Stormwater Management Plan Information (SMP, DIS & WQIS)

In order to comply with Federal and State regulations for urban storm water, a Stormwater Management Plan (SMP) will be required for all development and redevelopment projects that require demolition or complete removal of existing structures or impervious surfaces at a site and replacement with new development. Maintenance activities such as top-layer grinding and repaving are not considered redevelopment. Interior remodeling projects are also not considered to be redevelopment.

REQUIREMENTS: The developer shall prepare and submit to the Department of Development, an SMP that recommends specific drainage and stormwater runoff quality improvements. The SMP shall be consistent with issues and recommendations presented in the Drainage Impact Study (DIS) and Water Quality Impact Study (WQIS) when either or both of these are required. Specific stormwater runoff quality improvements and drainage improvements and impacts must be addressed in the SMP, regardless of the need for a WQIS or a DIS.

EXEMPTIONS: The following development activities shall be exempted from the requirement of preparing an SMP:

- 1. All development in duly authorized subdivisions and master planned developments created with an approved SMP that includes both a WQIS and a DIS, provided that they comply with the SMP prepared for the subdivision or master planned development at the time of the original approval.
- 2. All single-family residential development on existing lots of record within subdivisions created before April 1, 2008.

THE SMP SHALL INCLUDE:

- 1. A map of the location of the subject property and adjacent developments and infrastructure.
- 2. A description and map of existing site conditions, including land cover, contours, soil types, and estimated pollutant load.
- 3. A description and site plan of the proposed development, including land cover, contours, empirically expected pollutant load, and proposed drainage ways and stormwater BMPs.
- 4. A description of the specific proposed drainage ways and stormwater BMPs and how they meet the requirements for drainage and water quality as described in Sections 15.14, Drainage, and 15.16, Water Quality, respectively. The SMP shall describe the types of BMPs that will be on the site after construction is complete with specific locations of each and estimated capacity for pollutant load reduction.
- 5. A description of how the proposed drainage ways and stormwater BMPs will be maintained.

For all projects requiring a Stormwater Management Plan, a Stormwater BMP Maintenance Covenant and Private Stormwater Quality BMP Certification will be required prior to granting Final Occupancy:

1. STORMWATER BMP MAINTENANCE COVENANT: A document signed by the property owner guaranteeing that all constructed stormwater BMP's will be continually maintained according to the recorded BMP maintenance description and schedule. A Schedule of Maintenance for the Permanent BMP's must be provided. The BMP Maintenance Covenant and Schedule of

Maintenance for the Permanent BMP's must be filed with the East Baton Rouge Parish Clerk of Court prior to submittal to the Permit Office or Subdivision Engineering.

2. PRIVATE STORMWATER QUALITY BMP CERTIFICATION: A document signed and sealed by the professional of record who prepared the Stormwater Management Plan for the project is required, certifying that all components of the SMP were installed according to the approved building permit plans. Must be signed and stamped by the Licensed Professional of Record.

The BMP Maintenance Covenant and Stormwater BMP Design Certification forms are available on the BR Gov. website; https://www.brla.gov/518/Commercial https://www.brla.gov/documentcenter/view/1678 <a href="https://www.brla.gov/documentcenter/

Contact the Subdivision Engineering Division for all commercial development requiring Planning Commission approval including; PUD's, SPUD's, ISPUD's, CUP's TND's, Subdivisions, and Site Plans with a building or buildings over thirty thousand (30,000) square feet; phone (225) 389-3198.

Contact the Permit and Inspections Division for commercial buildings under thirty thousand (30,000) square feet; phone (225) 389-3205.

Refer to The Unified Development Code (UDC) Chapter 15 for detailed information concerning all requirements. https://www.brla.gov/DocumentCenter/View/2257/Chapter-15---Floodways-Floodplains-Drainage-and-Water-Quality-PDF

Drainage Impact Study Information

The purpose of a Drainage Impact Study is to ensure that existing drainage conditions at proposed sites are evaluated and the potential impacts of proposed improvements to drainage in the vicinity are determined. The SMP shall be consistent with the issues and recommendations presented in the DIS, when it is required. All drainage improvements shall be planned in accordance with the criteria for drainage as specified by the Department of Development.

