



CH. 19 GUIDELINES

**HOUSTON PUBLIC WORKS
MAY 2018**

CH. 19 GUIDELINES

**Companion to Floodplain Ordinance to
Establish Operational Procedures**

GUIDELINES HIGHLIGHTS

New Permit Procedures

Temporary Repair Permit For Substantially Damaged Structures

- Repair immediately
- Allow Up to 2 Years to Bring Into Compliance
- Provides options to impacted property owners
- Per recent FEMA guidance

Expedited Review | Zero Fee Permit For Small Scope Projects

- Remodel or repair
 - No sitework, additions or conversion to living space
 - Residential less than \$10k
 - Commercial less than 10% floor area
-

ZERO NET FILL

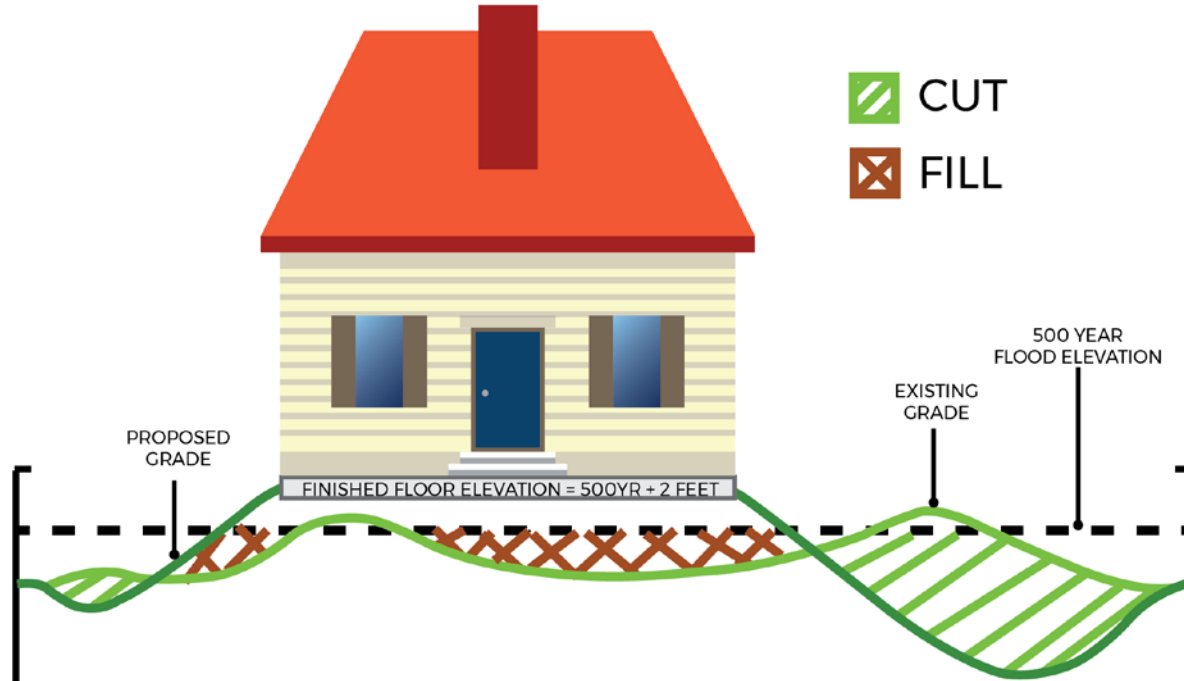
Mitigation Plan

Mitigation Plan

- Prepared by Texas Professional Engineer
- Compares existing and proposed elevations on a development site
- FILL = material is added to area of site below the 500-year flood elevation either from on site or off site
- CUT = material is removed from area of site below the 500-year flood elevation
- ZERO NET FILL = fill does not exceed cut

ZERO NET FILL

Cut Equals or Exceeds Fill



GUIDELINES HIGHLIGHTS

New Design Procedures

Simplified Mitigation Plan

Procedure for simplified cut and fill calculations for qualifying sites

Flood Opening Calculations

- Accept ICC-ESR in lieu of Engineer's certifications for Engineered Flood openings
 - Provide standard flood opening calculation template
-

