

如何为



小型施 工项目

编制侵蚀和沉
积物控制计划

1A类、1B类和2类



檀香山市和县

SIMPLIFIED CHINESE

2019年7月

施工项目会导致污物和其他废物流入河流和海洋。



施工项目使土壤暴露。

下雨时，或者如果在施工现场用水，污物会随着水一起流出现场，流入排水管道。



污物和其他废物流顺流而下。



污物和废物流入海洋。

使用本手册中所述的水质保护措施 / 最佳管理实践 (BMP) 来保护河流和海洋。



檀香山市和县

如何为小型施工项目编制侵蚀和沉积物控制计划 1A、1B 和 2 类

本手册的目的

本手册的目的是提高流入檀香山市雨水排放系统的径流质量，减少河流和海洋中的污染物。

本手册适用于需要建筑和 / 或分级许可且土地扰动活动面积小于一英亩的住宅和商业项目。涉及土地扰动活动并可能造成檀香山市雨水排放污染的常见建筑许可项目包括：

- 挡土墙和栅栏
- 地基修复和重建
- 人行道和车道的维修和重建
- 房屋拆迁、扩建和新建住宅
- 游泳池
- 公用设施（即管道、电气等）

这些项目被归类为 1A 类、1B 类或 2 类项目或小型开发项目。根据《水质规则》（城市管理规则 §20-3），1A 类、1B 类和 2 类项目必须有包含检查表、现场示意图和项目进度表的侵蚀和沉积物控制计划。本手册帮助房屋业主和承包商确定他们的项目类别，为制定侵蚀和沉积物控制计划提供指导，并说明水质保护措施或最佳管理实践（BMP），如 biosocks 和淤泥栅栏。

小型开发项目，如安装栅栏柱，必须在施工计划中包括所需的最佳管理实践说明，但不需要侵蚀和沉积物控制计划。

向城市排水系统排放污染物（包括沉积物）的项目工地将收到违规通知，并会被罚款。

本手册使用方法

以下是使用本手册确定项目需求以及如何满足项目需求的步骤。

步骤	本手册章节
1 使用流程图确定您的 项目类别 。	概述
2 查看 项目类别要求 。	概述
3 确定在您的项目现场使用哪些 最佳管理实践 (BMP) 。	保护措施 /BMP
4 查看 已完成的项目表格的示例 。	现场示意图 / 案例研究
5 查看 检查要求 。	检查表格样本

大写术语

为保持一致性，檀香山市和县水质规则 (§20-3-3) 中的大写和定义的单词或短语在本手册中均为大写。

如何为小型施工项目编制侵蚀和沉积物控制计划

1A类、1B类和2类

概述

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定义和填筑许可标准（见第 3 页）

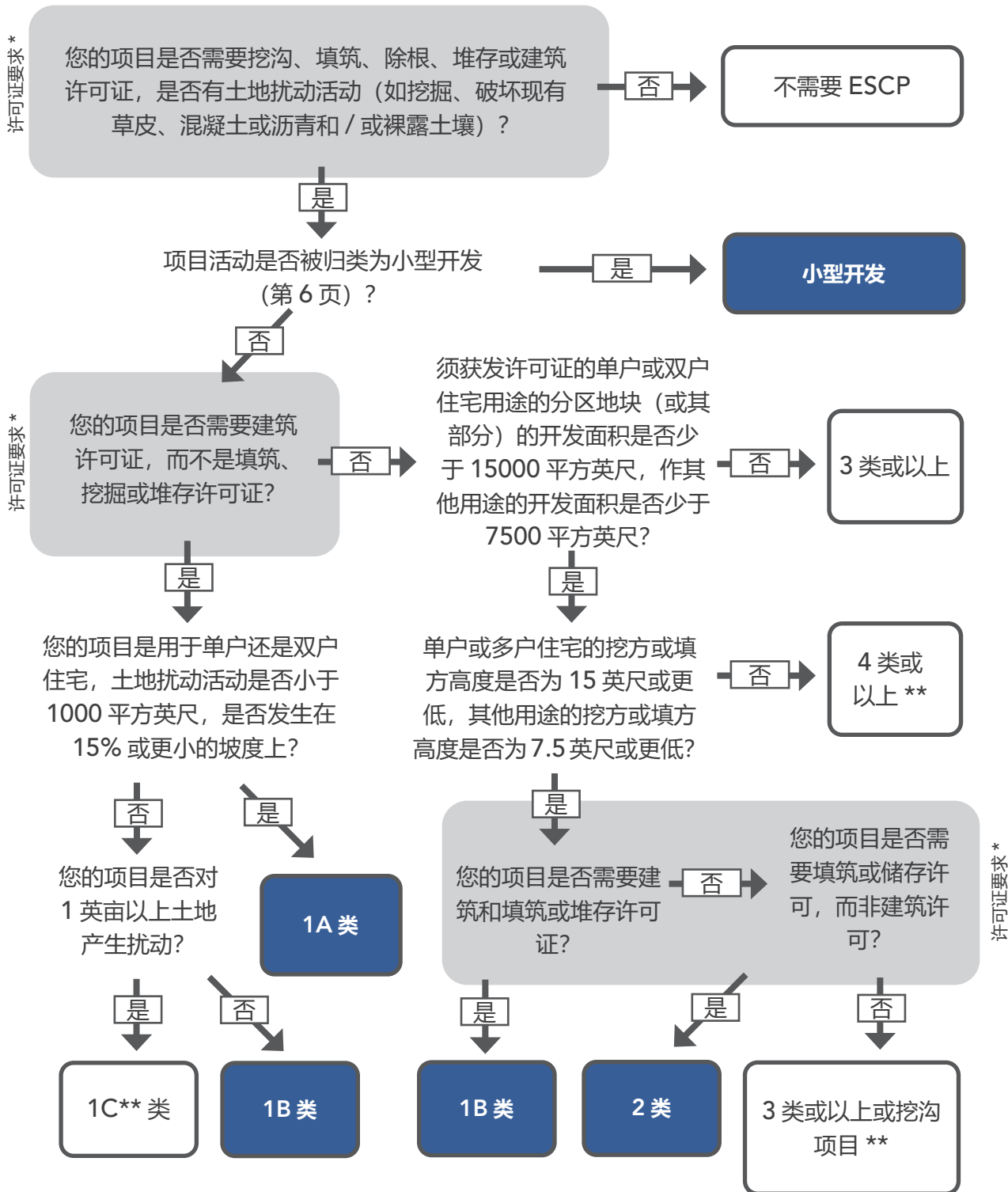
填筑任何挖掘或填充或其任何组合。

填筑许可当垂直高度为 50 立方码或更大或 3 英尺或更大时，或者当相对于相邻的物业改变排水模式时，需要有填筑许可。

除根将包括树木、林木、灌木和植物在内的植被从地表移走或连根拔起的任何行为。在对 15000 平方英尺或以上的区域进行除根时，需要除根许可证。

堆存将超过 100 立方码的土料临时露天贮存在任何场所（已获发填筑许可证的场所除外），以便日后在其他场所使用该物料作为填料。

识别您的项目类别



注

* 如果一个项目除其他许可外还需要挖沟许可，则更高的项目类别 (1A、1B、1C、2-5) 适用，除非该项目被归类为小型开发项目。

** 本手册不包括 1C 类、3 类或更高类别以及挖沟项目的要求。

扰动面积

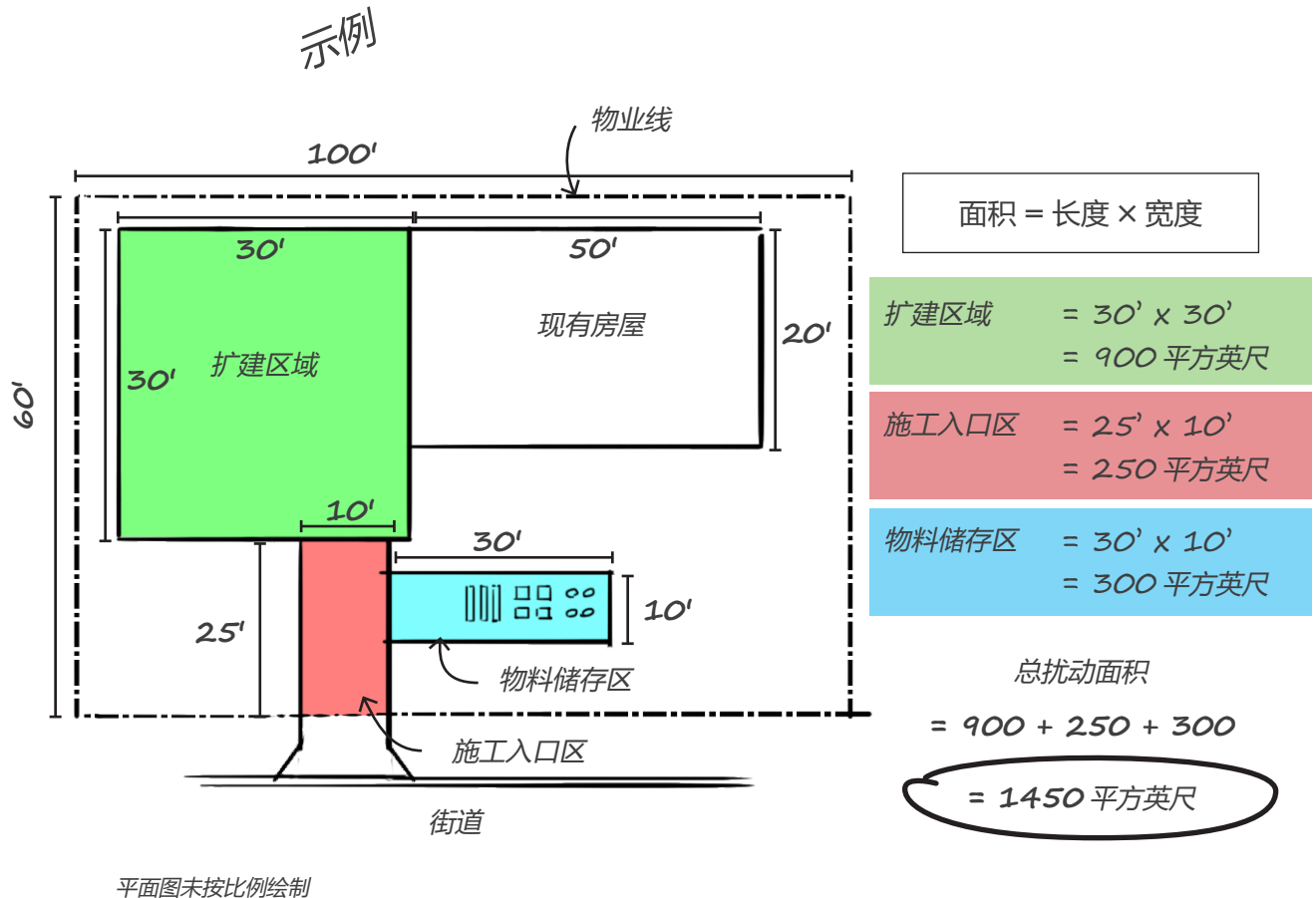
扰动面积是指现有地面受到扰动且下方土壤暴露的任何区域。

地面扰动活动的例子包括：挖掘；破坏现有草皮、混凝土或沥青；暴露裸露的土壤；重型卡车进出；挖掘、设备储存 / 转移；拆除现有基础 / 结构和建造新结构；填筑、挖掘和挖沟。

要计算项目的扰动面积：

1. 测量所有地面扰动区域（包括任何施工通道和储存 / 中转区域）的长度和宽度，单位为英尺。
2. 将每个区域的长度乘以宽度。
3. 将单块扰动面积相加以获得总扰动面积，或者当整个地块被扰动时，使用整个地块的总面积。

例如：住宅扩建工程



坡度

如果您的扰动区域包括有坡度的地面，则应测量和计算该坡度。要计算项目的扰动区域的坡度：

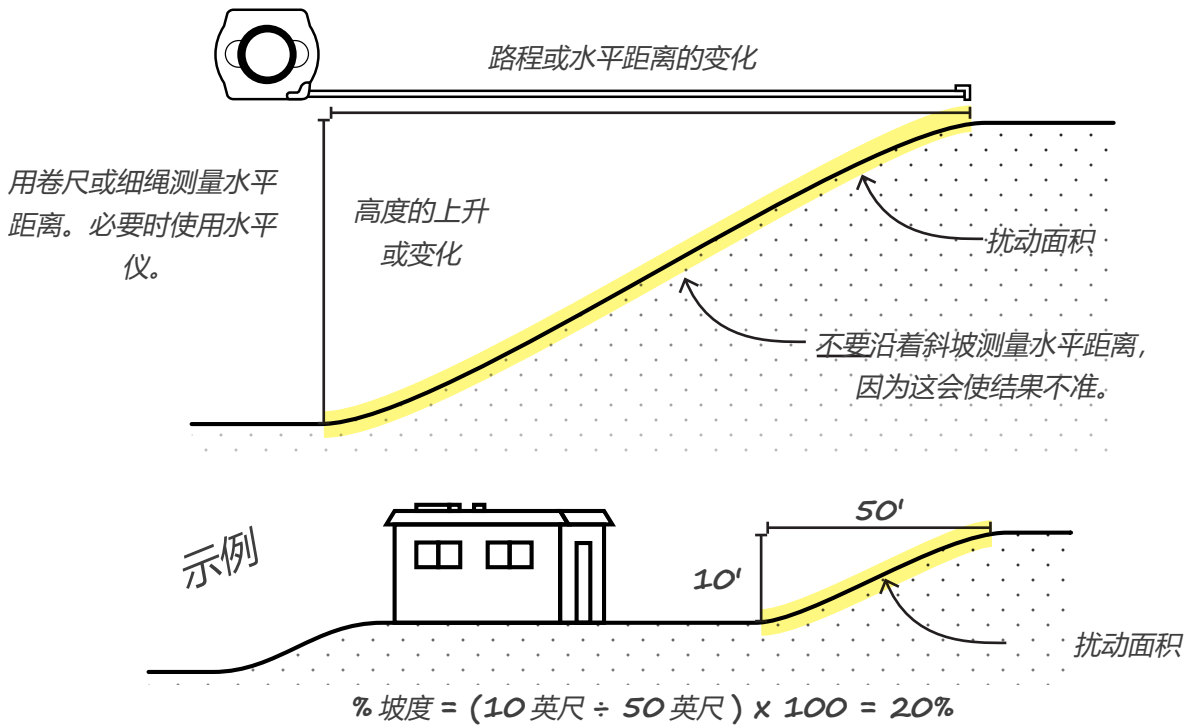
第 1 步 测量扰动区域内的高度**上升**或变化。

第 2 步 测量高度发生变化的**路程**或水平距离。确保使用与第 1 步相同的测量单位（如英尺、码）。

第 3 步 将上升数除以路程数，然后乘以 100。

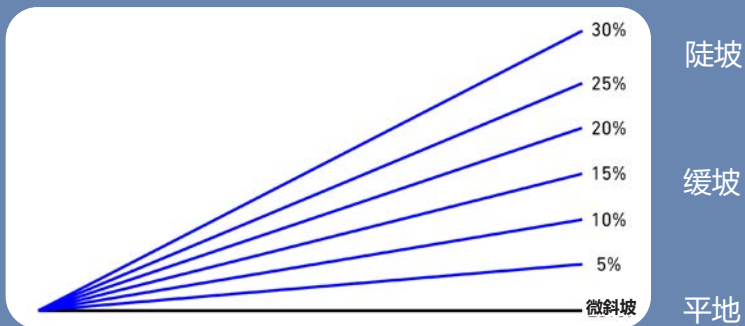
$$\% \text{ 坡度} = (\text{上升} \div \text{路程}) \times 100$$

