

**Babcock Ranch Community Design and
Specification Manual**

Vol. 3 Babcock Ranch District Lands

Owner:

**Babcock Ranch Community Independent Special District
42850 Crescent Loop
Babcock Ranch, FL 33982**

May 2020

VOL. 3 BABCOCK RANCH DISTRICT LANDS
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3.1 DISTRICT LANDS

3.1.1 GENERAL

All lands proposed for development must be suitable for the various purposes proposed in the request for approval. In addition to the standards contained in this volume, the developer must demonstrate to the satisfaction of the District for all purposes consistent with Chapter 2007-306, Laws of Florida, as amended, and any other authority granted pursuant to any other agreements that the proposed development is specifically adapted and designed for the uses anticipated, including lot configuration, access and internal circulation, and that the development will be consistent with the criteria prescribed in the standards set forth in the Master Development Order, Incremental Development Orders, Charlotte County Babcock Overlay Zoning District Land Development Regulations (BOZD), Sierra Club Agreement, Builders Manual, Babcock Community Pattern Book, the ACOE Permit SAJ 2006-6656 (IP-MJD), and the SFWMD ERP Permit 08-00004-S-05. The developer must also demonstrate that the proposed development complies with all provisions of the Babcock Ranch Community Design and Specification Manual (DSM), this volume, and other laws and regulations, as applicable.

The standards and specifications in the following volumes and sections shall constitute and be designated as the "Babcock Ranch Community Design and Specification Manual,"(DSM) and may also be cited as the "Babcock Ranch Standards and Specifications."

3.1.2 MONUMENTS

- 3.1.2.1 Concrete monuments four (4) inches square, twenty-four (24) inches long containing a metal rod as specified in F.S. section 177.031 shall be set at all street corners, at all points where the street lines intersect and the exterior boundaries of the subdivision, and at angle points and points of curve in each street. These location requirements are in addition to those specified by F.S. section 177.091, (7), (8). The top of the monument shall have the point of reference marked thereon to identify properly the location and shall be set flush with the finished grade.
- 3.1.2.2 Two (2) permanent bench marks with identification as to number, location, type, elevation and datum shall be set by the surveyor on or near the site and shown with the same information on the record plat.
- 3.1.2.3 A stable, permanent and accessible elevation reference shall be established on or within one hundred (100) feet of all permitted discharge structures no later than the submission of the stormwater certification report. The location of the elevation reference must be noted within the stormwater certification report.

3.1.3 ROADWAY AND PARKING LOT CONSTRUCTION

3.1.3.1 General

This Section provides the standards, procedures, and guidelines for the design and construction of all roadways and parking areas within the Babcock Ranch Community.

3.1.3.2 Intent of Drawings and Specifications

The following Specification is intended for use in the design, selection of materials, and construction of sidewalks, driveways, streets, pathways, parking lots, concrete gutter, curb elements, and traffic separator, etc. These construction items shall meet the requirements of the District and the Florida Department of Transportation (FDOT).

3.1.3.3 (FDOT) Governing Specifications

- A. Unless otherwise specified, all construction shall conform to the current “Florida Department of Transportation Standard Specifications for Road and Bridge Construction” (FDOT Standard Specifications) and the current edition of the FDOT “Standard Plans for Road Construction”.
- B. All streets must be designed, constructed and improved in accordance with the DSM set out in this Section. In addition, the following standards and criteria will be applicable: American Association of State and Highway Transportation Officials (AASHTO) *A Policy on Geometric Design of Highways and Streets*, as modified by Florida Department of Transportation (FDOT) *Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways* (Florida Greenbook), FDOT Standard Plans for Road Construction, FDOT Drainage Manual and FDOT Standard Specifications, current editions, with supplements, and such other applicable publications, editions and amendments as may be adopted by the state department of transportation, and sound engineering judgment. Any construction on State facilities must be done in accord with applicable State statutes and regulations.

3.1.3.4 Design Standards

3.1.3.4.1 Spine Roads

- A. Master plan of spine roads – ingress and egress and through traffic must be designed to consider the masterplan of spine roads (arterial roads). Developer shall maintain thru-ways or incorporate spine roads as previously planned and identified in the Phases & Spine Roads Exhibit into their design to ensure the proposed development conforms to the Master Plan.
- B. The roadways between the Town Center, the Villages and Hamlets shall be designed as parkways so that there are no cross intersections, other than limited access driveways, for vehicular traffic in the areas between the designated Town Center, Villages or Hamlets respectively.
- C. Residential driveway access on spine roads are prohibited.

3.1.3.4.2 Street Design

3.1.3.4.2.1 Design Speed

Selection of an appropriate design speed must consider the anticipated operating speed, topography, existing and future adjacent land use, and functional classification. All roads shall be designed to accommodate the minimum design speed of 35 mph, with a posted 30 mph and 25 mph where golf carts are used, unless a variance is granted by the District in accordance with FDOT and AASHTO Standards. Additionally, during the night time hours (sunset to sunrise) speeds on all internal collector roads within the BOZD shall be decreased by 10 miles per hour below the posted speed limit; but in no event, will the night time speed limit be less than 25 miles per hour, with the exception of limiting speed from the northern most hamlet to the northern boundary of the BOZD to 20 mph at night. This reduced speed limit shall be subject to Florida Department of Transportation rules and regulations. Such reduced nighttime hours shall be posted by Owner on all speed limit signs.

3.1.3.4.2.2 Right-of-way

All roads and streets established and constructed in accordance with this volume must have minimum right-of-way widths or roadway easements complying with the requirements of Table 1.

Table 1. Right of Way Width Requirements

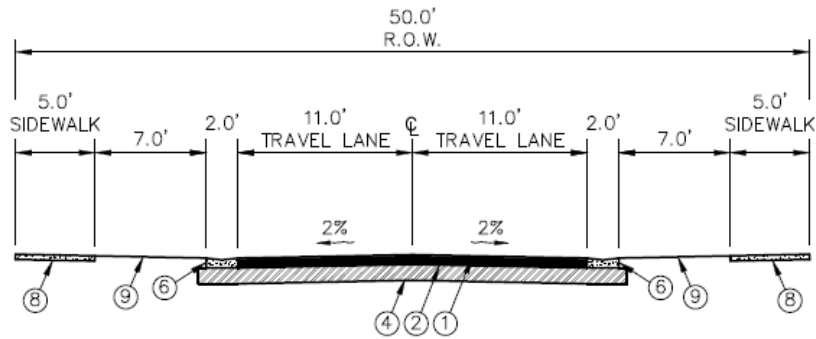
Street Type	Minimum Right-of-way Width
Arterial/Collector (Spine Road)	120' + 10' P.U.E. each side
Arterial/Collector (Other)	100' + 10' P.U.E. each side
Collector	80' + 10' P.U.E. each side
Local	50' + 10' P.U.E. each side
One-way Local	40' + 10' P.U.E. each side
Alley	20' + 4' P.U.E. each side

3.1.3.4.2.3 Typical Sections

All roadway improvements shall meet the minimum requirements given in Table 2 and be in concurrence with the additional tables in this Section. Typical sections are detailed cross section depictions of the roads principal elements that are standard between certain station or milepost limits. These sections are the basis for construction details and information shown on the various plan sheets.

Table 2. Typical Section Minimum Requirements

Street Type	Lane Width	Median Width	Bike Lane	Shoulders	Sidewalks
	(ft)	(ft)	(ft)	(ft)	(ft)
One-way Alley	10	N/A	N/A	N/A	N/A
Alley	10	N/A	N/A	N/A	N/A
One-way local	11	N/A	N/A	N/A	5
2-lane local	11	N/A	N/A	N/A	5
2-lane collector/arterial	11	N/A	4	N/A	5
4-lane collector/arterial	11*	24	5	10	10
6-lane collector/arterial	11*	24	6	10	10

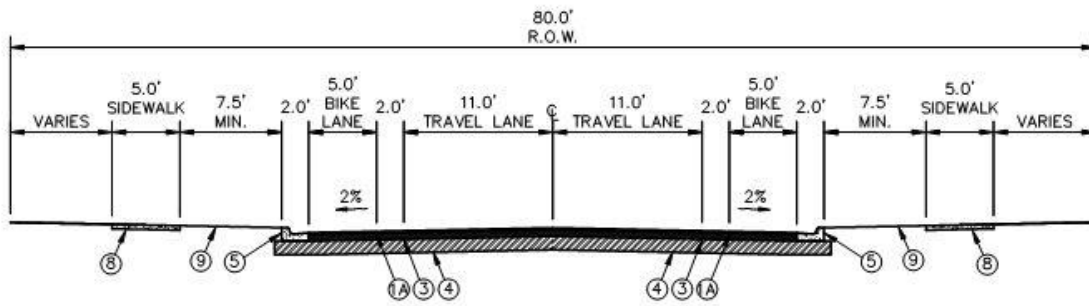


TYPICAL LOCAL ROAD

N.T.S.

KEYNOTES (X): (NOT ALL KEYNOTES PERTAIN TO ALL TYPICAL SECTIONS)

- ① 1-1/2" TYPE SP-9.5 OR TYPE SP-12.5 ASPHALTIC CONCRETE (FDOT SPECIFICATION SECTION 334)
- ①A 1-1/2" TYPE SP-12.5 PLUS 1" TYPE SP-9.5 ASPHALTIC CONCRETE (FDOT SPECIFICATION SECTION 334)
- ② 6" LIMEROCK BASE, LBR 100 MIN. (FDO SPECIFICATION SECTION 200)
- ③ 8" LIMEROCK BASE, LBR 100 MIN. (FDOT SPECIFICATION SECTION 200)
- ④ 12" TYPE B STABILIZED SUBGRADE, LBR 40 MIN. (FDOT SPECIFICATION SECTION 160)
- ⑤ TYPE 'F' CURB AND GUTTER (FDOT STANDARD PLAN 520-001)
- ⑥ DROP CURB (FDOT STANDARD PLAN 520-001)
- ⑦ TYPE 'A' CURB (FDOT STANDARD PLAN 520-001)
- ⑧ CONCRETE SIDEWALK, (3,000 PSI MIN. AND PER FDOT STANDARD PLAN 522-001)
- ⑨ GRASSING BY SOD AND SEED/MULCH. 2' SOD STRIPS SHALL BE USED ALONG ALL PAVEMENT EDGES, BACK OF CURBING, EACH SIDE OF SIDEWALK AND ON ALL SLOPES STEEPER THAN 6:1 RATIO'S. SEED AND MULCH SHALL BE USED FOR ALL OTHER SLOPES, MEDIAN AND DISTURBED AREAS.

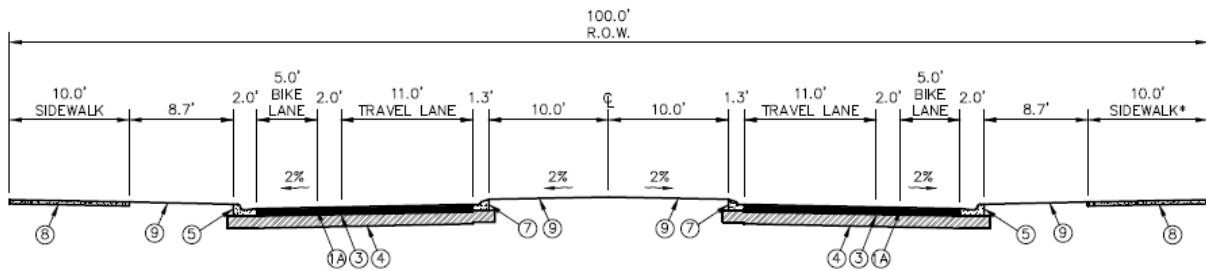


TYPICAL 2 LANE COLLECTOR ROAD

N.T.S.

KEYNOTES (X): (NOT ALL KEYNOTES PERTAIN TO ALL TYPICAL SECTIONS)

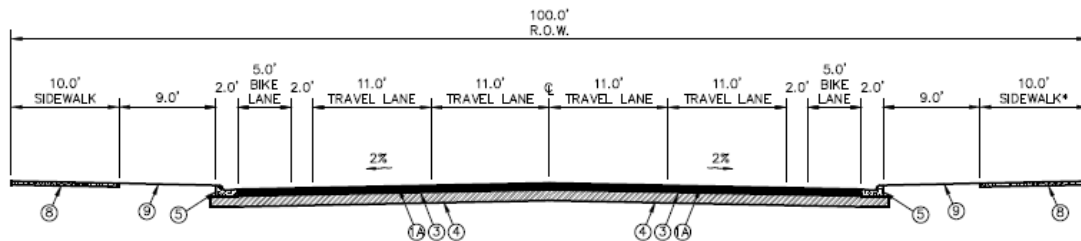
- ① 1-1/2" TYPE SP-9.5 OR TYPE SP-12.5 ASPHALTIC CONCRETE (FDOT SPECIFICATION SECTION 334)
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TYPICAL 2 LANE W/ MEDIAN
COLLECTOR ROAD
 N.T.S.

