Proposed Amendment No. 12, Marion County Land Development Code: Article 6 - Overlay Zones, Creating New Article 6.4, Springs Protection Overlay Zone

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PROPOSED AMENDMENT NO. 12
MARION COUNTY LAND DEVELOPMENT CODE

ARTICLE 6 - OVERLAY ZONES

CREATING NEW ARTICLE 6.4, SPRINGS PROTECTION OVERLAY ZONE

(Page LDC6.20)

Section 6.4.1. Definitions. For the purposes of this Section, the following definitions shall apply. Terms not defined here are defined elsewhere in the Code.

**Animal Feeding Operation.** A lot or facility (other than an aquatic animal production facility) where the following conditions are met:

- Animals have been or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12 month period; and
- Crops, vegetation, forage, growth or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.
- Two or more animal feeding operations under common ownership are deemed to be a single animal feeding operation if they are adjacent to each other or if they utilize a common area or system for the disposal of wastes.

**Animal Unit.** A unit of measurement for an animal feeding operation calculated by adding the following numbers: the number of slaughter and feeder cattle multiplied by 1.0, plus the number of mature dairy cattle multiplied by 1.4, plus the number of swine weighing over 55 pounds multiplied by 0.4, plus the number of sheep multiplied by 0.1, plus the number of horses multiplied by 2.0.

**Approved Conservation Easement.** An instrument that is approved by the County and recorded in the Marion County public record which restricts...
certain activities within a delineated area, in accordance with specific requirements of this Section, for the purposes of protecting the quality and/or quantity of recharge. Approved Conservation Easements provide the County with the right of access and inspection, as well as right but not obligation to enforce non-compliance with County regulations and to mitigate for damages.

**Available Capacity.** An existing central water or sewer system shall be deemed to have “available capacity”, if: (a) As to a central sewer system, it is capable, and permitted by its then-existing FDEP permit, of providing central sewer service concurrently with the proposed build-out schedule of the project without the applicant having to expand the facility providing treatment for the wastewater from the development; provided, however, if it is necessary for the MCUD to so expand the treatment facility, the applicant may be required to prepay capital charges imposed for such facility; and (b) As to a central water or sewer system, its existing water or sewer lines are of sufficient size and capacity to accommodate the water or sewer requirements of the project without the applicant having to reconstruct the existing lines. This requirement concerns existing lines, only, and does not excuse an applicant from having to construct new lines from its project to the point of connection to the central water or sewer system. Further, if it is necessary to replace the existing lines, the County may require the applicant to pay to reconstruct existing lines, within the applicant’s required connection distance, in an amount equal to what it would have cost the applicant to originally construct such lines of sufficient size and capacity to accommodate the applicant’s project.

**Bioretention Facility.** An area which provides retention of stormwater through the use of vegetated depressions of 4 to 9 inches in depth with engineered landscaping and soil matrix, designed to collect, store, and infiltrate stormwater runoff. The invert of a Bioretention Facility is the bottom of the engineered soil matrix. A Bioretention Facility shall fully recover surface storage within 24 hours and soil matrix storage within 48 hours.

**Board.** Marion County Board of County Commissioners.

**BMP.** Best Management Practice.

**C&DD Disposal Facility.** Construction and Demolition Debris Disposal Facility, also referred to as Construction and Demolition (C&D) Landfill.

**CDD.** A “Community Development District” as defined in Section 190.003, Florida Statutes, created pursuant to the “Uniform Community Development District Act of 1980,” Section 190.001 et. seq., Florida Statutes. For purposes of this Section, Improvement Districts shall be equivalent to a CDD.

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**CCR.** Declaration of Covenants, Conditions and Restrictions, recorded in the public records for a development project and meeting the requirements of this Section.

**Centralized System.** A water withdrawal, treatment and distribution system (including fire hydrants) or a Wastewater collection, treatment and dispersal system that serves the needs of one or more residential or non-residential development projects. Centralized Systems are generally owned, operated, and maintained by Marion County, a city, or a Public Service Commission-certificated entity.

**Code.** Marion County Land Development Code.

**Confining Unit.** Consolidated or unconsolidated strata above or below the limestone formation having a vertical permeability shall be of $1 \times 10^{-7}$ cm/second or less. (A semi-Confining Unit has a vertical permeability of between $1 \times 10^{-4}$ and $1 \times 10^{-7}$ centimeters/second.)

**County Engineer.** The County Engineer or duly appointed designee.

**DADF.** Designed Average Daily Flow, in gallons.

**Decentralized System.** A water withdrawal, treatment and distribution system (including fire hydrants) or Wastewater collection, treatment and dispersal system that is designed to serve the needs of a single residential or non-residential development project. Decentralized Systems are, further: (1) usually located within the boundaries of the development project; (2) not typically owned, operated, and maintained by Marion County, a city, CDD, or Public Service Commission-certificated entity; and (3) considered as temporary facilities until a Centralized System is available to serve the development project.

**Developable Area.** The portion of a project area that lies outside sovereign submerged lands, jurisdictional wetland, and, as designated on the approved site plan, the 100-year floodplain. For the purposes of this section, The definition of Developable Area is used solely to determine the area needed to meet the Groundwater Recharge Preservation requirements of this Section, and is not intended to identify or classify lands that would be restricted from development.

**Drought Tolerant Vegetation.** Plants which have the ability to survive without supplemental Irrigation through periods of drought characteristic of the North-Central Florida region. Drought Tolerant vegetation does not include exotic and/or invasive plant species, as defined in the Florida Pest Plant Council’s List of Invasive Species, as amended.
Economic Hardship. An “Economic Hardship” is presumed to exist if the total household income is equal to or less than eighty (80) percent of the median household income of Marion County, as verified by the Marion County Community Services Department. If, however, the Board makes a determination that sufficient public funding assistance and/or adequate long-term financing is available to the owner to help pay for costs resulting from the application of this Section, then an “Economic Hardship” is not presumed to exist.

ERU. Equivalent Residential Unit, each unit representing 300 gallons per day.


Failing. As pertaining to an OSTDS, “Failing” is the point at which the septic tank or at least twenty five percent of the drainfield must be replaced, as determined by a Florida-licensed plumber or OSTDS contractor, the Marion County Health Department, or the Board, due to improper sizing or construction, physical deterioration, root penetration, and/or intentional or unintentional damage. Where central sewer is available, the Failing shall also include the point at which pumping is required, as determined by a Florida-licensed plumber or OSTDS contractor, the Marion County Health Department, or the Board.

FDEP. Florida Department of Environmental Protection.

FFL. Florida-friendly Landscaping.

Food Service Facilities. Any commercial facility that generates Wastewater through the processing and preparation of food, including restaurants and other commercial facility where food is processed or prepared. It does not include facilities that only sell pre-processed or pre-packaged foods.

Geotechnical Study. A detailed analysis and report of the geologic and hydrologic conditions of a project area and which provides site-specific design and engineering recommendations that address both structural safety and groundwater protection issues. Geotechnical studies must be signed and sealed by a professional engineer or geologist licensed in the State of Florida.

Groundwater Impact Area. That portion of a new or expanded development other than the MFLA. The area of a new or expanded development that may be landscaped in a manner inconsistent with the principles of Marion-Friendly Landscaping, and where the use of lawn chemicals (i.e. fertilizers and pesticides), High and/or Medium Volume Irrigation, and/or non-Drought Tolerant plants in the landscapable area is not specifically prohibited in the approved development plans, documents, and

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deed restrictions, as applicable.

**Groundwater Recharge Preservation Area (GRPA).** The area within a development that is in public or common ownership and/or permanently protected under an Approved Conservation Easement, and where the quantity and quality of groundwater recharge is preserved. Generally, the use of Drought Tolerant and/or natural landscaping is required and the use of lawn chemicals (i.e. fertilizers and pesticides), High and/or Medium Volume Irrigation, and impervious surfaces are prohibited.

**High Volume Irrigation.** Irrigation by a system which utilizes rotors, pop-up sprays, or sprinkler heads that irrigate at rates higher than two gallons per minute (2 gpm) per outlet.

**HOA.** Home Owners Association.

**Irrigation.** The outside watering of plants in a landscape such as shrubbery, trees, lawns, grass, ground covers, plants, vines, gardens and other such flora that are situated in such diverse locations as residential areas, cemeteries, public, commercial, and industrial establishments, and public medians and rights of way. “Landscape Irrigation” does not include golf course play areas, and vegetation associated with intensive recreational areas, such as playgrounds and soccer, baseball and football fields.

**Karst Feature.** A landform that has been modified by dissolution of soluble rock, including limestone or dolostone. These include springs, spring runs, sinkholes, solution pipes, swallets and swallow holes. A directly or indirectly connected karst feature is one where no confining layer of sediment exists to prevent runoff from directly or indirectly entering the Floridan Aquifer system.

**Landscapable Area.** The entire parcel less the building footprint, natural water features, surfaced and un-surfaced driveways and parking areas, road rights-of-way, hardscapes such as decks and patios, and other non-planted areas. Landscapable area excludes golf course play areas, other intensive recreation areas (e.g. soccer fields, ball diamonds, etc.) and any part of a constructed stormwater management system that has a design flow or storage depth three feet or greater.

**LID.** Low Impact Development

**Low Pressure Dosing System (LPDS).** An OSTDS consisting of a time-dosed shallow soil absorption system with a network consisting of 2 inch or smaller diameter schedule 40 PVC or equal pipe with ½ inch or smaller diameter drilled holes in narrow trenches. An LPDS shall consist of at least the following components: (1) septic tank; (2) pumping (dosing) chamber
consisting of a submersible effluent pump, level controls, high water alarm and supply manifold; and (3) small diameter distribution laterals with small perforations. Low pressure systems shall be sized with a soil loading rate of no more than 0.72 gallons per square foot per day for trenches or 0.56 gallons per square foot per day for beds.

**Low Volume Irrigation.** Irrigation by a system which utilizes Micro-irrigation equipment and devices that irrigate at rates of one gallon per minute (1 gpm) or less, allowing water to be placed with a high degree of efficiency in the root of each plant.

**Marion-Friendly Landscaping.** The use of plants (and non-plant materials such as mulch) and landscape designs and practices that are compatible with the natural environment and climate of Marion County. Marion-Friendly Landscaping minimizes the use of Turfgrass that is irrigated and fertilized, and maximizes the use of plants that tolerate sandy soils and drought conditions characteristic of North-central Florida.

**Marion-Friendly Landscaping Area (MFLA).** That portion of a new or expanded development where the use of High and/or Medium Volume Irrigation, non Drought Tolerant plants, and lawn chemicals (fertilizers and pesticides) on Turfgrass, is prohibited in the approved development plans, documents, and deed restrictions, as applicable. The use of drought-tolerant grasses, such as Bahia, is minimized but is not necessarily prohibited.

**MCAVA.** Marion County Aquifer Vulnerability Assessment.

**MCHD.** Marion County Health Department.

**MCUD.** Marion County Utilities Department.

**MCUD Director.** Marion County Utilities Department Director, or duly appointed designee.

**Medium Volume Irrigation.** Irrigation by a system which utilizes pop-up sprays or sprinkler heads that irrigate at rates from one to two gallons per minute (1 to 2 gpm) per outlet.

**Micro-irrigation.** An Irrigation method that involves the application of small quantities of water directly on or below the soil surface, usually as discrete drops, tiny streams, or miniature sprays through emitters placed along the water delivery lines (typically half inch flexible tubing). Micro-irrigation encompasses a number of methods or concepts including drip, subsurface, micro-bubbler, and micro-spray Irrigation, previously referred to as trickle Irrigation, low volume, or low flow Irrigation, and has flow volumes measured in gallons per hour.
Mitigation. An action or series of actions aimed at offsetting adverse impacts that new development may have on groundwater quality and quality within the SPZ, particularly as related to the use of fertilizers, pesticides and Irrigation on new lawns and landscaping.

Multi-family. Any residential development project that consists of more than two dwelling units per building, or more than 8 units per gross acre.

OSTDS. Onsite Sewage Treatment and Disposal System; also referred to as a septic system.

Primary SPZ. Primary Springs Protection Zone, as set forth in Map Exhibit B1, adopted under Ordinance #7-20.

Public Access Reuse. Beneficial reuse to a public access area intended to be accessible to the general public.

Rapid-rate Land Application System. Rapid-rate land application system means the use of percolation ponds or rapid infiltration basins (RIBs) or subsurface absorption fields, as described in Chapter 62, Florida Administrative Code (F.A.C.).

Residuals. Biosolids from a permitted Wastewater treatment or water Reuse facility and septage from an OSTDS.

Reuse. The deliberate application of reclaimed water in compliance with FDEP and County requirements for a beneficial purpose.

Reclaimed Water. Water that has received the appropriate level of treatment and disinfection required by FDEP and is Reused after flowing out of a Wastewater treatment facility. The action of Reuse is the deliberate application of reclaimed water, in compliance with FDEP and County requirements, for a beneficial purpose.

Sinkhole. A landform created by subsidence of soil, sediment or rock as underlying strata are dissolved by ground water. Sinkholes may be directly or indirectly connected to the aquifer or disconnected by the presence of a confining layer of soil (clay) or rock that no longer allows water to permeate below this layer. The later may be expressed as a relic Sinkhole or lake, depression in the land surface, or loose soils in the subsurface.

Slow-rate Land Application System. Slow rate land application system means the application of reclaimed water to a vegetated land surface using an overhead or spray, or subsurface drip, Irrigation system, as defined in Chapter 62-610.400 and 62-610.450, F.A.C.
SPZ. Springs Protection Zone, which is the combined extent of the primary and secondary springs protection zones, as set forth in Map Exhibit B1, adopted under Ordinance #7-20.

**Solution Pipe.** A naturally occurring vertical cylindrical hole attributable to dissolution, often without surface expression and much narrower circumference than a Sinkhole.

**Stockpile.** Animal manure, including droppings, urine, and soiled bedding material, that is piled, spread, or otherwise allowed to accumulate to such depth and/or volume in excess of two (2) three (3) cubic yards that it: a) prevents or substantially hinders the growth of grass or other vegetation, and/or b) generates leachate that can potentially contaminate ground or surface water. Manure that is spread on pasture or cropland areas in accordance with normal agronomic practices following UF/IFAS recommendations and this Section is not considered stockpiling.

**SUP.** Special Use Permit.

**Swallet or Swallow Hole.** A place where water disappears underground in a limestone fissure or opening at or near the surface. A swallow hole generally implies water loss in a closed depression or Sinkhole, whereas a swallet may refer to water loss from a disappearing stream or streambed, even though there may be no depression.

**Total Nitrogen (TN).** As a measurement of wastewater effluent quality, Total Nitrogen is the total content of the nitrogen species of organic nitrogen, ammonia, nitrate and nitrite expressed as elemental nitrogen, N, as determined using approved methods. As a measurement of groundwater quality, Total Nitrogen is the total content of the nitrogen species of nitrate and nitrite.

**Turf or turfgrass.** A mat layer of monocotyledonous plants, including but not limited to Bahia, Bermuda, Centipede, Paspalum, St. Augustine, and Zoysia.

**UF/IFAS.** University of Florida, Institute of Food and Agricultural Science.

**USDA-NRSC.** United States Department of Agriculture – Natural Resources Conservation Service.

**Wastewater.** Any substance that contains any of the waste products, excrement or other discharge from the bodies of human beings or animals as well as such other wastes as normally emanate from dwelling houses.

**Wastewater System.** A centralized or Decentralized System for the collection and treatment of domestic wastewater and disposal or **Reuse** **reclaimed**
**effluent of treated effluent.** A wastewater system includes without limitation the collection lines, WWTF, pumping stations, intercepting sewers, force mains, and all necessary appurtenances and equipment and shall include all property, rights, easements, and franchises relating to any such system and deemed necessary or convenient for the operation thereof.

**WTP.** Water Treatment Plant, including all wells, pumps, tanks, valves, piping, treatment and disinfection facilities required to withdraw, treat, and disinfect water suitable for public consumption.

**Water System.** A water supply distribution system consisting of all water mains, valves, service laterals, fire hydrants, meter boxes, etc. used to deliver water from the WTP to the consumer.

**Water Resources Official.** Water Resources Manager or duly appointed designee.

**WWTF.** Wastewater Treatment Facility, which is the facility at which the raw wastewater is collected and treated, and is one component of a centralized or decentralized wastewater system.

**Zoning Official.** Zoning Director or duly appointed designee.

### Section 6.4.2. Statement of Intent.

The purpose and intent of Section 6.4, Springs Protection is to preserve the quantity and protect the quality of the Floridan Aquifer underlying all of Marion County and to protect the environmental, recreational, and economic values of Silver Springs and Rainbow Springs in the interest of public health, safety and general welfare. This is to be accomplished by regulating land uses and activities which can adversely impact the quality and quantity of groundwater within the identified Springs Protection Zones (SPZ).

