



City of Knoxville

SITE DEVELOPMENT PERMIT

REVIEW CHECKLIST

Date: _____ Number of times reviewed (including this one): _____
 Project name: _____ Address: _____

General Requirements:

1. Has the site development review fee been paid?
2. Has MPC address certification been obtained?
3. Is the city block # on the site development plan?
4. Is the CLT # on the site development plan?
5. Are all names, phones and addresses of interested parties on the site development plan?
6. Is there a vicinity map with all adjacent streets shown and labeled?
7. Do all plans have a scale (preferably graphic scale) and north arrow?
8. Is the vertical datum reference shown on the plan? (NGVD29, NAVD88, ASSUMED)
9. Are all plans stamped & signed by professional engineer, landscape architect, or architect registered in TN?
10. Has MPC plan approval been obtained?
11. Has the total site acreage and total disturbed area been calculated and shown on drawings?
12. Has the Property Owner Acknowledgement Form been submitted?

Yes	No	N/A

Property Requirements:

1. Are all property lines shown clearly and labeled?
2. Is the information concerning adjoining property owners correct?
3. Does property match the official city ward maps (Technical Services Counter - 4th floor)?
4. Is the site free of any existing drainage easements or detention easements?
5. Are the mandatory utility easements (10' exterior and 5' interior lot lines) free and usable?
6. If it is a major subdivision, have two permanent monuments been provided?
7. Is the existing right-of-way adequate? (As per the Major Road Plan)
8. Have all variances and zoning regulations been incorporated?
9. Are all proposed structures and signs sufficiently set back from property lines?

Yes	No	N/A

Grading:

1. Are all existing and proposed contours shown at 2' intervals (maximum)?
2. Do all proposed contour lines tie back in properly?
3. Is all of the grading inside of the property line?
4. Are all slopes flatter than 2:1?
5. Is the site free from any retaining walls?
6. Are all existing features clearly labeled to either remain or to be removed?
7. Has a landscaping plan or note been provided?
8. Is the disturbed area less than 5 acres? If disturbance reaches/exceeds 5 acres, sediment pond(s) required.
9. Is the disturbed land less than 1 acre? (Otherwise will need NPDES construction permit)

Yes	No	N/A

Streets, Sidewalks, & R.O.W.:

1. Is a proper roadway section shown (width of base under curb, prime coat, tack coat, etc)?
2. Local city street pavement is 1.5" Grading D, 2.5" Grading B, and 8" Class A Grading D shown?
3. Are contraction joints (5') and expansion joints (25' and fixed objects) shown for all concrete?
4. Are all streets and drives correctly labeled as either dedicated, JPE or as a driveway?
5. Is horizontal curve information provided for each street and driveway?
6. Is vertical curve information (including K values) provided for each street and driveway?
7. Are all turning radii shown and adequate for each street and driveway?
8. Do the tops of catch basins and manholes line up properly with the proposed profiles?
9. Is appropriate clear zone provided each side of the right of way? (10 feet from curb maximum 4% slope)
10. Is there 3 feet of clearance around sidewalk "obstacles" to afford accessibility?
11. Are sidewalks shown correctly on plans and details (with a cross-slope)?
12. Are all driveway cuts and sidewalk cuts (12:1 slope) shown on the plans and details?
13. Has a TDOT right-of-way access permit been obtained for all state routes?
14. Are minimum parking and access requirements met? (refer to Art. 5 Sect. 7 of Zoning Ordinance)
15. Is there appropriate site distance for all driveways and street intersections?
16. Is there a proper detail for any utility trench that is within city or state right-of-way?
17. Do curbs meet City standard detail or match existing?
18. Does sidewalk match City standard detail (5' w/2' grass or 7') or match existing (if applicable)?

Yes	No	N/A

Drainage:

1. Are all existing drainage features shown and labeled correctly with inverts?
2. Is the site free from any sinkholes? (100% retention required for known sinkholes)
3. Is the site away from any blue-line streams and wetlands? (If not, then an ARAP may be required.)
4. Is the site located away from floodplain and above the base flood elevation?
5. Are all pipe sizes, lengths, slopes, construction material, inverts and capacities shown?
6. Are all appropriate lines shown? (No fill line, Buffer zone, Floodway, 500-year, 100-year, F-1 zone)
7. Are all proposed catch basins and pipes consistent with a logical flow path?
8. Are all pipe slopes sufficient (not too flat or too steep)?
9. Are all appropriate drainage details provided?
10. Do all of the drainage details correspond to the plan locations with consistent elevations?
11. Are catch basins or junction boxes shown at all changes in grade and direction?
12. Is the environmental message detail for manhole cover, curb iron, and grate inlet shown on the plans?
13. Are high pipe velocities handled in a manner to prevent HGL problems?
14. Are all pipe and culvert outlets sufficiently stabilized and controlled to prevent erosion?
15. Is the downstream drainage system able to handle the 2-year and 10-year storms?
16. Is RCP used for all systems draining offsite water or systems needed to prevent flooding?
17. Are all pipes within the ROW a minimum of 15" diameter?
18. Are all pipes and ditches sized for the appropriate design storm?
19. Are drainage easements provided for pipes carrying offsite water or crossing property lines?
20. Have elevations/contours been provided for proposed sidewalk, curb/gutter, etc. located in right of way?

