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# **Planning Commission Public Hearing and Staff Report**

Meeting Date: May 08, 2023

From: Shilpi Bharti, Planner

**Location:** City of Chesterfield Unified Development Code.

Petition: P.Z. 02-2023 City of Chesterfield (Unified Development Code – Article 2 & 4): An

ordinance amending Article 2 and Article 4 of the Unified Development Code to do modification in Improvements Installed or Guaranteed and Stormwater

Standards.

### **SUMMARY**

The request is to amend the City of Chesterfield Unified Development Code Article 2 and Article 4. The Unified Development Code Article 2, Section 405.02.120 Improvements Installed or Guaranteed codifies the required guarantees of improvements associated with the subdivision process. Article 4 Section 405.04.120 includes the language for stormwater management that is managed by City of Chesterfield but is primarily the responsibility of the Metropolitan St. Louis Sewer District (MSD). An exception is the levee protected area, where the Monarch Chesterfield Levee District has assumed many of these responsibilities from MSD via a Memorandum of Understanding (MOU). The City recently updated the MOU between the City and the Levee District which reflects the role the City plays in the management of stormwater within Chesterfield Valley. The code (Article 4 stormwater) revisions are recommended to update the stormwater standards based on the recently signed MOU between the City and Monarch Chesterfield Levee District (MCLD).

#### **STAFF ANALYSIS:**

### Article 2

Section 89.410 of the Revised Statutes of the State of Missouri (RSMo) allows cities to require guarantees of improvements associated with the subdivision process and these requirements are codified in Article 2 of the Unified Development Code. These regulations are put in place to ensure required improvements to serve the subdivided area are completed to serve the new lots. Following the framework of RSMo 89.410, the City accepts cash or a letter of credit for construction deposits and maintenance deposits for items including streets and sidewalks, street lights, grading, water mains, storm and sanitary sewers, bioretention, and other required items. The City currently retains 5% of all construction items until the

completion of all improvements. However, as regulations have changed, this practice is having an unintended consequence of delaying completion of subdivision improvements as MSD water quality elements are not completed until after construction of all homes within a subdivision. There are several developments in the City that have been in the construction phase of improvements for years. One of the goals of the City's subdivision requirements is to complete improvements within two years.

Currently, Section 405.02.120 A point 3 states "For plats approved after the effective date of this UDC, any guarantee or deposit required by the City for sanitary and storm sewer within the jurisdiction of MSD may be reduced proportionally, by the amount of any guarantee or escrow collected and held by MSD if MSD confirms that its requirement for assurance of completion is satisfied. This provision shall not affect the intent or enforcement of any existing guarantee, escrow, or renewal, extension or replacement thereof."

Staff from the departments of Planning and Public Works have coordinated on solutions to better achieve the outcomes of the intent of the City's regulations and have identified the below solution:

"Remove escrow requirements for items that are completed following all construction activity."

Storm, sanitary, and water quality elements are generally under MSD requirements, inspection, and acceptance (if public improvements) and MSD has escrow requirements for these items. As these items are under the jurisdiction and escrow requirements of another public agency, this requirement could be removed. This would allow City staff to focus on getting non-MSD related improvements completed in a more timely fashion.

Staff recommends to replace point 3 and add point 5 of the existing UDC with the below options:

"For plats approved after the effective date of this UDC, no guarantee or deposit is required with the City for sanitary and storm sewers within the jurisdiction of MSD if MSD confirms that its requirements for assurance of completion are satisfied. This provision shall not affect the intent or enforcement of any existing guarantee, escrow or renewal, extension or replacement thereof."

