Display of a banner is limited to no more than 45 days.
Campaign Signs	A. Signs in this category are specifically designed to allow non-commercial speech supporting candidates in upcoming elections for office on the local state or federal levels of government, ballot initiatives or referenda appearing on the ballot in an upcoming election, and/or voter registration. The following Sections are designed to implement the stated purpose herein while protecting

	the community against sign clutter which detracts from the appearance of the community: 1. Campaign signs are not permitted on public rights-of-way, parks, government offices, or other public properties; 2. Campaign signs placed in Agricultural Conservation, Commercial, or Industrial zoning districts may not exceed 32 sq. ft.; 3. Campaign signs placed in Residential or Conservation-Preservation zoning districts may not exceed 6 sq. ft.; 4. Campaign signs may be placed no earlier than 60 days prior to the designated date of election and must be removed within 15 days following the designated date of election. 5. A sign permit is not required for campaign signs.
Feather Flags	A. A feather flag sign is a lightweight, portable, freestanding, on-premises sign typically constructed of a single plastic or metal shaft that is affixed to the ground or a base with a pendant vertically attached to the shaft. The feather flag must advertise the business, its relevant promotion or products. Non-residential uses and subdivision model homes may have on-premises feather flags on a permanent bases subject to the following conditions: 1. Feather flag signs shall be permitted on all properties with a commercial or industrial designation (PO, NC LC, GC, LI-W, HI) and on any parcel in the AC zoning district. 2. Size. Maximum height of 12 ft.; maximum width of 3 ft.; maximum sign area of 36 sq. ft.

	3. Number. The number of feather flags permitted per parcel is based upon the following sliding scale: (1) Parcels with less than 50 linear feet of frontage measured at the primary street – 2 flags; (2) Parcels with 50 to 100 linear feet of frontage – 3 flags; (3) Parcels with 100 linear feet or more – 4 flags. 4. Setbacks. Feather flags shall meet all zoning district sign setbacks. 5. Duration. The feather flag may remain indefinitely as long as it is in good condition and is securely fastened, as determined by the Zoning Administrator.

4. LIGHTING

4.1 INTENT

A. The purpose of this Section is to regulate exterior lighting for buildings, lots, and developments. The intent of this lighting ordinance is to:

1. Require exterior lighting at minimum levels for the safety and security of motorists and pedestrians;
2. Provide standards to prevent light from excessively illuminating other properties and street rights-of-way;
3. Minimize glare;
4. Reduce light pollution;
5. Minimize other adverse impacts from light intensity; and
6. Provide security for persons and property.

4.2 APPLICABILITY

The standards of this ordinance apply to all new developments and redevelopments, except those in *Chapter C.4.2.B.1: Exemptions*. The following shall apply in instances of repairs, renovations, and/or additions:

A. **Minor.** When a building or site area is improved by 25% or less of the building or site's gross square footage, lighting subject to the standards of this Section is required only for the additional improved site area.

B. **Major.** When a building or site area is improved by greater than 25% of the building or site's gross square footage, both the additional are and existing area must conform to the lighting standards of this ordinance.

1. **Exemptions.** The following are exempt from the standards of this Section:
   (1) Lighting for residential uses that are not part of a site plan or subdivision plan;
   (2) Lighting located within public rights-of-way;
   (3) Lighting exempt from this UDO under state or federal law;
   (4) Security lighting required for public spaces as approved by City of Sumter Public Safety Officials;

(5) Lighting for permitted temporary uses, including grand openings, special events, and celebrations;

(6) Holiday displays;

(7) FAA-required lighting on buildings, telecommunication towers, or airports;

(8) Temporary lighting for construction work and/or emergency personnel; and

(9) Lighting for flags, public monuments, and public statues.

4.3 MAXIMUM ILLUMINATION

A. All required maximum lighting levels are identified, calculated, and measured in maintained foot-candles using a foot candle meter at a pre-set distance.

B. *Table C.4.1.* identifies maximum illumination values. Illumination shall not exceed the maximum illumination permitted at the edge of any lot line (i.e. property line).

C. Where a single development occupies multiple lots, the maximum illumination shall be required around the perimeter of the development.

Table C.4.1 Maximum Illumination of Property Perimeter

Use	Maximum Foot Candles (fc)
Multi-family residential	1.0 fc
Nonresidential uses	2.0 fc
Industrial and Logistics uses	3.0 fc

4.4 LIGHTING PLAN

All development reviewed in conjunction with a site plan and/or subdivision plan shall provide a lighting plan designed by the appropriate electric utility company or project engineer. The lighting plan shall be submitted for approval at the preliminary plat stage. At minimum, lighting plans shall comply with and include the requirements detailed in the applicable application form.

4.5 GENERAL DESIGN STANDARDS

A. All fixtures, except for streetlighting fixtures, must be cutoff fixtures.

B. Cutoff fixtures shall emit no direct up-light and shall project all of its light in a downward motion. All lighting fixtures shall be constructed and designed to prevent light from emitting upwards. Fixtures shall conform to the Permitted Fixture Types as identified in *Figure C.4.1*.

C. Streetlights shall be uniform throughout a subdivision or development, including the design of light fixture and color.

D. Canopy lighting fixtures shall be completely recessed within the canopy.

E. All fixtures must be incorporated into the building or site as an integrated design element using common or complementary style, material, and color.

F. Rooftop lighting of parking garages must be set back a minimum 15 feet in height from the perimeter of the rooftop parking structure.

G. Interior fixtures used to light the interior of parking garages must be shielded to prevent light spilling from the garage.

H. The maximum height of light poles shall not exceed the maximum building height for the applicable zoning district, or 25 ft., whichever is less.

I. Wall packs on buildings may be used at entrances to a building or to light potentially unsafe areas. They should not be intended to draw attention to the building or provide general building or site lighting. Wall packs shall be fully shielded, cutoff type fixtures with concealed light sources. The lighting must be directed downward.

J. Loading/unloading docks shall only be illuminated by fixtures which feature full cutoff design and shall be affixed to an outside building wall or pole.

K. All outdoor lighting fixtures not mounted on buildings (i.e. ground based) shall be located a minimum of 10 ft. from a right-of-way line or 5 ft. from an interior property line. Undergrounding service is encouraged.

L. Light fixtures shall be between 12-15 feet in height in non-vehicular pedestrian areas. An illustrative example of permitted light fixture heights is provided in *Figure C.4.2.*

M. Ornamental light fixtures may be used upon approval of the Zoning Administrator or their designee.

Figure C.4.1 Permitted Fixture Type

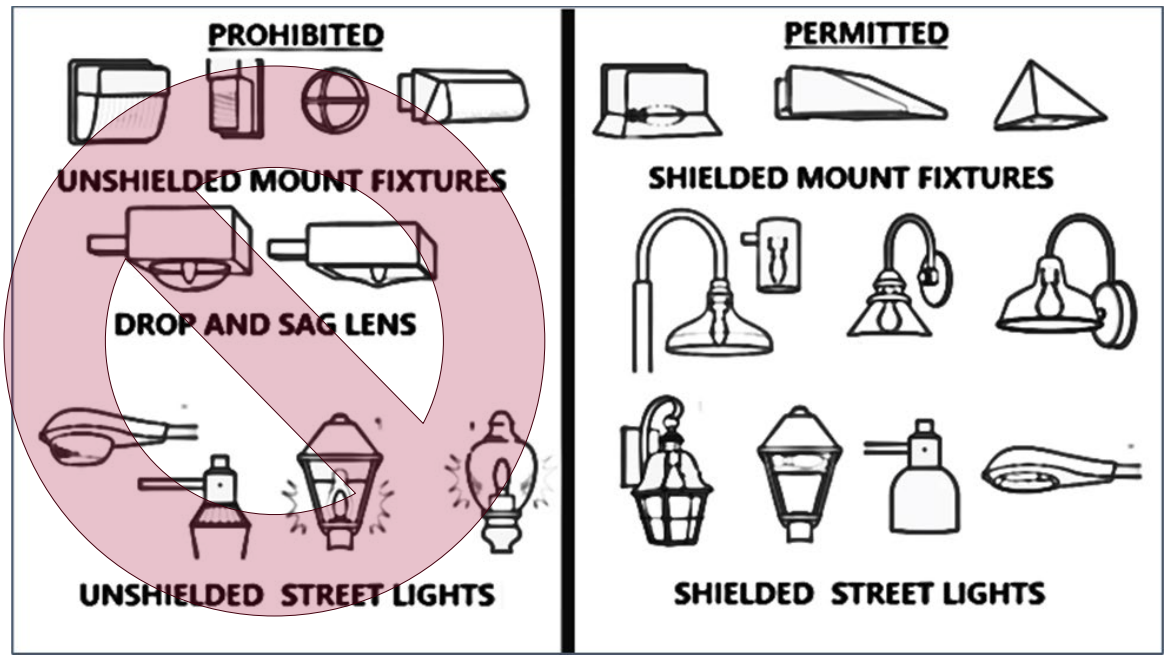


Figure C.4.2 Light Fixture Height

4.6 EXTERIOR BUILDING LIGHTING STANDARDS

External building lighting shall comply with the following standards:

A. Fixtures that decoratively light a building or wall may not light above the parapet of the building or the top of the wall.

B. Landscape and decorative lights are exempt from this Section.

C. Floodlights, spotlights, or any other similar lighting shall not be used to illuminate buildings or other site features unless approved as an integral architectural element on the development plan.

D. On-site lighting may be used to accent architectural elements but not used to illuminate entire portions of buildings or signs.

E. Where accent lighting is used, the maximum illumination on any vertical surface or angular roof surface shall not exceed 5.0 foot-candles.

F. Building façade and accent lighting will not be approved unless the light fixtures are carefully selected, located, aimed, and shielded so that light is directed only onto the building façade and spillover light is negligible.

G. Motion-activated lighting shall be lit only when activated and turn off within 5 minutes of activation. Motion-activated lighting shall not be triggered by movement off the property.

4.7 PARKING AREA LIGHTING STANDARDS

Lighting is required within parking areas. The height of light fixtures within a parking area shall comply with the following standards:

A. Light fixture height shall not exceed the maximum building height permitted in the zoning district or 25 feet, whichever is lower

B. To avoid conflict in layout, parking lot lighting shall be coordinated with parking area landscaping.

C. An exterior lighting plan, including a photometric plan (which covers the parcel which is the site of the development in question), appropriate pole, fixture, and lamp technical specifications, descriptions of lenses and optical systems and appropriate data tables shall be submitted for review. The exterior lighting plan shall be prepared by a professional engineer, landscape architect or professional architect who shall certify on the photometric plan that the exterior lighting plan complies with this Section. The photometric plan must measure off-site impacts. Values must be calculated at grade and include contributions from all on-site features. It shall indicate the minimum, maximum, and average footcandle levels within the lighted areas of the site, and the average to minimum ratio for determination of uniformity.

Figure C.4.3 Parking Area Lighting Examples

4.8 PEDESTRIAN LIGHTING STANDARDS

Pedestrian lighting is required and includes lighting along internal sidewalks, multimodal paths, civic spaces, and public gathering spaces. Street lighting is excluded from this standard. Bollard or path lighting shall not exceed 4 ft. in height. Pedestrian lighting shall provide at least 1.0 foot-candle of illumination and shall not exceed 2.0 foot-candles.

Figure C.4.4 Bollard/Path Lighting Examples

4.9 SIGN LIGHTING STANDARDS

All external lighting for signs shall be designed and located to ensure there is no spillover light. Signs shall be in compliance with *Chapter C.3.*

4.10 ATHLETIC FIELD LIGHTING STANDARDS

Lighting for athletic fields may be in excess of permitted fixture heights and illumination levels. Recreation lighting levels established by the Illuminating Engineering Society of North America (IESNA) are to be used as the standard for all athletic field lighting. All sports fields, areas, or courts must meet the following minimum standards:

A. Light poles are not more than 30 feet in height, except at ball diamonds, football fields, and other playing fields, where they can be taller;

B. Maximum illumination from such lighting at the property line is not brighter than 2.0 foot-candles; and

   Such lighting is extinguished no later than 11:00 p.m., except to complete an activity that is in progress prior to 11:00 pm.

4.11 GAS STATION LIGHTING STANDARDS

A. All light fixtures for gas stations that are mounted on the lower surface of canopies must be fully shielded. Canopy edges do not qualify as shielding.

B. Light fixtures mounted on canopies shall be recessed so that lens cover is recessed or flush with the bottom surface (ceiling) of the canopy or shielded by the fixture or edge of the canopy so that light is restrained to 70 degrees or less from vertical.

C. Lighting levels shall be no greater than 15.0 foot-candles at the edge of the canopy.

D. Areas outside the service pump island canopy shall be illuminated so that the maximum horizontal illumination at grade level is no more than 10.0 foot-candles.

4.12 RESIDENTIAL LIGHTING STANDARDS

A. Lighting shall ensure adequate illumination while minimizing light pollution and glare onto adjacent or neighboring properties. The lighting shall be consistent with the character and architectural standards of the residential area. Full-cutoff or semi-cutoff fixtures shall be used to direct light downward and reduce light pollution. Any lighting that causes measurable light trespass beyond the property boundary shall

constitute a violation of this Ordinance. Illumination levels on residential streets shall be between 0.5 and 2 footcandles.

B. Except as otherwise required under this Section, the height of an outdoor lighting fixture (inclusive of the pole and light source) shall be a maximum of 16 feet.

4.13 PROHIBITED LIGHTING

A. **Flashing light.** Lights that flash, move, rotate, blink, flicker, vary in intensity or color, or use intermittent electrical pulses. No exemptions shall apply to flashing lights located inside buildings if they are visible from the exterior.

B. **Floodlights.** Floodlights, spotlights, or any other similar lighting shall not be used to illuminate buildings or other site features unless approved as an integral architectural element on the site plan or as a permitted temporary use (such as spotlights for grand openings or celebrations). Accent lighting shall not be considered floodlighting.

C. **Tube lighting.** Tube lighting in the form of neon or rope lighting on building exteriors and along façade trims where it defines a window, door, or elevation. The use of tube lighting behind windows is also prohibited if it flashes or blinks.

D. **Traffic control.** Lighting that is similar to or could be confused as being a traffic control device.

5. LANDSCAPE, BUFFER, AND TREE PROTECTION

5.1 INTENT

Regulations for landscape and tree protection are necessary in order to preserve and enhance the visual image of the City, and promote the public health, safety, and general welfare of its residents. More specifically, the intent of the landscape ordinance is to:

A. Mitigate incompatibility between land uses, while ensuring attractive views from streets and adjacent properties.

B. To assist in delineating separations of spaces, structures, uses, and activities on a site or between adjacent sites.

C. Protect, preserve, and promote aesthetic appeal and scenic beauty, and enhance property values.

D. Reduce noise impacts and air pollution, absorb carbon dioxide, provide shade and reduce the heat island effect.

E. Reduce storm water run-off, control soil erosion, filter pollutants, and reduce the hazard of flooding.

F. Filter and reduce glare from artificial light sources, and screen noise and dust.

G. Break up large expanses of pavement so as to reduce impervious surface area and provide shade within parking areas and along streets.

H. Promote the preservation of open space, existing tree canopy, and natural habitat, using supplemental plantings when necessary.

5.2 APPLICABILITY

A. **Applicability.** All applicable developments shall submit and receive approval of a landscape plan as part of the required site plan and shall include the parking/paving plan. Protection of existing vegetation is encouraged and can be used to meet the requirements of this Section, where permitted.

1. **Repair or Renovation.** Provided there is no increase in gross floor area, a building may be repaired or renovated without meeting the requirements of this Section.
2. **Minor Site Change.** When a building or site is increased in gross floor area or improved site area by less than 25% or 20 parking spaces, required landscaping is required only for the additional floor area or improved site area. The improved site area shall include site improvements such as utility installations, landscape modifications, additional impervious surfaces (including parking), and/or construction of structures.
3. **Major Site Change.** When a building or site is increased in gross floor area or improved site area by greater than 25% or 20 parking spaces, both the additional area and existing area must conform to the landscaping standards in this UDO, except for interior parking island standards. The Improved site area shall include site improvements such as utility installations, landscape modifications, additional impervious surfaces (including parking), and/or construction of structures.
4. **Single Family Exemption.** Development or redevelopment of individual single-family dwellings that are not part of a new subdivision approval, will be exempt from the standards of this Section.

5.3 LANDSCAPE AREA GENERAL STANDARDS

A perimeter landscape yard is determined separately from any required setback; however, perimeter landscape yards may be located in required setbacks.

A. **Location**. Landscape Yards shall be located along the entire outer perimeter of the lot, parallel to and extending to the lot line. Landscape Yards begin at the common property line, immediately abutting the adjacent property, and will need to be located and measured from the property line.

B. **Buffer Required**. Perimeter landscape yards shall consist of a landscaped buffer that mitigates and screens the property from adjacent properties.
   1. There shall be no buildings, structures, principal or accessory uses, nor parking or drive aisles located within the landscape yard. Driveways, pedestrian or bicycle trails, utilities, stormwater, parks, and general open spaces are permitted within the required landscape yards.

C. **Easements**. If there is a perimeter easement present (such as drainage or utility easement) that does not allow for the installation of the landscape yard plantings, the required landscape yard shall be placed as close to the property line as possible, adjacent to the easement. When possible, proposed easements should cross required landscape yards perpendicularly. Presence of an easement shall not result in a reduction of required landscape yard width or plantings.

D. **Design Flexibility**. Plant material may be planted parallel to the landscape yard perimeter or may be meandered for aesthetic purposes. Landscape yards may include greater width and additional plant materials if needed.

E. **Installation with Fencing**. Where non-residential uses abut residential uses, required plant material shall be installed in front of any required fence so the plant material is completely visible from the adjacent property or right-of-way and is coordinated with any required fencing. The required plant material shall meet the standards as outlined in this UDO. The reverse applies when residential uses abut non-residential uses.

F. **Sight Distances**. Any fence, wall, or berm shall be located in such a manner as to not

interfere with any sight distance requirements of this UDO and shall not encroach upon any platted easements unless specifically authorized by the terms of the easement. Fences, walls, and berms shall not interfere with any walkway or pedestrian/bikeway system serving the site.

G. **Street Trees.** Any new applicable development that includes the construction of a new principal building along a right-of-way must provide the installation of street trees as outlined in *Chapter 5.5.a*.

1. All required street trees must be installed before a certificate of occupancy can be issued. Street trees must be maintained in a healthy and growing condition until full maturity. Street tree requirements may be waived or decreased at the discretion of the Zoning Administrator if the required number of trees already exist on the street or if specific locations of curb cuts, utilities, or other features conflict with the placement of trees.

5.4 LANDSCAPING DETERMINATION AND CALCULATION

A. **Calculation of Requirements.** Requirements for landscape yards shall be based on the proposed use and the existing land use of the adjacent parcel(s). The type of landscaping yard required for each zoning classification is provided in *Table C.5.1*.

B. **Landscape Yard Determination** To determine the required landscape yard requirements, identify the proposed or expanded use and the existing adjacent land use(s). The existing use on an adjacent property supersedes the actual zoning district. Use *Table C.5.1,* to determine the appropriate letter designation for each landscaping area; each letter represents a defined Landscape Type depicted in *Chapter C.5.5.* This Section identifies the number of trees (understory and or canopy), shrubs and other buffer requirements for each Type.

Table C.5.1 Landscape Yard Determination

Proposed Use Groups	Existing Adjacent Use Groups					
	Agricultural/ Vacant	Residential	Office	Commercial	Light Industrial	Heavy Industrial
Residential[1, 2]	n/a	n/a	B	C	C	D
Office/Institutional	A	B	A	B	C	D
Commercial	A	C	B	A	B	D
Mixed Use	A	C	B	B	C	D
Light Industrial	B	C	C	B	B	D
Heavy Industrial	D	D	D	D	D	n/a

Notes:

1. Multifamily housing projects, apartment complexes, and mobile home parks shall be considered a Commercial use for the purposes of this table.
2. For any residential single-family subdivision, Planning Commission may require additional landscaping and buffering to mitigate the impacts of the development on adjacent uses.
3. Required plant material may not be clustered to achieve requirements. A maximum allowable 10 ft. gap may be permitted.
4. Required trees may be on both sides of a fence/wall as long as a minimum one half of required trees are in front.

5. If perimeter buffer types are more intense than the required parking area buffer, the perimeter buffer will take precedence.

5.5 REQUIRED LANDSCAPING AREAS

A. **Required Planting Areas.**

1. Street Landscaping
2. Vehicular Use Areas
3. Landscape yards (Referred to as Type A, B, C, and D landscape yards).

B. **Landscape Areas Defined.**

1. **Street Landscaping**. A planting area parallel to a street designed to provide a continuity of vegetation along the right-of-way and a pleasing view from the road.
2. **Parking Lot Landscaping.** The landscaping area within and adjacent to parking areas designed to shade and improve the attractiveness of parking lots and paved areas.
3. **Landscape Yards.** *Figures C.5.2., C.5.3., C.5.4., and C.5.5.* provide details for each landscape yard type. The visual representations are for illustrative purposes only; the text dimensions and standards shall apply in all cases where there is a conflict.
   (1) **Type A Landscape Yard.** A peripheral planting strip intended to separate uses, provide vegetation in densely developed areas, act as a minor visual screen, and enhance the appearance of individual properties.
   (2) **Type B Landscape Yard.** A low-density screen intended to partially block visual contact between uses and create spatial separation.
   (3) **Type C Landscape Yard.** A medium-density screen intended to partially block visual contact between uses and create spatial separation.
   (4) **Type D Landscape Yard.** A high-density screen intended to substantially block visual contact between adjacent uses and create spatial separation. Type D Landscaping screens views and noise which would otherwise negatively impact adjacent land uses.
4. **Utility Service.** When the configuration of a site is such that the required landscaping set forth herein has to be placed in proximity to utility services,

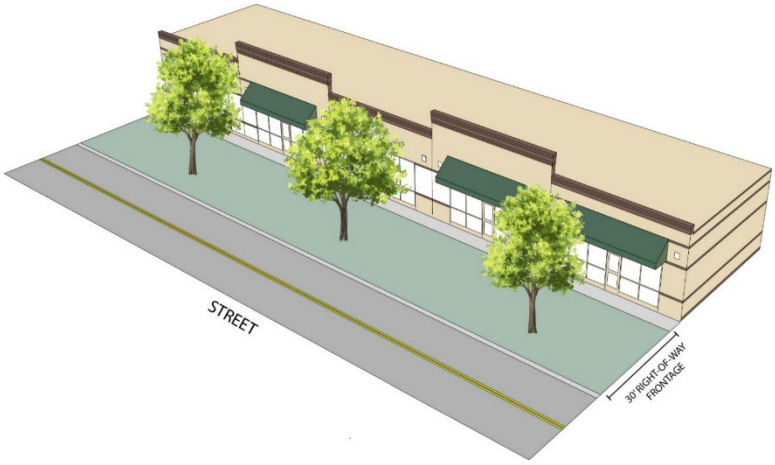
consideration shall be given to the estimated mature height of required plant materials, as well as root structure.

5.6 LANDSCAPE YARD TYPES

A. **Street Landscaping.** Any new applicable development that includes the construction of a new principal building along the right-of-way must provide the installation of street trees as follows:

1. A minimum of 1 canopy tree shall be installed adjacent to public rights-of-way, not including alleys, for each 30 linear feet of right-of-way frontage.
2. When overhead utilities are present, understory trees may be substituted for canopy trees. Understory trees shall be installed at a rate of 1 understory tree for each 20 linear feet of right-of-way frontage.

Figure C.5.1 Street Landscaping Examples



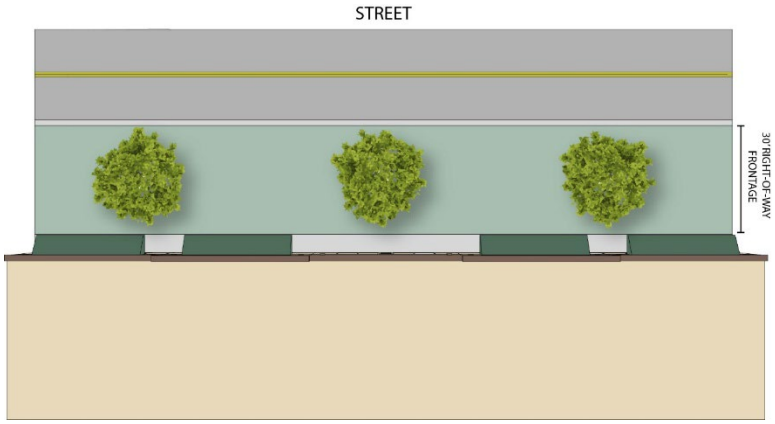


Figure C.5.2 Type A Landscape Buffer

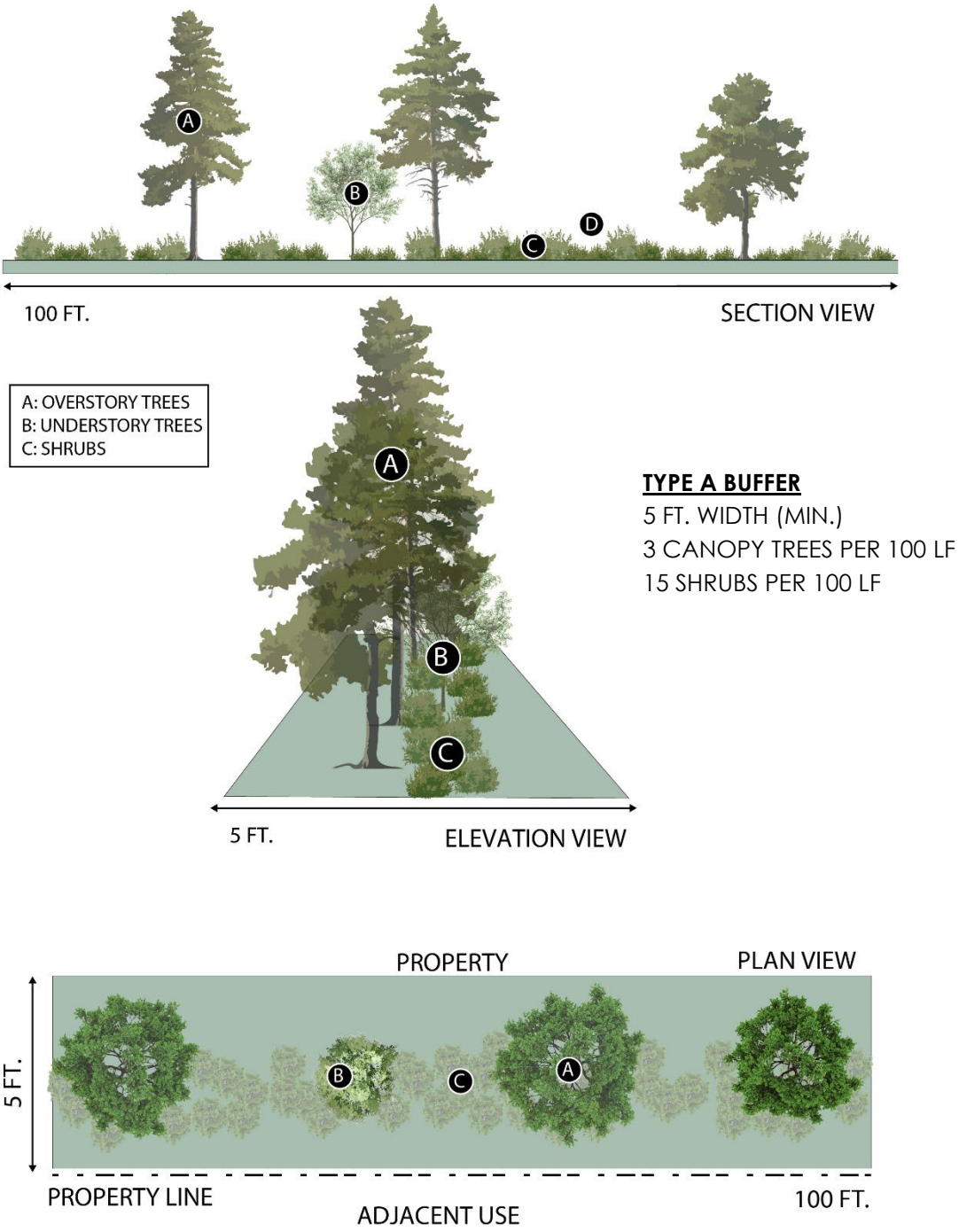


Figure C.5.3 Type B Landscape Buffer

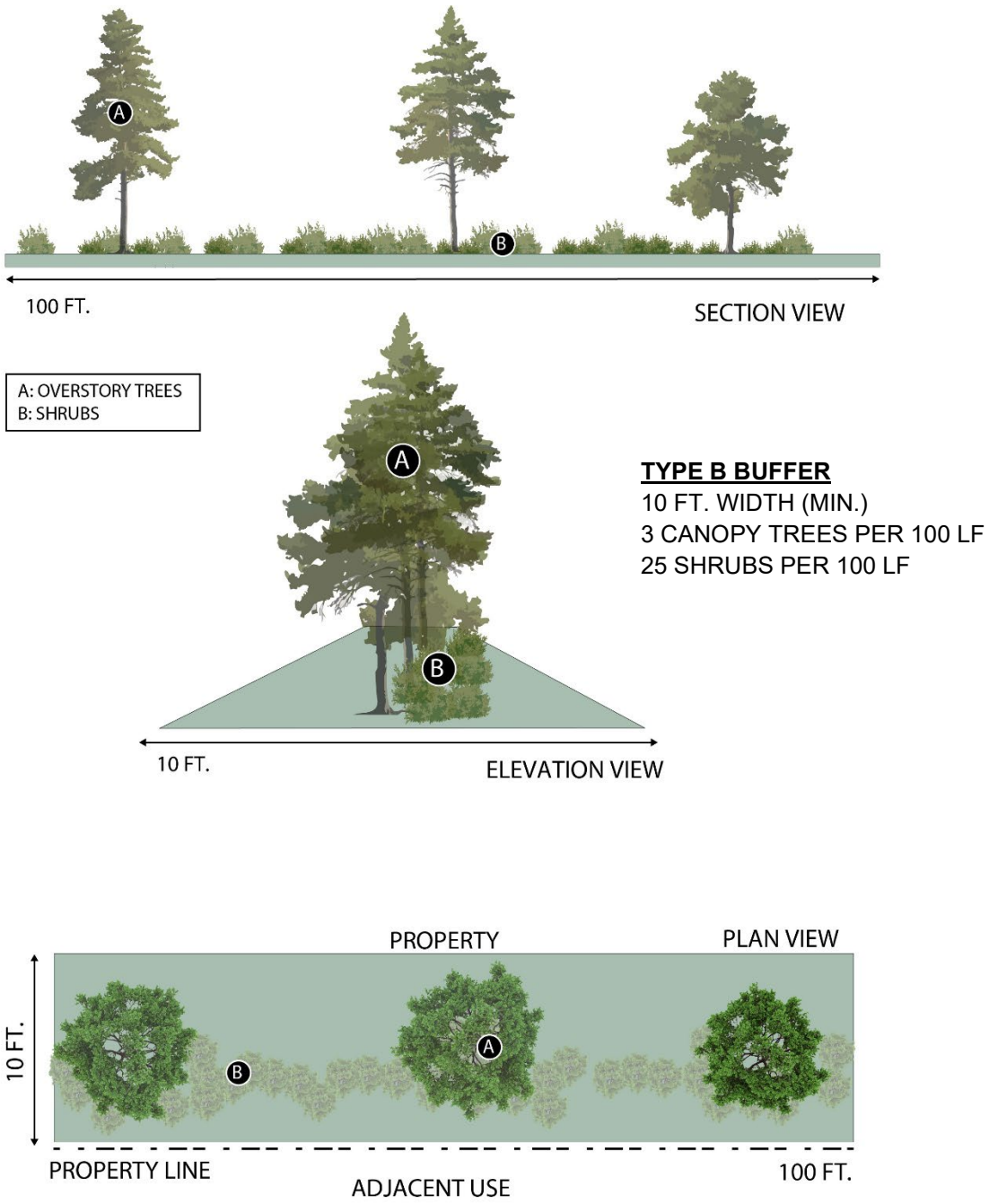


Figure C.5.4 Type C Landscape Buffer

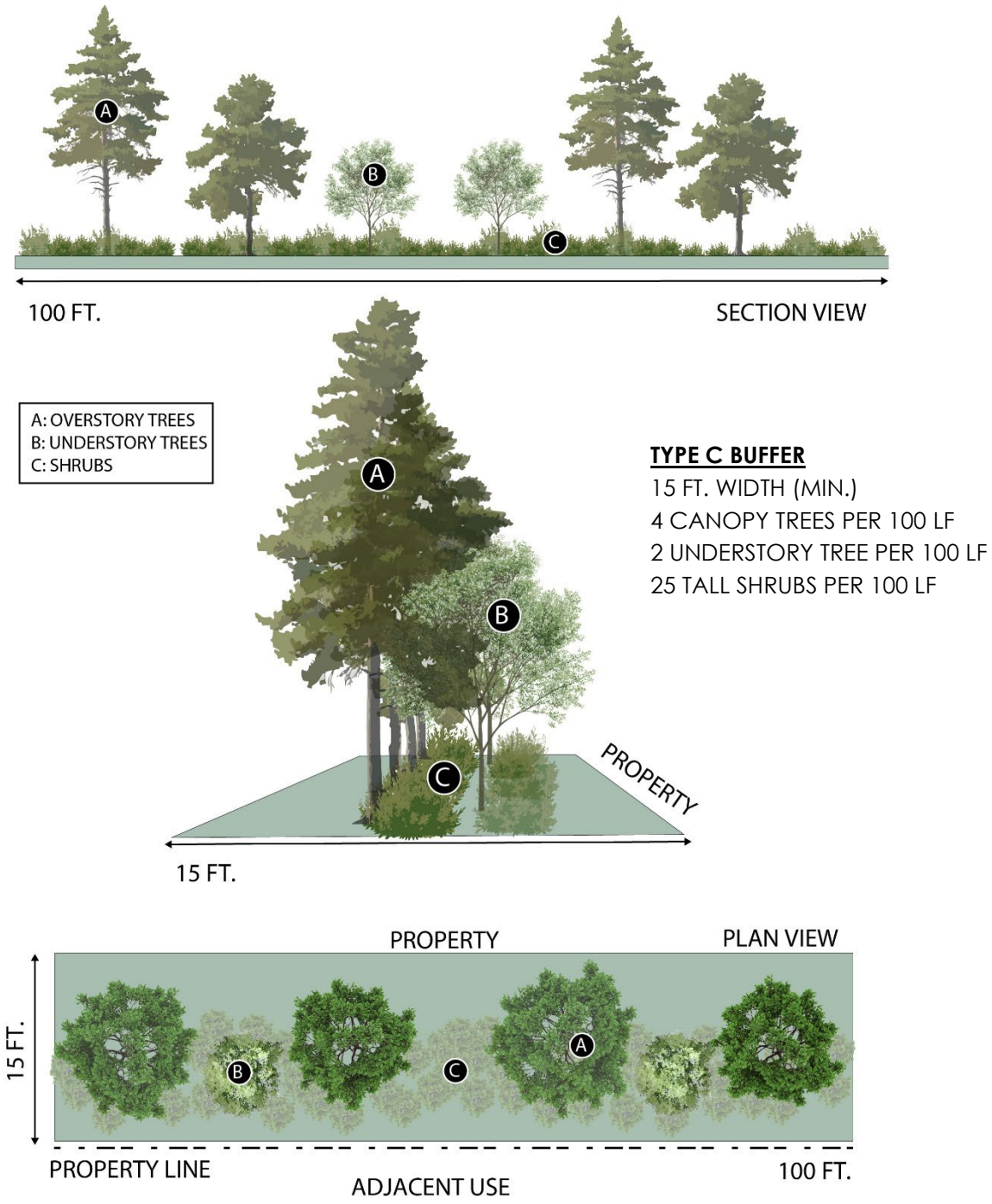
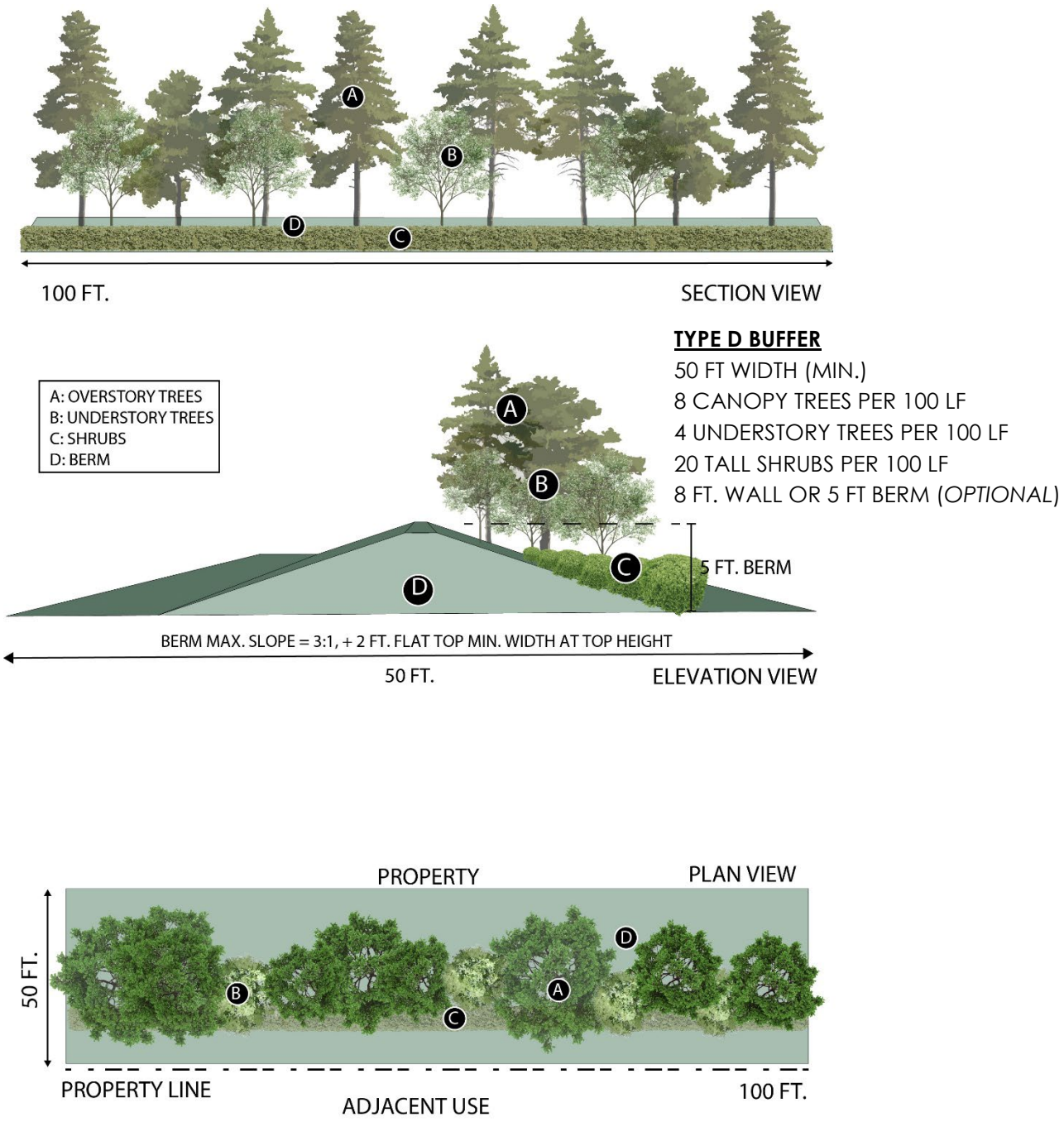


Figure C.5.5 Type D Landscape Buffer



5.7 ALTERNATIVE LANDSCAPING PLAN

A. **Alternative Landscaping Plan.** If due to unique topography, location of site features, or size of parcel influences compliance of this Section, the Zoning Administrator may approve an alternative landscaping plan. This plan must meet the following criteria:

1. Intent Alignment. The proposed landscaping must reflect the overall intent and goals of this Section.
2. Tree Planting Standards Maintained. The plan must meet or exceed all tree planting requirements. No reduction in tree quantity is permitted, and no invasive species may be included.
3. Equal or Superior Quality. The alternative plan must provide landscaping that is equal to or better than the standards of this Section.
4. Visual Examples Required. The applicant must submit visual examples—such as renderings, site diagrams, or photo simulations—that clearly demonstrate how the alternative plan achieves the objectives of this Section.

5.8 LANDSCAPE DESIGN STANDARDS

A. **Purpose**. The purpose of this Section is to identify acceptable plant species for landscape, buffer, and screening requirements.

B. **Streetscape Calculation.** Street landscaping rate and width calculations shall be based on gross linear footage at the street frontage. The linear footage of required driveways may be subtracted from the total linear footage when calculating Streetscaping rates.

C. All plant materials used to satisfy requirements set forth herein shall be suitable for the climatic characteristics of Sumter (USDA Climate Zone 8). The recommended plant lists in *Chapter C.5.17.* are suitable for the Sumter climate. All plans must cite the most recent recommendations of American Standards for Nursery Stock by the American Association of Nurserymen with regards to size standard, planting specifications and maintenance recommendations.

D. Plant materials may be grouped and clustered in order to present a more natural appearance. However, such groupings must be distributed equally throughout the

landscaped areas to maintain cohesion and aesthetic integrity. The arrangement should complement the character of the site and support the intended design theme. Any alternative layout that deviates from uniform distribution may be subject to review and approval by the Zoning Administrator to ensure it meets the visual and functional goals of this Section.

E. Existing trees may be counted as canopy or understory as set forth herein provided such trees are a minimum 2-inch caliper size, in good health and located in the approximate area as required herein. Invasive species shall not be counted toward existing trees.

F. No structures, including parking lots and display of goods for sale or portions of structures (except structures required in conjunction with public utility services and public transit, fences, or walls) shall be permitted in a required landscape buffer. Ingress and egress shall be permitted through required landscape buffers in accordance with this Section.

G. Berms shall comply with the requirements of *Chapter C.6.4*.

5.9 RESERVED

5.10 LANDSCAPE REQUIREMENTS FOR PARKING AND VEHICLE USE AREAS

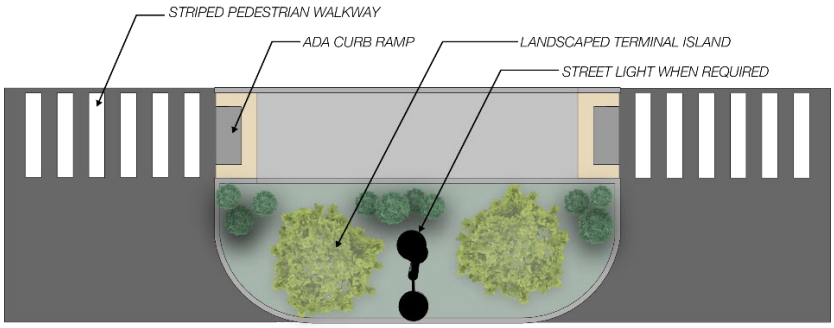
A. **Parking Area Landscaping Standards**.

1. **Accessibility.** Nothing in this Section shall deny ADA accessibility within parking lots nor deny the placement of crosswalks and sidewalks through parking lots (including terminal islands, interior islands, and divider medians) required for pedestrian safety.
2. **Parking Terminal Islands Standards.** The following shall apply to all terminal islands within parking lots in addition to the requirements found in *Figure C.5.6*.
   (1) Each row of parking spaces shall end with terminal islands to separate parking from adjacent *drive* lanes.

(2) Landscaping in islands adjacent to parking spaces shall be set back a minimum of 2 feet behind the back of the curb to provide pedestrian access to parked vehicles.

(3) Lighting may be installed in parking terminal islands.

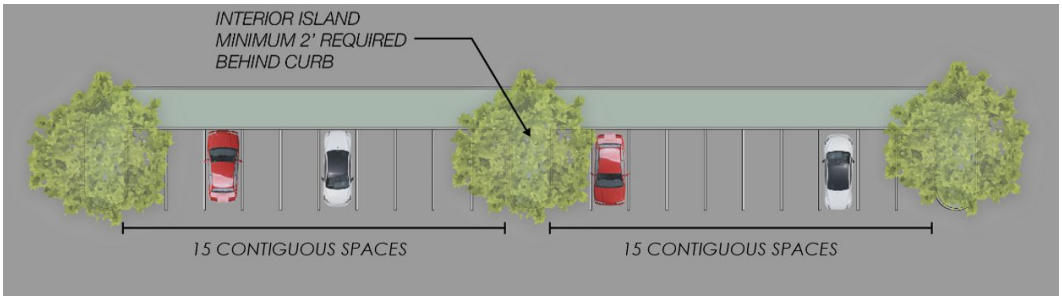
Figure C.5.6 Terminal Island Landscaping



B. **Parking Interior Islands Standards.** The following standards shall apply to all interior islands in addition to the requirements found in *Table C.5.7*.

1. Interior islands shall be provided so that there are no more than 15 contiguous parking spaces.
2. The Zoning Administrator may reduce the required width and/or length by up to 3 feet where existing site constraints make compliance impracticable, or where such reduction will allow preservation of existing trees.
3. Landscaping in islands adjacent to parking spaces shall be set back a minimum of 2 ft. behind the back of the curb to provide for pedestrian access to parked vehicles.
4. Lighting may be installed in parking interior islands but shall be at least 15 ft. from trees.

Figure C.5.7 Interior Island Parking



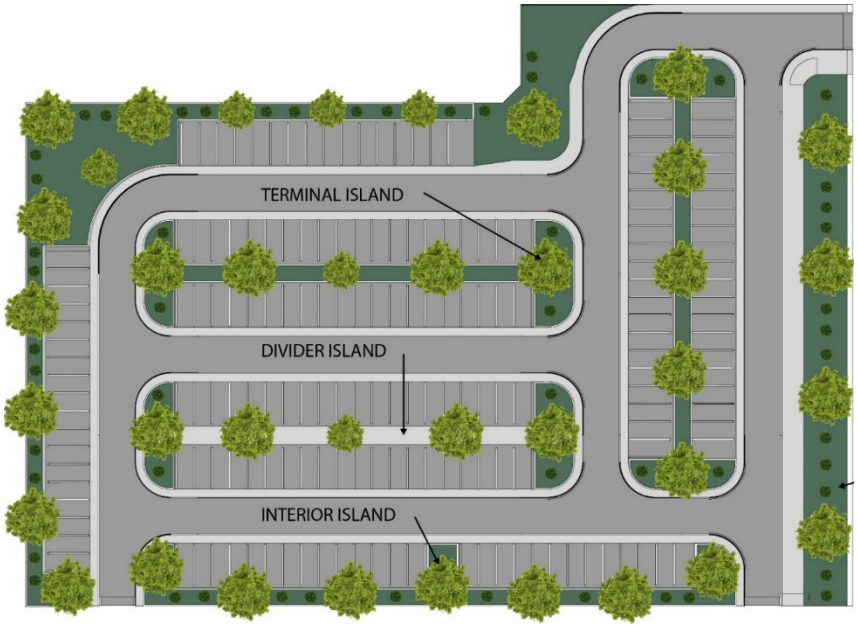
C. **Parking Divider Medians Standards.** The following standard shall apply to all parking divider medians in addition to the requirements found in *Table C.5.2.*

1. In parking lots with 5 or more rows of parking or 100 or more spaces, every third group of rows of parking spaces shall be separated from one another by a parking divider median with an integrated 5 ft. wide sidewalk that extends the entire length of the row of parking spaces.
2. Landscaped divider medians shall form a continuous landscaped strip between abutting rows of parking areas or access drives.
3. Lighting must be provided within divider median(s).

TABLE C.5.2 MINIMUM DEVELOPMENT STANDARDS FOR PARKING AREAS

	Minimum Width	Minimum Length	Minimum Area	Minimum Tree Requirement	Minimum Shrub Requirement
Terminal Island	N/A	N/A	275 sq. ft.	1	2
Interior Island	10 ft.	18 ft.		1 Canopy Tree	2
Divider Median	7 ft.	N/A		1 per 30 LF	N/A

Figure C.5.8 Parking Landscaping Illustrative Example



5.11 STORMWATER FACILITY LANDSCAPING REQUIREMENTS

A. Landscaping shall be required in and around stormwater facilities. The plant species selected shall be those which are commonly known to flourish in wetlands or stormwater areas.

