

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.
- Both figures 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.

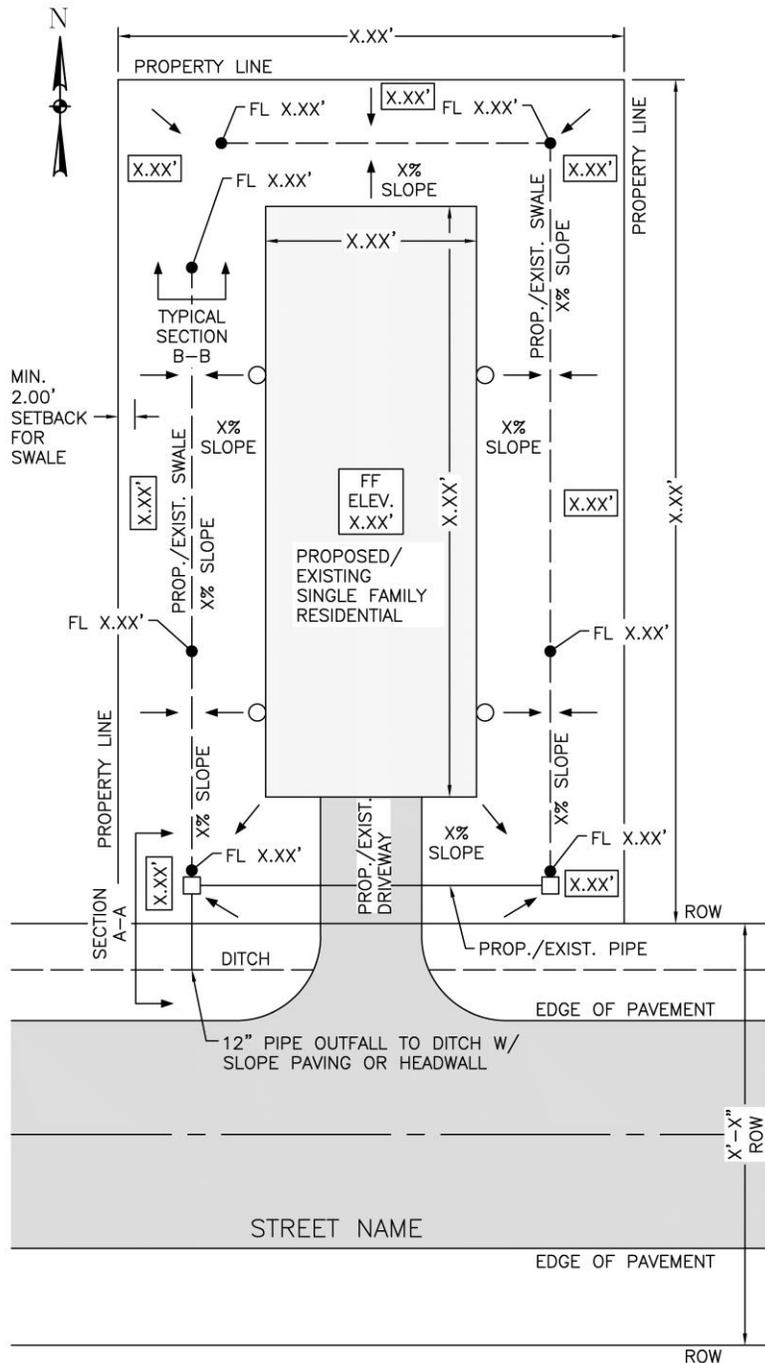
Documents:	
<u>Item Description</u>	<u>Sheet No./Location</u>
Stormwater Information Form (OCE-0004): Complete one form per project. Supporting documentation: Recorded Deed, Tax Account Printout, Survey, and Recorded Plat/Replat. Plans must breakdown impervious cover per lot	
Grading Permit for Excavation 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	
<u>Item Description</u>	<u>Sheet No./Location</u>
Property in 100-year or 500-year floodplain: Storm cannot approve review until Floodplain Management Office has approved their review.	

