

**CITY OF COLUMBIA ENGINEERING REGULATIONS
PART 6: PROCEDURES FOR THE SUBDIVISION OF LAND
TABLE OF CONTENTS**

Paragraph	Description	Page No.
6.1	General	6-1
6.2	Sketch Plan Review	6-1
6.3	Preliminary Plat (Construction Drawings)	6-1
6.4	Final Plat Approval	6-3
6.5	Form No. 2	6-9
6.6	Form No. 3	6-10
6.7	Sample Procedures for Sanitary Sewer Construction Permitting Under Delegated Review Program Letter	6-11
6.8	Sample Request for 208/201 Plan Conformance Certification	6-14
6.9	Delegated Review Program Checklist	6-15

LIST OF FORMS

Form	Description	Page No.
Form 6-1.	Record Drawing Checklist	6-4
Form 6-4.	Required Easement Language	6-6
Form 6-2.	Infiltration Certification	6-6
Form 6-3.	Engineer's Certification	6-6
Form 6-5.	Storm Drain Certification Language	6-6
Form 6-6.	Form No. 2	6-9
Form 6-7.	FormNo. 3	6-10
Form 6-8.	Sample Procedures for Sanitary Sewer Construction Permitting Under Delegated Review Program Letter	6-11
Form 6-9.	Sample Request for 208/201 Plan Conformance Certification	6-14
Form 6-10.	Delegated Review Program Checklist	6-15

CITY OF COLUMBIA ENGINEERING REGULATIONS

PART 6: PROCEDURES FOR THE SUBDIVISION OF LAND

6.1 General

The procedure for review and approval of a subdivision plat consists of three separate steps. These are:

6.1.1 Sketch plan review by Planning Commission or its staff.

6.1.2 Review and approval of Preliminary Plat, and

6.1.3 Review and approval of final Plat.

6.2 Sketch Plan Review

The subdivider or his representative shall present seven (7) copies of a sketch plan to the staff of the Planning Commission. Plans should be delivered to the zoning Administrator, 1136 Washington Street, Columbia, SC 29201. Telephone number (803) 545-3333. The sketch plan shall be prepared in accordance with procedures set forth in City of Columbia Subdivision Regulations.

6.3 Preliminary Plat (Construction Drawings)

The subdivider or his representative shall submit seven (7) copies of a Preliminary Plat (Construction drawings) to the staff of the Planning Commission at the address shown in section 6.1 above. The construction drawings shall be prepared in accordance with procedures set forth in Part 1, City of Columbia Regulations and City of Columbia Subdivision Regulations.

6.3.1 Preliminary Engineering Report – If a water system is proposed for the development, a preliminary engineering report should be submitted to the South Carolina Department of Health and Environmental Control, 2600 Bull Street, Columbia, S.C. 29201. The report should be submitted at least four (4) weeks prior to submission of construction drawings. When the preliminary engineering report is approved, submit three (3) copies of the permit to construct directly to the South Carolina Department of Health and Environmental Control. It should be noted that construction plans for sanitary sewers meeting the criteria for processing under SCDHEC’s Delegated Review Program will not be submitted directly to SCDHEC. The procedures described in the letter attached hereto as Section 6.6 will be followed instead.

6.3.2 A copy of the preliminary engineering report (s) shall be submitted to the City Engineer, 1136 Washington Street, P.O. Box 147, Columbia, SC 29201. Telephone number (803) 545-3400. The report (s) shall be prepared in accordance with procedures set forth in Part 1, City of Columbia Regulations.

6.3.3 Annexation – If the property being subdivided is contiguous to the City limits, see Part 8, Section 8.0.2 for procedures.