注：如果您的坡度跨越很长一段距离，可以测量小段距离的上升和路程。然后将所有上升测量值相加得到总上升，并将所有路程测量值相加得到总路程。



替代方法

使用下面的图表和你的手来查看项目的最陡坡度，从而估算现场坡度。



1B 类、1A 类、2 类和小型开发标准

1B 类、1A 类、2 类和小型开发项目由檀香山市和县规划和许可部《水质规则》(城市管理规则 §20-3) 定义。

1A 类、1B 类、2 类和小型开发项目需要建筑许可证和 / 或填筑、挖掘或堆放许可证和 / 或挖沟许可证，分类如下：

1A 类项目标准：

- 住宅单户或双户独立开发，以及
- 该项目的总扰动面积小于 1000 平方英尺
- 项目区坡度小于 15%。

1B 类项目标准：

- 不到一英亩扰动面积的开发，需要建筑许可证，不符合 1A 项目标准，不需要填筑、挖掘或堆存许可证；或者
- 须获发许可证的单户或双户住宅用途的分区地块或其部分的开发，开发面积少于 15000 平方英尺，以及其他需要建筑许可证和填筑或堆存许可证的用途的分区地块或其部分的开发，开发面积少于 7500 平方英尺。
- 住宅单户或双户独立开发，扰动区域坡度为 15% 或更大。

2 类项目标准：

- 对于需要填筑或堆存许可证而不需要建筑许可证的开发，须获发许可证的作单户或双户住宅用途的分区地块（或其部分）的面积少于 15000 平方英尺，作其他用途的开发面积少于 7500 平方英尺。

小型开发

需要挖沟、建筑、填筑、除根或堆存许可证且项目范围仅限于以下活动的开发被视为小型开发：

- 单户或双户住宅用栅栏、地板、屋顶覆盖物和棚架的基础 * 或支柱的安装。
- 土地扰动活动仅限于不扰动土地的许可工程的附带设备和材料脚手架的工程，例如，封闭现有室外天井或广场或保留现有混凝土板的二层加建设施。
- 完全在屋顶或其他围栏下进行的土地扰动活动，以及现有场地条件阻止雨水流入扰动区域的活动。
- 除围墙、挡土墙和车道挡板项目外，上述未列出的干扰不超过 120 平方英尺土地的工程。（小于 120 平方英尺的围墙、挡土墙和车道挡板项目需要侵蚀和沉积物控制计划。）
- 城市通行权范围内为一处物业服务的支线挖沟项目。

* 栅栏和墙壁的连续（或线性）基础不被视为次要开发，需要侵蚀和沉积物控制计划。

1A/1B/2 类要求

1A 类、1B 类和 2 类项目要求：

1. 由业主或授权代理人编制的侵蚀和沉积物控制计划 (ESCP)。
2. 许可证发放前指定一名 ESCP 协调员 (规则附录 A 或附录 B)。
3. 施工前由 ESCP 协调员进行现场检查, 每 30 天检查一次, 直到完工, 如果项目在不 到 30 天内完工, 则为中途检查。

如何创建 ESCP

- 完成 ESCP 小型项目模板 (规则附录 B) 或作为计划注释的一部分。
- 在 ESCP 小型项目模板上创建一份现场示意图, 或将其包含在施工图中。本手册第 26 页提供了一份现场示意图图例, 后面是案例研究示例。
- 建立项目进度表, 提供一系列 BMP 活动。

Appendix B
City and County of Honolulu
Erosion and Sediment Control Plan Small Project Template
for Categories 1A, 1B and 2

Construction Site Project Name: _____
Physical Site Address: _____
Building Permit Application Number: _____
Disturbed Area (square-feet)*: _____

Instructions:
Use this template to prepare an Erosion and Sediment Control Plan (ESCP) for projects under the City and County of Honolulu, Department of Planning and Permitting (DPP) Categories 1A, 1B, and 2. This ESCP may be prepared and must be signed by the property owner or an authorized agent designated by the owner. Submit a completed ESCP with the building permit application and keep a copy of the approved ESCP on the job site at all times. Any changes to the approved ESCP must be approved by the DPP.

1. EROSION PREVENTION BMPs: practices that prevent erosion from occurring.

1. Permanent Stabilization (REQUIRED)
Prior to closing of any permits permanent stabilization must be in place which includes the following requirements:
 • All exposed disturbed areas must be permanently stabilized with ground covering such as vegetation, gravel, or pavers;
 • Rain gutters, downspouts, and channelized flows must be installed and functioning as designed;
 • In seeded areas, grass or vegetation must cover at least 90 percent of the disturbed soils or must be temporary stabilized while it is growing;
 • Temporary measures, such as sediment barriers, should be removed when permanent measures are in place;
 • All paved surfaces must be clean; and
 • Storm drain inlet filters must be removed after all cleanup activities have been completed.

2. Slope Management and Protection (Categories 1B and 2 only)
Areas disturbed on a slope greater than 3% must be protected when work is inactive for seven (7) days or more.

To find the slope, divide the vertical height of your slope by the horizontal length of your slope and multiply by 100. For example, if your slope measures 3 feet vertically, and 10 feet horizontally, your slope would be 3 / 10 X 100 = 30%.

Check if will be used:

1. Rolled erosion control products	<input type="checkbox"/>
2. Hydraulic mulch or hydrossed	<input type="checkbox"/>
3. Hydraulic or bonded fiber matrix	<input type="checkbox"/>
4. Planting and/or vegetation providing at least 70% surface cover	<input type="checkbox"/>
5. Other: (please specify)	<input type="checkbox"/>

If this BMP will not be used, provide brief explanation: _____

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Appendix B
SITE DIAGRAM

Provide a drawing of your site below or attach another map. Include the building outlines, property boundary or fence line, the limits of where your work will be located, flow arrows indicating direction of storm water runoff, location of BMPs, and any storm drains within 50 feet of your property. The drawing does not need to be to scale.

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小型开发项目要求

1. 填写一份小型开发认证表，并由业主或其授权代理人签字。具有最小扰动面积的低风险小型开发项目（例如，设备和材料分段、单侧挖沟）不需要小型开发认证。
2. 小型开发项目不在 ESCP 要求之内。然而，小型开发项目必须在批准的建设计划（檀香山市和县行政规则 20-3-14(i)(3)）中包括 BMP 说明。

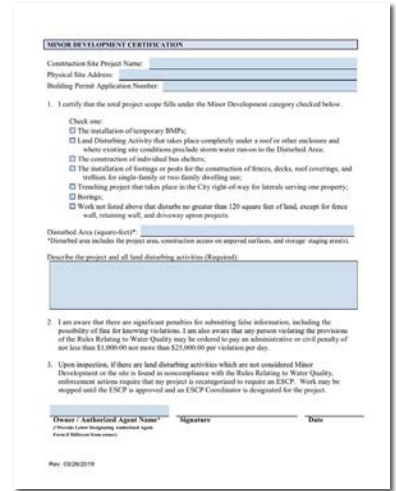
小型开发项目侵蚀和沉积物控制说明：

- (i) 使用最佳管理实践 (BMP) 来防止和减少污染物从项目现场排放到场外街道、雨水管道、溪流和海洋。潜在污染物包括但不限于土壤、石油产品、油漆、溶剂、建筑拆除废物、垃圾、流动厕所、空调材料、混凝土和任何其他液体、铺路材料或冲刷材料，如果这些材料释放到环境中，会造成危害。
- (ii) 除非计划在 14 天内进行积极施工，否则对于该活动中暴露的土壤必须立即使用植被、砾石、铺路材料、碾压侵蚀控制产品或同等方法永久或临时稳定。
- (iii) 必须妥善控制和处理所有建筑垃圾和冲洗水。
- (iv) 每天必须对场外留下的沉积物进行清扫或吸尘。
- (v) 项目现场的污物不得运输或排放到场外区域。施工必须符合夏威夷行政规则所载的空气污染控制标准：标题 11 第 60.1 章，「空气污染控制」。

有关 BMP 的更多信息，请参考本手册中的 BMP 章节。

注：根据 §20-3-14(i)(2)，如果规划和许可部主任认定有必要实施 ESCP，则可通过对项目进行重新分类，从而要求小型开发项目业主制定和实施 ESCP

如果在施工期间，建筑检查员确定有关项目不是小型开发项目，将指示承包商停止工作，并在继续之前获得经批准的 ESCP。开工时没有经批准的 ESCP，将收取 500 美元（双倍）的 ESCP 审查费。伪造建筑许可证申请会被处以额外罚款。



执行 ESCP

对 ESCP 的执行包括指定一名经认证的 ECSP 协调员，购买和安装 BMP 供应品，并在施工前两周通知规划和许可部检查员。

ESCP 协调员

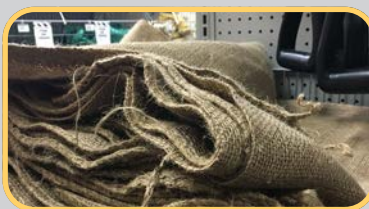
- ESCP 协调员是指目前拥有规划和许可部颁发的 ESCP 协调员证书的人。可以通过在线培训获得该认证（参见本手册封底内的参考资料）。如果业主参加了在线培训并获得认证，也可以成为 ESCP 协调员。
- ESCP 协调员负责 ESCP 在项目现场的执行。ESCP 协调员还负责进行所需的检查（第 46 至 50 页的示例），向市和县提交检查报告，并确保在需要时正确设置和更换 BMP。
- 如果在项目期间，您需要更改您指定的 ESCP 协调员（例如，将 ESCP 协调员从项目设计者更改为承包商），请使用规则的附录 A。



Biosock



淤泥栅栏和支架



用于临时边坡稳定的麻袋



填充沙子或砾石的聚丙烯袋

哪里可以找到供应品

大多数供应品在安全用品商店有售，精选用品在家庭装修商店有售。

项目计划 / 施工开始日期通知

在项目开始前两周通知建筑许可证底部列出的规划和许可部门检查员。

如果列出了多个检查员（如电气、管道、建筑），通知首先开始的工作的检查员。

项目进度表样本

行动	时间表
将项目开始日期通知规划和许可部	开始施工前两周
安装保护措施	1 天
场地清理	3 天
施工（例如，安装铁丝网围栏）	1 周
种植草皮（包括覆盖 70% 以上面积的时间）或安装其他永久固定装置	2 个月
移除保护措施	1 天

永久固定

在建筑工程完成后进行永久固定，必须在停止建筑许可之前到位。

永久固定意味着：

- 暴露的扰动区域用植被、砾石或铺路材料等地面覆盖物来固定。如果使用草或植被，必须覆盖至少 90% 的扰动土壤，或者在生长过程中暂时固定；
- 雨水沟、落水管和渠化水流按照设计安装和运行；
- 所有铺砌表面保持干净；
- 一旦永久性措施到位，适当移除淤泥栅栏和 biosocks 等临时措施或 BMP；以及
- 所有清理活动结束后，移除雨水排放入口过滤器。

移除 BMP

业主和承包商应确定并明确沟通谁将负责正确移除 BMP。临时最佳管理实践应在城市有关部门进行最终现场检查并同意现场足够稳定后予以移除。

雨水排放口 / 滤污器保护

1. 一旦项目现场足够稳定，移除 BMP。
2. 清扫雨水排放口或滤污器周围沉积物或其他碎屑可能聚集的区域。
3. 清除并处置积聚在 BMP 上的沉淀物或碎屑。

注：当施工期间有暴雨威胁时，必须暂时拆除雨水排放口 BMP，以防止洪水。BMP 的临时移除也必须遵循适当的程序。

移除 BMP

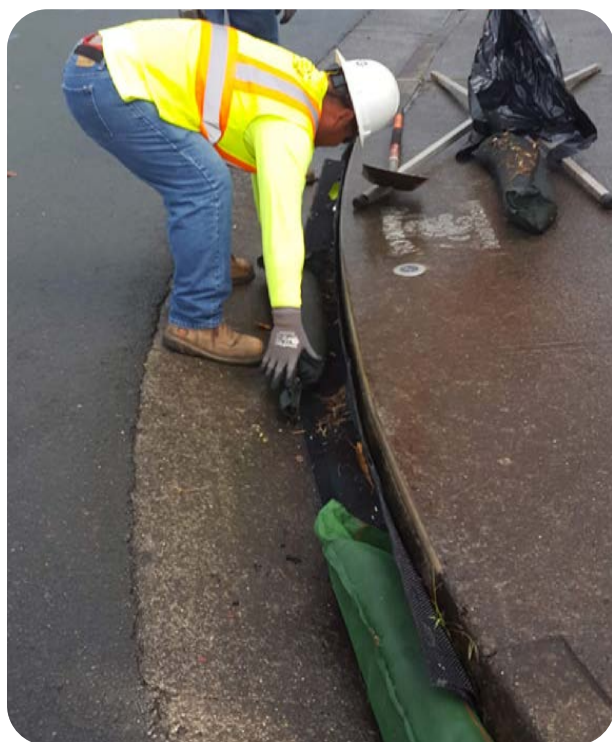
淤泥栅栏

1. 让植被覆盖现场。在 90% 的区域由植被覆盖后移除，而不是之前。
2. 清除淤泥栅栏后面残留的土壤。
3. 移除滤布和木桩。
4. 回填、平整并压实该区域。
5. 在移除淤泥栅栏的任何新裸露的土地上种植更多的植被。