B. 70% of the disturbed area and slopes of a stormwater area, excluding any area intended to be wet at all times, shall be planted with perennial cover (grasses, shrubs, perennials). A combination of coir fabric and seed mix is acceptable as long as all slopes greater than 8% are completely covered.

C. No trees shall be planted in any location that may compromise the integrity of the stormwater engineering system.

D. Stormwater facilities shall be located at the rear or sides of a development site where practicable. Vinyl-coated chain link fencing is permitted around stormwater facilities only if located in the rear of a site or when the public health, safety, and welfare make placement of fencing necessary.

5.12 RESIDENTIAL SUBDIVISION DEVELOPMENT LANDSCAPING

A. **Subdivision Front Buffer yard (Street Landscaping) Requirements.** A new subdivision with more than 10 lots must choose from the following street landscaping types:
   1. **Heavy Landscaping.** Front buffer yard shall meet the standards of Type D landscaping, without a fence, as described in *Figure C.5.5*.
   2. **Berms.** Shall meet the standards as described in *Figure C.6.1.* and *Chapter C.6.4*.
   3. **Walls.** Shall be constructed of brick, stucco or stone, with a minimum height of 6 feet and with plantings between the wall and the street that meet the standards of Type C Landscaping as described in *Figure C.5.4*.

B. **Side Buffer yard Requirements.** Side buffer yards shall be consistent with *Chapter C.5.*

1. Buffer yards shall be located on commonly owned open space controlled by an approved Home Owners Association (HOA). Said organization shall be responsible for maintenance and upkeep of all required buffers.
2. **Interior Street Tree Requirements.** All individual lots within a subdivision shall have at least 1 tree located within 10 ft. of the front property line. Street trees shall generally be canopy trees, except where utility services and/or driveway and street intersection sight triangles require an alternate tree type.
3. As an alternative to the above requirements, a developer may submit a master streetscape plan for the development. The total number of trees in the master streetscape plan must be at least equivalent to placing trees in the public right of way at 40 ft intervals on both sides of the street. The master streetscape plan shall be reviewed and approved by the Zoning Administrator as part of the preliminary plan submission and must meet the minimum requirements stated in *Chapter C.5.*

5.13 PLANT MATERIALS

All plant materials used in a landscape plan must meet the following minimum standards at the time of planting:

A. All plantings shall be installed according to the latest American Nursery and Landscaping Association's American Standards for Nursery Stock recommendations.

B. Multi-stemmed specimens shall be calculated by adding the calipers of individual stems. The cumulative caliper for any multi-stemmed specimen must meet the above minimum standards for Canopy or Understory Trees, depending on the species proposed.

C. Tall shrubs used in a buffer shall be predominantly evergreen, no more than 1 of every 10 shrubs used in a buffer yard may be deciduous.

D. Rootbound, damaged, diseased or otherwise inferior plant material shall be replaced before final zoning approval is given.

TABLE C.5.3. LANDSCAPE PLANTING MINIMUM STANDARDS

	Min. Size (at Planting)	Min. Height (at planting)
Canopy Tree	2 in. caliper	8 ft.
Understory Tree	1.5 in. caliper	6 ft.
Evergreen Tree		6 ft.
Tall Shrubs	2 ft width	3 ft
Foundation/Small Shrubs		1.5 ft.

5.14 IRRIGATION REQUIREMENTS

A. Irrigation Requirement. All required trees, shrubs, and groundcovers must be supported by an irrigation method adequate to maintain plant health during both:
   1. The initial establishment period of 2 years; and
   2. Extended dry periods typical of Sumter's summer climate.

B. Permanent vs. Temporary Irrigation.
   1. A permanent irrigation system is required for:
      (1) High-maintenance landscape areas (e.g., turf, formal plantings).
      (2) Commercial or multifamily developments.
      (3) Subdivision entrances and medians maintained by an HOA or property owner.
   2. Temporary irrigation (such as portable systems or hoses) may be used for:
      (1) Low-maintenance or drought-tolerant landscapes.
      (2) Single-family residential lots.
      (3) Native planting areas (with a 2-year minimum establishment period).

C. System Design. Irrigation systems must:
   1. Be designed to prevent overspray onto sidewalks, streets, or buildings.
   2. Include rain sensors or weather shutoff devices.
   3. Use zoning to group plant types with similar water needs.
   4. Avoid runoff and erosion, especially near driveways, curbs, and slopes.

D. Water Source. Where feasible, developers are encouraged to utilize:
   1. Rainwater harvesting systems .
   2. Irrigation wells (in accordance with SCDES regulations).
   3. Non-potable water systems (if permitted by the utility provider).

E. Maintenance Requirements.
   1. Irrigation systems must be kept in good working condition at all times. Leaks, broken heads, or faulty components must be repaired promptly.
   2. Controllers shall be seasonally adjusted based on Sumter's weather patterns.
      (1) Systems must be shut off during freezing weather to prevent damage.

(2) Overwatering that results in ponding, runoff, or mosquito breeding shall be avoided.

F. Exemptions. Permanent irrigation systems are not required for:

1. Landscaped areas of less than 500 square feet
2. Landscapes planted entirely with drought-tolerant or native species (must include temporary irrigation for plant establishment).

G. Alternative Irrigation Practices. The Zoning Administrator or their designee may approve alternative irrigation methods that:

1. Demonstrate equal or improved water efficiency, and
2. Comply with the intent of this Section.

5.15 REPLACEMENT OF DEAD, DYING, AND DAMAGED VEGETATION

The damage, failure to thrive, and/or intentional removal of any landscaped area or vegetation required by this Section shall constitute a violation of the Ordinance. All disturbed landscaped areas and vegetation shall be replanted in accordance with the approved landscape plan or in accordance with an agreed upon mitigation plan approved by the Zoning Administrator.

A. **Timeline for Replacement**. Upon notification by the Zoning Administrator or their designee, dead or dying plant materials required by an approved landscape/buffering plan shall be replaced by the current property owner(s) or legally responsible party. Failure to act within 30 days of notice by the Zoning Administrator will constitute a zoning violation.

B. **Emergencies.** In the case of emergencies such as windstorms, ice storms, fire, or other disasters, the Zoning Administrator may waive the requirements of this ordinance during the emergency period so that the requirements of this ordinance will in no way hamper work to restore order. This shall not be interpreted as a general waiver of the intent of this ordinance. A period of 1 year shall be granted following such an emergency, for the requirements of the ordinance to be met;

C. **Extension of Plant Installation Timeline.** In instances where planting is delayed by weather or other external factors, a written request for plant installation extensions shall be provided to the Zoning Administrator indicating a finite date for completion. Minor revisions to planting plans may be approved by the Zoning Administrator.

D. **Waivers**. A waiver of the landscaping requirements may be requested of the Zoning Administrator. The waiver request shall be in writing and include a detailed justification in support of the request. Waiver requests shall be judged on their ability to provide an alternative design which meets the public purpose to at least an equivalent degree

5.16 SCREENING

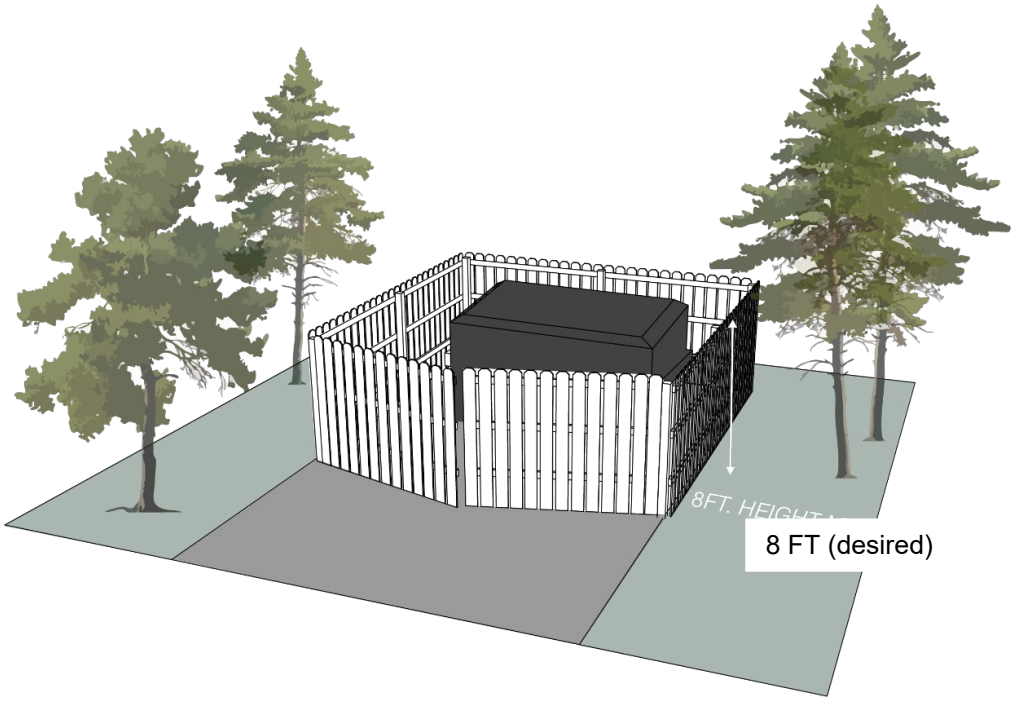
A. **Loading Areas.**

1. Outdoor loading areas 50 sq. ft. or larger not screened by an intervening building must be screened from view from adjacent property or public street right-of-way for their entire length.
2. Enclosed loading areas must be screened with a roll down door or other opaque screen.
3. Screening may be accomplished with evergreen plant material that can be expected to reach a mature height of 6 ft. with a spread of 4 ft. within 3 years of planting.

B. **Service Areas.**

1. Trash collection, trash compaction, recycling collection, utility service areas, and other similar service areas shall be located to the side or rear of buildings and must be screened from view from adjacent property or public street right-of-way.
2. Service areas that are fully integrated into a building must be screened with a roll down door or other opaque screen. Screening is not required for utility service areas located more than 50 feet from an adjacent property or a public right-of-way.

Figure C.5.9 Service Area Screening Illustrative Example



C. **Roof-Mounted Equipment.**

1. Roof mounted equipment shall be screened from ground level view from adjacent property or adjacent public right-of-way.
2. Parapet walls shall be constructed to screen roof mounted equipment from view.
3. For existing buildings with no or low parapet walls, roof mounted equipment shall be screened on all sides by an opaque screen compatible with the material of the principal building.

D. **Ground Mounted Equipment:**

Ground Mounted Equipment shall be screened by evergreen plant material or an opaque screen as high as the highest point of the equipment.

5.17 RECOMMENDED PLANTS

A. **Canopy and Understory Trees:** *Tables C.5.4.and C.5.5.* contain trees which have been determined to be suitable for the climate of the Sumter area. Applicants seeking landscape plan approval are encouraged but not required to select plant materials from the following plant list.

TABLE C.5.4. RECOMMENDED CANOPY TREES					
Common/Scientific Name	**Height and Width**	**Sun and Shade** FS=Full Sun PS= Part Sun S=Shade	**Street Tree**	**VUA**	**Landscape Yard**
Beech, American/*Fagus grandifolia*	50-75' h/40-80' w	PS/FS			*
Birch, River/*Betula nigra*	40-70' h/25-45' w	PS/FS			*
Blackgum/*Nyssa sylvatica*	65-75' h/25-35' w	PS/FS	*	*	*
Deodar Cedar/*Cedrus deodara*	40-60' h/25-30' w	PS/FS			*
Cryptomeria, Japanese/*Cryptomeria japonica*	50-60' h/15-20' w	FS			*
Cypress, bald/*Taxodium distichum*	60-80' h/25-35' w	FS/PS		*	*
Cypress, pond/*Taxodium ascendens*	50-60' h/50-60' w	PS/FS		*	*
Dawn redwood/*Metasequoia glyptostroboides*	70-90'h/25-35' w	FS/PS			*
Ginkgo/*Ginkgo biloba* (male only)	50-75' h/50-60' w	PS/FS	*	*	*
Hackberry/*Celtis occidentalis*	40-60' h/30-50' w	FS	*		*
Hickory, pignut/*Carya glabra*	50-65' h/30-40' w	PS/FS			*
Hickory, shagbark/*Carya ovata*	60-80' h/25-35' w	PS/FS			*
Holly, American/*Ilex opaca*	40-80' h/25-50' w	PS/FS			*
Hophornbeam, American/*Ostrya virginiana*	40-50' h/25-35' w	PS/FS	*	*	*
Katsura tree/*Cercidiphyllum japonicum*	40-60' h/35-60' w	PS/FS	*		*
Loblolly bay/*Gordonia lasianthus*	50-60' h/10-15' w	PS/FS			*
Magnolia, Southern/*Magnolia grandiflora* 'Claudia Wannamaker'	60-80' h/30-40' w	PS/FS			*
Magnolia, Southern/*Magnolia grandiflora* 'Bracken's Brown Beauty'	40-50'h/15-30'w	FS			*

Common/Scientific Name	Height and Width	Sun and Shade FS=Full Sun PS= Part Sun S=Shade	Street Tree	VUA	Landscape Yard
Maple, red/*Acer rubrum*	60-75 'h/25-35' w	PS/FS	*		*
Maple, sugar/Acer saccharum	50-80' h/35-50' w	S/FS		*	
Oak, Chinese evergreen/Quercus myrsinifolia	30-50' h/20-30' w	FS			
Oak, laurel/darlington/Quercus laurifolia	60-70 'h/50' w	PS/FS	*		*
Oak, live/Quercus virginiana	60-80' h/60-120' w	PS/FS			*
Oak, nuttall/Quercus nuttallii	40-60' h/25-40' w	FS	*		*
Oak, overcup/Quercus lyrata	40-50' h/35-50' w	FS	*		*
Oak, shumard/Quercus shumardii	40-50' h/35-50' w	FS	*		
Oak, southern red/Quercus falcata	60-80' h/60-70' w	FS	*		*
Oak, willow/Quercus phellos	70-80' h/35-50' w	FS	*		*
Oak, swamp chestnut/Quercus michauxii	60-70' h/30-50' w	PS/FS	*		*
Oak, white/Quercus alba	60-100' h/60-80' w	PS/FS	*		*
Pine, loblolly/Pinus taeda	50-80' h/30' w	FS			*
Pine, longleaf/Pinus palustris	60-80' h/30-40' w	FS			*
Sweetgum/Liquidambar styraciflua	75' h/50' w	PS/FS			*
Sycamore, American/Platanus occidentalis	75-90' h/60-70' w	FS	*		*
Tulip poplar/Liriodendron tulipifera	80-120' h/25-40' w	FS	*		*
Yellowwood, American/Cladrastis kentukea	40-50' h/40-50' w	PS/FS	*	*	*
Zelkova, Japanese/Zelkova serrata	50-90' h/50-75' w	FS	*	*	

TABLE C.5.5 RECOMMENDED UNDERSTORY TREES					
Common/Scientific Name	**Height and Width**	**Sun and Shade** FS=Full Sun PS= Part Sun S=Shade	**Street Tree**	**VUA**	**Landscape Yard**
Buckeye, red/*Aesculus pavia*	15-20' h/15-25' w	S/FS	*	*	*
Chastetree/*Vitex agnus-castus*	10-15' h/15-20' w	PS/FS			*
Chastetree, cutleaf/*Vitex negundo-'Heterophylla'*	10-15' h/10-15' w	PS/FS			*
Cherry, Okame/*Prunus x incamp* 'Okame'	15-25' h/20' w	PS/FS	*	*	
Dogwood, flowering/*Cornus florida*	20-30' h/20' w	PS	*		*
Dogwood, Japanese/*Cornus officinalis*	20' h/25' w	PS/FS	*		*
Dogwood,kousa/*Cornus kousa*	15-20' h/15-20' w	PS/FS	*		*
Dogwood, pagoda/*Cornus alternifolia*	15-20' h/15-20' w	PS/FS	*		*
Fringetree/*Chionanthus virginicus*	12-15' h/10-15' w	PS/FS	*	*	*
Fringetree, Chinese/*Chionanthus retusus*	20' h/10-15' w	PS/FS	*	*	*
Hophornbeam/Ostrya virginiana	25-40'h/20-30'w	PS/FS	*	*	*
Hornbeam, American/*Carpinus caroliniana*	20-40' h/20-30' w	PS	*	*	*
Loquat/*Eriobotrya japonica*	20-30' h/30-35' w	PS/FS			*
Maple, amur/*Acer ginnala*	15-20' h/15-20' w	PS/FS	*		*
Magnolia, star/*Magnolia stellata*	15-20' h/10-15' w	PS/FS	*		*
Magnolia, Southern/*Magnolia grandiflora*'Little Gem'	20-25' h/10-15'w	PS/FS			*
Magnolia, sweetbay/Magnolia virginiana	30-40' h/15-25' w	PS			*
Maple, hedge/Acer campestre	30-35' h/30-35' w/	PS/FS	*		*

Common/Scientific Name	Height and Width	Sun and Shade FS=Full Sun PS= Part Sun S=Shade	Street Tree	VUA	Landscape Yard
Maple, trident/Acer buergerianum	30-40' h/25'w	PS/FS	*		*
Persian parrotia/Parrotia persica	20-40' h/20-40' w	PS/FS	*	*	*
Pistache, Chinese/Pistacia chinensis	25-35' h/25-35' w	FS/PS	*	*	
Redbud, Chinese/Cercis chinensis	10-15' h/6-10' w	PS/FS	*	*	*
Redbud, eastern/Cercis canadensis	20-30' h/15-30' w	PS	*	*	*
Silverbell, Carolina/Halesia Carolina	20-40' h/15-30' w	PS/FS	*	*	*
Snowbell, Japanese/Styrax japonicus	20-30' h/15-25' w	PS/FS	*	*	*
Stewartia, tall/Stewartia monadelpha	25-35' h/15-25' w	PS/FS			*
Waxmyrtle/Myrica cerifera	15-20' h/20-25' w	PS/FS			

B. **Evergreen Trees.** *Table C.5.6. includes* trees that are evergreen and perform well as screens in this climate. This is not an exhaustive list, there may be species acceptable for this use that are not listed here, this is just meant as a general guideline for the type of plants recommended for this purpose.

TABLE C.5.6 RECOMMENDED EVERGREEN TREES	
Common/*Scientific Name*	**Height and Width**
Japanese Cryptomeria/*Cryptomeria japonica*	50-60' h/20-30' w
'Emily Bruner'/*Ilex cassine*	20-30' h/8-15' w
'Nellie R. Stevens' Holly/*Ilex cornuta*	20-30' h/10-12' w
'Mary Nell' Holly/*Ilex latifolia*	20-25' h/8-14' w
American Holly/*Ilex opaca*	40-50' h/20-40' w
Foster's & Savannah Holly/*Ilex x. attenuata*	20-30' h/10-12' w
Weeping Yaupon Holly/*Ilex vomitoria*	20-30' h/6-12' w
'Emily Bruner' Holly/*Ilex x. Maserveae*	18-30' h/8-15' w
Eastern Red Cedar/*Juniperus virginiana*	40-50' h/8-20' w
Southern Magnolia/*Magnolia grandiflora*	60-80' h/30-50' w
'Little Gem' Magnolia/*Magnolia grandiflora*	18-30' h/8-15' w
Sweetbay Magnolia/*Magnolia virginiana*	18-30' h/15-25' w
Longleaf Pine/*Pinus palustris*	60-80' h/20-40' w
Live Oak/*Quercus virginiana*	40-80' h/60-100' w
Leyland Cypress/x. *Cupressocyparis Leylandii*	60-70' h/15-25' w
Redcedar, eastern/*Juniperus virginiana*	40-50' h/8-25' w

C. **Tall Shrubs.** *Table C.5.7.* consists of tall shrubs (greater than 6 feet in height at maturity) that are evergreen and perform well as screens in this climate. This is not an exhaustive list, there may be species acceptable for this use that are not listed here, this is just meant as a general guideline for the type of plants recommended for this purpose.

TABLE C.5.7 RECOMMENDED TALL SHRUBS	
Common/*Scientific Name*	**Height and Width**
Camellia/*Camellia japonica*	10-15' h/6-10' w
Sasanqua/*Camellia sasanqua*	6-10' h/6-8' w
Loquat/*Eriobotrya japonica*	15-25' h/15-25' w
Inkberry Holly/*Ilex glabra*	6-8' h/8-10' w
Foster's Holly/*Ilex x attenuate 'Fosteri'*	15-25' h/8-12' w
Yaupon Holly/*Ilex vomitoria*	15-20' h/8-15' w
Florida Anise/*Illicium floridanum*	6-10' h/6-8'w
Hollywood Juniper/*Juniperus chinensis 'Torulosa;*	10-15' h/10-15' w
Loropetalum/*Loropetalum chinense*	6-10' h/6-10' w
Banana Shrub/*Michelia figo*	6-15' h/6-15' w
Tea Olive/*Osmanthus heterophyllus* (also *O. fragrans, O.* x. *serrulata)*	8-20' h/8-12' w
Pittosporum/*Pittosporum tobira***	10-15' h/15-20' w
Podocarpus Yew/*Podocarpus macrophyllus*	15-35' h/10-18' w
Cleyera/*Ternstroemia gymnanthera***	6-10' h/6-8' w
Awabuki 'Chindo' Viburnum/*Viburnum awabuki*	15-20' h/10-15' w

D. **Prohibited Plants.** *Table C.5.8.* lists plants that are considered poor performers and are not permitted for use in landscaping applications:

1. No invasive species are allowed in the City of Sumter. Any plant included on the *USDA Noxious and Invasive Plant List* will also be considered an invasive plant.

TABLE C.5.8. POOR PERFORMERS	
Common Name	***Scientific Name***
Maple, Norway	*Acer platanoides*
Maple, Silver	*Acer saccharinum*
Catalpa	*Catalpa speciosa*
Honeylocust	*Gleditsia triacanthos*
Eastern White Pine	*Pinus strobes*
Bradford Pear	*Pyrus calleryana 'Bradford'*
Scarlet Oak	*Quercus coccinea*
Siberian Elm	*Ulmus pumila*

E. **Native Plants:**

1. Native vegetation shall be planted in all retention areas other than swales, such as rain gardens. Native vegetation includes plants indigenous to South Carolina (Zone 8), which intercept rainwater and are highly drought tolerant.
2. The following small to medium plants are all native and are tolerant of the fluctuating wet/dry conditions present in retention areas:

TABLE C.5.9 NATIVE PLANTS

Scientific Name	Common Name	Height	Comments
Amsonia hubrechtii	Texas Bluestar	36"	Blue Flowers; Fall foliage
Asclepias incarnata	Milkweed	30"	Butterfly food source
Aster novae angliae	New England Aster	24"	Bird food source, drought tolerant
Callicarpa Americana	Beautyberry	42"	Berries in Fall, nondescript at other times of year
Carex stricta	Tussock Sedge	12-36"	Clumping, grasslike
Echinacea purpurea	Purple Coneflower	24"	Bird & butterfly plant
Chasmanthium latifolium	Fish on a Pole	36"	Beautiful grass, year-round interest
Coreopsis verticillata	Coreopsis	24"	Yellow flowers; drought tolerant
Eupatorium purpureum	Joe-Pye Weed	24-60"	Dusty pink blooms; Dwarf varieties exist
Itea virginica	Virginia Sweetspire	36"	Deciduous; Great Fall color and spring blooms
Muehlenbergia	Muhly Grass	36-42"	Pink/Purple Flowering Grass
Panicum virgatum	Switch Grass	36"	Beautiful year-round in southeast
Rudbeckia hirta	Black-Eyed Susan	24"	Bird & butterfly plant
Solidago rugosa	Goldenrod	24-42"	Does not cause allergies

5.18 TREE PRESERVATION, CREDIT, AND REPLACEMENT

A. **Generally.** Tree preservation can provide environmental and aesthetic benefits to the community and is thus, preferred to that of tree replacement. Through tree preservation and protection, it is possible to attain credits toward the landscaping requirements, as set out in *Chapter C.5.18.F.* To attain these credits, development shall be designed, where practical and feasible, so that protected trees, when preserved, are preserved and located in designated open spaces or landscape surface areas.

B. **Protected Trees.** A Grand Tree includes those species and sizes listed in *Table C.5.10.* For the purposes of this requirement, a "Significant Stand of Trees" is a stand of mature trees with interconnected canopies that cover an area of at least 5,000 square feet. Pursuant to the allowable credit for the preservation and protection of existing trees, Grand Trees and Significant Stands of trees shall not be removed from any multi-family, non-residential, mixed use, or public or institutional property unless a Land Disturbance Permit has been issued, subject to the following exceptions:
   1. The tree is dead, diseased, irreparably damaged, hazardous or creating or potentially creating damage to the property or injury to person.
   2. The tree is listed on the USDA Invasive and Noxious Weed List.
   3. The tree is on an existing single family or duplex residential lot.
   4. The tree is on a property used by an active commercial farming operation.
   5. Loblolly Pines are not protected regardless of size.

TABLE C.5.10 GRAND TREES		
Latin Name:	**Common Name**	**Diameter at Breast Height (DBH)**
Acer spp.	All Maples	24 inches
Betula nigra	River Birch	24 inches
Carpinus caroliniana	American Hornbeam	24 inches
Carya illinoinensis	Pecan	24 inches
Cedrus deodora	Deodar Cedar	24 inches
Celtis occidentalis	Hackberry	24 inches
Fagus grandifolia	Beech	24 inches
Ginkgo biloba	Ginkgo	24 inches
Juglans nigra	Black Walnut	24 inches
Magnolia grandiflora	Southern Magnolia	24 inches
Nyssa sylvatica	Tupelo	24 inches
Ostrya virginiana	Ironwood	24 inches
Quercus virginiana	Live Oak	24 inches
Quercus alba	White Oak	24 inches
Quercus phellos	Willow Oak	24 inches
Quercus palustris	Pin Oak	24 inches
Quercus shumardii	Shumard Oak	24 inches
Pinus palustris	Longleaf Pine	24 inches
Platanus occidentalis	Sycamore	24 inches
Ulmus Americana	American Elm	24 inches
Ulmus parviflora	Chinese Elm	24 inches
Taxodium distichum	Bald Cypress	24 inches
All Other Canopy Trees (unless on the USDA Noxious and Invasive Plant List)		32 inches

C. **Tree Survey/Tree Protection Plan:** A tree survey and tree protection plan is required prior to development activity and/or tree removal. The survey shall include the species, diameter at breast height (DBH), and location of all grand trees. A tree protection plan shall be drawn to scale and submitted as part of a landscape plan, site plan, preliminary subdivision plan, when seeking a site development permit, or filed separately.

D. **Removal of Grand Trees or Significant Stands of Trees**. Grand Trees and/or Significant Stands of Trees may only be removed during site development and/or construction under the following conditions:

1. In instances where no reasonable and/or economically feasible design alternative exists to save a Grand Tree or Significant Stand of Trees during site development, removal shall be mitigated by the planting of 6 new 2" caliper canopy trees for each Grand Tree removed.
2. For the purposes of mitigation calculation, a Significant Stand of Trees will convert to a Grand Tree at a rate of 1 Grand Tree Unit to each 5,000 sq. ft. of tree canopy. If a Grand Tree exists in a Significant Stand of Trees, both the existing Grand Tree and Significant Stand of Trees must be counted separately.
3. Mitigation trees cannot be counted towards other ordinance required landscaping requirements (e.g. buffer yard or parking lot planting requirements).

E. **Preservation of Existing Grand Trees.** It shall be the responsibility of the developer to ensure protection of all grand trees or stands of significant trees not permitted for removal during construction, using the following requirements:

1. The Critical Root Zone (CRZ) shall be established as a 1 ft. radius for every 1-inch of DBH, or a 10 ft. radius of the trunk of a tree, whichever is greater.
2. Irrigate protected trees during periods of drought or dry weather.
3. Tree protection or 'keep out' signage shall be placed on and attached to the physical barrier and maintained until all construction activities are completed. The placement and quantity of signage shall be on all sides and convey the intent of the CRZ and barriers.
4. Mitigate drainage around protected trees if re-grading the site causes poor drainage or ponding in root zone.
5. Where compaction might occur due to construction traffic or materials delivery through the CRZ, the area must first be mulched with a minimum 4 in. layer of wood chips.
6. The removal of trees adjacent to tree protection zones can cause inadvertent damage to the protected trees. Prior to clearing activities, trenches with a minimum width of 1.5 inches and a minimum depth of 12 inches shall be cut along the limits of land disturbance.

F. **Credit for Preservation of Grand Trees and/or Significant Stands of Trees**. It is the policy of the City to promote the preservation of its healthy mature tree canopy. Healthy, mature trees that are preserved on-site shall be credited as set out in *Table C.5.10.* toward mitigation plantings required for grand tree removals per *Chapter C.5.18.D*. These credits may only be applied to the specific site in question at the time of development and may not be transferred to any other site.

TABLE C.5.11 CREDIT FOR PRESERVATION OF TREES		
Diameter at Breast Height (DBH) of Preserved Canopy Tree		
More than	Up to and Including	Credit Per Preserved Tree
32 inches	Any size larger than 32 inches	5 canopy trees
24 inches	32 inches	4 canopy trees
16 inches	24 inches	3 canopy trees
10 inches	16 inches	2 canopy trees

G. **Tree Survey Required/Eligibility for Preservation Credit for Existing Grand Trees and/or Stands of Significant Trees.** To be eligible for credits where trees are preserved on a site, a tree survey is required.

1. **Tree Survey**. A tree survey (including caliper size, type, and location of trees) performed by a certified arborist or registered landscape architect, is required for parcels proposed for development when the applicant seeks credit for existing trees pursuant to *Chapter C.5.18.F*.
2. **Quality of Existing Trees**. Existing trees that are protected according to *Table C.5.11.* count towards mitigation planting requirements for any Grand Tree or Stand of Significant Trees authorized for removal.

(1) Eligibility. Existing trees are eligible for credit if:

A. They are healthy and in good structural condition, and

B. They are not on the prohibited plants list

H. **Post-Timber Harvest Development Deferral.** Pursuant to S.C. Code § 48-23-205, and to discourage harvesting of timber for the purpose of circumventing the requirements of *Chapter C.5*. while preserving the right of landowners to conduct

bona fide forestry activities. Nothing in this subsection shall be construed to require a permit, license, or approval from the City for a forestry activity, or to regulate the method, timing, or extent of a timber harvest. This subsection governs the timing of the City's consideration of applications for development approval following a timber harvest.

1. **Definitions.** For the purposes of this subsection the following definitions apply:
   (1) **Development.** Any activity, including timber harvesting, that is associated with the conversion of forest land to a non-forest or non-agricultural use.
   (2) **Timber Harvest.** The cutting and removal of trees for sale or for use as forest products.
   (3) **Completion of Harvest.** The date on which the final load of harvested timber is removed from the tract, or the date on which site cleanup, replanting, or other post-harvest closeout activity on the tract is completed, whichever occurs later, as determined by the Zoning Administrator based on the best available evidence.
2. **Deferral of Development Approvals.** Where all or substantially all of the trees classified as Grand Trees or Significant Stand(s) of Trees under *Chapter C.5.18.B.* have been removed by timber harvest from the area of a tract included in an application for a land disturbance permit, a building permit, site plan application, preliminary subdivision plan, or other approval for development, the City shall defer consideration of that application as follows:
   (1) **1-Year Deferral.** Consideration of the application shall be deferred for a period of 1 year following the completion of harvest.
   (2) **5-Year Deferral.** Consideration of the application shall be deferred for a period of up to 5 years following the completion of harvest where the Zoning Administrator determines that the harvest was conducted in willful violation of this Chapter, or with willful intent to remove trees that would otherwise have been protected by, or required to be mitigated under, this Chapter. The deferral period imposed under this subparagraph shall be proportionate to the extent of the canopy and Grand Tree loss and shall not exceed the maximum period authorized by S.C. Code § 48-23-205.

3. **Determination of Willful Intent.** In determining whether a harvest was conducted with willful intent for the purposes of *Chapter C.5.18.G.3.b.*, the Zoning Administrator shall consider the following factors:
   (1) **Timing.** The proximity in time between the harvest and any application for annexation, rezoning, subdivision, site plan, or development permit affecting the tract, or any option, contract, or listing for sale of the tract for development purposes.
   (2) **Correspondence to Development Footprint.** Whether the harvested area corresponds substantially to the footprint of the proposed development, rather than to stand boundaries, timber type, or silvicultural rotation.
   (3) **Forestry Practices.** Whether the harvest was conducted in accordance with the Best Management Practices established by the South Carolina Forestry Commission pursuant to S.C. Code Ann. § 48-36-30, whether merchantable timber was actually sold, and whether the tract was replanted or otherwise regenerated.
   (4) **Forest Management Status.** Whether the tract is taxed on the basis of its present use value as forestland under S.C. Code Ann. § 12-43-220(d), is managed in accordance with a written forest management plan or is subject to a legally binding conservation easement.
   (5) **Post-Harvest Site Activity.** Whether stumps, root mats, or debris were removed, or grading, filling, or infrastructure installation occurred, beyond that customary for a silvicultural operation.
   (6) **Notice.** Whether the property owner, agent, or operator received prior written notice from the City of the requirements of this Chapter.
4. **Limitations and Exemptions.** Consistent with S.C. Code Ann. § 48-23-205(B), the City shall not adopt or enforce any ordinance, rule, regulation, resolution, or permit related to forestry activities on forestland described in that subsection, including forestland taxed on the basis of its present use value as forestland under S.C. Code Ann. § 12-43-220(d), forestland managed in accordance with a forest management plan, forestland subject to a legally binding conservation easement under which the owner limits the right to develop or subdivide the land, and forestland managed and harvested in accordance

with the Best Management Practices established by the South Carolina Forestry Commission pursuant to S.C. Code §48-36-30. The deferral authorized by this subsection is applied solely to applications for development approval as permitted by S.C. Code §48-23-205(C) and shall not be applied to the harvest itself. This subsection shall not apply to the removal of trees that are dead, diseased, irreparably damaged, hazardous, or listed on the USDA Invasive and Noxious Weed List, to harvests conducted in response to a declared emergency, natural disaster, wildfire, insect infestation, or disease outbreak, or to trees exempted under Chapter C.5.18.B.

5. **Remediation and Early Release.** An applicant subject to a deferral under this subsection may request that the deferral be released prior to its expiration by submitting a remediation plan, approved by the Zoning Administrator, that mitigates the loss of protected trees as though those trees had been standing on the date of application. Mitigation shall be calculated using the standards of Chapter C.5.18.D. based on the best available pre-harvest evidence, and may be satisfied through on-site planting, a contribution to the Tree Bank Program, or a combination thereof. Mitigation plantings provided under this paragraph shall be in addition to, and shall not be credited toward, required landscaping, buffer, street tree, or parking lot planting requirements.
6. **Required Documentation.** An applicant for development approval on a tract on which a timber harvest has occurred within 5 years preceding the date of application shall submit, with the application, the date and extent of the harvest, available harvest records or timber sale documentation, pre-harvest and post-harvest aerial imagery where available, and a tree survey prepared in accordance with Chapter C.5.18.C. documenting all remaining Grand Trees and Significant Stands of Trees.
7. **Appeal.** A determination of the Zoning Administrator under this subsection, including the length of a deferral period, a finding of willful intent, or the denial of a remediation plan, may be appealed to the Board of Zoning Appeals in accordance with the procedures of this Ordinance.

5.19 TREE BANK PROGRAM

A. **Purpose and Intent.** The Tree Bank Program is established to provide an alternative compliance mechanism for tree replacement and canopy coverage requirements when on-site planting is not feasible due to physical site constraints, utility conflicts, or approved design alternatives. The program supports the City's goals for urban forestry, environmental quality, and equitable canopy distribution.

B. **Applicability.** Tree Bank contributions may be approved by the Zoning Administrator in the following cases:
   1. When required tree replacement cannot be accommodated on-site.
   2. When development occurs in areas with limited planting space (e.g., urban infill, constrained parcels).
   3. As mitigation for unauthorized tree removal or canopy loss.

C. **Contribution Standards.**
   1. Valuation. Contributions shall be calculated based on the size and species of trees not replaced, using a fee schedule adopted by City Council and updated annually.
   2. Use of Funds. Tree Bank funds shall be used exclusively for:
      (1) Tree and/or shrub planting on public property or rights-of-way,
      (2) Tree giveaway/distribution programs
      (3) Maintenance of public landscaping,
      (4) Urban forestry education and outreach,
      (5) Tree canopy studies or inventories.

D. **Administration.**
   1. The City of Sumter shall maintain a dedicated Tree Bank account.
   2. The City Arborist shall review and approve Tree Bank contributions as part of the development review process.
   3. Annual reports on Tree Bank activity shall be submitted to the Planning Commission and made available to the public.

E. **Tree Bank in Lieu of On-Site Planting.** Applicants must demonstrate that on-site planting is infeasible and submit a Tree Bank Contribution Plan as part of their landscape plan. Approval is subject to staff review and may be conditioned on partial on-site planting.

6. FENCING, BERMS, AND WALLS

6.1 PURPOSE

A. The purpose of this Section is to establish standards for the design, placement, and construction of fences, berms, and walls. The intent of these regulations is to:

1. Ensure compatibility between adjacent land uses and protect the character of surrounding areas;
2. Provide privacy, buffering, and screening of incompatible uses, structures, and activities;
3. Enhance community aesthetics through the use of durable, high-quality materials and cohesive design;
4. Promote safety and security while maintaining appropriate visibility for vehicles and pedestrians; and
5. Prevent the creation of visual barriers or site conditions that could adversely impact public health, safety, and welfare.

6.2 GENERAL STANDARDS

A. Fences, berms, and/or walls, whether required by this UDO or optional, shall require a permit unless otherwise stated.

1. Fences and walls must be constructed of high-quality materials including brick and stone, stucco over concrete masonry blocks, treated wood, wrought iron, metal or similar materials to imitate wrought iron, composite fencing, PVC vinyl, and/or other like materials as approved by the Zoning Administrator.
2. Unless required by law, no fence or wall may be constructed of non-traditional or dangerous fence or wall materials including but not limited to barbed wire, razor

wire, scrap metal, railroad ties, or any other material determined by the Zoning Administrator to be detrimental to the public health, safety and welfare.

3. Where a fence or wall is used as part of the required screening, all required vegetation shall be planted on the exterior side of the fence or wall.
   (1) Where the fence option is used to screen multifamily residential zoning types from more intense zoning, the required vegetation may be planted on the interior side of the fence or wall.
4. No fence or wall shall impede or divert the flow of water through any drainageway.
5. All gates must be installed such that it does not encroach onto public rights-of-way or adjacent property when opened.

6.3 FENCE STANDARDS

Table C.6.1 Fence Standards

Standard		Maximum Dimension
Location	Downtown Core (DTC) & Downtown Transition (DTT)	Except where otherwise permitted, fences in the DTC and DTT are limited to 3 feet in height along front public street frontages.
	Industrial	Industrial Fences may be a maximum of 10 ft. above ground level
Height	Measurement	Fence height refers to the fence itself. Posts, decorative columns, light fixtures, or other decorative details may exceed the height limit by up to 1 foot.
	Front	Fences must be placed at least 2 feet from the Right-of-Way or any sidewalk, unless an encroachment permit is obtained from the Right-of-Way owner Fences located in front yards may be a maximum of 4 ft. above ground level.
	Side	8 ft. maximum above ground level May be placed on property line.
	Rear	8 ft. maximum above ground level May be placed on property line.
Support Structures		All fence support structures must be located on the inside of the fence covering material.
Color Restrictions		Bright colors, including orange, yellow, and red, are not permitted for permanent fences.

A. **Electric fences.** Electric fences are only permitted in conjunction with agricultural uses or permitted uses in the LI-W and HI districts. They are not permitted in residential districts, and all other instances require approval from the Zoning Administrator. Electric fences must abide by the following standards:
   1. Underground electric fences that are used in conjunction with electric transponder collars for pets are permitted in all districts.
   2. Electric fences may be powered only by a commercial storage battery not to exceed 12 volts DC.
   3. Warning signs shall be required on all electric fences and meet all safety and emergency services requirements.

B. **Barbed Wire Fences.** Barbed wire fencing is only permitted in conjunction with industrial activities in all districts except for residential districts. Barbed wire may be approved by special exception in all districts if deemed necessary to protect health and safety in association with agriculture, utility structures, landfills, airports or similar civic uses.

6.4 BERM STANDARDS

Berms constructed to satisfy buffer requirements stated herein shall be physical barriers which screen incompatible land uses.

A. **Landscaping**. Berms that are 6 feet high or greater, or earthen berms with combined evergreen shrub plantings reaching a minimum height of 6 feet, may be used in lieu of not more than 50% of the evergreen buffer yard plantings providing the following conditions are met:
    1. soil stabilization measures are taken;
    2. A continuous turf/groundcover layer is applied to the berm; and,
    3. A minimum 6-foot combined height of berm and plantings is maintained.

B. **Berms In Required Yards Setbacks.** Berms may be located in required yards setbacks subject to the following additional standards:

C. **Required Setbacks.** Fences, walls, berms, and retaining walls are exempt from setback requirements. However, a berm may not be constructed in a manner that any portion of the berm's slopes extend over the property line.

D. **Right-of-Way.** No fence, wall or berm may encroach into a public right-of-way. Fences and walls shall not block any required ingress or egress point.

E. **Sight Triangles.** No fence, wall, berm, or retaining wall may encroach into a designated visibility triangles for driveways or for the intersections of rights-of-ways subject to this Section.

F. **Grading.** Berms shall not exceed a grade of 1 ft. of rise per 3 ft. of width.

G. **Height.** Berms shall not exceed a total of 8 feet above the toe of the berm.

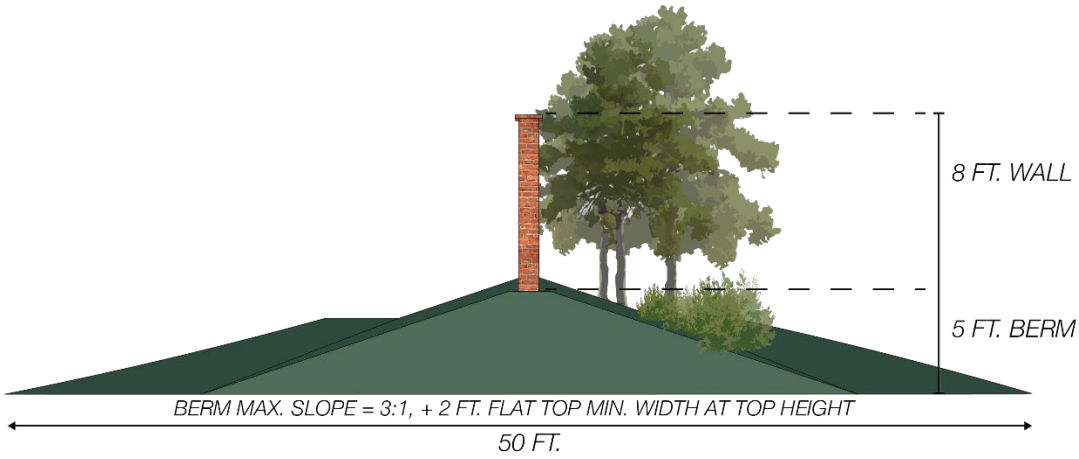
H. **Shape**. Berms shall be natural shaped, shall have a minimum crown width of 2 feet, and shall have side slopes stabilized to meet sedimentation and erosion control standards.
    1. **Drainage.** Berms shall not drain onto neighboring yards and cause undue pooling of water. Runoff shall be directed into appropriate drainage easements or facilities.

6.5 WALL STANDARDS

Walls constructed to satisfy buffer requirements stated herein shall be physical barriers which screen incompatible land uses.

A. **Setbacks**. walls and retaining walls are exempt from setback requirements.
B. **Right-of-Way**. No wall may encroach into a public right-of-way. Walls shall not block any required ingress or egress point.
C. **Site Triangle**. No wall or retaining wall may encroach into a designated visibility triangles for driveways or for the intersections of rights-of-ways subject to this Section.
D. **Height.** Walls shall not exceed a total of 8 feet in height.
E. **Drainage.** Walls shall not drain cause undue pooling of water. Runoff shall be directed into appropriate drainage easements or facilities.

Figure C.6.1 Berms and Walls Diagram



7. PARKS AND OPEN SPACE

7.1 PURPOSE

The purpose of this Section is to require open space that preserves natural features, ensures access to open areas, provides active and passive recreational opportunities, adds to the visual character of a development, and provides other public health benefits. Further, this Section intends to:

A. Define minimum open space requirements;
B. Require maintenance and upkeep of open spaces;
C. Promote open space that is accessible to the public in applicable developments; and
D. Expand opportunities for connectivity and quality open spaces provided in the City.

7.2 GENERAL PROVISIONS

All new major subdivisions and planned developments shall comply with the standards of this Section, except for individual commercial uses:

A. **Repair or Renovation.** A building may be repaired or renovated without requiring open space per the requirements of this UDO provided there is no increase in gross floor area.

B. **Major.** When a building or site is increased in gross floor area or improved site area by greater than 25%, open space must be provided for the entire property. Improved site area shall include site improvements such as utility installations, landscape

modifications, additional impervious surfaces (including parking), and/or construction of structures.

C. **Change in Use.** A change in use, providing no major or minor increases are proposed, shall not require compliance with *Chapter C.7*.

D. **Single-Family Dwellings.** Development or redevelopment of individual single-family dwellings, not part of a new subdivision approval, are exempt from the standards of this Section.

E. **Open Space Sizes.** Open space may consist of a variety of different sizes. For the purpose of this Section, open space sizes shall be defined as small, medium, and large. The acreage of open space for each open space size is defined in *Table C.7.1*.

Table C.7.1 Open Space Sizes

Open Space Size	Acreage (Range)
Small	500 SF – 1.0 Acre
Medium	1.0 – 2.5 Acres
Large	2.5 Acres or More

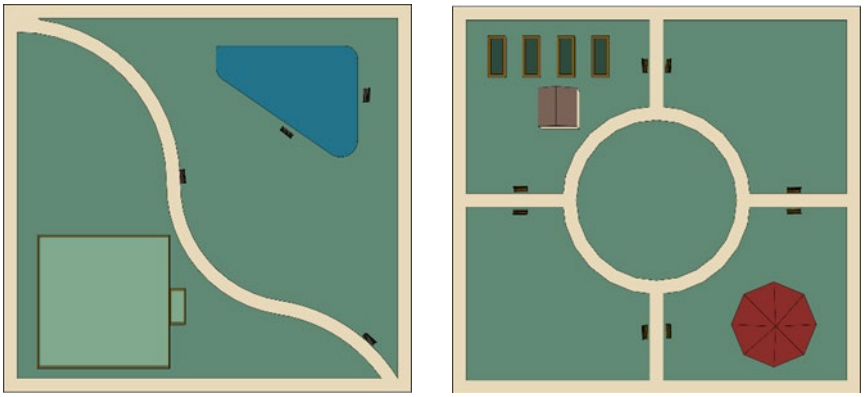
7.3 OPEN SPACE FORMS

Required open space shall be implemented through permitted open space forms identified in this Section. Open spaces forms shall allow for public areas, semi-public areas, and/or private outdoor areas. All open space areas shall be landscaped in accordance with this UDO and provide uniform design and coordinated experiences for the user. The following open space forms are identified as follows:

A. **Small:**

1. **Pocket Park.** Pocket parks are intended to be implemented within residential developments and shall comply with the following standards.
   (1) Pocket parks provide active and / or passive recreation uses.
   (2) Pocket parks shall include components such as (but not limited to) shade structures, gazebos, seating areas, multi-purpose lawn space, dog park, playground/play space, public art, sculptures, community gardens, landscaping, and trails.
   (3) Pocket parks may be designed around and include an environmental feature such as a stream, creek, or wetlands. Pocket parks shall be a minimum 500 square feet in size.

