

## **ARTICLE III. PLAN REQUIREMENTS**

### **SECTION 301. GENERAL REQUIREMENTS**

1. Prior to preliminary or final plan approval of any subdivision plan, land DEVELOPMENT PLAN, the issuance of any permit, or the commencement of any DEVELOPMENT within the jurisdiction of this ORDINANCE, the APPLICANT shall submit a STORMWATER MANAGEMENT PLAN application to the TOWNSHIP for approval. No approval of any subdivision plan, land DEVELOPMENT PLAN, issuance of any permit, or commencement of any DEVELOPMENT within the jurisdiction of this ORDINANCE shall be granted prior to approval of a STORMWATER MANAGEMENT PLAN application.
2. APPLICANTs are encouraged to schedule a pre-application meeting to review the APPLICANT's overall STORMWATER MANAGEMENT concept with the TOWNSHIP. The pre-application meeting is not mandatory, shall not constitute formal filing of a plan with the TOWNSHIP or imply any approvals by the TOWNSHIP. Topics discussed may include the following:
  - A. Geological information, plans and other available data obtained by the APPLICANT.
  - B. Findings of the site analysis including identification of any environmentally sensitive AREAs, wellhead protection AREAs, RIPARIAN BUFFERs, HYDROLOGIC SOIL GROUPs (HSG), existing NATURAL DRAINAGEWAYS, KARST features, AREAs conducive to infiltration to be utilized for VOLUME CONTROL, etc.
  - C. Results of infiltration testing performed.
  - D. Applicable TOWNSHIP Subdivision and Land Development Ordinance, Floodplain Ordinance and Zoning Ordinance provisions.
  - E. The APPLICANT's conceptual project layout, including proposed STRUCTURAL and NON-STRUCTURAL BMPS with consideration given to maximizing the use of both STRUCTURAL and NON-STRUCTURAL BMPS designed to accomplish the following:
    - (1) Minimize impact by identifying environmentally sensitive AREAs early on in the process and protecting them.
    - (2) Minimize impervious cover.
    - (3) Prevent STORMWATER generation.
    - (4) Prevent pollutant loads.
    - (5) Maximize the use of low impact and green infrastructure measures.
3. Preparation of a STORMWATER MANAGEMENT PLAN is required for all REGULATED ACTIVITIES, unless preparation and submission of the STORMWATER MANAGEMENT PLAN is specifically exempted or granted impervious credit according to Section 109.

## **SECTION 302. PLAN CONTENTS**

The following items shall be included as part of the STORMWATER MANAGEMENT PLAN:

1. Plans, showing the following information:
  - A. The copies of all plans submitted with the application for STORMWATER MANAGEMENT approval can be either black and white or blue and white prints.
    - (1) The sheet sizes shall be either 18 inches by 24 inches or 24 inches by 36 inches.
    - (2) Proposed name or identifying title of project.
    - (3) Name and address of the landowner and APPLICANT of the PROJECT SITE.
    - (4) Name and address of the individual or firm preparing the plan.
    - (5) Plan date and date of the latest revision to the plan, north point, graphic scale and written scale. All plans shall be at a scale of 20, 30, 40 or 50 feet to the inch.
    - (6) If the plan is prepared in two (2) or more drawing sheets, a full size drawing and key map showing the location of the sheets and a match line shall be placed on each sheet.
    - (7) Each sheet shall be numbered to show the relationship to the total number of sheets in the plan set.
    - (8) Plans shall be prepared in a form that meets the requirements for recording for the Office of the Recorder of Deeds of Lancaster County.
    - (9) Total acreage of the PROJECT SITE and the tract of land on which the PROJECT SITE is located.
    - (10) A location map, for the purpose of locating the PROJECT SITE to be developed, at a minimum scale of 2,000 feet to the inch, showing the relation of the tract to adjoining property and to all streets and TOWNSHIP boundaries existing within 1,000 feet of any part of the tract of land on which the PROJECT SITE is proposed to be developed.
2. Existing features.
  - A. Tract boundaries showing distances, bearings and curve data, as located by field survey or by deed plotting.
  - B. Existing contours at vertical intervals of one (1) or two (2) feet for land with an average natural slope of twenty (20) percent or less and at vertical intervals of five (5) feet for more steeply sloping land. The location of the benchmark and the datum used shall also be indicated.
  - C. The names of all owners of all immediately adjacent unplatte land, the names of all

proposed or existing DEVELOPMENTs immediately adjacent, and the locations and dimensions of any streets or easements shown thereon.