BIOSOCKS、沙袋和砾石袋

1. 施工完成且现场永久稳定后，移除 BMP。
2. 从该区域解除 BMP。
3. 清扫留下的污物。
4. 通过清空植被区（如花园）的内含物来处理覆盖物填充的保护套，因为那里会有土壤残留——而不是斜坡区域！

如果 biosock 不是为重复使用而设计的，请将织物材料放入垃圾桶。为再利用而设计的 biosocks 应在重新收集沉积物的区域进行冲洗，以防止沉积物进入雨水排放口。



从该区域解除 BMP。



清扫留下的污物。

斜坡管理 / 临时稳定

15% 或以上的坡度被认为是陡坡，需要特别注意。如果预计会下雨或在施工计划开始前，尽可能不要扰动陡坡。如果陡坡暴露，且工程需暂停 7 天或更长时间，则需要实施临时保护措施 /BMP。

植被

- 用植被固定土壤。可能需要浇水。



- 种子或植物生长过程中，用黄麻或椰子纤维垫来保持土壤。

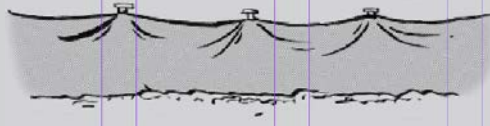
使用 BIOSOCKS 或淤泥栅栏

Biosocks 或淤泥栅栏是植物和种子开始生长时的备用系统。在斜坡底部和项目边缘使用它们，直到植物覆盖至少 70% 的面积。

Biosock



淤泥栅栏



斜坡管理 / 临时稳定

用垫子盖住斜坡

裸露的斜坡和地面可以覆盖淤泥织物、椰子纤维或黄麻网，以防止泥土被冲走。



- 淤泥织物可以用来覆盖斜坡和裸露的地面。
- 覆盖土壤也有助于保持施工现场的清洁。



- 通过钉住、压入、挖沟或用沙袋加重，确保垫子固定在斜坡的顶部和底部。



- 塑料或织物是暴露垂直面的绝佳选择。

斜坡管理 / 临时稳定

水力覆盖物或水力种子



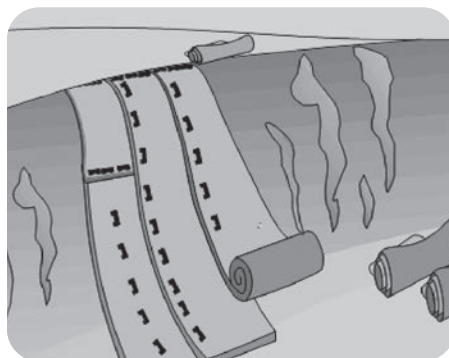
水力覆盖是在裸露的土壤上喷洒纤维。水力播种是将种子和纤维喷洒在裸露的土壤上。



- 通常用于大型建筑工地。
- 在斜坡底部使用 biosocks 或淤泥栅栏，直到植物覆盖至少 70% 的面积。

土工织物和地垫

土工织物和地垫靠着斜坡铺设，以保持土壤并让水通过。



- 土工织物和地垫适用于短陡坡。
- 通常用于大型项目现场。

上坡水分流

场外的水可能流入施工现场，增加现场的土壤侵蚀。斜坡顶部的 Biosocks 和淤泥栅栏可以最大限度地减少雨水流入现场。

除根植被移除

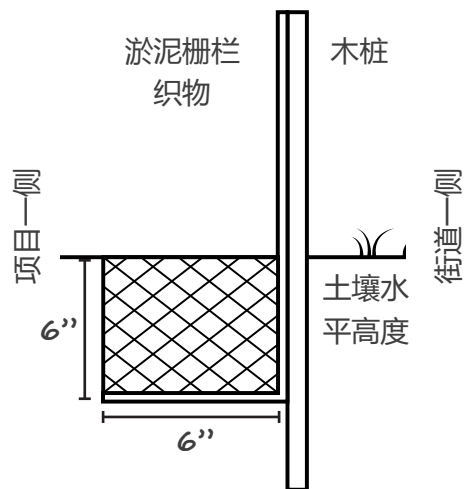
不要把挖掘过的材料和植物留在斜坡上，因为它们会冲刷到溪流或雨水排放系统中。移除它们并用不会被冲走的材料保护斜坡。

周边控制

淤泥栅栏



淤泥栅栏是将土壤保持在栅栏内的织物屏障。



淤泥栅栏处挖沟以将材料锚定在栅栏的项目一侧

- 适合不需要进出的区域。
- 定期将淤泥栅栏固定在支架上。

- 底部挖沟筑淤泥栅栏。
- 将屏障顶部置于土壤水平高度以上。



- 屏障太低，无效。
- 定期检查损坏情况。



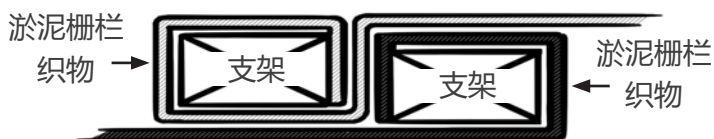
- 可以允许消防栓进入，但需要在淤泥栅栏上挖沟，并沿人行道边缘使用 biosock。



- 需要重叠以避免产生水和污物通过的缝隙。
- 将织物缠绕在支架上，并与相邻支架重叠，以避免间隙。

淤泥筛

淤泥筛是一种低矮、可重复使用的织物栅栏，可以过滤泥沙，让水通过。

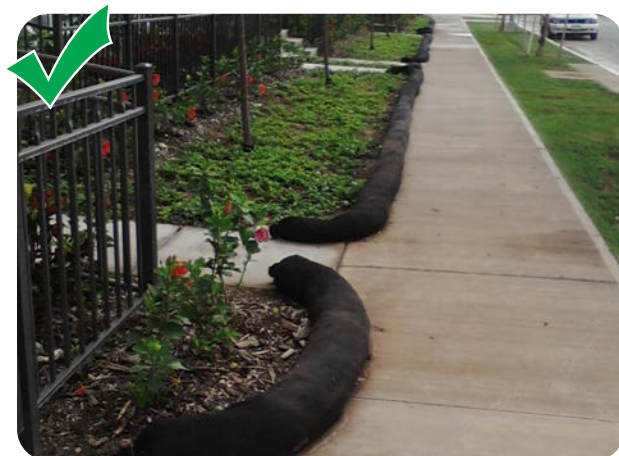


周边控制

BIOSOCKS



Biosocks 是填充有堆肥、纤维或其他有机材料的织物管。它们适用于高斜坡、堆存和景观设施，也适用于步行交通的区域，因为它们很容易跨过。堆肥过滤织物管的直径必须至少为 8 英寸。



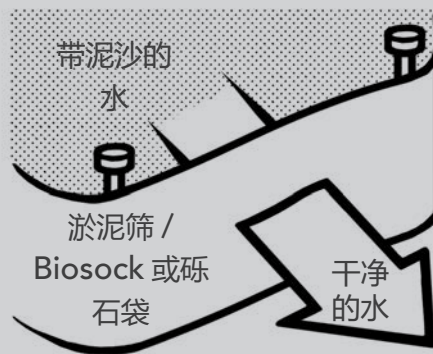
- 将 biosocks 重叠放置至少 6 英寸高，水就无法流出。
- 保持原位，直到所有的植物都生长进去。
- 将 biosocks (和淤泥栅栏) 的末端朝水流方向包裹起来，以阻止带污物的水离开现场流入雨水排放口。
- 暴雨期间可能需要木桩来固定 biosocks。

沙袋和砾石袋



- 沙袋和砾石袋可以用来代替 biosocks。
- 沙袋和砾石袋也可以用来固定淤泥织物。

工作原理



雨水排放口保护

保护雨水排放口，尤其是距离项目现场 50 英尺以内的入口。

在风暴发生之前，移除暴雨排水入口保护，以防止洪水；之后重新安装。

路边的排水沟



- 将 biosock 延伸到雨水排放口之外，这样水就不会流过。



- 固定这种保护措施的一端。



- 确保并保持雨水排放保护措施，以防止故障。
- 经常检查其有效性。

排水格栅入口



- 将淤泥织物固定在格栅下。



- 将淤泥织物固定在格栅周围。

BMP 和现场维护

1A 和 1B 类项目要求按照城市规则规定的时间间隔进行检查。不进行必要的检查可能会受到罚款和处罚。1A 类和 1B 类项目要求指定的侵蚀和沉积物控制计划 (ESCP) 协调员执行以下最低数量的检查：

- **施工前检查：**该检查应在项目施工开始前进行，以验证您的 ESCP 中描述的所有保护措施安装正确且工作正常。
- **施工检查期间：**检查应每 30 天进行一次。对于将在 30 天内完成的项目，应在项目中途进行检查。
- **施工后检查：**该检查应在项目结束时进行，以确认所有扰动区域已经稳定，所有临时保护措施（如淤泥栅栏入口保护等）已被移除。停止建筑许可需要提交检验报告和永久稳定。

检查报告使用《水质规则》附录 C。本手册的检查章节提供了示例。

维护期间

- 检查期间，检查保护措施 /BMP 是否正确安装。
 - 淤泥栅栏被塞入，并适当重叠。
 - Biosocks 朝水流方向呈 J 形钩住和 / 或重叠至少 6 英寸。
 - 覆盖和固定堆存物料。
- 如果安装的 BMP 不能正常起作用，可能需要安装额外的 BMP。
- 如果某个 BMP 损坏，修理或更换它。
- 重新安装并固定淤泥栅栏或其他掉落物品。



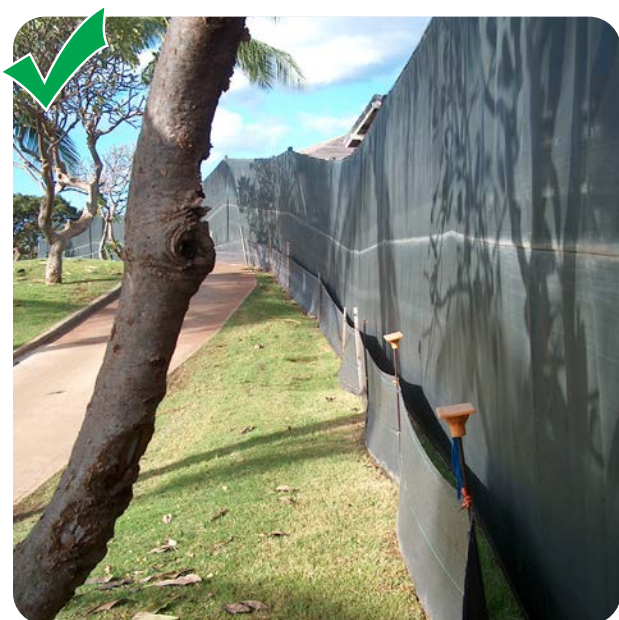
尘埃控制

洒水

- 水可以用来防止灰尘吹离现场。
- 数量很重要：使用足够的水来保持土壤的位置——不要太多以至于泥土和水外溢或者粘在汽车轮胎上。一般规则是没有积水或水流。
- 定期浇水。



垂直灰尘屏障



- 垂直灰尘屏障防止泥土离开现场，并保护邻近的土地使用免受泥土和碎屑的影响。注：灰尘栅栏不能用作淤泥栅栏。
- 在有大风和陡坡的地方使用垂直防尘屏障。

覆盖物

覆盖物（木头或砾石），至少 1 英寸深，也可以用来控制现场灰尘。

混凝土废物管理



- 儿童游泳池可以用来搅拌混凝土。在一天结束或下雨前盖上洗涤水。在现场施工时揭开盖子, 让它蒸发。移除洗涤水, 并在场外处理。



- 将内衬放在混凝土容器下, 以防飞溅和溢出。
- 解决方案可以是创造性的, 并根据洗涤水量进行调整。



- 将手、靴子和工具放在清洗容器上或大桶上清洗, 并在场外妥善处理。
- 工具和供应品也可以在场外清洗。



- 不要搅拌或冲洗人行道或街道上的混凝土
- 将混凝土、油漆和其他冲洗水冲洗到雨水排放口是违法的, 会被罚款。
- 不要将泥浆直接倾倒在地面上。

堆存物料管理

防止堆存物料进入排水管道。将一周内不会使用的堆放物覆盖住。



- 在物业上存储物料。
- 将物料储存在远离排水口的地方。
- 如果可能，将堆存物料储存在远离物业边缘的地方。
- 避免覆盖公用设施，如水阀、清洁器、电箱等。



- 覆盖物可以是粗麻布、淤泥织物 / 防尘网或塑料。
- 确保覆盖物能阻挡雨水和强风。



- 将堆存物料放在远离雨水排放口和车道（因为车道向街道和雨水排放口倾斜）的地方。
- 不要让堆存物料溢出到街道。溢出的物质会造成污染和安全隐患。

车辆污迹控制

离开施工现场的车辆可以将污物带到街道上，然后被冲入下水道。

指定车辆区域

- 将车辆交通限制在适当指定的区域，而不是允许车辆通过现场。
- 尽可能使用现有铺砌区域或砾石路面作为车辆行驶路径。

轮胎清洗区

- 在离开之前，在现场砾石区域清洗轮胎以清除灰尘。



现场入口处的砾石和织物

砾石有助于清除车轮上的灰尘，并将其截留在砾石块之间。



- 在离开项目现场之前，使用现场入口处的砾石清除车辆轮胎上的灰尘。
- 在现场入口 / 出口使用 8-12 英寸的 2 号 (或 2 号和 4 号) 砾石。
- 将淤泥织物放在砾石下过滤水。
- 定期翻动砾石，使较小的沉积物下沉，让其他污垢从车轮上脱落。

清扫街道上的灰尘



- 使用 BMP 可以防止街道上的大部分灰尘，但不是全部灰尘。清扫也是必要的。
- 切勿将泥土冲洗到街道或雨水排放口。

物料交付、储存和使用管理

物料的妥善储存可防止产品溢出到土壤中，随雨水流走。

- 在施工现场尽量减少危险材料的储存。
- 请勿将物料存放在雨水排放系统或溪流区域附近。
- 将材料储存在指定区域，并安装二次密封装置。
- 将物料覆盖或存放在有屋顶的区域。
- 在现场制作木箱，内衬塑料；用盖子或者用塑料覆盖，这样就不会进水。