### Section 6.4.3. Applicability

A. Except as provided under subp. D. below, all new development, redevelopment, or expansion of existing development, including residential and non-residential projects, within the SPZ must comply with the requirements under Section 6.4.7. when it equals or exceeds the following thresholds:

1. All existing and proposed impervious surfaces, collectively, exceed thirty five (35) percent of the gross site area; or
2. The existing and proposed impervious surfaces include 9,000 or more square feet of ground coverage

B. All new projects that fall below the thresholds established under subs. A., above, including, but not limited to, new single family, and duplex construction and non-residential minor site plans, shall, as applicable:

1. Connect to a central sewer system, if required under Section 6.4.7.C.2.(a), or install and maintain an OSTDS in accordance with Section 6.4.7.C.2.(e).

2. Connect to a central water system, if required under Section 6.4.7.C.3.

3. Provide for landscaping in accordance with Section 6.4.7.C.4.(a)(3).

4. Comply with special design requirements for uses listed under Section 6.4.7.C.7.

5. Comply with any applicable stormwater management plan, developer’s agreement, deed restriction and/or other development order approved and required by the County as a condition of development approval.

C. Agricultural Uses

1. Farm management activities, including but not limited to manure and fertilizer management, shall comply with the applicable requirements under Section 6.4.6.C.

2. Construction projects (building improvements, grading, etc.) associated with a bona fide agricultural operation shall be exempt from the requirements under Section 6.4.7, with the exception of the requirements for Onsite Waste Treatment and Disposal Systems under subs. 6.4.7.C.2.(e), if the project includes one or more than three (3) restrooms.

D. Unless specifically required by the Board as a condition of approval of the development project, the following projects shall be exempt from the provisions of Sections 6.4.7.A.2., 6.4.7.B., 6.4.7.C.4., 6.4.7.C.5., and 6.4.7.C.7. to the extent set forth below.

1. The exempt projects are those that, on the date that is 60 days after the effective date of this ordinance, prior to January 15, 2008, have obtained, or have submitted bona fide applications for (and paid all applicable application fees), any of the following unexpired development orders:

   (a) Preliminary plat.
(b) Subdivision improvement plans.
(c) Final plat.
(d) PUD concept plan, submitted with a signed and sealed boundary survey, portraying the boundaries of a site, the location of all lots or buildings, structures, uses and principal site development features for the project (i.e. not a “bubble plan” or informal sketch that could otherwise constitute a concept plan).
(e) PUD master plan.
(f) Master plan.
(g) Site plan.
(h) Building permit.

2. The exemptions set forth in Subsection D.1. herein shall:

(a) Continue for the duration, if any, of approval of the development order upon which it is based and any subsequent development orders for the project applied for and granted prior to the expiration of the preceding development order. For example, if, prior to January 15, 2008, on the date that is 60 days after the effective date of this ordinance, a developer submitted a bona fide application for approval of a preliminary plat, the exemption shall continue only if the preliminary plat for the project is subsequently approved and shall then expire within two years of such approval, pursuant to Section 4.4.1.E., unless, within such period, a final plat for the project is filed and ultimately approved and recorded as set forth in such section.

(b) Apply to such subsequent development orders as long as they do not substantially change the substance and design of the development from previously submitted applications for, or approved, development orders for the project.

3. The duration of such exemption for multi-phase PUD’s, DRI’s and multi-phase subdivisions for which a master plan is required, shall expire five (5) years after January 15, 2008, on the date that is 60 days after the effective date of this ordinance.

4. The exemption under subp. 1. shall expire if within ninety (90) days the applicant fails to take action which significantly moves the proposed development toward approval or completion, unless the applicant establishes
to the satisfaction of the DRC that such 90-day period of time lapse in activity was due to factors beyond the applicant’s control.

5. The Board of County Commissioners may extend the duration of a project exempt under this subsection D. upon a determination that the project has been proceeding in good faith and with due diligence, and that such extension would not be inconsistent with the intent of this section.

Section 6.4.4. Relationship of the Springs Protection Zone Requirements to Other Marion County Land Development Code Requirements.

The SPZ shall be considered as an overlay to other zoning districts and the regulations are designed to supplement or supersede other provisions of this Code. As such, when a regulation of this overlay conflicts with any other provision of the County Code, including provisions of another overlay, the more restrictive provision shall apply, as determined by the Zoning Official.

Section 6.4.5. Boundaries.

The Springs Protection Zone, including the Primary SPZ and Secondary SPZ, shall encompass the land areas as they appear on the Map Exhibit B1, adopted by Ordinance #7-20. If at least fifty (50) percent or more of a proposed project parcel area is within the Secondary SPZ, or Primary and Secondary SPZ combined, then the entire project parcel shall be subject to Secondary SPZ provisions of this Section. If fifty (50) percent or more of any a proposed project parcel area is within the Primary SPZ boundary, then the entire project parcel shall be subject to Primary SPZ provisions of this Section. If at least fifty (50) percent is within the Secondary SPZ, or Primary and Secondary SPZ combined, then the entire project shall be subject to Secondary SPZ provisions of this Section. Where applicability to Primary SPZ or Secondary SPZ is not specified, then the applicable provision shall be presumed to apply equally in both.

Section 6.4.6. Uses within the SPZ.

A. Prohibited Uses. The expansion of existing or new uses and activities, as listed below, shall be prohibited within the Primary SPZ:

1. Auto salvage yards.
2. Construction and Demolition Debris Disposal Facilities in locations that (a) exhibit Karst geology at or below land surface and (b) fall within a MCAVA aquifer vulnerability category of “more” or “most”, unless the applicant demonstrates, based on credible scientific data and information (including, without limitation, the information required to be submitted pursuant to subsection 6.4.7.C.7.(e).(1)) or on any additional measures the owner proposes (such as the provision of a liner and leachate collection system), that the C&DD Disposal Facility will not pose a potential threat to groundwater quality.

3. Any of the following uses unless the facility has, and is in compliance with, a non-discharging/closed loop recycle system permit, or equivalent, from the FDEP:
   (a) Auto and marine paint and body shops.
   (b) Printing shops.
   (c) Car washes.
   (d) Dry cleaning.
   (e) Carpet cleaning operations that discharge at the facility.
   (f) Metal plating.
   (g) Medical, dental, and veterinarian offices and laboratories.
   (h) Auto, recreational vehicle, commercial truck, tractor-trailer, farm tractor, heavy machinery, or small engine parts, service and repair operations;

4. Heavy industrial and commercial uses, including new and expanding permitted and special uses allowed exclusively in B-5, I-C, or M-2 zoning categories, unless the owner demonstrates to the Water Resources Official or the Zoning Director, based on credible scientific data and information, that the proposed use will not pose a potential threat to groundwater quality. in which case the use may be allowed by SUP only.

B. Permitted Uses with Conditions. Unless otherwise prohibited, the following uses are subject to the design requirements set forth. under Section 6.4.7.C.7 below.

1. New and expanding golf courses.
   (a) New and Expanding Golf Courses.
(1) Each golf course shall be designed, constructed, and maintained in accordance with a Natural Resources Management Plan (NRMP) that complies with the BMPs outlined in *Best Management Practices for the Enhancement of Environmental Quality on Florida Golf Courses*, FDEP 2007, as amended.

(2) Non-play areas shall be at least forty (40) percent of the total area if located in the Primary SPZ, and thirty (30) percent if in the Secondary SPZ. In addition, at least eighty (80) percent of all non-play areas shall not be irrigated and shall be preserved native vegetation, or re-established with landscape trees, shrubs, ground covers, and other plants that are Drought Tolerant and/or indigenous to the native plant community of Marion County. Bahiagrass shall qualify provided that: a) it is not irrigated and b) nitrogen fertilizer application is limited to no more than 50 lbs per year, as shall be set forth in the NRMP.

If the golf course is located in the Primary SPZ no more than 65% of the golf course may be irrigated and if the golf course is located in the Secondary SPZ no more than 75% of the golf course may be irrigated, except with reuse water or temporary irrigation as necessary to establish plant material.

(3) The golf course shall, consistent with procedures consistent with criteria established by the Marion County Zoning Director, self certify or hire a bona fide third-party entity which provides the following golf course certification services:

a. Certification that a NRMP complies with the requirements of subp. (1);

b. Certification that a golf course is constructed in accordance with the NRMP; and

c. Annual certification that a golf course is being operated and maintained in compliance with the NRMP.

(4) A detailed report or handbook describing the third-party certification process that will be used shall be submitted to the Water Resources Official for approval with other SUP application materials.
(5) A copy of the NRMP, along with a letter signed by the third-party entity certifying it meets the requirements under subp. (1) and (2) above, shall be submitted to the Water Resources Official prior to start of construction.

(6) A letter signed by the third-party entity certifying that golf course construction complies with the NRMP shall be provided to the Water Resources Official prior to the start of play.

(7) Proof of annual certification in the form of a letter signed by the third-party entity shall be provided to the Water Resource Official beginning within one year of commencement of golf course operations, or at the earliest available time after play starts, and by March 1 of every year thereafter. Annual certification shall be maintained for as long as the course remains in operation.

(8) This provision shall not apply to new and expanding golf courses that: a) are located within a Master Plan community approved prior to the effective date of the ordinance January 1, 2008, and b) are implementing the BMPs outlined in *Best Management Practices for the Enhancement of Environmental Quality on Florida Golf Courses*, FDEP 2007, as amended.

2. New and existing auto salvage yards.

(a) Auto Salvage Yards.

(1) All new and expanding auto salvage operations shall be required to participate in the FDEP Green Yards Program. Compliance with the Green Yards Program shall be attained and certified by the FDEP within one year of commencing operation. Issuance of a SUP shall be conditioned upon maintaining such certification.

(2) Within (3) two years from the date of the adoption of this ordinance By or before December 31, 2010, all existing auto salvage operations shall be certified by the FDEP Green Yards Program.
(3) As a condition of the SUP, the owner or operator shall by March 1 of each year provide documentation to the Water Resource Official or Zoning Director demonstrating the certification status of the salvage yard.

3. New and expanding uses which store and/or stock fertilizers, pesticides, pool and spa chemicals and treated wood products.

(a) Storage and Stocking of Fertilizers, Pesticides, Pool and Spa Chemicals and Treated Wood Products. Fertilizers, pesticides, pool and spa chemicals, treated wood products and other similarly hazardous materials that are stored or stocked for wholesale distribution, retail sale, or commercial use shall be protected from rainfall with a permanent roof structure or by other effective means, as approved by the County. Runoff from the roof structure and surrounding areas shall be effectively diverted away from fertilizer and pesticide storage areas. In addition, any runoff originating from within the covered area shall be contained and used or disposed of in a manner approved by the County, and as set forth in the SUP.

4. Hazardous materials and waste facilities.

(a) Hazardous Materials and Waste Facilities.

(1) Uses which produce, use, or store hazardous materials listed under Section 12.7. shall comply with the provisions of Section 12.8.3., regardless if a Wellfield Protection Permit is required.
(2) Hazardous Materials manufacturing, storage, use, and handling shall comply with the requirements set forth under Section 8.1.5.e.(2).

(3) Containment shall be required in compliance with Section 12.9.

(4) The above requirements shall be stipulated in the approved SUP.


(a) Construction and Demolition Debris (C&DD) Disposal Facilities. Approval of any new or expanding C&DD disposal facility located within a MCAVA category of “more” or “most” vulnerable shall be subject to the following requirements:

(1) Report Required Before Approval. A report generated based on the following analysis and data, which is signed and sealed by a Florida registered professional geologist or professional engineer with geotechnical expertise, shall be submitted to the County before approval, and shall contain, or be based upon, the following:

a. Drilled borings will be installed in order to determine and characterize the subsurface lithology below the proposed landfill site. The borings will be sufficient to determine geological cross-section across the entire site, will consist of soil profiling using the Unified Soil Classification System (ASTM D2487), Standard Penetration Testing (ASTM D1586), and will include a minimum of two borings per five acre of proposed landfill area, with a minimum of four borings. The borings must be sufficient enough to plot the geological cross-section across two axes. The cross-section will also include a designation and description of the shallow water bearing unit, its classification (e.g.: G-I, G-II, G-III), and any confining or semi-confining layers separating the shallow water bearing unit from the Floridan Aquifer. The cross section shall also include a description of the Floridan Aquifer and its location in relation to the proposed bottom of the landfill. An analysis shall also be made regarding the
integrity of the confining or semi-confining layer, if present, and prospect of open conduits from the proposed landfill to the Floridan Aquifer or other sensitive water bodies within one-half mile of the proposed landfill area. The description shall at a minimum include porosity or effective porosity, horizontal hydraulic conductivity, vertical permeability, and depth and lithology of the shallow water bearing unit, confining layers and aquifer.

b. A report signed and sealed by a Florida registered professional geologist or professional engineer shall be submitted regarding observed, or the likelihood of, Karst Features within the proposed landfill area, based upon the borings and other information. Ground Penetrating Radar (GPR) shall be used, if determined applicable by the Registered Geologist or professional engineer, to assist in this determination. The determination of the existence or likelihood of Karst Features will be made by the Registered Geologist or professional engineer based on the subsurface investigation.

c. Soil samples will be collected at a minimum of either (1) three of the borings, or (2) one per every five acres, whichever is greater, from the zones below the bottom of the landfill and the shallowest water bearing unit, and the shallow water bearing unit and the underlying Confining Unit; the required depth of sampling in the Confining Unit may be limited to two feet, and complete penetration of the Confining Unit shall be avoided. The samples shall be submitted for laboratory analysis for the determination of hydraulic conductivity, soil porosity, percent fines, moisture content, plasticity, grain size distribution and organic contents. Field measurements shall be taken from a minimum of three locations, or one for every five acres, whichever is greater, to determine the average horizontal hydraulic conductivity. Average values of the above parameters should be calculated using the more appropriate of the arithmetic mean or the geometric mean, depending on the data spread and consistency.

d. The foregoing requirements are in addition to those set forth in Chapter 62-701 FAC.
(2) **Setback.** The finished base of the facility after final landscaping shall be set back at least fifty (50) feet from all property lines or such greater distance as is determined necessary for stormwater control by a Florida Registered Professional Engineer.

(3) **Prohibition on Material.** The on-site disposal of Copper Chromium Arsenic treated lumber and any debris not specifically classified as “construction and demolition debris” pursuant to Section 62-701.200, Florida Administrative Code, shall be prohibited except in de minimus amounts as may be allowed by Section 62-701.200.

4) **Separation Layer.** The separation distance between the extent of fill and the maximum predicted elevation of water table, seasonal high water table plus one foot, or consistent lime rock formations or layers (if water bearing), whichever is higher, shall be:

   a. At least fifteen feet if the average permeability of the separation layer is greater than $1 \times 10^{-6}$ cm/s, except that no portion of the layer may be greater than $1 \times 10^{-5}$ cm/s; or,

   b. Five feet, of which a minimum of 2 feet shall have a uniform permeability no greater that $1 \times 10^{-8}$ cm/s.

(5) **Leachate Containment.** A leachate containment and management plan shall be provided for any leachate, or stormwater containing leachate, that may bypass the separation layer, and shall ensure that leachate does not contaminate the Floridan Aquifer system through soil materials, retention areas or other conduits occurring beyond the extent of fill. The management plan may require, but not be limited to, extending the separation layer under subs. (4) above beyond the extent of fill.

(6) **Liner and Leachate Collection.** A liner and leachate collection system shall be provided in accordance with applicable FDEP standards, if the report under subs. (1) above indicates any of the following:

   a. The immediate water bearing unit is the Floridan Aquifer; or
b. Karst Features are observed within the proposed landfill area, unless the features are extremely localized and are effectively remediated according a remediation plan that is (1) compliant with applicable state and local regulations and (2) signed and sealed by a Florida Registered Geologist or professional engineer with extensive geotechnical expertise; or

c. The formation of Karst Features is likely within the proposed landfill area, as determined by a Florida registered professional geologist or professional engineer, based on the geological and hydrogeological investigation; or

d. Other open conduits or breaches in the Confining Unit which would allow leachate to enter the Floridan Aquifer either exist or are likely to exist.