- D. The names, locations and dimensions of all existing streets, railroads, WATERCOURSEs, drainage facilities, FLOODPLAINs, streams, lakes, ponds, and other waterbodies, existing drainage courses, KARST features and other significant features within 200 feet of any part of the tract proposed to be developed and the location of all buildings and structures.
- E. Other physical features including WETLANDs, sinkholes, AREAs of NATIVE VEGETATION to be preserved including trees greater than two (2) inches in diameter at breast height, WOODLANDs, other environmentally sensitive AREAs and the total extent of the upstream AREA draining through the PROJECT SITE.
- F. The locations of all existing utilities, including on-lot disposal systems and wells, sanitary sewers, and water lines within 200 feet of property lines.
- G. Soil boundaries and soil types as designated by the NRCS.

3. Proposed features.

- A. The proposed land use, the number of LOTs and dwelling units and the extent of commercial, industrial or other nonresidential uses.
- B. The locations and dimensions of all proposed streets, parks, playgrounds, and other public AREAs, sewer and water facilities; LOT lines and building locations, and parking compounds, driveways, paved AREAs and other IMPERVIOUS SURFACES.
- C. The proposed changes to land surface and vegetative cover including AREAs to be cut or FILLED.
- D. Proposed contours at vertical intervals of one (1) or two (2) feet for land with an average natural slope of twenty (20) percent or less and at vertical intervals of five (5) feet for more steeply sloping land.
- E. Finished elevations on tops of curbs at LOT lines projected and LOT corners. Elevations shall be shown to the nearest tenth of a foot.
- F. A summary table depicting the minimum lowest floor elevation, which includes the basement for all LOTs located immediately adjacent to the FLOODPLAIN AREA.
- G. The location of any proposed on-LOT disposal system, replacement drainfield easements, and water supply wells.
- H. The location of any proposed signage identifying the constructed BMP. Proposed signage shall be installed on any nonresidential property or property under the control of a homeowners association or community association.

4. STORMWATER MANAGEMENT FACILITIES.

- A. All calculations, assumptions, and criteria used in the design of the STORMWATER MANAGEMENT FACILITIES must be shown. If multiple facilities are used in conjunction with each other, such as infiltration BMPs with vegetation based management practices, a summary narrative shall be included describing any sequencing and how the facilities are meant to function with each other to manage STORMWATER RUNOFF in accordance with this ORDINANCE.
- B. All STORM SEWERS along with any proposed connections to existing facilities.
- C. Plans and profiles, drawn to scale, of all proposed STORMWATER MANAGEMENT FACILITIES including BMPs, drainage structures, PIPEs, OPEN CHANNELs, and SWALEs and including vertical and horizontal alignment, size and type of material. This information shall be of the quality required for the CONSTRUCTION of all facilities. All SWALEs and OPEN CHANNELs shall have centerline invert elevations shown every one-hundred (100) feet and at changes in GRADE. Prior to final plan recording, such plans and profiles of all proposed STORMWATER MANAGEMENT FACILITIES shall exclude any other utility information and shall be limited to the STORMWATER MANAGEMENT FACILITIES.
- D. When subdivision or land DEVELOPMENT PLAN applications, whether preliminary or final, are submitted in sections, a generalized STORMWATER MANAGEMENT PLAN for the entire PROJECT SITE shall be submitted in addition to the detailed STORMWATER MANAGEMENT PLAN for the proposed section. This generalized plan shall demonstrate how the STORMWATER of the proposed section will relate to the entire DEVELOPMENT. The amount and velocity at the discharge point of the section shall be included in the data submitted. If temporary facilities are required for CONSTRUCTION of a section, such facilities shall be included in the submitted plans.
- E. A minimum twenty (20) foot wide ACCESS EASEMENT shall be provided for all STORMWATER MANAGEMENT FACILITIES. ACCESS EASEMENTS shall provide for ingress and egress to a public right-of-way.
- F. A minimum twenty (20) foot wide DRAINAGE EASEMENT shall be provided where the CONVEYANCE, treatment, or storage of STORMWATER, either existing or proposed, is identified on the STORMWATER MANAGEMENT PLAN. DRAINAGE EASEMENTS shall be provided to contain and convey the One-Hundred (100) Year STORM EVENT.
- G. Where PERMEABLE PAVEMENT is to be installed, pavement material and CONSTRUCTION specifications shall be included.
- H. A planting plan for all vegetated BMPs in accordance with Section 401.4 and Section 403.7 shall be provided.
- I. A note on the plan indicating any AREA that is not to be offered for dedication along with a statement that the TOWNSHIP is not responsible for maintenance of any AREA not dedicated for public use. The only AREAs that shall be offered for

dedication are those STORMWATER MANAGEMENT FACILITIES situated within a dedicated TOWNSHIP right-of-way.