注：小心存放可以防止材料容器生锈并保持产品质量。



溢出预防和控制

- 防止溢出工具包应放在车辆附近或车辆上。
- 工人应知道溢出工具包的存放位置以及如何使用。
- 猫砂可以用来处理溢出物。使用后，应将其清理干净并妥善处理。

固体废物管理

保持施工现场清洁

- 每天清理场地，不要让垃圾四处飞扬。
- 为固体废物、建筑和拆除废物提供指定的废物收集区。

管理垃圾箱

- 定期收集垃圾；不要让垃圾桶中的垃圾堆满溢出。
- 如有可能，应在物业上放置垃圾桶。如果垃圾箱存放在街道上，需要街道使用许可证 (<http://bit.ly/2kLeEu9>)。
- 盖住垃圾，防止水与垃圾混合，然后流入雨水排放系统。
- 不要使用漏水的垃圾箱；及时修理或更换。

流动厕所

确保流动厕所的安全，防止污物泄漏进入雨水排放系统。



- 绳索、CMU 砖块、木桩或沙袋可以用来固定流动厕所。（双水箱流动厕所比单水箱厕所更重、更安全。）
- 将流动厕所放在远离雨水管道的地方。
- 定期安排维修以防止外溢。

液体废物管理

- 将油、石油、润滑剂、油漆溶剂和胶水装在带盖桶或便携式罐体中，并在场外处理。
- 清理乳胶漆时，可以使用带盖子的 5 加仑容积的桶和水。洗涤水可以通过生活污水管道带到场外处理。
- 干墙胶带和泥浆应该装在一个盒子里（内衬塑料的木箱），一旦硬化，就可以扔进垃圾箱。不要把干墙泥浆放入下水道，因为它会变硬并堵塞管道。
- 另请参考危险废物管理 BMP。

车辆和设备清洁、加油和维护



- 在设备下面使用铁板或塑料来防止油气泄漏。
- 在放置在街上的设备周围使用 biosocks。
- 擦拭车辆，而不是在现场清洗。
- 防止油进入雨水管道。
- 将油排放到雨水管道是违法的，会被罚款。

危险废物管理

正确使用物料并妥善处理废物，防止危险废物进入排水管道。

- 对于乳胶漆：待其干透后放入垃圾桶或垃圾箱。处理或储存前，请更换盖子。
- 对于油基漆：放入垃圾箱前，使用换油工具包或其他吸收剂和袋子。
- 处理垃圾中的空杀虫剂、危险废物或油漆容器。
- 有关正确处理和处置危险废物的更多信息，请参考安全数据表。
- 欲了解更多信息，请访问 www.opala.org

污染土壤管理

如果堆放物可能污染土壤，用塑料布或防水布覆盖堆放物，并在周围安装护堤以防止溢出。将土壤运离现场，并妥善处理。

如果土壤受到污染并产生危险，请与州卫生部固体和危险废物办公室合作，制定处理和 / 或处置方案。

现场示意图

您的现场示意图需要包含以下内容：

物业边界

绘制您的物业边界（参见下面的方框）。

现有建筑

画出现有建筑的轮廓（参见下面的方框）。

雨水管道

注意项目现场 50 英尺范围内的雨水管道。可以用箭头显示，并注明与项目现场之间的距离。

是否需要帮助来寻找附近的雨水管道？请前往：honolulu.gov 寻找滤污器和格栅/排水入口。

施工界线

在计划的施工区域周围画一个“云”（见图例）。

水流

使用波浪箭头显示水流方向。水从小山/斜坡流下。


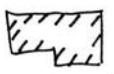
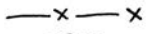
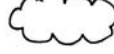



保护措施 /BMP

在图上标记要使用的保护措施（也称为最佳管理实践或 BMP）。这些措施应解决项目的类型和规模，以防止灰尘和其他废物离开施工现场。

现场示意图中使用的符号在此图例中显示。图例可以附加到现场示意图或地图上使用的标签上。

现场示意图图例

现场条件

	物业边界
	现有建筑
	栅栏
	施工界线
	雨水管道滤污器 / 入口
	雨水管道平面入口
	水流方向

保护措施 (或 BMP)

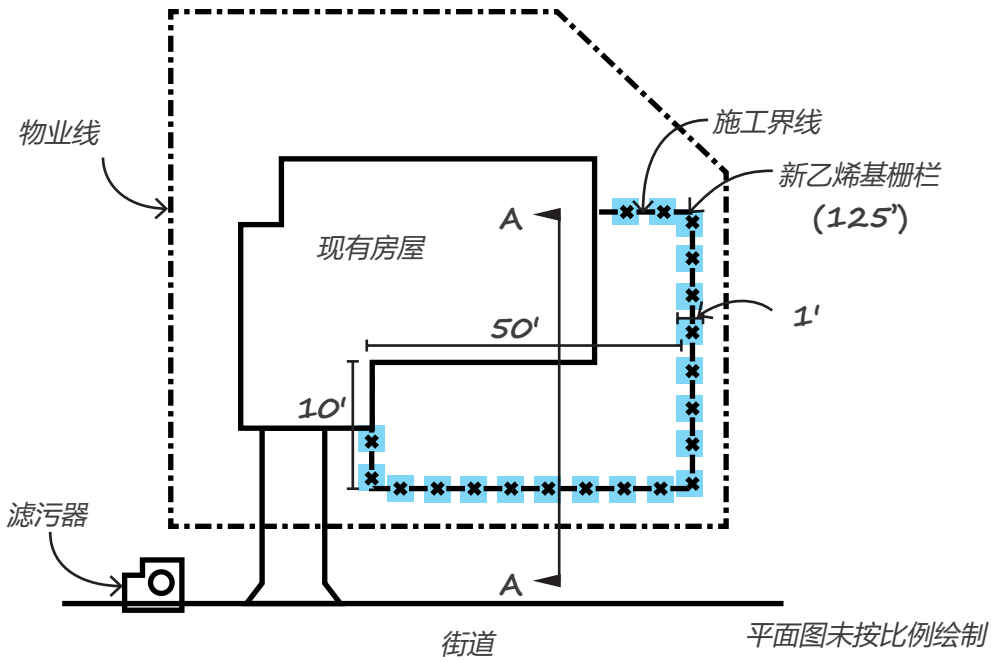
	淤泥栅栏
	Biosock
	沙袋 / 砾石袋
	滤污器 / 排水保护
	植被
	垫子或塑料盖
	水力覆盖 / 水力播种
	灰尘栅栏
	砾石
	稳定的施工入口 / 出口

如何获取关于物业边界和现有建筑的更多信息？

前往檀香山房地产网站 (www.qpublic.net/hi/honolulu)，按地址搜索

- 对于物业边界信息：
点击地理信息系统宗地地图。航拍图上显示物业轮廓。使用页面顶部的测量工具（单击一行的开始和结束）。
- 对于现有建筑信息：
单击显示建筑形状和尺寸的建筑草图。

案例研究 1 : 乙烯基栅栏 (小型开发)

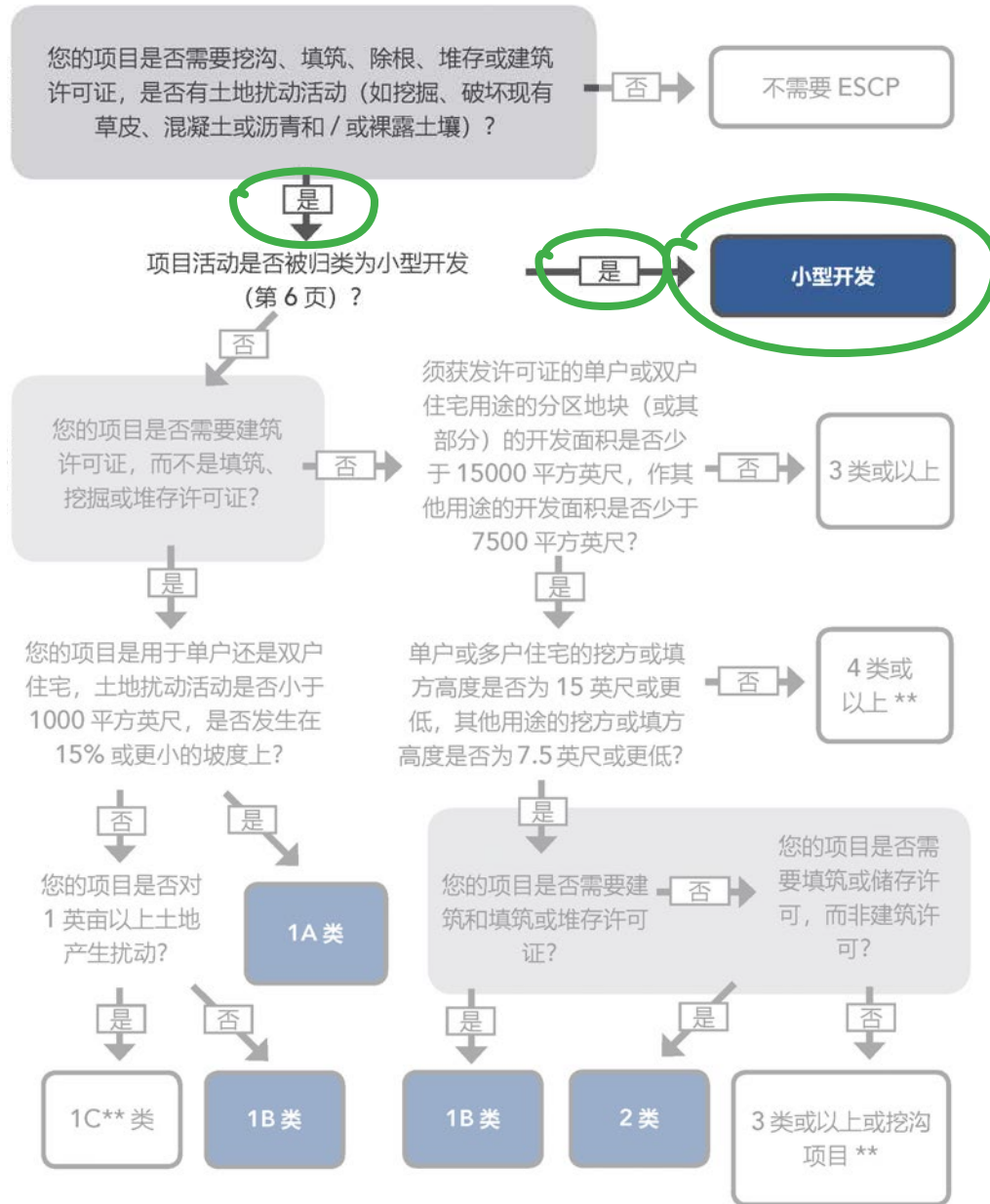


扰动面积

乙烯基栅栏面 = 20 根栅栏柱 × (1' × 1')
积 = 20 平方英尺

总扰动面积
= 20 平方英尺

案例研究 1：乙烯基栅栏 (小型开发)



项目要求

- 单户或双户住宅用乙烯基围栏建筑许可证
- 小型开发认证

案例研究 1 : 乙烯基栅栏 (小型开发)

MINOR DEVELOPMENT CERTIFICATION

Construction Site Project Name: Vinyl Fence

Physical Site Address: 1234 O'ahu St.

Building Permit Application Number: #12345678

1. I certify that the total project scope falls under the Minor Development category checked below.

Check one:

- The installation of temporary BMPs;
- Land Disturbing Activity that takes place completely under a roof or other enclosure and where existing site conditions preclude storm water run-on to the Disturbed Area;
- The construction of individual bus shelters;
- The installation of footings or posts for the construction of fences, decks, roof coverings, and trellises for single-family or two-family dwelling use;
- Trenching project that takes place in the City right-of-way for laterals serving one property;
- Borings;
- Work not listed above that disturbs no greater than 120 square feet of land, except for fence wall, retaining wall, and driveway apron projects.

Disturbed Area (square-feet)*: 20 sq. ft.

*Disturbed area includes the project area, construction access on unpaved surfaces, and storage/ staging area(s).

Describe the project and all land disturbing activities (Required):

A new vinyl fence with posts.

2. I am aware that there are significant penalties for submitting false information, including the possibility of fine for knowing violations. I am also aware that any person violating the provisions of the Rules Relating to Water Quality may be ordered to pay an administrative or civil penalty of not less than \$1,000.00 nor more than \$25,000.00 per violation per day.

3. Upon inspection, if there are land disturbing activities which are not considered Minor Development or the site is found in noncompliance with the Rules Relating to Water Quality, enforcement actions require that my project is recategorized to require an ESCP. Work may be stopped until the ESCP is approved and an ESCP Coordinator is designated for the project.