- 6.3.4 Easements – Attention is directed to the requirement for granting easements to the City of Columbia to provide for the operation, maintenance, and future extension of water, sanitary sewer, and storm drainage systems within the subdivision, as applicable. It is important to note that two copies of all off-site easements necessary for construction of the facilities to be deeded to the City must be submitted with the preliminary plat (construction drawings).
- 6.3.5 Water Main Extension – The City of Columbia will extend water service into those areas inside City limits not presently served by its water system in accordance with procedures set forth in Part 7, City of Columbia Regulations.
- 6.3.6 Sanitary Sewer Extension – The City of Columbia will extend sanitary sewer service into those areas inside City limits not presently served by its sewer system in accordance with procedures set forth in Part 8, City of Columbia Regulations.
- 6.3.7 Use of Septic Tanks – If the use of septic tanks is anticipated, the subdivider must:
 - 6.3.7.1 Make application to the appropriate County Health Department.
 - 6.3.7.1.1 Richland County Health Department
1221 Gregg Street
Columbia, SC 29201
Telephone (803) 254-4186
 - 6.3.7.1.2 Lexington County Environmental Health Department
212 South Lake Drive
Lexington, SC 29072
Telephone (803) 356-8113
 - 6.3.7.2 Request an I&E report from the appropriate County Soil and Water Conservation District.
 - 6.3.7.2.1 Richland County Soil and Water Conservation District
2020 Hampton Street
Columbia, SC 29201
Telephone (803) 765-5806
 - 6.3.7.2.2 Lexington County Soil and Water Conservation District
Lexington County Memorial Building
Lexington, SC 29072
Telephone (803) 359-3165
- 6.3.7.3 Submit a copy of the I&E report obtained in subparagraph 6.2.6.2 above along with the Preliminary Plat (construction drawings) to the South Carolina Department of Health & Environmental Control, 2600 Bull Street, Columbia, SC 29201.
- 6.3.8 Construction – Following approval of the Preliminary Plat (construction drawings) the subdivider may begin construction provided:

- 6.3.8.1 All necessary permits to construct have been received from the South Carolina Department of Health and Environmental Control. Refer to section 6.2.1 above.
- 6.3.8.2 All necessary highway encroachment permits have been received from the South Carolina Department of Transportation, City or County. To make application for an encroachment permit, contact the City Engineer, 1136 Washington Street, P.O. Box 147, Columbia, SC 29217. Telephone number: (803) 545-3400.
- 6.3.8.3 The Contractor must provide the City Engineer twenty-four (24) hours prior notice in order that a City Inspector can be scheduled to inspect the construction. Notice may be given by contacting the Engineering Plans Review Section in the City Engineer's office. Telephone number (803) 545-3400.

6.4 Final Plat Approval

Following completion of the physical development of all or an approved phase or part of the areas shown on the approved Preliminary Plat (construction drawings), the subdivider or his representative shall provide an electronic copy of plans meeting Part 28 of this manual along with a .pdf copy, and five (5) prints of the Final Plat to the Planning Commission at the address shown in Section 6.1 above. The Final Plat shall be prepared in accordance with Procedures set forth in Record Drawing Checklist, City of Columbia Regulations and City of Columbia Subdivision Regulations.

6.4.1 Record Drawing Checklist

Project Name & Location: _____ **Date:** _____

Engineer Name & E-Mail Address: _____ **City File #:** _____

- Name of Subdivision or Project and City File Number **[Refer to page 3 of this document regarding submittal format]**
- "Record Drawing" marked in title block (Please do not use the older label of "As-Built").
- Show distinct phase lines and identify the phase in the as-built title block.
- Identify TMS number and property owners for all adjacent properties.
- Graphic scale should not be smaller than 1" = 100'.
- Date (Revision Dates when changes are made after original Submittal).
- North point identified as magnetic, true or grid.
- Vicinity map @ scale of 1" = 1,000'
- Remove easements over water or sewer lines in public roads
- Off-Site Easements Obtained (where applicable)
- City File Number(s) referenced for existing lines
- County where project located properly identified
- Mean sea level datum and so stated [in statement form].
- Insure record drawing date and City's approval date is correct in certification statement. Final submittals must be certified by a Professional Engineer.
- Print Engineer's Name and Provide PE License #, including State where licensed
- Provide blow-ups of hydrants and hydrant valves
- Use standard symbols for all fittings, such as meter boxes, sanitary sewer taps, fire hydrants, reducers and valves
- Meter box/Sanitary Sewer tap identified for each lot with 2 references to each
- Bearings and distances provided on all sanitary sewer mains
- Conforms to approved construction drawings and approval letter [The City of Columbia does not determine meter sizes].
- Name and address of Sewer provider if other than the City (note if sewer provided through septic tank).
- Must Submit Sewer Acceptance letter upon receipt (if sewer to be treated by non-City entity).
- Name and address of fee simple title holder(s). **Verify ownership through County on-line records.**
- Submit Copy of Recorded Mortgage on all parcels being developed as part of this project**
- Must submit deed to property or Title to Real Estate.

