Connect Features – Function to connect with conveyance or control features, connection of the Stormwater management system to surface or subsurface flow

| Catch Basin | Type 1 – 22” x 26” x 40” allows a max. 15” pipe with a sump  
|            | Type 1P – 22” x 26” x 52” allows a max. 13” pipe with a sump  
|            | Type 1L – 28” x 32” x 40” allows a max. 21” pipe with a sump  
|            | Type 2 – Round 36” or larger CB with a sump |
| Drop Inlet | Type 1 – A Trapezoidal structure that catches water at the end of ditch  
| Grate Inlet | Type 1 – Large grated 23” x 42’ with sump and will not support traffic loads  
|            | Type 2 – Large grated 23” x 42” with No sump, will support light traffic. |
| Manhole | Type 1 – 48”, 54”, & 60” structure, an 8” min depth, for 48” pipes or less, w/o sump, with cone  
|          | Type 2 – 72” or larger structure, Max depth of 20’, for 48” or larger pipes, w/o sump, with cone  
| Concrete/Curb Inlet | Type 1 – Similar to CB Type 1, without sump, 13” pipe max.  
| Type 2 Inlet | – Similar to CB Type 1, with a sump <1”  
| Bridge Scupper | – A drain pipe or hole on a bridge  
| Access Riser | – Human access point to a tank or vault  
| Cleanout | – Access point that is small enough for cleaning and inspection, but not human access.  
| Non Standard | – A structure that does not match the exact specifications of a contemporary design standard  
| Unknown | – Could not define what type because it is flooded or buried, etc. |
| Undefined Type | – A connector point that is yet to be defined, or needs to be attributed with component type and other attribution. |
| Intersection | – A connector point lacking surface visibility that doesn’t use a fitting. (a completely underground pipe-pipe hammer-in connection)  
| Fitting | – A connector point lacking surface visibility that occurs via a separate designed junction piece (e.g. elbow, tee, wye, valve) |

Convey Features – Function to move water from point A to point B; generally a linear feature

| Culvert |
|         |
| – Round – Features a circular shape.  
| – Arch Culvert – Non circular culvert with a flatter bottom and rounded top  
| – Bottomless Arch Culvert – Arched top with no bottom  
| – Box Culvert – Rectangular shape, usually concrete  
| – Bottomless Box Culvert – Rectangular shape, but has no bottom  
| – Round Culvert – Feature that may have one intermediate connection structure along its length  
| – Squash Culvert – Typically corrugated, may have been reshaped on site to reduce height |

| Pipes |
|       |
| – Stormwater Pipe – Typically connected to structures at one or both ends, >8” in diameter.  
| – Tightline – Typically conveys water down a steep slope, with no collection points in between  
| – Force Main – Closed pipe that is designed for pressurized flow  
| – Under Drain – Closed pipe that has perforated or slotted openings (perforated) for inflow |

| Curb/Gutter | Raised edge or perimeter barrier of a roadway or other hard surface |
| Ditch | A narrow, constructed channel |
| Half Round | Pipe cut in half longitudinally. Commonly used to line a ditch |

Natural Drainage – Surface water flow that follows the natural contours of the landscape

Screw Pump – Conveys water up from one height to another, a mechanical device like a rotating corkscrew

Trench Drain – Grated lid opens to a pipe or box bottom

Control Features – Function designed to hold and/or treat stormwater

| Proprietary Device | Water quality device made patented by a company. e.g. stormceptor |
| Filter Strip | Grass area with gentle slopes which treats stormwater runoff from adjacent paved areas before it concentrates into discrete channels. |
| Tank | Typically round or half-round pipe section(s), constructed of metal or plastic |
| Pond | Typically opens to the surface with one or more earthen sides and an earthen bottom |
| Vault | Typically covered, rectangular structure constructed of concrete |

| Pond/Vault/Tank ComponentTypes |
|                               |
| – Combined (Wet & Detention) – Look like a detention facility, but contain a permanent pool of water |
| – Detention – Provides temporary storage of storm flows |
| – Infiltration – Designed to allow water to soak into the ground |
| – Wet – Provide water quality treatment with long retention times. Have a permanent pool of water, >3’. |
| – Oil/Water Separator – A vault designed to provide quiet/stable environment for oil to separate from water. Commonly have a baffle walls. |

Last edit date: 3/11/2015
- **Settling** – Designed to let sediments settle out before going to an adjacent infiltration pond/vault.
- **Stormwater Wetland** – Uses biological, chemical and physical processes similar to a wetland to treat stormwater. Similar to wetpond sizing, but the second cell’s depth is reduced to encourage plant growth. One shallow cell (1’), one deep cell (2.5’).