John Smith

Owner / Authorized Agent Name*

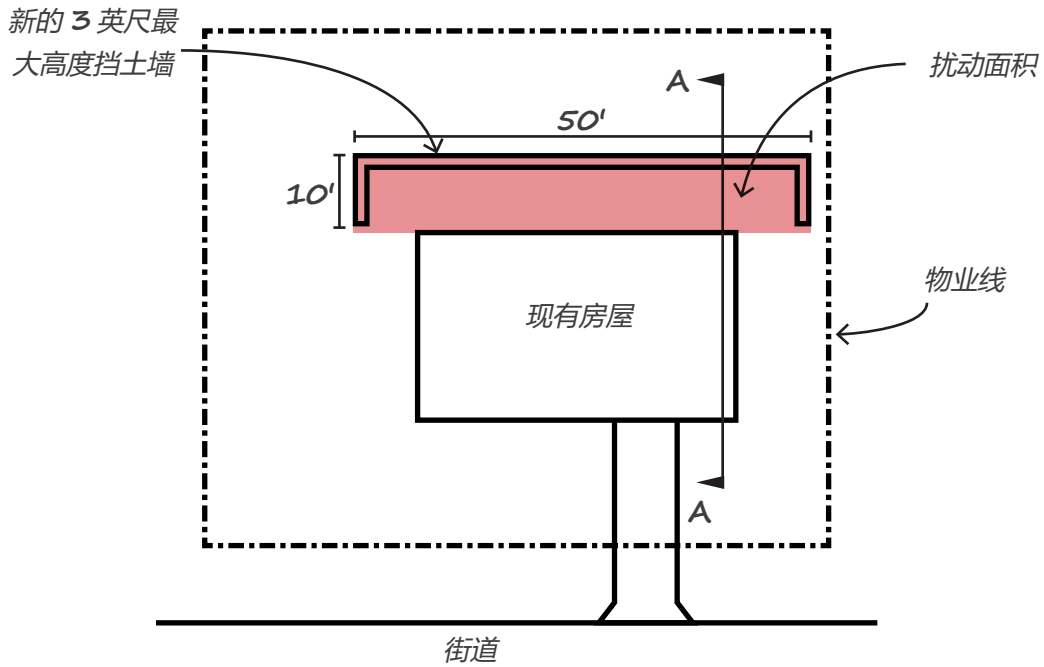
(*Provide Letter Designating Authorized Agent Form if Different from owner)

John Smith
Signature

4/4/2019

Date

案例研究 2：新挡土墙 (1A 类)



平面图未按比例绘制

扰动面积

挡土墙和填土区	= 10' x 50'
	= 500 平方英尺

总扰动面积

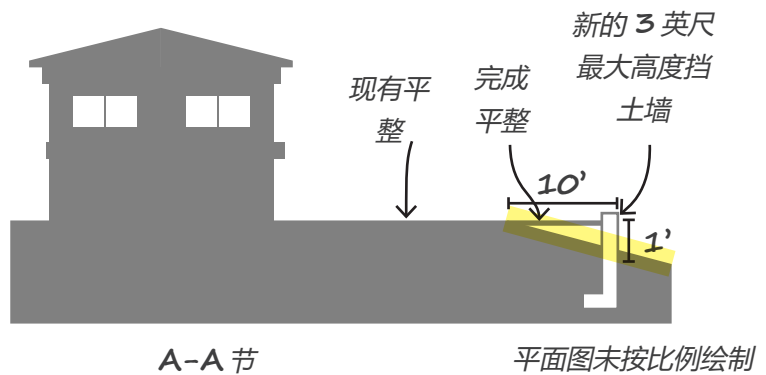
= 500 平方英尺

坡度

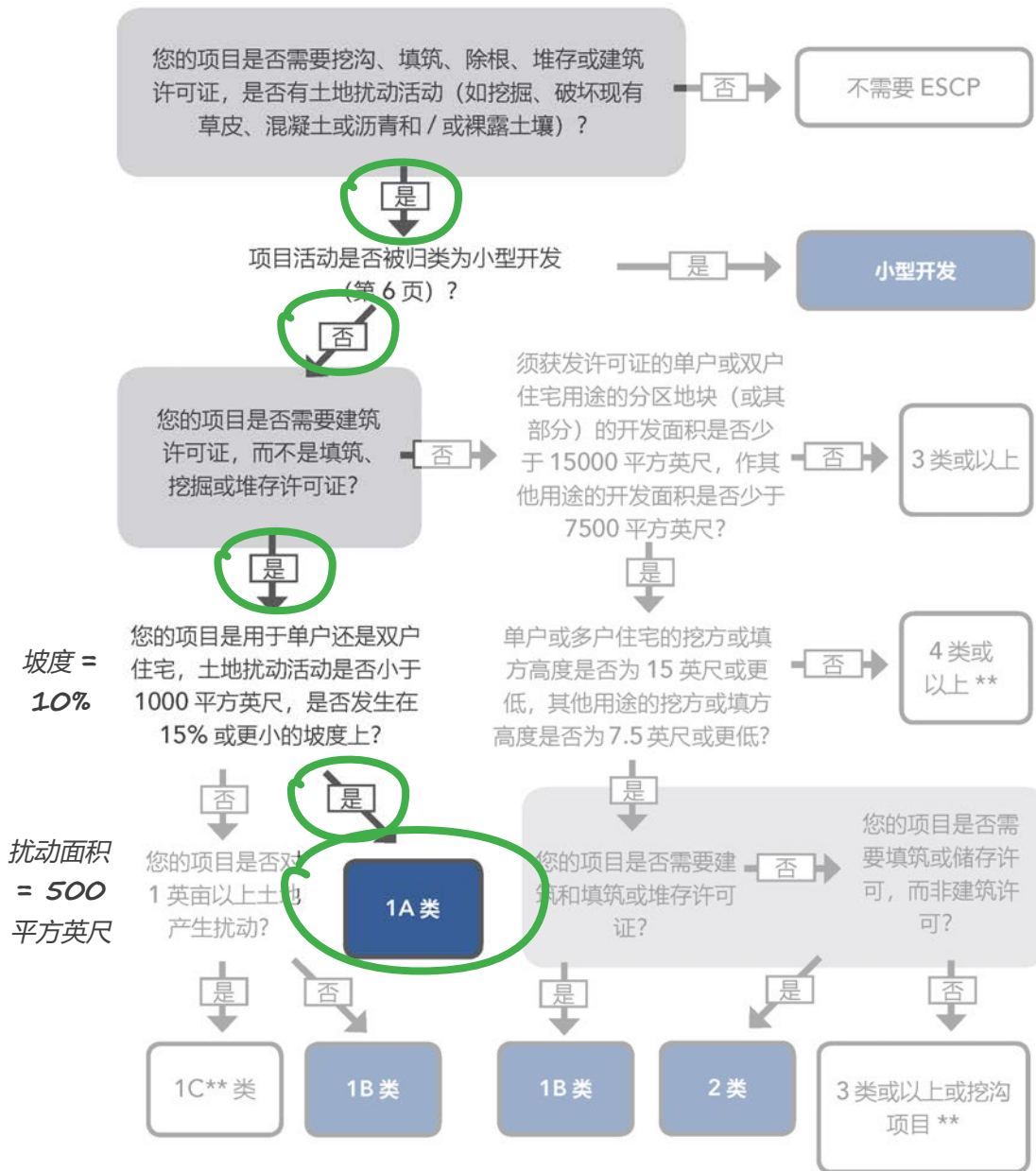
项目区高度变化为 1 英尺，水平距离为 10 英尺。

$$\% \text{ 坡度} = (1' \div 10') \times 100$$

= 10 %



案例研究 2 : 新挡土墙 (1A 类)



项目要求

- 单户或双户住宅新挡土墙建设许可证
- 侵蚀和沉积物控制计划 (1A 类)

案例研究 2 : 新挡土墙 (1A 类)

Appendix B



City and County of Honolulu

Erosion and Sediment Control Plan Small Project Template for Categories 1A, 1B and 2

Construction Site Project Name: **Mr. Smith's New Retaining Wall**

Physical Site Address: **1234 O'ahu Street**

Building Permit Application Number: **2018-00-0000**

Disturbed Area (square-feet)*: **500 sq. ft.**

*Disturbed area includes the project area, construction access on unpaved surfaces, and storage/ staging area(s).

Instructions:

Use this template to prepare an Erosion and Sediment Control Plan (ESCP) for projects under the City and County of Honolulu, Department of Planning and Permitting (DPP) Categories 1A, 1B, and 2. This ESCP may be prepared and must be signed by the property owner or an authorized agent designated by the owner. Submit a completed ESCP with the building permit application and keep a copy of the approved ESCP on the job site at all times. Any changes to the approved ESCP must be approved by the DPP.

Refer to the guidance booklet "How to Prepare Erosion and Sediment Control Plan for Small Construction Projects" available on DPP's website @ www.honolulu.dpp.org for more information on each BMP below. Select the BMPs which will be used at the site and if not used, provide a brief explanation for why it is not needed or impracticable for the site.

Designate a certified ESCP coordinator for the project by providing the information on page 6 of this template or sending written notice to DPP (the form is available on DPP's website). The ESCP coordinator is responsible for performing inspections before construction starts and at least once every 30 days until permanent stabilization is in place.

I. EROSION PREVENTION BMPs: practices that prevent erosion from occurring.	
1. Permanent Stabilization (REQUIRED)	
Prior to closing of any permit(s) permanent stabilization must be in place which includes the following requirements:	
<ul style="list-style-type: none"> All exposed disturbed areas must be permanently stabilized with ground covering such as vegetation, gravel, or pavers; Rain gutters, downspouts, and channelized flows must be installed and functioning as designed; In seeded areas, grass or vegetation must cover at least 90 percent of the disturbed soils or must be temporary stabilized while it is growing; Temporary measures, such as sediment barriers, should be removed when permanent measures are in place; All paved surfaces must be clean; and Storm drain inlet filters must be removed after all cleanup activities have been completed. 	
2. Slope Management and Protection (Category 1B and 2 only)	
Areas disturbed on a slope greater than 15% must be protected when work is inactive for seven (7) days or more.	
	<p>To find the slope, divide the vertical height of your slope by the horizontal length of your slope and multiply by 100. For example, if your slope measures 3 feet vertically, and 10 feet horizontally, your slope would be $3 / 10 \times 100 = 30\%$.</p>
	Check if will be used:
1. Rolled erosion control products	<input type="checkbox"/>
2. Hydraulic mulch or hydroseed	<input type="checkbox"/>
3. Hydraulic or bonded fiber matrix	<input type="checkbox"/>
4. Planting and/ or vegetation providing at least 70% surface cover	<input type="checkbox"/>
5. Other: (please specify)	<input type="checkbox"/>
	<input checked="" type="checkbox"/> Will Not Use
If this BMP will not be used, provide brief explanation:	
<i>Not required for Category 1A projects.</i>	

案例研究 2 : 新挡土墙 (1A 类)

Appendix B

3. Temporary Stabilization (Category 1B and 2 only)	
Use one or more of the following to protect disturbed areas that will not be worked on within 14 days:	Check if will be used:
1. Rolled erosion control products	<input type="checkbox"/>
2. Hydraulic mulch or hydroseed	<input type="checkbox"/>
3. Hydraulic or bonded fiber matrix	<input type="checkbox"/>
4. Planting and/or vegetation providing at least 70% surface cover	<input type="checkbox"/>
5. Other: (please specify)	<input type="checkbox"/>
	<input checked="" type="checkbox"/> Will Not Use
If this BMP will not be used, provide brief explanation: <i>Not required for Category 1A projects.</i>	
II. SEDIMENT CONTROL BMPs: practices to prevent soil and sediment from leaving the project site and entering storm drains during rain events.	
1. Perimeter Controls	
Sediment fences or barriers shall be used at the perimeter of all disturbed areas where there is potential for runoff to flow off the project site, Barriers may include gravel bags, sand bags, fiber rolls, silt fences, compost socks, or an equivalent BMP that intercepts runoff.	<input checked="" type="checkbox"/> Will Use <input type="checkbox"/> Will Not Use
If this BMP will not be used, provide brief explanation:	
2. Storm Drain Inlet Protection	
Inlet protection is required over storm drains that may receive runoff from your site unless those inlets drain to a sediment basin or trap. Inlet protection should be removed during severe storm events to prevent flooding.	<input checked="" type="checkbox"/> Will Use <input type="checkbox"/> Will Not Use
If this BMP will not be used, provide brief explanation:	
III. GOOD HOUSEKEEPING BMPs: practices that prevent pollution by limiting or reducing potential pollutants at their source.	
1. BMP and Site Maintenance (REQUIRED)	
Regularly inspect and maintain BMPs to ensure continued performance.	
2. Dust Control	
Use one of the following to control dust:	Check if will be used:
1. Mulching to a depth of one inch or more	<input type="checkbox"/>
2. Sprinkling exposed soils with water to maintain moistness	<input checked="" type="checkbox"/>
3. Vertical dust barriers	<input type="checkbox"/>
	<input type="checkbox"/> Will Not Use
If this BMP will not be used, provide brief explanation:	
3. Concrete Waste Management	
Conduct washout off-site or perform onsite in a designated area, away from water bodies, channels, or storm drains. Construct and maintain washout to contain all liquid and concrete waste generated.	<input checked="" type="checkbox"/> Will Use <input type="checkbox"/> Will Not Use
If this BMP will not be used, provide brief explanation:	
4. Stockpile Management	
Locate stockpiles away from drainage ways or other areas of concentrated flows. Use a barrier around stockpiles and cover if they will not be actively used within seven (7) days.	<input checked="" type="checkbox"/> Will Use <input type="checkbox"/> Will Not Use
If this BMP will not be used, provide brief explanation:	
5. Vehicle Tracking Control	
Restrict vehicle traffic to properly designated areas and remove sediment from vehicle tires prior to exiting the project site. All sediments that are tracked or discharged off-site must be swept or vacuumed at the end of each day.	<input checked="" type="checkbox"/> Will Use <input type="checkbox"/> Will Not Use
If this BMP will not be used, provide brief explanation:	

案例研究 2 : 新挡土墙 (1A 类)