KEYNOTES (X): (NOT ALL KEYNOTES PERTAIN TO ALL TYPICAL SECTIONS)

- ① 1-1/2" TYPE SP-9.5 OR TYPE SP-12.5 ASPHALTIC CONCRETE (FDOT SPECIFICATION SECTION 334)
- ①A 1-1/2" TYPE SP-12.5 PLUS 1" TYPE SP-9.5 ASPHALTIC CONCRETE (FDOT SPECIFICATION SECTION 334)
- ② 6" LIMEROCK BASE, LBR 100 MIN. (FDO SPECIFICATION SECTION 200)
- ③ 8" LIMEROCK BASE, LBR 100 MIN. (FDOT SPECIFICATION SECTION 200)
- ④ 12" TYPE B STABILIZED SUBGRADE, LBR 40 MIN. (FDOT SPECIFICATION SECTION 160)
- ⑤ TYPE 'F' CURB AND GUTTER (FDOT STANDARD PLAN 520-001)
- ⑥ DROP CURB (FDOT STANDARD PLAN 520-001)
- ⑦ TYPE 'A' CURB (FDOT STANDARD PLAN 520-001)
- ⑧ CONCRETE SIDEWALK, (3,000 PSI MIN. AND PER FDOT STANDARD PLAN 522-001)
- ⑨ GRASSING BY SOD AND SEED/MULCH. 2' SOD STRIPS SHALL BE USED ALONG ALL PAVEMENT EDGES, BACK OF CURBING, EACH SIDE OF SIDEWALK AND ON ALL SLOPES STEEPER THAN 6:1 RATIO'S. SEED AND MULCH SHALL BE USED FOR ALL OTHER SLOPES, MEDIAN AND DISTURBED AREAS.

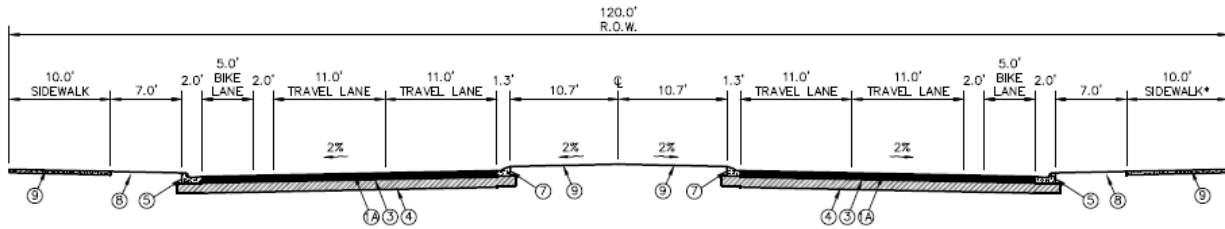


TYPICAL 4 LANE
COLLECTOR ROAD

N.T.S.

KEYNOTES (X): (NOT ALL KEYNOTES PERTAIN TO ALL TYPICAL SECTIONS)

- ① 1-1/2" TYPE SP-9.5 OR TYPE SP-12.5 ASPHALTIC CONCRETE (FDOT SPECIFICATION SECTION 334)
- ①A 1-1/2" TYPE SP-12.5 PLUS 1" TYPE SP-9.5 ASPHALTIC CONCRETE (FDOT SPECIFICATION SECTION 334)
- ② 6" LIMEROCK BASE, LBR 100 MIN. (FDO SPECIFICATION SECTION 200)
- ③ 8" LIMEROCK BASE, LBR 100 MIN. (FDOT SPECIFICATION SECTION 200)
- ④ 12" TYPE B STABILIZED SUBGRADE, LBR 40 MIN. (FDOT SPECIFICATION SECTION 160)
- ⑤ TYPE 'F' CURB AND GUTTER (FDOT STANDARD PLAN 520-001)
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TYPICAL 4 LANE W/ MEDIAN
COLLECTOR ROAD
N.T.S.

KEYNOTES (X): (NOT ALL KEYNOTES PERTAIN TO ALL TYPICAL SECTIONS)

- ① 1-1/2" TYPE SP-9.5 OR TYPE SP-12.5 ASPHALTIC CONCRETE (FDOT SPECIFICATION SECTION 334)
- ①A 1-1/2" TYPE SP-12.5 PLUS 1" TYPE SP-9.5 ASPHALTIC CONCRETE (FDOT SPECIFICATION SECTION 334)
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3.1.3.4.2.4 Minimum grade of streets

Minimum grade of streets with:	Cross-Slope
Crowned curb and gutter section	2.0%
Inverted crown section	2.0%
Open drainage section (no curb)	2.0%

3.1.3.4.2.5 Material and Specifications

All construction undertaken to widen existing roadways or to provide turn lanes, acceleration lanes or deceleration lanes shall use the same subgrade, base, and paving materials as the existing roadway. For all new roadway construction, the following standards and criteria shall apply:

3.1.3.4.2.5.1 Arterial/Collector roads

The following provisions are in addition to those set forth in Section 3.1.3.3.

- A. Pavement width. Required pavement widths must provide for on-road or off-road bikeways and will depend on the type of street drainage planned. Typical median width and representative cross sections are shown in Section **Error! Reference source not found.**. Cross-sectional elements such as median width, lane width and shared use path width may be revised consistent with the standards and criteria in the Florida Greenbook. Deviations from this publication are subject to approval of the District on District -maintained roadways and on privately maintained roadways.
- B. Subgrade. Twelve-inch thick (minimum) stabilized subgrade LBR 40. If the LBR value of the in-situ soil is less than 40, the subgrade must be stabilized in accordance with section 160 of the FDOT standard specifications.
- C. Base. Compacted limerock of a minimum thickness described in the sections listed in 3.1.3.4.2.3 shall provided for the intended use. An alternative design will be reviewed by the District for structural and serviceability analysis comparison with limerock.
- D. Wearing surface. Two and one-half inch asphaltic concrete of FDOT Type SP-12.5 plus one inch of SP-9.5 in conformance with the provisions of section 334, FDOT specifications is required for the wearing surface course(s). The wearing surface for turn lanes that are added to existing roadways must match the materials and surface of the existing roadway. However, the applicant may submit a request for variance in accord with Volume II, Section 2.1.4 for an alternative design, including but not limited to Portland cement concrete. The design will be reviewed by the District for structural and serviceability analysis comparison with asphaltic concrete.

3.1.3.4.2.5.2 Major arterial/collector roads

The following provisions are in addition to those set forth in Section 3.1.3.3.

- A. Pavement width. Required pavement widths must provide for on-road or off-road bikeways and will depend on the type of street drainage planned. See Section **Error! Reference source not found.** Cross-sectional elements such as median width, lane width, and shared use path width may be revised consistent with the standards and criteria in the Florida Greenbook. Deviations from this publication are subject to approval of the District on District -maintained roadways and on privately maintained roadways.
- B. Subgrade. Twelve-inch thick (minimum) stabilized subgrade LBR 40. If the LBR value of the in-situ soil is less than 40, the subgrade must be stabilized in accordance with section 160 of the FDOT standard specifications.
- C. Base. Compacted limerock of a minimum thickness described in the sections listed in 3.1.3.4.2.3 shall provided for the intended use. The design will be reviewed by the District for structural and serviceability analysis comparison with limerock.
- D. Wearing surface. One and one-half inch asphaltic concrete of FDOT Type SP-12.5 plus one inch of Type SP-9.5 in conformance with the provisions of section 334, FDOT specifications is required for the wearing surface course(s). The wearing surface for turn lanes that are added to existing roadways must match the materials and surface of the existing roadway. However, the applicant may submit a request for a variance to the District in accord with Volume II, Section 2.1.4 for an alternative design, including but not limited to Portland cement concrete. The design will be reviewed by the District for structural and serviceability analysis comparison with asphaltic concrete.

3.1.3.4.2.5.3 Minor arterial/collector roads

The following provisions are in addition to those set forth in Section 3.1.3.3.

- A. Pavement width. Required pavement widths must provide for on-road or off-road bikeways and will depend on the type of street drainage planned. See Section **Error! Reference source not found.** Cross-sectional elements such as median width, lane width, and shared use path width may be revised consistent with the standards and criteria in the Florida Greenbook. Deviations from this publication are subject to approval of the District.
- B. Subgrade. Twelve-inch thick (minimum) stabilized subgrade LBR 40. If the LBR value of the in-situ soil is less than 40, the subgrade must be stabilized in accordance with section 160 of the FDOT standard specifications.

- C. Base. Compacted limerock of a minimum thickness described in the sections listed in 3.1.3.4.2.3 shall provided for the intended use. The design will be reviewed by the District for to structural and serviceability analysis comparison with limerock.
- D. Wearing surface. One and one-half inch asphaltic concrete of FDOT Type SP-9.5 in conformance with the provisions of section 334, FDOT specifications is required for the wearing surface course(s). The wearing surface for turn lanes that are added to existing roadways must match the materials and surface of the existing roadway. However, the applicant may submit a request for a variance in accord with Volume II, Section 2.1.4 for an alternative design, including but not limited to Portland cement concrete. The design will be reviewed by the District for structural and serviceability analysis comparison with asphaltic concrete.

3.1.3.4.2.5.4 Local and access streets

The following provisions are in addition to those set forth in Section 3.1.3.3.

- A. Pavement width. Required pavement widths must provide for on-road or off-road bikeways and will depend on the type of street drainage planned. Pavement widths will be as indicated in the DSM relating to bikeways and associated roadway widths. For the roadway to be accepted for maintenance by the District, the provisions of this Section must be met.
- B. Subgrade. Twelve-inch thick (minimum) stabilized subgrade LBR 40. If the LBR value of the in-situ soil is less than 40, the subgrade must be stabilized in accordance with section 160 of the FDOT standard specifications.
- C. Base. Compacted limerock of a minimum thickness described in the sections listed in 3.1.3.4.2.3 shall provided for the intended use. The design will be reviewed by the District for to structural and serviceability analysis comparison with limerock..
- D. Wearing surface. For roads to be publicly maintained. One-and-one-half-inch asphaltic concrete of FDOT Type SP-9.5 or FDOT Type SP-12.5 in conformance with the provisions of section 334, FDOT specifications is required for the wearing surface course(s) and as outlined in Section 2.6.3. However, the applicant may submit a request for variance in accord with Volume II, Section 2.1.4 for an alternative design, including but not limited to Portland cement concrete. The design will be subject to structural analysis for comparison with asphaltic concrete. With District approval and receipt of assurance of completion in a form approved in advance by the District, the second course may be placed after substantial buildout of the project.

3.1.3.4.2.5.5 Sidewalks/Bike Facilities

It is the expressed policy of the Babcock Ranch Community that sidewalks and bike facilities are an integral part of the community's transportation system. Therefore, all site development projects will be required to install sidewalks and bike facilities as part of any site development plan. The requirements of this Section may be waived through the variance application process by the District engineer for projects of four (4) standard size building lots or less, or if the District engineer determines that a sidewalk or bike facility is not required because adequate facilities already exist.

- A. Standards and Specifications: Sidewalks will be designed to meet or exceed current FDOT and District standards with respect to the base preparation, slab thickness, joint locations, finish, drainage, and all other applicable specifications. All designs and installations will meet or exceed the Americans With Disabilities Act (ADA) specifications and guidelines. The minimum sidewalk width shall be five (5) feet, except for those cases where state law may require a different width.
- B. Exception and Modification: It is recognized that there will be situations that exist which affect the ability of a developer to comply with the requirements of this Section. Therefore, the District engineer may grant a variance from or approve an alternative to the requirements of this Section if, in the determination of the District engineer, some physical or topographical feature prevents or seriously restricts the capability of the sidewalk or bike facility to be included with the project.
- C. Crosswalks: Crosswalks shall meet FDOT Design Standards, current edition. Crosswalks shall be located at, but are not limited to, the following locations: at all mid-block pedestrian crossings, all pedestrian crossings where traffic does not have a stop condition, all spine road pedestrian crossings and pedestrian crossings directly adjacent to spine roads.

3.1.3.4.3 Intersection Design

Streets must be designed to intersect as nearly as possible at right angles. Intersections involving the juncture of more than two streets are prohibited. A minimum sight distance of 200 feet from every intersection and consistency with the Florida Greenbook requirements on all applicable roadways must be maintained on all intersecting streets. This requirement may not be construed to increase the minimum allowable intersection separation of 125 feet.

- A. The angle of intersection of intersecting streets must be in accordance with the requirements of the following table:

Angle of Intersection			
Street Type	Intersecting Street Type	Angle (degrees)	
		Minimum	Maximum
Local or access	Local or access	75	105
	Major or Minor Collector	80	100
	Principal or Minor Arterial	85	95
Major or Minor Collector	Major or Minor Collector	85	95
	Principal or Minor Arterial	85	95
Principal or Minor Arterial	Principal or Minor Arterial	85	95

- B. The inside edge of the pavement at street intersections must be rounded with a minimum radius as shown in the table below:

Minimum Edge of Pavement Radius at Intersecting Streets							
Street Type	Intersecting Street Type	Minimum Radius (feet)					
		Residential			Commercial/Industrial		
		Urban	Suburban	Non-Urban	Urban	Suburban	Non-Urban
Local	Local	10	25	25	15	30	30
	Major or Minor Collector	15	30	30	15	35	35
	Principal or Minor Arterial	20	40	40	20	45	45
Major or Minor Collector	Major or Minor Collector	25	40	40	20	50	50
	Principal or Minor Arterial	25	50	50	25	50	50
Principal or Minor Arterial	Principal or Minor Arterial	25	50	50	25	50	50

- C. Greater radii may be required where school buses will be routed or if an engineering study determines that traffic conditions warrant a larger radius. Application must include justification for use of minimum radii.