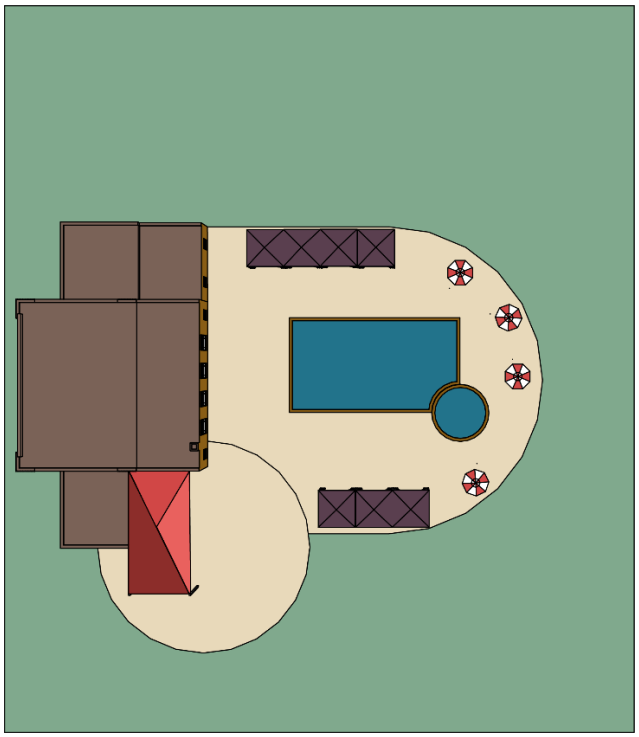
Figure C.7.1 Pocket Park



B. **Medium:**

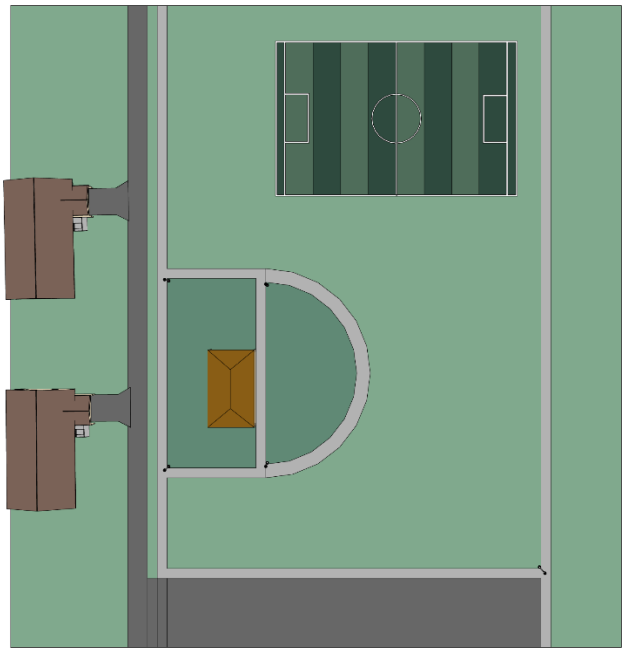
1. **Amenity Centers.** Amenity centers are primarily implemented in residential developments and shall comply with the following standards.
   (1) Provide recreational opportunities in residential developments.
   (2) May include (but is not limited to) features including pools, fitness facilities, splash pads, outdoor seating, clubhouse, small scale recreational facilities such as pickleball, soccer, or shuffleboard, and lawn games.
   (3) All features are intended to be utilized by residents and their guests only.

Figure C.7.2 Amenity Center



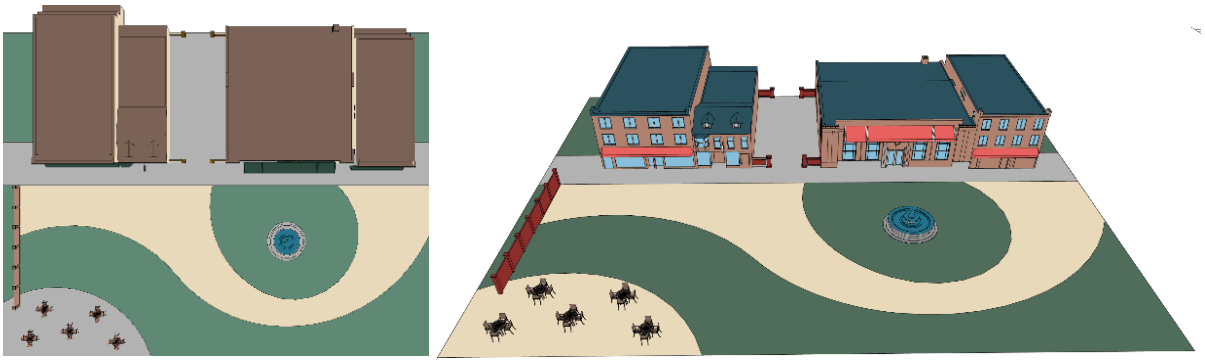
2. **Green:** A green provides a larger, more informal spaces and is implemented in residential developments and shall comply with the following standards.
   (1) Shall provide for both active and passive recreation.
   (2) Shall be located within a ½ mile radius of the majority of residents.
   (3) May include but is not limited to shade structures, gazebos, seating areas, multi-purpose lawn space, playground/play space, limited/small scale recreational facilities.
   (4) Shall be a minimum ½ acre in size.

Figure C.7.3 Green



3. **Plaza/ Square.** The plaza/square open space form serves as a more formal open space for the gathering of people for a wide variety of civic, social, and commercial purposes. This open space form is primarily intended to be implemented in nonresidential developments. Plazas and squares shall meet the following standards:
   (1) Shall provide a uniform and coordinated design of compatible materials, colors, pavers, seating, and structures.
   (2) Shall include outdoor lighting that meets the requirements of this UDO.
   (3) Shall require landscaping, foundation plantings, and green space in addition to impervious surfaces.
   (4) Shall be partially paved with brick, permeable pavers, or similar materials.
   (5) Shall require a focal point such as public art installations, fountains, gazebo, or similar structures.

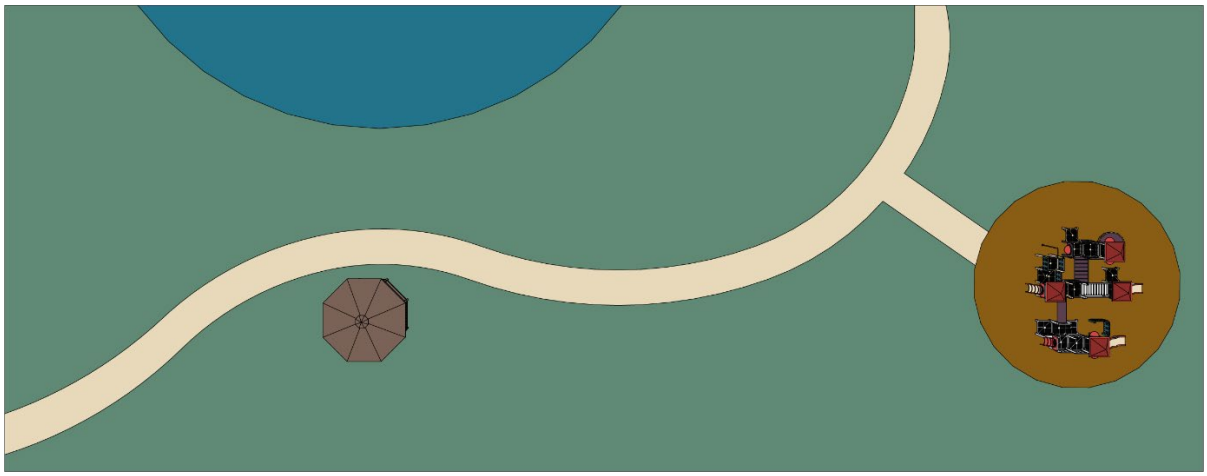
Figure C.7.4 Plaza/Square



C. **Large:**

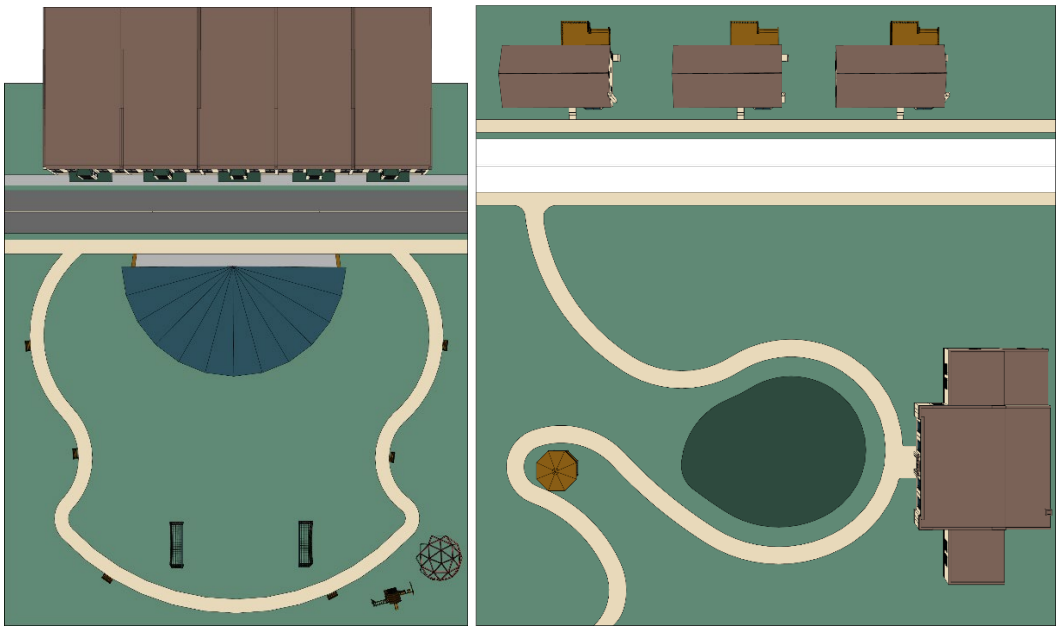
1. **Linear Park/Greenway**. Linear Park/greenway is an open space form that provides passive and active recreation and a formalized function (provides multimodal options and connectivity). Linear parks may be implemented in residential and nonresidential developments and shall comply with the following standards:
   (1) May be designed around a natural feature such as a stream, wetlands system, stormwater facility, or other man-made or natural feature.
   (2) Shall connect with other open spaces or linear parks where practicable.
   (3) Shall feature improved or non-improved walkways that respect the natural environment in which they are constructed.
   (4) Walkways shall be a minimum 8 feet in width.
   (5) May include accessory structures such as gazebos, seating areas, playgrounds, and shade structures.

Figure C.7.5 Linear Park



2. **Neighborhood park.** Neighborhood parks provide active and passive recreational activities to residents of a residential development. Neighborhood parks shall comply with the following standards:
   (1) Shall provide for both active and passive recreation.
   (2) Shall include at minimum shade structures, seating areas, multipurpose lawns, and/or sports fields.
   (3) May include gazebos, community center, playground, pool, fitness center, and other appropriate uses.
   (4) A minimum 25% of the park area shall be dedicated to active recreation uses as defined in this Section.
   (5) Shall be a minimum of 1 acre in size.

Figure C.7.6 Neighborhood Park



D. **Minimum Open Space Requirement.** The required amount of minimum open space in an applicable development shall be in accordance with this Section. Open space shall be calculated as a percentage of the total square footage of a development. Each development shall also require a minimum number of open space forms pursuant to Table C.7.2. For example, a residential development in a residential district shall require that 10% of the total square footage of the development is open space. The open space shall be in the form of at least 2 distinct open space forms, such as a pocket park and green.

TABLE C.7.2 MINIMUM OPEN SPACE REQUIREMENT		
ZONING DISTRICT	**MINIMUM OPEN SPACE PERCENTAGE (%)**	**MINIMUM REQUIRED OPEN SPACE FORM(S)**
Residential Districts – Subdivisions		
0-50 Acres	10%	2
Greater Than 50 Acres	20%	3 *1
Mixed-Use Districts – Planned Developments		
Less Than 25 Acres	10%	2
Greater Than 25 Acres	15%	2
Special Districts		
Planned Developments are required to meet Open Space standards set forth in *Chapter B.8.*		
Notes: 1. At least 50% of the dwelling units within a residential development must be located within 0.5 mile of the provided open space area. 2. The minimum open space requirements of this table shall not apply to infill development, as defined in this Ordinance.		

E. **Open Space Design Standards.** The design and incorporation of open space in a development shall comply with the following standards:

1. **Evenly Distributed.** Required open space shall be, to the maximum amount practicable with respect to environmental considerations and subdivision design, evenly distributed throughout the development.
2. **Consolidation.** Required open space shall not be consolidated to meet the standards of this Section. It is the intent of this Section to require multiple open space forms of varying sizes in each development where required.
3. **Distance.** No 2 open space forms shall be within 100 feet of each other. Active use areas are exempted from this standard.
4. **Accessible.** Open space shall be located and designed to be easily accessible for residents and/or users of the development. Open spaces shall provide universal design that can be enjoyed by users and provide for ADA accessibility.
5. **Public Seating.** Public seating shall be appropriate to the intended use of the park area (i.e. benches may be appropriate for active spaces; chairs and landscape terraces may be appropriate for passive spaces).
6. **Receptacles.** Refuse and recycling receptacles are required at each entrance and gathering space.
7. **Stormwater.** A maximum 50% of total required passive open space may be stormwater facilities. Any stormwater facility used toward that requirement shall be publicly accessible through an improved or primitive trail. For the purpose of this Section, improved and primitive trails are defined in *Chapter C.7.3.E.8.*
8. **Improved Trail.** An improved trail shall be defined as a clearly marked, paved, impervious trail.
   (1) **Primitive Trail.** A primitive trail shall be defined as an unpaved, pervious trail that consists of mulch, crushed stone, or similar material.
   (2) **Environmentally Sensitive/Unique Lands and Floodplains.** A maximum 20% of total required passive open space may be environmentally sensitive or unique lands such as waterbodies, wetlands, protected stream buffers, rock outcroppings, and floodplains.
   (3) **Multi- Phased Developments.** In multi-phased developments, open space shall be provided for each phase in an amount sufficient to satisfy the open

space requirements for the subject phase of development and all preceding phases of development.

(4) **Areas Not Included in Open Space.** The following are not considered open space and cannot be counted toward minimum open space requirements:

a. Private yards that are not part of an open space or conservation easement;
b. Street right-of-way or private easements
c. Vehicular parking areas; and
d. Designated outdoor storage areas.

F. **Active and Passive Features.** Within residential developments, a minimum of 25% of all required open space (gross square footage) shall be dedicated and designed to allow for active recreation features. Active recreation and passive features are identified in *Table C.7.3.*

1. Active recreation is defined as recreational features, often requiring equipment and taking place at prescribed places, sites or fields, which allow for the active recreational needs of residents or users of the development which they serve.
2. Passive recreation is defined as recreational features that do not require prepared facilities like sports fields or pavilions and require minimal disruption to a site. These include such activities as walking paths and other features defined in *Table C.7.3*.

TABLE C.7.3 ACTIVE AND PASSIVE FEATURES	
ACTIVE FEATURES	**PASSIVE FEATURES**
Lawn Games and Concrete Gaming Tables	Walking Trails
Hard Courts (Pickleball, Tennis, Etc.)	Boardwalks
Playgrounds	Gardens
Swimming Pools and Splash Pads	Greens
Athletic Fields (Pickleball, Baseball, Etc.)	Picnic Areas
Clubhouse, Pavilions, Amenity Centers, Gazebos, Shade Structures	Lakes and Ponds
Exercise Facilities	Lawns and Natural Areas
Plazas	Greenways

7.4 OWNERSHIP OF OPEN SPACE

A. The type of ownership of land dedicated for open space purposes shall be selected by the owner, developer, or subdivider, subject to approval of the Planning Commission.
   1. Open space restrictions must be permanent; and
   2. The owner must be responsible for liability insurance, local taxes, and the maintenance of recreational and other facilities.

B. Ownership may include, but is not necessarily limited to, the following:
   1. The City of Sumter, Sumter County, or the State of South Carolina
   2. Not-for-profit land trusts or other charitable organizations focused on land stewardship
   3. Home Owners, condominium, or cooperative associations
      (1) If open space is owned and maintained by an association, the developer shall file with the registrar of deeds a copy of the covenants and other legal documents as may be required by the City, including but not limited to deed restrictions and the like, which provide for the continuous and ongoing use, maintenance and ownership of said facilities. Restrictions shall be provided to the City that will govern the association and the responsibilities prior to the site plan approval or the preliminary plat application stage.

7.5 MAINTENANCE OF OPEN SPACE

The owner of open space shall be required to maintain the open space. This shall include regular maintenance of vegetation as well as infrastructure components (stormwater facilities, paths, impervious surfaces, amenities, etc.). Failure to maintain the open space in the condition in which it was approved will result in code violation and potential penalty by the city.

8. WETLANDS AND FLOODPLAINS

8.1 PURPOSE

The public interest and general welfare of the residents of the City of Sumter is served through procedures for the protection, conservation, enhancement, and proper maintenance of all existing wetlands, wetlands buffer areas, and floodplains within the City and for the protection of existing wetlands, wetlands buffer areas, and floodplains from encroachment, pollution, degradation, alteration, or elimination. These protections are an integral part of the City's broader surface and groundwater management plans. These protections are also a crucial element of the City's resiliency planning in anticipation of more frequent and severe storm events.

8.2 APPLICABILITY

A. **Wetlands Impact Certification/Wetlands Notification**. Any person proposing to carry out a wetlands disturbance under this Section must, prior to the commencement of the activity, obtain a Wetlands Certification from the City.

B. **Flood Damage Prevention**. The City of Sumter requires that uses vulnerable to floods be protected against flood damage, in accordance with the requirements found in the *City of Sumter Flood Damage Prevention Ordinance*, located in *Appendix 1*.

C. **Applicable Activities**. This Ordinance shall apply to any proposed land disturbance use or activity within a wetlands or wetlands buffer area. A Wetlands Impact Application shall be submitted simultaneously with any action that results in land disturbance, including but not limited to the following:

1. Major or Minor Site Plan Applications;
2. Preliminary Plat Approvals for Major Subdivisions;
3. Major Commercial Land Disturbance Applications;
4. Major Subdivision Land Disturbance Applications

D. **Non-conforming buffers**. All developed lots and all undeveloped but recorded single-family lots on the effective date of this Ordinance that do not comply with the buffer and setback requirements of this Ordinance shall be grandfathered as legal nonconforming lots.

E. **State/Federal Permits**. Permits issued by state or federal agencies do not relieve a person of the requirement to seek approval under this Ordinance.

8.3 WETLANDS DELINEATION

For all proposed land disturbances taking place within the City as defined herein, and all applicable activities, as enumerated herein, the following shall apply:

A. Where unexpired wetlands delineations have been approved by the U.S. Army Corps of Engineers, such delineations will constitute "wetlands" for the purposes of this Ordinance. This Ordinance encompasses all delineated wetlands regardless of whether they are jurisdictional or non-jurisdictional.

B. Where the National Wetlands Inventory (NWI) indicates the possible presence of wetlands, a professional wetlands delineation or certification by a wetlands professional attesting that no wetlands are present on the site is required.

C. In all other cases, a landowner or authorized agent of the landowner shall submit to the Zoning Administrator either of the following:
   1. An affidavit attesting that no wetlands or wetlands buffer areas exist on the site.
   2. Professional wetlands delineation.

8.4 WETLANDS NOTIFICATION AND WETLANDS IMPACT CERTIFICATION

A. Wetlands Notification and Wetlands Impact Certification.

1. Any person wishing to carry out a wetlands disturbance activity not otherwise exempted in *Chapter C.8.5* shall submit a Wetlands Impact Application to the Zoning Administrator. For applicants who will adhere to all buffer and setback requirements and will not impact wetlands, a Wetlands Notification may be submitted.

B. If the activity will result in impacts to wetlands or buffers and setbacks, the applicant must submit the following additional materials as part of the Wetlands Impact Application:

1. Description of anticipated direct and indirect wetlands impacts of the proposed land disturbance;
2. A detailed explanation of why this activity cannot be located at an upland location, along with descriptions of any alternatives that were considered;
3. A detailed description of all measures proposed to reduce or compensate for project impacts; and
4. A statement demonstrating how the purpose of the proposed project serves an overriding public interest, as defined herein.

8.5 PROHIBITED AND EXEMPTED ACTIVITIES IN WETLANDS AREAS

A. **Prohibited Activities**. Unless otherwise exempted, all wetlands disturbance shall be prohibited unless the proper Wetlands Certification has been granted by the City.

B. **Exempted Activities**. The following activities are exempted from the purview of this Ordinance and may be undertaken without a Wetlands Impact Application, where otherwise allowable by law.

1. Installation of nature trails or pervious pedestrian access paths;
2. Pruning or trimming of grasses, shrubs, and other smaller vegetation;
3. Planting native species of plants;

4. Removal of invasive species of plants;
5. Any outdoor recreation activities not otherwise proscribed by the property owner or another applicable law or regulation, to include hiking, swimming, kayaking, canoeing, boating, horseback riding, hunting, fishing, shell fishing, and camping;
6. Research of soil, vegetation, water, fish, or wildlife for educational, scientific, or conservation purposes;
7. Maintenance or repair of existing water-control devices or structures, provided the device or structure is not "degraded" as defined herein, and the maintenance or repair does not involve enlarging, expanding, constructing, or relocating such water-control structures or devices;
8. Maintenance and repair of existing utilities and roadways, provided the activity does not involve enlarging, expanding, constructing, or relocating such utilities and roadways.

C. Prior Nonconforming Use, Activity, or Structure.

1. Prior nonconforming uses, activities, or structures, as defined herein, shall not be enlarged or expanded to further encroach onto or otherwise disturb wetlands, wetlands waterbodies, or wetlands watercourses.
2. No nonconforming use, activity, or structure which has been discontinued for 2 years or more shall be resumed without a permit.

8.6 STANDARDS AND CRITERIA FOR APPROVAL/DISAPPROVAL OF WETLANDS IMPACT APPLICATION

A. **Review Factors**. The City will consider relevant factors, and shall require the applicant to demonstrate evidence of such, including, but not limited to, the following:

1. The functions of the wetlands in question;
2. The proximity of the wetlands to other water bodies;
3. The environmental impact of the proposed disturbance;
4. Alternatives to the proposed disturbance and suitability of the area;
5. Threats to other properties from increases in flooding, erosion, and/or pollution;
6. The loss of wetlands habitat and the loss of flora/fauna;

7. The cumulative impact of the above factors in relation to all known previous, pending, and reasonably anticipated future wetlands disturbances;
8. Whether the purpose of the completed proposed project serves an overriding public interest, as defined herein;
9. Input from members of the public, if applicable; and
10. Input from federal, state, or local agencies, if applicable.

B. **Conditional Approval**. The City shall have the authority to require certain prerequisites, plan modifications, wetlands management plans, and/or compensatory mitigation plans as a condition to application approval if it deems such conditions are necessary to further the purposes of this Ordinance and shall have the authority to fix a reasonable time within which any conditions must be completed. These conditions can include, but are not limited to:

1. Design modifications to reduce project impacts to wetlands and adjacent areas;
2. Flood and erosion loss reduction measures to prevent hazard losses;
3. Compensatory mitigation measures to offset losses to wetland area acreage, functions, and values;
4. Increasing wetlands buffer widths to protect sensitive areas;
5. Requiring structures to be elevated on piles, flood-proofed, or otherwise protected from hazards including flood heights, velocities, and erosion potential;
6. Modification of waste disposal and water supply facilities to reflect flooding, high ground water, and erosion hazards;
7. Inclusion in the deed for the property a warning that the property contains a wetlands area and that any activities in the wetlands area are subject to special regulatory requirements;
8. Deed restrictions, covenants, or conservation easements regarding future use of lands, including but not limited to preservation of undeveloped areas; and/or
9. Erection of permanent wetlands area markers or signs.

C. **Approval Standards**. The City shall not approve any application, conditional or otherwise, unless it finds that the proposed disturbance:

1. will not cause a net loss of wetlands functions;
2. will avoid wetlands areas to the maximum extent practicable;

3. will not increase flood, erosion, subsidence, or pollution;
4. will preserve natural drainage features to the maximum extent possible and minimize the need to construct, repair, maintain, or replace structural water management systems;
5. will not permanently alter the aquatic ecosystem in the vicinity of the project
6. will not adversely modify wildlife habitat or otherwise jeopardize plant, animal, or other wildlife species;
7. will not threaten public health or safety;
8. will not negatively impact recreational opportunities for the public, where applicable;
9. will not create a nuisance to neighboring property owners or the community at large;
10. will not violate other applicable federal, state, or local laws.

8.7 WETLANDS BUFFERS AND SETBACKS

A. **Wetlands Buffer Areas**. Wetlands buffers are to be calculated by measuring horizontally outward from and perpendicular to the edge of the wetlands, as defined herein. They must extend the entire perimeter of the wetlands delineation within the property. If a wetlands falls into more than one of the categories below, the more restrictive buffer width shall control. The following wetlands buffer widths are applicable to all uses and activities subject to the purview of this Ordinance:

1. General Wetlands Buffers. A minimum buffer of 25 ft. must be observed for all wetlands as defined by this Ordinance.
2. Wildlife Refuge, Wildlife Sanctuary, or Nature Preserve Wetlands Buffers. A buffer of 100 ft. must be observed when a wetland is part of, adjacent to, or within 100 ft. of a Wildlife Refuge, a Wildlife Sanctuary, or a Nature Preserve, that has been established and operates under enabling state law.
3. Local, State, or National Park or Forest Wetlands Buffers. A buffer of 50 ft. must be observed when a wetlands is part of, adjacent to, or within 100 ft. of a local, state, or national park.

4. Industrial Buffers. To counteract the increased risk of pollution from industrial activities, a buffer of 100 ft. must be observed between wetlands and industrial activities or uses.
5. Agricultural Buffers. To counteract the increased risk of pollution from fertilizer, pesticide, and animal waste, a buffer of 25 ft. must be observed between wetlands and agricultural activities or uses.

8.8 MONITORING, REPORTING, AND ENFORCEMENT

A. **Criminal Penalties**. Any person who violates any provision of this Ordinance or who fails to comply with any of the requirements thereof shall be guilty of a misdemeanor, according to applicable City and state code provisions, punishable in accordance to law. In the case of a continuing violation, each day's violation shall constitute a separate and distinct offense.

B. **Stop Work Orders, Permit Revocation, and/or Suspension**. The City may issue a Stop Work Order if the holder of a Wetlands Certification is in violation of provisions or conditions of their approval, or if the permittee is in violation of other applicable laws and/or regulations. Such notice shall be in writing and shall be given to the owner of the property or to his/her agent, or to the person doing the work, or posted in a conspicuous place at the job site.

C. **Restoration**. The City shall have the power to order restoration of a wetlands area in the event of a violation. If the responsible person or agent does not complete such restoration within a reasonable time frame determined by the City, the City shall have the authority to restore the affected wetlands to their prior condition, and the person or agent responsible for the violation shall be held liable to the City for the costs of such restoration.

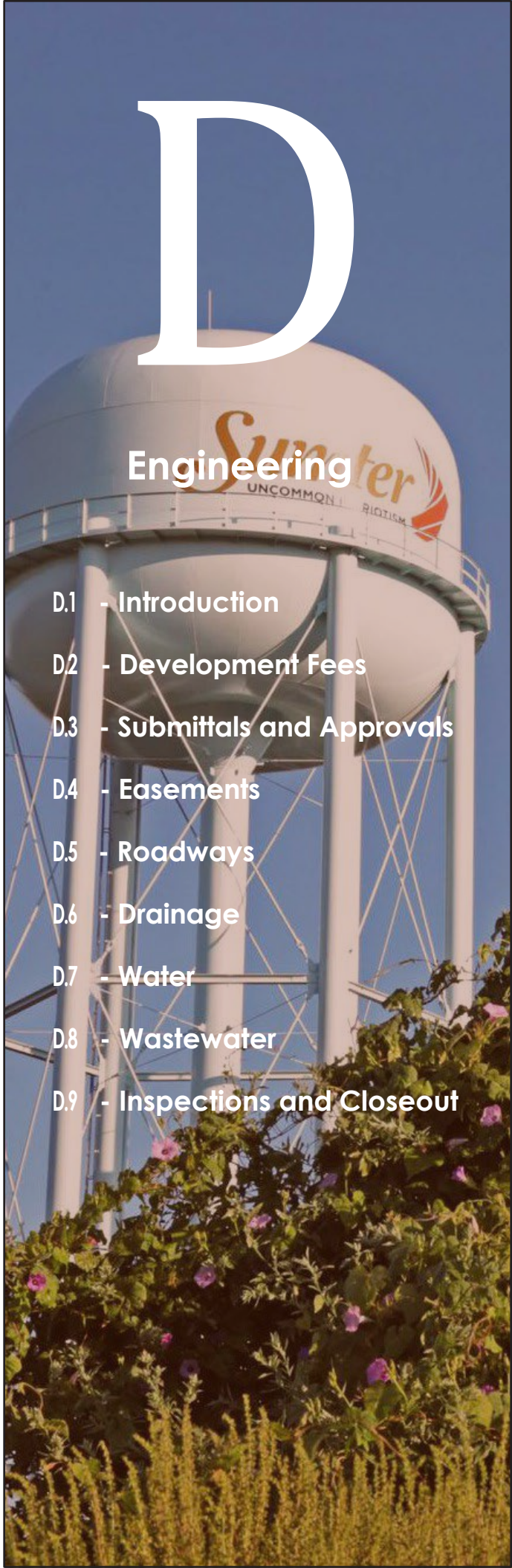
(This page Intentionally Left Blank)

1. INTRODUCTORY PROVISIONS

1.1 INTRODUCTION

A. **Introduction.** Continued development of the Sumter area and expansion of the utility, drainage, and road systems owned, operated, and maintained by the City of Sumter has resulted in the need for a quality standard for those systems being deeded to or constructed for the City of Sumter which includes projects outside the City limits. The benefits of standardization for the City include:

1. Reduction in overall cost of operations and maintenance.
2. Reduction in total inventory of spare or replacement components.
3. Familiarity with systems resulting in reduced down time during emergencies.
4. Common standard of design, materials and construction requirements.
5. Reduced design time, review time, and overall process time from project submittal to approval.
6. Reduced installation time, inspection time, and overall process time to reach project construction approval and complete project closeout.



1.2 ROLES AND RESPONSIBILITIES

A. The following covers roles and responsibilities of the parties involved in the overall submittal and approval process for new utility, drainage, and road systems and is applicable to all developments requiring water and/or wastewater service from the City.

B. **City Engineering.**

1. Plan Review:
   (1) Determine water and/or wastewater service availability.
   (2) Perform a hydrostatic flow test at the request of the Developer or the Engineer of Record.
   (3) Determine all applicable fees.
   (4) Review project plans and permit applications for conformance with the requirements of these standards.
   (5) Ensure proposed plans are consistent with the City's long-term plans.
   (6) Sign the Engineer of Record's prepared SCDOT encroachment permit application.
   (7) Identify and communicate to the Developer and the Engineer of Record any required changes when plans are not in conformance with the requirements of these standards.
   (8) Provide the following letters:
      a. Ability to serve letter
      b. Willingness to serve letter if the project is outside the City limits
   (9) Upon receipt of a SCDES Permit to Construct, distribute plans stamped "Approved for Installation". This physical set is to remain onsite for use during inspections.
2. Construction:
   (1) Observe and document construction related activities to ensure compliance with the requirements of these standards and City approved plans.
   (2) Require work determined not in compliance with these standards and/or approved plans to be promptly corrected to the satisfaction of the City.
   (3) Review and approve project Record Drawings
   (4) Perform a final inspection for acceptance of the constructed water, sewer, drainage, and road systems

3. Closeout:
   (1) Review and approve required project documents to be submitted to City Council for acceptance.
   (2) Provide final Operation and Maintenance (O&M) letter(s) to the Engineer of Record for submission to SCDES once City Council has accepted the ownership of the water and sewer system.

C. **Developer.**

1. The Developer shall be considered the following:
   (1) Person or entity initiating the development of a new or improvement to an existing residential or commercial property and is requesting water and/or wastewater service.
   (2) This can be, but is not required to be, the Owner of the property.
   (3) This person or entity shall have legal authority to execute necessary permits, applications, and legal documents which require the Owner's signature.
   (4) This same person or entity will execute all documents throughout the project unless the project is sold and/or this authority is transferred to the new Owner or Owner's agent.
2. The Developer will:
   (1) Provide accurate information as the person or entity responsible for the development and their contact information.
   (2) Be responsible for payment of all fees required in accordance with these standards.
   (3) Be responsible for the execution of all documents required for project closeout.
   (4) Be financially responsible for future requests for repairs, if any arise, during the maintenance guaranty period after takeover of the constructed system(s) by the City.
   (5) The developer is the applicant for SCDES permits to construct. The developer bears all legal and financial burden to ensure the construction of the water and/or sewer system is constructed according to the SCDES regulations.

D. **Developer's Engineer (Engineer of Record).**

1. The Developer's Engineer will be referred to as the Engineer of Record throughout this document.
2. The Engineer of Record is the Engineer hired by the Developer or Property Owner to prepare and design plans for the project.
3. The Engineer of Record will:
   (1) Request determination of water and/or wastewater ability to serve.
   (2) Request determination of water and/or wastewater willingness to serve if outside the City limits.
   (3) Request a hydrostatic flow test for all water projects.
   (4) Prepare and submit plans to the City in accordance with the requirements of these standards and will be the engineer of record for the project.
   (5) Provide a survey of existing conditions.
   (6) Revise the plans in accordance with the City's requirements.
   (7) Submit to the City the SCDES permit application for verification of daily flow rates.
   (8) The Engineer of Record is responsible for submitting the permit application package and required documentation to SCDES to obtain permit to construct and permit to operate.
   (9) Submit to the City Engineering Department all encroachment permit applications for execution. Engineer of Record is responsible for submission of encroachment permit(s) to appropriate permitting agencies and ensuring all encroachment permits are closed prior to acceptance for ownership by City Council.
   (10) Schedule and attend Preconstruction Meeting with the assigned City Engineering and Public Works Department staff prior to beginning construction.
   (11) Monitor all phases of the work in progress during construction to ensure all water, sewer, drainage, and road installations are in conformance with the approved plans and these standards. The City accepts no responsibility or liability for work rejected due to non-conformance.
   (12) Conduct required testing of systems in the presence of the City Engineering and/or Public Works Staff.
   (13) Promptly notify City Engineering and Public Works Staff in writing concerning any changes which may be necessary during the progress of the work. No changes to

the approved plans shall be made without prior written approval from the City Engineering staff.

(14) Certify in writing that the water, sewer, drainage, and road work was constructed in accordance with the approved plans and these standards.

(15) Coordinate, compile, and submit accurate Record Drawings to the City in accordance with these standards. Record drawings shall be stamped and signed by the engineer of record.

(16) Schedule a Final Inspection with City Engineering Staff to determine conformance with the approved plans.

(17) Provide all information and submittals as required for project closeout and acceptance for ownership by the City as defined in *Chapter D.9*.

2. DEVELOPMENT FEES

2.1 DEVELOPMENT FEES

A. **General Information.**

1. The Developer shall be responsible for payment of all applicable development fees at the appropriate stages of the process in accordance with the current fee schedule.
2. The City's development fees are subject to review by City Council and may be amended from time to time. Projects will be subject to the most recent fees in effect at the time full payment is received.
3. An engineering services fee will be charged on all projects.
4. All inspection fees are required to be paid prior to scheduling the inspections. Any failed inspections will require a retest fee.

B. **Fees.**

1. Subdivision Water Connection Fees
   (1) The subdivision water connection fee is a charge for linking a piece of property to the City of Sumter Water System. It also includes costs for the City to procure and set the water meter and associated materials.
   (2) Subdivision water connections shall be assessed to the customer for each connection based on its size. Subdivision water connection fees will be paid 50% at plan approval and 50% at final plat approval.
2. Subdivision Sewer Connection Fee
   (1) The subdivision sewer connection fee is a charge for linking a piece of property to the City of Sumter Sewer System. It also includes costs for the City to review sewer service functionality upon receipt of a tap order.

(2) Subdivision sewer connection fees shall be assessed to the customer based on its size. Subdivision sewer connection fees will be paid 50% at plan approval and 50% at final plat approval.

3. Commercial Water Connection Fee
   (1) The commercial water connection fee is a charge for linking a piece of property to the City of Sumter Water System. It also includes the following costs for the City:
      i. Observe and inspect the tap and work completed in the right-of-way by the property's contractor.
      ii. Procure and deliver water meter to the property's contractor.
      iii. Process paperwork for initial backflow test and update list.
   (2) Commercial water connection fees shall be assessed to the customer for each connection based on its size. Commercial water connection fees must be paid at plan approval.
4. Commercial Sewer Connection Fee
   (1) The commercial sewer connection fee is a charge for linking a piece of property to the City of Sumter Sewer System. It also includes costs for the City to observe and inspect the tap and work completed by the property's contractor that will affect the City.
   (2) Commercial sewer connection fees shall be assessed to the customer based on its size. Commercial sewer connection fees must be paid at plan approval.
5. Residential Water Connection Fee
   (1) The residential water connection fee is a charge for linking a piece of property to the City of Sumter Water System.
   (2) Residential water connection fees shall be assessed to the customer for each connection based on its size. Residential water connection fees must be paid at the time of building permit application.
6. Residential Sewer Connection Fee
   (1) The residential sewer connection fee is a charge for linking a piece of property to the City of Sumter Sewer System.
   (2) Residential sewer connection fees shall be assessed to the customer for each connection based on its size. Residential sewer connection fees must be paid at the time of building permit application.

7. Residential Water Tap Fee
   (1) The residential water tap fee is a charge for the City to physically make the water tap into its' system. It also includes costs for the City to procure and set the water meter and associated materials
   (2) Residential water tap fees shall be assessed to the customer for each tap based on its size. Residential water tap fees must be paid at the time of building permit application.
8. Residential Sewer Tap Fee
   (1) The residential sewer tap fee is a charge for the City to physically make the sewer tap into its' system.
   (2) Residential sewer taps fees shall be assessed to the customer for each tap based on its size. Residential sewer tap fees must be paid at the time of building permit application.
9. Hydrant Flow Test
   (1) A hydrant flow test is used to determine the available water pressure and flow at a point in the water system
   (2) Payment of fee and completed application is required to schedule a flow test with the City.
10. Sewer Reinspection
   (1) Fee will be charged if the City is required to reinspect due to failure of the first sewer inspection.
11. Proofroll Reinspection
   (1) Fee will be charged if the City is required to reinspect due to failing a proofroll inspection.
12. Engineering Distribution Services
   (1) The City will charge an Engineering Distribution Services Fee to help fund the cost of reviewing plans, specifications, design documents, sketches, calculations, providing administrative services associated with new development, and the installation of new utilities and roadways, and inspections.
13. Engineering Subdivision Services
   (1) The City will charge an Engineering Subdivision Services Fee which will be charged on a per lot basis. This fee will help fund the cost of reviewing plans, specifications,

design documents, sketches, calculations, providing administrative services associated with new development, and the installation of new utilities and roadways, and inspections.

14. Minimum Water and Sewer Flow
    (1) Minimum monthly water and sewer flow fees will be charged to a development once the developer has received their permit to construct from SCDES. The developer will be required to continue paying these fees until a property owner or resident purchases the dwelling and assumes the minimum fees or the developer gets SCDES to remove the flow from the City's flow inventory.
15. Maintenance Guaranty
    (1) The Maintenance Guaranty includes a 15% guaranty based on the installed value of the water, sewer, drainage system and roadways documented in the as-builts submitted by the Engineer of Record at the final inspection package. The guaranty can be either an Irrevocable Standby Letter of Credit from a financial institution or other instrument readily convertible to cash. The guaranty will be held for a period of 2 years from the date of Council approval and will be refunded upon completion of the Maintenance Guaranty Final Inspection, provided no deficiencies are found.
    (2) If deficiencies are found and the Developer does not correct these deficiencies, the letter of credit will be used to cover the City's costs to make corrections. In which case, the entire letter of credit amount will be forfeited.
    (3) The Maintenance Guaranty and letter of credit must be received with the Council submission package.
    (4) In some instances, service only projects will be required to provide a Maintenance Guaranty.
    (5) In the event the development is transferred to new ownership during the maintenance period, the Maintenance Guaranty and letter of credit must be updated to the new ownership.
16. A Performance Guaranty for the roads and sidewalks will be required in the amount of 150% of the construction cost of the final surface course.

3. SUBMITTALS AND APPROVALS

3.1 SUBMITTALS AND APPROVALS

A. **General.**

1. The City will consider for operation and maintenance only those water, sewer, drainage, and road systems which are within the City's service area.
2. Design and construction of water, sewer, drainage, and road systems shall be in accordance with these standards.
3. Phasing of subdivisions shall be completed in a manner that allows for the long-term resiliency and viability of the City owned infrastructure.
   (1) While phases are being constructed the developer is required to have temporary turn-around at the end of each road.
   (2) Each phase must be independently functional
   (3) A Fire hydrant shall be required at the end of the water main.
4. All connections to the City's existing water and wastewater systems, whether a system extension or new service only connection, must be approved in writing by the City. All taps are to be performed by a properly licensed contractor.
5. No water, sewer, drainage, or road system components shall be put into service prior to the receipt of all approved project documents, applicable fees, acceptance for ownership by City Council, and the Permit to Operate as issued by SCDES.
6. Those individuals associated with implementing projects are strongly encouraged to meet with the City's Engineering & Public Works Department staff to review plans and coordinate proposed projects. The City's Engineering Department reserves the authority to approve changes to brand name materials.
7. No verbal approvals, authorizations, or representations regarding development, permitting, construction, site improvements, or code compliance shall be valid. All

approvals must be obtained in writing from the appropriate authority having jurisdiction.

B. **Water and Wastewater - Ability to Serve**

1. The initial step for any new water or wastewater system being considered by the City is submission of a Request for Ability to Serve to determine service availability for the proposed development.
2. Information required to determine Ability to Serve.
   (1) Property Address
   (2) Tax map number
   (3) Type of proposed development
   (4) Daily water and sewer demand
3. Factors considered in ability to serve
   (1) Water system capacity
   (2) Sewer system capacity
   (3) Hydraulic analysis
   (4) Distance to existing utility lines
4. The information provided in the Request for Ability to Serve will be utilized by City Engineering to perform a preliminary hydraulic analysis of the proposed water and/or wastewater system.
5. Based on the results and conclusion determined by the preliminary hydraulic analysis, an Ability to Serve Letter will be issued by City Engineering stating whether service is available or is not available for the proposed development and directives for water and wastewater connection points.
6. This letter will state if offsite infrastructure capacity needs to be upgraded to serve the proposed development with water or sewer service. Any offsite infrastructure that is required to be upgraded to serve the proposed development will be at the expense of the developer. The developer will not own or have preferential use of the off-site infrastructure other than the utility service for the requested development.
7. Once infrastructure from a development is transferred to the City for ownership and maintenance, the City has the sole use of the infrastructure and will only guarantee capacity of the infrastructure for the development, or phase of development, that has

paid the engineering development fees, tap fees in full, and continuously pays the minimum monthly water and sewer fees. The City has sole discretion in disbursement of infrastructure capacity regardless of the entity providing the initial capital investment to upgrade or install any infrastructure.

8. The City reserves the right to withhold an ability to serve letter if a development company has projects that have several infrastructure failures that are unresolved.
9. An Ability to Serve Letter is valid for 12 months from the date of issuance. An extension to the ability to serve letter can be renewed upon request.
10. Any subsequent changes to the proposed development that changes capacity requirements may require submission of a revised Request Ability to Serve and issuance of a revised Ability to Serve letter.
11. No Plan Review will be conducted without a valid Ability to Serve Letter stating the City's ability to provide water and/or wastewater service.

C. **Water and Wastewater- Willingness to Serve**

1. The Willingness to Serve letter determines whether the City is willing to serve land parcels water and sewer outside of the City limits. The City Administration is the authorized authority to determine Willingness to Serve. The City Engineering staff does not have the authority to make this determination.
2. Information required to determine Willingness to Serve.
   (1) Property address.
   (2) Tax map number.
   (3) Type of proposed development.
   (4) Daily water and sewer demand.
3. A Willingness to Serve letter is valid for 12 months from the date of issuance. An extension to the willingness to serve letter can be renewed upon request.
4. Any subsequent changes to the proposed development deemed significant by City Engineering may require submission of a revised request Willingness to Serve and issuance of a revised willingness to Serve letter.

D. **Plan Review**

1. Submittal Requirements and Plan Review Process.

(1) The Developer or the Engineer of Record shall submit a plan review package to the City Planning Department. The package shall include the following items, or Plan Review will not proceed:

a. Plan Review Application.

b. Engineering Services Fee.

c. Valid Water and/or Wastewater Ability to Serve Letter.

d. Valid Water and/or Wastewater Willingness to Serve Letter if property is outside of the City limits.

e. Water and/or wastewater system plans, drainage, and road plans, which shall include all details, drawn to a horizontal scale no smaller than 1-inch equals 50 feet and a vertical scale no smaller than 1-inch equals 5 feet. Plans shall be signed, sealed and dated by an Engineer licensed in the state of South Carolina and shall include the following:

(a) Complete system design.

1. Include the following plan sheets: cover, general development, site plan, building layout, drainage, landscape, demolition, existing conditions survey, water and wastewater system plans, roadway and drainage plan, and applicable City details.
2. Landscape plans shall include any proposed hardscapes (i.e., signage, architectural columns, retaining walls or other types of above ground and underground structures).
3. Demolition plans shall include all existing water and wastewater services, with those proposed for abandonment clearly identified.
4. Existing conditions survey shall include all existing utilities.

(b) Plan and profile view for all water, wastewater, drainage, and road projects.

(c) All fittings and appurtenances shall be clearly labeled with description and stationing. Use of Key notes should be limited.

(d) All vertical and horizontal bends shall be shown and labeled on both the plan and profile view.

(e) Profiles shall show and label (size, type, material, depth) for all utility crossings.

(f) Profile for all water and wastewater mains installed by Jack and Bore or Horizontal Directional Drill or where steel casing is used.

(g) For commercial developments, provide location and size of all proposed water and wastewater services along with addressing plan.

(h) County Tax Map Reference Number of Property.

(i) All public and private rights-of-way for both road and utility plans shall indicate ownership of existing roadways (City, County, or State), road width and right-of-way width. Indicate the agency to operate and maintain proposed roadways.

(j) Location, type, ownership, and width of all existing and proposed easements to include the City utility easements. In the event a proposed City utility easement encroaches upon or crosses an existing easement owned by another entity, written permission must be obtained from the existing easement holder. No plan approval will be issued without written permission being provided to the City. Additional details and requirements are found in *Chapter D.4*.

f. 1 set of water and/or wastewater calculations signed, sealed and dated by an Engineer licensed in the state of South Carolina. Calculations shall be in accordance with the requirements set forth in the applicable sections of these standards.

(a) Water Mains – *Chapter D.7.1*. For commercial developments requesting water for temporary fire protection, provide additional fire flow calculations based on the size of the proposed backflow prevention assembly and fire service meter.

(b) Wastewater Gravity Sewer Mains – *Chapter D.8.1*.

(c) Wastewater Force Mains – *Chapter D.8.4*.

(d) Wastewater Pump Stations – *Chapter D.8.7*.

g. Geotechnical Report indicating thickness of road sections and recommendations for construction materials and construction testing. This

report shall be stamped, signed, and dated by an engineer licensed in the State of South Carolina.

h. Completed SCDES Construction Permit Application for review of daily flow. Engineer of Record is responsible for submission of this package to SCDES.

i. Filled out encroachment permit applications for execution for water and sewer line extension. Engineer of Record is responsible for submission of encroachment permit.

(2) Upon review of the submitted Plan Review items, the City will return to the Engineer of Record:

a. Written design change requirements in the form of a letter or comment log.

b. Request for any other required information pertinent to the proposed project.