(7) Groundwater Monitoring Plan. A ground water monitoring plan, which meets the criteria set forth in 62-701.510 and 62-550 Florida Administrative Code (F.A.C.), except as modified below, shall be submitted, implemented and maintained by the owner or operator.

a. All compliance monitoring wells will be installed in accordance with ASTM D5092.

b. Compliance monitoring wells shall be installed around the disposal facility at a spacing of no more than 600 1,000 feet apart across the downgradient direction of groundwater flow, and 4500-2,000-feet apart along the upgradient and cross-gradient direction of flow. A minimum of three wells will be installed on the downgradient side and a minimum of two wells on each of the upgradient and cross-gradient sides. The wells will be installed using ten feet of screen intersecting the water table two feet and will use a slot size appropriate to the grain size distribution of the screened interval soils.

c. Compliance wells will be analyzed for the constituents required by Chapter 62-701, FAC. The wells required by the C&DD Disposal Facility’s FDEP permit will be sampled on a semi-annual basis (i.e., every six months). All additional wells installed pursuant to the requirements of this section will be sampled on an annual basis.

(8) Grading and Landscaping. As the portions of the facility are filled, the side slopes shall be graded, covered with soil, and
landscaped at a maximum 2-acre frequency, as measured along the face of the slope.

(9) *Final Cover.* When filled to capacity, the facility shall have a final cover designed to prevent ponding and low spots, maximize runoff, limit infiltration and erosion, and support the required landscaping. Soil cover on finished sloped faces (where maximum slope is 3H:1V) shall have an *maximum* average permeability of $1 \times 10^{-4}$ cm/s to $1 \times 10^{-5}$ cm/s. The crown (top, where slope is less than 3H:1V) of the finished facility shall have an average maximum permeability of $1 \times 10^{-6}$ cm/s. The permeability of the finished slope and crown shall be determined by testing performed by a Florida registered professional geologist or registered professional engineer. The cover can be constructed of a soil layer, geomembrane, or combination of both in order to achieve the appropriate permeability and erosion control, to the extent permitted by FDEP regulations.

(10) *Monitoring.* The owner or operator of the construction and demolition debris disposal facility, or their successors or assigns, shall continue to monitor and maintain the facility for ten years from the date of closing. However, no financial assurance requirements shall be maintained beyond the initial five year period required by FDEP regulations unless monitoring data indicates that the facility is impacting groundwater at concentrations which may be expected to result in violations of FDEP water quality standards, in which case financial assurance shall continue to be provided beyond 5 years. Compliance well monitoring shall be on an annual basis, with alternating wells to be tested every other year (i.e. 50% of wells tested one year, and 50% the next). The ten year time period shall be extended if assessment monitoring or corrective action has been initiated in accordance with subsection 62-701.510(7), *Florida Administrative Code*, or if site-specific conditions make it likely that any contamination which may emanate from the disposal area would not be detected within ten years.

(11) *Signage.* The owner shall post signs indicating the name of the operating authority, traffic flow, hours of operation and restrictions and conditions of disposal.
(12) **Declaration to the public.** After closing operations are approved by the Department, the facility owner or operator shall file a declaration to the public in the deed records in the office of the Marion County Clerk of Circuit Court. The declaration shall include a legal description of the property on which the facility is located and a site plan specifying the area actually filled with construction and demolition debris. The declaration shall also include a notice that any future owner or user of the site should consult with the FDEP prior to planning or initiating any activity involving the disturbance of the facility’s cover, monitoring system or other control structures. A certified copy of the declaration shall be filed with the Zoning Official.

(13) **Application Review, Construction Certification and Fees.** All construction shall be conducted in accordance with a construction quality assurance/quality control (CQA) plan to be submitted with other application materials for approval. The CQA plan shall specify soils testing and analysis in accordance with generally accepted engineering procedures, and outline project specifications and construction requirements in accordance with generally accepted industry standards. The plan shall also specify performance criteria for soil separation and cover layers, and provide quality control testing procedures and minimum sampling frequencies. In addition, the plan shall define the responsibilities of the parties that will be involved in soil separation and cover layer construction, and shall present minimum qualifications of each party to fulfill their identified responsibilities. Marion County shall reserve the right to hire an independent, professional engineer(s) to provide review of the CQA plan, geotechnical information and other application materials, and to inspect and certify construction activities and completion. The County may further require the applicant to compensate the County for the lesser of (a) costs incurred exclusively for such professional services, according to a fee set annually by resolution of the Board, or (b) actual contractual costs for services rendered for the specific project.

(14) **Relationship to FDEP Regulations.** Where the provisions of this part conflict with the requirements of the FDEP, the more restrictive provisions shall apply.

6. **Mining operations for which the following applies:** (a) at least thirty five (35) percent of the proposed excavated area falls within a MCAVA category of “more” or “most” vulnerable, or (b) excavation will occur within fifteen (15) feet
of the predicted high water table, seasonal high water table plus one foot, or top of limerock, whichever is higher.

Mining Operations. New and expanded mining operations, including sand, clay, and limerock mines, shall be subject to the following minimum requirements if the following applies: (a) at least thirty five (35) percent of the proposed excavated area is located in a MCAVA category of “more” or “most” vulnerable, and/or (b) the operations will excavate within fifteen feet of predicted height of water table, or lime rock, whichever is higher.

which (a) are located in a MCAVA category of “more” or “most” vulnerable and (b) will excavate within fifteen feet of predicted height of water table, seasonal high water table plus one foot, or limerock, whichever is higher, shall be subject to the following minimum requirements:

(1) All surface drainage from site runoff shall be directed away from mined area to avoid groundwater contamination. If necessary, grading to alter the direction of flow and/or construction of berms to direct runoff around the mined area may be required.

(2) Pollutants or substances of any kind which may be detrimental to water quality shall not be permitted stored in the mined area. In addition, all fueling, lubrication and any other equipment maintenance activity for equipment that is reasonably maintained outside of the mined area, shall be performed beyond the edge of the mined area, and additional spill containment shall be provided.

(3) Only clean fill, as defined in Article 2 by FDEP, may be disposed of in the mined area.

(4) Test borings shall be required to delineate geologic conditions, and to determine the interface between the surficial and Floridan aquifers and the locations of groundwater tables on a site. At a minimum, the test borings shall comply with the following:

   a. Minimum depth. All borings shall be conducted to a depth of not less than ten feet below the deepest proposed mining or excavation.

   b. Maximum spacing. All borings shall be spaced at a minimum of 500-foot intervals in two transverse directions.
c. **Log content.** The boring log shall indicate the geologic description and thickness of all strata encountered, including topsoil, overburden, mineral deposit or material to be mined or excavated and material immediately underlying the mineral deposit or material, and the position of the groundwater. *in relation to individual*

d. **All borings shall be properly filled or grouted.**

(5) All mines shall be required to have an approved Reclamation Plan that, in addition to meeting all FDEP requirements, includes the following measures to protect water quality in the surficial and Floridan Aquifer:

a. Where the excavated area will be reclaimed and developed with an urban land use or rural development, clean fill and/or soil with similar or lower permeability and recharge rate than the original strata shall be replaced to a minimum depth of fifteen (15) feet over seasonal high water table or top of limerock, whichever is higher. *Not to exceed natural ground elevation.*

b. For any mine where reclamation results in (1) a water body connected to the surficial or Floridan Aquifer, and/or (2) exposed limerock, a natural vegetative buffer along the edge of the water body or exposed limerock shall be provided according to the following:

i. The buffer shall be at least one hundred fifty (150) feet wide, as measured from the edge of OHWM, escarpment or highest closed contour of the mined area, as applicable. For water bodies, the buffer shall, additionally, extend from the outer edge of the minimum buffer width to the edge of water. *These minimum buffer widths may be reduced if the applicant demonstrates that a narrow buffer can be calculated using the design methodology for calculating buffer width based on infiltration, as set forth in the Applicant’s Handbook for Regulation of Stormwater Management Systems, SJRWMD 2005, as amended.*

ii. The buffer shall be permanently protected through an easement granted to the county, or other County-
approved public or non-profit entity, on an county-approved instrument recorded in the public record

iii. Vegetation within the easement shall consist of native or approved non-invasive and drought tolerant trees, shrubs, grasses and other ground covers, which shall be established according to a buffer landscaping plan submitted to the County for approval.

(6) The following information shall, as part of the Special Use Permit application, be included with all other submittal documents required for major site plan review:

a. Major site plan showing the following at a minimum:
   i. Location of the site and boundaries of property lines in relation to state and county roads;
   ii. Proposed location of storage tanks, refueling areas and equipment maintenance areas;
   iii. Existing potable water wells within 500 feet of the site boundaries;
   iv. Existing and proposed water bodies; and
   v. Existing and proposed temporary and permanent stormwater management facilities;

b. Aerial photograph provided from the most recent data available from the Marion County aerial photo program, showing property lines and areas proposed for mining, excavation or fill; taken within one year of application submittal, showing property lines and areas proposed for mining, excavation or fill;

c. Topographic map showing pre and post development contour lines, at a maximum of two-foot intervals;

d. Cross-sectional of the proposed depth of areas to be mined or excavated and relationship to the wet season high water table potentiometric surface and geologic materials, based on test borings performed on the site;

e. Copy of Reclamation Plan, prepared in compliance with FDEP requirements, and including post-development vegetative buffer plan;
f. Copy of hazardous materials management plan consistent with the requirements of FDEP and this Section;
g. Copy of geotechnical report required under Section 6.4.7.B.;
h. Stormwater management plan; and
i. Draft copy of proposed conservation easement document, if applicable.

7) Industrial and commercial uses located in a MCAVA category of “more” or “most” vulnerable, and for which the following applies: (a) the use is a permitted or special use allowed exclusively in B-5, I-C and M-2 zoning categories; or (b) the use is a motorized vehicle, heavy machinery, and/or small engine service and repair operation.

(7) Heavy Industrial and Commercial Uses. Heavy industrial and commercial uses as set forth under Section 6.4.6.B.7., above, such uses shall:
a. Conduct any manufacturing and repair operations under a roofed structure; and
b. Provide cover over any machinery, used parts, or other equipment which are potential sources of pollutants or substances of any kind which may be detrimental to water quality.
c. Cover requirements under subp. (b) shall not apply to normal runoff from landscape, roof and employee and customer parking lot areas served by a county-approved stormwater management facility.

C. Agricultural Uses. Except as provided below, all agricultural uses permitted under Article 5 shall be permitted in the SPZ.

1. New and expanded Animal Feeding Operations that qualify as a Concentrated Animal Feeding Operation and is operating at density greater than one animal unit per acre, pursuant to Chapter 62-670, Florida Administrative Code, shall be prohibited in the primary SPZ unless the facility is granted a non-discharge permit from the FDEP.

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Or the facility is granted a Special Use Permit by the county. (Florida Department of Environmental Protection)

2. The following activities associated with an agricultural use shall be prohibited in the SPZ:

(a) The dumping or stockpiling of manure in a Sinkhole or other Karst Feature

(b) The dumping or stockpiling of manure in a wetland, stream, lake, Sinkhole, ephemeral waterway or any other surface water feature.

(c) The placement or burying of manure in an excavated pit or mine.

(d) The stockpiling of three (3) cubic yards or more of manure within two hundred (200) feet of a Sinkhole or other Karst Feature that has an opening at the surface, including Swallets and Solution Pipes unless, as determined by the county engineer, based on geology, topography and vegetation, adequate treatment can be achieved by a shorter distance of separation. The application of fertilizer, manure, and/or Residuals within two hundred (200) feet of a Sinkhole or other Karst Feature unless based on geology, topography and vegetation, equal treatment can be achieved by a shorter distance.

(e) The application of fertilizers, manure and/or Residuals on pastureland, cropland, tree farm, ornamental nursery, or other agricultural field at rates that exceed UF/IFAS recommendations, and use thereof in a manner that is inconsistent with any applicable BMP’s adopted by the State of Florida, or the Board. In no case may nitrogen be applied at a rate exceeding fifty (50) pounds per acre per year on pasture or grasslands used primarily for incidental grazing. (Incidental grazing being defined as grazing that is not the primary feed source of the grazing animals.) If the principal objective of the grassland is to be a primary feed source or hay production and harvesting, then higher levels of nitrogen may be applied, provided the application rate is in accordance with a nutrient management plan that:

(1) Has been prepared for the farm by a professional qualified to prepare such plans pursuant to requirements of the USDA- NRSC NRCS; and or

(2) Is in compliance with applicable agricultural nutrient management BMPs adopted by the State of Florida.

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3. **By or before December 31, 2008** On the date that is **60 days after the date of adoption of this ordinance**, the addition of any manure to an existing Stockpile or to existing Stockpiles that cumulatively exceed the greater of a) the amount of manure generated on the farm within a three (3) month period, or b) twenty five (25) cubic yards times the size of the farm operation (in contiguous acres) up to a maximum of two hundred (200) cubic yards, shall be prohibited. If a Stockpile is located within any of the areas described under subparagraphs 2.(a) through (d), above, then any addition shall be prohibited effective immediately. The amount of manure generated within a three month timeframe shall be calculated by multiplying the total number of Animals Units on the farm by 6 cubic yards. Alternatively, the owner may provide substantial evidence that Stockpiled manure has not accumulated for more than three months, including but not limited to invoice receipts from a licensed hauling operation. Upon owner request, the Board Water Resource Manager or Zoning Director may grant a waiver from these stockpiling limitations, subject to the following:

(a) The owner can demonstrate, based on credible scientific data including but not limited to groundwater quality monitoring data that demonstrates the manure Stockpile is not contributing and will not contribute to an increase in the concentration of nitrates in groundwater down gradient from site; or

(b) The manure is effectively covered and/or located in a manner that prevents rainfall and stormwater from coming into contact with the Stockpile; or

(c) The manure is contained within a manure storage facility designed, constructed and maintained in accordance with applicable U.S. Department of Agriculture Natural Resources Conservation Service conservation practices standards and specifications; or

(d) The manure is being managed as part of a composting operation that is in compliance with a valid permit issued by the FDEP for such operations. or it is manure produced solely on the farm where it is being composted and is managed in compliance with FDAC composting manual xxxxx with any applicable BMP’s.

4. The requirements of this subsection shall apply until such time that the owner can demonstrate through appropriate certification or other documentation that the farm or farm activity is already regulated by the Florida Department of Environmental Protection, the Florida Department of Agriculture and Consumer Services, or water
management districts through a best management practice program ("BMP") administered and adopted under Chapter 120, Florida Administrative Code, as part of a statewide or regional program. To be deemed already regulated, the owner shall, at a minimum, provide satisfactory evidence that a Notice of Intent to Implement has been filed with the appropriate state agency, pursuant to Chapter 403.067 (7)(c)(2), Florida Statutes and applicable BMP rule under Chapter 5M, Florida Administrative Code, and that the BMP's necessary to bring the farm into compliance with this Section have already been implemented or will be implemented within no more than two (2) years from the date the owner receives official notice of Code violation from the Board.

5. The owner of an agricultural commercial hauling operation shall be responsible for ensuring that any manure that is removed from any the farm operation is disposed of in a manner that complies with local, state and federal regulations. The County shall maintain a list of known locations that accept and process manure waste in compliance with applicable local, state and federal permits, as well as haulers known to operate in Marion County that are licensed to haul to such facilities.

Section 6.4.7. Any new or expanding farm commercial use operations involving the production of plants useful to man on 10 acres or greater or, greenhouse, nursery operations 5 acres or greater shall, if the Florida Department of Agriculture and Consumer Services has adopted mandatory BMPs governing the operations of such business:

A. File with the appropriate State agency a Notice of Intent to Implement (NOI) such BMPs, pursuant to Chapter 403.067 (7)(c)(2), Florida Statutes and applicable BMP rule under Chapter 5M, Florida Administrative Code, within 30 days of commencing or expanding operations;

B. Provide a copy of the NOI to the Zoning Official concurrent with filing with the State; and

C. Bring the business into compliance with such BMPs within one (1) year of filing the NOI.
adopted BMP’s as may be necessary to bring the farm into compliance with this Section. A copy of the NOI shall be provided to the Zoning Official concurrent with filing with the State. If no applicable BMP Manual has been adopted by the State of Florida, the applicant shall, within one (1) year of the date the operation starts new, or is expanded, implement any practical and reasonable measure(s) as may be necessary to bring the farm into compliance with this Section.

Section 6.4.8. Development Standards.

A. General.

1. Preferred Development Method. The clustering of units into pods and utilizing appropriate low impact development methods through the planned unit development (PUD) process shall be the preferred method of development for both urban and rural projects within the SPZ, where the intent of such approaches is to promote and comply with the overall intent and specific requirements of this Section.

2. Springs Protection Pre-development Review (PDR)

(a) Application Required. All projects located in the SPZ that meet the criteria under Section 6.4.3.A shall apply, using a form provided by the County, for a PDR conference to be conducted with County technical staff. The applicant shall submit a signed and sealed site plan, to scale, which shall depict existing site conditions and improvements in accurate detail, including at a minimum the following:

(1) Karst Features on the project site and offsite within 200 feet of project boundary.