3.1.3.4.4 Cul-de-sac

Dead-end Streets, designed to be so permanent, must be closed at one end by a circular turnaround for vehicles and constructed according to the following standards:

- A. Diameter of pavement to inside edge of curb or edge of pavement must be a minimum of 90 feet outside diameter, and a maximum of 45 feet inside diameter.
- B. Diameter of right-of-way for curb and gutter section: 110 feet.
- C. The diameter of right-of-way for ditch and swale drainage must be a minimum of 130 feet.
- D. The island in the center of the circular turnaround may be paved solid, kept unpaved to preserve existing vegetation, or enhanced with additional vegetation, provided that vegetation does not cause a visual obstruction between two vertical feet and seven vertical feet inside of the back of curb or edge of pavement.
- E. All streets ending in a cul-de-sac that are over 250 feet long must have a standard "No Outlet" traffic sign installed at the street entrance and paid for by the developer.

3.1.3.4.5 Roundabouts

Roundabouts shall conform to the current edition of the National Cooperative Highway Research Program (NCHRP) Report 672 and the FDOT Design Manual, Chapter 213 unless otherwise approved by the District.

3.1.3.4.6 Parking

- A. Refer to Charlotte County Land Development Regulations, Section 3-9-51- Babcock Overlay Zoning District for parking requirements specific to development sub-districts.
 - B. All minimum widths of parking spaces shall not include gutter width.
 - C. 5% of all parking spaces used by the project as preferred parking for green vehicles. Clearly identify and enforce sole use by green vehicles. Distribute preferred parking spaces proportionally among various parking sections (e.g. between short-term and long-term spaces).

In addition, parking for green vehicles must meet one of the following two options for alternative fueling stations:

Option 1: Electric vehicle charging. Install electrical vehicle supply equipment (EVSE) in 2% of all parking spaces used by the project. Clearly identify and reserve these spaces for the sole use by plug-in electric vehicles. Parking spaces that include EVSE must be provided separate from and in addition to preferred parking spaces for green vehicles. The EVSE must:

1. Provide a level 2 charging capacity (208-240 volts) or greater
2. Comply with the relevant regional or local standards for electrical connectors, such as SAE Surface Vehicle Recommended Practice J1772, SAE Electric Vehicle Conductive Charge Coupler.
3. Be networked or internet addressable and be capable of participating in a demand-response program or time-of-use pricing to encourage off-peak charging.

Option 2: Liquid, gas, or battery facilities. Install liquid or gas alternative fuel fueling facilities or a battery switching station capable of refueling a number of vehicles per day equal to at least 2% of all parking spaces

New construction projects self-identifying as warehouses must meet one of the following options:

1. Alternative-Fuel Vehicles. Provide an on-site fleet with at least one-yard tractor that is powered by electricity, propane, or natural gas. Provide on-site charging or refueling stations for the vehicles. Liquid or gas refueling stations must be separately ventilated or located outdoors
 2. Reduced Truck Idling. Provide an electrical connection for at least 50% of all dock door locations to limit truck idling at the dock.
- D. Compact car parking may be allowed for thirty-five (35) percent of the required spaces and may be provided for up to one hundred (100) percent of the spaces in excess of the required number of spaces.

Compact car off-street parking requirements:

1. Shall be clustered in groups
2. Shall be designated for compact cars by use of signage or marking
3. Shall be located within easy access of an entrance

E. Off-street parking must conform to the following requirements:

Minimum individual parking space dimensions are as follows:

1. Disabled parking (all): Shall be in accordance with Florida Building Code – Accessibility as amended from time to time. The individual parking space dimensions do not preclude compliance with the Americans with Disabilities Act (ADA) of 1990, as amended.
2. Electric vehicle parking shall be located on the shortest route to the entrance but shall not precede required disabled parking.

3. Standard parking, high and low turnover parking lots:
 - a) 90-degree parking: 9 feet by 18 feet.
 - b) 30-, 45- or 60-degree parking: 9 feet by 18 feet.
 - c) Parallel parking: 8 feet by 22 feet.
4. Golf cart parking: 5 feet by 8 feet.
5. Compact car: 8 feet by 16 feet

F. On-street parking must conform to the following requirements:

The type of on-street parking selected should depend on factors including, but not limited to, adjacent existing and planned land use, traffic volume, and traffic operations. Acceptable on-street parking types are below:

1. Parallel parking (preferred type)
 - a) Minimum dimension of parking stall: 8 feet by 22 feet
 - b) Minimum width of adjacent travel lane: 12 feet
 - c) Adjacent Bike Lane
 - d) Does not include gutter
2. Angled parking (30- or 45-degree allowed)

When angled parking is proposed for on-street parking, back in angle parking should also be considered.

- a) Minimum dimension of parking stall: 9 feet by 18 feet
- b) Minimum width of adjacent travel lane: 13 feet (12 feet if bike lane present between travel lane and parking stall)

G. Delineation of spaces.

1. Paved parking lots:
 - a) Parking spaces must be delineated by all-weather painted lines, or thermoplastic striping, not less than four inches in width, centered on the dividing line between spaces.

- b) Parking spaces for persons with disabilities must be prominently outlined with blue paint and must be repainted when necessary to be clearly distinguishable as a parking space designated for persons who have disabilities. Signs must indicate the penalty for illegal use of the space.
- c) Parking spaces that abut a pedestrian walkway, required landscaping, or required open space must be provided with a parking block set two feet from the end of the parking space.

2. Unpaved parking lots:

- a) Parking spaces in unpaved parking lots must be delineated by placing a parking block two feet from the end of the parking space and centered between the sides of the space.
- b) If the space abuts a structure, the space may be indicated on the structure, in which case parking blocks are not required.
- c) Temporary parking lots. Individual spaces in temporary parking lots do not need to be delineated provided the end of each space and all aisles are clearly delineated with temporary posts and ropes.

H. Minimum parking aisle widths

Minimum aisle widths. Minimum aisle widths are as follows:

Angle of Parking	Aisle Width	
	One-Way (feet)	Two-Way (feet)
Parallel	12	20
30	12	24
45	12	24
60	18	24
90	22	24

- I. Parking angle. Parking must be developed throughout the site utilizing the same degree of angle. The mixture of one-way and two-way parking aisles, or different degrees of angled parking within any parking area is prohibited except:
 - 1. A single bay of parking provided along the perimeter of the Site may vary in design in order to maximize the number of spaces provided on-site.
 - 2. Parking design may vary between individual parking areas provided that the parking areas are physically separated from one another by buildings or a continuous landscape buffer a minimum of five feet in width. The District may approve a minimum number of vehicle access points to pass through the landscaped buffer.

J. Temporary parking facilities for residential projects

1. Temporary parking facilities in residential projects are acceptable for uses such as designated parking for model homes.
2. Such facilities shall require written approval by the District, through the ARC review process, prior to construction
3. Temporary parking facilities shall meet the requirements of Section 0.
4. Grading and drainage of the temporary parking facility shall not cause adverse impacts to adjacent property, such as adjacent lots or rights-of-way.
5. Temporary parking facilities may be located on residential lots with written approval from owner of lot.

K. Required parking spaces

1. All uses are required to provide off-street parking based on the project requirements unless the use is located in an area that qualifies as a shared use parking is available, in which case, the minimum required spaces for shared use parking projects must be demonstrated to meet the total parking requirements for all of the shared uses accessing that parking space. Shared uses spaces include off-street parking only. Each application shall demonstrate that the addition of commercial uses does not add required parking in excess of the existing shared spaces when all other permitted buildings utilizing the shared parking spaces are considered.
2. Parking for uses not specifically mentioned in this section must meet minimum parking requirements most similar to those being requested.

Use	Minimum Required Spaces	Minimum Required Spaces for Shared Use Parking
R1. Assisted Living Facilities	0.5 spaces per unit	0.4 spaces per unit
R2. Continuing Care Facilities	1.25 spaces per unit	1 space per unit
R3. Independent living facilities	1 space per unit	.5 spaces per unit
R4. Clubhouse/ancillary (not golf)	4 spaces per 1,000 sf of total floor area	3.5 spaces per 1,000 sf of total floor area
C1. Animal clinics	5 spaces per veterinarian plus 1 space per employee	4 spaces per veterinarian plus 1 space per employee
C2. Animal Kennels	5 spaces	N/A

Use	Minimum Required Spaces	Minimum Required Spaces for Shared Use Parking
C3. Automotive repair and service	3 spaces per service bay plus one space per employee	1 space per employee
C4. Banks and financial establishments	2 spaces per 1,000 square feet of total floor area	1.5 spaces per 1000 square feet of total floor area
C5. Bars/Cocktail Lounges/night clubs	25 spaces per 1,000 square feet of total floor area	10 spaces per 1000 square feet of total floor area
C6. Barbershops/Beauty Shops/ Massage Parlors	3 spaces per operator (share) minimum of 5 spaces	5 spaces
C7. Bed and Breakfast	1.2 spaces per rental unit	1.2 spaces per rental unit
C8. Amusement Attractions	10 spaces per device	10 spaces per device
C9. Car Washes	1.5 spaces per car stall	N/A
C10. Convenience food and beverage stores	5 spaces per 1000 square feet of total parking area and one space per 4 fuel pumps. Minimum of 5 spaces	N/A
C11. Daycare Centers	2 spaces per employee or 1 space per employee with short term parking for .5 spaces per employee and a drop off loop	1 space per employee
C12. Schools	Parking must be provided in compliance with state law	Parking must be provided in compliance with state law
C13. Funeral homes	1 space per 4 seats or 4 spaces per 250 square feet of chapel area, whichever is greater.	1 space per 4 seats or 4 spaces per 250 square feet of chapel area, whichever is greater.
C14. Golf Courses	6 spaces per hole	6 spaces per hole
C15. Health and Fitness Clubs	7 spaces per 1000 square feet of total floor area	4 spaces per 1000 square feet of total floor area
C16. Hotels and motels	1.2 spaces per rental unit	1.2 spaces per rental unit
C17. Manufacturing and Light Industrial	1.75 spaces per 1,500 square feet of total floor area	1.5 spaces per 1500 square feet of total floor area
C18 Meeting halls, clubs, and other group assembly	1 space per 100 square feet of total floor area	.5 spaces per 100 square feet of total floor area

Use	Minimum Required Spaces	Minimum Required Spaces for Shared Use Parking
C19. Miniature Golf	1.5 spaces per hole	1 space per hole
C20. Museums, art galleries, libraries, studios, and other similar uses	3 spaces per 1000 square feet of total floor area	2 spaces per 1000 square feet of total floor area
C21. Offices, excluding medical	1 space per 300 square feet of total floor area	1 space per 400 square feet of total floor area
C22. Medical Offices	4.5 spaces per 1000 square feet of total floor area	4 spaces per 1000 square feet of total floor area
C23. Places of worship	1 space per 3 seats	1 space per 6 seats
C24. Recreation facilities (indoor)	4 spaces per 1000 square feet of total floor area	3 spaces per 1000 square feet of total floor area
P1. Parks	1 space per acre up to the first 10 acres. And 1 space for each additional 10 acres plus parking required for other recreational uses	1 space per acre up to the first 10 acres plus parking required for other recreational uses
P2. Ball fields	10 spaces per field	10 spaces per field
P3. Swimming Pool	1 space per 250 sq. foot of pool area	1 space per 250 sq. foot of pool area
P4. Ball Courts	3 spaces per court plus one space per 3 spectator seats	3 spaces per court plus one space per 3 spectator seats
C28. Restaurants	14 spaces per 1000 square feet of total floor area including outdoor seating area	12.5 spaces per 1,000 square feet of total floor area including outdoor seating area
C29. Fast Food Restaurant	12 spaces per 1000 square feet of total floor area including outdoor seating	12 spaces per 1000 square feet of total floor area including outdoor seating
C30. Retail: Small Commodities	1 space per 250 square feet of total floor area with a minimum of 5 spaces including dead storage	1 space per 350 square feet of total floor area including dead storage
C31. Retail: Large products or commodities	2.5 spaces per 1000 square feet of total floor area; dead	1.5 spaces per 700 feet of total floor area; no parking is required for areas of the

Use	Minimum Required Spaces	Minimum Required Spaces for Shared Use Parking
	storage is calculated at 1 space per 1000 square feet	building used only as dead storage, and not available to the public
P5. Theaters, auditoriums, stadiums	1 space per 4 seats	1 space per 4 seats
C32. Warehouse	1 space per 1000 square feet of total floor area for the first 20,000 sq/ft; plus 1 space per 2000 square feet for the remaining square footage	1 space per 2000 square feet of total floor area
C33. Warehouse storage	1 space per 25 storage units with a minimum of 5 spaces	1 space per 50 storage units with no minimum
C28. Restaurants	14 spaces per 1000 square feet of total floor area including outdoor seating area	12.5 spaces per 1,000 square feet of total floor area including outdoor seating area

3.1.3.4.7 Bicycles

A. Bicycle Parking

1. All projects, except single family residential, having an off-street parking requirement of 20 spaces or more, shall provide bicycle parking spaces equal to ten percent of the total automobile parking space provided.
2. All bicycle parking must be provided at the ground level.
3. If the bicycle parking is placed in the public right-of-way, it shall not obstruct pedestrian walkways and shall be required to obtain a right-of-way use approval, encroachment, or maintenance agreement.