"Following approval of the guarantee or deposit, the Director of Planning shall administer the guarantee in accordance with RSMo 89.410 and City Code including replacement of such agreements and guarantees"

Staff presented to the Planning and Public Works Committee that an update to the UDC should be considered that would remove MSD requirement improvements from the escrowed items. MSD holds separate guarantees and is the public jurisdiction responsible for these elements. Additionally, inclusion of these items (i.e. water quality elements) often are not completed until all construction activity on the site is complete. This results in developers waiting for extended periods to address deficiencies in streets, sidewalks, and other infrastructure until all development is complete. In the case of single family residential developments, this also means that the City will not accept streets and the cost of snow plowing and other activities often falls to the homeowners.

Additionally, Staff would recommend a minor change to allow replacement agreements and guarantees in the event that a bank changes during the process. Currently, these items are brought back to P&PW and then to City Council for approval of the replacement agreement and deposit. RSMo requires cities to accept replacement escrows in the amount of the escrow or letter of credit currently being held. Staff

would recommend consideration of authorizing the department to accept these changes without having to be reviewed by P&PW and City Council.

## Article 4:

Generally, stormwater is the responsibility of MSD; however, there are some areas in Chesterfield Valley that are maintained by MCLD via a Memorandum of Understanding (MOU) between MSD and MCLD. This MOU was last updated in 2019. Following this update, the City of Chesterfield has been working to update our MOU with MCLD to continue clarifying responsibilities within the Chesterfield Valley to ensure compliance with the Chesterfield Valley Stormwater Master Plan. In April 2023, City Council approved an updated MOU with MCLD. As discussed with City Council during approval of the MOU, modifications to align the City Code requirements with the responsibilities of the City under the revised MOU are necessary.

Section 405.04.120 of the Unified Development Code provides the information on the Stormwater Standards; specifically, Section A and subsections 1 to 9 define the stormwater design and management requirements. From a stormwater perspective under the updated MOU, the City's primary role is to review development plans in Chesterfield Valley, to administer the Chesterfield Valley Storm Water Master Plan, and to serve as the floodplain manager. MCLD is the entity responsible for the maintenance and operation of all public stormwater and drainage improvements.

Staff recommends revision to the section on Stormwater standards to clarify the City's Stormwater Standards, more clearly represent that stormwater design and management in Chesterfield is subject to MSD Rules and Regulations, and add specific requirements for stormwater in Chesterfield Valley.

The recommended revision to the code is attached with this report.

### **REQUEST**

Staff recommends updating Article 2 and Article 4 of the Unified Development Code for Improvement Installed or Guaranteed and Stormwater Standards, and request for consideration by the Planning Commission.

The petition has met all filing requirements and procedures of the City of Chesterfield. Upon receiving recommendation on this petition from the Planning Commission, this request will be forwarded to both the Planning and Public Works Committee and City Council for review. Planning Commission may vote on this petition.

#### Attachments:

- 1. Attachment A
- 2. Red line for Article 2, Improvement Installed or Guaranteed.
- 3. Red line for Article 4, Stormwater Standards.

# NOTICE OF PUBLIC HEARING CITY OF CHESTERFIELD PLANNING COMMISSION

**NOTICE IS HEREBY GIVEN** that the Planning Commission of the City of Chesterfield will hold a Public Hearing on Monday, May 08, 2023 at 7:00 pm, in the Council Chambers at the City Hall, 690 Chesterfield Parkway West, Chesterfield, Missouri 63017.

Said Hearing will be as follows:

P.Z. 02-2023 City of Chesterfield (Unified Development Code – Article 2 & 4): An ordinance amending Article 2 and Article 4 of the Unified Development Code to do modification in Improvements Installed or Guaranteed and Stormwater Standards.

