

# **QUALIFICATION CRITERIA**

This checklist only applies to a residential project that:

- Tract Size less than 15,000 sq. ft.
- Has less than 65% impervious cover
- Is not subdivided from the original tract, and
- Does not use a shared driveway

For other types of residential projects, please refer to the Infrastructure Design Manual (IDM).

**Note:** Properties that are part of a subdivision do not qualify for 65% impervious cover exemption.

See Figure 1 and Figure 2 for examples of drainage plans. Both figures do not reflect project specific data thus may not contain all required information. They are to be used as a guide in conjunction with this checklist.

Replat of a lot larger than 15,000 sq. ft. into multiple lots less than 15,000 sq. ft. does not qualify for exemption to 65% impervious cover.

# **DOCUMENTS**

Item description	Sheet No./Location
Stormwater Information Form (OCE-0004): Complete one form per project.	
Supporting documentation: Recorded Deed, Tax Account Printout, and	
Survey/Recorded Plat. Plans must breakdown impervious cover per lot	
Grading Permit for Excavation and Fill Worksheet (CE-1094): Documentation	
and/or permits as required by worksheet	
Outfall approval (if applicable): Upload approval from the outside agency if	
outfall is in their jurisdiction (ex: HCFCD or TxDOT)	
Easement approval (if applicable): For construction in the easement, approval	
is required from the owner of the easement. If the City of Houston is the owner,	
obtain an encroachment permit.	

# **DESIGN ELEMENTS**

Item description	Sheet No./Location
<b>Property in 100-year or 500-year floodplain:</b> Storm cannot approve review until Floodplain Management Office has approved their review.	
Replat for multiple lots: Must be approved and sealed by the Houston Planning	
Commission.	
<b>Topographic survey:</b> Required for any drainage plan. Actual topo is preferred,	
but elevations relative to a base benchmark is acceptable.	
Label all "existing", "proposed" and "to be permitted separately" impervious	
surfaces.	
Show all internal drainage, including but not limited to:	
<ul> <li>Pipes: flowline elevations, material, slope, distance of run, and size</li> </ul>	
<ul> <li>Inlets/Manholes/Junction Box/Cleanouts: size, flowline elevations, details</li> </ul>	
Roof Drainage: Downspouts and gutters required for all roof drainage. Show	
connection to on-site drainage system. Water cannot flow onto a neighboring	
property. Additional design criteria may apply for homes very close to the	
property line.	

revised: February 17, 2022 Form OCE-0008



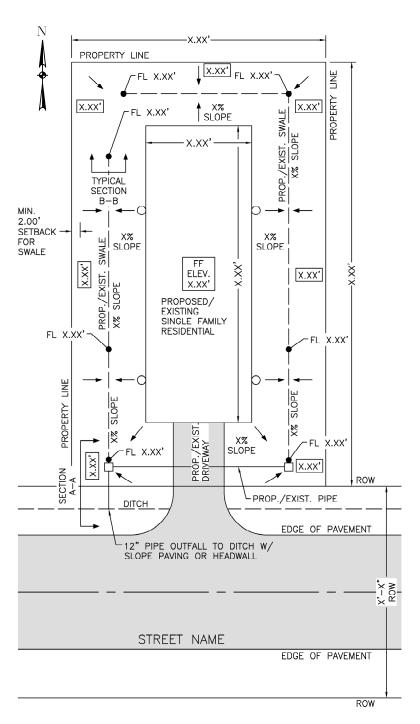
Item description	Sheet No./Location
Grading	
<ul> <li>Show spot elevations every 20 feet around the perimeter to indicate area drained to each inlet or drainage structure. Slope grading is acceptable where applicable.</li> <li>Illustrate clearly that grading does not result in draining any part of the area onto adjacent private property or piped to an unapproved location.</li> <li>Show perimeter of property.</li> <li>Sheet flow direction within the private property.</li> </ul>	
<ul> <li>No sheet flow allowed to adjacent property or right-of-way.</li> </ul>	
<ul> <li>Engineered Grading Plan is required if grading exceeds 1,000 cubic yards.</li> </ul>	
<b>Swales:</b> Minimum 2-foot setback from the top cut or high bank. When swale is used for conveyance only, add the following note: "Swale will not be compacted after excavation and will be sod back." Show flowline elevations, cross section, and dimensions.	
<ul> <li>Single-family residential lots with front loading right-of-way         <ul> <li>Ditch (12-inch schedule 40 pipe): Headwall protection, Cross Sectional View, dimension, elevations</li> <li>Curb (4-inch schedule 40 pipe w/ curb cut): Cross Sectional View / Callout on plans</li> </ul> </li> <li>All other situations or connections:         <ul> <li>Submit a Plan and Profile prepared by a Professional Engineer to the Office of the City Engineer for review and approval.</li> </ul> </li> <li>No alleyway connection allowed.</li> </ul>	
<b>Proposed Driveway Culvert:</b> Minimum 24-inch pipe. Converting a ditch to a parking pad is not allowed.	
Low-impact development (LID) techniques (if applicable): Full compliance with IDM. Provide Details, Design and Geotechnical Report. Storm Water Quality Permit is required.	
<b>Swimming Pools (if applicable):</b> Pool deck drainage must be directed to storm system. Add the following note on plans: "Pipes carrying wastewater from swimming or wading pools, including pool drainage and backwash from filters, shall be installed as an indirect waste. Where a pump is used to discharge waste pool water to the drainage system, the pump discharge shall be installed as an indirect waste."	
<b>Note on plans:</b> Add "Owner is responsible for maintenance of drainage facilities within private property".	