B. Bicycle Lanes

1. Bicycle lanes must have a minimum width of four feet of continuous pavement and the minimum width shall not include gutter width.
2. Bicycle lanes adjacent to parallel parking must have a minimum width of seven feet of continuous pavement. The minimum width may include the gutter width to be used as a traffic barrier.

3. Bicycle lanes shall be required for all arterial and collector roads.

3.1.3.4.8 Public Utility Easement

- A. All local and arterial/collector streets shall have a ten-foot-wide public utility easement (P.U.E.) on each side of the right-of-way. The P.U.E. may be used for power lines, telephone lines, fiber optics, cable television lines, and gas lines.
- B. All alley streets shall have a minimum four-foot-wide P.U.E. on each side of the right-of-way. The P.U.E. may be used for power lines, telephone lines, fiber optics, cable television lines, and gas lines.
- C. Encroachments of unauthorized uses are not permitted in P.U.E.'s. Proposed crossings through P.U.E.'s shall be limited and are subject to review and written approval by the District.
- D. In commercial districts only, P.U.E.s can be located within the right-of-way and/or under sidewalks, with district approval.

3.1.3.4.9 Variances

Variances and waivers may be granted in accordance with Rule 2.0(12) of the District's Rules of Procedure.

3.1.3.5 Stabilizing

Designated portions of the roadbed shall be stabilized in accordance with FDOT Section 160 to provide a firm and unyielding subgrade, having the required bearing value specified in the plans.

3.1.3.6 Rock Base

- A. The construction of a base course shall be done in accordance with FDOT Section 200.
- B. Acceptance and testing shall be done in accordance with FDOT Section 200. Copies of all completed compaction test results shall be furnished to the District prior to completion of the project.

3.1.3.7 Prime and Tack Coats for base courses

The application of bituminous prime and tack coats shall be done in accordance with FDOT Section 300.

3.1.3.8 Hot Bituminous Mixtures

- A. Refer to FDOT Section 320 for basic equipment and operational requirements for hot mix asphalt production facilities used in the construction of asphalt pavements and bases.
- B. The construction of hot mix asphalt pavements and bases shall be done in accordance with FDOT Sections 228, 231, 330, 334 and 337.

3.1.3.9 Asphalt Concrete

3.1.3.9.1 Superpave Asphalt Concrete

- A. The construction of cement concrete pavement shall be done in accordance with FDOT Section 334.
- B. Producers must meet the requirements of FDOT Section 320 for plant and equipment and the general construction requirements of FDOT Section 330.

3.1.3.9.2 Asphalt Concrete Friction Courses

- A. The construction of cement concrete pavement shall be done in accordance with FDOT Section 337.
- B. Producers must meet the requirements of FDOT Section 320 for plant and equipment and the general construction requirements of FDOT Section 330.

3.1.3.10 Cement Concrete Pavement

The construction of cement concrete pavement shall be done in accordance with FDOT Section 350.

3.1.3.11 Inlets, Manholes, and Junction Boxes

- A. Inlets, manholes, and junction boxes shall be constructed from reinforced concrete as shown in the FDOT Design Standards and the Construction Plans and shall conform to FDOT Section 425.
- B. Inlets, manholes, and junction boxes shall be located within easements or rights-of-way.

3.1.3.12 Pipe Culverts

Refer to FDOT Section 430 for material specifications and construction standards for pipe culverts.

3.1.3.13 Concrete Gutter, Curb Elements and Traffic Separator

- A. The construction of cement concrete gutter, curb elements, and traffic separators shall be done in accordance with the construction documents and FDOT Section 520.
- B. All curb and gutter intended to convey drainage shall be constructed per the construction documents and shall promote positive drainage to avoid ponding.

3.1.3.14 Concrete Sidewalk and Pavement

Concrete sidewalks and pavement shall be constructed in accordance with the construction documents and FDOT Section 522. Accessible sidewalk curb-cut ramps shall be constructed per FDOT Standard Plan 522-002.

3.1.3.15 Performance Turf

Please refer to FDOT Section 570 for all Performance Turf Specifications.

3.1.3.16 Fertilization

- A. Fertilizer delivers nutrients to plants to help them grow and stay healthy. Most fertilizers deliver the three most important nutrients – nitrogen, phosphorous, and potassium. It should be recognized by applicants of fertilizer that the Babcock Ranch Community supplies irrigation reuse water to the public within the Babcock Ranch Community. Irrigation Reuse Water is treated waste water that meets the state standard of reuse and is not a potable source of water. Irrigation reuse water, by nature of the treatment necessary, remains higher in nutrients (nitrogen and phosphorous) than natural water bodies, and can be used effectively to meet fertilizer needs for native plat types. The District has several agreements that contain limitations on fertilizer as all runoff of excess fertilizer will enter the Districts Stormwater Management System and affect the water quality of the District. The remainder of this section includes excerpts from the Sierra Club Agreement, the Charlotte County MDO, and the Lee County Settlement Agreement, and all fertilization should be consistent with all documents. Shall two documents conflict, the most stringent of the two should be followed.
- B. Fertilization will not be permitted during the summer rainy season except in response to special fertilization needs, including but not limited to grow -in or establishment of sod and new plant material establishment unless otherwise prohibited by Charlotte and/or Lee County.
- C. For established golf course greens and tees, the majority of fertilization shall be controlled release or non-chemical, foliar applied water-soluble fertilizer products, unless otherwise prohibited by Charlotte and/or Lee County. Quick release fertilizers may be applied as needed to tees and greens during grow-in and establishment or turf grass transition periods, except that no quick-release urea nitrogen products shall be applied at any time. At all times best management practices shall be utilized.

Controlled release fertilizers, or non-chemical water-soluble applied fertilizers, shall be required for all established lawns and landscaped areas. Quick release fertilizers shall be acceptable during grow-in or establishment of new sod, new sprigs, or plants materials, except that no quick-release urea nitrogen products shall be applied at any time, unless otherwise prohibited by Charlotte and/or Lee County.

3.1.3.17 Minimum Landscape Requirements for Mixed Use Residential Commercial

- A. General tree planting requirements shall be consistent with the Sierra Club Agreement, any requirements within the Charlotte County MDO as applicable, any requirements within the Lee County MPD as applicable, any requirements within the Lee County Settlement Agreement, and any requirements with any other agreements. In the event that two agreements conflict, the most stringent of the two shall apply:
 - 1. Use of native plants or other approved plant materials, with emphasis on drought tolerant species, shall be used to minimize the amount of turf grass within lawns and common areas, and plants selected shall be plant materials that could be used for landscaping using minimal water.
 - 2. There shall be no planting of invasive exotic plant materials.
 - 3. For every single-family lot, a minimum of one tree shall be planted in the front yard or in the right-of-way in front of the lot or street trees planted in or adjacent to the right of way with a minimum spacing of one tree every 60 feet on average.
 - 4. To reduce the overall effects of heat islands in developed areas all development which contains parking lots or roadways will be required to demonstrate a minimum 30 percent tree canopy coverage with a 10 year grow in period. At least 50% of the required canopy should be located internal to paved areas where appropriate to shade asphalt and reduce the heat island effect.

In addition to the canopy coverage requirements, the following perimeter landscaping requirements apply to projects requiring site plan review. The required planting listed herein can contribute to the required minimum tree canopy coverage requirements:

- 1. A minimum of one shrub per 10 linear feet of front property line shall be planted in a hedge row or otherwise clustered within the front yard.
- 2. For landscape buffer areas that serve as transition between intense uses and residential uses per BOZD Sec. 3-9-51 (c)(A)3. i.e, a minimum of one shrub per ten linear feet of property line shall be planted in a hedge row or otherwise clustered in the transitional landscape buffer area.
- 3. Substitution of trees for shrubs is acceptable at a rate of 1 tree per three shrubs.
- 4. The location of required plantings may be any of the following: in-ground planting areas, raised planters, or planter boxes.

5. In addition to the preceding provisions 1) through 4), wherever a parking lot abuts public rights-of-way along a front property line, a hedge, or durable non-vegetative barrier, or combination thereof, at least three feet in height, shall be placed along the entire length of the front property line, except within sight triangles. Wherever non-vegetative barriers are employed, one shrub or vine shall be planted for every eight linear feet, distributed evenly or in clusters.
6. All planting should consider runoff patterns of adjacent properties and should not impede flow patterns.
7. All plantings should consider existing and proposed utilities and roots should not interfere with proposed utilities.
8. No trees shall be proposed in the public utility easements.

B. Parking area requirements:

For parking constructed of impervious material, planter islands shall be constructed to interrupt rows of parking. The maximum number of parking spaces between planter islands is 10 spaces. Minimum dimension for a planter island is ten feet, exclusive of curbing. Each planter island must contain at least one tree maintained with a minimum six feet of clear trunk measured from the ground up.

- C. Planter islands may be alternatively used as a low impact development (LID) site enhancing feature. Any features placed within the planter islands will need to be explained in narrative form to the District. For emerging techniques or technologies, applicants are encouraged to submit research with the proposed LID enhancement technology. LID features in planter islands will be approved by the District at its sole discretion.
- D. Planter islands are not required for parking constructed of pervious material.

3.1.3.18 Traffic Signage

- A. For purposes of this section, “signs” are defined as traffic and navigation signage.
- B. All signs within the BRC shall conform to the BOZD, Sec. 3-9-51 (d)(J) and subsequent pattern books.
- C. For traffic signs proposed within ISD ROW, a right of way approval is required. No signs are permitted to be located within the Public Utility Easement (PUE).
- D. All highway signage shall conform to FDOT Section 700, Highway Signage, and the current edition of the Manual on Uniform Traffic Control Devices (MUTCD).
- E. The use of novelty signs as described in the Florida Greenbook, Chapter 15, Section C.3, is discouraged due to the inefficiency to reduce speed and volume of traffic on local roadways.

- F. Maximum allowable height. All traffic signs within the Project Site are limited to a maximum height of seven feet as measured from the ground at the sign base to the bottom edge of the sign panel, or as otherwise provided within the DSM.
- G. Minimum setback. All signs within residential zoning districts shall be located no closer than ten feet from the property line, unless otherwise noted below or as provided for within the DSM. When a property line encompasses a portion of the roadway, then the setback shall be no less than ten feet from the edge of the roadway, paved surface or back of the curb, as applicable, unless otherwise provided for in this Section.
- H. If the applicant is not the property owner, then a copy of a notarized authorization letter between the property owner or property manager and the applicant is required, specifically authorizing approval of the erection of a sign on the subject parcel.
- I. Double-faced signs shall be measured by only one side if both sides are the same.
- J. The use of fluorescent colors on signs is prohibited.
- K. For any ground sign over 32 square feet or over 8 feet in height, construction drawings shall be certified by a qualified Florida Registered Professional. The construction drawings shall contain the plans and specifications, the method of construction, and the method of attachment to the building or the ground for pole signs and all projecting signs.
- L. Illuminated signs shall not be allowed facing residential uses unless the nonresidential use is separated from the residential use by an arterial or collector road.

3.1.3.19 Applying Traffic Stripes

Apply Traffic Stripes and Markings, in accordance with the Construction Plans.

- A. Painted striping, arrows, messages, and stop bars in parking lots

Contractor shall refer to FDOT Section 710 for material specifications, equipment requirements, application, tolerances in dimensions and alignments, protection of new markings, and corrections for deficiencies.

- B. Thermoplastic striping, arrows, messages, and stop bars in roadways

Contractor shall refer to FDOT Section 711 for material specifications, equipment requirements, application, tolerances in dimensions and alignments, protection of new markings, observation period, and corrections for deficiencies.

3.1.3.20 Detectable Warnings

- A. Detectable warnings shall be built in or applied to walking surfaces or other elements to warn of hazards along an accessible route.

- B. All textured surfaces shall adhere to the ADA Standards, Section 705 Detectable Warnings, FDOT Section 527 and FDOT Standard Plan 522-002 .

3.1.4 MAINTENANCE OF TRAFFIC

- A. Maintenance of traffic procedures must be in strict compliance with Florida Department of Transportation “Standard Plans for Road Construction” (current edition), Standard Plan 102 Series unless otherwise approved in writing by the District.
- B. If a detour is required, a detailed traffic control and routing plan must be submitted five business days prior to start of work for review and approval by the District Engineer. A site inspection is required prior to opening the detour.