Anyone interested in the proceedings will be given an opportunity to be heard. Copies of the request are available for review in the Department of Planning at Chesterfield City Hall, 690 Chesterfield Parkway West during weekdays between the hours of 8:30 a.m. and 4:30 p.m. If you should need additional information about this project, please contact Shilpi Bharti, Planner, by telephone at 636-537-4743 or by email at Sbharti@chesterfield.mo.us

CITY OF CHESTERFIELD Guy Tilman, Chair Chesterfield Planning Commission

For information about this and other projects under review by the Department of Planning, please visit "Active Projects" at <a href="https://www.chesterfield.mo.us">www.chesterfield.mo.us</a>

### Attachment A

### Section 405.02.120 Improvements Installed Or Guaranteed.

- A. Completion Guarantee By Developer. After the improvement plans have been substantially completed and all inspection fees and review fees paid, but before approval of the record subdivision plat, the developer shall guarantee the completion of required improvements. The developer shall either:
  - 1. Complete the improvements in accordance with the approved improvement plans under the observation and inspection of the appropriate inspection agency; or
  - 2. Deposit cash under an escrow agreement or post a land subdivision bond or provide the appropriate surety as set forth in this UDC to guarantee the construction, completion, and installation of the improvements shown on the approved improvement plans within the improvement completion period approved by the Director of Planning, which shall not exceed two (2) years. The land subdivision bond or escrow agreement or other required surety shall be prepared and executed on forms furnished by the Department and shall be submitted to the City Council for approval or disapproval after review and approval by the Director of Planning and the City Attorney.
  - 3. For plats approved after the effective date of this UDC, no guarantee or deposit is required with the City for sanitary and storm sewers within the jurisdiction of MSD if MSD confirms that its requirements for assurance of completion are satisfied. This provision shall not affect the intent or enforcement of any existing guarantee, escrow or renewal, extension or replacement thereof.
  - 4. The Director of Planning may require any specific improvement to be installed prior to approval of the record plat where failure to install such improvement prior to further development could result in damage to the site or surrounding properties.
  - 5. Following approval of the guarantee or deposit, the Director of Planning shall administer the guarantee in accordance with RSMo 89.410 and City Code including replacement of such agreements and guarantees.
  - 6. The City shall not permit or accept the posting of any bond issued or proposed to be issued by a surety or an affiliate of a surety which has, in the preceding ten (10) years, refused to pay upon formal demand all or part of a claim of the City on any other surety bond. Any individual, corporation or property owner aggrieved by this Section may appeal to the City Council to request the City to accept the posting of such bond. The City Council may consider whether the refusal to pay resulted in litigation, mediation or arbitration of the claim, whether the claim was wholly or partially determined in favor of the City, whether the prior refusal to pay was settled between the City and surety or any other hardship evidence presented by the individual, corporation or property owner. In no instance shall a bond be accepted from a surety while in litigation, mediation or arbitration with the City.

7.	The City shall not accept the posting of any bond issued or proposed by any surety or an affiliate who has refused to pay upon formal demand of the City or been involved in any litigation pertaining to said failure to pay within the past ten (10) years as of the effective date of this Section of the UDC.

#### Section 405.04.120 Stormwater Standards.

#### A. General.

- 1. The purpose of this Section is to provide standards and regulations governing land development in order to reduce or prevent flooding and at the same time minimize damage to real property.
- 2. During the construction phase of development, facilities shall be provided to prevent erosion and siltation in accordance
- 3. The City of Chesterfield hereby adopts by reference The Metropolitan St. Louis Sewer District (MSD) Rules and Regulations and Engineering Design Requirements for Sanitary Sewer and Stormwater Drainage Facilities, February 1, 2018. The City of Chesterfield, unless otherwise acted upon, shall adopt by reference any changes made by MSD to the standards effective as of February 1, 2018.
- 4. Ability To Waive Requirements. The Director of Public Works is empowered to grant exceptions to the stormwater standards on a case-by-case basis when specific requirements are onerous and inappropriate for a particular development.
- 5. In addition to the standards as promulgated by MSD, the City of Chesterfield hereby supplements those standards which will be added to and effective in the City of Chesterfield as of the new MSD standards and shall read as follows:

#### a. General.

- (1) Compacted granular backfill is required within trenches located in the right-of-way and adjacent areas. (This includes sidewalks that are installed on easements adjacent to the right-of-way.)
- (2) Siltation control measures are to be designed, constructed and maintained until adequate vegetation is established to prevent erosion.
- (3) The adequacy of any existing downstream storm sewer system is to be verified and upgraded, if necessary.