GUIDELINES HIGHLIGHTS

New Design Procedures

Options for Fill in 500 year floodplain

- Comply with zero net fill provision **OR**
- Complete Optional Sheet Flow Analysis
 - Engineering Analysis for exception to zero net fill in 500-year floodplain

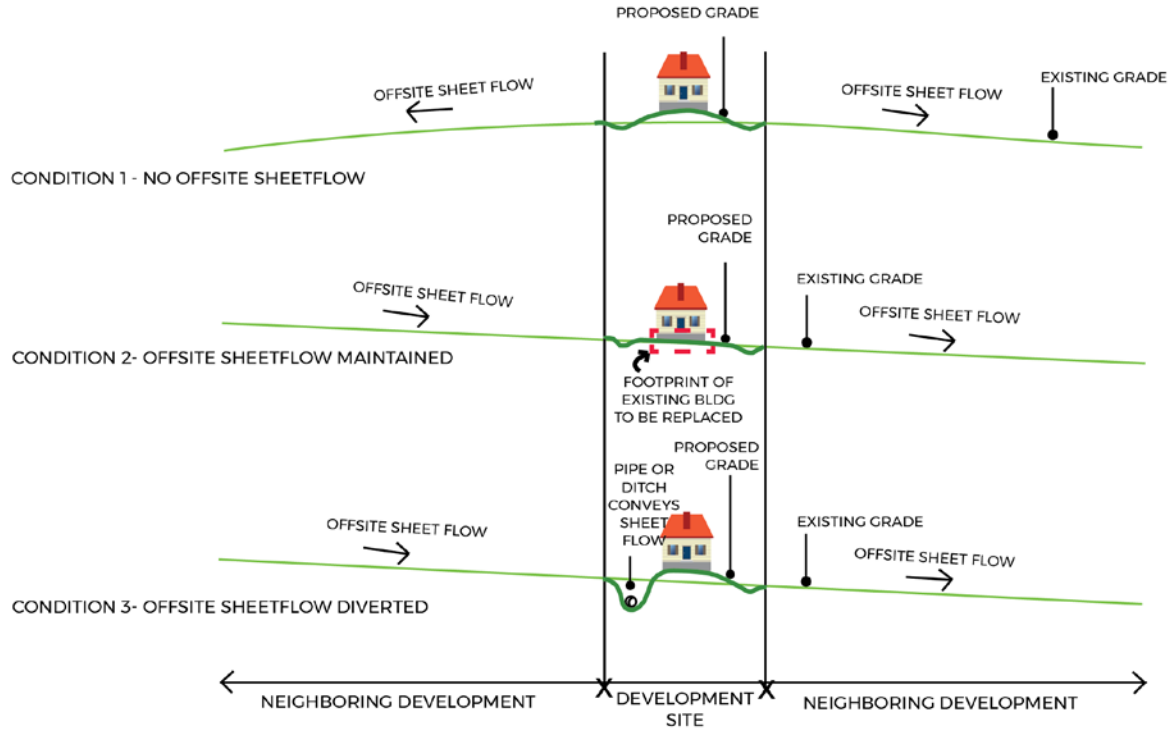
GUIDELINES HIGHLIGHTS

Sheet Flow Analysis

	Condition 1	Condition 2	Condition 3
Sheet Flow Analysis Result	No Existing Offsite Sheet Flow	Existing Offsite Sheet Flow Identified	Existing Offsite Sheet Flow Identified
Fill Requirement	Net Fill Permitted	Net fill permitted in Footprint of existing building to be replaced	Net Fill Permitted
Design Notes	Grading per building code	No other grading changes permitted	Design ditch or pipe to divert offsite sheet flow to appropriate outfall per IDM

GUIDELINES HIGHLIGHTS

Sheet Flow Conditions



GUIDELINES HIGHLIGHTS

Enforcement

Non-Compliance Certificate

- Filed in deed records for non-compliant properties including unresolved substantial damage or temporary repair permit
-