3.1.5 WORK WITHIN ROAD RIGHTS-OF-WAY

3.1.5.1 General

This Section for Work Within the Public Right-of-Way regulates the location, manner, installation, and adjustment of all work performed within the right-of-way of the District’s roadway network. The issuance of approvals for such work is in the interest of capacity, safety, protection of existing facilities, ease of maintenance, and future development of the roadway network. This Section provides standards, procedures and guidelines for construction and maintenance within the public right-of-way that are in the best interests of and for the protection of the public.

3.1.5.2 Signs

All signs installed within the District road right of way required by the United States Department of Transportation’s Federal Highway Administration as set forth in the Manual on Uniform Traffic Control Devices (MUTCD) are not subject to the requirements of the DSM.

3.1.5.3 Survey Monuments

3.1.5.3.1 General

- A. To assist in the elimination of possible future boundary disputes and to simplify location of monuments and future construction improvements within the public right-of-way of the District, a land surveyor, registered in the State of Florida, shall be consulted before actual construction of improvements. Only a land surveyor registered in accordance with Florida Statutes, Chapter 472, may reference monuments for replacement if destroyed or disturbed.
- B. Refer to Section 3.1.2 for monument standards and requirements.

3.1.5.3.2 Preservation

- A. Any official monument set for the purpose of locating or preserving the permanent lines of any public street, public easement or recorded subdivision boundary within any District public right-of-way or public easement shall not be removed or disturbed without first obtaining permission in writing from the District. Permission shall be granted only upon the condition that the person making application shall pay all expenses incidental to the proper replacement or relocation of such monument by a land surveyor registered in the State of Florida.
- B. The authority for the determination of permanent monuments, as outlined above, shall be the county plat books or the instrument and accompanying record drawing conveying ownership of the right-of-way or easement to the public, if properly recorded.
- C. These requirements shall in no way diminish the protection of permanent monuments within the public right-of-way or within easements, which monuments are protected by State or Federal Law.

3.1.5.4 Construction Requirements

The basic requirements governing location and construction methods of facility installation will follow the FDOT Standard Specifications for Road and Bridge Construction, Standard Plans for Road Construction and Traffic Operation Standards, current editions(s), current adopted edition of the DSM, the FDOT Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets & Highways, current edition, and the Manual on Uniform Traffic Control Devices, current edition. Of primary concern in the design, construction and location of facilities is the safety of roadway users and the protection of the right-of-way. In all cases, highest consideration shall be given to sound engineering principles over economic factors.

- A. At locations where District traffic control and/or safety devices will interfere with proposed construction, the applicant or his consultants must notify the District at least three working days in advance of the specific job commencement. All such devices will be removed or relocated only upon District approval and under the supervision of the District. Any traffic control and/or safety devices damaged or destroyed shall be replaced by and at the expense of the applicant, his successors, or designee.
- B. All longitudinal underground utility facilities shall be placed outside of the shoulders as near to the right-of-way as possible and have a minimum cover of thirty-six inches with programmable electronic marker balls unless otherwise approved. Primary cable shall have a minimum cover of thirty-six inches unless otherwise approved. Secondary cable and water lines shall have a minimum cover of thirty-six inches unless otherwise approved. Programmable electronic marker balls shall be placed with the utility ID.
- C. Where encasement is used, or designed as a pressure vessel, the casing pipe shall have strength equal to or exceeding the carrier pipe. Where the casing is not a pressure vessel, the casing pipe shall be capable of supporting minimum external loads of 2,200 PSF at thirty-six-inch depth.

- D. When an emergency condition reasonably warrants immediate action, such as a break in a gas, cable, sewer, or water line, or where a situation occurs which may endanger the public, time may not allow the normal issuance of an approval. In such cases, the District and applicable agencies must be notified as soon as possible by any available means. Within 72 hours, a right-of-way use application and maintenance of traffic plans of the work performed must be submitted to the District. This submittal will not be considered an after-the-fact application if it is submitted within the 72 hours.
- E. Fencing that encloses public property or that indicates that public property is being used for private purposes will not be permitted to be placed in a public right-of-way.
- F. Prior to the installation of fencing within any utility and/or drainage easement, the applicant /owner must obtain approval from all affected utility companies or agencies. The applicant /owner shall be responsible for any future maintenance, removal, or replacement of such fencing.
- G. No construction or maintenance of the facility shall interfere with any property rights of any prior occupant without written consent of the affected party(s).
- H. All materials and equipment are subject to inspection by the District.
- I. During construction, all applicable safety regulations shall be observed. The applicant shall provide, pay for, and maintain, satisfactory to the District, the types of insurance described herein. All insurance shall be from responsible companies duly authorized to do business in the State of Florida and having a rating reasonably acceptable to the District. All liability policies shall provide that the District is an additional insured for all approved construction activities. The required coverages must be evidenced by properly executed certificates of insurance forms. The certificates must be signed by an authorized representative of the insurance company and shall be filed and maintained with the District annually. Thirty (30) days' advance written notice must be given to the District of any cancellation, intent not to renew, or reduction in the policy coverages. The insurance requirements may be satisfied by evidence of self-insurance or other types of insurance acceptable to the District. The limits of coverage of insurance required shall not be less than:
1. Workers' Compensation: Florida Statutory Requirements
 2. Employer's Liability: One Million Dollar Limit per Accident
 3. Comprehensive General Liability Bodily Injury and Property Damage: One Million Dollar Combined Single Limit Each Occurrence
 4. Automobile Liability Bodily Injury and Property Damage: One Million Dollar Combined Single Limit Each Accident.
- J. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Applicant/Owner, applicant shall agree to indemnify, defend and hold harmless District, and the officers, directors, board of governors, staff, members,

partners, employees, agents, consultants and subcontractors of District from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the work.

- K. The applicant, through his Contractor, is responsible for the means, methods, and procedures to be followed for construction of the permitted facilities. Warning lights, flashers, barricades, or any other safety measure must be in strict accordance with applicable Florida Department of Transportation “Standard Plans for Road Construction” (current edition), Standard Plan 102 series.
- L. It shall be the applicant’s responsibility to locate and protect from damage all existing utilities, both aerial and underground. For landscaped roadways, applicant must obtain the location of irrigation facilities from the District. If driveways, turn lanes, or sidewalks are installed, applicant must re-sleeve the existing irrigation lines and sleeve the proposed irrigation lines.

3.1.5.4.1 Roadway Crossings shall be as follows:

A. General Information:

- 1. Crossings under existing pavement shall normally be made using the jack and bore or directional bore method without cutting pavement. A pneumatic underground piercing tool is not an acceptable device for use under roadways.
- 2. Sewer force main, gas, and water lines require PVC pipe that shall meet the design criteria for AWWA C900 SDR 18 or equal with written approval by the District. The design criteria for other PVC pipe usage shall be reviewed on an individual case-by-case basis by the District at its sole discretion.
- 3. Neither jetting (air or water) nor tunneling is allowed.
- 4. Crossing of paved roads must be perpendicular to the center line of the roads, unless otherwise approved in writing by the District Engineer.

B. Jack and Bore

- 1. Pipes may be installed under roadways and other linear surface features using the jack and bore method where a steel pipe casing shall be installed using a hydraulic jacking machine with cutter head from a launching pit on one side of crossing to a receiving pit on the other side of the crossing.
- 2. Casing pipe shall meet the following requirements:
 - a. Steel pipe shall have a specified minimum yield strength, SMYS, of at least 35,000 psi.

b. Steel casing shall have wall thicknesses per the following:

Steel Casing Diameter, Nominal Pipe Size (in.)	Coated or Cathodically Protected Wall Thickness (in.)	Uncoated and Unprotected Nominal Wall Thickness (in.)
10 and under	0.188	0.188
12 & 14	0.188	0.250
16	0.219	0.281
18	0.250	0.312

c. Casing joints shall be butt-welded or interlocking joints.

d. The inside diameter of the casing pipe shall be such as to allow the carrier pipe to be removed subsequently without disturbing the casing or the roadbed. The inside diameter of the casing pipe shall be at least 2 inches greater than the largest outside diameter of the carrier pipe joints or couplings, for carrier pipe less than 6 inches in diameter; and at least 4 inches greater for carrier pipe 6 inches and over in diameter.

e. In no event shall the casing pipe diameter be larger than is necessary to permit the insertion of the carrier pipe.

3. Pipe casings shall be jacked and bored under a roadway at a minimum depth of thirty-six inches measured from the top of the casing pipe to the elevation of the lowest road edge.
4. If mechanical boring is utilized to place the pipe, the tip of the drill head shall precede the end of the pipe by no more than two inches and shall be equipped with means to prevent any unsupported excavation occurring between the cutter head and the casing being jacked.
5. All jack and bore crossing must be a continuous operation at the approved location and depth. Any deviation from any requirement will be sufficient grounds for work stoppage, plugging the pipe with concrete, and placement of the pipe at another approved location at the expense of the applicant.

6. Casing ends shall be equipped with custom manufactured soil tight wrapped neoprene boots of min 1/8" thickness with seams oriented downward. Hardware shall be stainless steel.
 7. Any request for a variance from any of the foregoing requirements must be fully justified by the applicant in writing to the District and is subject to review and written approval by the District.
- C. All open cuts on collector/arterial roadways shall be restored using flow able fill up to the bottom of the lime rock base course in accordance with the Open Cut Restoration Detail for collector/arterial roads, of the DSM and/or special stipulations, if any, of the District approval.
 - D. Open-cutting of existing pavement will generally not be allowed, but may be considered under one or more of the following conditions, provided inspection and approval beforehand is made by the District:
 1. Subsurface obstructions including rock within thirty inches of the surface.
 2. High water table that cannot be adequately lowered by conventional means (i.e., well-pointing or sump pumping).
 3. Limited space for jack and bore pits due to right-of-way confinement.
 - E. Where an open-cut has been approved on local roads, replacement of backfill, base, and wearing surface shall be in accordance with the Open Cut Restoration Detail for local roads, of the DSM and/or special stipulations, if any, of the Permit.
 - F. Limerock for backfill shall be available on the job site during any open cut operation.
 - G. If the restoration is incomplete at the end of the day, the trench shall be backfilled and secured by temporary asphalt patch or steel plate. Lane closures may be allowed with District's consent at its sole discretion.
 - H. Before a lane is open to traffic, an asphaltic patch must be provided where applicable.
 - I. Upon backfill and completion of the base, if the hot mix asphalt is not immediately placed, a temporary cold or hot mix asphaltic patch with a smooth all-weather surface may be utilized, if authorized by the District at its sole discretion.
 - J. The applicant assumes all maintenance/repair responsibilities and liability for the installation.
 - F. Directional Bore: on all collector, arterial, and local roadways, FDOT Standard Specifications will be followed. No directional bore with less than 36" depth will be allowed under any pavement.

3.1.5.5 Safety Requirements

- A. Unless an approved detour is provided at any open-cut crossing, a minimum of one traffic lane must be maintained during the daylight hours and two-way traffic at night. All traffic detours shall be restricted to the limits of the District right-of-way with necessary flaggers and/or marking devices. The District at its sole discretion shall approve detours in writing prior to approval issuance. Detours of traffic outside of the District right-of-way will be considered only with the approval of affected local governmental agencies and any affected private interests.
- B. Signs, flaggers, and other safety devices shall be utilized throughout the construction period in accordance with the most current Florida Department of Transportation “Standard Plans for Road Construction” (current edition), Standard Plan 102 series.

3.1.5.6 Restoration Requirements

All District public property shall be restored to its original condition or better, consistent with the FDOT Standard Specifications for Road and Bridge Construction, Standard Plans for Road Construction, and Traffic Operation Standards, current applicable editions(s), current adopted edition of the DSM, the FDOT Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets & Highways, current edition, and the Manual on Uniform Traffic Control Devices, current edition, and in a manner otherwise satisfactory to the District.

A. Restoration Guidelines:

- 1. All material excavated from the District right-of-way in excess of the quantity required for backfill, shall be removed by the applicant at his cost and expense. All unusable material shall be disposed of at the applicant’s expense and not placed within the limits of the District’s right-of-way unless specifically directed by the District.
 - a) Anyone who performs work within the public right-of-way shall be responsible for protection of all existing vegetation and facilities not authorized to be removed in the Permit. It shall be the applicant’s responsibility to have all construction debris removed from the public right-of-way and to restore all vegetation and facilities damaged or relocated during construction.
 - b) Grass seed or sod, shall be installed and maintained on all disturbed areas within 48 hours of completing final grade and at other times, as necessary, to prevent erosion, sedimentation, or turbid discharges into receiving waters and/or adjacent wetlands. All seed or sod shall be continuously monitored and watered until growth is initiated or until sufficient local seasonal rain activity will ensure growth. All requirements regarding sodding, seeding, mulching, and watering shall be in accordance with the FDOT Standard Specifications for Road and

Bridge Construction, current edition, or as otherwise directed by the District.