E. **Plan Approval**

1. Upon receiving the required design change requirements, the Engineer of Record shall submit to the City Planning Department an electronic copy of the revised plans along with the Engineer of Record's responses to the official comment log/letter. The Engineer of Record is also required to submit 1 hard copy set of revised system plans. Once an acceptable set of plans are approved, the City will notify the Engineer of Record in writing or email.
2. Upon notification of plan approval, the Engineer of Record shall submit to the City the following:
   (1) 2 complete set of approved plans.
3. Fee Determination
   (1) City Engineering Staff will determine the following fees at this time:
      a. Tap Fees.
   (2) 50% are due at plan approval and 50% are due at final plat approval.
4. Once plan approval is received, the development is protected for 24 months from the date of plan approval for any changes to the development standards. Projects under active construction are vested under the development standards with which they were approved.

5. No verbal approvals, authorizations, or representations regarding development, permitting, construction, site improvements, or code compliances shall be considered valid. All approvals must be obtained in writing from the appropriate authority having jurisdiction.

F. **Construction Activity**

1. The SCDES Permit to Construct and all applicable approved encroachment permits must be received by the City prior to beginning construction.
2. Plans stamped "Approved for Installation", or "Approved for Construction" will be distributed to the Developer and the Engineer of Record for use by the Contractor. No construction activity shall proceed prior to receipt of stamped approved plans. These stamped approved plans shall remain with the Contractor on site at all times.
3. Prior to construction activities, a Preconstruction Meeting shall be conducted. The Engineer of Record shall schedule and attend the Preconstruction Meeting with the assigned City Engineering Inspector. The Developer (or representative), Contractor (to include any sub- contractors working on the utility, drainage, and road systems shall attend.
   (1) The Preconstruction Meeting shall be held no more than 60 days prior to the start of actual construction.
   (2) If construction does not begin within 60 days of the Preconstruction Meeting, another Preconstruction Meeting shall be held.
   (3) The Contractor is responsible for the construction of all water, sewer, drainage, and road installations.
4. The Engineer of Record is responsible for monitoring the project as required to ensure construction of the water, sewer, drainage, and road systems meets all design requirements of the approved plans and permits. The Engineer of Record shall provide its project inspection reports to the City Engineering Inspector.
   (1) Engineer of Record Inspection Report Requirements
      a. The Engineer of Record is required to provide a report to City Inspector, identified at the preconstruction meeting, after each inspection (pressure test, vacuum test, sub grade, base course, and final paving) and at regular intervals during active construction.

b. The report must include the date, location, City inspector name, work observed, conformance determination, deficiencies and corrective action, and weather
c. Reports to be submitted electronically

5. If installation per the City approved plans cannot be achieved due to conflicts with other utilities (or sub-grade obstructions), the Contractor shall immediately notify the Engineer of Record and the City Engineering Inspector. No deviation from the City approved plans will be allowed without prior written approval from the City. The Engineer of Record shall make any required modifications to project plans and submit modified plans to the City for approval. The City Engineering office will issue an approval in writing. Construction of the modification shall not be constructed until written approval is received by the City

4. EASEMENTS

4.1 EASEMENTS

A. **General Information.**

1. Easements for all water, wastewater, storm drains and associated appurtenances to be conveyed to the City, shall require the developer or the engineer of record to submit an easement form and drawing illustrating the easement to the City's Engineering Department for approval prior to constructing the utility.
2. Easements shall be grassed and clear of trees and debris unless other treatment is specified and approved by the City.
3. Obstructions within, above, or below any easement such as buildings, building footers, building overhangs, trees, overhead structures or other objects or structures which may limit access to or use of the entire easement by the City are not permitted. Brick, steel, and ornamental fences are considered permanent structures and are not permitted. Any fencing in an easement will be repaired or replaced with readily available fencing materials.
4. Asphalt or poured concrete pavement is acceptable within easements. Any asphalt, poured concrete, or other paving materials that are damaged by subsequent construction or maintenance by the City will be repaired or replaced with standard, readily available asphalt or concrete materials only.
5. The City utility easements shall be extended to the nearest property line that is shared with the adjoining property owner in a manner that does not conflict with current or future use of the property.
6. In the event a proposed City utility easement encroaches upon or crosses an existing easement owned by another entity, written permission shall be obtained from the existing easement holder. Such permission shall be obtained by the Developer or the Engineer of Record and shall name the City. The City shall have the right to review and

accept or reject any terms of the written permission prior to its final approval and acceptance by the City.

B. **Easement Width.**

1. All utility easements to be dedicated and conveyed to the City shall maintain a minimum width of 30 feet. Wider easements may be required based on the utility, pipe diameter, depth, and other mitigative circumstances. The easement will be centered on the centerline of the utility line installed. The edge of easement shall not be less than 10 feet from a permanent structure or foundations.

C. **Final Plat Easement Requirements.**

1. Final Plat shall state the easement is for the City, the type of utility installed in the easement, and the easement width.
2. If a utility easement exists for the use of HOA or other entities, the final plat shall state, the easement owner and type of utility located in the easement.

D. **Easement Agreement**.

1. As an instrument of conveyance, an easement form completed and signed by developer shall be recorded with the final subdivision plat. The plat and easement form shall list the width of the easement. They shall also indicate the type of utility (water, sewer, or storm drainage). The City will not accept easements for ditches, swales, ponds or other conveyance of stormwater other than pipes. A copy of the recorded easement form shall be sent to the engineering department.

E. **Utility Easement**

1. All subdivisions shall have 10 feet wide utility easement outside of the City road right-of-way. The utility easement will be for gas, power, cable tv, internet, phone, and other utilities to be located.

5. ROADWAYS

5.1 ROADWAY DESIGN REQUIREMENTS

A. **Roadway Design Requirements.**

1. This Section applies to all roadways being conveyed to the City for ownership.
2. All new roads shall be constructed by the developer at no cost to the City. The developer shall be responsible for obtaining all permits. Required improvements under this Section shall not be installed or constructed until required site plans have been approved by the City in writing.

B. **Road Classification.**

1. Local Street.
   (1) Provides direct access to lots. Access streets shall be designed to carry an Average Daily Trips (ADT) between 0 to 250.
2. Collector (Minor).
   (1) Provides direct access to lots and carries traffic from local streets. Collector streets are designed to accommodate higher traffic volumes than local streets. Sub-collectors shall be designed for an ADT between 251 and 1,000. If proposed ADT exceeds this threshold, then an increase in pavement traffic classification is required.
3. Collector (Major).
   (1) Conducts and distributes traffic between local/sub-collector and arterial streets. Function is to promote free traffic flow; therefore, parking and direct access to homes from this level of street shall be prohibited. Collectors shall be designed for an ADT between 1,001 to 2,000. If proposed ADT exceeds this threshold, then an increase in pavement traffic classification is required.
4. Arterial.
   (1) Principal traffic artery that carries relatively high traffic volumes and carries traffic from access and collector streets. Its function is to promote the flow of traffic. Minor

arterial shall be designed and constructed according to SCDOT standard specifications.

C. **Road Right-of-Way Widths.**

1. Following are descriptions of typical required road right-of-way widths for select categories of road types.

Table D.5.1 Local Street and Minor Collector Dimensions	
Width	
A. Right-of-Way Width	50 ft.
B. Back-of-curb to back-of-curb	27 ft.
Streetscape	
C. Sidewalk (min)	6 ft. (one side)
Travelway	
D. Travel lane	12 ft. (pavement edge to pavement edge)
E. Grass verge	5 ft. (sidewalk side)
F. Sidewalk	6 ft. (one side)
G. Curb & Gutter	1.5 ft. (both sides)
Engineering Specifications	
H. Design speed (mph)	25 mph
I. Design vehicle	Passenger vehicle
J. Driveway spacing	As needed
K. Curb radii	25 ft.
L. Lighting	Required on all public streets for new development

Table D.5.2. Major Collector Dimensions	
Width	
A. Right-of-Way Width	66 ft.
B. Back-of-curb to back-of-curb *	39 ft.
Streetscape	
C. Sidewalk (min)	6 ft. (one side)
D. Grass verge	5 ft. (sidewalk side)
Travelway	
E. Travel lane **	12 ft. (pavement edge to pavement edge)
Engineering Specifications	
F. Design speed (mph)	35 mph
G. Design vehicle	All vehicles
H. Signalized intersection density	As warranted
I. Driveway spacing	As needed
J. Median opening distance	N/A
K. Partial Medians / Island	No
L. Curb Radii	30 -40 ft.
M. Lighting	Required on all public streets for new development, pedestrian scale optional and responsibility of developer
N. Permitted furniture	Bicycle racks, benches, parking meters

*Number of travel lanes will be determined by the traffic count

D. **Pavement Width and Curb.**

1. Residential, collector, and arterial roads shall measure pavement width from pavement edge to pavement edge.
2. Curb and gutters shall be installed on all paved roads. The curb shall consist of rolled curbed shown as *Figure D.5.1.* or barrier curb shown in *Figure D.5.2.*

Figure D.5.1 Rolled Curb – Ogee Curb Detail

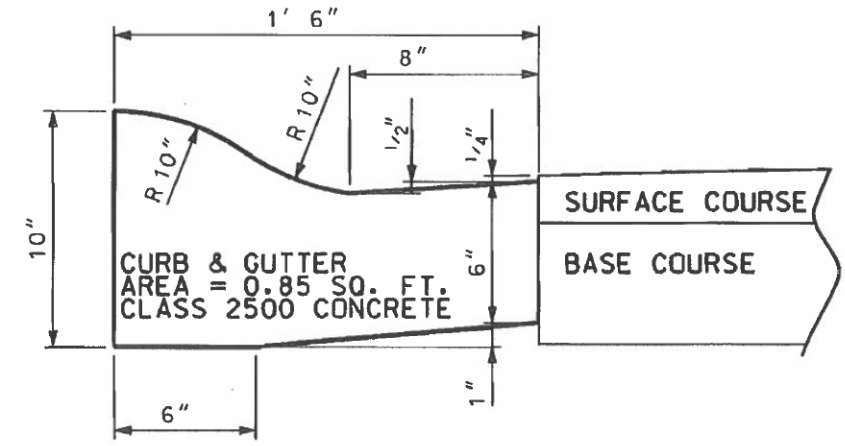
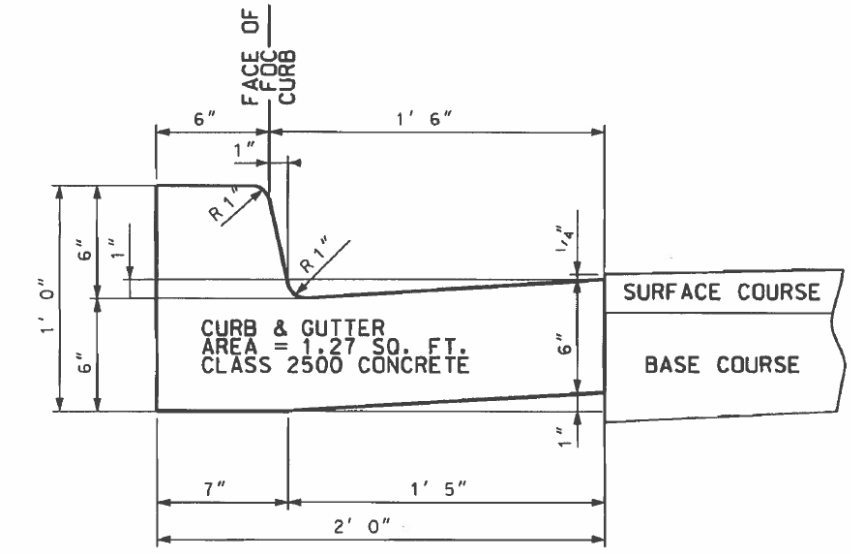


Figure D.5.2. Barrier Curb Detail



E. **Road Geometric Design.**

1. Unless specifically addressed in these regulations, all geometric elements of roadway design for streets and roads in the City's Road System will be in accordance with the SCDOT Roadway Design Manual.
2. Horizontal Curves.
   (1) Horizontal curves are to be introduced at all changes of direction on collector, local, and arterial streets. Refer to the SCDOT Roadway Design Manual for further information. The minimum radii of curvature is to be in accordance with *Table D.5.3.* Refer to the SCDOT Roadway Design Manual for further information.

Table D.5.3 Street Classification Requirements			
Street Classification	**Stopping Site Distance (ft)**	**Min. Curve Radius (ft)**	**Max. Grade (%)**
Local Street	160	150	8
Minor Collector	160	150	8
Major Collector	275	350	8
Arterial	*	*	*

*Dependent on design speed selected

3. Vertical Curves.
   (1) Crest vertical curves are to be of sufficient length to provide the minimum stopping sight distance at the design speed. Refer to the SCDOT Roadway Design Manual for further information.
4. Intersections.
   (1) The centerlines of no more than 2 streets shall intersect at any one point. The centerlines of intersecting streets are to be perpendicular. All angles and distances are measured relative to the intersection of a street centerline.
5. Curb Radius.
   (1) The minimum acceptable curb radius at intersections is 25 feet. Larger radii must be provided in accordance with the AASHTO Policy on Geometric Design of Highways and Streets when significant tractor-trailer, or other large vehicle, traffic is expected.
6. Dead End Streets.

(1) Cul-de-sacs shall not exceed 500 feet in length unless necessitated by topography or property accessibility. Measurement shall be from the point where the centerline of the dead-end road intersects with the centerline of a general circulation road to the center of the turnaround of the cul-de-sac. Where one cul-de-sac extends from another cul-de-sac, the end of each cul-de-sac shall be no more than 1,200 feet from a general circulation road as measured by the centerline of the roads. Cul-de-sacs shall terminate in a circular turnaround having a minimum right-of-way of at least 100 feet in diameter and a paved turnaround with a minimum outside diameter of 80 feet.

F. **Sidewalks.**

1. Sidewalks in residential developments shall be constructed on one side of the road to meet the following standards:
   (1) The minimum width of all sidewalks shall be six feet.
   (2) Sidewalks shall match the grade or elevation of adjacent sidewalk at the property lines; if there is no adjacent sidewalk, the sidewalk shall be six inches above the adjacent edge of the pavement grade at the property line.
   (3) Sidewalk shall have a maximum cross slope of 2%.
   (4) Sidewalks shall be constructed to meet the minimum requirements of the Americans with Disabilities Act (ADA).
   (5) All sidewalks will be owned and maintained by the City.

G. **Temporary Dead-End Roads and Half Roads.**

1. Temporary dead-end roads shall be provided with a temporary turnaround having a roadway surface diameter of 80 feet.
   (1) Dead end roads and turn around shall drain stormwater runoff and not detain runoff.
   (2) This is only allowed for eighteen months and must be permitted with the City.
   (3) If for any reason the next phase of construction does not move forward within eighteen months from the date of the maintenance guaranty execution, the

Developer is required to pave the turnaround or provide a performance guaranty in the amount of 150% of the construction cost of paving the turnaround.

H. **Lateral Clearance**.

1. A minimum lateral clearance as shown below shall be from the back of curb.
   (1) Rolled curb and gutter: 6.0 ft.
   (2) Barrier type curb 4.0 ft.
2. No entrance gates or other obstructions, except for traffic control, street name signs, and mailboxes, are to be placed within these distances from the edge of the street.
3. Trees are allowed at the right-of-way line only and must utilize a root barrier on the sidewalk and/or roadway side.
4. The City will not maintain trees, shrubs, or plants located in the road right of way.

I. **Road Subgrade and Pavement Structure Requirements**

1. A geotechnical report shall be submitted for the design of the roadway section based on subgrade soils, traffic design loads, and other factors that will affect the structural integrity of the roads. The traffic loads shall include all house construction traffic as well as daily traffic of the proposed development. The roads shall have a 20-year design life.
2. All roads to be dedicated to the City shall have a 1.5-inch final surface type "C" course placed once 80% of all structures have received certificate of occupancy (C.O.) or upon request by the City. The final surface course shall be placed on top of the paved road surface that was constructed for construction traffic loads. The final surface course shall be type "C" asphalt as defined in the SCDOT Standard Specification.
3. The surface course(s), base course, and sub-base shall all be constructed in accordance with SCDOT Standard Specification. The geotechnical report shall include all testing methods and requirements of the road section materials and testing of the installed materials.
4. The geotechnical engineer shall provide a letter to the City stating the roads are constructed in general accordance with the project report. Any deviations from the

report shall be noted in this letter. The City will not accept any roads for ownership without the geotechnical engineer's letter.

5. A performance guaranty will be required for the 1.5-inch surface course that will be required once 80% of home construction is completed. The performance guaranty will require a letter of credit in the amount of 150% of construction cost of the final surface course and sidewalk.

5.2 PAVEMENT SUBMITTAL REQUIREMENTS

A. **Pavement Submittal Requirements.**

1. Plan and profile sheets for each road. Include all horizontal & vertical curve information. Include station numbers.
2. Plan and profile shall be at no smaller scale than 1inch = 50 feet horizontal scale and 1 inch = 5 feet vertical scale.
3. Show water, sewer, and storm drain utility's horizontal and vertical locations to include depths below road surface course. All utilities shall be 12 inches below the base course. If utilities cannot be located 12 inches below the base course, a geotechnical engineer can design a road section allowing for the reduced subbase section with approval from City Engineering. The design shall include location on the road(s) where the alternative section will occur and the width(s) of the alternative road section.
4. Provide typical roadway cross sections indicating thickness and material of each roadway course (subgrade, base and surface course).
5. The surface course shall consist of lanes that are 12 feet wide from edge of asphalt to centerline of road or to the beginning of the next lane on roads with more than two lanes. The road shall have a 1 inch in 48 feet of slope from the center line of the road to the edge of pavement.
6. The centerline slope of the road shall not exceed 8% and shall be a minimum of 0.5%. All roads designed with centerline slopes between 0.5% and 1% will require as built surveys of the roads verifying the roads are constructed with the minimum slope. The engineer of record will need to stamp and sign the as-built road survey.

7. All roads shall have curbs and gutters at the edge of pavement. The curbing shall consist of roll curbing as illustrated on Figure D.1 Rolled Curb – Ogee Curb Detail or barrier curb shown in Figure D.2 Barrier Curb Detail.
8. The road shoulder, including the remaining road right of way, shall be graded to a maximum slope of 2% from the back of curb to the road right of way line and should provide for positive drainage. The shoulder shall be seeded with grass prior to City Council accepting roads for ownership.

5.3 ROADWAY CONSTRUCTION AND TESTING

A. **Clearing and Grubbing.**

1. All work associated with clearing and grubbing of all debris, vegetative matter, trees, stumps, and obstructions within the limits of disturbance such as roadway, right-of-way, easement areas, ditches, etc., unless otherwise stated to remain in accordance with the approved set of plans. All clearing and grubbing work shall be authorized under a City land disturbance permit. The contractor shall confirm all organic, vegetative matter (roots, stumps, logs, etc.) have been removed from the roadway right-of-way and document any unsuitable soil conditions with the right-of-way.

B. **Road Embankment**

1. All stumps and large roots must be removed from the roadbed prior to placement of fill for embankments regardless of fill height. All roadway sub-base and embankment fill shall be approved and certified in writing by the geotechnical engineer. Roadway embankment fill is to be placed and compacted in lifts not exceeding 8 inches. The contractor is responsible for providing geotechnical testing and documentation that the sub-base and fill material has been compacted to 95% of maximum dry density, as determined by ASTM 1557. At a minimum, density testing of embankment fill is to be performed every 16 inches of fill or the fill limits, whichever is less. Spacing of density testing is to be every 250 ft. of road, alternating lanes. Density testing shall be performed in accordance with the geotechnical report, however a minimum of two (2) tests per road per 16 inches of fill (or the fill limit, whichever is less) is required. No

proof-roll of the sub-grade will be scheduled until the compaction has been documented and submitted to the City Engineering Department.

2. Any roadway embankment modifications (extra stone, soil cement, lime treatment, geo grid, etc.) must be approved by the geotechnical engineer and the City Engineering Department.

C. **Materials and Equipment.**

1. Materials and equipment used for all roadway courses shall be in accordance with the latest edition of the SCDOT Standard Specifications and in working condition necessary for the construction, application, placement, and maintenance.
2. Any geotechnical firm that is to conduct work in the City shall hold at least one lab certification from the following agencies, and is responsible for providing their credentials when the initial proof roll is requested:
   (1) SCDOT
   (2) AASHTO
   (3) CMEC
   (4) USACE

D. **Road Construction Requirements.**

1. The typical flexible pavement structure consists of subgrade (subbase) course, base course, and surface course and shall be in conformance with lines, grades, dimensions, and cross-sections shown on approved construction plans.
2. Subgrade Course. The following subgrade course types are acceptable to the City.
   (1) A Native Soils Subgrade may be used as a subgrade and must be properly prepared for construction and pavement structure.
   (2) Cement Modified Subgrade can be used in the modification of an existing subgrade by adding Portland cement, pulverizing the in-place soil, mixing, shaping, compacting, curing, and finishing the mixed material to form a subbase for a pavement structure. This subgrade material shall be prepared in accordance with SCDOT Standard Specifications.
3. Base Course.

(1) The following base course types are acceptable to the City: Macadam Base Course or type "B" Asphalt Base Course.

4. Maintenance of Base Courses.
   (1) Base courses shall be maintained in good condition until all work is complete and accepted. Any defects that may occur must be repaired immediately. Any repairs made shall be to the full depth of the base.
5. Binder or Intermediate Course.
   (1) The following Binder or Intermediate Course types are acceptable to the City.
      a. Asphalt Concrete Intermediate Course, Type "C".
6. Maintenance of Intermediate Course.
   (1) Intermediate Course shall be maintained in good condition until all work is complete and accepted. Any defects that may occur must be repaired immediately. Any repairs made shall be to the full depth of the intermediate course.
7. Surface Course.
   (1) The following Surface Course types are acceptable to the City.
      a. Asphalt Surface Course Type C.
      b. All roads will require 1.5 inches of surface course once 80% of the homes are constructed. The road section design shall be designed to support all construction traffic without the 1.5 inches of surface course.
8. Construction of Surface Course.
      a. Compacting, rolling, finishing, and opening to traffic shall be in accordance with the latest edition of the SCDOT Standard Specifications.
9. Maintenance of Surface Course.
   (1) Asphalt Surface Course shall be maintained in good condition until all work is complete and accepted by City council. Any defects that may occur must be repaired immediately. Any repairs made shall be to the full depth of the surface course.
10. Weather Restrictions.
   (1) Asphalt Surface Course Type C cannot be applied on a wet surface or when the ambient temperature is below 45°F.

11. Asphalt Mixture Placement Quality Control Verifications.
    (1) During all asphalt mixture placement and compaction operations, a density gauge shall be in use. Asphalt roadway quality control verifications shall be documented by a certified Asphalt Roadway Technician. The rolling and compacting roadway verification shall include the following:
        a. Proper number and type of rolling and compacting equipment.
        b. Identify asphalt type, depth thickness, mixture placement, and compaction during production.
        c. Document ambient air temperature.
    (2) If the City Engineering Department determines that the asphalt course has areas of non- uniformity between coarse and fine aggregate particles within the compacted surface course pavement, the contractor and developer are responsible for correcting all segregated areas. These areas are to be removed and replaced for the full depth of the surface course within 10 feet on either side of the segregated areas for the full width of the paving lane.
    (3) Road shoulders shall be graded to final grade and establish grass prior to being dedicated to the City.
    (4) Road shoulders shall be compacted to 95% of the maximum dry density as determined by the standard proctor ASTM 1557.

E. **Proof Rolling.**
    1. A proof roll inspection involves the following components: the specifications for equipment, construction and requirements of testing the roadway embankment and subgrade for compaction uniformity and stability through a proof roll inspection.
    2. Failed proof roll inspection will require a retest fee.
    3. Equipment.
        (1) The contractor shall ensure that the equipment used is in acceptable working condition necessary for the construction and testing in areas subject to proof roll inspections. A fully loaded dual axle dump truck with a minimum 50,000 lbs. is accepted for proof rolling. The approved equipment shall only have air-filled pneumatic tires with a pressure between 70 and 90 psi while proof rolling.

4. Proof Rolling Method.
   (1) Prior to scheduling any proof roll inspections, all density testing data must be submitted to and approved by the City.
   (2) All proof rolls are to be performed in the presence of the City Engineering representative, geotechnical engineer, and contractor.
5. Proof Roll Types.
   (1) Proof roll types are described as follows:
      a. Concrete curb and gutter
      b. Cement Stabilized Earth (soil cement)
      c. Subgrade
      d. Embankment (Road Shoulders)
      e. Base course
6. Concrete Curb and Gutter Proof Roll and Soil Cement.
   (1) Proof rolls may be performed for concrete curb and gutter and soil cement at the request of the contractor. No proof roll inspection can be conducted without prior City approval of the submitted density and subgrade condition reports. Proof roll inspection shall use a fully loaded dual axle dump truck.
   (2) The contractor shall schedule this inspection with the Engineering Department. The geotechnical engineer, City Engineering Inspector, and contractor shall be represented and in attendance for the proof roll inspection. The City Engineering Inspector reserves the right to conduct or require additional testing at any time.
1. Road Shoulders, Subgrade, and Base Course Proof Rolls.
   (3) Proof rolls may be performed for the road shoulders, subgrade, and base course at the request of the contractor. No proof roll inspection can be conducted without prior City approval of the submitted density and subgrade condition reports. The contractor shall schedule this inspection with the Engineering Department. The geotechnical engineer, City Engineering Inspector, and contractor shall be represented and in attendance for the proof roll inspection. The Engineering Inspector reserves the right to conduct or require additional testing at any time.

(4) The geotechnical engineer shall submit their inspection/observation report to the City Engineering Department.

F. **Roadway Signs/Traffic Control Devices.**

1. Road signs, in conformance with the requirements of the Federal Highway Administration's Manual on Uniform Traffic Control Devices latest edition.
2. Roadway Signs.
   (1) Shall be installed by the Developer in accordance with an approved sign plan developed by the Design Engineer.
   (2) Custom road signs that do not follow the MUTCD guidelines will not be maintained or owned by the City.
   (3) Stop Signs
      a. Size to be 30 inches x 30 inches
      b. Color to be High Intensity Prismatic (HIP) Reflective

6. DRAINAGE

6.1 DRAINAGE PIPE AND BASIN STANDARD

A. **Drainage Pipe and Basin Standard**

1. This Section applies to developments that the storm drainage system will be conveyed to the City for ownership.
2. All regulations, procedures, fees, and penalties listed in *City Ordinance 2469 Stormwater Management and Sediment Control Regulations* are applicable when designing drainage systems.
3. The minimum size storm drainage pipe allowable shall be 18 inches in diameter. All storm drainage to be owned by the City shall be reinforced concrete pipe (RCP).
4. The minimum allowable slope for storm drainage pipe shall be 0.5% (0.005 ft/ft). Maximum allowable slope for storm drainage pipe is 20% (0.20 ft/ft).
5. At pipe outfalls, the use of a rip-rap apron, placed on filter fabric, for a minimum distance equal to or greater than 6 pipe diameters. Use type A riprap as defined by *SCDOT Standard Specification Section 804*. Fabric shall be from SCDOT Qualified Product List.
6. Type and class of storm drainage pipe, as well as the construction of pipe culverts, shall be in accordance with SCDOT's *Supplemental Technical Specifications, Sections 714*. RCP is the only type of drainage pipe the City shall accept for municipal ownership and maintenance.
7. A minimum of 1 ft. of cover shall be provided for RCP storm drainage pipe. Storm drainage pipe shall be placed to minimize the length running under pavement. Where it is necessary for a pipe to cross the roadway, the preferred placement shall be at a 90-degree angle. All cross lines in the roadway shall be compacted in 8-inch lifts to 95% Standard Proctor maximum density and to 100% on the last 8 inches.
8. Any "open" storm drainage cross line pipe shall extend out of the toe of the roadway embankment; in no case will the end of the pipe be within 5 ft. of the roadway shoulder.

9. Storm drainage pipe discharging into a drainage channel shall intersect the channel in a manner such that the interior angle measured from its centerline of flow, is at least 90 degrees. Rip-rap, or other suitable protection, is required from the outlet point to the bottom of the channel and on the opposite channel bank to prevent scour and erosion.
10. Storm drainage pipes discharging into a wet pond below the permanent pool shall be analyzed to ensure that the tailwater conditions do not adversely impact storm drainage capacity or increase the potential for flooding. Where storm drainage pipes discharge above the permanent pool, rip-rap or other energy dissipation structures shall be designed and installed to ensure non- erosive velocities and discourage resuspension of solids in the pond.
11. An access point to allow maintenance shall be available within every 300 feet for 18 inch diameter pipe, every 400 feet for 24 inch pipe, and every 500 feet for larger storm drainage pipes.
12. The 100-year, 24-hour storm event shall be used to check all drainage designs for local flooding and, most notably, potential flood hazards to adjacent structures and/or property.
13. Hydraulic grade line and head loss calculations for determining water surface elevations shall be performed for connections to existing systems.
14. Calculations shall be performed for the appropriate design storm event.
15. For storm drainage systems with less than 10 connections, Manning's Equation shall be acceptable for sizing the capacity of drain pipes for non- submerged conditions where the free water surface elevation is below the crown of the pipes.
16. Storm drain profile plots shall be included in the set of construction plans.
17. Storm drainage systems shall be designed to convey stormwater runoff by gravity flow.
18. CCTV inspection is required for all storm drain piping and apparatuses.

B. **Culverts.**

1. Proper consideration of inlet and outlet control shall be given in the design of culverts and outlets.
2. The pipe, appurtenant entrance, and outlet structure shall properly account for water, bed-load, and floating debris at all stages of flow.
3. The outlet shall be designed to resist undermining and wash-out. Rip-rap aprons, flared end sections, wing walls, or other means shall be sized and specified, as necessary.
4. Culvert section techniques can range from solving empirical formulas, to using nomographs and charts, to comprehensive mathematical analysis for specific hydraulic conditions. Other widely accepted models may be used but must be approved by the City Engineering Department. Designs shall be based upon SCDOT requirements where applicable.
5. Additional hydraulic capacity shall be required as necessary to prevent backwater effects that may adversely impact upstream property or structures.

C. **Headwalls and Outlets.**

1. All exposed ends of pipes shall be protected by a flared end section or one of the following type headwalls:
   (1) A concrete headwall with wing walls is preferred.
   (2) A rip-rap headwall is acceptable for pipes 24 inches or less . Note that this technique requires the use of both filter fabric and grout.
   (3) new development discharges into a channel, a stabilized outlet must be provided such that the discharge does not cause erosion of the receiving channel.
   (4) Outlets will not be allowed to discharge on fill slopes.

D. **Energy Dissipation.**

1. All concentrated discharge points shall be sufficiently stabilized, or have energy dissipating devices added, to mitigate the potential for long-term erosion of the areas receiving the stormwater flows. Calculations shall be provided justifying the design and material used. The use of energy dissipating devices shall be considered in all applications, and an explanation shall be provided for all instances where they are

excluded from the design (e.g. flows enter directly into a stable, natural swale/channel).

2. Where concentrated runoff does not discharge to a channel, level spreaders, rip-rap aprons, plunge pools, etc. shall be properly designed and installed to ensure that concentrated flows are converted into sheet flow. The use of level spreaders shall be considered in all applications, and an explanation shall be provided for all instances where they are excluded from the design (e.g. flows enter directly into a natural swale/channel).

E. **Catch Basins, Yard Inlets, Manholes, Piping, and Junction Boxes.**

1. Materials and construction shall be prefabricated concrete box.
2. Materials and construction shall be as specified in *SCDOT Standard Drawings Section 719*.
3. Side inlet catch basins or junction boxes with concrete covers shall have a metal ring and manhole lid cast within the top for easy access (e.g. pull holes in lid).
4. When the depth of a catch basin or junction box exceeds 4 feet, rungs/steps shall be provided for ascent and descent (Steps are to be *ASTM-C-478,* or equivalent).
5. The box top shall be a minimum of 3 feet by 3 feet. Sides shall be plastered with grout.
6. All pipes entering or leaving shall not protrude more than 4 inches into the box.
7. All roadway catch basins be Modified Florida Type Catch Basins.
8. Yard inlets shall be designed to accommodate a given flow such that ponded water is removed within 72 hours and does not cause flooding to adjacent buildings or other interests. As long as these criteria are met, the depth of ponded water is allowed to exceed the top of the manhole lid by no more than 6 inches for the appropriate design storm.
9. It is desirable to locate catch basins outside curve radii. If this is not reasonably possible, the catch basin shall be set back 1 additional foot and the face of the catch basin shall be parallel to a chord joining the two points on the curve radius located by projecting lines from the sides of the catch basin box.
10. Catch basins shall contain a minimum drop of 0.2 feet from invert in to invert out.

11. Floors are to be concrete with raised corners. Concrete shall tie in at the inlet invert (invert in) and continue to the outlet invert (invert out) with raised corners to prevent water and sediment from collecting in the bottom of the catch basin.
12. Within a catch basin, the elevation at the crown of any inlet pipe shall be equal to or greater than the crown of the outlet pipe.
13. Catch basins shall be field staked to ensure proper catch basin inlet alignment with the street gutter line.
14. Areas around all catch basins shall be backfilled in 12 inch lifts, compacted to 95% Standard Proctor maximum density.
15. Inlet protection shall be provided at all inlets into the stormwater system during construction and until project closure procedures have been completed or notification from the City's Engineering Department has been given stating that an acceptable level of stabilization has been achieved. Guidance on design, installation and maintenance of inlet protection can be found in the *SCDES Storm Water Management BMP Field Manual (2005)*. The City does not allow inlet protection devices that are installed inside an inlet or pipe. All inlet protection devices must be located at the surface/entrance of the inlet.
16. Maximum depth in which the water may pond above or around an inlet must not threaten surrounding permanent structures or facilities and ponded water shall not extend into travel lanes.
17. Catch basins, yard inlets, and junction boxes shall be constructed large enough to accept the pipes entering and exiting the box. Also, when necessary, an offset lid or other means shall be provided for safe access into the box for maintenance purposes. A detail shall be provided that clearly depicts these requirements.
18. Stormwater RCP - piping joints must have two complete wraps of geotextile material. Geotextile wrap to be 1 ft. long on both sides from the center line of the pipe joint and must include 18 inches overlap

7. WATER

7.1 WATER DISTRIBUTION SYSTEM DESIGN STANDARDS

A. **General.**

1. The following water system design standards are based on Federal, State, and the requirements of the City.
2. These design standards are applicable to all development requiring water service from the City.
3. As a general rule, the City does not allow aerial water main crossings. Examples of aerial crossings include, but are not limited to, water mains constructed on piers or pilings, and water mains attached to structures such as roadways, bridges or piers.
4. Where it is necessary for water mains to cross surface water or wetlands, the preferred method of installation is by Horizontal Directional Drill or Jack and Bore. In either case, the Engineer of Record is encouraged to meet with the City to discuss method of installation prior to submitting development plans for plan review.
5. The City has specific requirements and specifications for the selection and installation of backflow prevention assemblies. Information regarding The City's backflow prevention requirements can be found in Appendix 4.

B. **Design Criteria.**

1. Design water mains in accordance with the requirements of the South Carolina Department of Environmental Services (SCDES*) State Primary Drinking Water Regulation R.61-58* and the requirements of these standards.
2. Plan and Profile.
   (1) Provide plan view for all water mains drawn to a horizontal scale no smaller than 1-inch equals 50-feet.
   (2) Provide water main profile drawn to a vertical scale no smaller than 1-inch equals 5-feet.

(3) Provide plan and profile at each location where water main crosses over or under a storm drainage pipe or structure, or sewer lines.

(4) Provide plan and profile for all water mains installed by jack and bore or horizontal directional drill.

3. Water mains shall not be closer than 25 ft horizontally from any portion of a wastewater tile field or spray field. If this separation is not possible, the water mains shall be protected by an acceptable method approved by SCDES and the City.
4. Water mains shall be located outside of contaminated areas. Where it is necessary for water mains to cross contaminated areas, the Engineer of Record shall submit proposed method of construction to the City for review and approval prior to submitting development plans for plan review.
5. There shall be no connection between the water distribution system and any pipes, pumps, hydrants, or tanks whereby unsafe water or other contaminated materials may be discharged or drawn into the system.
6. Locate water mains, valves and meters outside of paved roadway, if possible. All waterlines shall be located adjacent to publicly-maintained paved roadways for maintenance access. Water mains, valves, meters or hydrants are not to be located under or behind parking spaces or in any other areas that could inhibit access for operations and maintenance.
7. Minimize dead ends by looping of all water mains. Arrange water mains so they are looped and interconnected at intersections without using crosses.
8. Where dead-ends occur, provide a fire hydrant on water mains 6 inches and larger and a yard hydrant on water mains less than 6 inches. Size flushing devices to provide flows with a velocity of at least 2.5 fps in the water main being flushed.
9. All water mains installed by direct bury or jack and bore shall be ductile iron pipe or C900 DR14 PVC.
10. All water mains installed by horizontal directional drill shall be High Density Polyethylene (HDPE).
11. Provide restrained joint pipe and fittings on all piping at each fitting, valve, and fire hydrant connection. The location and length of restrained joint pipe will be clearly marked on the plans.

12. Provide minimum 36 inches to maximum 48 inches cover at finished grade. Justification for deviation must be approved by the City.
13. Water Main Size.
    (1) Minimum water main size shall be 6 inch. 4 inch mains may be allowed on dead-end lines provided the main cannot be extended and the main does not provide fire protection. The use of 4 inch mains requires prior approval from City Engineering.
    (2) Maximum water main size shall be no larger than the water main from which it is being extended from or, in the case of a looped water main, no larger than the water main to which it is being extended to, whichever being the larger.
    (3) The City reserves the right to stipulate the maximum water main size for any water main extension

C. **Capacity Design.**

1. Size mains based on either 1/5 the maximum instantaneous demand plus fire flow or maximum instantaneous demand, whichever is greater. The minimum pressure under conditions of maximum instantaneous demand shall be 30 psi at every service tap. 30 psi will be acceptable at any service tap when fire flows or flushing flows are provided in excess of maximum peak hourly flow.
2. Minimum design fire flow shall be 500 GPM.
3. Hydraulic calculations shall be based on the available static and residual pressure in the main to be extended. These pressures will be from a fire hydrant flow test performed by the City.
4. Use Hazen and Williams design coefficient, for cement lined DIP 120 and for PVC pipe 150.
5. The maximum instantaneous demand is to be calculated using the tables provided below, as published in the *Community Water System Source Book* by Joseph S. Ameen.

Table D.7.1 Maximum Instantaneous Flows for Residential Areas	
Number of Residences Served	**Flow per Residence in GPM**
1 (First)	15.0
2 – 10*	5.0
11 – 20**	4.0
21 – 30	3.8
31 – 40	3.4
41 – 50	3.2
51 – 60	2.7
61 – 70	2.5
71 – 80	2.2
81 – 90	2.1
91 – 100	2.0
101 – 125	1.8
126 – 150	1.6
151 – 175	1.4
176 – 200	1.3
201 – 300	1.2
301 – 400	1.0
401 – 500	0.8
501 – 750	0.7
751 – 1,000	0.5

* Second, third, etc. through tenth residence served

** Eleventh, twelfth, etc., through twentieth residence served

Table D.7.2 Maximum Instantaneous Flows for Commercial Areas	
Type of Business	**GPM on Basis Shown**
Barber Shop	3.0 gpm per chair
Beauty Shop	3.0 gpm per chair
Dentist Office	4.0 gpm per chair
Department Store*	1.0 – 2.0 – 3.0 gpm per employee
Drug Store	5.0 gpm
with fountain service	add 6.0 gpm per fountain area
serving meals	add 2.0 gpm per seat
Industrial Plants**	4.0 gpm plus 1.0 gpm per employee
Laundry	30.0 gpm per 1,000 pounds of clothes
Launderette	8.0 gpm per unit
Meat Market, Super Market	6.0 gpm per 2,500 sq ft floor area
Motel, Hotel	4.0 gpm per unit
Office Building	0.5 gpm per 100 sq ft floor area or 2.0 gpm per employee
Physician's Office	3.0 gpm per examining room
Restaurant	2.0 gpm per seat
single service	6.0 to 20.0 gpm total
drive-in	2.0 to 7.0 gpm total
Service Station	10.0 gpm per wash rack
Theater	0.2 gpm per seat
drive-in	0.2 gpm per car space
Other Establishments***	Estimate at 4.0 gpm each

* Including customer service

** Not including process water

*** Non-water using establishments

Table D.7.3 Maximum Instantaneous Flows for Institutions	
Type of Institution	**Basis of Flow, GPM**
Boarding Schools, Colleges	2.0 gpm per student
Churches	0.4 gpm per member
Clubs: Country, Civic	0.6 gpm per member
Hospitals	4.0 gpm per bed
Nursing Homes	2.0 gpm per bed
Prisons	3.0 gpm per inmate
Rooming House	Same as Residential*
Schools: Day, Elementary, Junior High, Senior High	
Number of Students	**GPM Per Student**
0 – 50	2.00
100	1.90
200	1.88
300	1.80
400	1.72
500	1.64
600	1.56
700	1.44
800	1.38
900	1.32
1,000	1.20
1,200	1.04
1,400	0.86
1,600	0.70
1,800	0.54
2,000	0.40

* Each unit of an apartment building shall be considered as an individual residence.

D. **Relation to Sewer Mains.**

1. There shall be no physical connection between a public potable water supply system and a sewer, or appurtenance thereto which may permit the passage of any sewage or polluted water into the potable supply. No potable water pipe shall pass through or come into contact with any part of a gravity sewer manhole.
2. Horizontal and Vertical Separation:
   (1) Water mains shall be laid at least 10 feet horizontally from any existing or proposed sewer main. The distance shall be measured edge to edge. For water mains where it is not practical to maintain 10 foot separation, deviation may be allowed provided that the water main is in a separate trench or on an undisturbed earth shelf located on one side of the sewer main and at an elevation so the bottom of the water main is at least 18 inches above the top of the sewer main.
   (2) Crossings.
      a. Water mains crossing sewer mains shall be laid to provide a minimum vertical distance of 18 inches between the outside of the water main and the outside of the sewer main. This shall be the case whether the water main is either above or below the sewer main. Whenever possible, the water main shall be located above the sewer main. The crossing shall be arranged so that the water main joints will be equidistant and as far as possible from the sewer main joints. Where a water main crosses under a gravity sewer main, adequate structural support shall be provided for the gravity sewer main to maintain line and grade.
      b. Where it is not practical to obtain proper horizontal and vertical separation as stipulated above, both the water main and the gravity sewer main shall be installed in a watertight steel casing that extends 10 feet either side of the crossing, measured perpendicular to the outside of the water main.

E. **Relation to Storm Drains.**

1. General.
   (1) No water main shall pass through or come into contact with any part of a storm drain pipe or structure.
2. Horizontal Separation.

(1) Water mains shall be laid at least 5 feet horizontally from any existing or proposed storm drain pipe or structure. The distance shall be measured edge to edge.

3. Crossings Above.

(1) Water mains crossing above storm drains shall be laid to provide a minimum vertical separation of 12 inches between the outside of the storm drain and the outside of the water main.

4. Crossings Below.

(1) Single Barrel, 18-inch Diameter or Less.

a. Water mains crossing below a single barrel storm drain pipe 18-inch diameter or less shall be laid to provide a minimum vertical separation of 18-inches between the outside of the storm drain and the outside of the water main.

b. Where vertical separation is between 18 inches and 42 inches, one full length of ductile iron water main shall be centered under the storm drain crossing. The crossing shall be arranged so that the water main joints will be equidistant and as far away as possible from the storm drain crossing.

(2) Single Barrel, 30 inch Diameter or Greater.

a. Water mains crossing below a single barrel storm drain pipe 30 inch diameter or greater shall be laid to provide a minimum vertical separation of 18-inches between the outside of the storm drain and the outside of the water main and shall be installed in a steel casing, regardless of the depth of vertical separation, that extends 5 feet on both sides of the crossing, measured perpendicular to the outside of the storm drain. A longer length may be required, as determined by the City, based on the depth and location of the crossing. The crossing shall be arranged so that the water main joints will be equidistant and as far as possible from the storm drain crossing.

(3) Multiple Barrel.

a. Water mains crossing below 2 or more adjacent storm drain pipes, regardless of diameter, shall be laid to provide a minimum vertical separation of 18-inches between the outside of the storm drain and the outside of the water main and shall be installed in a steel casing, regardless of the depth of vertical separation, that extends 5-feet on both sides of the crossing, measured perpendicular to the outside of the storm drain. A longer length may be

required, as determined by the City, based on the depth and location of the crossing. The crossing shall be arranged so that the water main joints will be equidistant and as far as possible from the storm drain crossing.

(4) Box Culverts.

a. Water mains crossing below box culverts shall be laid to provide a minimum vertical separation of 18 inches between the outside of the box culvert and the outside of the water main and shall be installed in a steel casing, regardless of the depth of vertical separation, that extends 5-feet on both sides of the crossing, measured perpendicular to the outside of the box culvert. A longer length may be required, as determined by the City, based on the depth or location of the crossing. The crossing shall be arranged so that the water main joints will be equidistant and as far as possible from the storm drain crossing.

F. **Services.**

1. Location.

(1) All water services and fire lines will require a meter.

(2) All meter boxes and meter vaults to be installed within road right-of- way, outside of the paved roadway, or in a City easement dedicated for the water system.

(3) Install all service lines, meter boxes and meter vaults perpendicular to the road right-of-way.

(4) Locate a minimum of 1 inch services and meter boxes for residential properties so services and meters are not located in concrete.

(5) Do not locate meter box or meter vault in driveways, under or behind parking spaces, or in any other areas that could inhibit access for operations and maintenance.

(6) Maximum length of service line, from the water main to the meter, shall not exceed 150 feet.

(7) All water service lines shall maintain a continuous attached tracer wire.

2. Tap Size.

(1) General.

a. The service line, including any branch lines, from the tap to the customer's point of connection, may be the same size as the tap, but may not be any larger.
b. All residential services shall require a minimum 1 inch tap.
c. The City reserves the right to stipulate the minimum or maximum size service tap available off of any water main regardless of the water main size.

(2) Services, 2-inch and smaller.

a. Tap size shall be, at a minimum, one size smaller than the water main being tapped.

G. **Joint Restraint.**

1. General.

(1) Design restrained joints in accordance with the Ductile Iron Pipe Research Association (DIPRA) standards for all fittings, valves, hydrants and pipe joints as required to resist forces during testing and normal operating pressures within the distribution system.

(2) Retainer glands shall be used on all mechanical joint fittings. All tees, plugs, caps, and bends equal to or exceeding 11.25 degrees, and at other locations where unbalanced forces exist, must have acceptable thrust restraint.

H. **Valves.**

1. Gate Valves.

(1) Water mains 4 inch through 12 inch: Use resilient wedge gate valves.

(2) Provide valves at maximum 500 foot intervals. Requests for spacing greater than 500-foot will be reviewed on a case-by-case basis.

(3) Provide 3 valves for a tee intersection and 4 valves for two- offset tee intersections. The use of crosses is not acceptable.

(4) Valves shall be placed to minimize the number of City customers out of service due to a water main break and/or any maintenance operation.

(5) If a water line crosses at a bridge, a valve will be required on either side of the bridge.

(6) The City reserves the right to require additional valves if it is deemed in the best interest of current and future customers.

I. **Fire Hydrants.**

1. General.
   (1) Minimum main size for water mains serving fire hydrants shall be 6- inch.
   (2) Minimum size for hydrant lead shall be 6-inch
   (3) Provide hydrant control valve on all hydrant leads
   (4) Fire hydrants shall be flush to finish grade
2. Location.
   (1) Fire hydrants shall be spaced at intervals of 1,000 feet in rural areas and at intervals of 500 feet in urban areas.
   (2) The City reserves the right to require the installation of additional fire hydrants, solely at its discretion.
   (3) When practical, locate fire hydrants at road intersections or at property corners.
   (4) Do not locate fire hydrants in driveways, ditches, wetlands or in areas not easily accessible for operation and maintenance.
   (5) No portion of a fire hydrant shall be inside an ADA sidewalk or ramp.
   (6) Fire hydrants shall be required as blow-offs on water mains 6 inches and larger to achieve a 2.5 foot per second scouring velocity.