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(3) Existing water and Wastewater service infrastructure that is located within a right of way contiguous to the property and within 200 feet of the property boundary. And

(4) An address assignment from the 9-1-1 System Management Department.

(b) Pre-application Conference. Applicants under subp. (a), above, shall participate in the PDR conference to be scheduled by the County upon receipt of the completed application. The applicant will
be notified of the date and time of the PDR conference, which shall be scheduled within 20 business days of the application date.

(c) PDR Summary Report. The applicant shall receive a summary report of the PDR conference, to be issued by the County within ten (10) working days. No application for formal DRC review shall be accepted unless a copy of this report is submitted with the application under subs. 3.(a), below.

(d) Any statements or determinations made in conjunction with the PDR Conference shall not be binding upon the applicant, technical staff, Development Review Committee, or the Board. Further, no development rights shall be conferred upon the applicant or the proposed development as a result of the Pre-application Conference.

3. Development Review. All applicants shall submit the following:

(a) A completed DRC application form.
(b) A copy of the determination under subs. C.2.(a)(1) and C.3.(a)(1), below, if required.
(c) A copy of the PDR Summary Report.
(d) The Geotechnical Study required under sub. B.1., below. And
(e) All other plan submittal items as required to demonstrate compliance with this and other applicable sections this Code.

B. Geotechnical Study

1. Requirements. The study and analysis required under Section 8.1.5. shall be required for all projects meeting the applicability requirements under Section 6.4.3.A., and submitted to the County for review and acceptance. If the project falls within a MCAVA category of “more” or “most” vulnerable, then the Geotechnical Study shall meet the following additional requirements:

(a) The number, pattern and type of test borings shall be determined by the project engineer or geologist based on the project size, type, and complexity. At a minimum, at least one test boring of twenty (20) feet or greater in depth shall be performed for each increment of five (5) acres. Where visual reconnaissance, available published data, and/or initial borings suggest high karst sensitivity or lithologic variability, additional borings may be required. Where practicable,
test borings shall be performed in a linear pattern or network to enable development of geologic cross-sections.

(b) For each increment of forty (40) acres in project area, at least one of the test borings under subp. (a) above shall extend to the anticipated depth of limerock or Confining Unit; however, no boring shall be required to a depth greater than 40 feet. If a Confining Unit is encountered, the boring shall extend at least five (5) feet into the unit and a permeability test shall be performed.

(c) All test borings, permeability tests, and soil tests shall be performed in conformance with applicable ASTM standards.

(d) Ground Penetrating Radar may be used in addition to, not as an alternative to, test borings.

(e) For projects that involve mining, solid waste disposal (including Class I, II and III landfills and C&DD Disposal Facilities), effluent sprayfields, rapid infiltration basins, or biosolids disposal, the type, number, and pattern of borings shall be modified and enhanced to enable the project engineer or geologist to provide accurate lithologic cross sections and descriptions of the Impacted Area, including but not limited to: soil type, depth, permeability and other physical characteristics; Confining Unit depth, thickness and permeability (if present); top of limerock; seasonal high and permanent water table elevations; and Karst Features. Ground Penetrating Radar shall be used where test borings reveal the presence of Karst Features (including active or relic Sinkholes, Solution Pipes, pinnacles, and/or caves).

(f) The Geotechnical Study shall include a report that contains the following in accurate and reasonable detail:

1. A site plan, to scale, showing the following in true and accurate detail:
   a. Size and location of existing buildings and other impervious surfaces, and estimated size and location of proposed buildings and other impervious surfaces, if known;
   b. Location of test borings, ground penetration radar, and other points of subsurface exploration performed on the site; and
   c. Location of Karst Features, including Sinkholes, Solution Pipes, Swallets and limestone outcroppings, based on visual
reconnaissance, test borings, and other published data, if available.

(2) Profile and description of soils at each boring location, according to the Unified Soil Classification System;

(3) A description of Karst characteristics and sensitivity of the site;

(4) Estimated or known depth to limerock;

(5) Estimated or known depth and thickness of any confining or semi-Confining Unit, if present;

(6) Estimated or known depth to water table and groundwater flow direction;

(7) A Groundwater Impact Analysis (GIA) which includes the following at a minimum:

a. Assessment of the risk of surficial and Floridan Aquifer contamination, based on the lithology and Karst nature of the site;

b. Assessment of whether there is any increased potential for new Sinkholes, Solution Pipes or caves to develop based on the type of improvements and stormwater management;

c. Recommendations for design and construction alternatives that will minimize: (1) impacts on groundwater quality and recharge, and (2) formation of Sinkholes, Solution Pipes and caves. Recommendations shall include, at a minimum, alternatives for stormwater and Wastewater management, as applicable, and options for open space and natural area preservation and Karst Feature protection.

2. **Timing of Submittal.** For uses listed under subp. 1.(e), above, the Geotechnical Study shall be submitted at the time of the application for a Special Use Permit. For all other projects, the Geotechnical Study shall be submitted along with other submittal documents required for Development Review.

3. **Fees for Geotechnical Review.** Marion County shall reserve the right to utilize a consultant to provide professional geological and/or engineering services for the review of a Geotechnical Study, and to require the applicant to compensate the County for costs incurred for such review according to a fee set annually by resolution of the Board.

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C. Design Standards.

1. General

(a) Intent. All new and expanded development and redevelopment shall be designed and constructed in a manner that minimizes adverse impacts to groundwater quality and preserves recharge. Methods to achieve this shall, to the greatest extent practicable, include but not be limited to, any or all of the following:

(1) Maximizing preservation of natural areas and use of Drought Tolerant and native or approved non-invasive and drought-tolerant plant landscaping that is compatible with and characteristic of the natural environment, climate and soils of Marion County, and consistent with Marion-Friendly Landscaping.

(2) Minimizing impervious surfaces;

(3) Using efficient Irrigation systems;

(4) Using clustering and other forms of conservation development approaches that minimize overall impact;

(5) Using vegetated swales, shallow retention areas, and small basin drainage areas that help to improve stormwater water quality and mimic pre-development hydraulic conditions; and

(6) Utilizing domestic waste treatment and disposal systems which maximize removal of nitrogen and minimize contamination of groundwater.

Note: Marion County shall develop and make available to the public a list of native or approved non-invasive and drought-tolerant plants that may be used to meet the applicable requirements of this Section.

(b) Consistency with Geotechnical Study. All development shall be designed and construction in a manner that is consistent with the findings, intent, and recommendations of the Geotechnical Study accepted by the County, pursuant to subsection B.

2. Domestic Waste Management.

(a) System Connection.
(1) **Application Required.** All new and expanding development projects in the SPZ that generate Wastewater shall apply to the Marion County Utilities Department (MCUD) for a determination of central sewer availability and connection, using a form provided by the MCUD. Within ten working days of receipt of a completed application, the MCUD shall issue an official written determination to the applicant. The determination shall advise the applicant if central sewer is available and, if so, shall indicate the source of the central sewer service (including, for example, the MCUD, a PSC-certified utility, a city, a Community Development District, or other entity authorized by the State of Florida to provide public Wastewater services), the location of the nearest connection point and whether any additional off-site facilities (larger lines, off-site lift stations or expansions to a WWTF) will be required to provide central sewer service to the project. All applications made for building permits and/or other development reviews shall be accompanied with a copy of the written determination.

(2) **New Development in an Urban Area.** All new development shall connect to an existing central sewer system if a system with Available Capacity has a treatment plant or sewer line within a distance equal to or less than the lesser of the following: (a) four hundred (400) feet times the total number of ERUs within the project, at build out, or (b) five (5) miles. Otherwise, the project shall comply as follows:

a. For new residential projects that consist of five (5) or more ERUs, the developer shall design and construct a decentralized Wastewater treatment system that meets the needs of the entire development and complies with the requirements of the FDEP or FDOH, as applicable, and the County.

b. New residential projects that consist of fewer than five (5) ERUs may use individual OSTDS that meet the requirements of the FDOH and this Section.

c. New non-residential site development projects that consist of fifteen (15) or more ERUs, and all projects that include
Food Service Facilities, shall design and construct a sewage treatment facility that complies with all applicable requirements of the FDEP and the County.

d. New non-residential site development projects that consist of fewer than fifteen (15) ERUs and do not include Food Service Facilities may use an OSTDS that meets the requirements of the FDOH and this Section.

(3) **Subdivisions in the Rural Area.** Except as set forth in subs. a. and b., below, new rural subdivisions containing any buildable lot less than five (5) acres in size shall connect to an existing central sewer system if a system with Available Capacity has a treatment plant or sewer line within a distance equal to or less than the lesser of the following: (a) than four hundred (400) feet times the total number of ERUs within the project, at build out, or (b) five (5) miles. Otherwise, the project shall comply as follows:

a. As an alternative to connecting to an existing central sewer system, **if the project contains thirty-one (31) lots or less, and all lots are at least one (1) acre in size**, the developer shall design and construct a decentralized Wastewater treatment system that meets the needs of the development and complies with all applicable requirements of the FDEP, or FDOH, as applicable, and the County.

b. As an alternative to connecting to an existing central sewer system or a Decentralized System complying with subs. a. above, if the project **at build out contains less than five (5) lots and all lots are at least one (1) acre in size**, the development shall utilize OSTDS that meets the requirements of FDOH and this Section.

c. As an alternative to connecting to an existing central sewer system or a Decentralized System complying with subs. a. above, if all buildable lots **at build out** are five (5) acres or greater, the development shall utilize an OSTDS that meets the requirements of FDOH and this Section.

(4) **New Single Family Residential and Duplex Construction.**

New single family residential and duplex construction in the Urban or Rural area shall connect to a central sewer
system if any of the following applies, as determined by the MCUD:

a. A gravity sewer line from a central sewer system with Available Capacity is within one four-hundred (400) (100) feet of the nearest property boundary, as measured along any legal access eligible for utility installation and/or operation using the shortest distance measurement, and if a connection may be made to the existing sewer line with a gravity line, or an onsite pumping station.

b. A sewer line from a decentralized sewer system with Available Capacity is within one four-hundred (400) (100) feet of the nearest property boundary, as measured along any legal access eligible for utility installation and/or operation using the shortest distance measurement, and permission is obtained by the owner/operators of the Decentralized System.

c. A force main from a central sewer system with Available Capacity is located in right of way adjacent to the property boundary, unless the MCUD determines that connection is not technically feasible.

(5) Residential and non-residential development Utilizing an OSTDS. Any residential and non-residential development that is utilizing an onsite septic system, whether a conventional OSTDS or performance based treatment system (PBTS), shall be required to connect to a central sewer system when a sewer line within the right of way contiguous to the property is within two-one hundred (200) (100) feet of the property boundary and a written notice of central sewer availability for the property has been duly issued by the MCUD. The timeframe within which the owner must connect shall be as follows:

a. Within ninety (90) days of issuance of a written notification by the MCHD, or Board, that the OSTDS is Failing. Connection may, however, be required in fewer than 90 days if site conditions pose a threat to public health or safety, as determined by MCHD or Board.

b. Within six (6) months of any transfer of property ownership, except for those transaction types listed under subs. (e)(2)f.,
below. The seller of a property for which a written notice of availability has been issued shall disclose to the transferee that such notice has been issued; however, failure by the seller to disclose shall not relieve the transferee from being required to comply with this provision.

c. Within one (1) year if the development meets any of the following criteria

i. Is within a subdivision where connection to central sewer, when available, is specified on the subdivision plat dedication; or if the county pays the cost of, or runs the sewer lines, and if the county does not require the owner to pay impact fees, sewer connection charges or other charges.

ii. Was issued an OSTDS permit that includes a provision requiring the owner to connect to a central sewer facility, when available.

iii. The OSTDS was installed on or after January 1, 2008, or if the county pays the cost of, or runs the sewer lines, and if the county does not require the owner to pay impact fees, sewer connection charges or other charges.

The foregoing sentence shall not preclude the county from collecting regular periodic sewer charges.

d. Any existing development which does not connect to a central sewer system within 365 days of the issuance a Notice of Availability by the MCUD, regardless of reason or justification, shall be subject to a Sewer Availability Fee, the amount of which shall be set by the resolution of the Board.

(6) Decentralized Wastewater Facilities. Decentralized Wastewater facilities shall be constructed, owned, and maintained, according the following:

a. The Wastewater collection/transmission system shall be designed in compliance with Section 8.2.7.f, except for the submersible pumps. Submersible pumps shall be sized to serve the development and are not required to meet the requirements of Section 8.2.7.f.
b. All collection/transmission components shall be constructed within a public right-of-way or utility easement, and the lift station shall be located within a tract of land that is (1) at least 50 feet square and (2) designated on the plat or site plan as a “sanitary lift station.”

c. The area served by a decentralized Wastewater system may not receive a Public Service Commission (PSC) franchise and must be owned, operated and maintained by an entity exempt from Public Service Commission (PSC) requirements. If the decentralized wastewater system is owned, operated or maintained by an entity that has a Public Service Commission (PSC) franchise, such entity must, as a condition of such ownership or operation, agree to terminate or modify the franchise to comply with the requirements of subsection e of this section.

d. The WWTF must meet the requirements of both FDEP and this Section.

e. The WWTF shall be taken out of service, deeded or reclassified according to the following:

i. When a Centralized System is determined by the MCUD Director to be available in accordance with this Section, the Centralized system owner will, either directly or through contractors: (a) 

ii. If the MCUD Director makes a determination that the constructed decentralized Wastewater system is suitable for expansion of and/or incorporation into an existing Centralized System, then all the components of the constructed decentralized Wastewater system shall be deeded to the Centralized System owner, subject to the Centralized System owner’s approval, and the Decentralized System shall be reclassified as a Centralized System.
iii. If the MCUD Director makes a determination under subp. (1) above that a proposed project will not be required to connect to a Centralized System, then the developer may construct a Decentralized System that shall be classified as a Centralized System. A Decentralized System that is classified as a Centralized System according to this provision may be constructed according to manufacturer’s requirements and shall be exempt from the requirements under subp. a. above. Such system shall, however, be required to comply with the treatment and disposal requirements of both FDEP and this Section, and shall be operated and maintained by a service company certified in the State of Florida according to a service contract approved by the County.

iv. Any person may appeal the determination of the MCUD Director. If the MCUD Director determines the WWTF is to be deeded to the County, the terms and conditions of the conveyance shall be established in a Developer’s Agreement agreed upon by both parties prior to any construction.

f. Any development which is not required to connect to centralized or decentralized sewer system shall use an OSTDS that meets the requirements under subs. (e) below.

(b) Treatment Standards. The requirements of this subsection shall apply to all centralized and decentralized Wastewater treatment facilities (WWTF) in the SPZ.

(1) Any new or expanded WWTF shall be meet the following applicable annual average reclaimed water limitations for Total Nitrogen Nitrate as N:

a. 3.0 mg/L for: (1) facilities in the Primary or Secondary SPZ having a designed average daily flow (DADF) equal to or greater than 500,000 gallons per day (gpd) and which use a Slow-rate Land Application System with restricted public access (e.g. sprayfield); and (2) facilities in the Secondary SPZ having a DADF equal to or greater than 100,000 gpd and which use rapid-rate land application as the primary disposal system.
b. 6.0 mg/L for: (1) facilities in the Primary or Secondary SPZ having a DADF less than 500,000 gpd but greater than or equal to 10,000 gpd, and which use Slow-rate Land Application System with restricted public access; and (2) facilities in the Secondary SPZ having a DADF less than 100,000 gpd but greater than or equal to 10,000 gpd and which use a rapid-rate land application as the primary disposal system.

c. 10.0 mg/L for any facility that:
   i. Has a DADF of less than 10,000 gpd; or
   ii. Disposes of effluent through a public access Reuse system.

d. If a facility is permitted by the MCHD, then the system shall comply with the requirements under Chapter 64E-6, Part IV, F.A.C. and this Section, otherwise it shall comply with the requirements of the FDEP and this Section.

(2) By or before January 1, 2019, the owner of an existing WWTF using rapid-rate land application as a primary disposal system shall:

a. Connect to a central sewer system that does not utilize a rapid-rate land application disposal system; or

b. Meet a 10 mg/L Total Nitrogen Nitrate effluent limitation and either convert to a Slow-rate Land Application System approved by the FDEP (including as an option a subsurface drip Irrigation system); or convert to a public access reuse disposal system. or

c. Meet the following annual average reclaimed water limitations for Total Nitrogen, as Nitrogen:
   i. 3.0 mg/L for facilities having a DADF equal to or greater than 100,000 gpd; or
   ii. 6.0 mg/L for facilities having a DADF less than 100,000 gpd.

d. A waiver from the limitations under subp. a., b., or c., above, may be obtained upon approval by the Board provided the permittee or permit applicant makes an affirmative demonstration, based on relevant water quality data,
physical circumstances, or other credible information, that the discharge of Reclaimed water has not and will not result in more than a 10% increase in background groundwater nitrogen concentrations at the disposal location. An affirmative demonstration shall include a site specific study based upon the following factors:

i. The proximity to a spring, and natural and manmade interconnected surface and subsurface features.

ii. Ground water flow gradient.

iii. Discharge volume.

iv. Dilution.

v. Ground water quality data.

vi. Site-specific geological conditions.

vii. New research/studies including dye tracer tests.

viii. Ground water transport modeling.

ix. Other relevant information or new technology recognized by the County;

(c) Effluent and Residuals Disposal.