- c) Any private yards or parts of the right-of-way in front of adjacent property that contain plantings shall be replanted with like vegetation with similar ground coverage.
- d) All side drains, side ditches, swales, and storm sewers will be referenced as to grade and location prior to construction and must be maintained during construction.
- e) Temporary asphaltic patches are required when restoration of the road is incomplete at the end of the day. For a temporary patch, the cut shall be properly back-filled, with compaction meeting the density requirements specified, primed, then the cold or hot mix asphaltic patch applied. At the time of final paving, the temporary cold or hot mix asphaltic patch used shall be removed and the final asphaltic overlay shall be evenly applied, as required. The temporary patch may be left in place for a maximum of 45 days.
- f) Both field and laboratory testing, such as density testing (LBR, Proctor), on the proposed backfill material shall be conducted by a certified laboratory. All testing shall be completed and shall meet minimum density requirements on each lift prior to additional backfilling. Copies of all completed compaction test results shall be furnished to the District prior to completion of the project.
- g) All work will be inspected by the District. Prior District approval is required before backfilling.
- h) When the specified compacted limerock base is greater than six inches, the base shall be constructed in two or more equal lifts.
- i) Limerock for backfilling must come from an FDOT-approved pit and be FDOT certified material or will be subject to review by the District and will be subject to structural analysis for comparison with limerock meeting current FDOT standards.
- j) Where crossings are made through driveways or parking lots, within public right-of-way or dedicated easements, restoration shall be equal to or better than previously existing, in both material and workmanship.

3.1.5.7 Turn lanes, Driveways, Access Roads, Sidewalks, Design Requirements

All turn lanes, driveways, sidewalks, and access roads shall conform to the current edition of the Manual of Uniform Minimum Standards for Design, Construction, and Maintenance for

Streets and Highways (Florida Green Book) and AASHTO unless otherwise approved by the District at its sole discretion.

3.1.5.7.1 Sidewalks

A. Sidewalks shall be designed in accordance with Sections **Error! Reference source not found.** and D.

1. Sidewalk widths shall be a minimum of 5 feet wide, 6 feet where adjacent to a curb. With approval, the width may be reduced to a minimum of 48 inches at obstructions in compliance with ADA standards. In areas previously identified by the District in section **Error! Reference source not found.**, 10' sidewalks shall be required.
2. Sidewalks must be constructed with a cross slope of 2% or less, and unless at a curb ramp, must have a running slope of 5% or less. All sidewalk construction/reconstruction must conform to current FDOT and ADA standards, including curb ramps.
3. No utility structures, other than utility valve boxes or pull boxes, will be allowed within the bicycle/pedestrian path without written approval by the District at its sole discretion. Buried structures must have any frame, lid, or grate flush with the travel surface and any openings in compliance with ADA standards.
4. Material type used in sidewalks shall be consistent with existing adjacent sidewalks. Where driveways cross sidewalks the material used in the pedestrian way of the driveway shall match the adjacent sidewalk material. Where no existing sidewalks are present, sidewalks shall be concrete or with approval, asphalt.
5. Concrete sidewalks shall be constructed using a minimum of 4-inch thick concrete in accordance with Section 522 of the FDOT Standard Specifications. Asphalt sidewalks/bike paths shall be constructed of a minimum of a twelve inch LBR 40 stabilized subgrade, four inches of primed, compacted limerock base, and surfaced with one and one-half inches of Type SP-9.5 asphalt concrete.
6. Owner is required to convey an easement to the District for portions that exist outside of the right-of-way of any sidewalks, bicycle path, or shared use facility (bicycle and pedestrian) that is built and meanders outside of the District right-of-way prior to completion.

3.1.5.8 Alternative Materials (Non-Conforming) and Landscaping Materials

Applicants proposing to use construction materials within the ISD rights-of-way, other than those specified by this DSM, must apply for prior approval of the materials and enter into an Alternative Materials Construction, Maintenance and Hold Harmless Agreement. The Agreement must be executed by the owner of the property, and the entity with perpetual

maintenance responsibility (e.g., District) with the same formality applicable to the transfer of real property; and be recorded, by the District after acceptance, at the property owner/applicant's expense.

All residential driveways and aprons within District rights of way shall be concrete. All commercial driveways shall be concrete or asphalt. Any alternate material requires written approval by the District before use. The District will not accept maintenance of the alternate materials.

3.1.6 ARCHITECTURAL PAVERS

3.1.6.1 General

All pavers shall be furnished and installed in accordance with this section and F.D.O.T. Standard Specification for Road and Bridge Construction Section 526.

3.1.6.2 Materials

Solid Concrete Interlocking Paving Stones shall meet the following requirements.

Paver Requirements

Proposed Use	ASTM C902 (Brick Paver)	ASTM C1272 (Brick Paver)	ASTM C936 (Concrete Paver)
Roadways	Do Not Use	X	Do Not Use
Commercial Driveways	Do Not Use	X	X
Sidewalks and Medians	X	Do Not Use	X
Residential Driveways	X	Do Not Use	X

Ensure that the pavers are consistent in color, size and appearance. Architectural paver type, pattern, shape and/or color will be in accordance with plan details, when specified.

3.1.6.3 Roadway

For installations on roadways and commercial driveways, provide architectural pavers having a minimum thickness of 3-1/8 inch.

3.1.6.4 Sidewalk

For installations on sidewalks, medians and residential driveways, provide architectural pavers having a minimum thickness of 2-3/8 inch.

3.1.6.5 Bedding and Joint Sands

Provide clean, non-plastic bedding and joint sand, free from deleterious or foreign matter, natural or manufactured from crushed rock. Ensure the bedding sand meets the grading

requirements of ASTM C33 Standard Specification for Concrete Aggregate. Ensure the joint sand meets the grading requirements of ASTM C144 Standard Specification for Aggregate for Masonry Mortar. Bedding sand may be used for joint sand. Do not use joint sand for bedding sand.

3.1.6.6 Bedding and Joint Grouts

A suitable grout, in thickness specified by the manufacturer and approved for use by the architectural paver manufacturer, may be substituted for either bedding sand, joint sand or both when specified in the plans and approved by the Engineer.

3.1.6.7 Construction Methods

3.1.6.7.1 Submittals

- A. For Architectural Pavers – Roadway, furnish full size samples to the District for approval prior to beginning placement.
- B. For Architectural Pavers - Sidewalk, submit to the District a certification that the architectural pavers meet the requirements of this Section.
- C. In addition, for all architectural pavers, submit a certified sieve analysis for gradation comparing results of the bedding sand and joint sand with the requirements of ASTM C33 or ASTM C144 as applicable.

3.1.6.7.2 Environmental Conditions

- A. Cover stockpiled materials with waterproof covering to prevent exposure to rainfall.
- B. Do not install bedding materials or architectural pavers during heavy rains or over wet substrata.

3.1.6.7.3 Installation

Install the architectural pavers according to F.D.O.T. Standard Specifications for Road and Bridge Construction Section 526 Architectural Pavers.

3.1.7 CLEARING AND GRUBBING

To ensure there is no detrimental impact to the District’s stormwater management system, no land may be cleared, graded, excavated or filled, or otherwise altered, except in conformity with the DSM and all other applicable local, state, and federal requirements.

- A. Site grading and surface water management standards.
 - 1. Site grading during construction activities. The building site must be graded and maintained during construction to:

- a) Prevent erosion of soil onto adjacent or abutting properties and street rights-of-way or improved drainage conveyances; and
 - b) Control surface water runoff to ensure that no surface water in excess of the preconstruction discharge flows onto developed adjacent or abutting properties; and
 - c) Maintain the flow capacity and function of existing drainage conveyances on or abutting the site including adjacent street rights-of-way/easements or improved drainage conveyances.
2. Final site grading. Final grading of a site must:
- a) Control and direct surface water runoff to ensure that surface water discharge is directed into an existing surface water management system or other offsite drainage conveyance; and
 - b) Preserve or relocate existing drainage conveyances necessary to maintain preconstruction flow capacity and function.
 - c) Final site grading plan features must be maintained in perpetuity by the property owner. A property owner may not alter or modify the lot grading in a manner that will prevent continued drainage of the site in accordance with the site grading plan in effect at the time the certificate of occupancy was issued.

3. Grading plan

Prior to issuance of a Charlotte County Certificate of Occupancy, the building site must be graded in accordance with the grading and drainage plan that was previously reviewed and approved through District and a final inspection by the District must be requested and passed.

3.1.8 TREE PROTECTION CRITERA

Due to the unique circumstances of the property and the excess of preservation tree points, all projects within the Charlotte County portion of the District is exempt from the Charlotte County tree removal permit process and is subject only to the landscape requirements of the DSM and the Babcock Zoning Code; as outlined in the Charlotte County Land Development Regulations.

3.1.9 EXCAVATION AND EMBANKMENT

A. General. This Section shall apply to manmade water bodies and to excavation which are primarily to provide for the retention/detention of stormwater runoff.

- B. Construction requirements. Wet retention/detention areas required by the South Florida Water Management District shall conform to its dimensional criteria as follows:
1. Depths for excavation. The depth of any excavation shall be limited to twenty feet or two (2) feet above the confining or impervious layer which separates the sandstone aquifer from the surface aquifer, whichever is less. A proposed increase in depth shall be at the sole discretion of the District and subject to a variance review.
 2. Excavation side slopes. The side slopes of all excavations under this section shall be one (1) of the following:
 - a. For side slopes which will be grassed, sodded or otherwise landscaped:
 - i. not steeper than six (6) to one (1) (horizontal to vertical) to two (2) feet below the dry season water table.
 - ii. Side slopes below two (2) feet below the dry season water table shall be no steeper than the angle of repose of the excavated material.
 - b. For side slopes requiring special architectural treatment: (1) vertical bulkhead, constructed of concrete, steel, timber, or other appropriate structural materials; or (2) rip-rap, boulders, or paver blocks not steeper than one (1) to one (1). Variance for treatment shall be approved by the District at its sole discretion.
- C. No lakes shall tie directly into conservation areas. All lakes adjacent to or near conservation areas shall be buffered appropriately such that the lakes have no adverse impacts to wetland elevations.
- D. Setbacks for excavation sites. The excavation shall be set back from existing or proposed road right-of-way and adjacent property boundary no less than twenty-five (25) feet except as otherwise permitted. Retention/detention areas which are common to more than one (1) parcel or property or that interface with a conservation area are exempt from this provision as to setback from a property line.

3.1.10 REMOVAL OF UNSUITABLE MATERIAL

- A. Material found in its original position and all excavated material that is deemed unsuitable for embankment shall be hauled from the project site and legally disposed of by the Owner at the Owner's expense.
- B. Removal of unsuitable materials and existing roads shall be in accordance to FDOT Section 120-4.

3.1.11 EXCAVATION FOR STRUCTURES

Excavation for structures and pipe shall be in accordance with the FDOT Standard Specifications for Road and Bridge Construction, Section 125.

3.1.12 EROSION AND SEDIMENT CONTROL

3.1.12.1 General

- A. Erosion control measures shall be provided on the project where work is accomplished in conjunction with the project, so as to prevent pollution of water, detrimental effects to public and/or private property, and damage to work on the Project.
- B. Temporary and/or permanent erosion control features shall be constructed as shown in the construction documents or as directed by the Engineer of Record and shall be maintained for the intended duration of the erosion control feature.
- C. All slopes must have side and back slopes no steeper than 4 to 1, though gentler slopes are recommended.

3.1.12.2 Stormwater Pollution Prevention Plan

- A. The Stormwater Pollution Prevention Plan (SWPPP) must be completed prior to the submittal of the notice of intent (NOI) to be covered under the FDEP's Generic Permit for Stormwater Discharge from Large and Small Construction Activities.
- B. The SWPPP shall be amended by the Owner whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for discharge of pollutants to surface waters of the state. The SWPPP also shall be amended if it proves to be ineffective in significantly reducing pollutants from sources identified the permit. The SWPPP also shall be amended to indicate any new contractor and/or subcontractor that will implement any measure of SWPPP. All amendments shall be signed, dated, and kept as attachments to the original SWPPP.

3.1.12.3 Control of Contractor's Operations

- A. Contractor shall prevent pollution of streams, canals, lakes, reservoirs, and other water impoundments with fuels, oils, bitumen, calcium chloride, or other harmful materials. Also, conduct and schedule operations to avoid or otherwise minimize pollution or siltation of such water impoundments, and to avoid interference with fish. Do not dump any residue from dust collectors or washers into any live stream.
- B. Except as necessary for construction, contractor shall not deposit excavated material in rivers, streams, canals, or impoundments, or in a position close enough thereto, to be washed away by high water or runoff.

- C. Where pumps are used to remove highly turbid waters from enclosed construction areas, such as cofferdams or forms, contractor must treat water by one or more of the following methods prior to discharge into state waters:
 - a. pumping into grassed swales or appropriate vegetated areas or sediment basins.
 - b. confined by an appropriate enclosure such as turbidity barriers or pumped filter sacks when other methods are not considered appropriate.
- D. Do not disturb lands or waters outside the limits of construction as staked, except as authorized by applicable permits and the District.

3.1.12.4 Materials for Temporary Erosion Control

- A. The Contractor may use new or used materials for the construction of temporary silt fence, staked turbidity barriers, and floating turbidity barrier not to be incorporated into the completed project, subject to the approval of the Engineer of Record. All temporary erosion control measures shall be removed prior to site turnover but only after final stabilization of upstream contributing areas.
- B. In general, contractor should remove or incorporate into the soil any temporary erosion control features existing at the time of construction of the permanent erosion control features in an area of the Project in such a manner that no detrimental effect will result. However, the Engineer of Record may direct that temporary features be left in place.