J. **Yard Hydrants.**

1. General.
   (1) All 4 inch dead-end water mains shall be designed to include a Post Hydrant.
   (2) Blow-off hydrants or other such appurtenances shall not be connected directly to any storm drain or sewer.

7.2 WATER DISTRIBUTION SYSTEM MATERIALS FOR CONSTRUCTION

A. **General.**

1. This Section includes pipe and fitting material specifications, joint materials, valves and encasement requirements.
2. All materials used in the construction of water distribution systems shall be new and unused when delivered on-site and shall be suitable for installation and operation under the conditions for which they are to be used.
3. All chemicals/ products added to public water supply must be third party certified as meeting the specifications of ANSI/NSF Standard 60.
4. All brass components in contact with potable water must be made from either CDA/UNS Brass Alloys C89520 or C89833 with a maximum lead content of 0.25% by weight. Brass alloys not listed in ANSI/AWWA C800 Paragraph 4.1.2 are not approved. All fittings shall be stamped or embossed with a mark or name indicating that the product is manufactured from the low-lead alloy.
5. All materials/products that contact potable water must be third party certified as meeting the specifications of ANSI/NSF Standard 61.
6. The pressure rating of pipe must be capable of handling 1.5 times the normal working pressure.
7. All pipe fittings, packing, jointing materials and valves must conform to *AWWA Standards Section C*.

B. **Bedding Material.**

1. Clean, well graded Class II and/or Class III soils.
2. Class II soils shall be used in the pipe zone.
3. Use Class II or Class III above the pipe zone.
4. Backfill material must be tamped in layers around the pipe and to a sufficient height above the pipe to adequately support and protect the pipe.
5. Stones must not come in contact with the pipe.

C. **Ductile Iron Pipe.**

1. All sizes of pipe shall be laying length of 18 feet to 20 feet.
2. All buried pipe shall be pressure class as follows:

Table D.7.4 Buried Pipe Class	
Pipe Size (inch)	**Pressure Class (psi)**
4 – 12	350
14 – 20	250

3. Pipe wall thickness shall be in accordance to bury depth as shown on drawing: ANSI/AWWA A21.50/C115.
4. Flange pipe or Victaulic grooved pipe shall be class 53.
5. Use cement mortar lining: ANSI/AWWA C104/A21.4, standard thickness.
6. Use rubber gaskets and lubricant: ANSI/AWWA C111/A21.11.
7. No metric sized pipe shall be permitted.
8. All pipe to be shipped with gaskets, glands, and bolts unless specified otherwise.
9. All pipe lengths must be tested to 500 psi working pressure prior to shipping.
10. Accepted products: American Cast Iron Pipe Company, Griffin Pipe Company, U.S. Pipe Company, and McWane Cast Iron Pipe Company.

D. **PVC Pipe & Fittings.**

1. General.
   (1) Only the products of a manufacturer regularly engaged in the manufacturing of pipe used for the conveyance of potable water will be acceptable.
   (2) All PVC water line pipe must be approved by the National Sanitary Foundation (NSF) and must bear the NSF seal of approval.
   (3) Piping shall comply with the following standards: ASTM D1598, ASTM D1599, ASTM D1784, ASTM D2241, ASTM D 2321, ASTM D3139, and AWWA C104.
   (4) Manufacturers are required to inspect and test all pipe and fittings at the place of manufacturing.
   (5) Manufacturer's certificate must indicate joints of the type proposed have been hydrostatically tested to 600 psi.
   (6) For Engineering approval submit the following items:
      a. Shop drawings for all joint gaskets.

b. One certified copy of the pipe manufacturer's allowable joint deflection limits.

2. PVC 4 Inches in Diameter and Larger.
   (1) Pipe shall meet AWWA C900 for 4 inch through 12 inch diameter and AWWA C905 for pipe in diameter greater than 12 inches.
   (2) Comply with the requirements of AWWA C900 or C905 as applicable for the size of the pipe, conforming with the outside diameter dimensions of cast iron pipe, with a maximum dimension ratio (DR) of 25. Mark pipe in compliance with the requirements of AWWA C900 or C905.
3. Pipe Lengths.
   (1) Provide pipe in nominal 20 foot lengths. Shorter lengths may be used where required by construction details or when approved by the Engineer.
4. PVC Pipe Joints.
   (1) Provide gasket integral bell end pipe joints utilizing elastomeric gaskets. The joint must provide protection of the line from shock, vibration, and earth movement, and must compensate for the expansion and contraction of pipe lengths.
5. PVC Fittings.
   (1) Unless otherwise specified or indicated on the drawings, use Pressure Rated Class 250 fittings, either ductile iron or gray cast iron, conforming to applicable sections of AWWA C110. Unless otherwise shown on the Drawings, use push-on or mechanical joint fittings. Provide fittings in the size indicated on the Drawings, as specified herein, or as required to make connections or changes in horizontal and vertical alignment. Line the interior of the fittings with a cement mortar lining and bituminous seal coat conforming to AWWA C104.
6. Bedding Material.
   (1) Comply with the requirements of ASTM D2321 for Class III embedment material.
7. Thrust Restraint.
   (1) Provide mechanical joint thrust restraints for all tees, bends and plugs on pipe 2.5 inches in diameter and larger. Thrust restraints shall be by EBAA Iron Sales or equal.
8. Tracer Wire.
   (1) Tracer wire shall be continuous, single strand copper wire, insulated, 10 AWG diameter.

E. **Pipe Joints.**

1. General.
   (1) Ductile iron pipe, PVC pipe, and fittings shall be furnished with push-on joints, push-on restrained joints, mechanical joints, flanged joints, and grooved joints as required.
   (2) Pipe ends (spigot end, bell and socket) for all pipe shall be gauged with suitable gauges at sufficiently frequent intervals to ensure compliance to the standard dimensions of ANSI/AWWA C151/A21.5.
   (3) Provide rubber gaskets and lubricants complying with ANSI/AWWA C111/A21.11 for mechanical or push-on joints.
      a. Natural rubber gaskets are not acceptable.
      b. Lubricants, which will support microbiological growth, shall not be used for slip-on joints.
      c. Vegetable shortening shall not be used to lubricate joints.
2. Push-on Joints.
   (1) Provide push-on joints complying with ANSI/AWWA 21.11/C11 as modified by ANSI/AWWA C151/A21.51.
   (2) Accepted products: Fastite, Tyton, and Bell-tite.
3. Mechanical Joints.
   (1) Provide mechanical joints complying with ANSI/AWWA 21.11/C11 as modified by ANSI/AWWA C151/A21.51.
4. Flanged Joints.
   (1) Provide flanged joints complying with ANSI/AWWA C115/A21.15.
      a. Provide ASTM D1330, Grade I rubber, full face type gaskets.
      b. Thickness.
         (a) Up to 10-inch pipe diameter: 1/16-inch.
         (b) Larger than 10-inch pipe diameter: 1/8-inch.
      c. Certified as suitable for chlorinated and chloraminated potable water.
5. Restrained Joints.
   (1) Provide restrained joint pipe and fittings on all piping at each fitting, valve, fire hydrant connection and on pipe joints as shown on the plans.
   (2) Conform to ANSI/AWWA A21.11/C111 as modified by ANSI/AWWA C151/A21.51.
   (3) Accepted Products:

a. American Cast Iron Pipe: Fast Grip, Flex-Ring, Field Flex- Ring or Lock-Ring
b. US Pipe: TR Flex or Field Lok 350 Gaskets
c. Griffin Pipe: Snap-Lok Restrained Joint, or Talon RJ Gasket
d. EBAA: Series 1100 Megalug Restraint Gland
e. Ford: Series 1400 Restraint Gland
f. Sigma: One-Lok Series SLD Restraint Gland
g. McWane: Sure Stop 350 Restraint Gasket
h. For connections to PVC pipe:
   (a) EBAA: Megalug series 2000PV.
   (b) Ford: Series 1500 Restraint Gland.

6. Bolts, Nuts, and All-Threaded Rod.
   (1) Tee bolts and nuts shall be made of high strength low alloy steel (ASTM A307), Cor-Ten (ASTM A242), 304 stainless steel, or 316 stainless steel.
   (2) Nuts and bolts used for flanged connections shall be grade 316 stainless steel.
   (3) All fasteners shall have minimum yield strength of 45,000 psi. Material type shall be marked on the fasteners.
   (4) All-thread rod shall be grade 316 stainless steel.
   (5) Stainless steel materials shall contain sufficient chromium to resist corrosion, oxidation, and rust.
   (6) Materials shall be sound, clean, and coated with a rust resistant lubricant, approved for use with potable water.
   (7) Threads shall be in accordance with ANSI B1.1, Unified Inch Screw Threads, and with B1.2, Screw Threads, Gages, and Gaging, conforming to the coarse thread series (UNC) Unified Coarse, with threads Class 2A internal and Class 2B external.
   (8) Bolts 0.75 inches and smaller shall be furnished with heavy hex heads conforming to ANSI B18.2.1.
   (9) Bolts larger than 0.75 inches may have either standard or heavy hex heads conforming to ANSI B18.2.1.

F. **Ductile Iron Pipe Fittings.**

1. General.
   (1) Use cement mortar lining: ANSI/AWWA C104/A21.4, Standard thickness or epoxy lining.
   (2) Compact fittings for piping 3 inch through 48 inch may be provided in accordance with ANSI/AWWA C153/A21.53.88.
   (3) No metric sized fittings shall be permitted.
   (4) All fittings are to be shipped with gaskets, glands, nuts, and bolts unless specified otherwise.
   (5) Provide joint restraint at each fitting, valve and fire hydrant connection unless specified otherwise herein or indicated on the drawings.
2. Mechanical joint fittings shall conform to ANSI/AWWA A21.53/C153 or ANSI/AWWA A21.10/C110.
3. Flanged Fittings.
   (1) Conform to ANSI/AWWA A21.10/C110.
   (2) Fitting flanges shall have facing and drilling which match AWWA/ANSI C115/B16.1 except were class 250 flanges are specifically noted.
4. Sleeves, 4 inch and Larger.
   (1) Provide full-length mechanical joint ductile iron solid sleeve, 12-inch minimum length, where needed to make piping connections.
   (2) Provide cut-in sleeve, ductile iron, with mechanical restraint joint where installing fittings in an existing line.
5. Accepted products: Tyler Union, Star Pipe Products, and Sigma Corporation.

G. **Tapping Sleeves.**

1. Tapping sleeve sizes 4 inch through 36 inch shall conform to the following criteria:
   (1) Provide stainless steel tapping split-type sleeve with flanged outlet.
   (2) Provide bolts, follower rings and gaskets on each end of the sleeve.
   (3) Provide for minimum working pressure of 150 psi.
   (4) Provide square or hexagonal head bolts with hexagonal nuts. All square and hexagonal head bolts and hexagonal nuts shall be Cor-Ten steel, 304 stainless steel, or 316 stainless steel.

(5) Provide 0.75 inch NPT test plug on top of the outlet.

(6) Accepted Products:

a. 4-inch through 16-inch: Mueller H-615

H. **Valves.**

1. General.

(1) All valves shall be in conformance with the latest revision of all reference standards of AWWA or ANSI.

(2) 4 inch through 12 inch: Use resilient wedge gate valves.

(3) All valves shall "Open Left".

(4) Provide a 2 inch ductile iron wrench nut with direction of valve operation clearly visible when looking down on the nut. Hold-down nut or bolt will be Type 316 stainless steel.

(5) Provide stem extensions on all valves where the top of the operator nut is located greater than 36-inches below the top of the valve box.

(6) All valves shall be equipped with a non-rising stem.

2. Gate Valves.

(1) All valves will meet or exceed all requirements of AWWA C509 or AWWA C515.

(2) Outer valve body will have raised lettering cast in, providing manufacturers name, valve size, year of manufacture, pressure rating, location of casting and each part is to be clearly marked indicating ductile or cast iron.

(3) All valves will be electrostatically, fusion-bonded epoxy coated, minimum 8-mil thickness inside and out, conforming to ANSI/AWWA C550 Standards.

(4) Resilient wedge to be ductile or cast iron fully encapsulated with EPDM elastomer, including guide path and will be US Food and Drug Administration approved for potable water and have an EPDM visible marking.

(5) All valves will have a minimum 250 psi working pressure and a 500-psi static pressure.

(6) Valve stem material will be bronze, brass, or Type 304 stainless steel.

(7) Valves will have two upper O-ring seals on the stem above the thrust collar and at least one O-ring seal below the collar so designed to allow for replacement of the upper O-rings with the valve under full operating pressure.

(8) Valves will have thrust washers located above and below the thrust collar to insure smooth frictionless operation.

(9) All exterior bonnet and thrust collar bolting, whether recessed or exposed, are to be Type 316 stainless steel and marked by type.

(10) Waterway seat area will be smooth without ridges or cavities and valves will have full size bore throughout the flow-way.

(11) All valves will be hydrostatically pressure tested prior to shipment in compliance with AWWA C509 or AWWA C515 Standards and be covered by the Manufacturer's 10-Year Limited Warranty from the date of purchase by the end user.

(12) Accepted products: Mueller and Clow.

3. Tapping Valves, 16 inch and Smaller.

(1) Conform to the requirements for gate valves as specified in Item 2 above, Gate Valves.

(2) Accepted products: Mueller and Clow.

I. **Fire Hydrants.**

1. Compression type, opening against pressure and closing with pressure, comply with ANSI/AWWA C502 dry-barrel fire hydrants, existing nation standards and ANSI B26.

2. Hydrants shall have a 6 inch mechanical joint connection with a 4.5 inch main valve. EPDM rubber will be specified on all hydrants and hydrant replacement parts to protect against chloramine deterioration.

3. 6 inch bell connection, two 2.5 inch hose connections, one 4.5 inch pumper nozzle with mechanical removal feature, set screw, lock ring, etc., and shall conform to ANSI B26.

4. Hydrants shall have a 1.5 inch pentagon shaped operating stem nut and shall "Open Right" (clockwise). Arrow shall be cast in top of hydrant indicating direction of opening.

5. National Standard screw threads on outlet nozzles.

6. Two- part breakable safety flange shall be integral parts of barrel casting at least 2 inches above bury line.

7. Barrel lengths shall generally be for 3.5 ft. bury.

8. Interior shall be two-part thermosetting or fusion bonded, coated holiday free to a minimum thickness of 4 mils conforming to AWWA C550: Standard for Protective Interior Coatings for Valves and Hydrants.

9. Exterior coating shall be as follows:
   (1) Hydrant barrel will be painted Sherwin Williams Chrome Yellow, product number B54T104.
   (2) Weather cap (bonnet), operating nut, and nozzle caps will be painted Sherwin Williams Orange, product number B54E39 for 6 inch diameter waterlines. 8 inch waterlines will be painted Sherwin Williams Safety Green, product number B54T1104.
   (3) Exterior hydrant parts below ground will be asphaltic or epoxy coated.
10. All bronze or brass internal working parts in contact with service water are to be maximum 16% in zinc content and 79% minimum in copper.
11. Retaining bolts from shoe to lower barrel shall be 316 stainless steel.
12. Upper assembly shall be provided with a grease or oil reservoir that automatically lubricates all operating stem threads and bearing surfaces each time of operation. The system shall be completely sealed from waterway and external contaminants. The reservoir is to have an external filler point that does not require dismantling any portion of the hydrant during regular maintenance and all hydrants are to be completely lubricated with food grade product prior to leaving the factory.
13. Exterior casting shall indicate type, design, date, and location of manufacturer.
14. Upper and lower main stem rods shall be steel, stainless steel, or bronze in accordance with AWWA C502.
15. Accepted Products: Mueller Company: Super Centurion A-421.
16. Fire hydrants shall be equipped with Storz connector with cap.

J. **Services.**

1. Taps.
   (1) DIP water main.
      a. Services 1 inch: Tapping Saddle Double Strap
      b. Services 1.5 inch to 2 inch: Tapping saddle
      c. Services greater than 2 inch: Tapping sleeve
   (2) Existing PVC water mains.
      a. Services 1 inch to 2 inch: Tapping saddle
      b. Services larger than 2 inch: Tapping sleeve with full body valve
2. Tapping Saddles.

(1) Provide all of the following materials:

a. Body - Ductile Iron ASTM-A536

b. Bales and Strips – Type 304 or 316 stainless steel

c. Studs - Type 304 or 316 stainless steel

d. Hardware - Type 304 or 316 stainless steel

e. Iron pipe thread

(2) Provide double strap for all sizes.

(3) Finish – Provide fusion bonded nylon to an average thickness of 12 mils.

(4) Accepted products:

a. Smith Blair: 317

b. Ford: FCD 202

c. Mueller: DR2S

d. JCM: 406

e. Romac: 202N

3. Service Line Piping.

(1) Minimum size, 1 inch.

(2) Services 1 inch to 2 inch, provide CTS Poly, 0.065 inch minimum thickness, suitable for underground water services and supplied in conformance with ASTM B88.

(3) Services greater than 2 inch, provide PVC or Poly pipe.

4. Corporation Valves.

(1) Corporation Valves will have NPT thread inlets. The outlet connection will be CTS /OD, conductive compression (grip nut) type outlets.

(2) Accepted products:

a. Mueller: 300 Corp, Model # B-25028N.

b. Ford: Ball Corp, Model # FB1100-X-Q-NL.

c. A.Y. McDonald: Ball Corp, Model # 74704-BG.

5. Meter Setter.

(1) Meter setters for 2-inch flanged meters are constructed of brass and copper tubing, ball valve inlet with padlock wing, check valve outlet, brace pipe eyelet on FIP 90 degree Ells on inlet and outlet sides of set-up

(2) Accepted products:

a. Ford: # VBH 77-15-44-77-Q-NL for 2-inch

b. Mueller: 2 inch with 15 inch riser and 110 compression connection

c. A.Y. McDonald: 721- 715WDGG 770 for 2-inch

6. Curb Stops.

(1) Provide curb stops for 1.5 inch and 2 inch services

(2) Accepted products:

a. Mueller: Model # B-25209N

b. A.Y. McDonald: Model # 76100-WG

c. Ford: Model # B44-XXX-Q-NL

7. Couplings.

(1) Provide couplings for service line connections.

(2) Accepted products:

a. Straight Couplings, 1 inch x 0.75 inch

(a) Mueller: Model # H-15403N

(b) Ford: Model # C44-34-Q-NL

(c) A.Y. McDonald: Model # 74758G

b. Y Branch, 1 inch x 0.75 inch x 0.75 inch

(a) Mueller: Model # H-15343N

(b) Ford: Model # Y44-243-Q-NL

(c) A.Y. McDonald, Model # 708YSG

c. 90 Degree Bends, 1.5 inch and 2 inch

(a) Mueller: Model # H-15526N

(b) Ford: Model # L44-XX-Q-N

(c) A.Y. McDonald: Model # 74761G

7.3 WATER DISTRIBUTION SYSTEM CONSTRUCTION PROCEDURES

A. **General.**

1. Prior to construction activities taking place, the Engineer of Record shall coordinate in advance a Pre-Construction Meeting with the assigned City Engineering Inspector. The Engineer of Record, Contractor(s), and City's Engineering Inspector shall be in attendance at a minimum.
2. The contractor is responsible for work site safety. Although the City will visit the construction site to observe construction, the City shall not be held liable for work site safety.

B. **Operation of the City of Sumter Valves and Hydrants.**

1. Only City of Sumter personnel shall operate City of Sumter valves or hydrants unless otherwise directed or approved by the City.
2. All hydrant and blow-off operations shall be done in a manner to direct flow away from private property and to prevent flooding of streets or roadways and to not cause any traffic problems .

C. **Handling of Materials.**

1. Store rubber gaskets and polyethylene film under cover and out of direct sunlight. Do not store nuts, bolts, glands, and other accessories directly on the ground. Keep all materials free of dirt and debris. Store per manufacturer's recommendations.
2. Keep valves off the ground and keep interior free of dirt and debris. Do not expose valve interior to direct sunlight. Store and maintain, if necessary, per manufacturer's recommendations.
3. Keep inside of pipe free of dirt and debris.
4. Handle pipe and fittings per manufacturer's recommendations so as to ensure delivery to the trench in sound, undamaged condition.
5. Use pinch bars, slings or tongs for aligning or turning pipe.
6. Use care not to damage pipe linings.

D. **Trench Excavation.** This Section is provided to outline most types of laying conditions but is not intended to cover all special laying conditions or the Engineer's special requirements.

1. Trench excavation shall be made via open cut and true to the lines and grades shown on the plans, unless boring is necessary or required. Banks of the trenches shall be cut in vertical, parallel planes equidistant from the pipe centerline. The horizontal distance between such planes, or the overall width of trench, shall vary with the size of the pipe to be installed.
2. Bell holes for bell-and-spigot pipe shall be excavated at proper intervals so that the barrel of the pipe will rest for its entire length upon the bottom of the trench. Bell holes shall be large enough to permit proper installation of joints in the pipe.
3. When muck, quicksand, soft clay, swampy or other material unsuitable for foundations or sub-grade is encountered such material shall be removed and replaced with crushed stone (slag is not acceptable).
4. After excavation, the area between the final pipe grade and the trench soil bottom shall be filled with crushed stone materials as required, compacted to proper grade, and made ready for pipe laying (slag is not acceptable).
5. Debris encountered in trench excavation for water mains and other pipelines shall be removed for the overall width of trench which shall be as shown on the plans. It shall be removed to a depth of 6 inches below the bottom of the pipe for pipes smaller than 24 inch; 8 inches below the bottom of the pipe for pipes 24 inch to 36 inch; and 12 inches below the bottom of the pipe for pipes larger than 36 inch, if debris extends to such depth.
6. In all cases, materials deposited shall be placed so that in the event of rain, no damage will result to the work.
7. The sides of all excavations shall be sufficiently sheeted, shored and braced whenever necessary to prevent slides, cave-ins, settlements or movement of the banks and to maintain the excavation clear of obstructions. Maintain the walls of the excavation properly in place and protect all persons and property from injury or damage. Sheeting, shoring or bracing materials shall not be left in place unless as shown by the plans or permitted by the City. All sheeting and bracing shall be left in place until the trench has been backfilled 1 ft. above the top of the pipe.

E. **Trench Backfill.**

1. The backfilling of pipeline trenches shall be started immediately after the pipe work has been inspected.

(1) The initial backfill material, placed to a height of 1 ft. above the top of the pipe, shall consist of approved backfill material free from organic matter and deleterious substances, containing no rocks or lumps over 2 inches in any dimension. It shall be carefully placed and compacted throughout the entire area to be backfilled.

(2) Backfill shall be deposited in 6 inch layers (before compaction) and thoroughly compacted with power tools to 95% of theoretical maximum density, modified *Proctor ASTM-D-1557*.

(3) Where pipe trenches are cut across or along pavement, the trenches shall be backfilled in accordance with applicable permits.

(4) Backfilling around structures shall be done in the manner specified above for pipe trenches by power tamping for the full depth of cut from the bottom of the finished grade.

(5) Tracer Wire.

a. Provide continuous, single strand copper wire, insulated, 10AWG diameter wire for all direct buried water mains.

(6) All backfilling shall be done in such a manner as will not disturb or injure the pipe or structure over or against which it is being placed. Any pipe or structure injured, damaged or moved from its proper line or grade during backfilling operations shall be uncovered, repaired, and then re-backfilled as herein specified.

(7) All backfilling shall be done in such a manner as will not disturb or injure the pipe or structure over or against which it is being placed. Any pipe or structure injured, damaged or moved from its proper line or grade during backfilling operations shall be uncovered, repaired, and then re-backfilled as herein specified.

(8) All excavations suspected of not meeting compaction requirements shall be tested for conformance by a City approved testing lab. Tests shall be performed at the locations and depths directed by the City, at the installing contractor's expense.

F. **Pipe and Appurtenances.**

1. General.
   (1) Inspect pipe for damage. Remove damaged and unacceptable pipe. Keep interior and joint surfaces clean and free of foreign materials. Install a mechanical joint or push-on type ductile iron plug or cap whenever work stops for a period of 1 day or greater.
   (2) Replace pipe where any part of coating or lining is damaged.
   (3) Lower pipe and accessories into trench by means of derrick, ropes, belt slings, or other equipment approved by the pipe manufacturer.
   (4) Do not dump or drop any of the materials into the trench.
   (5) Except where necessary in making connections to other lines, lay pipe with the bells facing in the direction of laying.
   (6) Rest the full length of each section of pipe solidly on the pipe bed, with recesses excavated to accommodate bells, couplings, and joints.
   (7) Bell pipe using manufacturer's approved leverage bar. Do not use machinery to bell pipe. Home line is to be clearly visible when pipe is joined.
   (8) Do not lay pipe in water or when trench conditions are unsuitable for the work. Keep water out of the trench until jointing is completed.
   (9) Re-lay pipe that has the grade or joint disturbed after laying.
2. Alignment and Grade.
   (1) Install pipe to the alignment and profile shown on the approved drawings.
   (2) Fittings, valves, and other appurtenances shall be located where shown on the approved plans, with the pipe being cut if necessary to ensure accurate placement.
   (3) Cutting Pipe.
      a. Cut pipe neatly and without damage to the pipe or lining.
      b. Unless otherwise recommended by the pipe manufacturer, cut pipe with milling type cutter, rolling pipe cutter, or abrasive saw cutter. Do not flame cut. Use wheel cutters when practical.
      c. Cuts must be even and perpendicular with length of pipe.
      d. Dress cut ends of pipe in accordance with manufacturer's directives for the type of joint to be made.

e. Cut ends and rough edges shall be ground smooth and, for push-on type connection, the cut end must be beveled slightly.

(4) Pipe lines intended to be straight shall be so laid.

(5) Where vertical or horizontal alignment requires deflection from straight lines or grade, do not exceed 75% of maximum deflection recommended by the pipe manufacturer or *AWWA Standard 600*.

(6) If alignment requires deflection exceeding recommended limits, furnish bends to provide angular deflections within the allowable limits.

3. Jointing Pipe and Appurtenances.

(1) Mechanical, Push-On, and Restrained Joint.

a. Join pipe with mechanical or push-on type joints in accordance with the manufacturer's recommendations. Provide all special tools and devices, such as special jacks, chokers, and similar items required for proper installation. Lubricants for the pipe gaskets shall be used and shall be manufacturer's standard. All mechanical joints used on hydrants, hydrant leads, taps and valves shall have restraining glands.

(2) Flanged.

a. Prior to connecting flanged pipe, the faces of the flanges shall be thoroughly cleaned of all oil, grease, and foreign material. The rubber gaskets shall be checked for proper fit and thoroughly cleaned. Care shall be taken to ensure proper seating of the flange gasket. Bolts shall be tightened so that the pressure on the gasket is uniform. Torque- limiting wrenches shall be used to ensure uniform bearing insofar as possible. If joints leak when the hydrostatic test is applied, the gaskets shall be removed and reset and bolts re-tightened.

4. Installation of Restraining Glands.

(1) Adjoining surfaces shall be clean, lubricated and meet the requirements of *ANSI/AWWA C111/A21.11*.

(2) Install using assembly recommendations established in *ANSI/AWWA C111/A21.11* as well as installation instructions provided by the manufacturer.

(3) If twist-off nuts are provided, tighten screws until nuts break loose.

G. **Tie-in to Existing Mains.**

1. General.
   (1) Tie-ins to existing mains shall be done by use of wet taps using tapping sleeve and tapping valve or by installation of a tee and valve. Existing waterline shall not be tapped on the opposite side of the existing pipe from where the new waterline intersects the existing waterline, also known as "back tapping" a waterline.
   (2) Engineer of Record or Contractor shall coordinate with the assigned City Construction Inspector to schedule wet tap or tee installation. A minimum of 3 business days shall be allowed for scheduling.
2. Wet Taps.
   (1) Tapping sleeve shall be installed on the water main with the tapping flange and valve at the 3 o'clock or 9 o'clock position.
   (2) Provide thrust blocking behind tapping sleeve.
   (3) Pressure test the tapping sleeve and valve at 150 psi. Pressure shall hold steady for 15 minutes.
   (4) Tap main thru the tapping valve.
   (5) When tap is complete, remove pipe coupon from shell cutter and provide to the City Construction Inspector.
   (6) Encase tapping sleeve, pipe and valve.
   (7) Backfill and set valve box.
3. Tee and Valve.
   (1) Cut out section of main to allow the installation of the tee with a solid sleeve.
   (2) Install tee and solid sleeve.
   (3) Add valve to the branch side of tee.
   (4) Shut new valve on branch side of tee, restore water to main and check for leaks.
   (5) Encase new tee, sleeve, pipe and valve in polywrap.
   (6) Backfill and set valve box.

H. **Setting Valves and Valve Boxes.**

1. Valves shall be carefully handled, cleaned and checked for operation prior to backfilling. Care shall be taken to ensure that no dirt, rock, or other obstacles that would interfere with the operation are left in the valve.

2. Center valve box on the valve, setting plumb. Valve box shall not rest on any part of the valve.
3. Tamp earth fill around each valve box to a distance of 4 feet on all sides, or to the undisturbed trench face if less than 4 feet.
4. Install shaft extensions plumb without any binding.
5. Valves shall be installed in a position such that the plane of operation or rotation for the operating nut is parallel to the ground surface.
6. Fully open and close each valve to manufacturer's specifications to assure that all parts are in working condition. All valves shall be left in the fully open position unless directed otherwise by the City.
7. Place valve box protection ring around top of valve box. Top of the ring is to be level with top of valve box and or no more than 1-inch above finish grade.

I. **Fire Hydrants.**

1. Installation.
   (1) Inspect hydrant carefully, ensuring that all foreign material is removed from the barrel. Inspect materials upon receipt for damaged or missing items. Store rubber gaskets under cover, out of direct sunlight. Do not store nuts, bolts, glands, and other appurtenances directly on the ground. Keep interiors free of dirt and debris.
   (2) Hydrants shall be carefully handled, cleaned and checked for operation prior to backfilling. Care shall be taken to ensure that no dirt, rock and other obstacles that would interfere with the operation are left in the hydrant.
   (3) Provide proper anchorage to fire hydrant installations by means of retainer glands.
   (4) Rotate fire hydrant offset fitting so hydrant is plumb and at the elevation detailed or install extension kit as necessary to position the bury line at finished grade.
   (5) Install stone drainage bed. Fire hydrants must be provided with a gravel pocket or dry well.
   (6) Fully open and close each hydrant to manufacturer's specification to assure that all parts are in working condition.
2. Acceptance.
   (1) Prior to acceptance by the City, hydrants shall be repainted in accordance with these Standards.

(2) Under the direction of the City Inspector, the Engineer of Record shall perform a flow test on all newly installed fire hydrants. Flow test results shall be furnished to the City as part of the project acceptance paperwork.

(3) All hydrants shall be bagged until SCDES permit to operate has been received and City Council has accepted the infrastructure.

(4) The Developer or Developer's Contractor shall not move fire hydrants after the infrastructure has been inspected and accepted due subdivision phasing. Any movement of accepted infrastructure must be approved in writing by City Engineering and updated record drawings will have to be submitted and approved.

J. **Services.**

1. General.

(1) All residential water services shall be located as shown on the approved plans. Provide straight alignment perpendicular to the road centerline from the meter to the main.

(2) Saddle taps are required on all PVC mains and when making 2 inch taps on ductile iron mains. Taps will be made with through-the-saddle style tapping machines, using coupon-type tapping bits under system pressure. The tapered iron drill bit shall be used where saddles are required on ductile iron. All saddle taps are to be located at the 2 o'clock or 10 o'clock position on the main.

2. Service Line Installation.

(1) All service lines will be installed with a minimum of 24 inches to a maximum of 36-inches of cover on all street crossings, and a minimum of 24 inches under all open ditches.

(2) PVC sleeves are optional on service lines crossing streets, driveways or parking areas. The Contractor may install a capped 4 inch Schedule 40 PVC water service carrier pipe to provide the flexibility of installing the water service line at a later date during the construction period. The carrier pipe shall be installed a minimum of 36 inches and a maximum of 60 inches below the surface of the road and made easily accessible. The carrier pipe shall be flagged with direct burial electronically detectable tape.

(3) Meter Box and Meter Vault Installation.

a. Install meter box or meter vault within road right-of-way, outside of the paved roadway or in a City easement.
b. Provide straight alignment perpendicular to the road centerline from the meter box to the main.
c. Locate meter box or meter vault either completely inside or completely outside of paved sidewalks. No portion of a meter box shall be inside an ADA sidewalk ramp
d. Do not locate meter box or meter vault in driveways, under or behind parking spaces, or in any other areas that could inhibit access for operation and maintenance.
e. Meter boxes for 1 inch services shall be placed on a 6 inch bed of gravel.
f. Meter boxes for 1.5 inch and 2 inch services shall be supported with 4 inch by 8 inch by 16 inch concrete blocks.
g. Meter setters for 1.5 inch and 2-inch services shall utilize a spacer between the flanges to stabilize the setup during installation and backfill procedures.
h. Set top of meter boxes or meter vault at final finished grade.

(4) City Meter Installation.

a. The following requirements shall be met prior to the City installing a meter:
(a) Meters are required on all water services and fire lines.
(b) Meter box or meter vault shall be flush and level to final finished grade.
(c) Water shall be on at the meter box or meter vault.
(d) Meter box or meter vault shall be tied to house, unit, condo, apartment, etc.
b. Contractor shall provide assistance when meters are being installed where it is not readily evident as to which customer the meter is serving.

K. **Hydrostatic Testing.**

1. General.

(1) Conduct a hydrostatic pressure test on all newly installed water mains, including connected service lines, in accordance with AWWA C600.
(2) Conduct test on each main or on sections of main between valves.
(3) Clean and flush mains of dirt and foreign material prior to conducting test.

(4) If concrete thrust blocking is installed, do not perform hydrostatic test until at least 5 days after placement of blocking.

(5) Test pressure shall be a minimum of 150 psi based on the elevation of the lowest point of the section of main being tested and corrected to the elevation of the test gauge.

(6) Slowly fill main in order to expel all air through air release valves or other installed appurtenances and to avoid excessive surge pressures at air vent opening(s).

(7) Test shall be conducted in the presence of the Engineer of Record or his representative and witnessed by a City representative. To schedule the test, the City Engineering Inspector requires a minimum of 3 business days' notice. This does not include holidays or weekends.

(8) Main installation will not be accepted if the quantity of makeup water required for the test is greater than the calculated testing allowance.

2. Hydrostatic Pressure Test.

(1) After filling water main and before applying test pressure, the main shall be maintained at the working pressure for a sufficient period of time for it to stabilize with respect to line movement, water absorption by the lining, etc. This may require several cycles of pressurizing and bleeding of trapped air.

(2) A suitable test pump, furnished by the Contractor, shall be connected to the main by means of a tap, or other suitable method, and the proper test pressure slowly applied to the main. Test pressure shall not vary by more than +/- 5 psi for the duration of the test and shall at no time during the test drop below 150 psi. The test shall be conducted for a minimum of 2 hours.

(3) Test pressure shall be maintained within the tolerance by adding makeup water through the pressure test pump into the main. The amount of makeup water added to the main (i.e. leakage) shall be accurately measured (in gallons per hour) by suitable methods and shall not exceed the applicable testing allowance.

(4) Testing allowance is defined as the maximum quantity of makeup water that is added into the main undergoing hydrostatic pressure testing, or any valved section thereof, in order to maintain pressure within +/- 5 psi of the specified test pressure. No water main installation will be accepted if the quantity of makeup water is greater than that determined by the following formula:

$$L = \frac{SD\sqrt{P}}{148{,}000}$$

Where:

L = testing allowance (makeup water), in gallons per hour S = length of pipe tested, in feet

D = nominal diameter of pipe, in inches

P = average test pressure during the hydrostatic test, in pounds per square inch (gauge)

(5) Acceptance of any main shall be determined on the basis of the testing allowance only. If any test discloses that the quantity of makeup water (i.e. leakage) is greater than the testing allowance as determined above, repairs or replacements shall be made to the main and the main retested. Any visible leaks shall be immediately repaired regardless of the allowance used for testing

(6) During the pressure test, any exposed pipe, fittings, valves, hydrants, and joints shall be carefully examined. Any damage or defects discovered during or following the pressure test shall be repaired or replaced with new material and the test repeated until satisfactory results are obtained.

(7) Certified test results shall be provided by the Engineer of Record to the assigned City Engineering Department with the project acceptance paperwork.

L. **Disinfection**

1. Conduct disinfection in accordance with *AWWA C651* before being placed in service.
   (1) Upon completion of testing, disinfect all water mains in accordance with SCDES requirements.
   (2) Newly laid valves or other appurtenances shall be operated several times while line is filled with chlorinating agent.
   (3) If bacteriological test results fail, to meet results specified, repeat procedures until satisfactory results are obtained.
2. Procedure.
   (1) Flush line to extent possible with available pressure and outlets, prior to disinfection.
   (2) Apply chlorine as liquid chlorine and chlorine compound such as calcium hypochlorite with known chlorine content. Water from the existing distribution system

or other source of supply shall be controlled so as to flow slowly into the newly laid pipeline during the application of chlorine.

(3) Apply through corporation cock in top of main, at beginning of section being sterilized.

(4) Use proper feeder and flow regulator to introduce chlorinating agent.

(5) Application rate shall not be less than 50 ppm.

(6) Retain chlorinated water in main not less than 24 hours.

(7) At end of retention period, at least 10 ppm of chlorine shall remain in the water at the extreme end of section.

(8) Flush the system with potable water and the sampling program begins.

(9) Dechlorinate chlorinated water used for disinfecting in accordance with the requirements of SCDES.

3. Acceptance.

(1) Provide 2 separate samples for each sample location, taken at 24 hour intervals, free of coliform bacteria. The Engineer of Record or contractor shall pull samples in accordance with SCDES specifications. Provide a copy of sample results to City Engineering.

(2) Sample locations shall be as required by SCDES and, at a minimum, at the following locations:

a. The tie-in location of new and existing water mains.

b. The end of all dead-end mains.

c. At intervals of no more than 1,200 feet.

(3) All sample locations are to be given an identifying label.

8. WASTEWATER

8.1 GRAVITY SEWER DESIGN STANDARDS

A. **General.**

1. The following wastewater collection system gravity sewer design standards are based on Federal, State, and the requirements of the City.
2. These design standards are applicable to all developments requiring wastewater service from the City.
3. Where it is necessary for gravity sewer mains to cross surface water or wetlands, the preferred method is directional boring. The engineer shall submit a proposed method of construction to the City for review and approval prior to submitting plans for review.
4. All regulations, procedures, fees, and penalties listed in *City Ordinance 2716 Sewage and Sewage Disposal* are applicable when designing sewer systems.
5. The City has specific requirements for grease traps. For all services that may require a grease trap (typically all food/beverage serving and/or preparation establishments), a Grease Trap Application must be submitted to the City for review. Additional submittals including drawings/schematics for the proposed grease trap and plumbing connections may be required after initial application review. Grease Trap Applications must be approved by the City in writing prior to installation, and a complete inspection of the installed grease trap and connected kitchen fixtures must be performed by the City prior to service acceptance.

B. **Design Criteria.**

1. Design gravity sewer mains in accordance with the requirements of the *South Carolina Department of Environmental Services (SCDES) Standards for Wastewater Facility Construction: R.61-67* and the requirements of these standards.
2. Plan and Profile.

(1) Provide plan and profile for all gravity sewer mains drawn to a horizontal scale no smaller than 1 inch equals 50 ft. and a vertical scale no smaller than 1 inch equals 5 ft.

3. Gravity sewer mains shall be polyvinyl chloride (PVC) SDR 35, SDR 26 or DIP Class 150.
   (1) SDR 35 or DIP shall be used at depths of up to 12 ft.
   (2) SDR 26 or DIP shall be used at depths greater than 12 ft.
4. Minimum depth of cover 3 ft. at finished grade and maximum depth of 15 ft. inside subdivisions.
5. Minimum gravity sewer main diameter shall be 8 inches. Maximum diameter shall not exceed the diameter of the downstream main from the point of connection.
6. Gravity sewer line shall be designed to have a velocity at 2 ft. per second.
7. Sewer manholes shall be placed a maximum of 400 ft. apart, at change of direction of the sewer line and at the end of the sewer line.
8. Where a smaller gravity sewer main joins a larger one, match their crowns.
9. Manholes shall have a minimum of 0.1 feet between invert in and invert out of the manhole.
10. Provide straight alignment with uniform slope between manholes and depth adequate to receive wastewater from the lowest service.
11. Minimum downstream angle between gravity sewer mains intersecting at manhole: 90 degrees.
12. Locate gravity sewer mains and manholes outside of paved roadway, if possible.
13. Manholes shall be either fully inside or fully outside of paved roadways and sidewalks. No portion of a manhole shall be inside of an ADA sidewalk ramp.
14. Do not locate manholes under or behind parking spaces or in any other areas that could inhibit access for operations and maintenance.
15. All manholes shall have paved access for cleaning. Such paved access shall be suitable to accommodate a gross vehicle weight capacity of 66,000 pounds.
16. Services with cleanouts shall be installed to all lots so as to properly serve each existing house and each vacant lot facing or abutting on the street or alley in which the gravity sewer main is being laid, and at such other locations as may be designated by the City.

17. Locate cleanout at the property line or edge of easement to provide access for maintenance.
18. Gravity sewer pipe shall be PVC SDR 35 or DIP to 12 ft. Pipe deeper than 12 ft. shall be DIP or PVC SDR 26.

C. **Capacity Design.**

1. Size gravity sewer mains based on peak hourly flow projections 2.5 times the average daily flow projection.
2. Average daily flow projections for all domestic wastewater facilities shall be based on the type of facility to be served and shall comply with the unit contributory loading criteria, *Appendix A* of the *South Carolina Department of Environmental Services (SCDES) Standards for Wastewater Facility Construction: R.61-67*.
3. Design for minimum velocity of 2 feet per second with pipe flowing full. Use Manning coefficient of roughness n = 0.013
4. Minimum Slope. Gravity sewer slopes shall comply with the minimum standards established in *Table D.8.1*.

Table D.8.1 Sewer Size and Minimum Slope

Nominal Sewer Size	Minimum Slope (Feet Per 100 Feet)
8 inch	0.40
10 inch	0.28
12 inch	0.22
15 inch	0.15
18 inch	0.12
21 inch	0.10
24 inch	0.08
27 inch	0.067

D. **Relation to Water Mains.**

1. There shall be no physical connection between a public or private potable water supply system and a sewer, or appurtenance thereto which may permit the passage of any sewage or polluted water into the potable supply. No potable water pipe shall pass through or come into contact with any part of a gravity sewer manhole.
2. Horizontal and Vertical Separation.

(1) Gravity sewer mains shall be laid at least 10 feet horizontally from any existing or proposed water main. The distance shall be measured edge to edge. For gravity sewers where it is not practical to maintain 10 foot separation, deviation may be allowed provided that the water main is in a separate trench or on an undisturbed earth shelf located on one side of the gravity sewer main and at an elevation so the bottom of the water main is at least 18 inches above the top of the gravity sewer main. Justification and any deviation must be acceptable to the City.

3. Crossings.

(1) Gravity sewer mains crossing water mains shall be laid to provide a minimum vertical distance of 18 inches between the outside of the water main and the outside of the gravity sewer main. This shall be the case whether the water main is either above or below the gravity sewer main. Whenever possible, the water main shall be located above the gravity sewer main. The crossing shall be arranged so that the gravity sewer joints will be equidistant and as far as possible from the water main joints. Where a water main crosses under a gravity sewer main, adequate structural support shall be provided for the gravity sewer main to maintain line and grade.

(2) Where it is not practical to obtain proper horizontal and vertical separation as stipulated above, either the water main or the gravity sewer main shall be installed in a watertight steel casing that extends 10 feet on both sides of the crossing, measured perpendicular to the outside of the water main.

E. **Relation to Storm Drains.**

1. General.

(1) No gravity sewer main shall pass through or come into contact with any part of a storm drainage pipe or structure.

2. Horizontal Separation.

(1) Gravity sewer mains shall be laid at least 5 ft. horizontally from any existing or proposed storm drainpipe or structure. The distance shall be measured edge to edge.

3. Crossings Above.

(1) Gravity sewer mains crossing above storm drains shall be laid to provide a minimum vertical distance of 12 inches between the outside of the storm drain and the outside of the gravity sewer main.

4. Crossings Below.

(1) Single Barrel, 24 inch diameter or Less.

a. Gravity sewer mains crossing below a single barrel storm drain pipe 24 inch diameter or less shall be laid to provide a minimum vertical distance of 18 inches between the outside of the storm drain and the outside of the gravity sewer main.

b. Where vertical separation is between 18 inches and 42 inches, one full length of Ductile Iron Pipe shall be centered under the storm drain crossing. The crossing shall be arranged so that the gravity sewer joints will be equidistant and as far as possible from the storm drain crossing.

(2) 30 inch Diameter or Greater, Multiple Drain Lines or Box Culvert.

a. Gravity sewer mains crossing below a single barrel storm drain pipe 30 inch diameter or greater shall laid to provide a minimum vertical separation of 18 inches between the outside of the storm drain and the outside of the gravity sewer main and shall be installed in a steel casing, regardless the depth of vertical separation, that extends 5 feet on both sides of the crossing, measured perpendicular to the outside of the storm drain. A longer length may be required, as determined by the City, based on the depth and location of the crossing. The crossing shall be arranged so that the gravity sewer joints will be equidistant and as far as possible from the storm drain crossing.

F. **Services.**

1. Locate at property line in grass in landscape area. Service shall not be located under concrete. Provide straight alignment perpendicular to the road centerline from the cleanout to the point of connection at the main.

2. Size:

(1) Minimum service size is 4 inch diameter for residential construction and shall conform to *ASTM D 1785 Schedule 40.*

(2) Commercial services will be specified by the design professional.

3. Service Connections

(1) Service connections shall be watertight and shall not protrude into the gravity sewer main. All materials used to make service connections shall be compatible with each other and with the pipe materials to be joined and shall be corrosion proof.

(2) Commercial 6 inch services or greater must connect at a manhole.

(3) When connection is to the gravity sewer main, use wye branches. Wyes shall be installed at an angle of 30 to 45 degrees to the horizontal to avoid deposition and buildup of solids at the connection.

(4) When connection is at the manhole, install so the crown of the gravity sewer main and the service is the same. The service shall protrude at least 1 inch and no more than 2 inches from the inside manhole wall and be properly grouted.

G. **Manholes.**

1. Location.

(1) Manholes shall be installed at the end of each line; at all changes in grade, size, or alignment; at all intersections; and at distances not greater than 400 ft.

(2) Locate manholes either fully inside or fully outside of paved roadways and sidewalks. No portion of a manhole shall be inside of an ADA sidewalk ramp.

(3) Do not locate manholes under or behind parking spaces or in any other areas that could inhibit access for operations and maintenance.

2. Diameter.

(1) Manholes over 8 ft. deep shall be a minimum of 5 ft. in diameter.

Table D.8.2 Nominal and Manual Measurement	
Nominal Sewer Main Size	**Manhole Diameter**
8 inch to 12 inch	4 ft.
15 inch to 18 inch	5 ft.
21 inch to 30 inch	6 ft.

3. Flow Channel.

(1) The flow channel straight through a manhole shall be made to conform as closely as possible in shape and slope to that of the connecting gravity sewer mains. The channel walls shall be formed or shaped to the full height of the crown of the outlet

gravity sewer in such a manner as to not obstruct maintenance, inspection, or flow in the gravity sewer. The connecting gravity sewer mains, inflow and outflow, shall protrude at least 1 inch and no more than 2 inches from the inside manhole wall and be properly grouted.

4. Bench.
   (1) A bench shall be provided on each side of any manhole channel when the pipe diameter(s) is less than the manhole diameter. The bench shall be sloped no less than 0.5 inch per foot. No lateral sewer or service connection pipe shall discharge onto the surface of the bench
5. Access.
   (1) All manholes shall have paved access for cleaning. Such access shall be smooth concrete or asphalt pavement designed to meet the following minimum requirements:
      a. Gross vehicle weight capacity: 66,000 pounds
      b. Pavement width: 12 ft.
      c. Left turn radius: 41 ft.
      d. Right turn radius: 37 ft.
      e. Turnaround diameter: 88 ft.