<u>Item Description</u>	<u>Sheet No./Location</u>
<p>Replat for multiple lots: Must be approved and sealed by the Houston Planning Commission.</p>	
<p>Topographic Survey: Required for any drainage plan.</p> <ul style="list-style-type: none"> • Actual topo is preferred, but elevations relative to a base benchmark is acceptable. 	
<p>Label: All “existing”, “proposed” and “to be permitted separately” impervious surfaces.</p>	
<p>Show all internal drainage, including but not limited to:</p> <ul style="list-style-type: none"> • Pipes: flowline elevations, material, slope, distance of run, and size. • Inlets/Manholes/Junction Box/Cleanouts: size, flowline elevations, details. 	
<p>Roof Drainage: Downspouts and gutters required for all roof drainage.</p> <ul style="list-style-type: none"> • 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. 	
<p>Grading:</p> <ul style="list-style-type: none"> • Show spot elevations every 20 feet around the perimeter to indicate area drained to each inlet or drainage structure. <ul style="list-style-type: none"> ○ Slope grading is acceptable where applicable. • Illustrate clearly that grading does not result in draining any part of the area onto adjacent private property or piped to an unapproved location. • Show perimeter of property. • Sheet flow direction within the private property. • No sheet flow allowed to adjacent property or right-of-way. • Engineered Grading Plan is required if grading exceeds 1,000 cubic yards. 	
<p>Swales: Minimum 2-foot setback from the top cut or high bank.</p> <ul style="list-style-type: none"> • When swale is used for conveyance only, add the following note: <ul style="list-style-type: none"> ○ “Swale will not be compacted after excavation and will be sod back.” • Show flowline elevations, cross section, and dimensions. 	

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<p>Storm Outfall:</p> <ul style="list-style-type: none"> • Single-family residential lots with front loading right-of-way <ul style="list-style-type: none"> ○ Ditch (12-inch schedule 40 pipe): Headwall protection, Cross Sectional View, dimension, elevations ○ Curb (4-inch schedule 40 pipe w/ curb cut): Cross Sectional View / Callout on plans. • All other situations or connections: <ul style="list-style-type: none"> ○ Submit a Plan and Profile prepared by a Professional Engineer to the Office of the City Engineer for review and approval. • No alleyway connection allowed. 	
<p>Proposed Driveway Culvert: Minimum 24-inch pipe.</p> <ul style="list-style-type: none"> • Converting a ditch to a parking pad is not allowed. 	
<p>Low-impact development (LID) techniques (if applicable): Full compliance with IDM. Provide Details, Design and Geotechnical Report.</p> <ul style="list-style-type: none"> • Storm Water Quality Permit is required. 	
<p>Swimming Pools (if applicable): Pool deck drainage must be directed to storm system.</p> <ul style="list-style-type: none"> • Add the following note on plans: <ul style="list-style-type: none"> ○ “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.” 	
<p>Note on plans: Add “Owner is responsible for maintenance of drainage facilities within private property”.</p>	

Figure 1: Example of Drainage Plan



NOTE

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

LEGEND

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

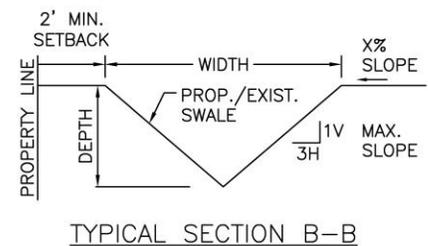
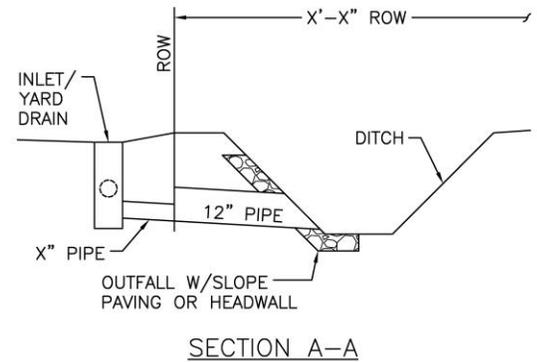


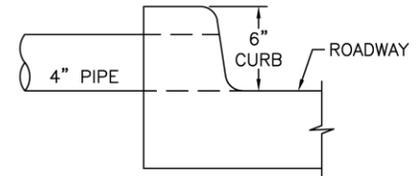
Figure 2: Example of Drainage Plan

LEGEND

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TYPICAL SECTION C-C