Appendix B

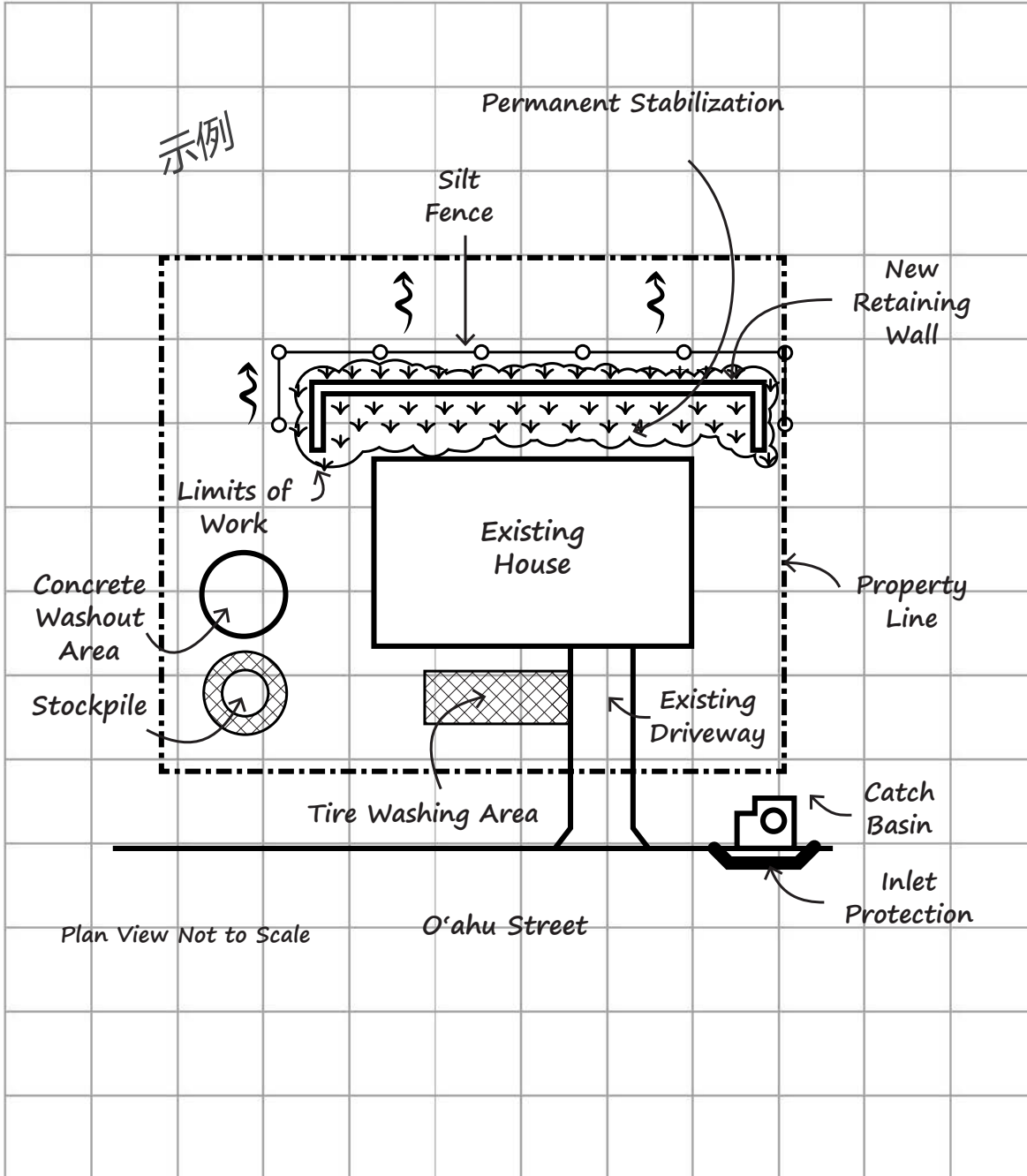
6. Material Delivery, Storage and Use Management	
Minimize the storage of potential pollutants onsite, store materials in a designated area, and install secondary containment. Do not store materials in buffer areas, near areas of concentrated flow, or areas abutting the City storm drainage system, receiving waters, or drainage improvements that discharge off-site.	<input checked="" type="checkbox"/> Will Use <input type="checkbox"/> Will Not Use
If this BMP will not be used, provide brief explanation:	
7. Spill Prevention and Control	
Keep ample supply of cleanup materials onsite. Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly.	<input checked="" type="checkbox"/> Will Use <input type="checkbox"/> Will Not Use
If this BMP will not be used, provide brief explanation:	
8. Solid Waste Management	
Provide designated waste collection areas for solid waste or construction and demolition waste, collect trash daily, and dispose at authorized disposal areas.	<input checked="" type="checkbox"/> Will Use <input type="checkbox"/> Will Not Use
If this BMP will not be used, provide brief explanation:	
9. Portable Toilets (Sanitary/ Septic Waste Management)	
Temporary and portable sanitary and septic waste systems shall be mounted or staked in, well-maintained and scheduled for regular waste disposal and servicing.	<input type="checkbox"/> Will Use <input checked="" type="checkbox"/> Will Not Use
If this BMP will not be used, provide brief explanation:	
<i>Will not have portable toilets.</i>	
10. Liquid Waste Management BMPs	
Contain liquid wastes in a holding pit, sediment basin, roll-off bin, or portable tank of sufficient volume to contain the liquid wastes generated.	<input type="checkbox"/> Will Use <input checked="" type="checkbox"/> Will Not Use
If this BMP will not be used, provide brief explanation:	
<i>Will not generate liquid waste.</i>	
11. Vehicle and Equipment Cleaning, Fueling, and Maintenance	
Prevent pollutants in storm water from vehicle and equipment cleaning, fueling and maintenance by using off-site facilities when feasible, performing work in designated areas only, using spill pads under vehicles and equipment, checking for leaks and spills, and containing and cleaning up spills immediately.	<input checked="" type="checkbox"/> Will Use <input type="checkbox"/> Will Not Use
If this BMP will not be used, provide brief explanation:	
12. Hazardous Waste Management	
Prevent or reduce the discharge of pollutants to storm water from hazardous waste through proper material use and waste disposal.	<input type="checkbox"/> Will Use <input checked="" type="checkbox"/> Will Not Use
If this BMP will not be used, provide brief explanation:	
<i>Will not generate hazardous waste.</i>	
13. Contaminated Soil Management	
Contain contaminated material soil by surrounding with impermeable lined berms or cover exposed contaminated material with plastic sheets. Contaminated soil should be disposed of properly in accordance with all applicable regulations.	<input type="checkbox"/> Will Use <input checked="" type="checkbox"/> Will Not Use
If this BMP will not be used, provide brief explanation:	
<i>No known contamination at site.</i>	

案例研究 2 : 新挡土墙 (1A 类)

Appendix B

SITE DIAGRAM

Provide a drawing of your site below or attach another map. Include the building outlines, property boundary or fence line, the limits of where your work will be located, flow arrows indicating direction of storm water runoff, location of BMPs, and any storm drains within 50 feet of your property. The drawing does not need to be to scale.



案例研究 2 : 新挡土墙 (1A 类)

Appendix B

PROJECT SCHEDULE

Use the table below or attach a separate project schedule to this ESCP. Project schedules must establish a sequence of all planned actions and activities on the project site, including, but not limited to, all land disturbing activities, the implementation of the BMPs identified in the project ESCP, scheduled inspections and maintenance of BMPs, and the removal of temporary BMPs. The project schedule shall include specific dates or project milestones i.e. install BMPs – 1 day, clear & grub - 2 days, construction – 2 weeks, stabilize disturbed areas – 1 day, remove BMPs – after vegetation is 90% established.

PROJECT SCHEDULE	
Action	Timeline or Date
Notify the Department of Planning and Permitting of Project Start Date - 768-8132 or dpp.npdes@honolulu.gov	2 weeks before starting work
<i>Install BMPs</i>	<i>1 day</i>
<i>Clear site</i>	<i>1 day</i>
<i>Construct wall</i>	<i>1.5 days</i>
<i>Plant grass</i>	<i>1 day</i>
<i>Remove BMPs after grass is established</i>	<i>1 day</i>

RAIN RESPONSE PLAN

The following will be performed when severe rain is forecast:

- Temporarily suspend land disturbing activities including clearing, grubbing, grading and trenching.
- Inspect all BMPs and maintain as needed.
- Reinstall BMPs that were removed due to active work in the area.
- If a severe storm is expected, remove inlet protection devices to prevent flooding on surrounding streets.
- Cover or relocate material stockpiles and liquid material containers to avoid contact with rainwater.
- Place spill pans or oil-only spill pads under construction vehicles to prevent runoff from contacting any spilled petroleum products. Properly dispose of any accumulated oily water after the rain event.
- Re-inspect project site after the rain event and replace or maintain BMPs as needed.

Other: (please specify)

案例研究 2 : 新挡土墙 (1A 类)

Appendix B

ESCP CERTIFICATION

Construction Site Project Name: Mr. Smith's New Retaining Wall

Physical Site Address: 1234 O'ahu Street

Building Permit Application Number: 2018-00-0000

- 1) By signing, you acknowledge that erosion prevention, sediment control, and good housekeeping BMPs in this ESCP are mandatory conditions of your building and/or grading permit and are subject to inspection and enforcement by the Department of Planning and Permitting, in accordance with Section 20-3-7 of the Rules Related to Water Quality.
- 2) If the proposed land disturbing work will be performed in the city sidewalk or right-of-way and/or best management practices installed in the sidewalk area (area between the property line and edge of pavement), the owner is responsible for obtaining a Permit for Street Usage from the Department of Transportation Services, 650 S. King Street, 2nd Floor, Honolulu, Hawaii, 96813.
- 3) The owner is responsible for installing appropriate barricades, flashers, and signage for pedestrian and vehicular safety, and removing the inlet protection(s) before a storm event to prevent flooding of the road and after the project site is completely stabilized.

John Smith

Owner / Authorized Agent Name*
(*Provide Letter Designating Authorized Agent Form if different from owner)

John Smith
Signature

4/4/2019

Date

Check this box to designate the person below as the ESCP Coordinator. If this box is checked, Appendix A is not required to submit, unless revising, or adding a new ESCP Coordinator to inspect this project.

Jane Doe

ESCP Coordinator Name
(if different from owner/ authorized agent)

Jane Doe
Signature

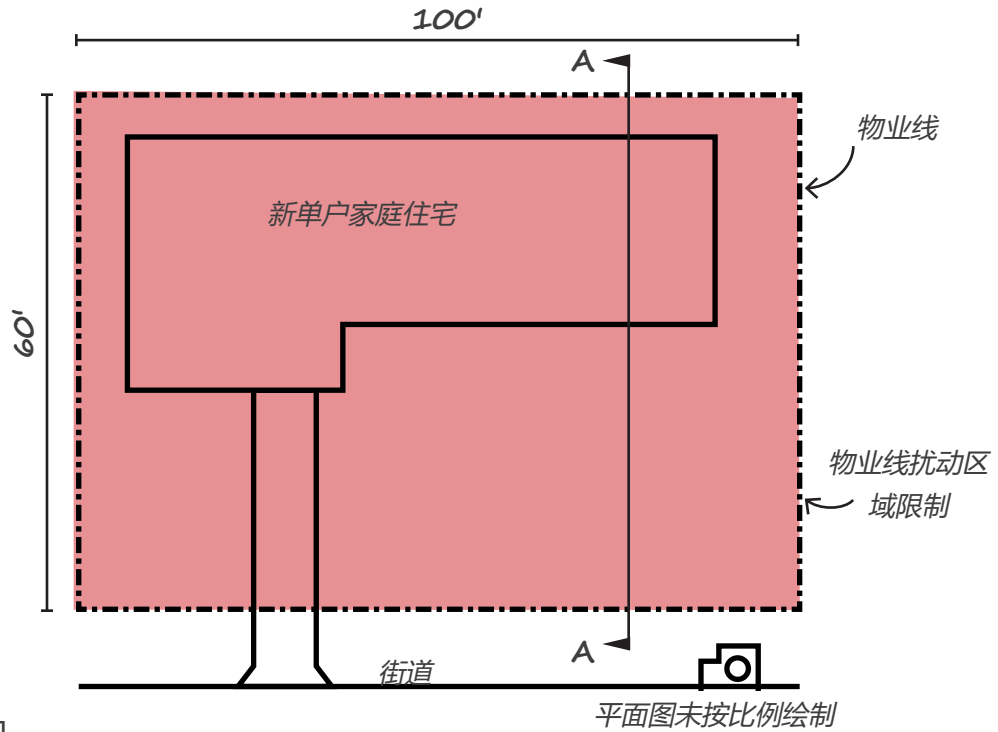
4/4/2019

Date

Certification #: 1111 Phone: 808-2222 Email: jane.doe@email.com

Mailing Address: 5678 Island Way, Honolulu, HI 96855

案例研究 3：新单户家庭住宅 (1B 类)



扰动面积

会对整个地块造成扰动。

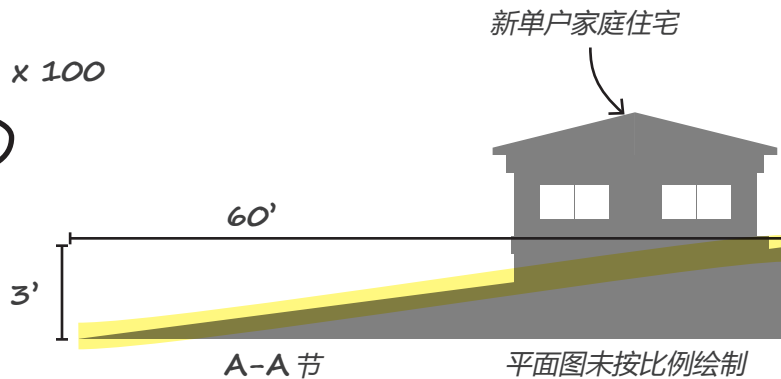
$$\begin{aligned}
 \text{总扰动面积} &= \text{地块面积} \\
 &= 60' \times 100' \\
 &= 6000 \text{ 平方英尺}
 \end{aligned}$$