- Specify in statement form to whom roadways will be conveyed. (SCDOT, City, County). **Verify Road names (i.e. Court, Circle, etc.) using www.Richlandonline.com**
- Label lot numbers, block numbers, phase identifications and buildings.
- Remove copyright statement or add “Does Not Apply to the City of Columbia.”
- Distances on sanitary sewer mains must match the coordinating stations numbers on the profile sheet.
- Utility lines cannot arbitrarily end at phase lines; there must be proper termination of the line (plug, manhole, etc.) A utility line cannot end at a tee.
- All bends must be identified, sizes shown and located from (2) location points.
- Identify blow-off sizes
- Topography by contours at vertical intervals of not more than five (5) feet depicting final or finished conditions
- Contours must be labeled and show multiple locations for ease of following. Top nut of hydrant may be substituted

For elevation purposes.

- Provide dimensions to nearest one-tenth of the foot and Angles shown to nearest second.
- Provide location and description of monuments (benchmarks).
- All rights-of-way, easements and areas to be dedicated to public use shown along with the purpose of each stated, including but not limited to power line rights of way, gas line rights of way, water, sanitary sewer, and storm drainage easements, private roadways.
- Location data: (2) locations are required for the point of beginning and the end of all new lines, on valves, bends, reducers, meter boxes, blow offs, cleanouts, manholes and catch basins; referenced to stable physical feature such as curb corners, building corners, property corners, etc., where available. Station numbers will not be accepted.
- Show location of utility lines running through easements of right-of-ways shown in relation to easement lines.
- All easements must be shown, labeled and dimensioned as “Exclusive City of Columbia easements. Gaps must be closed on easements if there is private property between the easement and the road right-of-way or property line.
- Material, size and lengths of all water lines must be shown from bend to bend.
- Size, material and slope between manholes, and lengths of all sanitary sewer lines on plan view and profiles.
- Sewer profiles including separations for all other utilities meeting Ten State Standards.
- Infiltration certification on all sewer drawings.

- 6.4.2 Infiltration Certification
 “I hereby certify that the infiltration/exfiltration does not exceed 200 gallons per day per inch of pipe diameter per mile of sewer pipe including manholes for any section of the system.”

 Registered Engineer, State of South Carolina, P.E. Number _____
- 6.4.3 Engineer’s Certification
 “I hereby certify that the streets, storm drainage system, sanitary sewer system and water system for _____ as shown on the Record Drawings dated _____, prepared by _____, has been installed in accordance with the Construction Drawings approved _____.”

 Registered Engineer, State of South Carolina, P.E. Number _____
- 6.4.4 Required Easement Language
 Main lines and future extensions - “Exclusive 15’ City of Columbia Water Easement Service Lines can be covered in a note: “There is a 10’ Exclusive City of Columbia water/ sewer easements on all service lines from the main line to the meter/cleanout” (Only in subdivisions)
- 6.4.5 Storm Drain Certification Language
 I hereby certify that the storm drainage system for _____ was installed in accordance with the City of Columbia approval letter dated _____, and meets storm drainage requirements and contained silt on the property concerned to the maximum extent feasible. Provisions for erosion and sediment control and storm drainage were met in accordance with the Columbia Sediment and Erosion Control and Storm Drainage Ordinance.
- 6.4.6 Final Record Drawing Review Package to the City of Columbia Must Include:
- 6.4.6.1 Five (5) Sets of 24x36 Record Drawings, **including two digital submittals (one in Adobe Acrobat PDF format and one in AutoCAD DWG format as described in Part 28 of this document)**. Digital submission will replace Mylar submittals at the completion and approval of the project.
- 6.4.6.2 Originally signed Form 2, signed by the developer, identifying the project name, location, phase and City File Number on Form
- 6.4.6.3 Originally signed Form 3 (a/k/a Lien Waiver), signed by the utility contractor, identifying the project name, location, phase and City File Number. Form 3 must be signed and certified by authorized representative of the utility company
- 6.4.6.4 Itemized Materials List on Utility Contractor’s Company letterhead, identifying project name, location, phase and City File Number