EXEMPTIONS: The following development activities shall be exempted from preparing a DIS:

- 1. Development in which the area of impervious surface does not exceed 20 percent of the developed site area at the point of discharge from the site. The total impervious area shall include all buildings, driveways, sidewalks, streets, parking areas, lakes, ponds, and similar facilities. All undeveloped open space and common areas shall be clearly identified.
- 2. Additions or modifications to existing developments which result in no more than a ten percent increase in existing impervious area and which have existing public storm drainage facilities designed to accommodate runoff from the existing site.

WAIVERS: Developers may request that the Department of Development approve a waiver of the DIS. If such a request is granted, no detailed DIS shall be required for the development. A waiver must be requested in writing and contain sufficient information regarding the specific details of the proposed development. A waiver may be considered for approval provided:

- 1. The proposed development results in no more than a ten percent increase in the ten- and 25year storm (the ten and four percent storms) pre-development peak discharge at the point of discharge from the development site;
- 2. The site is located within existing developed areas that are served by a network of public storm drainage facilities, which were designed to accommodate runoff from the development site; or,
- 3. Sufficient information is submitted by the developer indicating that the runoff from the proposed development is consistent with and discharges to a previously approved development having adequate drainage facilities or is a part of an approved larger plan of development with an approved drainage study.

THE DIS SHALL COMPLY WITH THE FOLLOWING MINIMUM REQUIREMENTS:

- 1. Location- Describe the location of the subject property Township and Range, identifying adjacent developments, major drainage outfalls, streets, highways, lot and block page number, and provide a vicinity map.
- 2. Existing Land Use- Describe the predominant existing land use and future land use in the project watershed (Comprehensive Land Use Data, aerial photos, etc.). Describe the proposed development, soil types, vegetative cover, and watershed slopes. Provide an estimate of percent of impervious area for pre- and post-development conditions. Provide photos of existing channels, ditches, natural drains, and drainage structures.
- 3. Watershed Map- Delineate drainage boundaries, indicate the acreage, and show the slope of basins, and peak 10 and 25-year runoff rates at entry and exit points of the development. The watershed map should indicate the location of existing channels, ditches, natural drains, proposed major drainage structures, channel realignments, and cross section location.

- 4. The DIS shall indicate existing conditions for peak ten- and 25-year flow rates at the development entry and exit points.
- 5. The Drainage Impact Study shall indicate future conditions for peak ten and 25-year flow rates at the development entry and exit points.
- 6. If ponds or sub-surface detention systems are used in design for routing of flows, the ten peak ten- and 25-year storm events (the ten and four percent storms) shall be used in design of the pond capacity and site disturbance. The interior conveyance system shall be designed for the ten year storm system. The effects of a 100-year, or one percent, storm on the pond shall be provided as well.
- 7. Developments shall not create a new point-source discharge or a new non-point source discharge onto adjacent properties of lower ground elevations without appropriate drainage servitudes. Unless otherwise approved by the Director of Development, storm-water overflow from detention ponds shall maintain a sheet flow condition.
- 8. On-site capacity- Indicate the capacity of any existing drainage outfall facility (ditch, canal, culvert, bridge, or similar) within the proposed development site and the required type, size, and capacity of any proposed outfall facilities.
- 9. Off-site capacity- Determine the capacity of existing downstream outfall facilities (ditches, canals, culverts, bridges, or similar) that will be utilized to convey flow from the downstream limits of the proposed development to the first public outfall as identified on the EBR stream segment data layer maintained by the City-Parish Department of Information Services as part of the City-Parish geographic information system. An inventory of downstream structures including the size, type, invert elevation, and cover topping elevation should be made. Channel cross at the upstream and downstream limits of the proposed development at structure locations and at intermediate canal locations shall be required to adequately define existing channel capacities.
- 10. Special conditions that may exist at the proposed development site should be clearly identified including but not limited to such items as: Special Flood Hazard Areas (Firm Zones A and AE), regulatory floodways, fill placement locations and mitigation requirements, potential wetland sites, churches, schools, cemeteries, landfills and hazardous waste sites and parks.