坡度

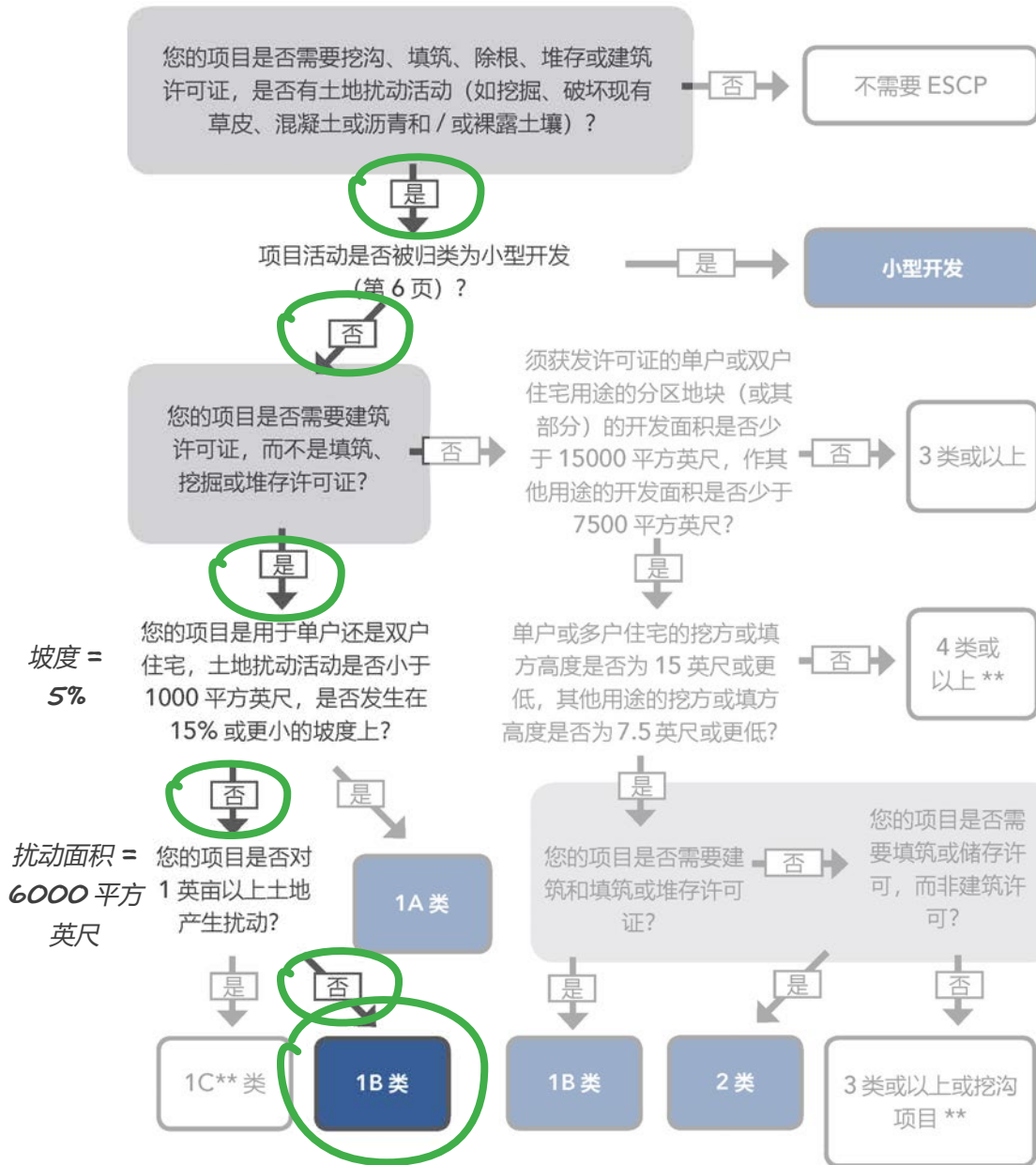
项目区高度变化为 3 英尺，水平距离为 60 英尺。

$$\% \text{ 坡度} = (3' \div 60') \times 100$$

$$= 5\%$$



案例研究 3 : 新单户家庭住宅 (1B 类)



项目要求

- 新单户家庭住宅建筑许可证
- 侵蚀和沉积物控制计划 (1B 类)

案例研究 3 : 新单户家庭住宅 (1B 类)

Appendix B



City and County of Honolulu

Erosion and Sediment Control Plan Small Project Template for Categories 1A, 1B and 2

Construction Site Project Name: Mr. Smith's New Single-Family Dwelling

Physical Site Address: 1234 O'ahu Street

Building Permit Application Number: 2018-00-0000

Disturbed Area (square-feet)*: 6000 sq. ft.

*Disturbed area includes the project area, construction access on unpaved surfaces, and storage/ staging area(s).

Instructions:

Use this template to prepare an Erosion and Sediment Control Plan (ESCP) for projects under the City and County of Honolulu, Department of Planning and Permitting (DPP) Categories 1A, 1B, and 2. This ESCP may be prepared and must be signed by the property owner or an authorized agent designated by the owner. Submit a completed ESCP with the building permit application and keep a copy of the approved ESCP on the job site at all times. Any changes to the approved ESCP must be approved by the DPP.

Refer to the guidance booklet "How to Prepare Erosion and Sediment Control Plan for Small Construction Projects" available on DPP's website @ www.honolulu.dpp.org for more information on each BMP below. Select the BMPs which will be used at the site and if not used, provide a brief explanation for why it is not needed or impracticable for the site.

Designate a certified ESCP coordinator for the project by providing the information on page 6 of this template or sending written notice to DPP (the form is available on DPP's website). The ESCP coordinator is responsible for performing inspections before construction starts and at least once every 30 days until permanent stabilization is in place.

I. EROSION PREVENTION BMPs: practices that prevent erosion from occurring.

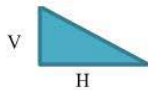
1. Permanent Stabilization (REQUIRED)

Prior to closing of any permit(s) permanent stabilization must be in place which includes the following requirements:

- All exposed disturbed areas must be permanently stabilized with ground covering such as vegetation, gravel, or pavers;
- Rain gutters, downspouts, and channelized flows must be installed and functioning as designed;
- In seeded areas, grass or vegetation must cover at least 90 percent of the disturbed soils or must be temporary stabilized while it is growing;
- Temporary measures, such as sediment barriers, should be removed when permanent measures are in place;
- All paved surfaces must be clean; and
- Storm drain inlet filters must be removed after all cleanup activities have been completed.

2. Slope Management and Protection (Category 1B and 2 only)

Areas disturbed on a slope greater than 15% must be protected when work is inactive for seven (7) days or more.



To find the slope, divide the vertical height of your slope by the horizontal length of your slope and multiply by 100. For example, if your slope measures 3 feet vertically, and 10 feet horizontally, your slope would be $3 / 10 \times 100 = 30\%$.

Check if will be used:

- | | |
|---|--|
| 1. Rolled erosion control products | <input type="checkbox"/> |
| 2. Hydraulic mulch or hydroseed | <input type="checkbox"/> |
| 3. Hydraulic or bonded fiber matrix | <input type="checkbox"/> |
| 4. Planting and/ or vegetation providing at least 70% surface cover | <input type="checkbox"/> |
| 5. Other: (please specify) | <input type="checkbox"/> |
| | <input checked="" type="checkbox"/> Will Not Use |

If this BMP will not be used, provide brief explanation:

Slopes are less than 15%.

案例研究 3 : 新单户家庭住宅 (1B 类)

Appendix B

3. Temporary Stabilization (Category 1B and 2 only)	
Use one or more of the following to protect disturbed areas that will not be worked on within 14 days: Check if will be used:	
1. Rolled erosion control products	<input type="checkbox"/>
2. Hydraulic mulch or hydroseed	<input type="checkbox"/>
3. Hydraulic or bonded fiber matrix	<input type="checkbox"/>
4. Planting and/or vegetation providing at least 70% surface cover	<input type="checkbox"/>
5. Other: (please specify)	<input type="checkbox"/>
	<input checked="" type="checkbox"/> Will Not Use
If this BMP will not be used, provide brief explanation:	
<i>Do not anticipate delays of 14 days or more.</i>	
II. SEDIMENT CONTROL BMPs: practices to prevent soil and sediment from leaving the project site and entering storm drains during rain events.	
1. Perimeter Controls	
Sediment fences or barriers shall be used at the perimeter of all disturbed areas where there is potential for runoff to flow off the project site, Barriers may include gravel bags, sand bags, fiber rolls, silt fences, compost socks, or an equivalent BMP that intercepts runoff.	<input checked="" type="checkbox"/> Will Use <input type="checkbox"/> Will Not Use
If this BMP will not be used, provide brief explanation:	
2. Storm Drain Inlet Protection	
Inlet protection is required over storm drains that may receive runoff from your site unless those inlets drain to a sediment basin or trap. Inlet protection should be removed during severe storm events to prevent flooding.	<input checked="" type="checkbox"/> Will Use <input type="checkbox"/> Will Not Use
If this BMP will not be used, provide brief explanation:	
III. GOOD HOUSEKEEPING BMPs: practices that prevent pollution by limiting or reducing potential pollutants at their source.	
1. BMP and Site Maintenance (REQUIRED)	
Regularly inspect and maintain BMPs to ensure continued performance.	
2. Dust Control	
Use one of the following to control dust: Check if will be used:	
1. Mulching to a depth of one inch or more	<input type="checkbox"/>
2. Sprinkling exposed soils with water to maintain moistness	<input checked="" type="checkbox"/>
3. Vertical dust barriers	<input type="checkbox"/>
	<input type="checkbox"/> Will Not Use
If this BMP will not be used, provide brief explanation:	
3. Concrete Waste Management	
Conduct washout off-site or perform onsite in a designated area, away from water bodies, channels, or storm drains. Construct and maintain washout to contain all liquid and concrete waste generated.	<input type="checkbox"/> Will Use <input checked="" type="checkbox"/> Will Not Use
If this BMP will not be used, provide brief explanation:	
4. Stockpile Management	
Locate stockpiles away from drainage ways or other areas of concentrated flows. Use a barrier around stockpiles and cover if they will not be actively used within seven (7) days.	<input checked="" type="checkbox"/> Will Use <input type="checkbox"/> Will Not Use
If this BMP will not be used, provide brief explanation:	
5. Vehicle Tracking Control	
Restrict vehicle traffic to properly designated areas and remove sediment from vehicle tires prior to exiting the project site. All sediments that are tracked or discharged off-site must be swept or vacuumed at the end of each day.	<input checked="" type="checkbox"/> Will Use <input type="checkbox"/> Will Not Use
If this BMP will not be used, provide brief explanation:	

案例研究 3 : 新单户家庭住宅 (1B 类)

Appendix B

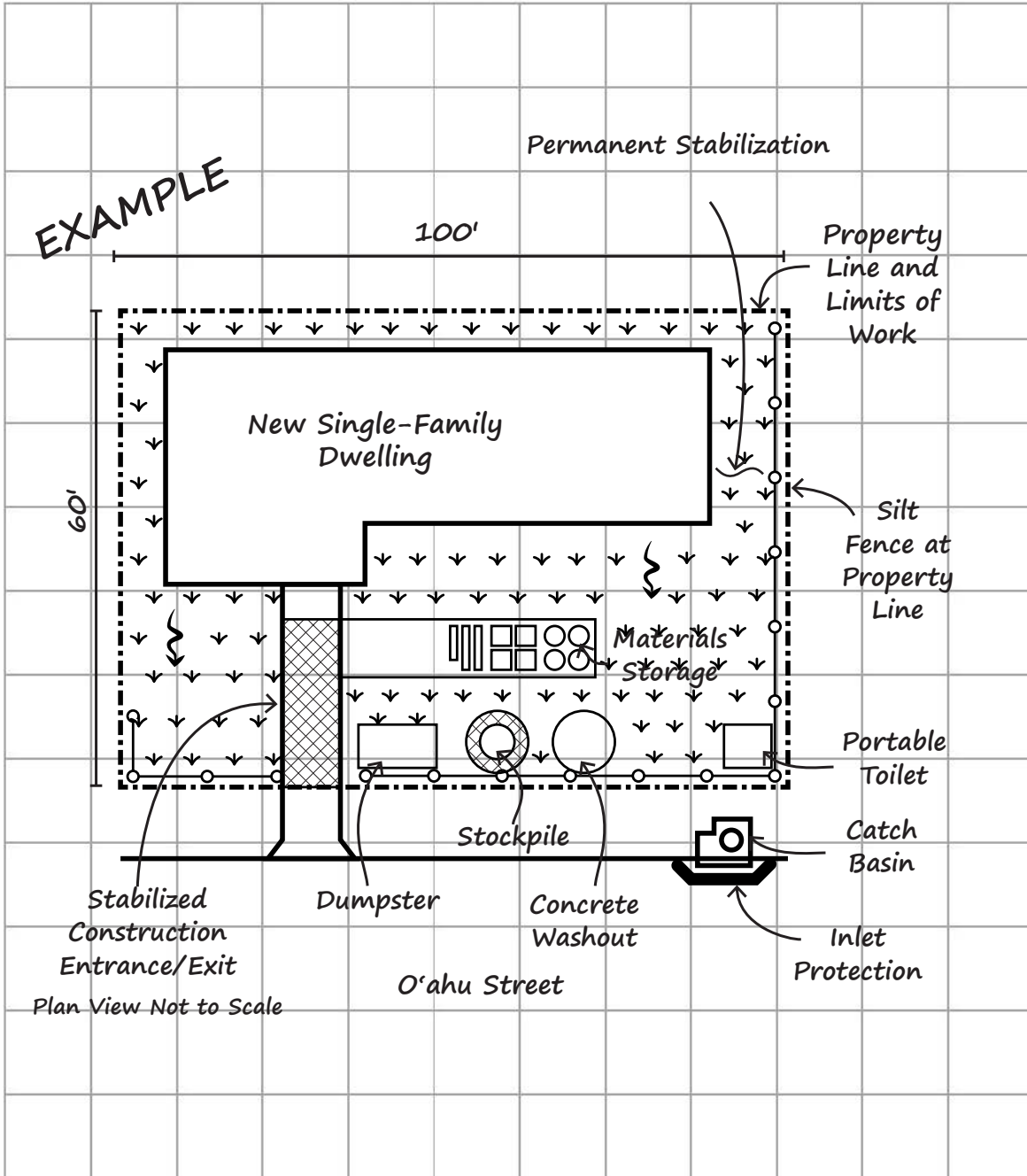
6. Material Delivery, Storage and Use Management	
Minimize the storage of potential pollutants onsite, store materials in a designated area, and install secondary containment. Do not store materials in buffer areas, near areas of concentrated flow, or areas abutting the City storm drainage system, receiving waters, or drainage improvements that discharge off-site.	<input checked="" type="checkbox"/> Will Use <input type="checkbox"/> Will Not Use
If this BMP will not be used, provide brief explanation:	
7. Spill Prevention and Control	
Keep ample supply of cleanup materials onsite. Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly.	<input checked="" type="checkbox"/> Will Use <input type="checkbox"/> Will Not Use
If this BMP will not be used, provide brief explanation:	
8. Solid Waste Management	
Provide designated waste collection areas for solid waste or construction and demolition waste, collect trash daily, and dispose at authorized disposal areas.	<input checked="" type="checkbox"/> Will Use <input type="checkbox"/> Will Not Use
If this BMP will not be used, provide brief explanation:	
9. Portable Toilets (Sanitary/ Septic Waste Management)	
Temporary and portable sanitary and septic waste systems shall be mounted or staked in, well-maintained and scheduled for regular waste disposal and servicing.	<input checked="" type="checkbox"/> Will Use <input type="checkbox"/> Will Not Use
If this BMP will not be used, provide brief explanation:	
10. Liquid Waste Management BMPs	
Contain liquid wastes in a holding pit, sediment basin, roll-off bin, or portable tank of sufficient volume to contain the liquid wastes generated.	<input type="checkbox"/> Will Use <input checked="" type="checkbox"/> Will Not Use
If this BMP will not be used, provide brief explanation:	
<i>Will not generate liquid waste.</i>	
11. Vehicle and Equipment Cleaning, Fueling, and Maintenance	
Prevent pollutants in storm water from vehicle and equipment cleaning, fueling and maintenance by using off-site facilities when feasible, performing work in designated areas only, using spill pads under vehicles and equipment, checking for leaks and spills, and containing and cleaning up spills immediately.	<input checked="" type="checkbox"/> Will Use <input type="checkbox"/> Will Not Use
If this BMP will not be used, provide brief explanation:	
12. Hazardous Waste Management	
Prevent or reduce the discharge of pollutants to storm water from hazardous waste through proper material use and waste disposal.	<input checked="" type="checkbox"/> Will Use <input type="checkbox"/> Will Not Use
If this BMP will not be used, provide brief explanation:	
13. Contaminated Soil Management	
Contain contaminated material soil by surrounding with impermeable lined berms or cover exposed contaminated material with plastic sheets. Contaminated soil should be disposed of properly in accordance with all applicable regulations.	<input type="checkbox"/> Will Use <input checked="" type="checkbox"/> Will Not Use
If this BMP will not be used, provide brief explanation:	
<i>No known contamination on site.</i>	

案例研究 3 : 新单户家庭住宅 (1B 类)

Appendix B

SITE DIAGRAM

Provide a drawing of your site below or attach another map. Include the building outlines, property boundary or fence line, the limits of where your work will be located, flow arrows indicating direction of storm water runoff, location of BMPs, and any storm drains within 50 feet of your property. The drawing does not need to be to scale.