### b. Design Criteria.

(1) Pavement under drains are to be installed the full width of the pavement at all curb inlets.

#### c. Detention.

(1) When developments are within sites served by local and regional detention facilities, the City may require an analysis of downstream effects and compliance with detention requirements at time of development for areas served by regional-type detention basins which were installed previously.

### d. Stormwater in Chesterfield Valley

(1) Stormwater in Chesterfield Valley is subject to review and approval by the City of Chesterfield

- for compliance with the Chesterfield Valley Master Stormwater Plan.
- (2) The Director of Public Works shall maintain a copy of the Chesterfield Valley Master Stormwater Plan in his/her office and make it available at all times hereafter.
- (3) Stormwater in Chesterfield Valley is subject to review and approval by MSD and the Monarch Chesterfield Levee District in accordance with the Intergovernmental Cooperation Agreement between MSD and MCLD.
- (4) Construction of required storm water improvements per the Chesterfield Valley Master Storm Water Plan shall occur with development and developers shall coordinate with the owners of the properties affected by construction of the required improvements. In the event that the ultimate required improvements cannot be constructed concurrently with a development, the developer shall provide interim drainage facilities and establish sufficient escrows as guarantee of future construction of the required improvements, including removal of interim facilities. Interim facilities shall be sized to handle runoff from the 100-year, 24-hour storm event as produced by the Master Storm Water Plan model. The interim facilities shall provide positive drainage and may include a temporary pump station, if necessary, to achieve positive drainage. Interim facilities shall be removed promptly after the permanent storm water improvements are constructed.
- (5) Alternate geometry, size and/or type of storm water improvements that are functionally equivalent to the required improvements per the Chesterfield Valley Master Storm Water Plan may be proposed. Functional equivalence is said to be achieved when, as determined by the Director of Public Works, the alternate proposal provides the same hydraulic function, connectivity, and system-wide benefits without adversely affecting any of the following: water surface profiles at any location outside the development; future capital expenditures; maintenance obligations; equipment needs; frequency of maintenance; and probability of malfunction. The City will consider, but is not obligated to accept, alternate plans. If the Director of Public Works determines that a proposed alternative may be functionally equivalent to the Chesterfield Valley Master Storm Water Plan improvements, hydraulic routing calculations will be performed to make a final determination of functional equivalence. The Director will consider proposals for alternate improvements, but is not obligated to have the hydraulic analysis performed if any of the other criteria regarding functional equivalence will not be met. The hydraulic routing calculations regarding functional equivalence may be performed by a consultant retained by the City of Chesterfield. All costs related to consideration of an alternate proposal, which shall include any costs related to work performed by the City's consultant, shall be reimbursed to the City.
- (6) All necessary Chesterfield Valley Storm Water Easements shall be provided to accommodate future construction of the Chesterfield Valley Master Storm Water Plan improvements, and any and all Chesterfield Valley Master Storm Water Plan improvements shall be depicted on the Site Development Plan(s) and Improvement Plans.
- (7) Maintenance of the required storm water improvements shall be the responsibility of the property owner unless the improvement is accepted by another agency for maintenance.

- (8) All Chesterfield Valley Master Storm Water Plan improvements, as applicable, shall be operational prior to the paving of any driveways or parking areas unless otherwise approved.
- (9) As-built plans for Chesterfield Valley Master Stormwater Plan improvements shall be submitted to the City and the Monarch Chesterfield Levee District for review and approval.

# e. Floodplain

(1) All requirements of Article 5, Flood Damage Prevention are incorporated herein, as may be revised from time to time.

### f. Easements

(1) Easements for stormwater improvements shall be provided as required by MSD, MCLD, and the City of Chesterfield.