- 6.4.6.5 Sewer Approval Letter (if Sewer is Provided by entity other than City of Columbia), identifying the project name, location, and City File Number
- 6.4.6.6 Deed to the property (a/k/a Title to Real Estate), identifying the project name, location, phase and City File Number
- 6.4.6.7 Completed Record Drawing Checklist Identifying project name, location, phase and City File Number
- 6.4.6.8 Note: Record drawings must be submitted along with executed utility deeds, declaration of covenant (where applicable), and Partial Mortgage Release (In instances where there is no mortgage on the property, the Owner must return form to the City identifying the project name and address with the notation, "There is no mortgage on this property.")
Declaration of Covenant, Partial Mortgage Release and utility deeds must be submitted as legal (8 ½" 14") documents.
- 6.4.7 Final Package to DHEC Must Include:
 - 6.4.7.1 Engineer's Certification Letter. The Engineer must certify that the project has been built in accordance with the permitted plans and with good engineering practices. The certification is based upon periodic observation of the construction by the project engineer or a representative of his/her office. Infiltration Certification must also be included for all sewer projects.
 - 6.4.7.2 The City's Ownership, Operation & Maintenance Letter (O&M Letter). This letter will be provided by the City of Columbia upon receipt of all required documents (deeds, covenants, etc.) approved pressure tests, bacteriological test and final inspection by the City's Utility Inspector
 - 6.4.7.3 Pressure, Bacteriological and Fire Hydrant Flow Test Results (Test results will be issued with the City's O&M Letter)
 - 6.4.7.4 Two (2) Sets of Record Drawings
- 6.4.8 The Complete Package Must Be Submitted By the Engineer to:
Central Midlands District
Environmental Quality Control
P.O. Box 156
State Park, South Carolina 29147
- 6.4.9 Form No. 2 – The subdivider or his designated representative shall submit Form No. 2, "Request for Approval & Acceptance of Installation". See sample Form No.2. Form No. 2 may be obtained by contacting the City Engineer at the address or telephone number shown in Section 6.2.7.2 above.
- 6.4.10 Form No. 3 – The subdivider or his designated representative shall submit Form No. 3, "Lien Waiver Form" signed by the Utility Contractor who installed the improvements, to the City Engineer before said improvements will be accepted by the City. See Form No. 3.

Form No. 3 may be obtained by contacting the City Engineer at the address or telephone number shown in Section 6.2.72 above.

- 6.4.11 Material List – The subdivider or his designated representative shall furnish to the City Engineer a detailed quantity list of all materials used on the project. This materials list must be signed by the Utility Contractor who installed the improvements.
- 6.4.12 Following receipt of acceptable record drawings and the laboratory report certifying the water system is free from harmful bacteria, the City Engineer, or his representative, will conduct a final inspection of the water and sanitary sewer systems.
- 6.4.13 Following successful completion of the final inspection, the City Engineer will prepare deeds and easements for those utilities to be accepted by the City for operation and maintenance. When these deeds and easements have been properly executed and accepted by the City Engineer, the letter of acceptance by the City for operation and maintenance will be issued.
- 6.4.14 Permit to Operate – Before the City can place the subdivision water and/or sanitary sewer system(s) in operation, a permit to operate must be granted by the South Carolina Department of Health and Environmental Control. Since SCDHEC no longer performs final inspections on a routine basis, the project developer through his engineer must assume this responsibility. The engineer’s inspection must be coordinated with the City Engineer’s final inspection.
- 6.4.14.1 Submittals Required – In order to obtain the permit to operate the developer’s engineer must submit to SCDHEC properly certified as built plans, laboratory test results for water mains, infiltration certification for sanitary sewers, and a letter from the City accepting the utilities for operation and maintenance.

_____, 20__

Division of Engineering
City of Columbia
Columbia, South Carolina

Gentlemen:

I certify that the described streets, sidewalks, storm drainage facilities, sanitary sewer mains, pump stations, manholes, sewer pump stations and appurtenances, water mains, valves, and appurtenances (strike items not applicable) have been installed in accordance with approved plans and specifications and request that the Utilities and Engineering Department approve and accept this installation.