案例研究 3 : 新单户家庭住宅 (1B 类)

Appendix B

PROJECT SCHEDULE

Use the table below or attach a separate project schedule to this ESCP. Project schedules must establish a sequence of all planned actions and activities on the project site, including, but not limited to, all land disturbing activities, the implementation of the BMPs identified in the project ESCP, scheduled inspections and maintenance of BMPs, and the removal of temporary BMPs. The project schedule shall include specific dates or project milestones i.e. install BMPs – 1 day, clear & grub - 2 days, construction – 2 weeks, stabilize disturbed areas – 1 day, remove BMPs – after vegetation is 90% established.

PROJECT SCHEDULE	
Action	Timeline or Date
Notify the Department of Planning and Permitting of Project Start Date - 768-8132 or dpp.npdes@honolulu.gov	2 weeks before starting work
<i>Install BMPs</i>	<i>1 day</i>
<i>Clear site</i>	<i>3 day</i>
<i>Construct house</i>	<i>4 months</i>
<i>Plant grass and landscaping</i>	<i>2 weeks</i>
<i>Remove BMPs after grass and landscaping is established</i>	<i>1 day</i>

RAIN RESPONSE PLAN

The following will be performed when severe rain is forecast:

- Temporarily suspend land disturbing activities including clearing, grubbing, grading and trenching.
- Inspect all BMPs and maintain as needed.
- Reinstall BMPs that were removed due to active work in the area.
- If a severe storm is expected, remove inlet protection devices to prevent flooding on surrounding streets.
- Cover or relocate material stockpiles and liquid material containers to avoid contact with rainwater.
- Place spill pans or oil-only spill pads under construction vehicles to prevent runoff from contacting any spilled petroleum products. Properly dispose of any accumulated oily water after the rain event.
- Re-inspect project site after the rain event and replace or maintain BMPs as needed.

Other: (please specify)

案例研究 3 : 新单户家庭住宅 (1B 类)

Appendix B

ESCP CERTIFICATION

Construction Site Project Name: Mr. Smith's New Single-Family Dwelling

Physical Site Address: 1234 O'ahu Street

Building Permit Application Number: 2018-00-0000

- 1) By signing, you acknowledge that erosion prevention, sediment control, and good housekeeping BMPs in this ESCP are mandatory conditions of your building and/or grading permit and are subject to inspection and enforcement by the Department of Planning and Permitting, in accordance with Section 20-3-7 of the Rules Related to Water Quality.
- 2) If the proposed land disturbing work will be performed in the city sidewalk or right-of-way and/or best management practices installed in the sidewalk area (area between the property line and edge of pavement), the owner is responsible for obtaining a Permit for Street Usage from the Department of Transportation Services, 650 S. King Street, 2nd Floor, Honolulu, Hawaii, 96813.
- 3) The owner is responsible for installing appropriate barricades, flashers, and signage for pedestrian and vehicular safety, and removing the inlet protection(s) before a storm event to prevent flooding of the road and after the project site is completely stabilized.

John Smith

Owner / Authorized Agent Name*
(*Provide Letter Designating Authorized Agent Form if different from owner)

John Smith
 Signature

4/4/2019

Date

Check this box to designate the person below as the ESCP Coordinator. If this box is checked, Appendix A is not required to submit, unless revising, or adding a new ESCP Coordinator to inspect this project.

Jane Doe

ESCP Coordinator Name
(if different from owner/ authorized agent)

Jane Doe
 Signature

4/4/2019

Date

Certification #: 1111 Phone: 808-2222 Email: jane.doe@email.com

Mailing Address: 5678 Island Way, Honolulu, HI 96855

检查表格样本

Appendix C

City and County of Honolulu



示例

Construction Site BMPs Inspection Checklist For CCH Category 1A, 1B, 2, 3, and 4 and Trenching Projects

General Information		
Project Name:	Mr. Smith's New Single-Family Dwelling	
ESCP Coordinator:	Ms. Jane Doe	
Location:	1234 O'ahu Street	
Owner/Authorized Agent:	John Smith	
Contractor:	ABC 承包商	
1. City Permit (check all that apply)	Building #: <input checked="" type="checkbox"/> BP#12345 Exp. Date: 08/16/2019 Grubbing #: <input type="checkbox"/> Exp. Date: <input type="checkbox"/> Trenching #: <input type="checkbox"/> Exp. Date: <input type="checkbox"/>	
2. Other Permits (list all):		
Inspection Type		
<input type="checkbox"/> Pre-construction inspection	<input checked="" type="checkbox"/> Regular Monthly Inspection (Category 1A, 1B, 2)	
	<input type="checkbox"/> Regular Weekly Inspection (Category 3, 4, Trenching)	
	<input type="checkbox"/> Re-inspection	
Project Phase (check all that apply)		
<input type="checkbox"/> Mobilization / Demolition	<input type="checkbox"/> Grubbing / Clearing	
<input checked="" type="checkbox"/> Building Construction	<input type="checkbox"/> Final Grading	
	<input checked="" type="checkbox"/> Infrastructure / Utilities	
Records Review (If "No" is checked for any of the following columns, complete Deficiencies / Corrective Action Report on page 3.)		
Pre-Construction Inspection	Available at Site	Complete, Signed, and Current
Weekly or Monthly Construction Inspections	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Erosion and Sediment Control Plan (ESCP)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Appendix C

Construction BMP Inspection Results (Mark the BMPs that are required per Plan for each column)		Construction BMP		Construction BMP		Construction BMP	
Construction BMP	Installed / Maintained / Number of Deficiencies	Construction BMP	Installed / Maintained / Number of Deficiencies	Construction BMP	Installed / Maintained / Number of Deficiencies	Construction BMP	Installed / Maintained / Number of Deficiencies
Erosion Prevention							
<input checked="" type="checkbox"/> Project Planning and Design	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input checked="" type="checkbox"/> Inlet and Storm Drain Protection	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	<input checked="" type="checkbox"/> BMP and Site Maintenance	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	<input checked="" type="checkbox"/> Stockpiling Management	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
<input checked="" type="checkbox"/> Project Scheduling	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input checked="" type="checkbox"/> Perimeter Control	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	<input type="checkbox"/> Dust Control	<input type="checkbox"/> Y <input type="checkbox"/> N	<input checked="" type="checkbox"/> Spill Prevention and Control	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
<input checked="" type="checkbox"/> Slope Management and Protection	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	<input type="checkbox"/> Other:	<input type="checkbox"/> Y <input type="checkbox"/> N	<input checked="" type="checkbox"/> Material Delivery, Storage, and Use BMPs	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	<input checked="" type="checkbox"/> Solid Waste Management	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
<input checked="" type="checkbox"/> Temporary Stabilization	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N			<input checked="" type="checkbox"/> Good Housekeeping	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	<input checked="" type="checkbox"/> Hazardous Waste Management	<input type="checkbox"/> Y <input type="checkbox"/> N
<input checked="" type="checkbox"/> Permanent Stabilization	<input type="checkbox"/> Y <input type="checkbox"/> N			<input type="checkbox"/> Contaminated Soil Management	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Concrete Waste Management	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
<input type="checkbox"/> Diversion BMPs to divert runoff from upstream areas around disturbed areas	<input type="checkbox"/> Y <input type="checkbox"/> N			<input checked="" type="checkbox"/> Sanitary / Septic Waste Management	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input checked="" type="checkbox"/> Liquid Waste Management	<input type="checkbox"/> Y <input type="checkbox"/> N
<input type="checkbox"/> Velocity Dissipation Devices	<input type="checkbox"/> Y <input type="checkbox"/> N			<input type="checkbox"/> Vehicle & Equipment Cleaning	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Vehicle & Equipment Fueling	<input type="checkbox"/> Y <input type="checkbox"/> N
<input type="checkbox"/> Other:	<input type="checkbox"/> Y <input type="checkbox"/> N			<input type="checkbox"/> Vehicle & Equipment Maintenance	<input type="checkbox"/> Y <input type="checkbox"/> N	<input checked="" type="checkbox"/> Vehicle Tracking Control	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
				<input checked="" type="checkbox"/> Stabilized Construction Entrance and Exit	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	<input type="checkbox"/> Dewatering Operations BMPs	<input type="checkbox"/> Y <input type="checkbox"/> N
				<input type="checkbox"/> Other:	<input type="checkbox"/> Y <input type="checkbox"/> N		

示例

检查表格样本

Appendix C

Deficiencies / Corrective Action Reports					
Item No.	Location	Description of Deficiency	Date Corrected	Action Taken	ESCP amendment required (Y/N)
1	Front Driveway of Property	Sediment Tracking onto Roadway	8/16/18	Swept Roadway, Added BMPs	Y
2	Sidewalk Area	Unprotected Soil Stockpiles on Sidewalk	8/16/18	Protected Stockpile	Y
3	East Side of Property	Sediment Discharge onto Roadway	8/16/18	Swept Roadway, Added BMPs	Y
4	Southwest Corner of Property	Unprotected Exposed Slope	8/16/18	Swept Roadway, Added BMPs	Y

示例

Ms. Jane Doe
 ESCP Coordinator

Jane Doe
 Signature

4/4/2019
 Date

示例

Appendix C

Deficiencies / Corrective Action Reports (attach additional pages as needed)

Photo # 1



Taken By: **Jane Doe** Date: **4/4/2019**
 Description: **1234 O'ahu Street**

Comments: *Sediment tracking onto roadway. Recommend sweeping road to remove any dirt tracked and installing entrance protection with gravel or other means to prevent tracking. Recommend installing perimeter and slope protection BMPs.*
 Status: **Completed** Priority: **High**

Corrected by (initials) **JD** Date: **4/4/2019**
 Comments: *Swept roadway and installed biosock along perimeter. Placed down 6" layer of gravel with blanket filter fabric lining underneath at entrance.*

Rev. 7/30/2018

Photo # 2



Taken By: **Jane Doe** Date: **4/4/2019**
 Description: **1234 O'ahu Street**

Comments: *Illegal unprotected stockpile stored on sidewalk. Recommend moving stockpile onto property and protecting with perimeter control and possibly covering material.*
 Status: **Completed** Priority: **High**

Corrected by (initials) **JD** Date: **4/4/2019**
 Comments: *Swept roadway and moved stockpile onto property. Installed biosock around stockpile and covered with tarp.*

Page 4 of 4

检查表格样本

示例

Appendix C

Deficiencies / Corrective Action Reports (attach additional pages as needed)

Photo # 1



Taken By: **Jane Doe** Date: **4/4/2019**
 Description: **New single-family dwelling at 1234 O'ahu Street**

Comments: **Lack of perimeter control BMPs and evidence of sediment discharge onto roadway. Recommend installing sediment control BMPs at perimeter and protecting exposed soil. Sweep and remove soil residue off road. Remove construction materials and store properly.**
 Status: **Completed** Priority: **High**

Corrected by (initials) **JD** Date: **4/4/2019**
 Comments: **Swept roadway and installed biosock and silt fence at perimeter. Removed construction materials and disposed properly.**

Photo # 2



Taken By: **Jane Doe** Date: **4/4/2019**
 Description: **New single-family dwelling at 1234 O'ahu Street**

Comments: **No slope protection and lack of BMPs at perimeter, signs of sediment discharge onto sidewalk. Recommend protecting slope with matting and install sediment control BMPs at perimeter. Sweep and remove soil off sidewalk. Remove construction materials off sidewalk and store properly. Clean inlet.**
 Status: **Completed** Priority: **High**

Corrected by (initials) **JD** Date: **4/4/2019**
 Comments: **Swept sidewalk and cleaned inlet of debris and sediment. Installed silt fence at the bottom of slope and placed matting over slope. Removed construction materials and disposed properly.**

规划和许可部联系人

雨水建筑许可证相关问题 768-8230

雨水分级许可证相关问题 768-8216 或
768-8217

在线信息和培训资源

侵蚀和沉积物控制计划协调员认证培训：q-r.to/DPP-SWQ



表格 / 模板：

www.honoluludpp.org/ApplicationsForms/StormwaterQuality.aspx

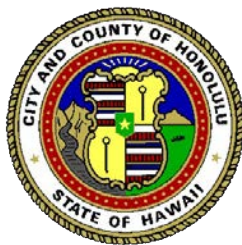
环保英雄和好邻居奖

檀香山市县设施维护部暴雨水质处每两年对建筑承包商和开发商进行评选，分别将环境英雄奖和好邻居奖授予当选的建筑承包商和开发商。

檀香山市根据施工现场检查数据评选获奖者，获奖企业的检查数据表明该企业在项目中努力遵守了关于雨水排放的规定。

以前的获奖企业不仅在项目施工时小心谨慎，而且通过创建有效的系统来防止施工现场的物料外溢，为员工提供全面的培训，实施有效的污染预防措施来保护整个社区。

会通过各种广告对获奖企业进行宣传，并且市长会亲自在颁奖仪式上向其致谢。





BE AN EVERYDAY
CLEAN WATER