3.1.12.5 Erosion and Sediment Control Plan

The erosion and sediment control plan shall be prepared as part of the Stormwater Pollution Prevention Plan (SWPPP). BMP's shall be implemented in the plan to not cause or contribute to a violation of water quality standards and minimize offsite sedimentation.

3.1.12.6 Dust Control

- A. Control dust throughout the entire construction process by wetting, covering, or other means as approved by the Engineer of Record. This applies to any non-vegetated, unpaved surface where vehicle movement or wind action would normally occur, such as an unpaved road, traffic area, parking lot, staging, or assembly area.
- B. Dust control shall be done in accordance with all federal, state, and local laws, rules, and regulations.
- C. When airborne particulate matter from the surface is visible, reapply the dust control product.
- D. If there is concern of runoff of sediments to a water body, seek additional practices or activities like buffer strips to minimize runoff.

3.1.12.7 Equipment Refueling, Maintenance, and Repair

- A. Consistent with public interest, safety, and good practice, maintain all equipment, tools, and machinery used in a satisfactory working condition throughout the period they are on the job site. Also, provide adequate equipment maintenance procedures to promote continuous satisfactory working condition and minimize noise pollution caused by construction equipment.
- B. If possible, refueling maintenance and repair of construction equipment shall be done exclusively at a designated location on an impervious paved surface (asphalt or concrete) as approved by the District.
- C. Chemicals, lubricants, petroleum products, and fuels, if kept on site, shall remain sealed in weathertight containers with secondary containment and/or double walled tanks with interstitial space monitoring. Accumulated rainwater in outdoor secondary containment systems shall be tested for contaminants and promptly disposed of if free of contaminants. Contaminated secondary containment rainwater shall be collected by a hazardous waste vendor and legally disposed of off-site. All exterior tanks shall be likewise properly anchored and secured per applicable codes.
- D. Spill kits shall be readily accessible. Personnel involved with refueling, maintenance and repair shall have proper training to use such kits and respond to spill incidents.
- E. Preventive measures, such as booms or dikes, shall be in place as appropriate to the task prior to commencing refueling, maintenance, or repair operations.
- F. A published Standing Operating Procedure (SOP) shall be readily accessible with instructions on how to respond to spill incidents.
- G. Maintenance and repairs shall be done at a location that protects against potential pollutants directly entering storm drain systems or receiving waters.

3.1.13 SLEEVING AND CONDUITS

3.1.13.1 General

The work to be performed under this Section consists of furnishing all labor, materials, equipment, tools and other associated appurtenances required for the complete installation of all pipe, fittings, and other appurtenances necessary for a complete and workable unit as detailed in the construction documents and further described in the DSM.

Piping and other material and equipment shall be of the size, type, and number shown on the construction documents and/or specified in the DSM. Any items described in these the DSM which are not included on the construction documents shall be disregarded.

The proposed dry conduit plan shall be provided to the District for review and the District at its sole discretion has the right to require the installation of additional conduit at its sole

discretion. The costs associated with these requests will be the responsibility of the land Owner.

3.1.13.2 Materials

A. Sleeves

Pipe and fittings for sleeves shall be PVC SCH 40 (or otherwise approved in writing by the District) and shall be in accordance with the Construction Documents.

B. Conduit

Pipe and fittings for conduit shall be PVC SCH 40 (or otherwise approved in writing by the District) and shall be in accordance with the Construction Documents.

3.1.13.3 Construction

3.1.13.3.1 Trench Preparation:

3.1.13.3.1.1 Cleaning Pipe:

All foreign matter or dirt shall be removed from the inside of the pipe before it is lowered into its position in the trench, and the pipe shall be kept clean by approved means during and after laying.

3.1.13.3.1.2 Laying Pipe:

- A. Prior to laying pipe, the trench shall be clear of all stones, roots, debris, other organics, etc. The pipe shall be laid by snaking in the trench. Care should be taken to carefully lower the pipe and fittings into the trench as to prevent damage.
- B. Pipe shall not be laid in water or when the trench conditions are unsuitable for such work except with written permission of the District. The excavation of trenches shall be fully completed a sufficient distance in advance of the pipe laying and the exposed ends of all pipe shall be fully protected with a board or approved stopper to prevent earth or other substances from entering the pipe.

3.1.14 STORM WATER MANAGEMENT FACILITIES

3.1.14.1 Governing Specifications

SFWMD conceptual permit (ERP# 08-00004-S-05), or most up-to-date revision.

3.1.14.2 Design Standards

- A. Design control elevations for the proposed project shall be based on the SFWMD conceptual permit (ERP# 08-00004-S-05), or most up-to-date revision.
- B. Tailwater assumptions for the proposed project shall be in accordance with the SFWMD conceptual permit (ERP# 08-00004-S-05), or most up-to-date revision.
- C. All proposed projects shall account for off-site flows which pass through the project limits as designed and permitted under the SFWMD conceptual permit (ERP# 08-00004-S-05), or most up-to-date revision. Property owners are responsible for collecting and distributing off-site flows through the project.
- D. Refer to Exhibit 2.12 of the SFWMD conceptual permit (ERP# 08-00004-S-05) for watersheds within and adjacent to the BRC.
- E. Allowable discharge rates shall match the design discharge rates of the SFWMD conceptual permit (ERP# 08-00004-S-05) as shown in Exhibit 2.5 of the permit.
- F. Discharge structures and locations shall be consistent with the approved conceptual plans of the SFWMD conceptual permit (ERP# 08-00004-S-05).
- G. All commercial/industrial parcels shall provide a minimum dry pre-treatment volume of ½ inch of runoff prior to discharge into the master surface water management system based on a total impervious coverage (building + other impervious area) of 75%.
- H. Refer to Exhibit 2.4 of the SFWMD conceptual permit (ERP# 08-00004-S-05) for minimum building floor elevation and minimum road crown elevation.
- I. Grass seed or sod shall be installed and maintained on all disturbed areas within 48 hours of completing final grade, and all other times, as necessary, to prevent erosion, sedimentation or turbid discharges into receiving waters and/or adjacent wetlands.
- J. Rainfall distributions for the BRC shall be as follows:
 - 1. 5-year 1 day: Scsii-24
 - 2. 25-year 3 day: Sfwmd72
 - 3. 100-year 3 day: Sfwmd72
- K. Rainfall amounts for the BRC shall be as follows, unless proper justification is provided to the District for different rainfall amounts:
 - 1. 5-year 1 day: 5.4 inches
 - 2. 25-year 3 day: 11.2 inches

3. 100-year 3 day: 14.2 inches
- L. All pond routing shall utilize ICPRv3 or newer.
 - M. All slopes must have side and back slopes no steeper than 4 to 1.
 - N. Lake slopes shall be 6:1 until a depth of 2' below the dry season water table to protect against erosion due to water level fluctuations.
 - O. One hundred percent of pond perimeter is to be planted with littoral plantings.
 - P. Side slopes shall be top soiled and stabilized through seeding or planting from 2 feet below control elevation to 2 feet beyond the top of bank.
 - Q. All stormwater pipes protruding into surface water bodies shall be designed such that the top of the pipe is four (4) feet below the control water elevation of the respective surface water body.
 - R. Stormwater Conveyance Criteria
 1. Minimum Requirements
 - a) Conveyance systems shall be sized to accommodate the 10-year 24-hour storm event based on the condition of ultimate project.
 - b) All storm drainage pipes under roadways shall be RCP.
 - c) All RCP shall be a minimum of 15" in diameter and must maintain a minimum of 2' of cover.
 - d) PVC, HDPE, or similar pipe must maintain a minimum cover of two (2) feet. The Engineer of Record shall evaluate if more cover is required based on projected loading of the pipe or to prevent flotation of the pipe.
 - e) All storm drainage structures shall have a minimum two (2) foot sump between the lowest pipe invert and inside bottom of the structure.
 - f) All installed storm drain pipes and structures shall be cleaned free of sediment and any other debris that accumulates during construction to the satisfaction of the District at its sole discretion
 - S. Drainage Easements
 1. *Open drainage easements.* Where a proposed project is traversed by or abuts a watercourse, drainageway, canal, lake, pond or stream, rear yard collection, or where such a facility is proposed as part of a plan, a drainage easement or right-of-way must be provided that conforms substantially with the limits of the watercourse, drainageway, canal, lake, pond or stream as measured from top of bank to top of

bank. Additionally, on one side of the watercourse, drainageway, canal, lake pond or stream, an additional 20-foot wide easement for maintenance purposes must be provided outward from the top of bank, unless a lesser dimension is approved in writing by the District. For canals, lakes or flow -ways greater than 50 feet wide, measured at the top of the bank, the developer must provide a 20-foot-wide easement or right-of-way on all sides of the canal, lakes or flow -way for maintenance purposes, unless a lesser dimension is approved by the District in writing. This easement or right-of-way must be kept clear by the property owners and have satisfactory vehicle access.

2. *Closed drainage easements.* The width of closed drainage easements must be based upon sound engineering principles including, but not limited to, depth of cut, size of drainage pipe, proximity of structures, etc. Closed drainage easements must be a minimum of 20 feet in width for pipes that are 48 inches or less in diameter. The easement width for multiple pipes or for pipes greater than 48 inches in diameter is 30 feet or more. These widths are minimums and easements shall be sized by the Owner/Engineer to adequately allow for complete access in the event the stormwater infrastructure needs to be unearthed. This easement or right-of-way must be kept clear by the property owners and have satisfactory vehicle access.
3. All proposed drainage easements shall be depicted in proposed plans.

T. Lake Maintenance Easements

A twenty-foot wide lake maintenance easement shall be provided around the entire perimeter of all lakes measured outward from the top of bank. This easement must be kept clear by the property owners and have satisfactory vehicle access.

U. Dry Detention

An easement over all dry detention areas, as measured from top of bank to top of bank, shall be provided and dedicated for District access.

V. Setbacks to Water

For any manmade or natural lake, pond, and stormwater facility within the District, standard setbacks are zero (0) feet. Buildings and Structures may extend over water.

W. Bulkhead Retaining Walls

Bulkhead retaining walls are allowed as permitted by Environmental Resource Permit (ERP).

3.1.14.3 Stormwater Plan Review

All proposed site development within the Babcock Ranch Community shall require a Stormwater Plan Review as part of the Site Development Plan Review and written approval by the District. The following is required as part of the stormwater submittal:

- A. Site Development Plan Review Application
- B. Stormwater Plan Review Fee (Refer to the current I District Fees sheet to determine the required review fee.)
- C. Environmental Plan Review Fee (Refer to the current District Fees sheet to determine the required review fee.)
- D. Civil construction plans signed and sealed by a Licensed Professional Engineer in the State of Florida.
- E. Model methodology and results. Engineering report detailing the proposed stormwater management design which includes, but is not limited to, design assumptions, calculations, model results, etc. (signed and sealed by a Licensed Engineer licensed in the State of Florida)
- F. Conveyance system design report detailing the proposed stormwater conveyance system design based on the 10-year 24-hour storm event. The report shall include, but is not limited to, design assumptions, calculations, model results, etc. (signed and sealed by a Licensed Engineer licensed in the State of Florida)
- G. Live electronic files of models used for design including but not limited to ICPR.
- H. All stormwater designs shall meet the standards previously set forth in the SFWMD conceptual permit (ERP# 08-00004-S-05), or most up-to-date revision. The conceptual permit design shall be used to determine the allowable design of the proposed project.
- I. Existing land use tables with percentage impervious utilizing the two District land use table templates as shown below:

Land Use Summary Table									
Basin	Building (ac)	Pavement (ac)	Lake (ac)	Upland Preserve (ac)	Wetland Preserve (ac)	Pervious (ac)	Other Surface Water (ac)	Filter Marsh (ac)	Total (ac)

Land Use Summary Table																	
Basin	Commercial/ Mixed Use (ac)	High Density Residential (ac)	Medium Density Residential (ac)	Low Density Residential (ac)	Education (ac)	Parks (ac)	Farm (ac)	Recreation (ac)	Major Collector Right of Way (ac)	Golf (ac)	Open Space (ac)	Other Surface Water (ac)	Upland (ac)	Wetland (ac)	Lake (ac)	Marsh (ac)	Total (ac)

- J. Proposed land use table with percentage impervious utilizing the two District land use table templates as shown below. The design engineer may propose different percentages of building/pavement/open space for the proposed project land use. All project land use tables will be subject to the review and written approval from the District.

Land Use Summary Table									
Basin	Building (ac)	Pavement (ac)	Lake (ac)	Upland Preserve (ac)	Wetland Preserve (ac)	Pervious (ac)	Other Surface Water(ac)	Filter Marsh (ac)	Total (ac)

Land Use Summary Table																	
Basin	Commercial/ Mixed Use (ac)	High Density Residential (ac)	Medium Density Residential (ac)	Low Density Residential (ac)	Education (ac)	Parks (ac)	Farm (ac)	Recreation (ac)	Major Collector Right of Way (ac)	Golf (ac)	Open Space (ac)	Other Surface Water (ac)	Upland (ac)	Wetland (ac)	Lake (ac)	Marsh (ac)	Total (ac)

- K. Proposed control structure detail.
- L. One (1) CD with electronic copies of submittal package documents including any live model files used in the design process.