8.2 GRAVITY SEWER MATERIALS FOR CONSTRUCTION

A. **General.**

1. This Section includes pipe and fitting material specifications, and joint material and encasement requirements.
2. All materials used in the construction of gravity sewers shall be new and unused when delivered on-site and shall be suitable for installation and operation under the conditions for which they are to be used.

B. **Pipe and Fittings.**

1. Polyvinyl Chloride (PVC) Pipe and Fittings.
   (1) 4 inch – 15 inch SDR 35 and 18 inch – 36 inch SDR 26:
      a. Pipe and fittings shall meet the requirements of ASTM D3034 for 4 - 15 inch SDR 35 and F679 for 18 - 36 inch SDR 26 sewer pipe.
      b. The pipe shall be colored green for in-ground identification as sewer pipe.
      c. Pipe shall be made from quality PVC resin equal to or exceeding cell class 12454 or 12365 as defined in ASTM D1784.
      d. Provisions must be made for expansion and contraction at each joint with an elastomeric gasket.
      e. The bell shall consist of an integral wall section with a solid cross section elastomeric gasket which meets the requirements of ASTM F477.
      f. Gaskets shall be factory assembled and securely locked in place to prevent displacement during assembly.
      g. Standard laying lengths shall be 14 ft. or 20 ft.
      h. Fittings and accessories shall be as manufactured and furnished by the pipe supplier or approved equal and have bell and/or spigot configurations compatible with that of the pipe.
      i. For transitions between PVC and Ductile Iron Pipe use ductile iron adapter with *Protecto 401 lining by Romac Industries, Inc., Model 501 Transition Coupling* or approved equal.
   (2) C900/C905:

a. Pipe and fittings 4 through 12 inches shall meet the requirements of AWWA C900. Pipe and fittings 14 through 24 inches shall meet the requirements of AWWA C905.
b. The bell shall consist of an integral thickened wall section with an elastomeric seal. The wall thickness in the bell section shall conform to the requirements of *ASTM D3139 Section 6.2*.
c. The pipe shall be manufactured to cast iron outside diameter in accordance with *AWWA C900/C905*.
d. The seal shall meet the requirements of *ASTM F477*.
e. Standard laying lengths shall be 20 ft.
f. The pipe shall be colored green for in-ground identification as sewer pipe.

(3) Ductile Iron Pipe (DIP) and Fittings.

a. Pipe and fittings shall be lined with Protecto 401, 40 mils nominal thickness.
b. For transitions between PVC and Ductile Iron Pipe use ductile iron adapter with Protecto 401 lining by Romac Industries, Inc., Model 501 Transition Coupling or approved equal.
c. Pipe shall be in accordance with *ANSI A21.50/AWWA C150* and conform to the requirements of *A21.51/AWWA C151*. Push-on and restrained joint pipe shall have a minimum rated working pressure of 150 psi.
d. Pipe and fittings shall be furnished with push-on joints, push-on restrained joints, mechanical joints, and flanged joints as required. Pipe ends (spigot end, bell, and socket) for all pipes shall comply with the standard dimensions of ANSI/AWWA C151/A1.5.
e. Push-on joints shall conform to ANSI A21.11/AWWA C111.
f. Mechanical joints and bolts shall conform to AWWA C111. Bolts shall be high strength low alloy steel.
g. Polyethylene encasement shall NOT be used on gravity sewers.
h. Acceptable products: American Cast Iron Pipe Company, Griffin Pipe Company, U.S. Pipe Company, and McWane Cast Iron Pipe Company.

C. **Tracer Wire.**

1. Provide continuous, single strand copper wire, insulated, 12 AWG diameter tracer wire.

D. **Manholes.**

1. Precast manholes shall be in accordance with ASTM C478.
2. Use precast manholes without steps. Factory installed steps shall be removed and penetrations grouted.
3. Manhole diameter:

Table D.8.3 Standard Manholes Schedule of Governing Dimensions	
Pipe Size (inches)	Manhole Diameter (ft.)
8 to 12	*4
14 to 18	5
21 to 30	6
36 or Larger	7

*Manholes over 8 ft. deep shall be a minimum of 5 ft. in diameter

4. Manhole riser sections, minimum wall thickness shall be:

Table D.8.4 Manhole Riser Minimum Wall Thickness	
4 ft. Diameter Manhole	5 inches
5 ft. Diameter Manhole	5 inches
6 ft. Diameter Manhole	6 inches

*Cone sections shall have a minimum wall thickness of 8" at their top

5. Provide monolithic base slab with walls. Bottoms cast with invert and bench are acceptable. Minimum base slab thickness shall be:

Table D.8.5 Minimum Base Slab Thickness	
4 ft. Diameter Manhole	6 inches
5 ft. Diameter Manhole	8 inches
6 ft. Diameter Manhole	8 inches

6. Suitable openings for inlet and outlet sewer pipe shall be cast or cored into the base sections and into riser sections for drop connections. These openings shall be circular, accurately made, and located as required for each manhole. Base riser

sections shall be set on compacted pipe embedment material, 12 inches in thickness.

7. Flexible manhole sleeves or flexible manhole entrance joints shall be installed on all pipe entering and leaving manholes. The flange shall be secured to the wall of the manhole base to form a tight water-stop. Sleeve material shall comply with the requirements of ASTM C-923. Sleeves shall be secured to the sewer pipe to make a watertight union with stainless steel strap clamps, draw bolts, and nuts.
8. The manhole sections shall be jointed with "Ram-Nek" joint sealer or equal. "Ram-Nek" shall be placed as recommended by the manufacturer. Outside of joint shall be wrapped with WrapidSeal Manhole Encapsulation System or approved equal. Material shall be 12 inches in width, centered on the joint. Install in accordance with manufacturer's recommendations.
9. Manhole inverts shall be constructed of cement grout and shall have the same cross section as the invert of the sewers, which they connect. The manhole invert shall be carefully formed to the required size and grade by gradual and even changes in sections. All channels shall be troweled smooth. Changes in direction to flow through the manhole shall be made to a true curve with as large a radius as the size of the manhole will permit. Concrete brick will be used to form only the invert channel walls. All other annular space shall be filled with non-shrink concrete grout. No fillers such as broken block, gravel, sand, or excavated material, are allowed in the construction of fillets (benches). Inverts shall be "U" design with top of "U" even with the crown of the pipe. Invert piping shall not extend inside manhole any farther than 2 inches. The slope of the invert benches shall be a minimum of 2 inches higher than the crown of the pipe. When dissimilar pipe size occurs, the elevation of the crown of the pipes must be the same
10. Manhole sections shall be free from large honeycombs, cracks, spalds, large chips, exposed reinforcing, and broken bells or spigots. Allowable deviation in form joints shall be 1 inch. Edges of bells and spigots shall be even and straight.
11. Size lift holes and inserts for a precision fit with the lift devices. Do not penetrate through the manhole wall. Comply with OSHA Standard.
12. Provide flat slab tops where manhole depth is less than 4 ft. Use flat slab top section: HS-20 traffic loading.

13. Frames and covers:

(1) General:

a. East Jordan Iron Works, Inc. or U.S. Foundry shall manufacture all castings. Frames and covers shall be East Jordan Iron Works model 2029 or U.S. Foundry model 480 frame and RA-SSG cover.

(2) Materials:

a. Grey iron castings for heavy-duty applications shall be manufactured from iron conforming to ASTM A48 Class 35B, as noted in AASHTO M306-04.

(3) Manufacture:

a. The covers will be water tight with no holes or perforations. Two stainless steel pick bars will be included on cover. Castings shall be of uniform quality, free from sand holes, gas holes, shrinkage, cracks and other surface defects. Surfaces of the castings shall be free from burned-on sand and shall be reasonably smooth. Runners, risers, fins and other cast-on pieces shall be removed from the castings and such areas shall be ground smooth. Bearing surfaces between manhole rings and covers shall be cast or machined with such precision that uniform bearing shall be provided throughout the perimeter area of contact. As-cast dimensions may vary within accepted industry tolerances.

(4) Proof Load Testing:

a. Traffic service castings shall have a first article proof load test conducted and the results of that proof load test shall be made available to the City upon request. The proof load test shall be conducted in accordance with the methods and procedures outlined in *AASHTO M306-04, Section 5, Proof Load Testing*.

(5) Marking:

a. Each casting shall be identifiable and show, at a minimum, the following: name of the producing foundry, country of manufacture (such as "Made in USA"), ASTM material designation, recycle symbol, individual part number. Cast into the cover will be the words SANITARY SEWER, 1.5 – 2 inch height. Producing foundry name will be cast with a height of 1 inch.

14. Manhole Frame to Cone Connection (Exterior)

(1) Wrap outside of frame to cone connection using WrapidSeal Manhole Encapsulation System. Install per manufacturer's instructions.

15. Coatings:
    (1) Coat force main receiving manholes and the next manhole downstream.
    (2) Coat pump station receiving manhole.
    (3) Coating shall be Raven 405 Epoxy System and shall be applied by a Raven Certified Applicator.
        a. Deviations from the Raven 405 Epoxy System will need to be submitted to City Engineering for review and approval.
    (4) Coating shall be tested for pinholes using approved spark test method. Applicator shall be responsible for correcting any defects found during testing.

E. **Pipe and Manhole Foundation and Backfill Materials.**
1. Pipe and manhole bedding material shall be No. 57 stone.
2. Backfill Materials.
    (1) Reuse of existing excavated materials will be allowed provided the materials are compactable, dried or dampened to their optimum moisture content, are free from roots and large clods of clay, and are granular and non-cohesive in nature.
    (2) Select fill shall be sand-clay, fine sand or sand gravel mixes.

8.3 GRAVITY SEWER CONSTRUCTION PROCEDURES

A. **General.**

1. Construction of the wastewater system to be conveyed to the City shall be performed in accordance with the approved engineering drawings, specifications and applicable permits. Any unapproved deviations from the engineering plans, specifications and permits shall prevent the City from accepting the wastewater system for ownership.
2. Prior to construction activities taking place, the Engineer of Record shall coordinate in advance a Pre-Construction Meeting with representatives from the City and the contractor.
3. The contractor shall bring up any issues that may require deviating from the approved engineering plans, specifications, and permits. The plans or specifications will need to be altered by the Engineer of Record and approved by the Engineering and Public Works department in writing prior to beginning construction.
4. The contractor is responsible for work site safety. Although the City will visit the construction site to observe construction, the City shall not be held liable for work site safety.

B. **Handling of Materials.**

1. All construction materials shall be shipped and handled to prevent any damage to the material and stored in units received from the manufacturer prior to use.
2. All material that can be damaged from direct sunlight shall be covered with opaque material prior to use.
3. Any material that becomes damaged from delivery, handling or storage of construction material shall be removed from the construction site.
4. All construction material to be used in the wastewater system shall be new from material supplier. The city will not accept material that has been used previously or has been scrapped or discarded.
5. All construction materials shall be placed on site in a location that can be inspected by the city's representative to ensure the material is in conformance with the approved plans and specifications.

C. **Pipe Cutting.**

1. Unless otherwise recommended by the pipe manufacturer, cut pipe with milling type cutter, rolling pipe cutter, or abrasive saw cutter. Do not flame cut. Use wheel cutters when practical. Cuts must be even and perpendicular with length of pipe. Dress cut ends of pipe in accordance with manufacturer's directives for the type of joint to be made. Cut ends and rough edges shall be ground smooth and, for push-on type connection, the cut end must be beveled slightly.

D. **Trench Excavation.**

This Section is provided to outline most types of laying conditions but is not intended to cover all special laying conditions or the Engineer's special requirements.

1. Trench excavation shall be made in open cut and true to the lines and grades shown on the plans, unless boring is necessary or required. Banks of the trenches shall be cut in vertical, parallel planes, equidistant from the pipe centerline. The horizontal distance between such planes, or the overall width of trench, shall vary with the size of the pipe to be installed. The overall width of trench shall be as recommended by the manufacturer.
2. Bell holes for bell-and-spigot pipe shall be excavated at proper intervals so that the barrel of the pipe will rest for its entire length upon the bottom of the trench. Bell holes shall be large enough to permit proper installation of joints in the pipe.
3. When muck, quicksand, soft clay, swampy or other material unsuitable for foundations or sub-grade is encountered, such material shall be removed and replaced with No. 57 stone.
4. After excavation, the area between the final pipe grade and the trench soil bottom shall be filled with No. 57 stone as required, compacted to proper grade, and made ready for pipe laying.
5. Debris encountered in trench excavation for sewer mains and other pipelines shall be removed for the overall width of trench to be 12 inches below the bottom of the pipe.
6. The sides of all excavations shall be sufficiently sheeted, shored and braced whenever necessary to prevent slides, cave-ins, settlements or movement of the

banks and to maintain the excavation clear of obstructions. Maintain the walls of the excavation properly in place and protect all persons and property from injury or damage. All sheeting and bracing shall be left in place until the trench has been backfilled.

E. **Trench Backfill.**

1. The backfilling of pipeline trenches shall be started immediately after the pipe work has been inspected. The initial backfill material, placed to a height of 1 ft. above the top of the pipe, shall consist of approved backfill material free from organic matter and deleterious substances, containing no rocks or lumps over 2 inches in any dimension. It shall be carefully placed and compacted throughout entire area backfilled.
2. Backfill the trench above the pipe zone with approved backfill material in lifts not exceeding 6 inches loose depth and compact each lift to a minimum of 95% of maximum dry density, as determined by ASTM D 1557, with mechanical vibrating or impact tampers.
3. Where pipe trenches are cut across or along pavement, the trenches shall be backfilled in accordance with the approved plans and permits.
4. Backfilling around structures shall be done in the manner specified above for pipe trenches by power tamping for the full depth of cut to the top of the finished grade.
5. All backfilling shall be done in such a manner as will not disturb or damage the pipe or structure over or against which it is being placed. Any pipe or structure damaged or moved from its proper line or grade during backfilling operations shall be uncovered, repaired, and then re-backfilled as herein specified.
6. All excavations suspected of not meeting compaction requirements shall be tested for conformance by the contractors or developer testing lab. Tests shall be performed at the locations and depths directed by the City, at the installing contractor's expense.

F. **Pipe Installation.**

1. General.

(1) Inspect pipe for damage. Remove damaged and unacceptable pipe. Keep interior and joint surfaces clean and free of foreign materials. Install a mechanical joint or push-on type ductile iron plug whenever work stops for a period of a day or greater.

(2) Replace pipe where any part of coating or lining is damaged.

(3) Lower pipe and accessories into trench by means of derrick, ropes, belt slings, or other equipment approved by the manufacturer.

(4) Pipe or other construction supplies shall not be dumped or dropped in the trench.

(5) Except where necessary in making connections to other lines, lay pipe with the bells facing in the direction of laying.

(6) Rest the full length of each section of pipe solidly on the pipe bed, with recesses excavated to accommodate bells, couplings, and joints.

(7) Bell pipe using manufacture's approved leverage bar. Do not use machinery to bell pipe. Home line is to be clearly visible when pipe is joined.

(8) Do not lay pipe in water or when trench conditions are unsuitable for the work. Keep water out of the trench until jointing is completed.

(9) Re-lay pipe that has the grade or joint disturbed after laying.

2. Alignment and Grade:

(1) Gravity sewer pipe installation must comply with ANSI/ASTM D2321 as the minimum acceptable standard as well as any additional requirements as stated herein.

(2) Before sewer pipe is placed in position in the trench the bottom and sides to the trench shall be carefully prepared as per manufacturer's specifications. Each pipe shall be accurately placed to the exact line and grade called for on the approved drawings. Laser equipment shall be used in setting pipe.

(3) PVC and Ductile Iron Pipe shall be laid in a full bed of No. 57 stone. Pipe laying shall proceed upgrade, starting at the lower end of the grade and with the bells upgrade. Pipe shall be straight when placed in the trench. Trench bottoms found to be at incorrect grade after pipe laying operations having begun shall be corrected and brought to exact line and grade.

(4) After each line of pipe has been laid, it shall be carefully inspected and all earth, trash, rags, and other foreign matter removed from the interior.

(5) Each joint shall be laid so that it will form a close concentric joint with adjoining pipe and so as to avoid sudden deflections.

(6) All jointing of pipe and fittings shall be in accordance with the pipe manufacturer's recommendations.

(7) Any leaks or defects discovered after completion of the work shall be repaired immediately. All pipes in place shall be carefully protected from damage until the backfilling operations have been completed.

(8) Water shall not be allowed to run through the pipe or stand in the trench.

G. **Connections to Existing Mains.**

1. Connection of gravity sewer main to an existing system shall be made at an existing manhole or by constructing a cut-in Manhole.

(1) Existing manhole:

a. Connection to an existing manhole shall be made in the presence of the City inspector.

b. New holes in manholes shall be core drilled.

c. When connecting to an existing manhole, temporarily block and/or divert sewage flows. Use high early strength cement to form proper channels with minimum interruption of service.

d. Seal around new pipe as specified.

(2) Cut-in manhole:

a. Temporarily block and/or divert sewage flows. Cut out length of existing pipe to accept new pipe in manhole.

b. If benches are pre-formed, insert short section of PVC pipe in the existing holes and seal. Lower bottom section of manhole into hole and sleeve to existing piping.

c. If benches are not pre-formed, cut the PVC pipe to form the channel and insert the required length of pipe through the holes in the bottom section of the manhole, set to match existing slope, and seal. Lower the assembly into

the hole, sleeve to existing piping, and unblock sewage flows. Using high early strength cement, form benches as in typical manholes.

H. **Manholes.**

1. Use proper bedding as specified.
2. Set base level so that the walls will be plumb.
3. Clean inverts, spigots, and pipe ends.
4. Apply joint sealer and set firmly in place to assure watertight joints.
5. Connect pipe boot to piping with dual stainless steel straps.
6. Grout lift holes from the outside using non-shrink grout.
7. Install exterior joint collar.
8. Form the invert channels directly in the concrete of the manhole base with mortar and concrete brick. Smooth the floor of the manhole outside the channels and slope toward the channels at not less than 1 inch per foot, nor more than 2 inches per foot.
   (1) Shape the invert channels to be smooth and semi-circular, conforming to the inside of the adjacent sewer section. Channel top shall be to crown of pipe.
   (2) Make changes in direction of flow with a smooth curve of as large a radius as the size of the manhole will permit.
   (3) Make changes in size and grade of channels smoothly and evenly.
   (4) Slope invert uniformly from invert of inlet to invert of outlet.
9. Match manhole top to finish grade utilizing concrete adjustment rings.
   (1) Manhole tops shall be watertight and at finished grade elevation. If located in pavement, elevation shall be set to match finished grade.
   (2) Leveling and final grading of manhole frames and covers shall be accomplished by using concrete brick or concrete grade rings. When using grade rings, a maximum of two 4 inch grade rings or one 6 inch grade ring shall be used. The total number of grade rings shall not exceed 8 inches in thickness. Grade rings shall be laid in a full bed of non- shrink grout and covered after laying with a smooth coating of non- shrink grout or hydraulic cement a minimum of 2 inches thick.

(3) After the manhole has been set in its final position, the cast iron frame for the cover shall be carefully set at finished grade and properly bonded using a full bed of non-shrink grout. Where manholes are constructed in paved areas, sidewalks, etc., the top surface of the frame and cover shall be tilted so as to conform to the exact slope, crown, and grade of the existing pavement.

10. Coatings.
    (1) Coat force main receiving manhole and the next manhole downstream.
    (2) Coat Pump Station receiving manhole.
    (3) Coating shall be Raven 405 Epoxy System and shall be applied and tested by a Raven Certified Applicator.
        a. Deviations from the Raven 405 Epoxy System will need to be submitted to City Engineering for review and approval.
11. Manhole Markers.
    (1) Where a manhole is located in a non-landscaped or hard-surface area, a fiberglass Carsonite marker shall be required.
        a. Marker shall be driven into the ground a minimum of 12 inches and extend above grade a minimum of 60 inches.
        b. Lettering on the marker shall indicate "sewer main line/manhole".

I. **Services.**

1. Services with cleanouts shall be installed to all lots so as to properly serve each existing house and each vacant lot facing or abutting on the street in which the gravity sewer main is being laid, and at such other locations as may be designated by the engineering or public works departments.
2. Locate services as shown on approved plans. The letter "X", minimum 3 inches in height, shall be stamped into concrete curb to identify location of service.
3. In landscaped areas, cleanout caps shall be SMARTPlug, as manufactured by GPK Products, Inc. Cleanouts shall terminate 3 to 6 inches below finish grade.
4. In paved areas, a PVC cleanout plug shall be installed 3 inches below finish grade and covered by a Neenah R-1976 frame and lid.
5. Do not stack service lines vertically over the gravity sewer main.

J. **Testing.**

The Engineer of Record is responsible for coordinating the testing of the wastewater system with the engineering department. The City will observe all testing of the wastewater system. The Engineer of Record and contractor will be responsible for implementing all testing and the Engineer of Record is responsible for determining the test results. The Engineer of Record will submit successful test results to the engineering department

1. Air Testing.

(1) The Contractor shall conduct low-pressure air tests on all completed sections of gravity sewer. The air test results will be used to evaluate materials and construction methods on the sewer line sections. The Contractor shall furnish an air compressor which will provide at least 300 cubic feet of air per minute at 100 psi, pressure gauges, air hoses, air hose connections and other equipment necessary to conduct the air test. Plugs in sewers 18 inches in size and larger shall be connected by cable for thrust reaction. The following provisions will be adhered to when conducting low- pressure air tests:

a. Equipment:

(a) Plug Design. Either mechanical or pneumatic plugs may be used. All plugs shall be designed to resist internal testing pressures without the aid of external bracing or blocking. However, the Contractor shall internally restrain or externally brace the plugs to the manhole wall as an added safety precaution throughout the test.

(b) Singular Control. To facilitate test verification, all air used shall pass through a single, above ground control panel.

(c) Air Control.

(a) The above ground air control equipment shall include a shut- off valve, pressure regulating valve, input pressure gauge, and a continuous monitoring, calibrated pressure gauge having a pressure range from 0 to at least 10 psi. Gauge shall display a NIST traceable calibration sticker with calibration date. The continuous monitoring gauge shall be no less than 4 inches in diameter with minimum divisions of 0.10 psi and an accuracy of plus or minus 0.04 psi.

(b) Acceptable Air Test Control Units:

i. SEALCO Model 5012-100 Portable Low Pressure Air Test Control Unit.

ii. Cherne Air-Loc Low Pressure Air-Testing System.

iii. Approved equal

(c) Separate Hoses.

i. Two separate hoses shall be used to: (1) connect the control panel to the sealed line for introducing low-pressure air, and (2) a separate hose connection for constant monitoring of air pressure build-up in the line.

(d) Pneumatic Plugs.

i. If pneumatic plugs are utilized, a separate hose shall also be required to inflate the pneumatic plugs from the above ground control panel.

b. Test Procedure:

(a) Plug Installation and Testing.

(a) After a manhole-to-manhole reach of pipe has been backfilled to final grade, prepared for testing, and the specified waiting period has elapsed, the plugs shall be placed in the line at each manhole and secured.

(b) Line Pressurization. Low pressure air shall be slowly introduced into the sealed line until the internal air pressure reaches 4.0 psi greater than the average back pressure of any groundwater above the pipe, but not greater than 9.0 psi. Immediately before testing, if groundwater is present, the groundwater elevation must be determined by appropriate means.

(c) Pressure Stabilization. After achieving the required internal pressure, the air supply shall be throttled to maintain the pressure for at least 2 minutes. This time permits the temperature of the entering air to equalize with the temperature of the pipe walls.

(d) Timing Pressure Loss.

Table D.8.6 Pressure Test	
Groundwater Above Pipe Invert (ft)	**Pressure (psi)**
1	4.5
2	5.0
3	5.5
4	6.0
5	6.5
6	7.0
7	7.0
8	7.5
9	8.0
10	8.5
11	9.0

(e) Specified Time Tables.

(a) To facilitate the proper use of this recommended practice for air testing, the following tables are provided. Table I contains the specified minimum times required for a 1.0 psi pressure drop from a starting pressure of at least 4.0 psi greater than the average back pressure of any groundwater above the pipe's invert. Table II contains specified minimum times required for a 0.5 psi pressure drop from a starting pressure of at least 4.0 psi greater than the average back pressure of any groundwater above the pipe's invert. Both Tables also include easy to use formulas for calculating required test times for various pipe sizes and odd lengths.

Table D.8.7. Specification Time Required for a 1.0 psig Pressure Drop for Size and Length of Pipe Indicated for Q=0.0015											
1 Pipe Diameter (in)	2 Min Time (min:sec)	3 Length for Min Time (ft)	4 Time for Longer Length (sec)	Specification Time for Length (L) shown (min:sec)							
				100 ft	150 ft	200 ft	250 ft	300 ft	350 ft	400 ft	450 ft
4	4:00	597	0.380L	4:00	4:00	4:00	4:00	4:00	4:00	4:00	4:00
6	5:40	398	0.854L	5:40	5:40	5:40	5:40	5:40	5:40	5:42	6:24
8	7:34	298	1.520L	7:34	7:34	7:34	7:34	7:36	8:52	10:08	11:24
10	9:26	239	2.374L	9:26	9:26	9:26	9:53	11:52	13:51	15:49	17:48
12	11:20	199	3.418L	11:20	11:20	11:24	14:15	17:05	19:56	22:47	25:38
15	14:10	159	5.342L	14:10	14:10	17:48	22:15	26:42	31:09	35:36	40:04
18	17:00	133	7.692L	17:00	19:13	25:38	32:03	38:27	44:52	51:16	57:41
21	19:50	114	10.470L	19:50	26:10	34:54	43:37	52:21	61:00	59:48	78:31
24	22:40	99	13.674L	22:47	34:11	45:34	56:58	68:32	79:46	91:10	102:33
27	25:30	88	17.306L	28.51	43:16	57:41	72:07	86:32	100:57	115:22	129:48
30	28:20	80	21.366L	35:37	53:25	71:13	89:02	106:50	124:38	142:26	160:15
33	31:10	72	25.852L	43:05	64:38	86:10	107:43	129:16	150:43	172:21	193:53
36	34:00	66	30.768L	51:17	76:55	102:34	128:12	153:50	179:29	205:07	230:46

Table D.8.8. Specification Time Required for a 0.5 psig Pressure Drop for Size and Length of Pipe Indicated for Q=0.0015											
1 Pipe Diameter (in)	2 Min Time (min:sec)	3 Length for Min Time (ft)	4 Time for Longer Length (sec)	Specification Time for Length (L) shown (min:sec)							
				100 ft	150 ft	200 ft	250 ft	300 ft	350 ft	400 ft	450 ft
4	4:00	597	0.190L	4:00	4:00	4:00	4:00	4:00	4:00	4:00	4:00
6	4:00	398	0.427L	4:00	4:00	4:00	4:00	4:00	4:00	4:00	4:00
8	4:00	298	0.760L	4:00	4:00	4:00	4:00	4:00		5:04	5:42
10	4:43	239	1.187L	4:43	4:43	4:43	4:57	5:56	6:55	7:54	8:54
12	5:40	199	1.709L	5:40	5:40	5:42	7:08	8:33	9:58	11:24	12:50
15	7:05	159	2.671L	7:05	7:05	8:54	11:08	13:21	15:35	17:48	20:02
18	8:30	133	3.846L	8:30	9:37	12:49	16:01	19:14	22:26	25:38	28:51
21	9:55	114	5.235L	9:55	13:05	17:27	21:49	26:11		34:54	39:16
24	11:20	99	6.837L	11:24	17:57	22:48	28:30	34:11	39:53	45:35	51:17
27	12:45	88	8.653L	14:25	21:38	28:51	36:04	43:16		57:43	46:54
30	14:10	80	10.683L	17:48	26:43	35:37	44:31	53:25		71:13	80:07
33	15:35	72	12.926L	21:33	32:19	43:56	53:52	64:38	75:24	86:10	96:57
36	17:00	66	15.384L	25:39	38:28	51:17	64:06	76:55	89:44	102:34	115:23

(f) Manhole Vacuum Test

i. When directed by the City, manholes shall be tested via vacuum testing per ASTM C1244 except that the minimum test times shall be as defined in the Manhole Vacuum Test Table (test times modified from those in ASTM C-1244). Vacuum testing shall not be performed until the manhole is completely finished, including applying any protective coating where specified. Manholes shall be thoroughly cleaned of all silt, debris and foreign matter of any kind prior to the vacuum testing and then again prior to final inspection as required.

ii. Vacuum tests shall be performed by placing the testing unit at the top of the manhole in accordance with the manufacturer's recommendations. A vacuum of 10 inches of mercury shall be drawn on the manhole, the valve on the vacuum line of the test unit closed, and the vacuum pump shut off. The time shall be measured for the vacuum to drop to 9 inches of mercury. The manhole shall pass if the time for the vacuum reading to drop from 10 inches of mercury to 9 inches of mercury meets or exceeds the test times indicated in Table 1 below. The test times in Table 1 are modified from those in ASTM C-1244. Table 1 shall be included on the Contractor's test reports. Refer to ASTM C-1244 for further requirements.

iii. Any leaks found during the vacuum testing shall be repaired by the Contractor in a manner approved by the City. The manhole shall be vacuum tested again after such repairs are made until the manhole passes the vacuum test.

Table D.8.9 Minimum Vacuum Test Times for Various Manhole Diameters									
Manhole Depth (feet)	**Manhole Diameter (inches)**								
	36	**42**	**48**	**54**	**60**	**66**	**72**	**84**	**96**
	Test Time (seconds)								
8	60	60	60	60	60	60	66	72	78
10	60	60	60	60	66	72	82	98	114
12	60	60	60	70	78	86	98	118	138
14	60	60	70	82	92	102	114	136	158
16	60	68	80	92	104	116	134	160	188
18	64	76	90	104	118	130	146	178	208
20	70	84	100	116	130	144	162	194	226
22	78	92	110	128	144	158	178	212	246
24	84	102	118	140	156	174	194	232	270
26	92	110	128	150	170	188	210	250	290
28	98	118	138	162	182	202	226	270	314
30	106	126	148	174	196	216	242	288	334

(g) There shall be no groundwater infiltration or other leakage (active or evidence of being previously active) through the manhole walls, benches, inverts or pipe connections at the manholes. If leakage is found, it shall be eliminated with an appropriate grout or non-shrink cement mortar approved by the City. Injection grouting (Avanti AV- 202 Multigrout or approved equal) may be required to stop leaks around the pipe connections or in the invert channel or benches. The City's decision on how defective manholes are repaired shall be final. If any defective manholes are discovered after they have been installed or during the warranty period, they shall be repaired or replaced in a satisfactory manner at no additional cost to the City. Repaired manholes, including those repaired during the warranty period, shall be vacuum tested again at no additional cost to the City

(h) Manhole Coating Test.

(a) Coating shall be tested for pinholes using approved spark test method. Applicator shall be responsible for correcting any defects found during testing

K. **Closed Circuit Television (CCTV) Inspection**

1. Intent

(1) It is the intent of this specification to provide inspection criteria for all sanitary sewer pipelines installed as part of any new development project. This specification requires that the pipelines be inspected utilizing the Pipeline Assessment Certification Program (PACP) inspection standards and closed-circuit television techniques. This process has been developed to identify and locate any sewer line defects, determine corrective action and perform/document post-correction inspection. It is the responsibility of the Engineer of Record to ensure that these CCTV inspection procedures are performed. All costs associated with CCTV inspection are the responsibility of the Developer/Contractor

2. Scope of Work:

(1) The CCTV Contractor shall video inspect all mainline sections from manhole to manhole, and all service laterals from the right-of-way boundary to the mainline connection or manhole connection. Video inspection shall be performed immediately following construction and prior to the low-air pressure and deflection testing. It is in the best interest of the Developer/Utility Contractor to complete this task in a timely manner

(2) Prior to performing CCTV inspection activities, all sewer lines and service laterals designated to be televised shall be thoroughly cleaned. After cleaning, all equipment will be removed from the sewer line(s). Just prior to performing the video inspection procedure, water must be introduced into the nearest upstream manhole, and all cleanouts for laterals, until observed at the nearest downstream manhole

3. CCTV and associated equipment:

(1) Television inspection equipment shall have an accurate footage counter that will display on the monitor and record the camera distance from the centerline of the starting manhole. Distance measurements within the sewer line are to be accurate within 0.5% of the above ground measurement. Line segment inspections shall be made manhole to manhole. Prior to the beginning of each CCTV inspection, manhole identification numbers, as indicated on project drawing or as supplied by the Engineer of Record, will be

displayed in the title and shall become a part of the video record. These manhole identification numbers shall correspond to the numbers shown on the project plans

(2) The camera shall be of the remotely operated pan and tilt type. The rotating camera and light head configuration shall have the capability of 360 degree rotating view angle and a minimum 270 degree pan angle with the capability to pan and tilt simultaneously while the transporter moves to view defects and voids around the entire diameter of the pipe wall, ensuring complete inspection of the mainline pipe, service laterals and any deficiencies

(3) The camera, television monitor, and other components shall be color. Geometrical distortion of the image shall not exceed 1%. To ensure peak picture quality throughout all conditions encountered, the color camera shall be equipped with the necessary circuitry to allow for the remote adjustment of the optical focus iris from the power control unit at the viewing station. A variable intensity control of the camera lights shall also be located at the viewing station

(4) All fog shall be evacuated from the pipeline and the pipeline kept clear of any fog during the CCTV inspection process

(5) Lighting and camera quality shall be suitable to allow a clear, in-focus picture for the entire inside periphery of pipelines extending at least 10 feet in front of the camera. In High Density Polyethylene (HDPE) or ductile iron poly-lined pipe, lighting shall be sufficient enough to provide a clear view at least 2 feet in front of the camera. The replay of the recorded video information shall be free of electrical interference and shall provide a clear stable image

4. Execution:

(1) It is the responsibility of the Engineer of Record to provide the CCTV Contractor with a set of City stamped "APPROVED FOR INSTALLATION" Construction Plans prior to CCTV inspection activities. Line segment inspections shall be made manhole to manhole

(2) Internal inspection of pipelines shall be performed by PACP certified personnel, trained in the identification of pipe deficiencies and condition assessment utilizing closed-circuit television inspection equipment. A 360 degree view of the pipe is required during inspection. The pipe must be clear and free of any dirt and/or debris. The CCTV Inspection Technician shall have full control of the movement of the television camera unit at all times. The travel speed of the camera shall be variable but uniform and shall not exceed 20 feet per minute (fpm). Any means of propelling the camera through the sewer line which would produce non- uniform or jerky movement of the

camera, will not be acceptable. The television system shall be capable of performing line segment inspection in increments of 400 ft. with one setup

(3) Service laterals shall be inspected utilizing a CCTV inspection push system, capable of inspecting up to 100 feet of pipe. All sanitary service lateral segments must be CCTV inspected from the top of the riser located at the property line, to the sewer mainline, noting type of cleanout installed, on the same USB drive for a continuous run. Continuous footage readings for identifying the location of defects must be accurate to within 3% tolerance. Deficiency identifications are to be called out and recorded to the nearest full foot. Any inaccuracy in the continuous footage meter, identified deficiencies, or lateral location descriptions which cause doubt as to the accuracy of the locations or total length shall render the line segment recording as unacceptable

(4) As directed by the City, the Engineer of Record or his representative, the camera shall be stopped to view and analyze conditions that appear unusual or uncommon. The CCTV Inspection Technician shall, at all times, be able to move the camera through the lines in either direction without the loss of quality in the video presentation

(5) The interior of the pipe shall be carefully inspected to determine the location and extent of all deficiencies. Pipe conditions that result in a question of proper installation procedures shall be noted so that these conditions can be reviewed and, if necessary, corrected before actual acceptance of the sewer system

(6) CCTV inspections will take place immediately after construction and prior to, or concurrent with the low pressure air testing. This will allow the correction of deficiencies found during the CCTV inspection process

(7) Access for CCTV inspection purposes shall be made via existing line segment manholes and lateral cleanouts. Should access to a particular sewer segment be difficult, and where adjacent segments require television inspection, the CCTV Contractor may be allowed to complete the inspection of multiple sewer line segments with one setup. When multiple sewer line segments are inspected utilizing one setup, the CCTV Contractor shall zero the footage counter at each subsequent sewer manhole to establish a uniform starting point, Station 0+00, for each line segment televised

(8) At all defects and service connections, the camera shall be stopped and the pan and tilt features used to obtain a clear picture. At each service lateral, the camera shall be panned to view up each lateral or point of connection. Make note of any deficiencies through the use of Data Collection Software

(9) CCTV Contractor shall record inspections in a PACP format and the video shall be recorded in a high quality CD/DVD format. The title block shall include the following information:

a. Date and time of day

b. PACP certified television operator's identification (Name, ID number, etc.)

c. Sewer segment number. Segment numbers shall be designated by the ENGINEER

d. Upstream manhole number

e. Downstream manhole number

f. Size of sewer pipe

g. Pipe material

h. Closest cross street or address where the line segment is located

i. Direction of movement of camera and direction of normal flow

j. Location of service connections indicated by clock position and with counter distance in feet from beginning manhole's centerline

k. Location (start and end counter distances in feet from the beginning manhole's centerline) and description of obstructions, structural defects, longitudinal and/or circumferential cracking, joints including open and/or offset joints, ovality, leakage or evidence thereof, break in connections, protruding connections, mineral deposits, roots, previous repairs, deposits on pipe walls, sags, and other abnormalities with respect to the sewer's condition with counter distance in feet from the beginning manhole's centerline

l. CCTV Contractor's log shall contain the same information

(10) CD/DVD shall visually display, at a minimum, the CCTV Contractor's name, Project name, City Job Number and Extension, date of inspection, pipe segment number, manhole numbers or lateral lot numbers. The distance between manholes shall be verified by measuring tape. If the counter distance and the taping distance differ by more than 3 feet per 100 feet, the run shall be re-televised by CCTV Contractor.

(11) USB drives shall be maintained and delivered in a hard case, which shall display the project name, City Job Number, date of inspection, manhole segment number(s) inspected, and camera operator's identification. No segment shall be split between two USB drives. A USB drive may have multiple

segments, so long as an entire section is on one USB drive. Original USB drives of all sections will be provided to the City Construction Inspector along with the respective television inspection field logs to be reviewed for completeness and soundness of construction prior to the Commissioning. Upon review and approval, copies will be provided to the Utility Contractor and Engineer of Record. Originals will remain the property of the City.

(12) If during video operations the television camera will not pass safely through the entire sewer line segment being inspected, CCTV Contractor shall set up equipment in the reverse, so that the inspection can be performed from the opposite manhole; from downstream to upstream. Where an obstruction is encountered and a reverse set up is required, the distance shall be entered into the log and noted on the video format from which manhole the measurements are being made. If under the reverse setup the camera again fails to pass through the entire sewer line segment, the inspection shall be stopped. All obstructions in the sewer segment that prohibit passage of the television camera shall be immediately reported to the Engineer by the CCTV Contractor, referencing location and nature of the obstruction. No correction work shall proceed until Utility Contractor receives direction from the Engineer of Record or the City Construction Inspector regarding removal or repair of deficiency.

(13) Should CCTV Contractor's televising equipment become lodged in any sewer line, it shall be removed by CCTV Contractor at his expense. This shall include, if necessary, excavation and repair of the sewer main and/or lateral, underground utility repairs, backfilling and surface restoration. Upon removal of CCTV equipment and repair, CCTV Contractor shall re- televise the line segment to Engineer of Record or his representative that the line segment has been placed back into operational condition with no further deficiencies.

5. Acceptance:

(1) CCTV Contractor shall present inspection video and inspection logs on USB drives. A continuous image in complete conformance with these specifications and with a full view of the internal pipe surface is required. CCTV Contractor shall re-clean and televise any segment for which the video does not present a clear image of 100% of the internal pipe surface at all times, and/or is accompanied by an incomplete inspection log

(2) Any of the following observations shall be considered defects:

a. Any bellies in a joint of pipe will be cause for rejection of the pipe segment

b. Joint separations

c. Offset joints

d. Chips in pipe ends

e. Cracked or damaged pipe or evidence of the presence of an external object bearing upon the pipe (rocks, roots, etc.)

f. Infiltration

g. Roots

h. Debris or other foreign objects inside of pipe

i. Other obvious deficiencies when compared to Approved Plans, Permits, and/or Minimum Standards

(3) The Engineer of Record and Developer shall be notified in writing of any deficiencies revealed by the CCTV inspection that will require repair. After repairs have been made, the line segment(s) shall be re-inspected at the Developer's/Contractor's expense. The CCTV inspection video shall be submitted to the City for review upon completion of discrepancies. Correction of any and all deficiencies must be corrected prior to acceptance of the project by the City.

8.4 FORCE MAIN DESIGN STANDARDS

A. **General.**

1. The following force main design standards are based on Federal, State and local health requirements and the requirements of the City.
2. These design standards are applicable to all developments requiring wastewater service from the City.
3. Where it is necessary for wastewater force mains to cross surface water or wetlands, the engineer shall submit a proposed method of construction to the City's Engineering Department for review and approval prior to submitting plans for permitting.
4. The preferred method of installation for force mains crossing surface water or wetlands is by Horizontal Directional Drill.
5. All regulations, procedures, fees, and penalties listed in *City Ordinance 2716 Sewage and Sewage Disposal* are applicable when designing sewer systems.

B. **Design Criteria.**

1. Design force mains in accordance with the requirements of the *South Carolina Department of Environmental Services (SCDES) for Wastewater Facility Construction: R.61-67*, and the requirements of these Standards.
2. Size force mains to provide minimum velocity of 2 feet per second at design flow and maximum velocity of 8 feet per second for PVC force mains. Maximum velocity determination shall be based with 2 pumps operating.
3. Use Hazen and Williams design coefficient: PVC: C=150, DIP: C=140, HDPE: C=155.
4. Minimum force mains diameter shall be 4 inches.
5. PVC force main shall be AWWA C900 DR-14 for force mains between 4 through 12 inches in diameter and AWWA C905 for force mains 14 inches and 48 inches in diameter.
6. Ductile Iron Pipe force mains shall be pressure class 250 for all pipe diameters.

C. **Separation of Water Mains and Force Mains.**

1. Where possible, locate force mains at least 10 feet horizontally away from water mains.
2. Should 10 feet separation not be practical, then the force main may be located closer provided:
   (1) It is laid in a separate trench.
   (2) It is laid in the same trench with the water main located at one side on a bench of undisturbed earth.
   (3) In either of the above cases, crown elevation of the force main shall be at least 18 inches below bottom of water main.
   (4) Where force mains and water mains cross, the force main shall go under the water main and be at least 18 inches below the bottom of water main.

D. **Cover.**

1. Provide suitable cover over all mains. Minimum cover depth as follows:
   (1) 12 inches diameter and smaller: 36 inches
   (2) 14 inches dimeter and larger: 48 inches
   (3) All piping located within a public right-of-way shall be constructed in accordance with applicable permits and these Standards

E. **Connection to an Existing Gravity System.**

1. Connection to an existing gravity system shall be made at an existing manhole or by constructing a cut-in manhole
2. Coat force main receiving manhole and the next manhole downstream

F. **Valves.**

1. Air Release Valves:
   (1) Design force main to minimize the number of air release valves
   (2) Provide at high points in the force main
   (3) Provide at maximum 3,000 ft. intervals
   (4) Maintain minimum 36 inches cover at location of air release valve
   (5) Provide valve vault

2. Gate Valves:
   (1) Force Mains greater than 5,000 ft. in length, provide a gate valve at the halfway point
   (2) Where no other force main isolation valve exists, provide gate valve within 250 ft. of an air release valve
   (3) Provide valve box and valve box protection ring

8.5 FORCE MAIN MATERIALS FOR CONSTRUCTION

A. **General.**
   1. This Section includes pipe and fitting material specifications, and joint material and encasement requirements.
   2. All materials used in the construction of force mains shall be new and unused when delivered on-site and shall be suitable for installation and operation under the conditions for which they are to be used.

B. **Pipe and Fittings.**
   1. Polyvinyl Chloride (PVC) Pipe and Fittings:
      (1) 4 inch diameter and above: ANSI/AWWA C900/AWWA C905, Table 2, Pressure Class 150, and ASTM D-2241
      (2) Use integral bell or coupling type with elastomeric gaskets
      (3) Factory-installed gaskets integral with the pipe
      (4) Use ductile iron fittings with pressure rating of 150 psi: ANSI/AWWA C110/A21.10, lined with Protecto 401, 40 mils nominal thickness
      (5) Provide adaptor glands, gaskets, etc. as required to accommodate any differences in pipe and fitting dimensions
   2. Fusible Polyvinyl Chloride (FPVC) Pressure Pipe:
      (1) Fusible Polyvinyl Chloride pipe shall conform to AWWA C900 or AWWA C905, and/or ASTM D2241 or ASTM D1785 for IPS standard dimensionality, if applicable. Testing shall be in accordance with AWWA standards for all pipe types

(2) Fusible Polyvinyl Chloride pipe shall be extruded with plain ends. The ends shall be square to the pipe and free of any bevel or chamfer. There shall be no bell or gasket of any kind incorporated into the pipe

(3) Fusible Polyvinyl Chloride pipe shall be manufactured in a standard 20 ft., 30 ft. or 40 ft. nominal length

(4) Fusible Polyvinyl Chloride Pipe shall be green in color for wastewater use

(5) Pipe generally shall be marked per AWWA C900 or AWWA C905, and shall include as a minimum:

a. Nominal pipe size
b. PVC
c. Dimension Ratio, Standard Dimension Ratio, or Schedule
d. AWWA pressure class or standard pressure rating for non- AWWA pipe
e. AWWA Standard designation number or pipe type for non- AWWA pipe
f. Extrusion production-record code
g. Trademark or trade name
h. Cell Classification 12454 and/or PVC material code 1120 may also be included

(6) Pipe shall be homogeneous throughout and be free of visible cracks, holes, foreign material, blisters, or other visible deleterious faults

(7) Use ductile iron fittings with pressure rating of 150 psi: ANSI/AWWA C110/A21.10, lined with Protecto 401, 40 mils nominal thickness

3. High Density Polyethylene (HDPE) Pipe and Fittings:

(1) Pipe shall be manufactured from a PE 3408 resin listed with the Plastic Pipe Institute (PPI) as TR-4. The resin material shall meet the specifications of ASTM D3350-02 with a minimum cell classification of PE345464C. Pipe outside diameter sizes shall be ductile iron pipe sizes (DIPS). Pipe shall have a manufacturing standard of ASTM D3035 and be manufactured by an ISO 9001 certified manufacturer. The pipe shall contain no recycled compounds except that generated in the manufacturer's own plant from resin of the same specification from the same raw material. The pipe shall be homogeneous throughout and free of visible cracks, holes, foreign inclusions, voids, or other injurious defects

(2) Fittings:

a. Butt fusion fittings shall be in accordance with ASTM D3261 and shall be manufactured by injection molding, a combination of extrusion and machining, or fabricated from HDPE pipe conforming to this specification. All fittings shall be pressure rated to provide a working pressure rating no less than that of the pipe. Fabricated fittings shall be manufactured using a McElroy Datalogger to record fusion pressure and temperature. A graphic representation of the temperature and pressure data for all fusion joints made producing fittings shall be maintained as part of the quality control. The fitting shall be homogeneous throughout and free of visible cracks, holes, foreign inclusions, voids, or other injurious defects.

b. Electrofusion fittings shall be PE3408 HDPE, Cell Classification of 345464C as determined by ASTM D3350-02 and be the same base resin as the pipe. Electrofusion Fittings shall have a manufacturing standard of ASTM F1055

c. Flanged and Mechanical Joint Adapters shall be PE 3408 HDPE, Cell Classification of 345464C as determined by ASTM D3350-02 and be the same base resin as the pipe. Flanged and mechanical joint adapters shall have a manufacturing standard of ASTM D3216. All adapters shall be pressure rated to provide a working pressure rating no less than that of the pipe.

d. Mechanical restraint for HDPE may be provided by mechanical means separate from the mechanical joint gasket sealing gland. The restrainer shall provide wide, supportive contact around the full circumference of the pipe and be equal to the listed widths. Means of restraint shall be machined serrations on the inside surface of the restrainer equal to or greater than the listed serrations per inch and width. Loading of the restrainer shall be by a ductile iron follower that provides even circumferential loading over the entire restrainer. Design shall be such that restraint shall be increased with increases in line pressure. Serrated restrainer shall be ductile iron ASTM A536-80 with a ductile iron follower; bolts and nuts shall be corrosive resistant, high strength alloy steel. The restrainer shall have a pressure rating of, or equal to

that of the pipe on which it is used or 150 PSI whichever is lesser. Restrainers shall be JCM Industries, Sur-Grip or approved equal.