The work to be accepted under this request is for _____ and is more particularly described by being located _____, in _____ County,

I further certify that all outstanding encumbrances associated with these installations have been satisfied and that the above described work is free of all liens.

This request includes permission for City employees and equipment to enter upon the property described hereon for the purpose of doing any maintenance and repairs deemed necessary to protect the operational integrity of the systems. It is understood and agreed that I will be billed, and pay for any maintenance/repairs required prior to final acceptance of the deeds for these systems by the City.

Date

Developer

APPROVED ENGINEERING DIVISION:

Inspector

Date

City Engineer

Date

_____, 20__

LIEN WAIVER FORM

TO WHOM IT MAY CONCERN:

The undersigned in consideration of _____ and other valuable consideration, the receipt whereof is hereby acknowledged, and in order to induce The City of Columbia to accept a deed to the property herein described do hereby waive and release to the owners of said property and the said The City of Columbia of any and all liens or right to liens upon said property or upon the improvements, now or hereafter thereon, or upon the monies or right to liens being on account of labor or services, material, fixtures or apparatus heretofore furnished or to be furnished at any time hereafter by the undersigned.

The property subject to said liens or right to liens is hereby released and is described as follows: (Enter name of project, including phase designation if appropriate.)

Signed and sealed this _____ day of _____, 20__.

By: _____

Title

6.7 Sample Procedures for Sanitary Sewer Construction Permitting Under Delegated Review Program Letter

October 24, 1991

Re: Procedures for Sanitary Sewer
Construction Permitting Under
Delegated Review Program

The City of Columbia has been delegated authority to perform construction plan review for The South Carolina Department of Health and Environmental Control related to the permitting of sanitary sewer construction. In an effort to minimize delays in permitting sanitary sewer construction, DHEC established a Delegated Review Program (DRP) which is available to Publicly Owned Treatment Works (POTW's) that have an internal review program. Review is limited to all gravity line extensions 16" diameter or smaller; lift stations with a design size of 2,000 gallons per minute or smaller; and force mains 16" diameter or smaller from lift stations tying to a gravity sewer. The program does not include pressure sewers, STEP systems, small diameter sewer service systems, wastewater treatment facilities (new, modifications or expansions), or effluent outfall construction (gravity force mains or pump stations) from wastewater treatment facilities.

The program has been designed so that once the delegated entity has completed its review and obtained all appropriate approvals, a packet will be forwarded to DHEC for construction permitting. If the approval packet is complete, the construction permit should be granted within three working days.

Systems that are to be operated and maintained by the City of Columbia with treatment provided at the Metro Wastewater Treatment Plant (NPDES Permit No. SC0020940) will be reviewed by the Department of Utilities and Engineering. Following approval by the City, plans and associated documents will be forwarded to DHEC's Bureau of Water Pollution Control for permitting. No direct submittals will be accepted by DHEC if they meet the criteria for processing under the DRP.

In addition to the two sets of construction plans normally sent to the City for review, the following is required:

1. Three additional sets of proposed construction plans (sanitary sewer plan and profile). Specifications will not be required since the City's specifications have been pre-approved and are on file with the Domestic Wastewater Division.
2. Two copies of the appropriate design calculations including flow and pump stations calculations with a copy of the pump curve. The flow calculations should be based on the DHEC publication entitled "Guidelines for Unit Contributory Loadings of Wastewater Treatment Facilities". These documents must be signed and sealed by the developer's engineer.
3. Two copies of an 8 ½" x 11" location map. This should be separate from the plans. Even if there is a location map on the plans, DHEC still requires separate maps on an 8 ½" x 11" sheet of paper.
4. A \$75.00 check made payable to South Carolina Department of Health and Environmental Control (S.C.D.H.E.C.).
5. One copy of an overall layout sheet of the wastewater system separate from the plans. This layout must show the proposed sewer lines and their sizes and include existing streets and sewer lines. The proposed sewer lines must be highlighted to be easily identified. This sheet must be sent by DHEC to the Development Board when the project is permitted. There is no scale requirement for this sheet.
6. Two copies of any required off-site easements necessary to build the project. Technical review will be undertaken upon receipt of plans by the City; however, the packet will not be forwarded to DHEC until required easements have been obtained. The City is available to assist in preparing necessary documents. Contact U&E office at (803) 545-3400 and ask for the right of way representative.
7. The original South Carolina Department of Health and Environmental Control application for permit to construct properly completed with the appropriate signatures and one copy.
8. The approved 208 Plan certification from the designated council of governments must be provided. The designated council of governments for this area is Central Midlands Regional Planning Council.
9. A South Carolina Water Resources Certification for crossings of navigable water bodies and/or any other related agency approval letters if required. The mailing address and telephone number for the South Carolina Water Resources Commission is 1201 Main Street, Suite 1100, Columbia, SC 29201, telephone 737-0800.