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Form OCE-0008



# OFFICE OF THE CITY ENGINEER STORM CHECKLIST FOR RESIDENTIAL PROJECTS TRACT SIZE LESS THAN 15,000 SQ FT

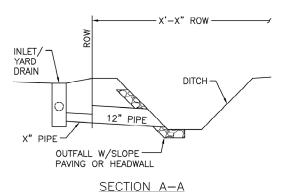


## **NOTE**

- SHADING NOT REQUIRED, SHOWN ONLY FOR CLARITY.
- A DESIGN WITH A COMBINATION OF PIPES AND SWALES IS ACCEPTABLE.

## **LEGEND**

- INLET/YARD DRAIN
- 0 DOWN SPOUT (LOCATION PER IBC CODE)
- SHEET FLOW DIRECTION
- x.xx' NATURAL GROUND SPOT ELEVATION
- FL **FLOWLINE**
- FINISHED FLOOR FF
- RIGHT-OF-WAY ROW
- TG TOP OF GRATE
- PROP. PROPOSED
- EXIST. EXISTING
- FLEV. FLEVATION
- FLOW LINE ELEVATION LOCATION



2' MIN. SETBACK SLOPE WIDTH PROP./EXIST. PROPERTY SWALE DEPTH 1V MAX. <u>3H</u> SLOPE TYPICAL SECTION B-B

FIGURE 1



# OFFICE OF THE CITY ENGINEER STORM CHECKLIST FOR RESIDENTIAL PROJECTS TRACT SIZE LESS THAN 15,000 SQ FT

## **LEGEND** NOTE SHADING NOT REQUIRED, INLET/YARD DRAIN SHOWN ONLY FOR CLARITY. 0 A DESIGN WITH A DOWN SPOUT (LOCATION PER IBC CODE) COMBINATION OF PIPES AND SHEET FLOW DIRECTION SWALES IS ACCEPTABLE. 6" x.xx' NATURAL GROUND SPOT ELEVATION ROADWAY FL **FLOWLINE** CURB 4" PIPE FF FINISHED FLOOR ROW RIGHT-OF-WAY TG TOP OF GRATE PROP. PROPOSED EXIST. EXISTING TYPICAL SECTION C-C ELEV. ELEVATION

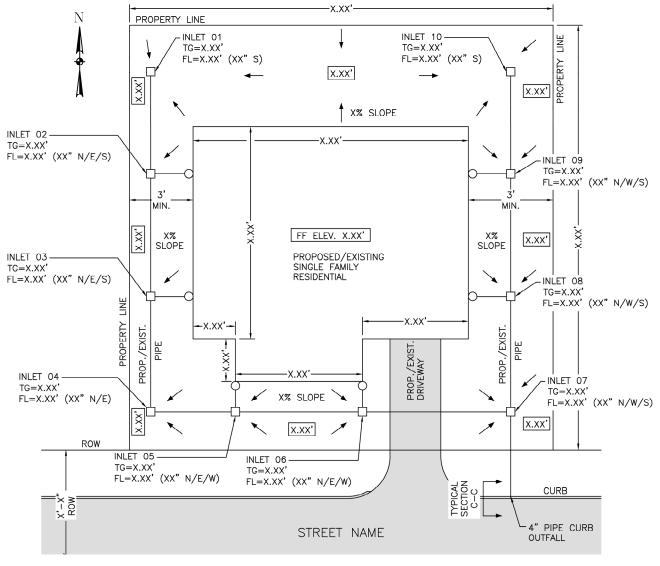


FIGURE 2