CONCLUSIONS AND RECCOMENDATIONS- the DIS should clearly identify the results and conclusions of the study and provide recommendations of any required action(s) so that surrounding properties experience no adverse impact.

Refer to The Unified Development Code (UDC) Chapter 15 for detailed information concerning all requirements. https://www.brla.gov/DocumentCenter/View/2257/Chapter-15---Floodways-Floodplains-Drainage-and-Water-Quality-PDF

Water Quality Impact Study Information (WQIS)

The purpose of this section is to ensure that the potential for water quality impacts to existing surface water and/or groundwater resources are evaluated as part of any development or redevelopment project. The development shall not be approved until the WQIS has been reviewed and approved by the Department of Development.

EXEMPTIONS: The following development activities shall be exempted from the requirements of preparing a WQIS, but shall comply with the stormwater BMPs described in an SMP:

- 1. Sites with a developed area of less than one acre.
- 2. Farming or agricultural activities.

THE WQIS SHALL COMPLY WITH THE FOLLOWING MINIMUM REQUIREMENTS:

- 1. Existing Conditions and Location
 - A. Site Location: Describe the location of the subject property using the street address and the latitude and longitude.
 - B. Watershed and Subwatersheds: Describe the watersheds and subwatersheds both on- and off-site.
 - C. Total Maximum Daily Loads: List all TMDLs established by the EPA and LDEQ for applicable affected waterbodies. If TMDLs have not been established, all first flush stormwater pollutants that originate from the site post-construction shall be treated or retained on the site.
 - D. Soils and Topography Provide the following: site contours at maximum two-foot contour intervals, general land slopes, and soil types and characteristics.
 - E. Land Cover: Show existing land cover on a current aerial photo and in a table with square footage of landcover area and percent of total site. Types of land cover to be listed include, but are not
 - limited to the following: forest, paving (list by type), meadow, crops, buildings, water bodies and wetlands.
- 2. Proposed Development Conditions:
 - A. Watersheds and subwatersheds: Describe the impact of development on watersheds and subwatersheds both on- and offsite.
 - B. Land Cover: Show proposed development land cover on a current aerial photo and in a table with square footage of land cover area and percent of total site. Types of land cover to be listed include, but are not limited to the following: forest, paving (list by type), meadow, crops, buildings, water bodies and wetlands.
 - C. Land Cover Comparison Table: Provide a table comparing existing land cover with proposed development land cover. Types of land cover and empirically expected contaminants from the land cover, uses, and activities to be listed include, but are not limited to the following:
 - 1. Auto-oriented use areas, including roadways, parking areas, and heavy equipment and maintenance areas (oil, grease, Freon, heavy metals, other chemicals);
 - 2. Lawn, plantings, and golf course maintenance (oil, grease, pesticides, herbicides, nutrients, other chemicals);
 - 3. Roofs and gutters (organic materials, roofing materials, coatings, heavy metals);
 - 4. Commercial activities (oil, heavy metals, other chemicals);

- 5. Residential activities (organic materials, pesticides, herbicides, other chemicals); and, light industrial (oil, grease, coatings, heavy metals, other chemicals).
- 3. Proposed Water Quality Treatment: Provide the following information to identify how stormwater will be treated to protect water quality:
 - A. Stormwater Treatment Train;
 - B. BMPs, identifying the following: sizes, water capacity, function, percent of empirically expected pollutant reductions (BMPs shall reduce the pollutant load in site stormwater runoff by treating or retaining all first flush stormwater pollutants that originate from the site post-construction or as otherwise required by EPA and LDEQ TMDLs), operation and maintenance, control and containment per special activities, and measures for BMP maintenance.
 - C. Water flows per watershed (in cubic feet per second).
- 4. Study Conclusions and Recommendations: Provide a table of the empirically expected percent of each pollutant by type per BMP for expected impact to affected waters.

Refer to The Unified Development Code (UDC) Chapter 15 for detailed information concerning all requirements.

https://www.brla.gov/DocumentCenter/View/2257/Chapter-15---Floodways-Floodplains-Drainage-and-Water-Quality-PDF