(7) Except as provided under subp. (2) below, new and expanded Rapid-rate Land Application Systems shall not be permitted in the Primary SPZ.

(8) A Rapid-rate Land Application System may be permitted in the Primary SPZ provided the following:

a. The WWTF is designed and permitted to utilize public access Reuse and proposes to use a Rapid-rate Land Application System only temporarily, until such time that 100,000 gpd or more is being generated, at which point the system shall serve solely as back-up as set forth under subp. b., below; or

b. The system is used solely as back-up to a public access Reuse system. In order to qualify as a back-up system, no more than 30% of the total annual flow may be directed to the back-up rapid-rate system if the WWTF is permitted to meet an annual average Nitrate as N TN limitation Greater than 6 mg/L, and no more than 50% of the total annual flow
may be directed to the back-up rapid-rate system if the WWTF is permitted to meet an annual average Nitrate as N TN limitation of 6 mg/L or less.

(9) A Rapid-rate Land Application System may only be permitted in the Secondary SPZ according to the following:

a. The applicant demonstrates, using credible data and information, that the disposal of effluent through a Slow-rate Land Application System is not technically feasible or cannot be permitted according to FDEP regulations. For Decentralized Systems, the applicant shall demonstrate that sufficient land area within the project boundaries, including public or common landscape areas, golf course, private lawn and landscape areas, and/or landscape buffers, is neither available nor could with an alternative plat or site design be made available for slow-rate land application, including but not limited to subsurface drip irrigation; and,

b. The WWTF complies with the applicable treatment standards set forth under subparagraphs (b)(1)a. and (b)(1)b. above.

(10) New Slow rate Land Application Systems with restricted public access shall be limited to dedicated sprayfields.

(11) All new and existing sprayfields shall be planted to hay or other sod-forming vegetation. During winter months, the sprayfield shall be over-seeded with ryegrass or winter-hardy grass to promote year-round nutrient uptake.

(12) Any WWTF that provides public access Reuse shall institute a program to educate the end user about the value and benefits of Reuse. The program shall be designed to enable the user to easily calculate the amount of nitrogen was applied to the disposal area and, therefore, promote reduced use of purchased sources of nitrogen. The owners of the WWTF shall coordinate such program efforts with the Marion County Conservation Coordinator.
(d) Monitoring. On or before December 31, 2009, the owner or operator of any new or existing WWTF with a DADF of 10,000 gallons or more shall test for effluent nitrate nitrogen at the point of discharge. and have at least one groundwater monitoring compliance well installed. All well construction, sampling, and testing shall be conducted in accordance with applicable FDEP standards and procedures. Effluent nitrate as N sampling shall be performed at regular intervals at least once every two weeks monthly, and groundwater testing shall be performed quarterly. All test results shall be reported using FDEP to the Marion County Zoning Director or Water Resources Official. Either the FDEP discharge monitoring report, or document provided by Marion County Zoning Department or Water Resources Official may be used, discharge monitoring reports, a copy of which shall be provided to the Water Resources Official at the same frequency as required by the FDEP permit. This provision shall not be construed to require additional monitoring if the WWTF, as a condition of its FDEP permit, is already required to comply with comparable or more intensive requirements. Nor shall this requirement apply to any facility that will, according to a County-approved Five-year Capital Improvement Plan, be abandoned and/or connected to a central sewer system.

(e) Onsite Waste Treatment and Disposal Systems (OSTDS).

(1) New OSTDS.

a. Any new development or construction project that is not required to connect to a centralized or decentralized sewer system shall install an OSTDS in accordance with the requirements of this subsection.

b. Except as provided under subs. c. below, any new OSTDS installed in the SPZ shall be a performance based treatment system (PBTS) designed, installed and maintained in compliance with Chapter 64E-6, Part IV, Florida Administrative Code, and shall: (1) utilize drip Irrigation or other pressure-dosed dispersal system that, and (2) be a system that, based testing by the National Sanitation Foundation (NSF) or other third party testing approved by the Board, achieves 10 mg/L TN, as N and/or reduces TN as N by at least seventy (70) percent. This provision shall apply according to the following schedule:

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Green type is original language which has been moved from one section to another without change
Green Strike through are deletions this edit to the moved text
Red strike through with red underline is copy that is new or copy supplied (Mr. Gooding) and then deleted this edit.
Blue underlined copy shows changes to new supplied copy this edit.
i. On or after July 1, 2008 for parcels created after December 31, 2007.

ii. On or after January 1, 2011 if located in the Primary SPZ.

iii. On or after January 1, 2012 if located in the Secondary SPZ.

b) Any new OSTDS installed in the SPZ shall be a low Pressure Dosing System (LPDS) designed and installed by a Florida Licensed OSTDS contractor in compliance with any FDOH permitting requirements. This provision shall apply according to the following schedule for all parcels in the SPZ on or after January 1, 2011.

i. On or after January 1, 2009 for parcels created after July 1, 2008.

ii. On or after January 1, 2010 in the SPZ.

c. New OSTDS shall be exempt from the requirements under subp. b., above, if any of following conditions apply:

i. The OSTDS will be located in an area where central sewer services will be available within 5 years, according to the Board adopted Five Year Capitol Improvement Plan; or

ii. The subject parcel is greater than one acre, and at least fifty percent of such parcel falls within in a MCAVA category of “less vulnerable” or “vulnerable”; or

iii. The project is a residential or commercial facility that includes no more than one restroom and the total estimated wastewater flow for the entire subject parcel is less than 200 gallons per day, as determined by the MCHD pursuant to Chapter 64E-6, Florida Administrative Code. This exemption shall not apply to any use that involves food preparation or sales, printing services, motorized vehicle repair, fuel service, medical services, or any type of business that uses or generates hazardous waste.

iv. Geologic characteristics of the site meet specific criteria adopted by the Board which naturally serve to prevent
groundwater nitrate contamination to a similar degree as would be achieved by the use of a PBTS.

d. iv. All new permits shall be issued in conjunction with the following:
   i. A Notification of Mandatory Connection to a central sewer system, in accordance with subs. (a)(5), above. And,
   
   ii. A Notification of Mandatory Maintenance, in accordance with the requirements under subs. (2), below.

(2) OSTDS Maintenance.

a. Except as provided under subs. g., below, On or after January 1, 2009, the owner of an OSTDS in the SPZ shall be required to have their OSTDS pumped and inspected by a Florida-licensed OSTDS contractor at least once every five years, or at the time of sale or transfer of their property, whichever comes first, according to a schedule and procedure established by the MCHD. If it can be demonstrated in a form and manner approved by the MCHD that the OSTDS has been pumped and inspected within three (3) years prior to the date of a property sale or transfer, then an inspection shall be required within five (5) years of the date of last inspection and not at the time of property sale or transfer.

b. All OSTDS inspections shall be performed in compliance with standards a. septic tank maintenance program developed by the MCHD in cooperation with the Board. The inspection fee shall be set annually by the MCHD in cooperation with the board. Expenses for this program shall be supported by a fee to be submitted to the MCHD along with the required pump-out and inspection report under subp. c., below. The fee amount shall be set annually by resolution of the Board.

c. Under the septic tank maintenance program, The owner shall be required to provide proof that the septic tank has been pumped and inspected as required. Such proof shall include timely submittal of a report, using a form provided by the MCHD or Board and completed and signed by the licensed contractor. The MCHD or Board shall be authorized...
to require that the septic tank be pumped, and that the mound, drainfield and septic tank system be in good working order and in compliance with the most current standards of Chapter 64E-6, *Florida Administrative Code*, or this Code, whichever is more restrictive. In the event that the MCHD or Board does not within the appropriate time frame receive proof that the septic tank has been cleaned and inspected pursuant to subs. a., above, the MCHD or Board shall inform, via written notification, that the property owner shall provide such proof within two months from the date of the written notification. If proof is not received within two months, the property owner shall be issued, via certified mail, a warning which provides for no more than thirty (30) day for the owner to provide proof that the septic tank has been cleaned and inspected.

d. Any OSTDS that is determined to be Failing shall be required to be brought into compliance with current FDOH standards, or this Section, whichever is more restrictive, within 90 days of the inspection date, or sooner if the Failing conditions pose an immanent threat to public health and safety, as determined by the MCHD, or the Board. An owner shall not, however, be required to upgrade a conventional OSTDS with a PBTS under subp. (e)(1)b., above, if the owner qualifies for economic hardship, as defined under Section 6.41. This exception does not exempt the owner from having to replace or repair the conventional system in accordance with current FDOH standards for groundwater separation, setback distances, and watertight tanks. If the failure requires a Repair Permit for the replacement of the septic tank or the drainfield, or both, then the owner shall be required to replace the existing OSTDS with a LPDS as described in (1) b. above.

e. All upgrades, modifications or replacements of existing OSTDS shall be subject to obtaining a permit from the MCHD and meeting the requirements of this Section, including upgrading to a PBTS LPDS as may be required under subs. (1), above, and complying with the maintenance requirements under this part. If a PBTS LPDS is not required, then the OSTDS shall comply with current FDOH
standards for groundwater separation, setback distances, and watertight tanks.

f. The inspection, maintenance and repair of any OSTDS or LPDS shall be in accordance with applicable FDOH regulations and this Section. The OSTDS inspection and maintenance requirement under this subsection shall not apply to the following sale or transfer conditions:

i. Transfers pursuant to court order, including but not limited to, transfers ordered by a probate court in the administration of an estate, transfers pursuant to a writ of execution, transfers by any foreclosure sale, transfers by a trustee in bankruptcy, transfers by eminent domain and transfers resulting from a decree for specified performance.

ii. Transfers to a mortgagee by a mortgagor or successor in interest who is in default; transfers to a beneficiary of a deed of trust by a trustor or successor in interest who is in default; transfers by any foreclosure sale after default, in an obligation secured by a mortgage; transfers by a sale under a power of sale or any foreclosure sale under a decree of foreclosure after default in an obligation secured by a deed of trust or secured by any other instrument containing a power of sale; or transfers by a mortgagee or a beneficiary under a deed of trust who has acquired the real property at a sale conducted pursuant to a power of sale under a mortgage or deed of trust or a sale pursuant to a decree of foreclosure or has acquired the real property by a deed in lieu of foreclosure.

iii. Transfer by a bank, savings and loan association, mortgage banker, the Federal National Mortgage Association, Government National Mortgage Association, Federal Home Loan Mortgage Corporation, or other institutional lender who has acquired the property through foreclosure or deed in lieu of foreclosure.

iv. Transfers of condominiums, as defined in Chapter 718 Florida Statutes (1993) or as subsequently amended; cooperatives, as defined in Chapter 719, Florida Statutes (1993) or as subsequently amended; and time share
plans, as defined in Chapter 21, Florida Statutes (1993) or as subsequently amended.

v. Transfers by a fiduciary in the course of the administration of a decedent’s estate, guardianship, conservatorship, or trust.

vi. Transfers from one co-owner to one or more other co-owners.

vii. Transfers made to a spouse or to a person or persons related by consanguinity to one or more of the transferors.

viii. Transfers made between spouses resulting from a decree of dissolution of marriage or a decree of legal separation or from a property settlement agreement incidental to such a decree.

ix. Transfers under Chapter 197, Florida Statutes (1993) or as subsequently amended, as a result of failure to pay property taxes.

x. Transfers or exchanges to or from any governmental entity.

g. Maintenance Requirements for PBTS. The inspection, maintenance, and repair of any PBTS shall be in accordance with applicable FDOH regulations, and this Section, effective the date of installation. Pursuant to FDOH requirements, the owner of a PBTS shall obtain a biennial operating permit issued by the MCHD, pursuant to chapter 64E-6, Part IV, Florida Administrative Code, as amended. The operating permit is subject to a local surcharge fee, as set annually by resolution of the Board, to cover expenses related to performing annual inspections, system tracking, data entry and management, effluent sampling, and other compliance activities. Maintenance of a PBTS shall include, but is not limited to, the following:

i. A minimum of two inspections per year by an appropriately licensed and certified maintenance entity. Such inspections shall be performed at approximately even intervals throughout the year.
ii. Submittal of inspection reports to the MCHD within 30 days of each inspection under subp. i. And

iii. Having, and providing to the MCHD a copy of, an executed maintenance agreement that is in effect between the owner and an approved PBTS maintenance entity.

h. Failure of any party to comply with the OSTDS or PBTS LPDS maintenance requirements of this part and/or applicable FDOH regulations shall constitute a violation of this Code. Any such violation shall be subject to a written warning by the MCHD or Board, which shall at a minimum specify the nature of the offenses and time frame for compliance. If corrective measures are not taken by the specified time, the owner shall be issued a Notice of Violation, and be subject to a penalty of no less than fifty dollars ($50) and no more than five hundred dollars ($500), per offense. Each day in violation shall constitute a separate offense. Alternatively, the County may commence a proceeding before the Code Enforcement Board.

(f) Reuse.

(1) Evaluation. All new projects which consist of five (5) (31) or more ERUs and are required under subs 2.(a)(1) above to connect to a central sewer system shall complete a water Reuse feasibility assessment form provided by the County. The completed form shall be submitted to the County along with any application required for special use permit and/or with any site improvement plan, master plan or other applicable document submitted for development review. The water Reuse capacity potential of a project shall be based on all potentially irrigated common areas of the proposed development, including but not limited to golf courses, public recreation areas and open spaces, and public and private lawns and landscaping, and an annual average Irrigation rate as calculated in a manner consistent with FDEP and/or water management district guidelines, based on type of vegetation and site-specific conditions. At the applicant’s discretion, private lawns and landscaped areas may be included.

(2) Mandatory Connection. The MCUD shall evaluate the information provided by the applicant and make a determination
if incorporation into the County’s Reclaimed water system represents a beneficial use of the Reclaimed water resource. If the MCUD determines that incorporation into the County’s system represents a beneficial use of the Reclaimed water, then the project shall connect to the County’s Reclaimed water system. If so required, the installation of an appropriate Reuse distribution (Irrigation) system, and connection to the Reclaimed water system in accordance with Appendix D, shall be a condition precedent to receipt of potable water and Wastewater service for the subject project. The developer may appeal the determination of the MCUD to the Board of County Commissioners.

(g) Continued County efforts.

(1) The County has presently determined that affordable technology does not presently exist to achieve a 70% or greater nitrogen removal efficiency for new and replacement OSTDS systems in the SPZ, but that the provisions of this Ordinance, including the LPDS system requirements, shall achieve such standard to the greatest extent possible using affordable available technology. Further, the LPDS requirements shall enhance the SPZ.

(2) The County shall:

a. Continue to evaluate, and consider adopting on or before December 31, 2012 when appropriate OSTDS performance standards aimed at achieving a 70 percent or greater nitrogen removal efficiency for new and replacement OSTDS systems in the SPZ, including performance based treatment systems (PBTS) designed, installed and maintained in compliance with Chapter 64E-6, Part IV, Florida Administrative Code. The County shall also consider incentives for providing such systems, such as providing grants to low-income property owners to assist in installing such systems.

b. Evaluate, and when appropriate adopt, requirements for passive OSTDS systems that consist of technologies and strategies for reducing nitrogen through alternative media, effluent recirculation, alterations such as the addition of dosing or drip irrigation, various plant materials over the drain field and other technologies, combinations or process configurations.

(3) Although the County has chosen not to presently require PBTS throughout the entire SPZ, nothing set forth herein shall preclude the County
Commission or DRC from requiring PBTS on a case by case basis and considering soil conditions, parcel sizes and the proximity to protected springs.

3. **Water Supply Management**

(a) Centralized System Connection.

(1) *Application Required.* All new and expanding development projects shall apply to the MCUD for determination of central water availability and connection, using a form provided by the MCUD. Within ten working days of receipt of a completed application, the MCUD shall issue an official written determination to the applicant. The determination shall advise the applicant if central water is available and, if so, shall indicate the source of the central water service (including, for example, the MCUD, a PSC-certified utility, a city, a Community Development District, or other entity authorized by the State of Florida to provide potable water services), the location of the nearest connection point and whether any additional off-site facilities (lines, water treatment plant, etc.) will be required to provide central water service to the project. All applications made for building permits and/or other development reviews shall be accompanied with a copy of the written determination.

