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|  | Stormwater Plan and Profile | PCA / EO Plans | | | |
| | | SUBMITTAL DATE: | | | |
| PROJECT NAME: | | DESIGN FIRM / DESIGNER: | | | |
| PROJECT NUMBER: | | <u>City of Lincoln Design Standards supersede this check list.</u> | | | |
| WORK COMPLETED | | | | | |
| <u>Overall Requirements</u> | | YES | NO | NA | SUBMITTER OR DESIGNER COMMENTS |
| Design meets all City of Lincoln Design Standards | | | | | |
| Storm drainage system matches approved Grading & Drainage Plan. | | | | | |
| When applicable, list the Planning Application No. of the approved Grading & Drainage Plan that applies to this Executive Order. | | | | | |
| <u>Hydrologic and Hydraulic Specific Requirements:</u> | | YES | NO | NA | SUBMITTER OR DESIGNER COMMENTS |
| Submit final pipe and inlet capacity calculations and configuration for the minor and major storm event <i>(Note: Minor deviations to flowlines, slope, and size may be permitted if not reducing capacity or causing other problems. Otherwise an amendment to the Grading & Drainage Plan is needed through Planning.)</i> | | | | | |
| Calculations include a diagram of all subareas delineated for each inlet | | | | | |
| Storm drainage system is designed to handle the appropriate design frequency storm event <i>(Residential: 5-year; Commercial & Industrial: 10-year; Cross Drainage Facilities: 50- year; if needed: 100-year)</i> | | | | | |
| Gutter flow does not exceed the allowable maximum spread and depth for the minor storm event | | | | | |
| All storm drainage pipes are at 0.5 percent slope or greater | | | | | |
| The hydraulic grade line calculations are provided and/or shown on the profile, and the hydraulic grade line is at least 0.75 ft lower than all inlet throats and manhole covers | | | | | |

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| All cross drainage structures (<i>i.e. culverts</i>) are designed to convey the 50-year storm event without overtopping the roadway | | | | |
| If any pipe is designed to handle the 100-year flows, inlet calculations need to include the 100-year analysis to verify the inlet have the capacity to intercept the 100-year flow | | | | |
| If major storm event (<i>ie. 100-year</i>) overland flow path (<i>or bypass</i>) is different than the trunkline or approved detention routing, calculations and proposal need to reflect such (<i>Note: An amendment to the Grading & Drainage Plan may be required if significant changes are proposed.</i>) | | | | |
| <u>Layout/Configuration Specific Requirements:</u> | YES | NO | NA | SUBMITTER OR DESIGNER COMMENTS |
| Show all existing pipes (<i>dashed</i>) and proposed pipes (<i>solid</i>), and note any temporary pipes/work | | | | |
| Construction plans must show a profile for every storm pipe, including all laterals. | | | | |
| Manholes are placed at a maximum of 600 ft apart | | | | |
| The crown of all storm pipes entering a junction are at the same elevation | | | | |
| There are no changes in vertical or horizontal elevation in the storm drainage system without either a manhole or a horizontal curves of the appropriate radius per City of Lincoln Standard Specifications. (<i>Note: Horizontal curves on new infrastructure must use 6 ft pipe segments at a minimum.</i>) | | | | |
| All storm drainage pipes have a minimum velocity of 3.0 ft/s and a maximum velocity of 20.0 ft/s | | | | |
| All storm drainage pipes have at least 2 ft of cover, with an absolute minimum cover of 1.5 ft at an inlet location | | | | |
| All storm drainage pipe stay within the ROW or an easement along the side or rear yards or an outlot. Storm drainage pipe may NOT cut the corner in the front yard of any property | | | | |
| If a storm drainage pipe is within 15 ft from a property line, an easement shall be provided that is 15 ft from the center of the pipe and does not extend past the setbacks for that lot | | | | |

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| The major storm event and overland flow path shall be contained within the ROW, an outlot, or a storm drainage easement. The grading must be shown for all 100-year overland flow paths. Cross sections with H&H calculations showing swale capacity may be needed. | | | | |
| The routing of the 100-year flow in the roadway must follow the paving grades (<i>ie. crowns and gutters</i>) | | | | |
| <u>Miscellaneous Notes</u> | YES | NO | NA | SUBMITTER OR DESIGNER COMMENTS |
| Show all storm drainage easements and list which Final Plat applies | | | | |
| Submissions of short segments of a storm drainage system must include future phases (<i>including proposed storm profile both upstream and downstream with street grades</i>) to ensure future phases meet design standards for capacity, cover, HGL, velocity, erosion, etc. | | | | |
| Rip rap is be placed at all storm drainage outlets. Lincoln Standard Plans shall be used. | | | | |
| There are no grate inlets placed in any City street | | | | |
| HDPE pipe may only be used for temporary pipe work, but will need to be removed for future phases | | | | |
| Deviations to the above require specific request and approval | | | | |