#### Section 405.02.120 Improvements Installed Or Guaranteed.

- A. Completion Guarantee By Developer. After the improvement plans have been substantially completed and all inspection fees and review fees paid, but before approval of the record subdivision plat, the developer shall guarantee the completion of required improvements. The developer shall either:
  - 1. Complete the improvements in accordance with the approved improvement plans under the observation and inspection of the appropriate inspection agency; or
  - 2. Deposit cash under an escrow agreement or post a land subdivision bond or provide the appropriate surety as set forth in this UDC to guarantee the construction, completion, and installation of the improvements shown on the approved improvement plans within the improvement completion period approved by the Director of Planning, which shall not exceed two (2) years. The land subdivision bond or escrow agreement or other required surety shall be prepared and executed on forms furnished by the Department and shall be submitted to the City Council for approval or disapproval after review and approval by the Director of Planning and the City Attorney.
  - 3. For plats approved after the effective date of this UDC, any guarantee or deposit required by the City for sanitary and storm sewers within the jurisdiction of MSD may be reduced proportionally, by the amount of any guarantee or escrow collected and held by MSD if MSD confirms that its requirement for assurance of completion is satisfied. This provision shall not affect the intent or enforcement of any existing guarantee, escrow, or renewal, extension or replacement thereof, no guarantee or deposit is required with the City for sanitary and storm sewers within the jurisdiction of MSD if MSD confirms that its requirements for assurance of completion are satisfied. This provision shall not affect the intent or enforcement of any existing guarantee, escrow or renewal, extension or replacement thereof.
  - 4. The Director of Planning may require any specific improvement to be installed prior to approval of the record plat where failure to install such improvement prior to further development could result in damage to the site or surrounding properties.
  - 5. Following approval of the guarantee or deposit, the Director of Planning shall administer the guarantee in accordance with RSMo 89.410 and City Code including replacement of such agreements and guarantees.
  - 6. The City shall not permit or accept the posting of any bond issued or proposed to be issued by a surety or an affiliate of a surety which has, in the preceding ten (10) years, refused to pay upon formal demand all or part of a claim of the City on any other surety bond. Any individual, corporation or property owner aggrieved by this Section may appeal to the City Council to request the City to accept the posting of such bond. The City Council may consider whether the

refusal to pay resulted in litigation, mediation or arbitration of the claim, whether the claim was wholly or partially determined in favor of the City, whether the prior refusal to pay was settled between the City and surety or any other hardship evidence presented by the individual, corporation or property owner. In no instance shall a bond be accepted from a surety while in litigation, mediation or arbitration with the City.

7. The City shall not accept the posting of any bond issued or proposed by any surety or an affiliate who has refused to pay upon formal demand of the City or been involved in any litigation pertaining to said failure to pay within the past ten (10) years as of the effective date of this Section of the UDC.

The following Code does not display images or complicated formatting. Codes should be viewed online. This tool is only meant for editing.

Section 405.04.120 Stormwater Standards.