**Swale** – Linear feature, vegetated, and often spreads water over large surface, also designed for WQ

**Swale ComponentTypes**
- **Basic Biofiltration Swale** - A long, gently sloped, vegetated ditch designed to filter pollutants from stormwater.
- **Wet Biofiltration Swale** - Used where water tables are high, slopes low, or continuous low base flow is likely to result in saturated soil conditions. Planted with wetland plants. Generally will have standing water.
- **Continuous Inflow Biofiltration Swale** - Water enters the swale continuously at numerous, discrete inflows
- **Infiltration Swale** - Placeholder for committee. Infiltration swale definition not vetted yet.

**Ctrl_Other_Polygon** ComponentTypes
- **Bioretention Cell** - Shallow depressions with a designed planting soil mix and a variety of plant material. Very designed, featuring overflows, and access roads.
- **Raingarden** – Shallow depressions with plant material that do not have size requirements or designed planting soil mixes
- **Bioretention Planter** - Planter boxes with a designed soil mix and a variety of plant material. Has underdrain.
- **Permeable Pavement (Vegetated)** – Modular grid pavement with grass planted, or soil in the openings
- **Permeable Pavement (Non Veg)** – Porous concrete, porous asphalt, permeable pavers, modular grid pavement

**Ctrl_Other_Line** ComponentTypes
- **Dry Well** - Gravel filled holes or structures used for temporary storage and infiltration of stormwater runoff
- **Full Dispersion** - Features a native vegetated flowpath segment of at least 100ft along the flowpath that runoff would follow upon discharge. Full dispersion involves use of splash blocks, rock pads, gravel filled trenches or sheet flow.
- **Basic Dispersion** – Dispersion that doesn’t meet the requirements of full dispersion. Uses splash blocks, rock pads, gravel filled trenches or sheet flow.
- **Injection Well** -

**Attributes of Note:**
- **Control Structure** – Generally inside a Pond/Tank or CB, is one or combo of; Flow Splitter, Weir, Orifice, Baffle, or Riser
- **Filter** – Water filters like; Filter Strips, Media Filter Drain, Sand Filter, or Vegetation
- **Other Controls** – BMP’s that provide Flow Control and/or Water Quality but don’t fit other Control Components
  **Like:** Amended Soils, Swale/with Underdrain, Dispersion, Injection Well, Limited Footprint, Permeable Pavement, Rain Garden, Rainwater Harvesting, Vegetated Roof

**CNCP** - Those features that are concepts or ideas, as opposed to physical structures.

**Link** - The point at which stormwater enters and leaves the county’s MS4, or where natural water bodies enter the county’s MS4.
- **Discharge Point** – the location where a discharge leaves the Permittee’s MS4 through the Permittee’s MS4 facilities/BMPs designed to infiltrate.
- **Connection** – The point where a discharge leaves or enters the county’s MS4 from another jurisdiction, private or public stormwater system, or where a discharge leaves the county’s MS4 to the ground and is not within the ordinary high water mark of a receiving water.
- **Outfall** – Point at which concentrated flows discharge from KC MS4 to a receiving water of the state (including wetlands).
- **Infall** – Point where a stream or wetland flow enters King County MS4.

**Proxy Flow** – Line features that do not directly represent drainage infrastructure, but are needed to connect the geometric network.

**Underground Injection Control (UIC)** – Wells that are manmade structures used to discharge water into the ground. Such as Injection wells, Infiltration Trenches with Perforated Pipe

**Dragon** - A point and/or direction within the stormwater system from where the flow and ability to map becomes unknown. A stormwater dragon should only be declared if all office and field investigation efforts have been unsuccessful or inconclusive and excavation is required to resolve the unknown. Also includes areas where data are needed to avoid due to liability issues.
- **Potential Dragon** – A dragon identified in the field that requires office research
- **Verified Dragon** – Declared if all office and field investigation efforts have been unsuccessful or inconclusive. Excavation is required to resolve the unknown.
- **Legal Dragon** – An area to NOT map the stormwater features within it due to potential legal liabilities

Last edit date: 3/11/2015