- J. A table on the plan indicating the assumed square footage of IMPERVIOUS SURFACE for each LOT.
- K. A table on the plan indicating the assumed square footage of IMPERVIOUS SURFACE permitted for each STORMWATER MANAGEMENT FACILITY.
- L. A summary table on the plan identifying all BMPs including BMP ID, drainage AREA to the BMP, name of receiving waterbody, the BMP's inspection and maintenance FREQUENCY, name of responsible person or organization at the time of STORMWATER MANAGEMENT PLAN approval, and the LOT numbers where the BMP is located. Refer to Figure 8, Attachment 1 of the MTSMRM.
- M. A note on the STORMWATER MANAGEMENT PLAN referencing the STORMWATER MANAGEMENT Agreement and Declaration of Easement and the requirement to implement BMPs in accordance with the minimum design standards and requirements for BMPs set forth in this ORDINANCE, in any deed of CONVEYANCE for the PROJECT SITE or any part thereof.
- N. A note on the STORMWATER MANAGEMENT PLAN indicating that nothing shall be placed, planted, set or put within the AREA of an easement. No ALTERATIONS to SWALEs, basins, BMPs or other STORMWATER MANAGEMENT FACILITIES shall be permitted.

5. EROSION and SEDIMENTATION Controls.

- A. The type, location and extent of all EROSION and SEDIMENTATION Control measures shall be shown on an EROSION AND SEDIMENT POLLUTION CONTROL PLAN including a narrative that conforms to the requirements of 25 Pa. Code CHAPTER 102.
- B. Evidence of approval of the EROSION AND SEDIMENT POLLUTION CONTROL PLAN from the CONSERVATION DISTRICT as required by 25 Pa. Code CHAPTER 102 prior to final plan approval.
- C. EROSION and SEDIMENTATION Controls are to be designed and maintained throughout the construction phase of the PROJECT SITE, beginning with initial topsoil removal and through the conversion and operation of all Post Construction STORMWATER MANAGEMENT IMPROVEMENTS. Specifically, the runoff conditions immediately downstream from the PROJECT SITE must be maintained or be less than the pre-developed rates during construction. Calculations at significant milestone dates within the construction phasing shall determine if the requirement is met. This will require attention to sequencing of land cover and controls on the PROJECT SITE. The designer shall provide information to define how such protection is incorporated into all phases of the CONSTRUCTION activity.

6. Supplemental information.

- A. A written description of the PROJECT SITE including a description of existing natural and hydrologic features and any environmentally sensitive AREAs.
- B. A written report, including STORMWATER RUNOFF calculations for both pre-DEVELOPMENT and post-DEVELOPMENT conditions including complete hydrologic, hydraulic and structural computations for all STORMWATER MANAGEMENT FACILITIES.
- C. A written description of the overall STORMWATER MANAGEMENT concept for the project, including a description of permanent STORMWATER MANAGEMENT techniques, STRUCTURAL and NON-STRUCTURAL BMPs to be employed and CONSTRUCTION specifications of the materials to be used for Structural STORMWATER MANAGEMENT FACILITIES to be applied both during and after DEVELOPMENT, and expected project time schedule. The narrative shall include a description of any treatment train and how the facilities are meant to function with each other to manage STORMWATER RUNOFF.
- D. A copy of the NPDES application.
- E. A copy of the NPDES CONSTRUCTION Permit for REGULATED EARTH DISTURBANCE ACTIVITIES prior to final plan approval. Information supporting any deviation, modification or renewal on an approved NPDES permit shall be immediately submitted to the Township for review and approval.
- F. Evidence of approval for any activities that require a PADEP Joint Permit and are regulated under 25 Pa. Code CHAPTER 105 or CHAPTER 106, require a PennDOT Highway Occupancy Permit, or require any other permit under applicable state or federal regulations, the permit(s) shall be part of the STORMWATER MANAGEMENT PLAN and must be obtained prior to final plan approval.
- G. In AREAs of CARBONATE GEOLOGY, a geologic assessment of the effects of STORMWATER RUNOFF and infiltration on sinkholes as specified in this ORDINANCE.
- H. The effect of the project (in terms of RUNOFF volumes, water quality and peak flows) on adjacent properties and on any existing TOWNSHIP STORMWATER MANAGEMENT FACILITIES that may receive RUNOFF from the PROJECT SITE.
- I. When utilization of a PennDOT STORMWATER MANAGEMENT FACILITY is proposed, a Declaration of Adequacy/Highway Occupancy Permit from the PennDOT District Office as well as an executed and recorded Drainage Indemnification Agreement with the TOWNSHIP is required. See informational sheet in the MTSMRM.
- J. An O&M PLAN that clearly sets forth the operation and maintenance responsibility that address the requirements of Article VI for all temporary and permanent STORMWATER MANAGEMENT FACILITIES and EROSION and SEDIMENTATION Control Facilities, including:

- (1) Description of temporary and permanent maintenance requirements.
  - (2) Identification of a responsible individual, corporation, association or other entity for ownership and maintenance of both temporary and permanent STORMWATER MANAGEMENT and EROSION and SEDIMENTATION Control Facilities.
  - (3) Establishment of suitable easements for access to and protection of all facilities.
  - (4) The intent of these regulations is to provide private ownership, operation and maintenance of STORMWATER MANAGEMENT and EROSION and SEDIMENTATION Control Facilities. Where the STORMWATER MANAGEMENT PLAN proposes that the TOWNSHIP own or maintain the facilities, a description of the methods, procedures, and the extent to which any facilities shall be turned over to the TOWNSHIP shall be incorporated as an integral part of the plan.
7. All landowners of land included in the STORMWATER MANAGEMENT PLAN shall be required to execute all applications and final documents.
8. The following certificates shall be shown on the plan:
  - A. A certificate signed and sealed by an individual registered in the Commonwealth of Pennsylvania and qualified under all applicable local and State laws to perform such duties, indicating the compliance of the design of the STORMWATER MANAGEMENT FACILITIES with the provisions of this ORDINANCE. See form of certificate in the MTSMRM.
  - B. A statement, duly acknowledged before an officer authorized to take acknowledgement of deeds and signed by the landowner of the property, to the effect that the STORMWATER MANAGEMENT PLAN is the act and deed of the landowner, that he/she is the owner of the property shown on the survey and plan, and that he/she desires the same to be recorded as such. Said statement shall be dated following the last change or revision to the STORMWATER MANAGEMENT PLAN. See form of certificate in the MTSMRM.
  - C. Certificate of dedication of IMPROVEMENTS and other public property to the TOWNSHIP or other appropriate municipal or governmental authority. See form of certificate in the MTSMRM.
  - D. Certificate for review by the TOWNSHIP ENGINEER. See form of certificate in the MTSMRM.
  - E. A certification signed by the registered professional GEOLOGIST or professional ENGINEER. See form of certificate in the MTSMRM.
9. FINANCIAL SECURITY for the completion of STORMWATER MANAGEMENT FACILITIES is set forth in Article V of this ORDINANCE.
10. Letters of approval from all utilities when CONSTRUCTION occurs within an existing utility easement or existing utility right-of-way.

11. Prior to the full release of FINANCIAL SECURITY, the APPLICANT shall be responsible for providing a Record Plan of all STORMWATER MANAGEMENT FACILITIES included in the approved STORMWATER MANAGEMENT PLAN. The Record Plan and an explanation of any discrepancies with the design plans shall be submitted to the TOWNSHIP or its DESIGNEE for final approval. The Record Plan shall include a final certification as required by CHAPTER 102, from an ENGINEER, Landscape Architect, Surveyor or other qualified person registered in the Commonwealth of Pennsylvania.
12. The APPLICANT shall submit both an approved and record plan on CD in AutoCAD data file format. This data file, when opened in AutoCAD, shall provide a complete display of the entire STORMWATER MANAGEMENT PLAN including all information contained on the approved final plan. The file shall be in AutoCAD 2000 or later format. All coordinates as depicted on the plan shall be based on the PA South Zone State Plane Coordinate System (NAD83 for horizontal and NAVD88 for vertical).

### **SECTION 303. PLAN PROCEDURES FOR SUBDIVISION AND LAND DEVELOPMENTS**

1. All STORMWATER MANAGEMENT PLANS for subdivision and land DEVELOPMENT shall adhere to the procedures required by The Manheim Township Subdivision and Land DEVELOPMENT, including the number of copies of material to be submitted, STORMWATER MANAGEMENT PLANS for all other DEVELOPMENT shall adhere to the plan procedure delineated in Section 304 of this ORDINANCE.
2. For any activities that require a PADEP Joint Permit Application and regulated under 25 Pa. Code CHAPTER 105 or CHAPTER 106, require a PennDOT Highway Occupancy Permit, or require any other permit under applicable state or federal regulations, the permit(s) shall be part of the STORMWATER MANAGEMENT PLAN.

