

Addendum to County of San Mateo Drainage Manual (March 2023)

Addendum: October 2026

Any proposed runoff from a private property/development that drains, flows, or connects into a county-maintained drainage facility within the public right-of-way must be approved by the County of San Mateo Department of Public Works.

The definition of “pre-development” runoff and “post-development” runoff are provided in the County of San Mateo Drainage Manual (2023).

Purpose and Geographic Scope

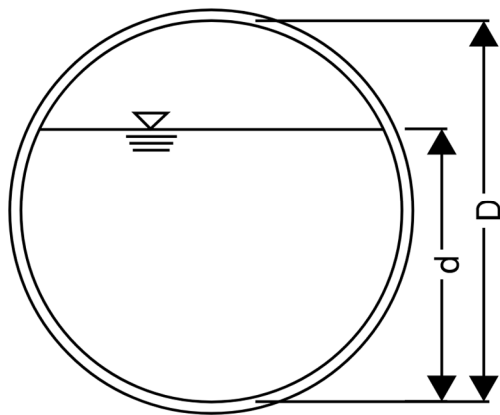
This addendum seeks to clarify some of the ambiguity in the current version of the County of San Mateo Drainage Manual (2023) regarding the integration of impervious areas within both the project parcel and the associated public right-of-way (ROW).

The drainage calculation and regulatory threshold determinations for a project must account for the total project footprint. This footprint is inclusive of all work areas spanning private property boundaries and public space in the public ROW.

Connections to County Drainage Systems

Connections to existing County-owned and maintained drainage facilities are strictly controlled. Exceptions may be granted at the discretion of the Director of Public Works or assigned staff, provided the applicant submits comprehensive hydrologic and hydraulic calculations demonstrating that the downstream County system possesses adequate capacity to convey existing (historic) flows plus all new project-generated peak runoff.

Capacity Standard: Adequate downstream capacity is defined as maintaining a peak coincident flow rate at or below 75% of the design capacity of the existing pipe ($Q_p/Q_d \leq 0.75$) within the existing storm drain system during 10-year design storm events. Compliance must be demonstrated through a Hydraulic Grade Line (HGL) analysis that accounts for downstream tailwater conditions and backwater effects. The analysis must prove that this threshold, corresponding to $d/D \leq 0.67$, is maintained within the County system when evaluating the cumulative impact of existing historic flows combined with all new project-generated peak runoff.



$$Q_p/Q_d \leq 0.75, \text{ and}$$

$$d/D \leq 0.67, \text{ where:}$$

Q_p = Proposed flow

Q_d = Original design flow

d = Height of proposed flow in pipe

D = Inner pipe diameter

Figure 1: Proposed Flow Requirements for Connections to County Drainage Systems

All permitted and new storm drain connections to the County system will require a maintenance agreement with the Department of Public Works. The County of San Mateo Public Works Department reserves the right to deny connection requests, and/or require localized capacity upgrades at the applicant's sole expense.

Prohibition on infrastructure in ROW: No C.3 stormwater treatment facilities or green infrastructure systems (such as bioretention cells, infiltration trenches) shall be permitted within the public right-of-way. All stormwater treatment and hydromodification management (i.e., controlling post-development flow to match pre-development flow) must be accommodated entirely on-site within the private parcel.

The Development may not be phased, split or carved out into smaller projects to avoid meeting drainage or treatment requirements.

The following is an existing definition from page 5 of the Drainage Manual, followed by the clarifying definition with changes in bold:

Existing Definition:

Total Project Impervious Area: The sum of all impervious surface areas created and/or replaced as part of the proposed project. Total Project Impervious Area includes any impervious areas planned for construction in the project parcel in the next three years, as well as any impervious areas created and/or replaced in the project parcel in the ten years preceding the current permit application without a building permit. If your redevelopment project replaced 50 percent or more of the impervious surface of a previously existing development, then your Total Project Impervious Area includes all existing, new, and/or replaced impervious surfaces within the entire parcel. If your project replaces less than 50 percent of existing impervious surfaces, then your Total Project Impervious Area includes only the impervious area created or replaced as part of your project. See Section 2.1 Defining Your Project, STEP 2 Impervious Area Calculations for more information.

Clarifying Definition:

Total Project Impervious Area: The sum of all impervious surface areas created and/or replaced as part of the proposed project. Total Project Impervious Area includes any impervious areas planned for construction in the project ~~parcel~~ **limits of work** in the next three years, as well as any impervious areas created and/or replaced in the project ~~parcel~~ **limits of work** in the ten years preceding the current permit application without a building permit.

If your redevelopment project replaced 50 percent or more of the impervious surface of a previously existing development, then your Total Project Impervious Area includes all existing, new, and/or replaced impervious surfaces within the entire ~~parcel~~ **project limits of work**. If your project replaces less than 50 percent of existing impervious surfaces, then your Total Project Impervious Area includes only the impervious area created or replaced as part of your project **limits of work**. See Section 2.1 Defining Your Project, STEP 2 Impervious Area Calculations for more information.