#### [CC 1990 § 31-04-12; Ord. No. 2801 § 3 (Exh. A), 6-16-2014]

#### A. General.

- 1. The purpose of this Section is to provide standards and regulations governing land development inorder to reduce or prevent flooding and at the same time minimize damage to real property.
- 2. The controlled release and storage of excess stormwater runoff may be required for all commercial and industrial land use projects, and for all residential subdivisions as determined by the City of Chesterfield.
- 3. Detention of differential runoff of stormwater, as approved by the City of Chesterfield, may be required by providing permanent detention facilities, such as dry reservoirs, ponds, or other acceptable alternatives.
- 4. Detention reservoirs or dry bottom stormwater storage areas may be designed to serve secondary-purposes, such as recreation, open space, or other types of uses that will not be adversely affected by occasional flooding as approved by the Department.
- 5. Drainage detention areas that are not maintained by a public authority shall be conveyed as an undivided interest in common to each lot in the subdivision for maintenance purposes or conveyed to trustees with authority to perform maintenance responsibilities.
- During the construction phase of development, facilities shall be provided to prevent erosion and siltation.
- <u>17</u>. The purpose of this Section is to provide standards and regulations governing land development in order to reduce or prevent flooding and at the same time minimize damage to real property.
- During the construction phase of development, facilities shall be provided to prevent erosion and siltation in accordance
- 3. The City of Chesterfield, as effective May 19, 1997, hereby adopts by reference The Metropolitan St. Louis Sewer District (MSD) MSD Rules and Regulations and Engineering Design Requirements for Sanitary Sewer and Stormwater Drainage Facilities, revised standards of February 1, 20181997. The City of Chesterfield, unless otherwise acted upon, shall adopt by reference any changes made by MSD to the standards as effective as of February 1, 20181997.
- 8. The Director of Public Works shall maintain copies of said standard in his/her office and make available at all times hereafter.
- 4. Ability To Waive Requirements. The Director of Public Works is empowered to grant exceptions to the stormwater standards on a case-by-case basis when specific requirements are onerous and inappropriate for a particular development.

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95. In addition to the standards as promulgated by MSD, the City of Chesterfield hereby supplements those standards which will be added to and effective in the City of Chesterfield as of the new MSD standards and shall read as follows: General. As built plans are to be submitted to the City. (12) Compacted Ggranular backfill is required within trenches located in the right-of-way and adjacent areas. (This includes sidewalks that are installed on easements adjacent to the right-of-way.) Siltation control measures are to be designed, constructed and maintained until adequate vegetation is established to prevent erosion. (3) Minimum slope of one percent (1%) is required on any grassed area; minimum slope of twopercent (2%) in grassed swales. The adequacy of any existing downstream storm sewer system is to be verified and upgraded, if necessary. Siltation control measures are to be designed, constructed and maintained until adequate vegetation is established. (5) The adequacy of any existing downstream storm sewer is to be verified and upgraded if necessary. Undersized downstream storm sewers are to be replaced until overflow(s) can be accommodated on the right-of-way. Storm sewer outlets within ten (10) feet of a sanitary sewer crossing are to be extended past the sanitary sewer crossing. Design Criteria. Blockage factor of forty percent (40%) is to be used in sizing inlets at low points. Inlet capacities are to be determined by the HEC (hydraulic engineering circulars). (2) Concentrated flow directed across sidewalks is limited to one (1) cfs (as in unincorporated County). (3) Lowest sill of structure(s) adjacent to 100 year overflow or ponding areas are to be at least one (1) footabove the high water elevation. (41) Pavement under drains are to be installed the full width of the pavement at all curb inlets.

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c. Detention.

- (1) For purposes of determination of detention calculation methods, and calculations to which differential calculations apply, undeveloped (instead of existing) vs. post development conditions are to be used.
- (2) Allowable release rates may be reduced due to downstream conditions.
- (3) Detention storage is to be provided for the current project phase, as applicable. Each successive phase may require basin modification as necessary to accommodate increases in runoff.
- (41) When developments are within sites served by local and regional detention facilities, the City may will require an analysis of downstream effects and compliance with detention requirements at time of development for areas served by regional-type detention basins which were installed previously.
  - d. Stormwater in Chesterfield Valley(5) Minimum slope one percent (1%) for paved swales.
    - (1) Stormwater in Chesterfield Valley is subject to review and approval by the City of Chesterfield for compliance with the Chesterfield Valley Master Stormwater Plan.
    - (2) The Director of Public Works shall maintain a copy of the Chesterfield Valley Master Stormwater Plan in his/her office and make it available at all times hereafter.
    - (3) Stormwater in Chesterfield Valley is subject to review and approval by MSD and the Monarch