3.1.15 MEANS AND VARIANCES

- A. All variances, deviations shall undergo a review process as outlined in Volume 1 of the DSM. No deviations or variances shall be made without prior written approval from the District.
- B. The contractor is responsible for the means and methods unless otherwise specified by the DSM.

3.1.16 FAT, OIL, AND GREASE (F.O.G.) INTERCEPTOR REQUIREMENT

- A. Fat, oil and grease (F.O.G.) interceptors shall be designed in accordance with applicable Florida Building Code and Department of Health regulations.
- B. F.O.G. interceptors required. Users who operate restaurants, cafes, lunch counters, take-outs, cafeterias, bars, clubs, or hotel, hospital, factory or school kitchens or other

establishments that serve or prepare food where F.O.G. may be introduced to the sewer system shall have a F.O.G. interceptor.

- C. Take-out food establishments or other establishments that prepare food but do not cook in oil or grease and who serve food only in disposable containers may utilize alternative interceptors as approved by the District, provided their discharges will not violate any discharge prohibitions of this article. F.O.G. interceptors may also be required in non-cooking or cold dairy and frozen foodstuff establishments when they are deemed necessary by the District.
- D. Oil and sand interceptors required. Users who operate automatic and coin operated laundries, car washes, filling stations, commercial garages or similar businesses having any type of washing facilities or grease racks and any other users producing grit, sand, oils or other materials which may have the potential of causing partial or complete obstruction of the building sewer or other areas in the sewer system shall install interceptors approved by the District.
- E. All interceptors shall be located outside the building in such a manner that personnel from the Utility can inspect the interceptors at any time.
- F. All interceptors shall be sized to ensure that the District 's sewer system is protected from excessive F.O.G., sand and oil which may cause clogging or damage and that the user is capable of meeting all discharge requirements. F.O.G. interceptors shall be based on chapter 10 of the Florida Plumbing Code, as amended.
- G. A sampling port shall be installed in an approved location to allow sampling by the Utility and the user. The sample port shall be located between the interceptor and the discharge point to the sewer system.
- H. An access manhole shall be provided over each chamber and sanitary tee. The access manholes shall extend at least to the finished grade and be designed and maintained to prevent water inflow or infiltration. The manholes shall have readily removable covers to facilitate inspection and cleaning. The manhole covers shall meet the District standard details.
- I. The following must be submitted to the District for review and approval as part of the Site Development Plan Review prior to installation of an interceptor.
 - 1. Site plans showing the location of the interceptor, lines, clean out or manhole and sample port;
 - 2. Details of the interceptor, lines, clean out or manhole and sample port; and
 - 3. Formula and calculation used to determine the interceptor capacity.
 - 4. Note: No non-grease-laden sources are allowed to be connected to sewer lines intended for grease, oil and sand separators.

- J. All interceptors currently in use or in existence at the time of this DSM will be considered sized sufficiently provided they meet all discharge requirements as stated in this DSM. All new interceptors or interceptors to replace or upgrade existing interceptors will be required to meet all criteria stated in this DSM and the District standard details.
- K. When upon inspection the interceptor is found to have six (6) inches or more of solids in the bottom of the interceptor (using a sludge judge) or a grease cap of three (3) inches or more, or the establishment exceeds discharge compliance levels, the Utility can require a grease pump out. Upon completion of an on-site inspection or analytical results of sampling indicate a violation of this DSM, the Utility may issue a "notice of violation" to the user or representative to document any discrepancies, noncompliance, special instructions or other guidance identified during the on-site inspection.
- L. Maintenance
 - 1. The user of the premises or business where such interceptor is located shall obtain from the Utility a maintenance card which shall be posted in a conspicuous manner showing proof of regular maintenance. Such card shall be obtained annually and shall be presented upon request. All records pertaining to the maintenance of an interceptor shall be retained by the user for a period of not less than three (3) years and available to the Utility upon request.
 - 2. Every F.O.G. interceptor shall be cleaned every ninety (90) days or sooner, if needed. An exemption may be granted to the ninety-day minimum requirement if the user can establish that such maintenance schedule is not necessary.
- M. The use of any free-enzyme, chemical, or other products designed to emulsify, liquefy or further render grease soluble for the purpose of clearing drains or circumventing the design of the interceptor is prohibited. All products claiming biological activity must be approved by the Utility. Approval for this or any other treatment does not relieve the user of properly maintaining the interceptor as to prevent discharge violations to occur.
- N. Failure to comply with this section shall subject the user to appropriate enforcement procedures as set forth in this DSM and/or the Babcock Ranch Water Utilities Policies Manual. Additionally, if any person fails to comply with this section and said failure results in damage to the District's system, the District shall be entitled to recover the cost of repair of the system from said person and any fines or penalties assessed against the District as a result of such failure.

3.1.17 SOLID WASTE

3.1.17.1 Development Requirements

- A. The roadway or pathway approach to containers shall be sufficient to accommodate a vehicle requiring a minimum clear width of twelve (12) feet and a minimum clear turning radius of fifty (50) feet.

- B. Turning radii for the waste haulers' service vehicles shall not encroach upon any parking spaces, pedestrian walkways, landscaped areas, or driveway entrances.

3.1.17.2 Containers, Compactors, and Recycling Containers

The purpose and intent of this section is to establish standards whereby all dumpsters, containers, recycling containers and other solid waste containers shall be sited on a property or placed within a screened enclosure such that, as much as possible, neither the container, compactor, recycling containers nor their contents are visible to the general public.

3.1.17.2.1 Applicability

- A. This section shall apply to the Babcock Ranch Community. Any new installation of containers, compactors or recycling containers subsequent to the effective date of this section, shall comply with all of the requirements of this section. As part of the approval procedures for any new construction, plans showing that the proposed location of the container, compactor or recycling container is in compliance with the requirements of this section must be provided to the county for its review and approval prior to beginning any new construction.
- B. Existing containers, compactors or recycling containers in use as of the effective date of this section shall have six (6) months, subsequent to the effective date of this section, in which to comply with the requirements of this section.
- C. Containers, compactors and recycling containers used on a temporary basis for the collection and storage of construction waste from ongoing permitted construction projects or temporary uses shall be exempt from the requirements of this section.

3.1.17.2.2 Definition

- A. *Container* shall mean a container one (1), two (2), four (4), six (6) or eight (8) cubic yards in size, with a lid, used for used for collecting and storing solid wastes.
- B. *Compactor* shall mean a container ranging from two (2) to forty-two (42) cubic yards in size, in which wastes are compressed to reduce their volume and are stored for disposal.
- C. *Recycling container* shall mean a container one (1), two (2), four (4), six (6) or eight (8) cubic yards in size, with a lid, used for collecting and storing recyclable materials. For the purposes of this section, the term "container" shall mean and include dumpster, compactor and recycling dumpster.

3.1.17.2.3 Requirements

All multifamily and nonresidential establishments of sufficient size shall require containers, and if applicable, compactors and recycling containers for the collection and storing of solid waste and recyclable materials between collections. Because these large containers must be properly located and supported, the following minimum criteria shall apply:

- A. Containers shall be emptied by a licensed collector at intervals so as to preclude overflow of the container;
- B. Neither containers, nor the immediate area around them, shall be used for disposal of furniture and major appliances;
- C. Containers, as well as the immediate area around them, shall be kept free of overflowing refuse at all times;
- D. Containers shall be maintained free of jagged edges or inside parts which could prevent the free discharge of their contents;
- E. Containers shall have lids and said lids shall be maintained in good repair and working order and kept closed when not in use.
- F. If a continuous problem of insufficient container or compactor capacity is proven to exist, additional or larger capacity containers or compactors and enclosures, or increased frequency of pickup, shall be required in order to eliminate the overflow problem.
- G. The roadway or pathway approach to containers shall be sufficient to accommodate a vehicle requiring a minimum clear width of twelve (12) feet and a minimum clear turning radius of fifty (50) feet.
- H. Turning radii for the waste haulers' service vehicles shall not encroach upon any parking spaces, pedestrian walkways, landscaped areas, driveway entrances, or rights-of-way.
- I. Businesses, such as gas stations, that have canopies must provide direct access to containers that is not under or within ten (10) feet of the canopy.
- J. No containers shall be located in the front yard of any lot or business. Loading docks and refuse containers and facilities shall generally be placed to the rear or side yard of a building. Exceptions may be made if the District determines that no reasonable alternative location is available.
- K. Containers shall not be placed in a location subject to vehicle stacking impeding access to the container.
- L. Recycling containers shall be sited on the same concrete pad and in the same enclosure as dumpsters or compactors when possible.

- M. Containers shall not be sited or placed upon any parking space, pedestrian walkway, landscaped area, fire lane, driveway entrance, right-of-way, visibility triangle, or easement, nor shall they be placed under power lines or building overhangs.
- N. Containers shall be set back a minimum of ten (10) feet from any canopy or overhang
- O. Trash containers serving nonresidential uses shall be screened from view from abutting residential properties.

3.1.17.2.4 Mobile Solid Waste Containers

Mobile solid waste containers such as rollout containers, trash cans or containers, compactors or recycling containers on wheels, are acceptable under this section. After pickup on the day of collection, these containers shall be promptly stored away. When not scheduled for pickup, these containers shall be kept stored out of public view, and in the case of containers, compactors or recycling containers on wheels shall comply with the requirements of this section.

3.1.17.2.5 Screening Enclosures

- A. Containers, compactors and recycling containers that are sited behind the trailing edge of the principal structure and are completely out of view from the public right-of-way are exempt from the screening requirements of this section.
- B. Enclosure walls shall be constructed of material compatible with principal structure it is serving.
- C. If a container is sited such that it, or its contents, are visible from a public right-of-way, those sides visible from the public right-of-way are required to be screened. If a side visible to a public right-of-way is also the access side for collection, a gate is required.
- D. The enclosure opening for dumpsters shall be a minimum of twelve (12) feet. The enclosure opening for compactors shall be a minimum of twelve (12) feet.
- E. Required screening shall be no less than the height of the containers plus six (6) inches or five (5) feet, whichever is greater and no more than the height of the containers plus twelve (12) inches.
- F. The enclosure shall be constructed of concrete block, poured concrete, recycled plastic, chain link with ultraviolet resistant slats, or other durable, opaque material. The enclosure shall have a decorative, finished appearance

to compliment the principal structures on site and shall be maintained in good repair and appearance at all times.

- G. Screening enclosures as required herein shall be exempt from height limitations for fences provided there is no obstruction of vision affecting adjacent streets.
- H. Screening enclosures in existence as of the effective date of this section are exempt from the requirements of subsection (E.) of this Section. However, if an existing screening enclosure is substantially rebuilt or replaced, the requirements of this section must be met.

3.1.17.2.6 Pads

- A. Existing containers are required to be placed on pavement, concrete or other improved surfaces.
- B. It shall be required of any new construction or new installation of dumpsters, compactors and/or recycling dumpsters that they be placed on concrete pads.
 - 1. Concrete pads shall be at least two (2) feet larger than containers or recycling containers on all sides and at least four (4) feet larger than compactors on all sides.
 - 2. Concrete pads shall be sized to accommodate for any recycling receptacles needed for the volume of waste anticipated for the proposed use and must be sufficiently reinforced to withstand anticipated loads. Under no circumstances shall the concrete pad be less than twelve (12) feet by twelve (12) feet in size.

3.1.17.2.7 Construction Debris and Trash Removal

It is the Districts intention to keep the Community as clean as possible. Any Owner, or its contractors who are found to be in violation of this provision are responsible of immediate clean-up, including the costs that are incurred to remove the debris. District may recover such costs from any responsible party by any legally available method.

Owner responsibilities shall include the following daily:

- A. Clean up all trash debris on the construction site
- B. Maintain an on-site container as approved by the District, as necessary to remove debris.
 - 1. All construction debris must be placed in a container. It shall not be overfilled, and it shall be the Owner's responsibility to have debris

emptied or removed without delay when full. Any spillage of debris must be placed in the District approved container immediately.

2. Wire fencing is not permitted as a container.
 3. The container must not be placed within (15) feet of a roadway.
 4. Dumpster shall be covered when not in use and during periods of inactivity with a weatherproof cover.
- C. Lightweight materials, packaging, and other items shall be covered or weighted down to prevent being blown off of the construction site.
- D. Promptly retrieve all trash and debris blown onto streets and neighboring properties.
- E. Owners are prohibited from dumping, burying or burning trash anywhere within the District.
- F. The District reserves the right to implement a mandatory recycling program for construction debris.

3.1.17.2.8 Interpretation

The District shall have final authority in interpretation of the requirements of this section. This section is not intended to repeal, abrogate or impair any existing code, statute, law, ordinance, easement, covenant or deed restriction which imposes more stringent restrictions on the installation, location or buffering of containers. If this section conflicts with another code or statute, the more stringent restrictions shall apply.