(2) *New Development in an Urban Area.* All new developments shall connect to an existing central water system if a system with Available Capacity has distribution lines within a distance equal to or less than four hundred feet times the total number of ERUs within the project, at build out. Otherwise, the project shall comply as follows:

a. New residential development with fifteen (15) Thirty one (31) lots or more, and all Multi-family and commercial projects, shall design and construct a decentralized water system in compliance with the requirements of Section 8.2.7 of the Land Development code, and construct an onsite WTP sufficient in size to serve the development in compliance with FDEP requirements and other applicable requirements of this Code.

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*Green Strike through* are deletions this edit to the moved text
*Red strike through with red underline* is copy that is new or copy supplied (Mr. Gooding) and then deleted this edit.
*Blue underlined copy shows changes to new supplied copy this edit.*

4/20/2016
b. New residential subdivisions with less than **fifteen (15) Thirty one (31)** lots may use individual onsite wells in compliance with the requirements of FDOH.

(3) **Subdivisions in the Rural Area, with any buildable lot 2 acres, in size or one acre in size if the overall project density is no greater than one unit per five (5) acres.** New rural subdivisions with any buildable lot less than **two (2) five (5)** acres in size shall connect to an existing central water system if a system with Available Capacity has water distribution lines within four hundred feet per each ERU from the project boundary. Otherwise, the developer shall design and construct a decentralized water system in compliance with the requirements of Section 8.2.7 of the Land Development Code and construct an onsite WTP that meets the needs of the development and complies with all applicable requirements of the FDEP. If (a) the projects contains less than **45 31** lots or (b) all lots within the project are five (5) acres or greater in size, then the project may use individual onsite wells. All lots meet the minimum size requirements of the first sentence of this subsection, then the project may use individual on-site wells.

(4) **New Single Family Residential and Duplex Construction.** New single family residential and duplex construction in the Urban or Rural area shall connect to a centralized water system if a water line is within **four one hundred** feet of the nearest property boundary, as measured along any legal access eligible for utility installation and/or operation using the shortest distance measurement.

(5) **Dedication.** The MCUD shall have the right to require that a water system designed and constructed to serve a single development within the county’s service area be dedicated to the County, and that any or all components of the system be designed and constructed to meet County standards if such dedication is required. The terms and conditions of any required dedication shall be set forth in a developer’s agreement. The applicant may appeal the determination of the MCUD.

(b) **Decentralized Systems.**

(1) The decentralized water system shall be designed in compliance with the requirements of Section 8.2.7 of the Land Development Code.
Development Code and constructed within public right of way or utility easements.

(2) The decentralized WTP may be constructed on underlying platted property (i.e. lots, roadways, etc.) which will be preserved and protected for the WTP, including protection area surrounding all well sites, until connection to a Centralized System is available.

(3) The area served cannot receive a Public Service Commission (PSC) franchise and must be operated and maintained by an entity exempt from Public Service Commissions (PSC) requirements. If the decentralized wastewater system is owned, operated or maintained by an entity that has a Public Service Commission (PSC) franchise, such entity must, as a condition of such ownership or operation, agree to terminate or modify the franchise to comply with the requirements of subsection e of this section.

(4) The WTP shall be taken out of service, deeded or reclassified under the following conditions:

a. A Centralized System meeting the requirements stated in Section 3.(a)(2) and (3), as determined by the MCUD Director, is available at which time the Centralized System owner will survey, design, permit, and construct all components necessary to connect the decentralized water system to the Centralized System. After connection, all components of the water system will be owned, operated, and maintained by the Centralized System owner who will also be responsible for the installation and operation of all water metering.

b. The MCUD Director and a Centralized System owner has determined the WTP is suitable for expansion or inclusion into the Centralized System owners PSC territory, the WTP property and all improvements shall be deeded to the Centralized System owner and reclassified as a Centralized System.

c. If the MCUD Director determines that the size, location, or other factors show the Decentralized System is not feasible for connection or inclusion into a franchised territory, the
system will be reclassified as a Centralized System. The reclassified system must be operated and maintained by an FDEP approved service company and the MCUD Director must review and approve the service contract.

d. Any person may appeal the determination of the MCUD Director to the Board of County Commissioners.

(5) A decentralized Wastewater facility as described in Section C.1.(6) shall not be transferred to a Centralized System owner without the project's decentralized water system also being transferred to the Centralized System owner. However, a decentralized water system may be transferred to a Centralized System owner without the projects decentralized sewer system with a written guarantee that the sewer system will be transferred to the central water system owner at a future date. As a condition of the transfer of a project's decentralized water system, the transferee must also accept transfer of the project's decentralized sewer system.

4. Natural Groundwater Recharge Protection

(a) Marion-Friendly Landscaping Measures Required. In order to minimize impacts to the quality and quantity of natural groundwater recharge in the SPZ, new and expanded development shall implement Marion-Friendly Landscaping measures set forth in this part, as applicable.

(1) New Development residential and mixed use subdivisions.

a) The Groundwater Impact Area, as defined under Section 6.4.1. shall be no greater than the reasonably-estimated total allowable irrigated area, based on the Irrigation Coverage Limits under Article 8.2.10.(l)(4), less 40 percent for projects located in the Primary SPZ and 30% for projects located in the Secondary SPZ.

a) The Groundwater Impact Area, as defined under Section 6.4.1. shall not exceed the greater of:

i. Sixty (60) percent of the total Developable Area in the primary SPZ; or

ii. Seventy (70) percent of the total Developable Area in the secondary SPZ; or

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iii. The amount of area necessary to dispose of the volume of Reuse water generated by the development, assuming an annual average Irrigation rate as calculated in a manner consistent with FDEP or water management district guidelines, based on type of vegetation and site-specific conditions, and provided the development uses such volume of Reuse for outdoor Irrigation in lieu of potable water.

b) The area limitations under subs. a., above, may be exceeded in accordance with an approved mitigation strategy that complies with the requirements set forth under subsection (b), below, including but not limited to the establishment of a Groundwater Recharge Preservation area.

c) The landscapable portion of a development lying outside the Groundwater Impact Area shall constitute the Marion-Friendly Landscaping Area (MFLA), as defined under Section 6.4.1. Up to one hundred (100) percent of the MFLA may be under private ownership where restrictions and compliance measures are clearly set forth in approved development plans, CCR documents or deed restrictions, as applicable.

d) A clear and complete description of the landscaping requirements and prohibitions, consistent with this part and definitions under Section 6.4.1., shall be included in the CCRs, Improvement Plans, and Master Plan documents, as applicable, in a form and manner approved by the County. The CCRs shall, in addition, include the following:

i. Reasonable compliance procedures that the HOA, CDD, or their equivalent, will follow to ensure compliance with this Section.

ii. Provisions giving the Board the right, but not obligation, to inspect for compliance and to take reasonable enforcement action when necessary in the event that owner, HOA, CDD, or equivalent, does not maintain compliance.

e) Any CCR provisions created for compliance with this Section shall not be subject to removal or alteration by any action of
the HOA or CDD, or equivalent, without the written consent of the Board. In addition, the HOA, CDD, or equivalent, shall be required to rerecord all CCRs before the expiration of their last date of recording, in accordance with Chapter 712, Florida Statutes. A violation of the CCR’s not corrected by the owner or HOA, CDD, or equivalent, may be subject to enforcement action by the Board.

(2) New and expanded non-residential development. I have changed nothing here or in (3) in that I think we may want to make paragraph (1) apply to all of these. For new and expanded non-residential development, compliance with applicable landscape requirements under Section 8.2.10.k. shall meet the requirements of this Section, with the following exceptions:

a) For new or expanded developments within Primary SPZ, the required landscape area under Section 8.2.10.k.(1)(b) shall be at least thirty (30) percent of the Developable Area.

b) The required landscape area may only include the following stormwater management areas: 1) approved distributed stormwater management facilities used to provide for the volume requirement under Section 6.4.7.C.5.(d); 2) any retention/detention area wherein the natural grade and vegetation is preserved; and 3) up to one quarter of the total area of any other constructed retention/detention area with a design depth of three feet or less.

c) Maintenance of the landscape area required under this Section shall be the responsibility of the owner. Any removal or alteration of the required plant species and composition shall be restored to its original or comparable condition. Violations shall be subject to Code enforcement action by the Board.

(3) New Minor Development. See note in paragraph (2) above. New minor development within a subdivision approved pursuant the requirements under subs. (1), above, shall comply with the landscaping requirements contained in the County-approved CCR’s and other applicable development orders. For all other minor development, the landscape requirements under Article 8.2.10.k.(1)(e) shall meet the requirements of this Section.
Compliance with the requirements of this provision shall be the responsibility of the owner. Installation of the required landscaping shall be a condition of the Certificate of Occupancy, and must be completed within six months of issuance. Any removal or alteration of the required and approved landscaping shall be restored to its original or comparable condition. Violations shall be subject to enforcement action by the Board.

(b) Groundwater Recharge Preservation Area. New rural and urban residential and mixed-use subdivisions may establish a GRPA in accordance with this section as a mitigation strategy pursuant to subs. (a)(1)b., above:

(1) Size. The size of the GRPA shall be at least three (3) acres for every one (1) acre of Impacted Area if located in the Primary SPZ, and at least two (2) acres for every one (1) acre of Impacted Area if located in the Secondary SPZ. I do not see a definition of Impacted Area; what is this saying?

(2) Qualifying Lands. The following areas may be included in the GRPA, subject to the conditions and restrictions under subp. (3), below:

a) Public or common open spaces as established by instruments recorded in the Marion County public records, and/or privately owned areas protected through a recorded Approved Conservation Easement, that consist of passive recreation areas, preserved wetlands, flood plains, and preserved or restored natural areas;

b) Portions of county-approved stormwater management facilities that are in common or public ownership and not in the right-of-way of a publicly-owned road, including vegetative swales, bioretention facilities, and retention areas having a design depth of three (3) feet or less; Should we remove the depth requirement?

c) Utility, drainage and conservation easements in public or common ownership, except vehicle access easements that are surfaced or normally used more than once per month;

d) Golf course natural areas that are 1) identified in the approved Natural Resource Management Plan, and 2) maintained in their natural state without the use of irrigation or fertilizers; and
e) Non-Turfgrass buffers constructed and maintained in compliance with Article 8 which contain a minimum of ninety (90) percent native or approved non-invasive and drought-tolerant plants.

(3) Conditions and Restrictions. Lands within an GRPA shall be managed in conformance with the following conditions and restrictions:

a. The use of lawn chemical, including fertilizers and pesticides, is prohibited, except for limited use of chemical spot treatments as may be necessary to control insect infestations.

b. The storage and/or release of petroleum and other hazardous materials is prohibited.

c. The use of Irrigation, except Micro-Irrigation, is prohibited unless the source of water is Reuse from a Wastewater or stormwater Reuse facility, in which up to fifty (50) percent of any public or common area may be Irrigated with High, Medium, or Low volume Irrigation System, excluding sprayfields.

d. Natural areas and restored natural areas shall be maintained in their existing natural condition or managed according to a management plan approved by the County.

e. Accessory structures in access of Three Hundred (300) square feet shall not be allowed in the GRPA except by Special Use Permit (SUP). To qualify for a SUP, the applicant shall:

   i. Demonstrate that the proposed structure and associated use will not contribute nutrients or other contaminates to the GRPA; and

   ii. Direct all stormwater runoff to pervious and/or shallow retention areas.

(4) Should we delete this section? It appears to give the County control over what we can designate as a GRPA. Priority Areas. Areas to be included in the GRPA shall be selected according to a priority system which recognizes environmental sensitivity. Lands having the following characteristics shall be given priority in order of the following:
a) Areas within 150 feet of a Sinkhole;
b) Natural areas with an aquifer vulnerability rating of “most vulnerable”, according to the MCAVA map;
c) Areas of the project site where limerock is closest to the surface.

5) Limits and Bonuses.

a) Undisturbed natural areas that consist of native trees, shrubs, groundcovers and other natural vegetation may be calculated using an area ratio of 1.25 to 1, provided that the natural area is preserved in its natural state. This entire subsection (5) uses inconsistent terminology when referring to area ratios. I do not know which is right but I think they should be consistent. It’s also not clear which is the 1.25 and which is the 1.

b) Approved distributed stormwater management facilities used to provide for the volume requirement under Section 6.4.7.C.5.(d), and any retention/detention area wherein the natural grade and vegetation is preserved, may be calculated using an area ratio of 1 to 1. Any other constructed retention/detention area may be calculated using an area ratio of .25 to 1. In no case, however, may any stormwater facility with more than three (3) feet of design depth be counted.

c) Wetlands may be calculated using an area ratio of 1 to 1.

d) Turf and pasture grass areas may be included in the GRPA, subject to the following:
   i. They constitute no more than fifty (50) percent of the total GRPA;
   ii. The grass is Drought Tolerant and not irrigated; or if irrigated, the source of water is Reuse;
   iii. The use of lawn chemicals, including fertilizers and pesticides, is prohibited, except for limited use of chemical spot treatments as may be necessary to control insect infestations.

6) Labeling. The boundaries of the GRPA and text descriptions of the conditions and restrictions that apply therein, consistent with

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subs. (3) above, shall be included and dimensioned on all site, improvement, and/or master plan submitted for a building permit or development review, as applicable. The requirement of this subsection may be met by use of a separate included page.

(7) **Recording.** The GRPA boundaries shall be shown and dimensioned on the final plat, and described in the recorded CCRs, or equivalent, for the development. The requirement of this subsection may be met by use of a separate included page. The CCRs shall, in addition, establish and provide for reasonable enforcement mechanisms that the HOA, CDD, or their equivalent, shall implement to ensure compliance with the applicable conditions and restrictions. The CCRs shall also provide the Board with the means and authority to inspect the GRPA for compliance with this section and to take reasonable enforcement action where necessary and appropriate in the event that the HOA, CDD, or equivalent fails to enforce noncompliance. CCR provisions which pertain to compliance with this Section shall not be subject to removal or alteration by any action of the HOA or CDD, or equivalent. In addition, the HOA, CDD, or equivalent shall be required to rerecord, in accordance with Chapter 712, Florida Statutes, all CCRs before the expiration of their last date of recording.

(8) **Maintenance and Enforcement.** Maintenance of the GRPA in accordance with this Section shall be the responsibility of the HOA, CDD, or equivalent. Violations not corrected by the HOA, CDD, or equivalent, shall be subject to Code enforcement action by the Board.

(c) **Parking Lots.** All parking lots with more than thirty (30) spaces in the primary SPZ and more than fifty (50) spaces in the secondary SPZ shall have a minimum of twenty (20) percent of the parking spaces constructed by porous concrete or porous asphalt. Where practicable, grass parking spaces may also be used as an alternative to meet this requirement.

a) The area limitations under subs. a., above, may be increased to up to 100% of total irrigated area as would be allowed under Article 8.2.10.(l)(4), in accordance with an approved mitigation strategy that complies with the requirements set forth under subsection (b), below, including

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but not limited to the establishment of a Groundwater Recharge Preservation area.

b) A clear and complete description of the landscaping requirements and prohibitions, consistent with this part and definitions under Section 6.4.1., shall be included in the CCRs, Improvement Plans, and Master Plan documents, as applicable, in a form and manner approved by the County. The CCRs shall, in addition, include the following:

i. Reasonable compliance procedures that the HOA, CDD, or their equivalent, will follow to ensure compliance with this Section. And

ii. Provisions giving the Board the right, but not obligation, to inspect for compliance and to take reasonable enforcement action when necessary in the event that owner, HOA, CDD, or equivalent, does not maintain compliance.

c) Any CCR provisions created for compliance with this Section shall not be subject to removal or alteration by any action of the HOA or CDD, or equivalent without the written consent of the Board. In addition, the HOA, CDD, or equivalent, shall be required to rerecord all CCRs before the expiration of their last date of recording, in accordance with Chapter 712, Florida Statutes. A violation of the CCR’s not corrected by the owner or HOA, CDD, or equivalent, may be subject to enforcement action by the Board.

(2) New and expanded non-residential development. For new and expanded non-residential development, compliance with applicable landscape requirements under Section 8.2.10.k. shall meet the requirements of this Section, with the following exceptions:

a) For new or expanded developments within Primary SPZ, the required landscape area under Section 8.2.10.k.(1)(b) shall be at least thirty (30) percent of the Developable Area.

b) The required landscape area may only include the following stormwater management areas: 1) approved distributed stormwater management facilities used to provide for the volume requirement under Section 6.4.7.C.5.(d); 2) any retention/detention area wherein the natural grade and
vegetation is preserved; and 3) up to one quarter of the total area of any other constructed retention/detention area with a design depth of three feet or less.

e) Maintenance of the landscape area required under this Section shall be the responsibility of the owner. Any removal or alteration of the required plant species and composition shall be restored to its original or comparable condition. Violations shall be subject to Code enforcement action by the Board.