      Chesterfield Levee District in accordance with the Intergovernmental Cooperation Agreement between MSD and MCLD.
    - (4) Construction of required storm water improvements per the Chesterfield Valley Master Storm

      Water Plan shall occur with development and developers shall coordinate with the owners of the
      properties affected by construction of the required improvements. In the event that the ultimate
      required improvements cannot be constructed concurrently with a development, the developer
      shall provide interim drainage facilities and establish sufficient escrows as guarantee of future
      construction of the required improvements, including removal of interim facilities. Interim
      facilities shall be sized to handle runoff from the 100-year, 24-hour storm event as produced by
      the Master Storm Water Plan model. The interim facilities shall provide positive drainage and
      may include a temporary pump station, if necessary, to achieve positive drainage, Interim
      facilities shall be removed promptly after the permanent storm water improvements are
      constructed.
    - (5) Alternate geometry, size and/or type of storm water improvements that are functionally equivalent to the required improvements per the Chesterfield Valley Master Storm Water Plan may be proposed. Functional equivalence is said to be achieved when, as determined by the Director of Public Works, the alternate proposal provides the same hydraulic function, connectivity, and system-wide benefits without adversely affecting any of the following: water surface profiles at any location outside the development; future capital expenditures; maintenance obligations; equipment needs; frequency of maintenance; and probability of

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malfunction. The City will consider, but is not obligated to accept, alternate plans. If the Director of Public Works determines that a proposed alternative may be functionally equivalent to the Chesterfield Valley Master Storm Water Plan improvements, hydraulic routing calculations will be performed to make a final determination of functional equivalence. The Director will consider proposals for alternate improvements, but is not obligated to have the hydraulic analysis performed if any of the other criteria regarding functional equivalence will not be met. The hydraulic routing calculations regarding functional equivalence may be performed by a consultant retained by the City of Chesterfield. All costs related to consideration of an alternate proposal, which shall include any costs related to work performed by the City's consultant, shall be reimbursed to the City.

- (6) All necessary Chesterfield Valley Storm Water Easements shall be provided to accommodate future construction of the Chesterfield Valley Master Storm Water Plan improvements, and any and all Chesterfield Valley Master Storm Water Plan improvements shall be depicted on the Site Development Plan(s) and Improvement Plans.
- (7) Maintenance of the required storm water improvements shall be the responsibility of the property owner unless the improvement is accepted by another agency for maintenance.
- (8) All Chesterfield Valley Master Storm Water Plan improvements, as applicable, shall be operational prior to the paving of any driveways or parking areas unless otherwise approved.
- (9) As-built plans for Chesterfield Valley Master Stormwater Plan improvements shall be submitted to the City and the Monarch Chesterfield Levee District for review and approval.

#### e. Floodplain

(1) All requirements of Article 5, Flood Damage Prevention are incorporated herein, as may be revised from time to time.

#### f. Easements

— (1) Easements for stormwater improvements shall be provided as required by MSD,

MCLD, and the City of Chesterfield. (6) Underground facilities generally to be rectangular vaults. Circular reinforced concrete pipe, minimum Class IV and minimum diameter of sixty (60) inches, with confined O ring joints is permitted. Pipe joints must meet requirements of ASTM C-361.

#### d. Floodplain.

- (1) All requirements of the Flood Damage Prevention Ordinance are incorporated herein, as may be revised from time to time.
- (2) If floodplain is proposed to be altered, LOMAR is to be obtained prior to the full release of subdivision escrows. Unless a CLOMR is obtained prior to the issuance of building permit for a lot that is to be removed from the special flood hazard area, the lot will have to conform to SFHA requirements.

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**Commented [1]:** Editor's Note: See Article 05, Flood Damage Prevention.

e.	Easements. Ponding easements are required for the 100-year storm.	
f.	Ability To Waive Requirements. The Director of Public Works is empowered to grant exceptions to the requirements on a case by case basis when specific requirements are onerous and inappropriate for a particular development.	