Compliance Certificate

- Filed in deed records reversing non-compliance certificate
-

Non-Conversion Agreement

- Filed in deed records Prohibiting the conversion of areas below minimum flood protection elevation to living space and requiring that floodplain standards be maintained (no certificate of occupancy for residential)
-

Section 1316

- City Engineer can recommend that FEMA deny NFIP flood insurance to violators of provisions of Chapter 19
-

Recertification of Mitigation Facilities

- Property owners are required to submit annual recertification packages for their Mitigation Facility.
-

CLARIFICATIONS

Revisions to guidelines include clarifications outside of ordinance changes

HOW IS SUBSTANTIAL DAMAGE DETERMINED?*

**Cost to
repair
damage**

$\geq 50\%$

of market value of
building (not including land)

Only Applies in the 100-year floodplain

City determines proactively using FEMA or FMO data

City determines reactively based on permitting activity and property owner request

*Not an ordinance change, but procedures are expanded from previous guidelines.

GUIDELINES HIGHLIGHTS

Substantial Damage – Only Applies in 100-year

Substantial Damage Procedures

Substantial Damage Determination Request

- Form for property owner requests
-

Substantial Damage Determination Appeal

- Form and procedure for Appeals
-

Increased Cost of Compliance Letter Request

- Form for property owner requests
-

GUIDELINES HIGHLIGHTS

Documenting City Engineer's Duties

Preliminary Damage Assessment

- Assist OEM and DON in assessing flood damage after a flood event
-

Community Rating System (CRS)

- Manage program and make annual submittals
-

Plan for Public Information (PPI)

- Implement plan, make annual updates and develop new plan every 5 years
-

Floodplain Management Plan (FMP)

- Implement plan, make annual updates and develop new plan every 5 years
-

AW-501 Updates / Community Letter Requests

- Notify FEMA of mitigated properties to change Repetitive Loss or Preferred Risk Policy status for insurance purposes
-

| SCHEDULE

Public comment period ends June 30th



DESIGN STANDARDS

WHAT: Draft Revisions Posted
60 Day Public Input Begins
WHERE: surveymonkey.com/r/HoustonDesignStandards

DESIGN STANDARDS & CHAPTER 19

WHAT: Super Neighborhood Meeting
WHERE: City Hall Annex, 900 Bagby St.

DESIGN STANDARDS

WHAT: Final Report Issued
WHO: Redevelopment & Drainage Task Force

DESIGN STANDARDS & CHAPTER 19

WHAT: Transportation, Technology & Infrastructure Committee
WHERE: City Hall, 901 Bagby St.

FEB

APR

MAY 29

JUN 11

JUN 12

CHAPTER 19

WHAT: Ordinance Amended
WHO: City Council

CHAPTER 19

WHAT: Draft Guidelines Posted
30 Day Public Input Begins
WHERE: pwe.director@houstontx.gov

DESIGN STANDARDS & CHAPTER 19

WHAT: Open House
WHERE: Houston Permitting Center, 1002 Washington Ave.



DESIGN STANDARDS & CHAPTER 19

WHAT: Open House
WHERE: TBD

DESIGN STANDARDS

WHAT: 60 Day Public Input Closes
WHERE: surveymonkey.com/r/HoustonDesignStandards

DESIGN STANDARDS

WHAT: Open House
WHEN: TBD

DESIGN STANDARDS

WHAT: Council Action to Amend Building Codes & Approve IDM Updates
WHERE: City Hall, 901 Bagby St.

JUN 29

JUL 16

JUL 30

SEPT 1

CHAPTER 19

WHAT: Public Input Posted
WHERE: HoustonRecovers.org/Chapter19

CHAPTER 19

WHAT: Final Guidelines Posted
WHERE: HoustonRecovers.org/Chapter19

CHAPTER 19

WHAT: Transportation, Technology & Infrastructure Committee
WHERE: City Hall, 901 Bagby St.

CHAPTER 19

WHAT: 30 Day Public Input Closes
WHERE: pwe.director@houstontx.gov

CHAPTER 19

WHAT: Final Guidelines Posted + Go Into Effect
WHERE: HoustonRecovers.org/Chapter19

QUESTIONS

www.houstonrecovers.org