(3) New Minor Development. New minor development within a subdivision approved pursuant the requirements under subs. (1), above, shall comply with the landscaping requirements contained in the County-approved CCR’s and other applicable development orders. For all other minor development, the landscape requirements under Article 8.2.10.k.(1)(e) shall meet the requirements of this Section.

Compliance with the requirements of this provision shall be the responsibility of the owner. Installation of the required landscaping shall be a condition of the Certificate of Occupancy, and must be completed within six months of issuance. Any removal or alteration of the required and approved landscaping shall be restored to its original or comparable condition. Violations shall be subject to enforcement action by the Board.

(c) Groundwater Recharge Preservation Area. New rural and urban residential and mixed-use subdivisions may establish a GRPA in accordance with this section as a mitigation strategy pursuant to subs. (a)(1)b., above.

(3) Size. The size of the GRPA shall be at least three (3) acres for every one (1) acre of Impacted Area if located in the Primary SPZ, and at least two (2) acres for every one (1) acre of Impacted Area if located in the Secondary SPZ.

(4) Qualifying Lands. The following areas may be included in the GRPA, subject to the conditions and restrictions under subp. (3), below:

a) Public or common open spaces as established by instruments recorded in the Marion County public records, and/or privately owned areas protected through a recorded Approved Conservation Easement, that consist of passive
recreation areas, preserved wetlands, and preserved or restored natural areas;

b) Portions of county-approved stormwater management facilities that are in common or public ownership and not in the right-of-way of a publicly-owned road, including vegetative swales, bioretention facilities, and retention areas having a design depth of three (3) feet or less;

c) Utility, drainage and conservation easements in public or common ownership, except vehicle access easements that are surfaced or normally used more than once per month;

d) Golf course natural areas that are 1) identified in the approved Natural Resource Management Plan, and 2) maintained in their natural state without the use of Irrigation or fertilizers; and

e) Non-Turfgrass buffers constructed and maintained in compliance with Article 8 which contain a minimum of ninety (90) percent drought-tolerant plants.

(4) Conditions and Restrictions. Lands within an GRPA shall be managed in conformance with the following conditions and restrictions:

a. The use of lawn chemical, including fertilizers and pesticides, is prohibited, except for limited use of chemical spot treatments as may be necessary to control insect infestations.

b. The storage and/or release of petroleum and other hazardous materials is prohibited.

c. The use of Irrigation, except Micro-Irrigation, is prohibited unless the source of water is Reuse from a Wastewater or stormwater Reuse facility, in which up to fifty (50) percent of any public or common area may be Irrigated with High, Medium, or Low volume Irrigation System, excluding sprayfields.

d. Natural areas and restored natural areas shall be maintained in their existing natural condition or managed according to a management plan approved by the County.
e.—Accessory structures shall not be allowed in the GRPA except by Special Use Permit (SUP). To qualify for a SUP, the applicant shall:

i. Demonstrate that the proposed structure and associated use will not contribute nutrients or other contaminants to the GRPA; and

ii. Direct all stormwater runoff to pervious and/or shallow retention areas.

(4) Priority Areas. Areas to be included in the GRPA shall be selected according to a priority system which recognizes environmental sensitivity. Lands having the following characteristics shall be given priority in order of the following:

a) Areas within 150 feet of a Sinkhole;

b) Natural areas with an aquifer vulnerability rating of “most vulnerable”, according to the MCAVA map;

c) Areas of the project site where limerock is closest to the surface.

(5) Limits and Bonuses.

a) Undisturbed natural areas that consist of native or approved non-invasive and drought tolerant trees, shrubs, groundcovers and other natural vegetation may be calculated using an area ratio of 1.25 to 1, provided that the natural area is preserved in its natural state.

b) Approved distributed stormwater management facilities used to provide for the volume requirement under Section 6.4.7.C.5.(d), and any retention/detention area wherein the natural grade and vegetation is preserved, may be calculated using an area ratio of 1 to 1. Any other constructed retention/detention area may be calculated using an area ratio of .25 to 1. In no case, however, may any stormwater facility with more than three (3) feet of design depth be counted.

c) Wetlands may be calculated using an area ratio of 1 to 1.

d) Turf and pasture grass areas may be included in the GRPA, subject to the following:
i. They constitute no more than fifty (50) percent of the total GRPA;

ii. The grass is Drought Tolerant and not irrigated; or if irrigated, the source of water is Reuse;

iii. The use of lawn chemicals, including fertilizers and pesticides, is prohibited, except for limited use of chemical spot treatments as may be necessary to control insect infestations.

e) If included within an Approved Conservation Easement, the GRPA shall be contiguous, or if not contiguous, no individual GRPA may be less than three (3) acres.

(6) Labeling. The boundaries of the GRPA and text descriptions of the conditions and restrictions that apply therein, consistent with subs. (3) above, shall be included and dimensioned on all site, improvement, and/or master plan submitted for a building permit or development review, as applicable.

(7) Recording. The GRPA boundaries shall be shown and dimensioned on the final plat, and described in the recorded CCRs, or equivalent, for the development. The CCRs shall, in addition, establish and provide for reasonable enforcement mechanisms that the HOA, CDD, or their equivalent, shall implement to ensure compliance with the applicable conditions and restrictions. The CCRs shall also provide the Board with the means and authority to inspect the GRPA for compliance with this section and to take reasonable enforcement action where necessary and appropriate in the event that the HOA, CDD, or equivalent fails to enforce noncompliance. CCR provisions which pertain to compliance with this Section shall not be subject to removal or alteration by any action of the HOA or CDD, or equivalent. In addition, the HOA, CDD, or equivalent shall be required to rerecord, in accordance with Chapter 712, Florida Statutes, all CCRs before the expiration of their last date of recording.

(8) Maintenance and Enforcement. Maintenance of the GRPA in accordance with this Section shall be the responsibility of the HOA, CDD, or equivalent. Violations not corrected by the HOA, CDD, or equivalent, shall be subject to Code enforcement action by the Board.
5. **Stormwater Runoff Management.**

   (a) **General.** Stormwater management systems shall be designed using a combination of traditional management practices as accepted in Article 8, low impact design principles, and best management practices.

   (1) It is recognized that shallow swales, basins, recessed medians and bioretention facilities enhance the quality of stormwater discharge and recharge through the processes of adsorption, filtration, denitrification, ion exchange, nutrient uptake, microbial activity, and decomposition.

   (2) To the maximum extent practicable, stormwater management within the Primary or Secondary Springs Protection Zone shall meet the following objectives:

   a. Mimic pre-existing hydrology and recharge of the site;

   b. Minimize disturbance to the site and maximize site preservation;

   c. Maximize sheet flow;

   d. Maximize the use of shallow, vegetated retention systems distributed throughout the site prior to discharge to drainage retention and/or wet detention areas; and

   e. Minimize directly connected impervious areas, including considerations to direct roof runoff onto pervious areas.

   (3) Stormwater runoff may be managed with retention and/or wet detention facilities.

   (4) Recessed parking lot islands, medians or other similar features require hard constructed wheel stops and/or other appropriate safety features.

   (b) **Submittal Requirements.** The applicant shall submit complete copies of all input parameters, supporting calculations, assumptions, and documentation for the design.

   (c) **Geotechnical Data Requirements.** Soil test borings shall be per the criteria established in Article 8. Shallow swales, bioretention facilities, recessed medians, etc. that are taking credit for soil infiltration and recovery shall additionally meet the following criteria:
(1) The seasonal high water table shall be a minimum of **two (2) feet** **one (1) foot** below the invert of the swale or **one (1) foot** **below the bottom of the prepared soil matrix of the Bioretention Facility.**

(2) For each linear feature, borings shall be taken a minimum of **every 500 600 feet.** If along a right-of-way, it is recommended that borings be staggered from one side of the right-of-way to the other.

(3) For each swale, Bioretention Facility or other similarly designed feature that is within **250 300 feet** of a boring which provided for permeability, additional borings are not necessary.

(4) For permeability, soil test borings shall be collected a minimum of every **4000 1,200 feet.**

(5) The boring depth can be less than 10 feet below the bottom of the stormwater facility when that boring depth is considered as the confining **unit layer.**

(6) The number, pattern and type of test borings shall be determined by the project engineer or geologist based on the project size, type, and complexity. At a minimum, at least one test boring of twenty (20) feet or greater in depth shall be performed for each increment of five (5) acres. Where visual reconnaissance, available published data, and/or initial borings suggest high karst sensitivity or lithologic variability, additional borings may be required.

(7) For each increment of forty (40) acres in project area, at least one of the test borings under **subp. (a) above** shall extend to the anticipated depth of limerock or Confining Unit; however, no boring shall be required to a depth greater than **of forty (40) feet.** However, if a Confining Unit is encountered, the boring may **terminate at shall extend at least five (5) feet into the unit and a permeability test shall be performed.**

(d) **Hydrology and Recharge.** Applicant shall demonstrate that the project site’s post recharge ability is equivalent to the pre recharge ability through analysis of the site’s pre and post hydrology on a watershed basis.
(1) Distributed volume shall be provided uniformly and evenly across the project site prior to discharge to the watershed’s on-site receiving retention and/or wet detention area. Site distribution shall demonstrate that an equivalent amount of storage is achieved such that the post development effective curve number is equal to the pre development curve number. The volume to be distributed shall be the difference between the post development and the pre development volume for the design event. The design event is that at which runoff is generated on the pre developed site (potentially the design event could be the 1 inch, mean annual, 10 year, etc.) The distributed volume shall minimally equal the first \( \frac{1}{4} \) inch and shall be no greater than the first 4.5 inches of runoff over the developed area.

a) Distributed volume shall be controlled within shallow swales, bioretention facilities, or recessed medians located within a right-of-way, drainage right-of-way, drainage easement or conservation easement.

b) Distributed volume within shallow swales or recessed medians or bioretention facilities shall fully recover surface storage within 72 hours.

c) Distributed volume within bioretention facilities shall fully recover surface storage within 24 hours and soil matrix storage within 48 hours. The 6 inches Freeboard requirement of section 8.2 of the Land Development Code shall not apply to shallow swales, recessed medians or bioretention facilities.

(2) Other low impact design principles and best management practices that meet the same criteria and intent of this subsection may be approved by the County Engineer if proven effectiveness and technical feasibility is demonstrated. If the County Engineer determines that the alternative design is not effective or technically feasible, then the applicant may apply for consideration through the LDC waiver process. A stormwater collection and reuse system, wherein all stormwater runoff from the development is reused for Irrigation purposes, may qualify as an alternative under this paragraph.
(e) **Quantity.** Credit can be received for stormwater quantity volume control outside of the retention and/or wet detention area when the hydrology and recharge criteria are met applying low impact design principles. Quantity volume will only be credited based upon the following:

1. Credit within a swale is available for surface storage between the invert and the control elevation, which may be the ditchblock. Credit can be taken for **50% 75%** of this storage volume or up to **6 3** inches below the control elevation, whichever is a greater volume.

2. Credit within a Bioretention Facility can be taken for that portion of above ground storage up to 1 inch below the control elevation.

3. Each swale, or recessed median **or** Bioretention Facility shall only receive credit for its distributed volume that recovers within **36-72** hours.

4. Each Bioretention Facility that receives credit shall fully recover surface storage within **24** hours and soil matrix storage within **48** hours.

5. Each swale or recessed median that receives credit shall be within a right-of-way, drainage right-of-way, drainage easement or conservation easement.

6. Other low impact design principles and best management practices that meet the same credit criteria and intent of this subsection may be approved by the County Engineer if proven effectiveness and technical feasibility is demonstrated. If the County Engineer determines that the alternative design is not effective or technically feasible, then the applicant may apply for consideration through the LDC waiver process.

(f) **Best Management Practices.** Best Management Practices (BMPs) are characterized as runoff prevention, retention, detention, and pollution prevention. The following BMPs are required and shall be incorporated as part of the project’s stormwater management system:

1. **Roof runoff from non-residential sites shall not be directed to areas subject to vehicular traffic.**
(2) Oil/water separator or comparable BMP technology is required for pre-treating runoff from vehicular traffic areas associated with the following practices:

a. Car washes;

b. Auto or marine paint and body shops;

c. Auto, recreational vehicle, commercial truck, tractor-trailer, farm tractor, heavy machinery, or small engine parts, service and repair operations;

d. Automotive fleet operations; and

e. Gas stations, including convenience stores with gas pumps.

(3) The bottom of all water retention areas shall have stabilized, vegetative cover.

(4) A minimum of 3 feet of unconsolidated soil material shall be provided between the surface of any limestone bedrock and the bottom and sides of any stormwater facility. Excavation and backfill of suitable material may be made to meet this criterion.

(5) Retention and/or wet detention facilities shall have a maximum depth of 10 feet.

(6) Projects in the Primary SPZ that require more than 30 parking spaces and projects in the Secondary SPZ that require more than 50 parking spaces shall utilize porous concrete or other porous material, as may be approved by the County Engineer, on a minimum of 20% of the total parking spaces. Where feasible and appropriate, grass parking spaces may also be used as an alternative to meet this requirement. Recessed medians that are (a) internal to the parking area and (b) designed to provide for the distributed volume under Section 6.4.7.C.5.(d), may be used to provide for groundwater recharge in lieu of or in addition to the pervious paving.

(7) A BMP maintenance document shall be submitted and approved for all projects. As part of the document, the owner shall certify by signature and date that the owner, all successors, and assigns shall perpetually maintain the BMPs; and that this document shall be incorporated into any contracts, covenants and/or restrictions for the property owners association and/or property management associations.

(a) **Submittal Documents.** An applicant for new development or expansion of existing development shall submit a signed and sealed site plan, to scale, which shall depict Karst features on the project site and off-site within 100 feet of the project boundary.

(b) **Buffer Required.** All new development and expansion of existing development shall provide and maintain a permanent vegetative buffer around any Sinkhole, cave, lineament, escarpment, Solution Pipe and other known Karst Feature. The buffer shall be clearly delineated, labeled and described on the preliminary plat, final plat, master plan, and/or site improvement plan, as applicable.

(c) **Width.** The minimum width of the required karst buffer shall be one hundred fifty (150) feet for Karst Features with a direct connection to the aquifer and seventy five (75) feet for Karst Features with no direct connection to the aquifer, as measured from the outermost closed contour or edge of the escarpment, as applicable, but no greater in width than the contributing watershed. These minimum buffer widths may be reduced if the applicant demonstrate either of the following:

1. A narrower buffer can be calculated using the “Design Methodology for Calculating Buffer Width Based on Infiltration”, as set forth in the Applicant’s Handbook for Regulation of Stormwater Management Systems, SJRWMD 2005, as amended; or

2. The lot of record is too small to accommodate permitted development in compliance with the minimum width, in which case the applicant shall, as an alternative, design and construct a vegetated swale and/or berm that effectively prevents drainage to the Karst Feature.

(d) **Buffer Use.** The karst buffer shall be maintained in permanent natural vegetative cover. In addition, the following shall be prohibited within the buffer:

1. Buildings, pavement and other impervious surfaces, except sidewalks three (3) feet or less wide may be permitted;
(6) Septic tank drainfields and any form of domestic Wastewater disposal;
(7) Drainage retention areas;
(8) Use of Irrigation, fertilizers, and pesticides.

(e) Remediation of Karst Features. If remediation of a Karst Feature is proposed, the application for development must include a Karst Feature remediation plan containing all details for the remediation activity. A final certification documenting that the Karst Feature was successfully remediated in accordance with the plan shall be submitted with the final certifications for the development. The Karst Feature remediation plan and final certification must be signed and sealed by a professional engineer. Karst Features remediated in compliance with this paragraph shall not be required to meet the buffer requirements of this subsection.

7. Uses with Special Requirements.

(a) New and Expanding Golf Courses.

(1) Each golf course shall be designed, constructed, and maintained in accordance with a Natural Resources Management Plan (NRMP) that complies with the BMPs outlined in Best Management Practices for the Enhancement of Environmental Quality on Florida Golf Courses, FDEP 2007, as amended.

(2) Non-play areas shall be at least forty (40) percent of the total area if located in the Primary SPZ, and thirty (30) percent if in the Secondary SPZ. In addition, at least eighty (80) percent of all non-play areas shall not be irrigated and shall be preserved native vegetation, or re-established with landscape trees, shrubs, ground covers, and other plants that are Drought Tolerant and/or indigenous to the native plant community of Marion County. Bahiagrass shall qualify provided that: a) it is not irrigated and b) nitrogen fertilizer application is limited to no more than 50 lbs per year, as shall be set forth in the NRMP.