****This page from the County of San Mateo Drainage Manual is for reference only****

Table 2-1. Impervious Surface Area Calculation Guide

Category of Impervious Surface		Description
A	New Parcel Impervious Surface	The sum of all new impervious surface areas to be created within the project parcel
B	Replaced Parcel Impervious Surface	The sum of all existing impervious surface areas to be replaced within the project parcel
C	Retained Parcel Impervious Surface	The sum of all existing impervious surfaces to be retained within the project parcel
D	New Right-of-Way Impervious Surface	The sum of all new impervious surface areas to be created in the public right-of-way
E	Total Project Impervious Area	The sum of all impervious surface areas created and/or replaced as part of the project (A + B + D)*
F	Parcel Impervious Area	The sum of all impervious surface areas within the project parcel following completion of the project (A + B + C)

*If >50% of existing impervious is replaced, then your Total Project Impervious Area includes the entire parcel consisting of all existing, new, and/or replaced impervious surfaces (A+B+C+D).

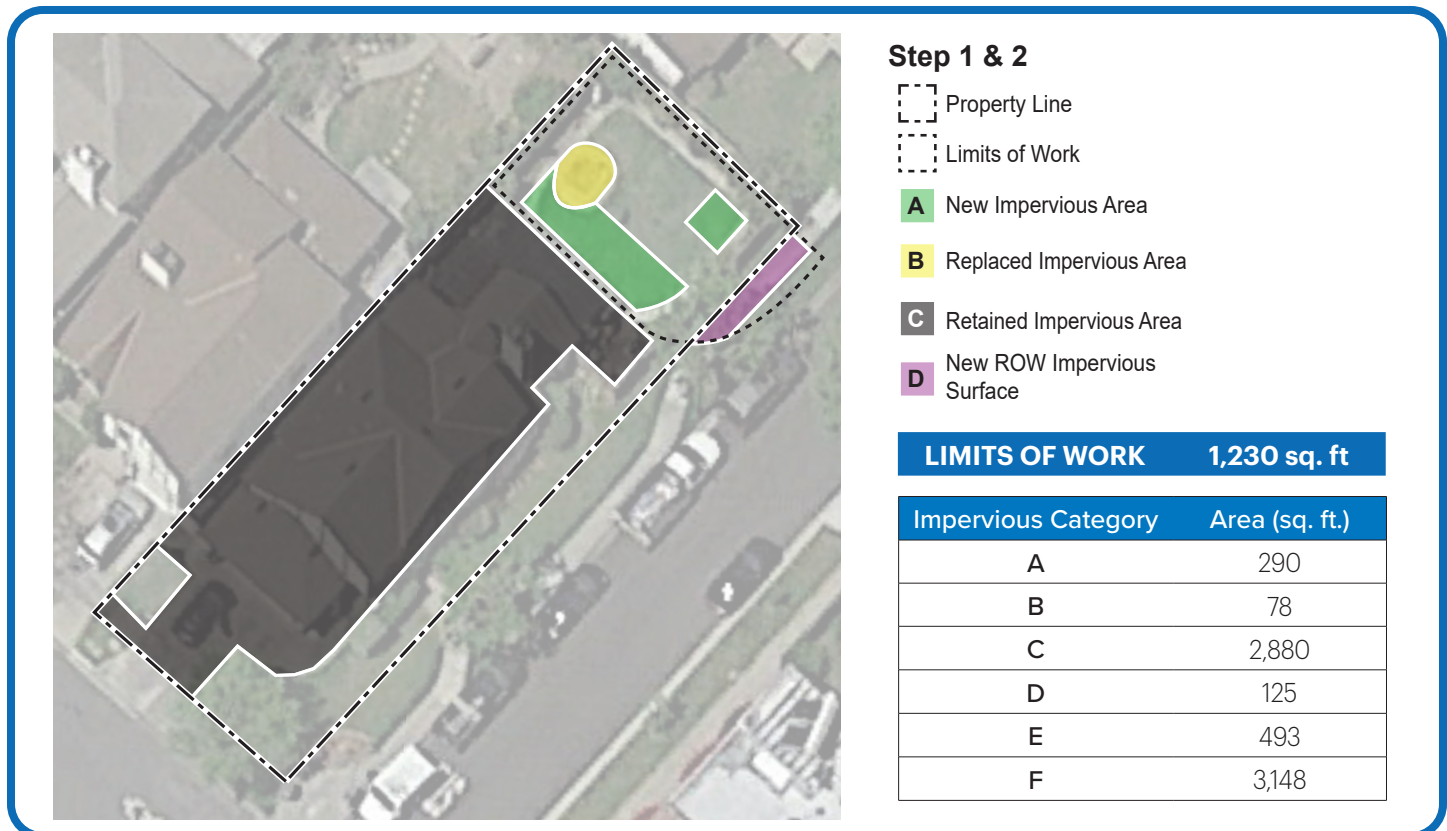


Figure 2-1. Example Parcel – Steps 1 & 2 Limits of Work & Impervious Area Calculations