Table D.8.10. Mechanical Restraint for HDPE		
Nominal Size (Inches)	**Restraint Width (Inches)**	**Serrations (Per Inch)**
4 – 6	1.5	8
8, 10, 12	1.75	8

e. Pipe stiffeners shall be used in conjunction with restrainers. The pipe stiffeners shall be designed to support the interior wall of the HDPE. The stiffeners shall support the pipe's end and control the "necking down" reaction to the pressure applied during normal installation. The pipe stiffeners shall be formed of 304 or 316 stainless steel to the HDPE manufacturers published average inside diameter of the specific size and DR of the HDPE. Stiffeners shall be by JCM Industries or approved equal.

4. Ductile Iron Pipe (DIP) and Fittings:

(1) All Ductile Iron Pipe and fittings shall be lined with Protecto 401, 40 mils nominal thickness

(2) Ductile Iron Pipe shall be in accordance with ANSI A21.50/AWWA C150 and conform to the requirements of A21.51/AWWA C151. Push-on and restrained joint pipe shall have a minimum rated working pressure of 150 psi. All buried pipe shall be pressure class as follows:

Table D.8.11. Buried Pipe Pressure Class	
Pipe Sizes (Inches)	**Pressure Class (psi)**
4 – 12	350
14 – 20	250
24	200
30 – 64	150

(3) Ductile Iron Pipe and fittings shall be furnished with push-on joints, push- on restrained joints, mechanical joints, and flanged joints as required. Pipe ends (spigot end, bell, and socket) for all pipes shall be gauged with suitable

gauges at sufficiently frequent intervals to ensure compliance to the standard dimensions of ANSI/AWWA C151/A1.5

(4) Push-on joints shall conform to ANSI A21.11/AWWA C111

(5) Mechanical joints shall conform to AWWA C111. Bolts shall be high strength low alloy steel per AWWA C111

(6) All buried ductile iron force main pipes shall be polyethylene wrapped. Thickness: 8 mils; Color: green (AWWA C105)

(7) Acceptable products: American Cast Iron Pipe Company, Griffin Pipe Company, U.S. Pipe Company, and McWane Cast Iron Pipe Company

5. Restrained Joint Fittings:

(1) Provide at each fitting and valve. Restrained joints shall be in accordance with DIPRA, "Thrust Restraint Designed for Ductile Iron Pipe"

(2) Restrained joint pipe will be indicated clearly on plans. The location and length of restrained joint pipe will be clearly marked on the drawings at all points where the direction or cross-sectional area of the pipe changes as well as at all bends, reducers, offsets, tees, wyes, dead ends, valves and transitions from PVC, FPVC or HDPE to Ductile Iron Pipe

(3) Acceptable products:

a. American Cast Iron Pipe – Fast Grip, Flex-Ring, Field Flex- Ring or Lock-Ring
b. US Pipe – TR Flex or Field Lok 350 Gaskets
c. Griffin Pipe – Snap-Lok Restrained Joint
d. EBAA – Megalug Restraint Gland
e. Ford – Series 1500 Restraint Gland
f. Sigma – One-Lok Series SLD Restraint Gland
g. McWane – Sure Stop 350 Restraint Gasket
h. Cape Fear Industries – EZ Restraint Gland for Ductile Iron

C. **Tracer Wire.**

1. All force main installations shall include the installation of a locator wire. The locator wire shall be taped to the top of the pipe with polyethylene tape during the pipe laying operation. For force mains, which are installed by the open- trench method, the locator wire shall be stranded 12-gauge copper with insulation rated UF or USE

by Underwriter's Laboratories. For force mains, which are installed by a trenchless method, horizontal directional drilling or other, the locator wire shall be stranded 10-gauge stainless steel with insulation rated UF or USE by Underwriter's Laboratories. Underground splice connections shall be minimized and shall be rated for direct burial service. The tracer wire shall be looped into "dummy" cast-iron water valve boxes with caps labeled "SEWER", painted green, and at grade level, one being installed adjacent to the valve vault at the source pump station. Additional valve boxes shall be installed at intervals of no greater than every 1,000 ft. along the length of the force main, unless the main was installed by a trenchless method. A final valve box shall be installed at the discharge point of the force main, whether that is at a manhole or at a "tee" into another force main. The looped termination shall allow for the connection of an electronic locator transmitter

D. **Air Release Valves.**

1. Provide combination air valve
2. Maintain minimum 36 inch cover over force main at location of air valve
3. The combination air valve shall be suitable for use at pressures up to 150 PSI
4. The valve shall have Type 316 stainless steel body, cover and cover bolts with an NPT inlet and outlet connection. Valves shall have a Type 316 stainless steel float and a replaceable seat of Buna-N or other suitable material. Venting orifice and internal linkage mechanism shall be Type 316 stainless steel
5. Valve size shall be 1 or 2 inch size as shown on the plans, both sizes to be supplied with 2 inch NPT pipeline connection. The distance from 2 inch pipeline connection to the top of the combination air valve shall not exceed 10 inches
6. Valve shall be supplied with flushing attachments consisting of 2 inch stainless steel inlet isolating ball valve, 1 inch stainless steel blow off ball valve and 0.5 inch stainless steel flushing ball valve and stainless steel pipe nipples and a 5 ft. rubber hose with quick connect couplings
7. Valves shall be GA Industries Figure 959SS-ESF
8. Provide valve vault:

(1) Air release valves shall be enclosed in a 4 ft. diameter precast manhole with a flat slab top as a minimum standard

(2) Provide manhole frame and vented cover. Frame and cover shall be East Jordan Iron Works model 2029 or U.S. Foundry model 480 frame and RA- SSG cover. Cast into the center of the cover will be the letters CPW, 2 – 3 inches in height. Also cast into the cover will be the words SANITARY SEWER, 1.5 – 2 inches in height

(3) Base shall be formed using solid concrete blocks set on a 12 inch deep bed of compacted No. 57 stone

(4) Coatings:

a. Coat interior surfaces of air release valve vault

b. Coating shall be Raven 405 Epoxy System, 120 mil nominal thickness, and shall be applied by a Raven Certified Applicator

(a) Deviations from the Raven 405 Epoxy System will need to be submitted to City Engineering for review and approval

c. Coating shall be tested for pinholes using approved spark test method. Applicator shall be responsible for correcting any defects found during testing

E. **Cushioned Swing Check Valves.**

1. Provide cast iron body with bronze seating ring and stainless steel shaft for attachment of weight and lever with non-corrosive adjustable air cushioned shock chamber
2. Mount the cushioned chamber to the side of the valve body with piston operating in the chamber, which will prevent valve closing without any hammering action
3. Shock absorption by air: Adjustable closing speed
4. Approved manufacturer: G. A. Industries, Inc. Figure 250-D

F. **Gate Valves.**

1. All valves shall be in conformance with the latest revision of all reference standards of AWWA or ANSI
2. 4-inch through 12-inch: Use resilient wedge gate valves
3. All valves shall "Open Left"

4. Provide 2 inch ductile iron wrench nut with direction of valve operation clearly visible when looking down on the nut. Hold-down nut or bolt will Type 316 stainless steel
5. Provide stem extensions on all valves where the top of the operator nut is located greater than 36 inches below the top of the valve box
6. All valves shall be equipped with a non-rising stem
7. All valves will meet or exceed all requirements of AWWA C509 or AWWA C515
8. Outer valve body will have raised lettering cast in, providing manufacturer's name, valve size, year of manufacture, pressure rating, location of casting and each part is to be clearly marked indicating ductile or cast iron
9. All valves will be electrostatically, fusion-bonded epoxy coated, minimum 8-mil thickness inside and out, conforming to ANSI/AWWA C550 Standards
10. Resilient wedge to be ductile or cast iron fully encapsulated with EPDM elastomer, including guide path and will be US Food and Drug Administration approved for potable water and have an EPDM visible marking
11. All valves will have a minimum 250 psi working pressure and a 500-psi static pressure
12. Valve stem material will be bronze, brass, or Type 304 stainless steel
13. Valves will have two upper O-ring seals on the stem above the thrust collar and at least one O-ring seal below the collar so designed to allow for replacement of the upper O-rings with the valve under full operating pressure
14. Valves will have thrust washers located above and below the thrust collar to ensure smooth frictionless operation
15. All exterior bonnet and thrust collar bolting, whether recessed or exposed, are to be Type 316 stainless steel and marked by type
16. Waterway seat area will be smooth without ridges or cavities and valves will have full size bore throughout the flow-way
17. All valves will be hydrostatically pressure tested prior to shipment in compliance with AWWA C509 or AWWA C515 Standards and be covered by the Manufacturer's Ten-Year Limited Warranty from the date of purchase by the end user
18. Approved manufacturer: Mueller

19. Provide valve box:
    (1) Valve box shall be full cast or ductile iron with iron covers suitable for heavy traffic use and conform to ASTM A-48, Class 20 Specifications
    (2) Valve boxes shall be screw type and have a 5.25 inch inside shaft diameter
    (3) Have the word "SEWER" cast into the cover
    (4) Coat box and cover with 2 shop coats of bitumastic paint
    (5) No part of the valve box is to rest on the buried valve
    (6) Acceptable product: Products of Tyler Union #6850 Series, Bingham & Taylor #4905 Series of U.S. manufacture only, AFC Box with external stem and locking lid, and East Jordan Ironworks #8550 Series
    (7) Provide at each valve box in unpaved areas a precast concrete protection ring

G. **Valve Markers.**

1. Where air valves and gate valves are located in areas that are not landscaped or have a hard surface, a Carsontie marker shall be installed within 1 ft. of the valve. The marker shall be driven into the soil a minimum of 12 inches and extend above grade 60 inches. Marker shall indicate sewer valve

8.6 FORCE MAIN CONSTRUCTION PROCEDURES

A. **General.**

1. Prior to construction activities taking place, the Engineer of Record shall coordinate in advance a Pre-Construction Meeting with the assigned City Engineering Inspector. The Engineer of Record, Contractor(s), and the City's Engineering Inspector shall be in attendance at a minimum**.**

B. **Operation of City System Valves.**

1. Only City personnel shall operate City valves or hydrants unless otherwise directed or approved by the City

C. **Handling of Materials.**

1. General.
   (1) Store rubber gaskets and polyethylene film under cover and out of direct sunlight. Do not store nuts, bolts, glands, and other accessories directly on the ground. Keep inside of pipe and fittings free of dirt and debris.
   (2) Keep valves off the ground and keep interior free of dirt and debris. Do not expose valve interior to direct sunlight.
   (3) Handle pipe so as to ensure delivery to the trench in sound, undamaged condition.
   (4) Carry pipe into position.
   (5) Use pinch bars, slings or tongs for aligning or turning the pipe.
   (6) Use care not to damage Ductile Iron Pipe linings.
2. Polyvinyl Chloride (PVC) pipe:
   (1) Store in unit packages as received from the manufacturer until just prior to use.
   (2) Stack units to prevent deformation to pipe barrels and bells.
   (3) Protect from direct sunlight by covering with opaque material.
3. Fusible Polyvinyl Chloride (FPVC) pipe:
   (1) Pipe lengths shall be stored and placed on level ground. Pipe shall be stored at the job site in the unit packaging provided by the manufacturer. Caution must be exercised to avoid compression, damage, or deformation to the ends

of the pipe. The interior of the pipe, as well as all end surfaces, shall be kept free from dirt and foreign matter.

(2) Pipe shall be handled and supported with the use of woven fiber pipe slings or approved equal. Care shall be exercised when handling the pipe to not cut, gouge, scratch or otherwise abrade the piping in any way.

(3) If pipe is to be stored for periods of 1 year or longer, the pipe shall be shaded or otherwise shielded from direct sunlight. Covering of the pipe, which allows for temperature build-up, is strictly prohibited. Pipe shall be covered with an opaque material while permitting adequate air circulation above and around the pipe as required to prevent excess heat accumulation.

(4) Pipe shall be stored and stacked per the pipe manufacturer's guidelines.

(5) High Density Polyethylene (HDPE) pipe:

a. Pipe shall be delivered without nicks, gouges, or other physical damage.

b. Pipe shall be stored on clean, level ground to prevent undue scratching or gouging. If the pipe must be stacked for storage, such stacking shall be done in accordance with the pipe manufacturer's recommendations. The pipe shall be handled in such a manner that it is not pulled over sharp objects or cut by chokers or lifting equipment.

c. Sections of pipe having been discovered with cuts or gouges in excess of 10% of the pipe wall thickness shall be cut out and removed. The undamaged portions of the pipe shall be rejoined using the heat fusion joining method.

d. Fused segments of the pipe shall be handled so as to avoid damage to the pipe. Chains or cable type chokers must be avoided when lifting fused sections of pipe. Nylon slings are preferred. Spreader bars are recommended when lifting long fused sections.

D. **Trench Excavation.**

This Section of the Standards is provided to outline most types of laying conditions but is not intended to cover all special laying conditions or the Engineer's special requirements.

1. Trench excavation shall be made in open cut and true to the lines and grades shown on the plans, unless boring is necessary or required. Banks of the trenches shall be cut in vertical, parallel planes, equidistant from the pipe centerline. The horizontal distance between such planes, or the overall width of trench, shall vary with the size of the pipe to be installed. The overall width of trench shall be as recommended by the manufacturer.
2. Bell holes for bell-and-spigot pipe shall be excavated at proper intervals so that the barrel of the pipe will rest for its entire length upon the bottom of the trench. Bell holes shall be large enough to permit proper installation of joints in the pipe.
3. When muck, quicksand, soft clay, swampy or other material unsuitable for foundations or sub-grade is encountered, such material shall be removed and replaced with No. 57 stone.
4. After excavation, the area between the final pipe grade and the trench soil bottom shall be filled with No. 57 stone as required, compacted to proper grade, and made ready for pipe laying.
5. Debris encountered in trench excavation shall be removed for the overall width of trench which shall be as shown on the plans. It shall be removed to a depth of 6 inches below the bottom of the pipe for pipes smaller than 24 inches in size; 8 inches below the bottom of the pipe for pipes 24 to 36 inches in size; and 12 inches below the bottom of the pipe for pipes larger than 36 inches in size, if debris extends to such depth.
6. In all cases, materials deposited shall be placed so that in the event of rain, no damage will result to the work.
7. The sides of all excavations shall be sufficiently sheeted, shored and braced whenever necessary to prevent slides, cave-ins, settlements or movement of the banks and to maintain the excavation clear of obstructions. Maintain the walls of the excavation properly in place and protect all persons and property from injury or damage. Sheeting, shoring or bracing materials shall not be left in place unless

as shown by the plans or permitted by the City. All sheeting and bracing shall be left in place until the trench has been backfilled 1 ft. above the top of the pipe.

E. **Trench Backfill.**

1. The backfilling of pipeline trenches shall be started immediately after the pipe work has been inspected. The initial backfill material, placed to a height of 1 ft. above the top of the pipe, shall consist of approved backfill material free from organic matter and deleterious substances, containing no rocks or lumps over 2 inches in any dimension. It shall be carefully placed and compacted throughout entire area backfilled. Backfill the trench above the pipe zone with approved backfill material in lifts not exceeding 6 inches loose depth and compact each lift to a minimum of 95% of maximum density, as determined by ASTM D 1557, with mechanical vibrating or impact tampers.
2. Where pipe trenches are cut across or along pavement, the trenches shall be backfilled in accordance with applicable permits.
3. Backfilling around structures shall be done in the manner specified above for pipe trenches by power tamping for the full depth of cut to the top of the finished grade.
4. All backfilling shall be done in such a manner as will not disturb or damage the pipe or structure over or against which it is being placed. Any pipe or structure damaged or moved from its proper line or grade during backfilling operations shall be uncovered, repaired, and then re-backfilled as herein specified.
5. All excavations suspected of not meeting compaction requirements shall be tested for conformance by a City approved testing lab. Tests shall be performed at the locations and depths directed by the City, at the installing contractor's expense.

F. **Pipe, Valve, and Appurtenance Installation.**

1. General:
   (1) Inspect pipe for damage. Remove damaged and unacceptable pipe. Keep interior and joint surfaces clean and free of foreign materials. Securely close open ends of pipe, fittings, and valves when work is not in progress.

(2) Replace pipe where any part of coating or lining is damaged.

(3) Lower pipe and accessories into trench by means of derrick, ropes, belt slings, or other equipment approved by the manufacturer.

(4) Do not dump or drop any of the materials into the trench.

(5) Except where necessary in making connections to other lines, lay pipe with the bells facing in the direction of laying.

(6) Rest the full length of each section of pipe solidly on the pipe bed, with recesses excavated to accommodate bells, couplings, and joints.

(7) Bell pipe using manufacturer's approved leverage bar. Do not use machinery to bell pipe. Home line is to be clearly visible when pipe is joined.

(8) Do not lay pipe in water or when trench conditions are unsuitable for the work. Keep water out of the trench until jointing is completed.

(9) Re-lay pipe that has the joint disturbed after laying

(10) Valves shall be carefully handled, cleaned and checked for operation prior to backfilling. Care shall be taken to ensure that no dirt, rock, or other obstacles that would interfere with the operation are left in the valve. Valves shall be installed in a position such that the plane of operation or rotation for the operating nut is parallel to the ground surface.

2. Alignment and Grade.

(1) Fittings, valves, and other appurtenances shall be located where shown on the approved plans, with the pipe being cut if necessary to assure accurate placement. Install the pipe, valves, and appurtenances to the alignment and profile shown on the approved drawings.

(2) Pipe lines intended to be straight shall be so laid.

(3) Where vertical or horizontal alignment requires deflection from straight lines or grade, do not exceed 75% of maximum deflection recommended by the pipe manufacturer or AWWA Standard 600.

(4) If alignment requires deflection exceeding recommended limits, furnish bends to provide angular deflections within the allowable limits.

3. Jointing Pipe, Valves, and Appurtenances:

(1) Mechanical, Push-On, and Restrained Joint

a. Join pipe with mechanical or push-on type joints in accordance with the manufacturer's recommendations. Provide all special tools and devices, such as special jacks, chokers, and similar items required for proper installation. Lubricants for the pipe gaskets shall be used and shall be manufacturer's standard. All mechanical joints used on taps and valves shall have restraining glands.

b. Flanged.

(a) Prior to connecting flanged pipe, the faces of the flanges shall be thoroughly cleaned of all oil, grease, and foreign material. The rubber gaskets shall be checked for proper fit and thoroughly cleaned. Care shall be taken to ensure proper seating of the flange gasket. Bolts shall be tightened so that the pressure on the gasket is uniform. Torque-limiting wrenches shall be used to ensure uniform bearing insofar as possible. If joints leak when the hydrostatic test is applied, the gaskets shall be removed and reset and bolts re- tightened.

4. Installation of Restraining Glands:
   (1) Adjoining surfaces shall be clean, lubricated and meet the requirements of *ANSI/AWWA C111/A21.11*.
   (2) Install using assembly recommendations established in *ANSI/AWWA C111/A21.11* as well as installation instructions provided by the manufacturer.
   (3) If twist-off nuts are provided, tighten screws until nuts breaks loose.
5. Cutting pipe:
   (1) Cut pipe neatly without damage to the pipe
   (2) Unless otherwise recommended by the pipe manufacturer, cut pipe with milling type cutter, rolling pipe cutter, or abrasive saw cutter. Do not flame cut. Use wheel cutters when practical. Cuts must be even and perpendicular with length of pipe. Dress cut ends of pipe in accordance with manufacturer's directives for the type of joint to be made. Cut ends and rough edges shall be ground smooth.
   (3) DIP and PVC pipe with push-on type connection, the cut end must be slightly beveled.
6. Polyethylene Encasement.

(1) All valves, ductile iron force mains, fittings, and appurtenances are to be wrapped in a linear low-density polyethylene film, 8 mil, color green, in accordance with *ANSI Standard A21.5 (AWWA C105)*. Close all open ends and damaged areas securely with poly-tape. If damaged polyethylene film cannot be repaired, replace with new film.

G. **Connection to an Existing Gravity System.**

1. Connection of new force main to an existing gravity system shall be made at an existing manhole or by constructing a cut-in manhole.

(1) Existing manhole:

a. Connection to an existing manhole shall be made in the presence of the City inspector
b. Connection shall be made at existing flow line
c. New holes in manholes shall be core drilled
d. When connecting to an existing manhole, temporarily block and/or divert sewage flows. Use high early strength cement to form proper channels with minimum interruption of service
e. Seal around new pipe

(2) Cut-in manhole:

a. Temporarily block and/or divert sewage flows. Cut out length of existing pipe to accept new pipe in manhole
b. If benches are pre-formed, insert short section of PVC pipe in the existing holes and seal. Lower bottom section of manhole into hole and sleeve to existing piping
c. If benches are not pre-formed, cut the PVC pipe to form the channel and insert the required length of pipe through the holes in the bottom section of the manhole, set to match existing slope, and seal. Lower the assembly into the hole, sleeve to existing piping, and unblock sewage flows. Using high early strength cement, form benches as in typical manholes

(3) Coatings:

a. Coat force main receiving manhole and the next manhole downstream

b. Coating shall be Raven 405 Epoxy System, 120 mil nominal thickness, and shall be applied by a Raven Certified Applicator
   (a) Deviations from the Raven 405 Epoxy System will need to be submitted to City Engineering for review and approval
c. Coating shall be tested for pinholes using approved spark test method. Applicator shall be responsible for correcting any defects found during testing.

H. **Installation of Air Release Valves.**

1. Maintain minimum 36 inch cover over force main at location of air release valve
2. Force mains less than 6 inches in diameter; install air release valve using 316 stainless steel tapping saddle
3. Force mains 6 inches in diameter and larger; install air release valve using 316 stainless steel tapping sleeve
4. Provide 316 stainless steel isolation ball valve
5. Set plumb valve
6. Provide valve vault:
   (1) Air release valves shall be enclosed in a 4 ft. diameter precast manhole with a flat top slab as a minimum. Base shall be formed using solid concrete blocks set on a 12 inch deep bed of compacted No. 57 stone
   (2) Provide manhole frame and vented cover
   (3) Valve vaults lids shall be level with the ground to ensure a lawn mower can move over top of the lid unobstructed
7. Provide Carsontie valve marker

I. **Installation of Cushioned Swing Check Valves.**

1. Maintain minimum 36 inch cover over force main at location of check valve
2. Set valve level
3. Mount the cushioned chamber to the side of the valve body with piston operating in the chamber, which will prevent valve closing without any hammering action

J. **Installation of Gate Valves.**

1. Maintain minimum 36 inch cover over force main at location of gate valve
2. Provide valve box. No part of the valve box is to rest on the buried valve. Sewer shall be printed on the valve cover
3. Provide at each valve box in unpaved areas a precast concrete protection ring
4. Provide Carsontie valve marker

K. **Tracer Wire Installation.**

1. All force main installations shall include the installation of a locator wire. The locator wire shall be taped to the top of the pipe with polyethylene tape during the pipe laying operation. For force mains, which are installed by the open- trench method, the locator wire shall be stranded 12-gauge copper with insulation rated UF or USE by Underwriter's Laboratories. For force mains, which are installed by a trenchless method, horizontal directional drilling or other, the locator wire shall be stranded 10-gauge stainless steel with insulation rated UF or USE by Underwriter's Laboratories. Underground splice connections shall be minimized and shall be rated for direct burial service. The tracer wire shall be looped into "dummy" cast-iron water valve boxes with caps labeled "SEWER", painted green, and installed at grade level, one being installed adjacent to the valve vault at the source pump station. Additional valve boxes shall be installed at intervals of no greater than every1,000 ft. along the length of the force main, unless the main was installed by a trenchless method. A final valve box shall be installed at the discharge point of the force main, whether that is at a manhole or at a "tee" into another force main. The looped termination shall allow for the connection of an electronic locator transmitter.
2. Prior to acceptance of the wastewater force main by the City, the Contractor shall demonstrate that the locator wire functions properly. The Contractor shall use one of several commercially available utility locating instruments to energize and trace the locator wire. When the wastewater force main is installed in the road shoulder, green-marking flags (pin flags) shall be installed along the length of the wastewater main at intervals of no greater than 20 ft. Where the force main is installed under concrete or asphalt, green marking paint shall be used. Testing of

the locator wire and installation of the marking flags shall be done prior to scheduling a final inspection of the wastewater system.

L. **Jack and Bore.**

1. General.

(1) Description.

a. This section covers work necessary to furnish and install steel casings and carrier pipes under surface structures, where indicated, as specified herein, and as needed for a complete and proper installation.

(2) Safety.

a. Perform all excavation and backfilling activities in accordance with the *Occupational Safety and Health Act of 1970.*

2. Materials.

(1) Carrier pipe shall be restrained joint ductile iron.

(2) Steel Pipe Casing shall be manufactured from steel conforming to ASTM A 139 for Grade B, with minimum yield strength of 35,000 psi before cold forming.

a. Pipe shall be straight seam welded. A protective coating will not be required.

b. Minimum diameter and wall thickness of the steel piping shall be as listed in *Table D.8.12*.

Table D.8.12. Minimum Diameter and Wall Thickness of Steel Piping

Restrained Joint DIP Carrier Pipe Size (inches)	Minimum Casing Size (inches)	Minimum Casing Thickness (inches)
4	14	0.250
6	16	0.281
8	18	0.312
10	20	0.375
12	24	0.375
14	26	0.438
16	30	0.469
18	32	0.500
20	36	0.532
24	42	0.625
30	48	0.688
36	54	0.781

42	56	0.812
48	62	0.875
54	72	1.000

c. The thicknesses of the casing shown in *Chapter* D.*2.b.2* are minimum thicknesses. Actual thicknesses shall be determined by the casing installer based on an evaluation of the required jacking forces.

(3) Casing Spacers.

a. Casing spacers shall be flanged, bolt-on style with a two-section stainless steel shell lined with a PVC liner, minimum 0.09 inches thick, also having a hardness of 85-90 durometer. Runners shall be attached to stainless steel risers which shall be properly welded to the shell. The height of the runners and risers shall be manufactured such that the pipe does not float in the casing. Casing spacers shall be as manufactured by Cascade Waterworks Manufacturing Company, Contractors Manufacturing, Inc., or approved equal.

3. Execution.

(1) Installation of Steel Pipe Casing

a. Installation of steel pipe casing shall be by the dry bore method at locations as shown on the Contract Drawings and approved by the applicable permits. Installation of steel pipe casing shall be in accordance with applicable regulations, the Contract Drawings, these specifications, and any permits required with respect to the particular boring

(a) Boring Pit and Receiving Pit.

(a) The boring pit shall be solid sheeted, braced, and shored as necessary to provide a safe operation. The Contractor shall take all precautions, and comply with all local, state and federal requirements as may be necessary to protect private property, public property and/or existing utilities. Maintain in dry condition by use of pumps, drains or other approved method.

(b) The receiving pit shall be constructed in accordance with the Contract drawings and applicable permits

(b) Line and Grade.

(a) The Contractor shall set the boring rig so that after the casing is complete, and the carrier pipe is installed, the invert of the pipe shall conform to grade and alignment as shown on the Contract Drawings. As the casing is installed, Contractor shall check the horizontal and vertical alignment frequently. Contractor shall install the boring at a 90 degree angle to the crossing unless permitting authority approves a different specific angle of crossing. The depth shall be a minimum depth as prescribed by the governing authority unless a deeper depth is dictated by design

(c) Boring.

(a) In all cases, jacking and boring of the casing pipe shall be accomplished by the dry jack and bore method without jetting, sluicing, or wet boring. For casing pipes 48 inches in diameter and larger, a closed face shield bore head shall be utilized in front of the casing. For casing pipes less than 48 inches in diameter, the casing may be installed via open face method whereby the hole shall be bored and cased through the soil by a cutting head on a continuous auger mounted inside the casing pipe. The distance between the leading end of the first auger section and the leading end of the casing shall be as necessary to maintain a solid plug of spoil material inside the forward portion of the casing. At no time during the operation shall the auger head be allowed to extend out in front of the casing being installed. The boring of the hole and jacking of the casing pipe shall be done simultaneously, with continuous installation, until the casing pipe is in final position

(d) Dewatering.

(a) Contractor shall fully investigate the location of all jack and bores for the project and determine required dewatering methodologies for each location in order to provide for and conduct a dry jack and bore. Contractor shall submit plans and specifications for dewatering to the Engineer for approval prior to beginning the process (for railways, railway authority must also approve). Pumps of sufficient

capacity to handle the flow shall be maintained at the site, provided the Contractor has received approval from the engineer to operate them. Pumps in operation shall be constantly attended on a 24-hour basis until, in the sole judgment of the DOT or railway authority ; the operation can be safely halted. When dewatering, a process for monitoring any settlement of tracks, roads, or structures must be in place. Prior to commencing boring, the Contractor shall verify, with acceptance by the Engineer, the absence of groundwater to below the lowest elevation of the casing at each entry/exit pit and as necessary along the casing route.

(e) Diameter of hole.

(a) Bored installations shall have a bored hole no more than 1 inch greater than outside diameter of the casing pipe to be installed. In the event that voids are detected, the voids shall be grouted

(f) Casing Pipe Length.

(a) Lengths of casing pipe shall be as long as practical for site conditions. Joints between lengths shall be completely welded in accordance with American Welding Society recommended procedures. Prior to welding joints, the Contractor shall ensure that both ends of the casing sections being welded are square. The length of the casing shall be such that each end of the casing shall extend a minimum of 6 ft. beyond the edge of pavement/back of curb of a paved roadway, or if railway installation, in accordance with requirements of the railway authority

(g) Lubricant.

(a) The Contractor shall plan to use a casing lubricant, such as bentonite, in the event excessive frictional forces jeopardize the successful completion of the casing installation

(h) Jacking.

(a) Once the jacking procedure has begun, it shall be continued without stopping until the boring and jacking operation is complete

(i) Installation of the Carrier Pipe.

(a) Inspect carefully, ensuring that all foreign material is removed from the casing and the casing meets alignment criteria for the type of carrier pipe being used

(b) The casing shall be installed as closely to grade as possible with no more deviation than can be adjusted with spacers to achieve the carrier pipe design grade

(c) Install casing spacers on the carrier pipe per the manufacturer's instructions

(d) Provide a minimum of 1 spacer per 10 linear feet of pipe

(e) Install the carrier pipe in the casing ensuring each joint is pushed "home" before the joint is installed into the casing

(f) Provide centered and restrained configuration

(j) End Seals.

(a) Grout each end of the casing with concrete brick and Type II concrete in such a manner to prevent the infiltration of foreign materials into the casing pipe, but allowing leakage to pass in the event of a carrier pipe break

b. Rights-of-Way, Easements, and Permits.

(a) Prior to the beginning of the Work, consult with the Engineer to determine that all rights-of-way, easements, permits, or other legalities are in order and become familiar with the requirements thereof. Confine the Work as required to comply with such requirements. Any encroachment beyond such limits shall be the Contractor's responsibility

c. Conflict of Specifications.

(a) Where laws or orders of public authority prescribes a higher degree of protection than specified herein, then the higher degree so prescribed shall be deemed a part of this specification and govern the specific installation.

M. **Hydrostatic Testing.**

1. Conduct hydrostatic testing in accordance with *AWWA C600*.

(1) Conduct tests on each line or valved section of line.

(2) Clean and flush line of dirt and foreign material.

(3) Slowly fill main in order to expel air from the main through the air release valves or other appurtenance.

(4) Tests are to be conducted in the presence of the Engineer of Record or his representative and witnessed by a City representative.

2. Pressure Tests.

(1) Pressure leakage test shall be conducted in accordance with *AWWA C600*. Each section of the pipeline shall be subjected to and successfully meet a pressure test of 150% of its working pressure, but not less than 100 psi. The line shall be slowly filled with water and all air expelled through the air valves or other means.

(2) A suitable test pump, furnished by the Contractor, shall be connected to the line by means of a tap in the line, or other suitable method, and the proper test pressure slowly applied to the line. The test pressure, +/- 5 psi, shall be maintained for at least 2 hours. Leaks, if found, shall be immediately repaired. The Engineer of Record or his representative shall be present on site and confirm the test results.

(3) Replace defective pipe, joints, fittings and valves with new material and repeat the test until results are satisfactory.

3. Leakage Test.

(1) Conduct leakage test in conjunction with pressure test.

(2) Testing allowance shall be defined as the maximum quantity of makeup water that is added into a pipeline undergoing hydrostatic pressure testing, or any valved section thereof, in order to maintain pressure within +/- 5 psi of the specified test pressure (after the pipeline has been filled with water and the air has been expelled). No pipe installation will be accepted if the quantity of makeup water is greater than that determined by the following formula:

$$I = \frac{SD\sqrt{P}}{L = \frac{SD\sqrt{P}}{148{,}000}}$$

Where:

L = Allowable Leakage, in gallons per hour S = Length of Pipe tested, in feet

D = Nominal Diameter, in inches P = Average test pressure, in psig

(3) Should test disclose leakage greater than that specified above, repair, or if necessary, remove and replace the defective joint or valve until the leakage is within the specified allowance

8.7 PUMP STATION DESIGN STANDARDS

A. **General.**

1. The following wastewater pump station design standards are based on Federal, State, and the requirements of the City.
2. These design standards are applicable to all developments requiring wastewater service from the City.
3. Design pump station in accordance with the requirements of the *South Carolina Department of Environmental Service (SCDES) Standards for Wastewater Facility Construction: R.61-67*, and the requirements of these Standards.
4. Pump Stations that serve a single customer will not be accepted for ownership by the City. These stations will be privately owned, operated, and maintained.
5. All regulations, procedures, fees, and penalties listed in *City Ordinance 2716* Sewage and Sewage Disposal are applicable when designing sewer systems.

B. **Capacity Design.**

1. Average daily flow projections for all domestic wastewater facilities shall be based on the type of facility to be served.
2. All flows shall comply with the unit contributory loading criteria, Appendix A of the *SCDES Standards for Wastewater Facility Construction: R.61-67*.
3. Size pump stations based on peak hourly flow projection 2.5 times the average daily flow projection.
4. When designing pumps, consideration is to be given to the ultimate capacity of the pump station, and the ability for growth surrounding the station.

C. **Equipment Requirements.**

1. Equipment for pump stations shall conform to the following requirements:
   (1) Totally submersible centrifugal pumps capable of handling raw, unscreened sewage, including up to 3 inch diameter spherical solids.
   (2) The design shall be such that the pump unit will be automatically and firmly connected to the discharge piping when lowered into place on its mating discharge connection, permanently installed in the wetwell.

(3) The pump shall be easily removable for inspection or service, requiring no bolts, nuts, or fastenings to be disconnected. For this purpose, there shall be no need for personnel to enter the wetwell.

D. **Pump Station Design.**

1. Pumps:

(1) Provide at least 2 pumps of equal capacity, each capable of handling the design peak flow

(2) Pumps shall be designed to operate in a lead-lag sequence and be on an alternating cycle

(3) Pumps shall have an operating point at or near peak efficiency

(4) Pumps shall be non-overloading for all duty points

(5) Pump suction and discharge piping shall be at least 4 inches in diameter

(6) Provide a swing check valve, gate valve, and pressure gauge connection on each pump discharge line

(7) A spare pump shall be provided to the City upon completion of the installation

2. Wetwell:

(1) Normal operating volume shall prevent any one pump from starting more than 4 times per hour

(2) Minimum allowable wetwell diameter shall be 8 ft.

(3) Maximum allowable depth shall be 26 ft. below finished grade

(4) Size the wetwell based on allowing each pump to run no more than 4 times per hour

(5) Wetwell level settings:

a. Distance between pump "OFF" and lead pump "ON": minimum as specified by the pump manufacturer, or as calculated for cycle time; whichever is greater. "OFF" level shall be 3 inches from the top of the pumps

b. Distance between lead pump "ON" and lag pump "ON": 6 inch minimum

c. Distance between lag pump "ON" and alarm "ON": 6 inch minimum

d. Distance between alarm elevation and inlet pipe: 12 inch minimum

(6) Top of wetwell slab shall be set to provide positive drainage away from the station and minimize flooding. At a minimum, top of slab shall be 6 inches above centerline elevation of public access road

3. Pump Station Site:

(1) Minimum property size: 50 ft. x 50 ft.

(2) Site shall be asphalt paved. Provide 8 inch stone aggregate base course and 2 inch asphalt surface course type C

(3) Design pump station site layout to allow access of service trucks to the pump station wetwell

(4) Provide receiving manhole on influent line within pump station fence

(5) Provide bypass connection

(6) Provide camlocks on pump station control panel for a portable generator

(7) No overhead power line will be allowed to cross the site

(8) The station shall have a 1 inch water service terminated in a City water meter box

(9) Provide a freeze proof yard hydrant

(10) Fencing:

a. Site shall be secured by a 6 ft. high chain link fence. NOTE: Brick fences will be reviewed on a case-by-case basis and are subject to the approval of the City. Wooden fences shall not be allowed

b. Provide vehicle access gate. Design vehicle access gate to allow entrance of service trucks without blocking the main roadway

(11) Access road:

a. Site shall be serviced by an asphalt road with top of road above the 25-year flood elevation. Road and site drainage shall be included in the design and approved by appropriate permitting agency

b. Minimum road width: 16 ft.

c. Type C surface course in accordance with SCDOT specifications

4. Electrical:

(1) General:

a. Electrical design of pump station shall conform to the latest editions of *NFPA 70 (National Electrical Code)* and *NFPA 820 (Standard for Fire Protection in Wastewater Treatment and Collection Facilities)*.

b. All electrical work shall be performed by licensed personnel

c. Design electrical service to handle the ultimate capacity of the pump station. Coordinate electrical service with local utility, 3-phase 480 volt is required

d. Single phase power, phase converters, and "add-a-phase" systems are not allowed

e. Provide a site flood light that will be owned by the City

(2) Electrical Equipment Rack:

a. Electrical equipment rack shall be large enough to house all control equipment to include SCADA.

b. Electrical equipment rack shall be made entirely of structural aluminum and be adequately grounded.

c. Power shall be located underground and shall be located on the rack in such a manner so the electric meter can be easily read from outside the fenced area.

d. Concrete pad shall be provided for the electrical equipment rack and extend a minimum of 4 ft. outside of wetwell to face of the control panel.

e. The control panel shall be located a minimum radius of 5 ft. outside the hatch opening and shall be protected by a conduit seal or other appropriate measures meeting the requirements of the National Electrical Code, to prevent the atmosphere of the wetwell from gaining access to the control panel. The seal shall be located so that the motor and level sensors may be removed and electrically disconnected without disturbing the seal.

f. All electrical cables from the motor and wetwell level sensors shall be terminated in a weather tight box located directly below the control panel. If size of pump cables allows use of boxes, install minimum 8 inches by 10 inches with 316 stainless steel terminal strip and backing plate.

g. Electrical supply, control, and alarm circuits shall be designed to provide strain relief and to allow disconnection from outside the wetwell. Terminals and connectors shall be protected from corrosion by location outside the wetwell or through use of watertight seals. If located outside, weatherproof equipment shall be used.

h. Soft starts are not allowed on any motors unless approved by the City. If soft starts are required by the electric utility provider, the system must be designed to clear their own faults due to power outages and prior approval from the City is still required. The City prefers VFDs in these situations over soft starts.

i. Provide transient voltage surge suppresser on load side of transfer switch.

j. Provide GFI Duplex receptacles.

5. Generators.

(1) All pump station sites require an onsite generator.

a. Provide Caterpillar Inc. diesel generator with 1 year subscription to CATRAM monitoring

(a) Include a manual starting switch

b. The generator shall be complete in all respects and shall include all equipment and controls necessary for a fully operational standby power supply system

c. The unit shall be provided in an outdoor, weatherproof, sound attenuated enclosure. The unit shall be provided with a double-walled, sub-base fuel tank

6. Aeration Supplementation.

(1) Provide a fine bubble and course bubble mixing system at pump stations. All parts to be stainless steel.

(2) Approved Manufacturer – Risen Water Fog Log

a. Fog Log shall be installed in the fine bubble configuration

7. Cellular SCADA System.

(1) Submit cellular based SCADA system to the City for approval

(2) Manufacturer – Streametrics Model M or approved equal

8.8 PUMP STATION MATERIALS FOR CONSTRUCTION

A. **General.**

1. This Section includes material specifications for pump stations and associated appurtenances.
2. All materials used in the construction of pump stations shall be new and unused when delivered on-site and shall be suitable for installation and operation under the conditions for which they are to be used.

B. **Wetwells.**

1. Use manhole sections complying with *Chapter D.8.2*.
2. Wetwell vent cap:
   (1) Size: 6 inches
   (2) Approved product: Josam Vandal-Proof Vent Cap, Model 26706
3. Wetwell access door:
   (1) Fabricate from welded aluminum sections.
   (2) Provide dual hinged door of 0.25 inch aluminum tread plate for each pump.
   (3) Upper surface shall be flush, with no protrusions.
   (4) Fit door with recessed latch requiring a special square tool for access.
   (5) Provide all hardware of Type 316 stainless steel.
   (6) Provide Type 316 stainless steel support bracing with a self-locking hinge mechanism to lock into open position.
   (7) Provide a recessed padlock hasp.
   (8) Access doors must be sized properly to allow for easy pump removal. Include coordination with pump manufacturer and precast manufacturer for final design.
   (9) Access doors shall include Protective Grating Panel option by Halliday Products, Inc., or Safe Grate System by ITT Flygt.

C. **Float Control System.**

1. Use 4 float switches:

(1) Single action design, integrally weighted floats
(2) Capable of withstanding water penetration under 25 ft. of water
(3) Micro-switch type
(4) Seal in a polypropylene housing
(5) No less than 50 ft. of cable with polypropylene cord grips and mounting hardware
(6) 3 to 1 safety factor, minimum
(7) Approved manufacturer: USA Bluebook Roto-Float 47738 normally open

2. Float cable holder:
   (1) Use 6 hooks, Type 316 stainless steel
   (2) Mount with Type 316 stainless steel anchors
   (3) Approved products: Halliday Product Series J4A Cable Holder, Type 316 Stainless Steel

D. **Pipe and Fittings.**

1. All piping shall be Pressure Class 250 Ductile Iron Pipe and all fittings shall be Pressure Class 150 Ductile Iron Pipe. Except piping within the wetwell shall be stainless steel type 316.
2. Provide flanged pipe ends complying with pertinent provision of ANSI/AWWA C110/A21.10
3. Fittings: Use flanged ductile iron fittings complying with ANSI/AWWA C110/A21.10
4. Couplings:
   (1) Provide cast iron flanged coupling adapters to connect discharge and suction piping to field piping
   (2) Provide restraining glands
5. All pipe and fittings shall be lined for sewers with Protecto 401 and conform to ANSI/ASTM D1248
6. Exterior of all piping and fittings shall be coated with TNEMEC paint in accordance with the following specifications:
   (1) Exterior exposed steel:
      a. Surface Preparation - SSPC-SP6/NACE 3 Commercial Blast Cleaning. The surface shall be free of all foreign matter and dry prior to painting

(a) 1st Coat – Series 1 Omnithane applied at 2.5-3.5 dry mils

(b) 2nd Coat – Series N-69 (Color: 110GN Clover) Hi-Build Epoxoline II applied at 4.0-6.0 dry mils

(c) 3rd Coat – Series 73-U (Color: 112GN Foliage) Endura Shield applied at 3.0-5.0 dry mils

b. Steel (Immersion):

(a) Surface Preparation – SSPC-SP10/NACE 2 Near White Blast Cleaning. The surface shall be free of all foreign matter and dry prior to painting

(b) 1st Coat – Series 1 Omnithane applied at 2.5-3.5 dry mils

(c) 2nd Coat – Series N-69 (Color: 110GN Clover) Hi-Build Epoxoline II applied at 4.0-6.0 dry mils

(d) 3rd Coat – Series 104 (Color: 112GN Foliage) H.S. Epoxy applied at 3.0-5.0 dry mils

c. All field applications shall be inspected and approved by a Tnemec authorized factory representative and City of Sumter approved representative

d. Approval shall be in the form of a written acceptance letter to be supplied by the Tnemec representative stating that all areas of application have been cleaned, primed and coated in accordance with the factory's approval for warranty acceptance.

E. **Valves.**

1. Gate Valves:

(1) All valves shall be in conformance with the latest revision of all reference standards AWWA or ANSI

(2) Valve Actuator:

a. Gate valves inside of the valve vault to be gear actuated

b. The permanent bypass connection gate valve shall be underground and nut operated

c. Valves shall open left

d. Approved manufacturer: Mueller Co

2. Cushioned Swing Check Valves:

(1) Provide cast iron body with bronze seating ring and stainless steel shaft for attachment of weight and lever with non-corrosive adjustable air cushioned shock chamber

(2) Mount the cushioned chamber to the side of the valve body with piston operating in the chamber, which will prevent valve closing without any hammering action

(3) Shock absorption by air: Adjustable closing speed

(4) Approved manufacturer: G. A. Industries, Inc., Figure 250-D

3. Coatings:

(1) Coat exterior of gate valves, and cushioned swing check valves with TNEMEC paint.

(2) The following coatings shall be applied in accordance with manufacturer's recommendations:

a. Surface Preparation - SSPC-SP6/NACE 3 Commercial Blast Cleaning. The surface shall be free of all foreign matter and dry prior to painting

b. 1st Coat – Series 1 Omnithane applied at 2.5-3.5 dry mils

c. 2nd Coat – Series N-69 (Color: 110GN Clover) Hi-Build Epoxoline II applied at 4.0-6.0 dry mils

d. 3rd Coat – Series 73-U (Color: 112GN Foliage) Endura Shield applied at 3.0-5.0 dry mils

(3) All field applications shall be inspected and approved by a Tnemec authorized factory representative and City of Sumter approved representative

(4) Approval shall be in the form of a written acceptance letter to be supplied by the Tnemec representative stating that all areas of application have been cleaned, primed and coated in accordance with the factory's approval for warranty acceptance.

F. **Portable Hoist.**

1. Provide a portable hoist with a minimum 1,000 lb. capacity. Coordinate hoist size with pump size on a per station basis.
2. Hoist to have stainless steel winch, hook, and cable.

3. Furnished and install a lined, stainless steel socket for embedment into the precast wetwell top. Coordinate location with wetwell supplier and the City.
4. Furnish a stainless steel cap to keep the socket free from debris.
5. Hoist shall be Halliday Model D2B36D or approved equal.
6. Hoist shall be manually operated but winch shall have the option of being drill driveable.

G. **Fencing.**

1. Provide chain link fence
2. All materials shall be galvanized including fabric, posts, rails and associated appurtenances
   (1) Chain link shall be 6 ft. high, ends twisted and barbed, and commercial grade 9-gauge 2 inch mesh
   (2) End, corner and pull posts shall be 2.875 inches outside diameter
   (3) Line posts shall be 2.375 inches outside diameter
   (4) Top rail shall be 1.66 inches outside diameter
   (5) Bottom tension wire shall be 7-gauge spring coil wire
   (6) Gate posts shall be 3 inches outside diameter for gates up to 6 ft. wide
   (7) Gate posts shall be 4 inches outside diameter for gates 7 to 13 ft. wide
3. Vehicle Access Gate:
   (1) Vehicle access gate shall be a pair of 7 ft. long by 6 ft. high sections constructed of 2 inch outside diameter pipe. Frame members shall not exceed 6 inches in length.
   (2) Gate shall be equipped with a prop post center latch and hasp assembly. A ground anchor cast in concrete shall be provided.
   (3) Gates shall be factory fabricated and equipped with gate hold backs. Panel shall have a horizontal brace at center of fabric height.