(3) The golf course shall hire a bona fide third-party entity which provides the following golf course certification services:
a. Certification that a NRMP complies with the requirements of subp. (1);
b. Certification that a golf course is constructed in accordance with the NRMP; and
c. Annual certification that a golf course is being operated and maintained in compliance with the NRMP.

(4) A detailed report or handbook describing the third-party certification process that will be used shall be submitted to the Water Resources Official for approval with other SUP application materials.

(5) A copy of the NRMP, along with a letter signed by the third-party entity certifying it meets the requirements under subp. (1) and (2) above, shall be submitted to the Water Resources Official Prior to start of construction.

(6) A letter signed by the third-party entity certifying that golf course construction complies with the NRMP shall be provided to the Water Resources Official prior to the start of play.

(7) Proof of annual certification in the form of a letter signed by the third party entity shall be provided to the Water Resource Official beginning within one year of commencement of golf course operations, or at the earliest available time after play starts, and by March 1 of every year thereafter. Annual certification shall be maintained for as long as the course remains in operation.

(8) This provision shall not apply to new and expanding golf courses that: a) are located within a Master Plan community approved prior to January 1, 2008, and b) are implementing the BMPs outlined in Best Management Practices for the Enhancement of Environmental Quality on Florida Golf Courses, FDEP 2007, as amended.

(b) Auto Salvage Yards.

(1) All new and expanding auto salvage operations shall be required to participate in the FDEP Green Yards Program. Compliance with the Green Yards Program shall be attained and certified by the FDEP within one
year of commencing operation. Issuance of a SUP shall be conditioned upon maintaining such certification.

(2) By or before December 31, 2010, all existing auto salvage operations shall be certified by the FDEP Green Yards Program.

(3) As a condition of the SUP, the owner or operator shall by March 1 of each year provide documentation to the Water Resource Official demonstrating the certification status of the salvage yard.

(c) Storage and Stocking of Fertilizers, Pesticides, Pool and Spa Chemicals and Treated Wood Products. Fertilizers, pesticides, pool and spa chemicals, treated wood products and other similarly hazardous materials that are stored or stocked for wholesale distribution, retail sale, or commercial use shall be protected from rainfall with a permanent roof structure or by other effective means, as approved by the County. Runoff from the roof structure and surrounding areas shall be effectively diverted away from fertilizer and pesticide storage areas. In addition, any runoff originating from within the covered area shall be contained and used or disposed of in a manner approved by the County, and as set forth in the SUP.

(d) Hazardous Materials and Waste Facilities.

(1) Uses which produce, use, or store hazardous materials listed under Section 12.7, shall comply with the provisions of Section 12.8.3., regardless if a Wellfield Protection Permit is required.

(2) Hazardous Materials manufacturing, storage, use, and handling shall comply with the requirements set forth under Section 8.1.5.e.(2).

(3) Containment shall be required in compliance with Section 12.9.

(4) The above requirements shall be stipulated in the approved SUP.

(e) Construction and Demolition Debris (C&DD) Disposal Facilities. Approval of any new or expanding C&DD disposal facility located within a MCAVA category of “more” or “most” vulnerable shall be subject to the following requirements:
Report Required Before Approval. A report generated based on the following analysis and data, which is signed and sealed by a Florida registered professional geologist or professional engineer with geotechnical expertise, shall be submitted to the County before approval, and shall contain, or be based upon, the following:

a. Drilled borings will be installed in order to determine and characterize the subsurface lithology below the proposed landfill site. The borings will be sufficient to determine geological cross-section across the entire site, will consist of soil profiling using the Unified Soil Classification System (ASTM D2487), Standard Penetration Testing (ASTM D1586), and will include a minimum of two borings per five acre of proposed landfill area, with a minimum of four borings. The borings must be sufficient enough to plot the geological cross-section across two axes. The cross-section will also include a designation and description of the shallow water bearing unit, its classification (e.g.: G-I, G-II, G-III), and any confining or semi-confining layers separating the shallow water bearing unit from the Floridan Aquifer. The cross-section shall also include a description of the Floridan Aquifer and its location in relation to the proposed bottom of the landfill. An analysis shall also be made regarding the integrity of the confining or semi-confining layer, if present, and prospect of open conduits from the proposed landfill to the Floridan Aquifer or other sensitive water bodies within one-half mile of the proposed landfill area. The description shall at a minimum include porosity or effective porosity, horizontal hydraulic conductivity, vertical permeability, and depth and lithology of the shallow water bearing unit, confining layers and aquifer.

b. A report signed and sealed by a Florida registered professional geologist shall be submitted regarding observed, or the likelihood of, Karst Features within the proposed landfill area, based upon the borings and other information. Ground Penetrating Radar (GPR) shall be used, if determined applicable by the Registered Geologist, to assist in this determination. The determination of the existence or likelihood of Karst Features will be made by the Registered Geologist based on the subsurface investigation.
c. Soil samples will be collected at a minimum of either (1) three of the borings, or (2) one per every five acres, whichever is greater, from the zones below the bottom of the landfill and the shallowest water bearing unit, and the shallow water bearing unit and the underlying Confining Unit; the required depth of sampling in the Confining Unit may be limited to two feet, and complete penetration of the Confining Unit shall be avoided. The samples shall be submitted for laboratory analysis for the determination of hydraulic conductivity, soil porosity, percent fines, moisture content, plasticity, grain size distribution and organic contents. Field measurements shall be taken from a minimum of three locations, or one for every five acres, whichever is greater, to determine the average horizontal hydraulic conductivity. Average values of the above parameters should be calculated using the more appropriate of the arithmetic mean or the geometric mean, depending on the data spread and consistency.

d. The foregoing requirements are in addition to those set forth in Chapter 62-701 FAC.

(2) **Setback.** The finished base of the facility after final landscaping shall be set back at least fifty (50) feet from all property lines or such greater distance as is determined necessary for stormwater control by a Florida Registered Professional Engineer.

(3) **Prohibition on Material.** The on-site disposal of treated lumber and any debris not specifically classified as “construction and demolition debris” pursuant to Section 62-701.200, **Florida Administrative Code**, shall be prohibited except in de minimus amounts as may be allowed by Section 62-701.200.

(4) **Separation Layer.** The separation distance between the extent of fill and the maximum predicted elevation of water table, seasonal high water table plus one foot, or consistent lime rock formations or layers (if water bearing), whichever is higher, shall be:

a. At least fifteen feet if the average permeability of the separation layer is greater than 1 x 10^-6 cm/s, except that no portion of the layer may be greater than 1 x 10^-5 cm/s; or,
b. Five feet, of which a minimum of 2 feet shall have a uniform permeability no greater that $1 \times 10^{-6}$ cm/s.

(5) Leachate Containment. A leachate containment and management plan shall be provided for any leachate, or stormwater containing leachate, that may bypass the separation layer, and shall ensure that leachate does not contaminate the Floridan Aquifer system through soil materials, retention areas or other conduits occurring beyond the extent of fill. The management plan may require, but not be limited to, extending the separation layer under subs. (4) above beyond the extent of fill.

(6) Liner and Leachate Collection. A liner and leachate collection system shall be provided in accordance with applicable FDEP standards, if the report under subs. (1) above indicates any of the following:

a. The immediate water bearing unit is the Floridan Aquifer; or

b. Karst Features are observed within the proposed landfill area, unless the features are extremely localized and are effectively remediated according a remediation plan that is (1) compliant with applicable state and local regulations and (2) signed and sealed by a Florida Registered Geologist or professional engineer with extensive geotechnical expertise; or

c. The formation of Karst Features is likely within the proposed landfill area, as determined by a Florida registered professional geologist based on the geological and hydrogeological investigation; or

d. Other open conduits or breaches in the Confining Unit which would allow leachate to enter the Floridan Aquifer either exist or are likely to exist.

(7) Groundwater Monitoring Plan. A ground water monitoring plan, which meets the criteria set forth in 62-701.510 and 62-550 Florida Administrative Code (F.A.C.), except as modified below, shall be submitted, implemented and maintained by the owner or operator.

a. All compliance monitoring wells will be installed in accordance with ASTM D5092.
b. Compliance monitoring wells shall be installed around the disposal facility at a spacing of no more than 600 feet apart across the downgradient direction of groundwater flow, and 1500 feet apart along the upgradient and cross-gradient direction of flow. A minimum of three wells will be installed on the downgradient side and a minimum of two wells on each of the upgradient and cross-gradient sides. The wells will be installed using ten feet of screen intersecting the water table two feet and will use a slot size appropriate to the grain size distribution of the screened interval soils.

c. Compliance wells will be analyzed for the constituents required by Chapter 62-701, FAC. The wells required by the C&DD Disposal Facility’s FDEP permit will be sampled on a semi-annual basis (i.e., every six months). All additional wells installed pursuant to the requirements of this section will be sampled on an annual basis.

(8) Grading and Landscaping. As the portions of the facility are filled, the side slopes shall be graded, covered with soil, and landscaped at a maximum 2-acre frequency, as measured along the face of the slope.

(9) Final Cover. When filled to capacity, the facility shall have a final cover designed to prevent ponding and low spots, maximize runoff, limit infiltration and erosion, and support the required landscaping. Soil cover on finished sloped faces (where maximum slope is 3H:1V) shall have an average permeability of $1 \times 10^{-4}$ cm/s to $1 \times 10^{-5}$ cm/s. The crown (top, where slope is less than 3H:1V) of the finished facility shall have an average maximum permeability of $1 \times 10^{-6}$ cm/s. The permeability of the finished slope and crown shall be determined by testing performed by a Florida registered professional geologist or registered professional engineer. The cover can be constructed of a soil layer, geomembrane, or combination of both in order to achieve the appropriate permeability and erosion control, to the extent permitted by FDEP regulations.

(10) Monitoring. The owner or operator of the construction and demolition debris disposal facility, or their successors or assigns, shall continue to monitor and maintain the
facility for ten years from the date of closing. However, no financial assurance requirements shall be maintained beyond the initial five-year period required by FDEP regulations unless monitoring data indicates that the facility is impacting groundwater at concentrations which may be expected to result in violations of FDEP water quality standards, in which case financial assurance shall continue to be provided beyond 5 years. Compliance well monitoring shall be on an annual basis, with alternating wells to be tested every other year (i.e. 50% of wells tested one year, and 50% the next). The ten year time period shall be extended if assessment monitoring or corrective action has been initiated in accordance with subsection 62-701.510(7), Florida Administrative Code, or if site-specific conditions make it likely that any contamination which may emanate from the disposal area would not be detected within ten years.

(11) Signage. The owner shall post signs indicating the name of the operating authority, traffic flow, hours of operation and restrictions and conditions of disposal.

(12) Declaration to the public. After closing operations are approved by the Department, the facility owner or operator shall file a declaration to the public in the deed records in the office of the Marion County Clerk of Circuit Court. The declaration shall include a legal description of the property on which the facility is located and a site plan specifying the area actually filled with construction and demolition debris. The declaration shall also include a notice that any future owner or user of the site should consult with the FDEP prior to planning or initiating any activity involving the disturbance of the facility’s cover, monitoring system or other control structures. A certified copy of the declaration shall be filed with the Zoning Official.

(13) Application Review, Construction Certification and Fees. All construction shall be conducted in accordance with a construction quality assurance/quality control (CQA) plan to be submitted with other application materials for approval. The CQA plan shall specify soils
testing and analysis in accordance with generally accepted engineering procedures, and outline project specifications and construction requirements in accordance with generally accepted industry standards. The plan shall also specify performance criteria for soil separation and cover layers, and provide quality-control testing procedures and minimum sampling frequencies. In addition, the plan shall define the responsibilities of the parties that will be involved in soil separation and cover layer construction, and shall present minimum qualifications of each party to fulfill their identified responsibilities. Marion County shall reserve the right to hire an independent, professional engineer(s) to provide review of the CQA plan, geotechnical information and other application materials, and to inspect and certify construction activities and completion. The County may further require the applicant to compensate the County for the lesser of (a) costs incurred exclusively for such professional services, according to a fee set annually by resolution of the Board, or (b) actual contractual costs for services rendered for the specific project.

(14) **Relationship to FDEP Regulations.** Where the provisions of this part conflict with the requirements of the FDEP, the more restrictive provisions shall apply.

(f) **Mining Operations.** New and expanded mining operations, including sand, clay, and limerock mines, which (a) are located in a MCAVA category of “more” or “most” vulnerable and (b) will excavate within fifteen feet of predicted height of water table, seasonal high water table plus one foot, or limerock, whichever is higher, shall be subject to the following minimum requirements:

(8) All surface drainage from site runoff shall be directed away from mined area to avoid groundwater contamination. If necessary, grading to alter the direction of flow and/or construction of berms to direct runoff around the mined area may be required.

(9) Pollutants or substances of any kind which may be detrimental to water quality shall not be permitted in the mined area. In addition, all fueling, lubrication and any other equipment maintenance activity shall be performed beyond the edge of
the mined area, and additional spill containment shall be provided.

(10) Only clean fill, as defined in Article 2, may be disposed of in the mined area.

(11) Test borings shall be required to delineate geologic conditions, and to determine the interface between the surficial and Floridan aquifers and the locations of groundwater tables on a site. At a minimum, the test borings shall comply with the following:

a. Minimum depth. All borings shall be conducted to a depth of not less than ten feet below the deepest proposed mining or excavation.

b. Maximum spacing. All borings shall be spaced at a minimum of 500-foot intervals in two transverse directions.

c. Log content. The boring log shall indicate the geologic description and thickness of all strata encountered, including topsoil, overburden, mineral deposit or material to be mined or excavated and material immediately underlying the mineral deposit or material, and the position of the groundwater in relating to individual

(12) All mines shall be required to have an approved Reclamation Plan that, in addition to meeting all FDEP requirements, includes the following measures to protect water quality in the surficial and Floridan Aquifer:

c. Where the excavated area will be reclaimed and developed with an urban land use or rural development, clean fill and/or soil with similar or lower permeability and recharge rate than the original strata shall be replaced to a minimum depth of fifteen (15) feet over seasonal high water table or top of limerock, whichever is higher.

d. For any mine where reclamation results in (1) a water body connected to the surficial or Floridan Aquifer, and/or (2) exposed limerock, a natural vegetative buffer along the edge of the water body or exposed limerock shall be provided according to the following:

i. The buffer shall be at least one hundred fifty (150) feet wide, as measured from the edge of OHWM, escarpment.
or highest closed contour of the mined area, as applicable. For water bodies, the buffer shall, additionally, extend from the outer edge of the minimum buffer width to the edge of water

ii. The buffer shall be permanently protected through an easement granted to the county, or other County-approved public or non-profit entity, on an county-approved instrument recorded in the public record

iii. Vegetation within the easement shall consist of native trees, shrubs, grasses and other ground covers, which shall be established according to a buffer landscaping plan submitted to the County for approval.

(13) The following information shall, as part of the Special Use Permit application, be included with all other submittal documents required for major site plan review:

j. Major site plan showing the following at a minimum:

i. Location of the site and boundaries of property lines in relation to state and county roads;

ii. Proposed location of storage tanks, refueling areas and equipment maintenance areas;

iii. Existing potable water wells within 500 feet of the site boundaries;

iv. Existing and proposed water bodies; and

v. Existing and proposed temporary and permanent stormwater management facilities;

k. Aerial photograph taken within one year of application submittal, showing property lines and areas proposed for mining, excavation or fill;

l. Topographic map showing pre and post development contour lines, at a maximum of two-foot intervals;

m. Cross-sectional of the proposed depth of areas to be mined or excavated and relationship to the wet season high water table and geologic materials, based on test borings performed on the site;
n. Copy of Reclamation Plan, prepared in compliance with FDEP requirements, and including post-development vegetative buffer plan;

o. Copy of hazardous materials management plan consistent with the requirements of FDEP and this Section;

p. Copy of geotechnical report required under Section 6.4.7.B.;

q. Stormwater management plan; and

r. Draft copy of proposed conservation easement document, if applicable.

(14) Heavy Industrial and Commercial Uses. Heavy industrial and commercial uses as set forth under Section 6.4.6.B.7., above, shall:

d. Conduct any manufacturing and repair operations under a roofed structure; and

e. Provide cover over any machinery, used parts, or other equipment which are potential sources of pollutants or substances of any kind which may be detrimental to water quality.

f. Cover requirements under subp. (b) shall not apply to normal runoff from landscape, roof and employee and customer parking lot areas served by a county-approved stormwater management facility.