Where the City review requires revisions of drawings, the project engineer will be notified so that plans may be revised and resubmitted. The City can no longer issue letters with technical conditions.

When plans are approved and required related documents received, the project will be submitted to DHEC. At this time, a letter will be sent to the appropriate local government planning office informing them that plans were approved and submitted for permitting. This letter will set forth non technical requirements by the City. Copies will be disseminated to all interested parties. It is important to note that work and materials must conform to City Specifications. This is to include infiltration certification, and preparation of record drawings.

Since DHEC no longer performs final inspections on a routine basis, the project developer through his engineer must assume this responsibility. Inspections must be coordinated with the Department of Utilities and Engineering Inspector.

Sample copies of the 208 Plan certification and a DHEC DRP checklist are furnished to assist in assembling required data.

6.8 Sample Request for 208/201 Plan Conformance Certification

DATED:

TO: Central Midlands Regional Planning Council
236 Stoneridge Drive
Columbia, SC 29210

SUBJECT: Request for 208/201 plan conformance certification.

Please review the following project and complete Sections 10 and 11.

1. Project Name:
2. County:
3. General Location: See attached map. (8 ½" X 11" sheet)
4. Type of Action for Review: Construction Permit Request
5. Type Project:
6. Type Waste: Volume (GPD):
7. Disposal Method:
8. Consulting Engineer:
 Phone:
9. POTW Contact: Scott Rogers
 Phone: (803) 545-3400
10. This project (is) (is not) in conformance with the 208/201 Plan.
11. Comments:

Signature of Certifying Officer and Title Date

Return with any attached comments to the following address of the POTW participating in the Delegated Review Program:

Name: _____ Department of Engineering
Address: _____ P.O. Box 147
City: _____ Columbia, SC 29217

6.9 Delegated Review Program Checklist

DELEGATED REVIEW PROGRAM
CHECKLIST FOR CONSTRUCTION SUBMITTAL

	Yes	No	N/A
1. Transmittal letter noting DRP submittal.	<u>By City</u>	_____	_____
2. Three (3) copies of plans and specifications (omit spec., City has approved standard specs on file with DHEC)	_____	_____	_____
3. Two (2) copies of appropriate design calculations including flow and pump station calculations with a copy of pump curve(s). The documents must be signed and sealed by the project engineer.	_____	_____	_____
4. Two (2) copies of a 8 ½" x 11" detailed location map (must be separate from plans)	_____	_____	_____
5. A \$75.00 check made payable to South Carolina Department of Health and Environmental Control (S.C.D.H.E.C.)	_____	_____	_____
6. One (1) copy of overall layout sheet of the wastewater system separate from the plans.* This layout must show the proposed sewer lines and their sizes and include existing streets and sewer lines. The proposed sewer lines must be highlighted to be easily identified. * (Master plan of proposed development)	_____	_____	_____
7. Two (2) copies of off-site easements.	_____	_____	_____
8. The original application for permit to construct and one (1) copy.	_____	_____	_____
9. A letter of acceptance from the entity providing the treatment of wastewater. If the owner of the WWTP will not own, operate and maintain the proposed sewer system, then a separate letter on the ownership and O&M from the responsible utility must be submitted.	<u>By City</u>	_____	_____
10. One (1) copy of the approved 208 Plan Certification (from designated COGs only).	_____	_____	_____
11. One (1) copy of the Water Resources Certification (if applicable).	_____	_____	_____