Yes	No	N/A

Stormwater Detention and Water Quality:

1. Is stormwater detention needed for this project, based on site development classification?
2. Has a Special Pollution Abatement Permit been prepared? (See BMP Manual Chapter 7)
3. Is the stormwater detention basin designed to attenuate the 1-, 2-, 5-, 10-, 25- and 100-year storms?
4. Is 100-year retention provided for areas draining to sinkholes?
5. Is 100-year retention provided in areas of known flooding? (Ten Mile, Harrell Hills, Prosser Rd, etc.)
6. Do all areas drain to the detention basin as designed in the calculations during a 100-yr storm event?
7. Is there an elevation/volume relationship table for the detention basin?
8. Are pre-developed and post-developed areas, CN, and Tc accurate and reasonable?
9. Have the detention calculations been prepared and stamped by a professional engineer?
10. Is the proper first flush attenuation been achieved for minimum of 24 hours? (The first 1/2" or 4500 ft³.)
11. Is the outlet control structure and culvert made from RCP, concrete, or sturdy masonry?
12. Does the outlet detail show all orifices with feasible sizes and elevations?
13. Does the outlet detail show a first flush filter that is easily constructed and maintained?
14. Does the detention basin invert have a positive slope towards the outlet control structure?
15. Are all inlet pipes located as far as possible from the outlet control structure?
16. Is the detention basin smoothly graded with adequate berms and 3:1 maximum slopes?
17. Is a detention easement provided for the detention basin on the plan?
18. Is a water quality facility easement provided for all water quality devices?
19. Is an access easement provided for the detention basin and/or water quality devices on the plan?
20. Is an anti-seep collar(s) provided for the detention outlet pipe?
21. Is there a 2% slope in the bottom of the detention pond?
22. Has the pond been designed for 15% extra storage?
23. Is there a minimum of 1 foot of freeboard from 100-year storm and the top of berm?

Yes	No	N/A

Erosion and Sediment Control:

1. Is construction entrance properly located with a detail (min 50' long, 16' wide, 6" deep)?
2. Does the plan show details for silt fences and straw bale barriers as needed?
3. Do the E&S details show flow arrow for proper alignment of silt fence and straw bale?
4. Does the plan show temporary and permanent seeding?
5. Is temporary inlet protection shown for all catch basins, inlets and culvert entrances?
6. Is all riprap sufficiently designed and shown on plans and details (with D50 sizes)?
7. Have Knoxville BMP Manual and T.E.S.C.H. been consulted for unusual conditions?
8. Do the plans specify to build detention pond as first item of construction?

Yes	No	N/A

Miscellaneous:

1. Has a bond (performance and indemnity agreement) been posted?
2. Has a Pre-construction Conference been arranged? (Developer's Assistance Meeting)
3. Has the Covenants for permanent maintenance been recorded for the detention basin and WQ devices?
4. Has a Streetlighting Plan, with pole type and fixture, been included for all subdivisions?
5. Has a Street Signage Plan with locations and details been included for all subdivisions?
6. Has all work been proposed outside the R.O.W.? (If not, a Construction R.O.W. permit is also needed)
7. Does the property have a recorded plat to dedicate easements?

Yes	No	N/A

Detention Computation Inputs					
		Subarea #1		Subarea #2	
		Predeveloped	Postdeveloped	Predeveloped	Postdeveloped
Area	A	Acres			
Curve number	CN	-----			
Time of concentration	Tc	Min			

Types of soil with hydrologic characteristics:

Method for computing times of concentration:

Detention computation methods and software:

Post-Developed CN computation				
Description	Area (acres)	Soil Name	HSG	CN

Summary of Outlet Control Structure			
Invert Elevation	Type of Control	Size	Coefficient Used

Summary of Detention Routing						Top of berm elevation: _____
Design Storm	Subarea #1			Subarea #2		
	Predeveloped peak flow	Postdeveloped peak flow	OK?	Predeveloped peak flow	Postdeveloped peak flow	OK?
1-year						
2-year						
5-year						
10-year						
25-year						
100-year						

Name of professional engineer on stormwater detention calculations: _____

P.E. # _____

Expiration date: _____