### **SECTION 304. PLAN PROCEDURE FOR OTHER DEVELOPMENT ACTIVITIES**

1. Two (2) copies of the STORMWATER MANAGEMENT PLAN, two (2) copies of, all supporting information required in Section 301, an application, a STORMWATER MANAGEMENT PLAN checklist, and a filing fee pursuant to the adopted TOWNSHIP fee schedule shall be submitted to the TOWNSHIP Manager or DESIGNEE. The TOWNSHIP Manager or DESIGNEE shall submit all applications to the TOWNSHIP ENGINEER for review and recommendations.
  - A. In the event that APPLICANT disputes the amount of such review fees, the APPLICANT shall, within ten (10) days of the filing date, notify TOWNSHIP that such fees are disputed, in which case the TOWNSHIP shall not delay or disapprove a STORMWATER MANAGEMENT application due to the APPLICANT's request over disputed fees.
  - B. In the event TOWNSHIP and the APPLICANT cannot agree on the amount of review fees which are reasonable and necessary, then the APPLICANT and TOWNSHIP shall follow the procedure for dispute resolution set forth in § 503 of the MPC.
2. The APPLICANT is responsible for submitting plans to any other agencies including but not limited to the CONSERVATION DISTRICT, PennDOT, and PADEP when approvals from these agencies are required. Final approval shall be conditioned upon the

APPLICANT obtaining all necessary permits.

3. If a plan submission is determined by the TOWNSHIP or its DESIGNEE to be incomplete, the APPLICANT shall be notified of the deficiencies. The STORMWATER MANAGEMENT PLAN Checklist will be used as the basis for determining whether a submission is complete or incomplete. See STORMWATER MANAGEMENT PLAN checklist in the MTSMRM. The TOWNSHIP is not responsible for returning an incomplete submission to the APPLICANT. If the application is deemed complete, it shall be accepted for filing as of the date of submission. Acceptance of the application shall not, however, constitute an approval of the plan or a MODIFICATION of any deficiencies or irregularities. The APPLICANT may appeal the TOWNSHIP's decision not to accept a particular application in accordance with Section 809 of this ORDINANCE.
4. Approval of the STORMWATER MANAGEMENT PLAN application shall be communicated to the APPLICANT by mail at the APPLICANT's last known address.
5. No grading permits, building permits or certificates of occupancy shall be issued unless the TOWNSHIP ENGINEER verifies that the STORMWATER MANAGEMENT standards and requirements herein are satisfied and the STORMWATER MANAGEMENT PLAN has been recorded.
6. Approval of a STORMWATER MANAGEMENT PLAN by the TOWNSHIP shall not be construed as an indication that the plan complies with the standards of any other agency of the Commonwealth.

#### **SECTION 305. STORMWATER MANAGEMENT PLAN REVIEW**

1. The TOWNSHIP or its DESIGNEE shall review the STORMWATER MANAGEMENT PLAN for consistency with this ORDINANCE.
2. In the case of a subdivision or land development, the TOWNSHIP ENGINEER shall review the STORMWATER MANAGEMENT PLAN for conformance with The Manheim Township Subdivision and Land Development Ordinance, for all provisions not superseded by this ORDINANCE.
3. The TOWNSHIP or its DESIGNEE's approval of a STORMWATER MANAGEMENT PLAN shall be valid for a period not to exceed five (5) years unless a schedule is submitted and approved for a longer period of time as part of the approval process. This five (5) year time period shall commence on the date that the TOWNSHIP or its DESIGNEE approves the STORMWATER MANAGEMENT PLAN. If STORMWATER MANAGEMENT FACILITIES included in this approved STORMWATER MANAGEMENT PLAN have not been completed and inspected within this five (5) year time period, then the TOWNSHIP or its DESIGNEE may consider the STORMWATER MANAGEMENT PLAN disapproved and may recommend that the TOWNSHIP revoke any and all permits. STORMWATER MANAGEMENT PLANS that are considered disapproved by the TOWNSHIP or its DESIGNEE shall be resubmitted in accordance with this ORDINANCE.

#### **SECTION 306. STORMWATER MANAGEMENT PLAN REVISION**

1. Revisions to a STORMWATER MANAGEMENT PLAN after submission but before TOWNSHIP approval shall require a resubmission of the modified STORMWATER MANAGEMENT PLAN consistent with Section 304 of this ORDINANCE and be subject to review as specified in Section 305 of this ORDINANCE.
2. Any substantial revisions to a STORMWATER MANAGEMENT PLAN after approval shall be submitted as a new plan to the TOWNSHIP, accompanied by the applicable application, supplemental information and filing fee pursuant to the adopted TOWNSHIP fee schedule.