H. **Station Security Light.**

1. Provide a site flood light that will be owned by the City.

I. **Submersible Pump Station.**

1. Pumps:

(1) General:

a. ANSI 125 lb. standard cast iron flange fitting or cast with volute

b. Pump components: cast iron, ASTM A48, Class 30

c. All exposed fasteners and washers: Type 316L stainless steel

d. Pump lift handle: Type 316 stainless steel

e. Chopper pumps may be required by City Engineering. Each pump station will be evaluated on a case-by-case basis to determine if a chopper pump is required.

f. Grinder pumps are not allowed on residential or commercial services

g. Coating:

(a) All components coming into contact with sewage

(b) Pump exterior: PVC epoxy primer and a chlorine rubber paint finish

(2) Impeller:

a. Double shrouded non-clog type

b. Gray cast iron, Class 30, balanced dynamically to 0.5 inches

c. Paint with one coat of alkyd resin primer

d. Provide wear ring consisting of a replaceable stationary ring made of brass, drive fitted to the volute inlet

e. Sliding fit between the impeller and the shaft with one key

(3) Volute.

a. Single piece, non-concentric design

(4) Shaft:

a. ANSI Type 420 stainless steel

(5) Bearings:

a. 2 permanently lubricated bearings

b. B-10 bearing life of 50,000 hours

c. Upper bearing: single deep groove ball bearing

d. Lower bearing: two row angular contact ball bearings

(6) Watertight seals:

a. Nitrile rubber O-rings

b. Fittings: Accomplish sealing by metal-to-metal contact between machined surfaces
c. Gaskets, elliptical O-rings, grease or other devices are not acceptable

(7) Mechanical seals:
a. Tandem mechanical shaft seal system
b. Operate the upper of the tandem set of seals in an oil chamber
c. Upper seal set: one stationary tungsten carbide ring soldered to a holder of stainless steel and one positively driven rotating carbon ring to function as an independent secondary barrier between the pumped liquid and the stator bearings
d. Lower seal set: a stationary ring soldered to a holder of stainless steel and a positively driven rotating ring, both of tungsten carbide. Hold each interface in contact by its own spring system
e. Require neither maintenance nor adjustment, easily inspected and replaced
f. Provide all seal hardware of stainless steel

(8) Warranty:
a. The pump manufacturer shall warrant the units being supplied against defects in workmanship and material for a period of 5 years or 10,000 hours under the Municipal Wastewater Permanent Installation Warranty Policy under normal use, operating and service. The warranty shall be in printed form and apply to all similar units

(9) Approved Pump Manufacturer:
a. Barnes Pumps
b. Ebara Pump
c. Flygt

2. Pump Motor:
(1) General:
a. Submersible type, designed for continuous duty, suitable for Class I, Div. I area and capable of sustaining a minimum of 12 starts per hour
b. Integral motor and pump

c. Air filled, squirrel cage induction, shell type design, Class F insulation system. Class F materials rated for continuous duty in 40 degree C (104 degree F) liquids
d. Cast iron motor frame and end shields
e. Stainless steel hardware and shaft
f. Service factor: 1.15
g. Minimum efficiency rating of 90%
h. Minimum power factor rating of 85%
i. Stator:
   (a) Heat-shrink fitted to shaft
   (b) Dip and bake in Class F varnish
   (c) Do not use bolts, pins or other fastening devices requiring penetration of the stator housing
   (d) Aluminum rotor bars and short-circuit rings

(2) Cable entry water seal system:
   a. Single cylindrical elastomer grommet, flanked by stainless steel washers, all having a close tolerance fit against the cable outside diameter and the entry inside diameter and compressed by the entry body containing a strain relief function, separate from the function of sealing the cable
   b. Bear assembly against a shoulder in the pump top
   c. Separate the cable entry junction chamber and motor by a stator lead sealing gland or terminal board to isolate the motor interior from foreign material gaining access through the pump top. Do not use epoxies, silicones, or other secondary sealing systems

(3) Provide pre-lubricated bearings: Minimum B-10 life of 50,000 hours
(4) Thermal protection:
   a. Motor rated thermally to NEMA MG1-12.42
   b. 3 thermostatic switches (one in each phase) in the stator windings
(5) Junction chamber:
   a. Seal from the motor by elastomer compression seal (o-ring)

b. Connect between the cable conductors and stator leads with threaded compressed type binding, post permanently affixed to a terminal board

(6) Seal protection:

a. Provide moisture detection device

3. Discharge connection:
   (1) Permanently installed discharge connection system
   (2) Pump(s) automatically connected to the discharge connection elbow when lowered into place. Easily removed for inspection or service.
   (3) Accomplish sealing of the pump unit to the discharge connection elbow by a simple linear downward motion of the pump.
   (4) Stainless steel sliding guide bracket to be an integral part of the pump unit.
   (5) Guide the entire weight of the pumping unit by no less than two guide bars and press tightly against the discharge connection elbow with metal-to- metal contact.
   (6) A diaphragm, O-ring or other devices to interface sealing of the discharge are not acceptable.
   (7) No portion of the pump to bear directly on the floor of the sump.
4. Discharge elbow:
   (1) Grey cast iron: ASTM A48, Class 30
   (2) Vertical leg: ANSI Class 125 lb. flange
   (3) Provide integral cast iron base
   (4) If necessary, size elbow with a reducer to reduce the maximum velocities and to match discharge piping
5. Pressure gauges:
   (1) Provide on the discharge side of each pump
   (2) Range - nearest available upper range above pump shut off head
   (3) Provide rounded type, stainless steel case, 4.5 inch nominal diameter with phosphor-bronze bourdon tubes, glycerin filled, 3 inch NPT bottom male threaded connections, stainless steel rack and pinion movement, black micro-adjusted corners and black figures with white plastic dials, and a threaded ring
   (4) Gauge accuracy: Within 1% of the total scale range

(5) Provide diaphragm isolators on all gauges. Provide diaphragm material resistant to chemicals in the process line being measured

(6) Gauge connections to consist of the following:

a. 0.25 inch Type 316 stainless steel shutoff valve with Viton seals as manufactured by Whitey ball valve

b. 0.25 inch stainless steel piping connections

6. Guide rails (per pump):

(1) Provide two lengths of Schedule 40, Type 316 stainless steel pipe, with diameter as specified by manufacturer

(2) Type 316 stainless steel bottom and top pilots

(3) Acceptable manufacturer: Halliday Metals

7. Pump guides:

(1) Attach to pump volute with stainless steel hex head cap screws

8. Lift chain:

(1) Provide each pump and motor with Type 316 stainless steel lifting chain sized per manufacturer's recommendations. Minimum 0.25 inch welded stainless steel link chain

(2) Length to reach top of station plus an additional 3 ft.

(3) Attach upper end of chain to wetwell access frame with Type 316 stainless steel clip and stainless steel eye nut

(4) Connect chain to pump using Type 316 stainless steel screw pin and shackle

9. Pump control panel:

(1) Standards Compliance – the panel and all components meet the relevant safety and performance standards. To include Underwriters Laboratories (UL) 508A for industrial control panels, the *National Electrical Code (NEC)/NFPA 70*, and *NFPA 79* for industrial machinery.

(2) The enclosure and its components shall be constructed from 14-gauge mild steel and provided with a door over door construction to provide protection of all control components, push buttons, indicting lights, switches, etc. Enclosure to be NEMA 12 rated at a minimum.

(3) See *Figure D.8.3 Pump Station Control Panel* for standard pump station control panel drawings

(4) Exterior of enclosure to be painted ANSI 61 gray powder coating. Interior to be white

(5) Internal components

a. Controller – Intrinsically safe duplex microprocessor-based controller as manufactured by Diversified Electronics.

(a) Basis of design is Diversified Electronics ARM-120-AFEP.

(a) No approved equals

(b) This controller is to be furnished with lead/lag motor alternator with pump 1-2 run indicators, pump 1-2 hand-off-auto, pump 1-2 lead select, automatic transfer to non-operating pump in event of overload in operating pump.

b. Operator interfaces – All pushbuttons, switches, etc. to be type 22mm NEMA 12/3X rated and mounted to the interior door face. All interfaces to be protected behind outside enclosure door. At a minimum an overload reset button, overload indicator light and over temperature indicator for each motor shall be provided. A unit alarm beacon (mounted on top exterior of enclosure) shall be provided to allow indication that the pump station has reached the alarm level. No audible alarm shall be provided.

c. Main disconnect and circuit protection – Unit is required to be provided with two UL rated power circuit breaker with sliding bar interlock and external handle (behind exterior door). One main is for Normal power input and one is for Generator power input. These two main circuit breakers to be sized in accordance with the requirements of the systems and as indicated on the plans. Breakers shall be provided with appropriate voltage and current ratings. Unit to be provided with phase protection monitor. All control circuits to be protected by a transient voltage surge suppressor.

d. Individual Motor Disconnects – Each motor shall be provided with its own disconnect which shall be lockable for maintenance purposes. Each motor to be provided with overload unit and magnetic contactors.

e. Motor components – Each motor to be provided with overload, short circuit protection and magnetic contactors for automatic operation. Each motor to be provided with a pump run time meter.

f. Power supply – Panel service to be three phase (480V, 240V, or 208V) as specified by Electrical engineer of record. Current rating to be as specified by Electrical engineer of record. A separately derived control power supply shall also be furnished as called for on the control panel drawings. Control power supply primary and secondary voltage ratings and VA rating(s) shall be as called for on the control panel drawings.

g. Generator input connections – The generator connection input shall consist of a set of three phase plus ground coded cam-lock male inlet connectors rated at 200amp each. These connections shall be located at the bottom of the control panel as indicated on the control panel drawings (See Figure 3 Pump Station Control Panel). Color codes are Brown, Orange, Yellow, and Green for 480V and Black, Red, Blue, and Green for 208/240V.

h. GFCI receptable – The control panel shall be provided with a ground fault circuit interrupter (GFCI) outlet for customer use.

i. Provide an LED strip light with 6 feet cord for remote use when needed.
   (a) Stego model 025423-10 or equal

j. Terminals and busbars – Require tin-plate alloy terminal blocks rated for copper wiring. A separate neutral (when required) and ground bar shall be provided. A separate three phase power terminal block shall be provided between the generator input terminals and the generator main breaker for operation connection by the owner.

k. Mounting – Requires a removable inner panel for component mounting.

l. Wiring and labeling.
   (a) Wiring – Wiring shall be MTW or SIS type stranded of gauge as called for on the control panel drawings. Color coded wiring where called for on the control panel drawings. Labeling shall be provided on all wiring.
   (b) Labeling – The City requires permanent labels for all internal and external components, including wire labels, component tags, and main panel identification. Components tags shall be provided with 0.25 inch letters on permanent plastic nametags. All wiring shall be labeled on both ends.

m. Electrical ratings.

(a) Supply Ratings – Voltage, phase, frequency, and ampere ratings shall be as called for on the control panel drawings.

(b) Short-circuit current rating (SCCR) – Control panel shall be required to have a minimum of 5000 amps SCCR for the entire panel.

(c) Overcurrent protection – Control panel shall be properly protected from overcurrent conditions.

n. Factory testing.

(a) Testing procedures – The control panel must be fully tested at the manufacturer's facility before shipping.

(b) Testing criteria – Testing shall be performed to confirm that all circuits are complete and correct, interlocks are functional, and all devices operate as specified.

o. Manufacturer.

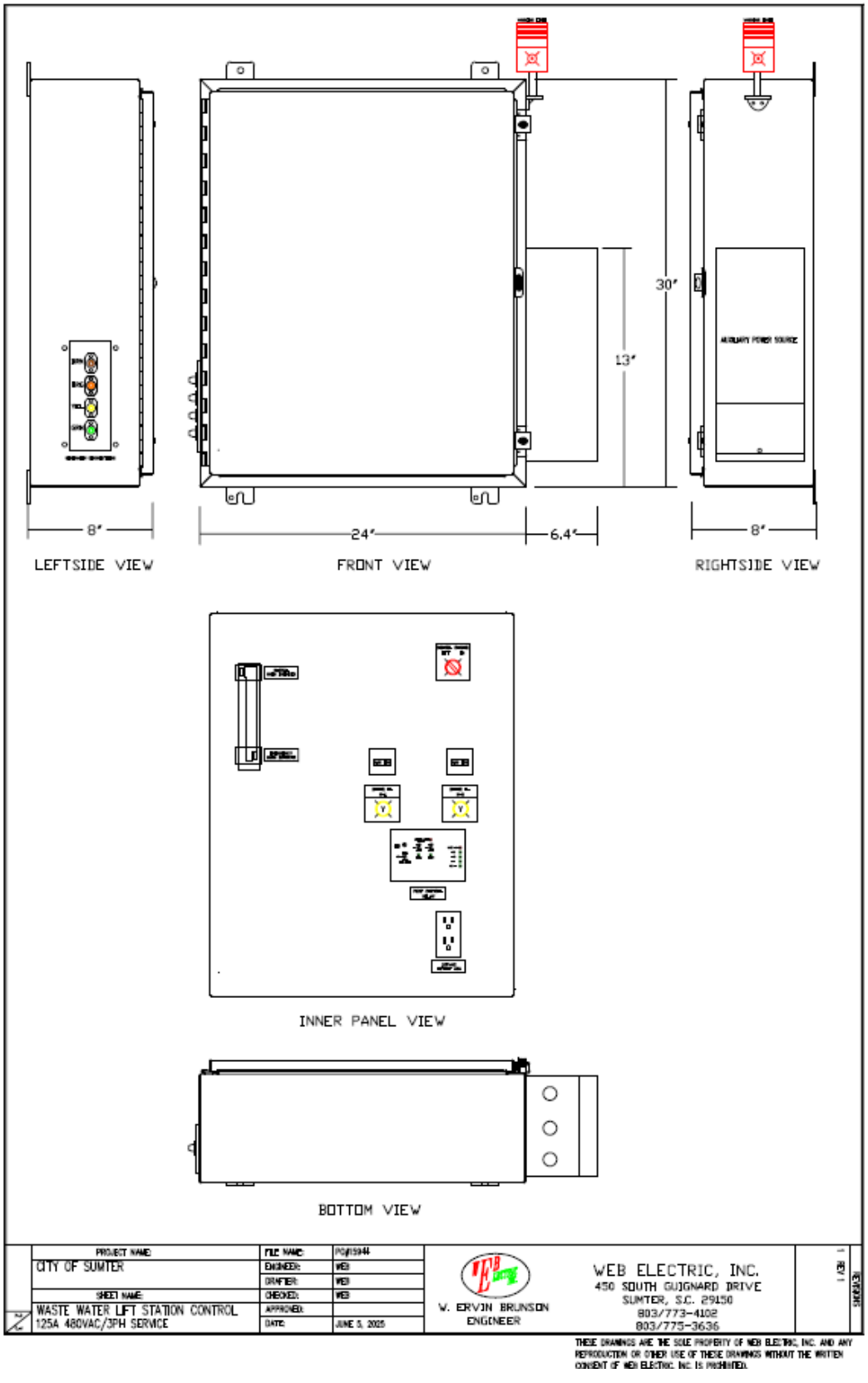
(a) Approved manufacturer – WEB Electric, Inc (450 South Guignard Drive Sumter, SC 29150).

(b) Approved equal will need to be submitted to the City for review and approval.

p. Installation and inspection.

(a) Installation – The control panel shall be properly mounted to the surface and to include a minimum of four 0.375 inch bolts. Panel to be affixed at all four corners of the panel. Panel shall be mounted such that there is a minimum of 36 inches of working clearance in front of the panel with overhead cover. There shall be ease of access to the mounted control panel. Control panel shall be properly grounded as per NEC.

Figure D.8.13 Pump Station Control Panel



8.9 PUMP STATION CONSTRUCTION PROCEDURES

A. **General.**

1. Prior to construction activities taking place, the Engineer of Record shall coordinate in advance a Pre-Construction Meeting with the assigned City Engineering Inspector. The Engineer of Record, Contractor(s), and City's Engineering Inspector shall be in attendance at a minimum.
2. The contractor is responsible for work site safety. Although City personnel will visit the site to observe construction, the City shall not be held liable for work site safety.

B. **Operation of City Valves.**

1. No City valve shall be operated without prior approval of the City.

C. **Handling of Materials.**

1. General:
   (1) Store rubber gaskets under cover and out of direct sunlight. Do not store nuts, bolts, glands, and other accessories directly on the ground.
   (2) Keep inside of pipe and fittings free of dirt and debris.
   (3) Keep valves off the ground and keep interior free of dirt and debris. Do not expose valve interior to direct sunlight.
   (4) Handle pipe so as to ensure delivery in sound, undamaged condition.
   (5) Carry pipe into position. Use pinch bars, slings or tongs for aligning or turning the pipe.
   (6) Use care not to damage Ductile Iron Pipe linings.
2. Submersible Pumps:
   (1) Store pump in shipping container until ready for use. The pump shall be covered to protect it from dust, dirt and water. The ends of the cable must be protected against moisture.
   (2) Do not allow the pump to freeze. If the pump must be stored in a sub- freezing environment, consult the factory for specific recommendations.
   (3) Prior to installation, the pump motor shall be rotated by hand to ensure the .mechanical seals are free-spinning.

D. **Wetwell.**

1. Install wetwell in accordance with pertinent provisions for manhole installation in *Chapter D.8.2*.
2. The bottom slab of the wetwell shall be set on a minimum of 18 inches of No. 57 stone
3. Set base level so that walls will be plumb
4. Form constant height slope on walls of wetwell bottom using Portland cement grout
5. Steps shall not be used in wetwell
6. All interior hardware shall be Type 316 stainless steel including, but not limited to, the following:
   (1) Lifting chains
   (2) Anchor bolts
   (3) Bolts, nuts, and washers
   (4) Guide rails and supports
   (5) Rail guides
   (6) Power cable holder
   (7) Cable strain support
   (8) Float cable holder
7. Coatings:
   (1) Coat all interior concrete surfaces of wetwell to include walls and bottom surface of the top slab
      a. Coating shall be Raven 405 Epoxy System and shall be applied by a Raven Certified Applicator
         (a) Deviations from the Raven 405 Epoxy System will need to be submitted to City Engineering for review and approval
      b. Care shall be taken to protect all pumps, valves, piping and internal hardware form overspray during application
      c. Coating shall be installed at 120 mils nominal thickness. Applicator shall verify thickness during installation by the use of a wet film thickness gauge
      d. Coating shall be tested for pinholes using approved spark test method. Applicator shall be responsible for correcting any defects found during testing
8. Locate floats where flow from the inlet pipe will not interfere with the floats.

E. **Piping and Fittings.**

1. Join pipe in accordance with the manufacturer's recommendations. Provide all special tools and devices, such as special jacks, chokers, and similar items required for proper installation. Lubricants for the pipe gaskets shall be used and shall be the manufacturer's standards.
2. Flanged pipe:
   (1) Prior to connecting flanged pipe, the faces of the flanges shall be thoroughly cleaned of all oil, grease, and foreign material.
   (2) Rubber gaskets shall be checked for proper fit and thoroughly cleaned.
   (3) Care shall be taken to ensure proper seating of the flange gasket.
   (4) Bolts shall be tightened so that the pressure on the gasket is uniform. Torque-limiting wrenches shall be used to ensure uniform bearing insofar as possible.
   (5) If joints leak when the hydrostatic test is applied, the gaskets shall be removed and reset and bolts re-tightened.
3. Restraining Glands:
   (1) Adjoining surfaces shall be clean, lubricated and meet the requirements of *ANSI/AWWA C111/A21.11*.
   (2) Install using assembly recommendations established in *ANSI/AWWA C111/A21.11* as well as installation instructions provided by the manufacturer.

F. **Valves.**

1. General:
   (1) Install all valves in accordance with manufacturer's recommendations.
   (2) Valves shall be installed plumb and level.
   (3) After installation, valves shall be fully operated in the presence of the City inspector.
2. Cushioned swing check valves:
   (1) Provide 1 cushioned swing check valves on each discharge pipe.
   (2) Valve shall be installed in the horizontal position
   (3) Mount the cushioned chamber to the side of the valve body with piston operating in chamber, which will prevent valve closing without any hammering action.
   (4) Shock absorption by air: Adjustable closing speed.

(5) Approved manufacturer: G.A. Industries, Inc., *Figure 250-D*.

3. Gate valves:
   (1) Provide two gear operated hand wheel actuated gate valves, one on each discharge piping to permit either or both pumps to be isolated from the header. Provide one gear operated nut actuated gate valve on the bypass pumping connection.
   (2) Furnish valve with a drip tight shutoff plug mounted in stainless steel bearings.
   (3) Furnish gate valves, with "open-left" operation.
   (4) Approved manufacturer: Mueller Co.

G. **Cellular SCADA System.**

1. General:
   (1) Include tying in the new pump station SCADA system into the City's existing SCADA system.

H. **Fencing.**

1. Fencing installation shall not begin before the proposed fence line has been inspected for low areas and incidental grading and compacting have been completed.
2. Excavation for post footings shall be drilled holes in virgin or compacted soil.
3. Depth of each post shall be set as specified by the manufacturer, but not less than 24 inches below finished grade when in firm, undisturbed soil. Posts shall be set deeper, as required, in soft and problem soils and for heavy lateral loads.
4. Setting posts:
   (1) Loose and foreign material shall be removed from holes and the soil moistened prior to placing concrete.
   (2) Top of footings shall be trowel-finished and sloped or domed to carry water away from posts.
5. All posts to be plumb.
6. All posts shall be able to pass a pull test when a force of 48 pounds is applied perpendicular to the fence at the top of the post. The post shall not deflect more than 1 inch at the locations where the force is applied.
7. Concrete:

8. Concrete shall conform to *ASTM C 94/C94M*. Mix shall be designed to obtain concrete with a minimum 28-day compressive strength of 2,500 psi.
9. Concrete shall have attained at 75% of its minimum 28-day compressive strength, but in no case sooner than 7 days after placement, before rails or fabric are installed. Fabric and wires shall not be stretched or gates hung until the concrete has attained its full strength.

I. **Asphalt.**

1. Provide asphaltic concrete pavement across entire pump station site, extending a minimum of 6 inches past fence line.
2. Provide asphaltic concrete paved entrance road, minimum 16 ft. wide.
3. Asphaltic concrete pavement shall comply with the following requirements:
   (1) Underlayment - Provide geofrabric underlayment
   (2) Stabilized Aggregate Base Course (SABC) – Provide SABC In accordance with *SCDOT Standard Specifications, Section 306, Type 1*, placed at a depth of 8 inches, compacted to 95% of maximum dry density in accordance with A*STM D 1557, Method D*.
   (3) Prime Coat – Applied uniformly at a rate of 0.5 gallons per square yard over compacted and cleaned sub-base surface in accordance with SCDOT Standard Specifications
   (4) Surface Course - Provide hot laid asphaltic concrete surface course in accordance with *SCDOT Standard Specifications, Section 403, Type C Asphaltic Concrete*, placed at a minimum depth of 2 inches.

J. **Submersible Pump Station.**

1. Use base plate as a template for drilling individual hole patterns. Mount base plates using Type 316 stainless steel expansion anchors.
2. Form constant height slope on walls of wetwell bottom using Portland cement grout.
3. Assemble guide rails to access frame and plumb the assembly.
4. Install cable holder to precast top: Use Type 316 stainless steel anchors.
5. Install pumps and piping, plumbing the assembly for proper alignment and fit.
6. Seal around inlet and discharge piping with non-shrink grout.

7. Install power cables using cable strain relief and cord grips (stainless steel).
8. Field wiring:
   (1) Extend grounding wire from control panel main ground screw to external ground as shown in details. Comply with NEC and local electrical codes.
   (2) Make motor lead, level control, temperature sensor, moisture sensor, and power supply connections.
   (3) Seal all conduits between junction box and control panel as shown in details. Comply with all pertinent National Electric Code requirements.
   (4) Seal conduit terminations in control panel with duct seal.
9. Electrical schematic:
   (1) Provide 3 laminated electrical schematic diagrams of the pump controls including terminal board connections.
      a. Permanently mount 1 schematic diagram on the inside of the enclosure door
      b. Include 1 schematic diagram in inside panel door document pouch
      c. Provide 1 schematic diagram
10. Startup and Testing:
   (1) Factory representative shall remain on site until startup and performance testing has been accepted by the City. Factory representative to provide instruction to City staff on the proper operation and maintenance.
   (2) The Engineer of Record shall conduct testing of pump station pumps and controls to verify operating parameters are met per design criteria. The Engineer of Record shall be responsible for coordinating the pump manufacturers, the City representative, and the contractor for draw down testing.
   (3) In the presence of the Engineer of Record and the City:
      a. Remove pump from structure
      b. Replace, demonstrating proper alignment and operation of mating parts
      c. Operate pumps utilizing manual and automatic modes
      d. Demonstrate proper operational sequences, including alarm conditions
      e. Measure amperage, voltage, pumping rate and discharge pressure for:
         (a) Each pump operating separately
         (b) Both pumps operating simultaneously

f. The Engineer of Record shall email a copy of final test report to the City

(4) Provide 1 hard copy and 1 electronic copy of the Operations and Maintenance Manuals. The manual shall contain a complete parts list showing factory part numbers. It shall also contain complete operating and service instructions and shall be tabbed and indexed for each use

(5) Spare parts:

a. Provide the following minimum spare parts:

(a) 1 spare pump

(b) 1 of each seal assemblies

(c) 1 complete set of bearings

(d) 1 set of wear rings

(e) 1 of each type relay

(f) 1 pump alternator

(g) 1 float switch with cable

(h) 1 of each type pilot light

(i) 1 box of each type lamp

(j) 1 set of fuses complete

b. Package in one container all spare parts and clearly identify on the outside what the unit is for. Seal tightly and properly protect for long term storage

9. INSPECTIONS AND CLOSEOUT

9.1 INSPECTIONS AND CLOSEOUT

A. **Roadway Testing and Inspections.**

1. Roadway construction shall follow requirements as outlined in *Chapter D.5.2.*

Table D.9.1: Roadway Course Testing Requirements			
Roadway Courses	**Mix Design Required?**	**Thickness and Density Frequency**	**Prime Coat Required?**
Subgrade Course			
Cement Modified	Yes	500 ft. per 2 lane roadway	No
Soil Aggregate	No	250 ft. per 2 lane roadway	Yes
Base Course			
Cement Stabilized Earth (Soil Cement)	Yes	250 ft. per 2 lane roadway	Yes (curing coat)
Macadam	No	250 ft. per 2 lane roadway	Yes
Intermediate Course			
Asphalt Binder or Immediate Course	No	500 ft. per 2 lane roadway	Yes (tack coat)
Surface Course			
Asphalt Surface Course Type C or Type D	Yes	500 ft. per 2 lane roadway	Yes (tack coat)

B. **Sidewalk Inspections**

1. Sidewalks will be inspected at the final inspection of the roads.
2. Below is a list of items that the sidewalks will be inspected for:

(1) Must meet ADA requirements

(2) Trip hazards
(3) Cracking
(4) Surface condition
(5) Width
(6) Obstructions
(7) Drainage
(8) Expansion and contraction joints

C. **Stormwater Inspections**

1. Refer to *City Stormwater Ordinance 2469* for inspection requirements.

D. **Water and Sewer.**

1. Final Inspections General.
   (1) The purpose of the final inspection is to inspect all aspects of the constructed water and sewer utility, drainage, and road systems to determine conformance with the plans stamped "Approved for Installation" or "Approved for Construction" by the City of Sumter.
   (2) Verbal discussions with staff do no constitute approval. Only written approvals and officially issued documents shall be relied upon for development activities.
   (3) All inspections other than the final inspection require a minimum 3 business days' notice. The final inspection requires a minimum 7 business days' notice after the City's approval of the final inspection package.
2. Final Inspections Subdivisions: Upon completion of construction and prior to scheduling the Final Inspection, the Engineer of Record shall submit a Final Inspection package to the City Engineering Department. The Final Inspection package shall include the following items:
   (1) One draft digital PDF, DWG file, and hard copy of Record Drawings for review. Record Drawings shall be prepared in accordance with City requirements. The Engineer of Record or Surveyor shall deliver digital files in AutoCad format (.dwg). The State Plane Coordinates shall be tied to the drawing in AutoCad for the drawings to be placed in the correct position inside GIS.
      a. Record Drawings.

b. Record Drawing PDF shall be of the final approved Record Drawings as submitted in accordance with the requirements of this Section; sealed, signed, dated by the Professional Land Surveyor and the Engineer of Record reflecting all as- constructed conditions.

c. PDF shall be black and white with white background. Minimal color text or graphics pertinent to the submittal will be accepted.

d. Final PDF shall be saved to open in proper orientation.

e. If drawing is multiple pages, a single multi-page PDF shall be submitted.

f. Record Drawings in AutoCad form:

(a) Provide in NAD 83 (2011) South Carolina State Plane Coordinates, oriented Grid North and tied to the current realization of the South Carolina Geodetic Survey Virtual Reference Station (VRS) network. Vertical coordinates shall be related to the National Geodetic Vertical Datum NAVD88 (Z coordinate). The Benchmark and vertical datum shall be noted on each sheet of the Developer's plans.

(b) Show each drawing entity with coordinates tied to SC Grid and show the grid tie at the point of connection to the existing system with bearing and distance to the Grid monument used and identified.

(c) Have water and wastewater lines in separate drawing layers.

(d) Have all water appurtenances (i.e., hydrants, valves, services, tees, etc.) and all wastewater appurtenances (i.e., manholes, valves, cleanouts, etc.) in separate drawing layers.

(e) Roads and drainage features shall be in separate drawings layers.

(2) Letter from the geotechnical engineer indicating the roads are constructed in general accordance with the project report. Any deviations from the report shall be noted in the letter.

(3) All easements must be listed on the as-builts and subdivision plat.

(4) For roads with between 0.5% and 1.0% slope provide as-built plans with the plan, profile, and road cross sections. The road cross sections shall indicate elevations at the gutter lines, center of travel lane, and road center every 50 feet.

(5) Pressure test results for all water mains and wastewater force mains. Test results

shall be certified by the Engineer of Record.

(6) Flow test results for all installed fire hydrants. Flow tests shall be performed under the supervision of a City Inspector and the results certified by the Engineer of Record.

(7) Low-pressure test results for wastewater gravity sewers. Test results shall be certified by the Engineer of Record.

(8) 2 USB drives containing Closed Circuit Television (CCTV) inspection video and CCTV Contractor's Log for gravity sewer services and gravity sewer mains. CCTV submittal shall be in accordance with the requirements of *Chapter D.8.K*. The Engineer of Record shall review the CCTV video and inspection report for any deficiencies prior to submitting to the City.

(9) 2 USB drives containing Closed Circuit Television (CCTV) inspection video and CCTV Contractor's Log for storm drains. CCTV submittal shall be in accordance with the requirements of *Chapter D.8.K.* The Engineer of Record shall review the CCTV video and inspection report for any deficiencies prior to submitting to the City.

(10) Manhole vacuum test results for wastewater gravity sewers. Test results shall be certified by the Engineer of Record.

(11) Spark test results for epoxy coated manholes and wet wells.

(12) Pump Stations - For projects involving wastewater pump stations, the following additional items shall be provided:

a. 1 draft digital and hard copy of Pump Station Record Drawings for review.

b. All electrical schematics, drawdown test results, and float level settings laminated and mounted inside the control panel door.

c. Complete list of supplied spare parts as specified in these standards.

d. Operation and Maintenance Manuals:

(a) Manuals shall be specific to the equipment supplied.

(b) Provide factory pump curves for installed pumps.

(c) Manuals applicable to many different configurations and which require the operator to selectively read portions of the instructions will not be accepted.

(d) The equipment model that the manual applies to shall be indicated by

an arrow.

(e) Table of contents specific to each manual.

(f) At the beginning of each manual, provide a description of the equipment to include model numbers, purchase order numbers, serial numbers, motor information, and performance and design criteria.

(g) Correlate manuals with approved shop drawings and include the following minimum information:

1. Parts list, including recommended spare parts.
2. Guarantees/Warranties.
3. Provide a maintenance and lubrication schedule to be a summary of all preventative maintenance and lubrication.
4. Address and telephone numbers of the source for repairs, spare parts, and service.
5. Detailed descriptions of operating procedures for the item of equipment specifically written for this installation, including start-up and shut- down procedures.
6. Equipment performance specifications, including pump curves and drawdown test data.
7. Results of start-up and any further recommendations resulting from start-up.

(h) Upon Council approval, the Developer will transfer the pump station electrical service account to the City.

(13) If any items are determined to be missing or if corrections are required, the City will provide notification to the Engineer of Record.

(14) Please allow a minimum of 7 business days for review and approval of the Final Inspection package.

(15) Upon notification of approval, the Engineer of Record shall schedule a Final Inspection with the City Inspector. A minimum of 7 business days shall be allowed for scheduling. The Engineer of Record, Developer's Contractor, City Inspector, and representatives from the City's Water Distribution and/or Wastewater Collection Department(s) shall be in attendance, at a minimum.

(16) Upon completion of the Final Inspection, the City's Inspector will prepare a

punch list of items to be corrected by the Developer. The punch list will be issued to the Engineer of Record.

(17) To ensure all punch list items have been satisfactorily addressed by the Developer, there will be a final walk through to confirm any deficiencies have been corrected.

(18) After the Final Inspection, the Engineer of Record shall submit 1 digital and hard copy of revised Record Drawings for final approval to the City Engineering Department.

3. Final Inspection Distribution Projects: Upon completion of construction and prior to scheduling the Final Inspection, the Engineer of Record shall submit a Final Inspection package to the City Engineering Department. The Final Inspection package shall include the following items:
   (1) 1 draft digital PDF, DWG file, and hard copy of Record Drawings for review. Record Drawings shall be prepared in accordance with City requirements.
   (2) All easements must be listed on the as-builts and subdivision plat.
   (3) Pressure test results for all water mains and wastewater force mains. Test results shall be certified by the Engineer of Record.
   (4) Low-pressure test results for wastewater gravity sewers. Test results shall be certified by the Engineer of Record.
   (5) 2 USB drives containing Closed Circuit Television (CCTV) inspection video and CCTV Contractor's Log for gravity sewer services and gravity sewer mains. CCTV submittal shall be in accordance with the requirements of *Chapter D.8.K.* The Engineer of Record shall review the CCTV video and inspection report for any deficiencies prior to submittal to the City.
   (6) 2 USB drives containing Closed Circuit Television (CCTV) inspection video and CCTV Contractor's Log for storm drains. CCTV submittal shall be in accordance with the requirements of *Chapter D.8.K.* The Engineer of Record shall review the CCTV video and inspection report for any deficiencies prior to submittal to the City.
   (7) Manhole vacuum test results for wastewater gravity sewers. Test results shall be certified by the Engineer of Record.
   (8) Spark test results for epoxy coated manholes and wet wells.

(9) If any items are determined to be missing or if corrections are required, the City will provide notification to the Engineer of Record.

(10) Please allow a minimum of 7 business days for review and approval of the Final Inspection package.

(11) Upon notification of approval, the Engineer of Record shall schedule a Final Inspection with the City Inspector. A minimum of 7 business days shall be allowed for scheduling. The Engineer of Record, Developer's Contractor, City Inspector, and representatives from the City's Water Distribution and/or Wastewater Collection Department(s) shall be in attendance, at a minimum.

(12) Upon completion of the Final Inspection, the City's Inspector will prepare a punch list of items to be corrected by the Developer. The punch list will be issued to the Engineer of Record.

(13) To ensure all punch list items have been satisfactorily addressed by the Developer, there will be a final walk through to confirm any deficiencies have been corrected.

(14) After the Final Inspection, the Engineer of Record shall submit 1 digital and 1 hard copy of revised Record Drawings for final approval to the City Engineering Department.

4. For Service Only Projects: Due to the smaller scope of service only projects, fewer inspection days are typically necessary. It is possible that the Preconstruction Meeting and Final Inspection could occur on the same day.

(1) While it may not be practical to submit all required closeout items prior to Final Inspection, all required items must be submitted and approved by the City prior to final approval and acceptance of the new service.

(2) Service only project closeout requirements outlined below will be communicated in writing to the Developer, Engineer of Record, and Contractor by the City Inspector during the Preconstruction Meeting.

(3) For service only projects, Record Drawings shall be updated copies of the City stamped "Approved for Construction" construction plans submitted by the Engineer of Record and shall be updated to reflect actual installed infrastructure.

(4) For wastewater service only projects, an open trench inspection of infrastructure installed in the public right-of-way or City of Sumter easement is required.

E. **Council Submission Package.**

1. A council submission package is required for all subdivisions and main extension projects. The following items are required to be submitted to the City Engineering Department for Council submission. See below for submission requirements due to ADA electronic document requirements
   (1) Letter of Credit – signed copy
   (2) Maintenance Guaranty – signed and unsigned copy
   (3) Deed of Dedication – signed and unsigned copy
   (4) Easement Forms – signed and unsigned copy
   (5) Title Certificate – signed and unsigned copy
   (6) Owner's affidavit – signed and unsigned copy
   (7) Right of Way Plat – unrecorded copy
   (8) Contract details for water lines, sewer lines, roads, and sidewalks including dollar amounts and lengths of infrastructure.
2. Legal Documents
   (1) Affidavit of Title Water – Establishes the Developer (Grantor) as the possessor of the title of the water utility infrastructure assets to be transferred to the City of Sumter (Grantee).
   (2) Affidavit of Title Wastewater – Establishes the Developer (Grantor) as the possessor of the title of the wastewater utility infrastructure assets to be transferred to the City of Sumter (Grantee).
   (3) Bill of Sale Water – Conveys ownership of the water utility infrastructure to the City of Sumter.
   (4) Bill of Sale Wastewater - Conveys ownership of the wastewater utility infrastructure to the City of Sumter.
   (5) Maintenance Guaranty - Water – Establishes a two-year maintenance period for repair of any deficiencies in the water utility infrastructure at the expense of the Developer.
   (6) Maintenance Guaranty - Wastewater – Establishes a 2-year maintenance period for repair of any deficiencies in the wastewater utility infrastructure at the expense of the Developer.
   (7) Maintenance Guaranty - Roads and sidewalks– Establishes a 2-year maintenance

period for repair of any deficiencies in the road infrastructure at the expense of the Developer.

(8) Pump Stations – For projects involving wastewater pump stations, the following additional legal documents shall be provided:

a. Affidavit for Transfer of Real Property - Establishes the Grantor as the possessor of the title of the real property to be transferred to the City of Sumter (Grantee).

b. Title to Real Estate – Conveys ownership of the real property from the Grantor to the City of Sumter (Grantee).

c. Affidavit for Exempt Transfer – Establishes the deed as being exempt from the deed recording fee because it is a transfer to a political subdivision of the State.

3. Performance Guaranty.

(1) A Performance Guaranty is only allowed to be used for subdivision roads.

(2) The Performance Guaranty will be a binding agreement between Council and developer/subdivider. The agreement will be accompanied by a Letter of Credit in an amount equal to 150% of the cost of the required improvements as certified by the City Engineer or City Manager to enter into a Performance Guaranty with the developer/subdivider.

(3) The Performance Guaranty must be accepted by Council and must include a specific and satisfactory date for the completion of the roads. In no case shall a Performance Guaranty be accepted for more than 2 years. The date of completion will be at least 3 months prior to the expiration of the financial instrument accepted by Council.

(4) When the improvements have been completed and approved for conformity, and accepted by Council with the appropriate Maintenance Guaranty, the financial instrument and Performance Guaranty shall be released and returned.

(5) In the event the developer/subdivider fails to construct the required improvements and have them accepted in time indicated on the Performance Guaranty, the financial instrument shall be forfeited to the City to be used for the completion of the improvements. A Performance Guaranty will initially be accepted for a maximum time of 2 years. The time frame and it associated financial instrument

may only be extended by Council after the developer/subdivider has demonstrated hardship due to an act of God.

(6) The successful conclusion of the Performance Guaranty shall include the automatic initiation of the Maintenance Guaranty and Council action to accept the improvements.

(7) Building permits may be issued during the Performance Guaranty process provided the Final Plat has been approved, recorded, and proper applications with required fees have been submitted. However, no Certificate of Occupancy (C.O.). shall be issued until all the improvements are in place, inspected, accepted by Council, and Maintenance Guaranty is in place.

4. Easements.
   (1) The Developer will record all easements. Copies of recorded easements will be emailed to the City Engineering Department.
   (2) Easement Agreement – As an instrument of conveyance, prepare and submit a City Easement Agreement.
5. Right of Way Plat shall be submitted with Council Submission package but cannot be recorded until after the package has received Council approval.
6. All documentation must be received and approved by City Engineering and Planning prior to being eligible to go before Council. 5 business days are required to review and approve the Council Submission Package. Once all changes have been made and approved, City Administration will review for being placed on the next Council agenda.

F. **Permit to Operate.**

1. Upon Council approval , the Developer and the Engineer of Record shall coordinate the submittal of a Permit to Operate package. The Engineer of Record shall review and certify that all items submitted as part of the Permit to Operate package are complete and meet the requirements of these standards.
2. For subdivisions and distribution projects, the Permit to Operate package shall include all the items listed below and shall be submitted to the City Engineering Department.
3. For service only projects, the Permit to Operate package may not include all of the items listed below. The required items will be communicated to the Developer and

the Engineer of Record by the City Inspector during the Preconstruction Meeting.

(1) Permit to Operate Package Items:

a. A letter from the engineer of record indicating all work for encroachment permits has been inspected and approved and the permit has been closed out.

b. Engineer of Record's Letter of Certification stating the project is complete and has been constructed in accordance with the stamped approved plans by the City.

c. Bacteriological sample test results from an SCDES certified laboratory. Test Results must be less than 30 days old.

d. Upon approval of the Permit to operate package the City Engineering Department will issue an O&M letter to the Engineer of Record. The Engineer of Record is required to make final package submission to SCDES for issuance of Permit to Operate.

G. **Infrastructure Capacity .**

1. Once infrastructure is transferred to the city for ownership and maintenance, the City has the sole use of the infrastructure and will only guarantee capacity of the infrastructure for the development, or phase of development, that has paid tap fees in full, continuously pays the minimum monthly water and sewer bill, and has active development plans approved by the City. The City has sole discretion in disbursement of infrastructure capacity regardless of the entity providing the initial capital investment to upgrade or install any infrastructure within the development or offsite.

H. **Project Cancellation.**

1. Any project without "Activity" by the Owner, Developer, the Engineer of Record or the Developer's Utility Contractor for a period of 12 months, concerning intent to proceed with the project, shall be canceled by the City of Sumter and any Ability to Serve or Willingness to Serve Letters issued by the City for utility service shall be considered withdrawn.

(1) Items considered "Activity" include plan submittals, payment of fees, meetings with City Engineering or Public Works Staff, written correspondence concerning

design, submittal of permit applications, water construction activities, and/or wastewater construction activities.

(2) Items not considered "Activity" are submittals to other municipal planning departments or review boards, telephone calls, and/or correspondence with other permitting agencies

APPENDICES

APPENDIX 1 – FLOOD DAMAGE PREVENTION ORDINANCE (ORDINANCE #2791)

APPENDIX 2 – STORMWATER ORDINANCE (ORDINANCE #2469)

APPENDIX 3 – SEWER USE ORDINANCE (ORDINANCE #2716)

APPENDIX 4 – CITY OF SUMTER BACK FLOW & CROSS CONNECTION POLICY MANUAL

APPENDIX 5 – SUMMARY OF UDO AMENDMENTS

(This page Intentionally Left Blank)

Ordinance No. 2791

Flood Damage Prevention Ordinance

City of Sumter, South Carolina

Adopted by Sumter City Council

September 6, 2022

Ordinance No. 2469

An Ordinance Amending and Restating Ordinance 2251, as Previously Amended, Which Established Stormwater Management and Sediment Control Regulations, Procedures, Fees, Penalties, and Other Matters Related Thereto For the City of Sumter, South Carolina

Adopted by Sumter City Council

August 6, 2016

Ordinance No. 2716

An Ordinance Amending Article III of Chapter 98 ("Utilities") of the City Code Concerning Sewage and Sewage Disposal

Adopted by Sumter City Council

December 1, 2020

City of Sumter Back Flow & Cross Connection Policy Manual

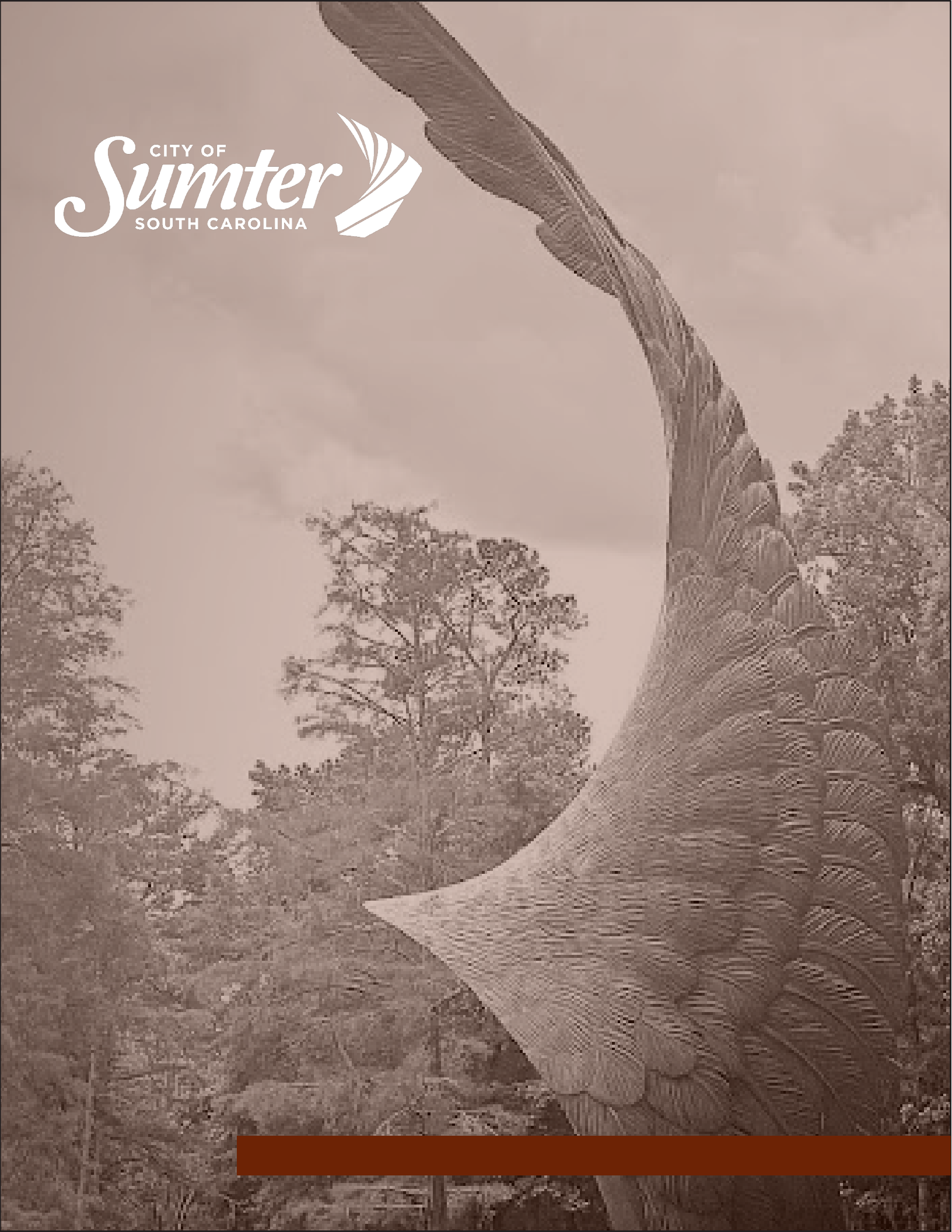
A Policy to protect the City of Sumter from the backflow or back-siphoning of pollutants or contaminants that may be present within its customer's water distribution system, to eliminate or control existing cross connections between its customers' potable and non-potable water systems, and to prevent the contamination or pollution of the City of Sumter's water system by establishing an ongoing maintenance program for cross connections

Enacted by City of Sumter

January 1, 2025

Summary of Amendments

No.	Case No.	Summary Description	Sections Amended	Date of Final Council Action	Ord. No.
N/A	N/A	Initial Adoption	N/A	9/15/2026	2911


CITY OF
Sumter
SOUTH CAROLINA