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**PRELIMINARY DRAINAGE REPORT**  
for  
**LINDSTROM CONSTRUCTION INC.'s**  
**MINOR SUBDIVISION**  
**Union Street**  
**McKinleyville, CA**  
**(APN 301-052-036)**

(Job No. 24-2341)

Prepared by:  
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## **PROJECT DESCRIPTION**

The Lindstrom Construction Inc. Minor Subdivision Project, at 4721 Union Street in Eureka, California, proposes to divide APN 301-052-036 into three (3) parcels. Each parcel will be over 5,000 square feet. As part of the subdivision, a 20-foot-wide private gravel driveway, within a 30-foot wide easement, is proposed to provide access to the subdivision.

## **EXISTING SITE CONDITIONS & DRAINAGE PATTERNS**

The property is roughly 0.83 acres in size and is currently developed with a 1,080 S.F., single story, single-family residence, detached garage, shed and a gravel driveway. The remainder of the property is undeveloped, but well vegetated.

The parcel is very flat, with slopes less than one percent (1%) over most of the project site. Grades are steeper near the easterly portion of the property, where they range from 2% to 11%. Existing site drainage currently infiltrates onsite, with no drainage infrastructure existing on or near the property. There are no drainage easements of record nearby. Based on existing contours, site runoff continues easterly to well vegetated adjacent parcels.

## **SOIL ANALYSIS**

Based on Web Soil Survey data available online from NRCS, the site soils are part of the Urban land-Halfbluff-Redsands complex, which consists of moderately well drained sandy loams to somewhat poorly drained fine sandy loams and sands, designated as hydrologic soil group B/D. Depth to groundwater ranges from 14 inches to 22 inches and restrictive features are expected to be greater than 80-inches. The capacity of the most limiting layer to transmit water (Ksat) is moderately high to high (0.60 to 2.00 in./hr.): This suggests that the site soils convey water relatively well and that infiltration is not expected to be a limiting factor.

## **PROPOSED DRAINAGE & LID MEASURES**

The project is in the County's Municipal Separate Storm Sewer System (MS4), and as such must comply with the County's MS4 requirements. To comply with these requirements, the project shall meet or exceed the standards outlined in Humboldt County's Low Impact Development (LID) Manual. Per the LID Manual, this project is a *Small Project* with between 2500 and 5,000 S.F. of impervious area being created and/or replaced.

In accordance with the California State Water Resources Control Board Phase II NPDES Permit for Small Municipal Separate Storm Sewer Systems (MS4 General Permit), projects on properties within the boundaries of the County of Humboldt and the Cities of Arcata, Eureka, Fortuna, and Trinidad subject to the MS4 General Permit that create or replace 2,500 square feet or more of impervious surface (e.g. roofs or pavement) must incorporate specified Site Design Measures to reduce stormwater runoff.

In order to meet the County's LID requirements, site design measures will incorporate Soil Quality Improvement standards by creating a landscape/infiltration area over and across the first 90 feet of the existing gravel driveway to be abandoned (at the panhandle portion of proposed Parcel 1), as well as proposed landscaping at the rear and side of proposed Parcels 2 and 3, to mitigate the increase in impervious surfaces.

Per the NOAA Precipitation Frequency Atlas of the United States, California, the 100-year, 24-hour storm event is 6.36 inches (0.53 feet).

Feature	Area (Square Feet)	Runoff Volume (Gallons)	Storage Volume (Gallons)
Impervious (Post)	16,255	6,560	N/A
Tree Credits	(1,434)	N/A	580
Soil Quality Improvement (Par 1)	(3,740)	N/A	1,510
Soil Quality Improvement (Par 2)	(4,710)	N/A	1,900
Soil Quality Improvement (Par3)	(4,710)	N/A	1,900
Total Post Project		670 gallons	

Table 1.

As shown in Table 1, above, the proposed design will be able to retain 90% of the runoff generated by the 100-year, 24-hour storm event. Per Attachment 1 of Part B of the LID Manual, the MS4 General Permit requires a calculation of the project runoff reduction resulting from the use of site design measures; however, there is no numeric standard or target for runoff reduction required for Small Projects.

The Part B Small Projects Worksheet and Stormwater Information Sheet are attached to demonstrate compliance with the MS4 and Humboldt County's LID standards.

## **ATTACHMENTS**

- Attachment 1 - NRCS Soil Survey
- Attachment 2 - Part B Small Projects Worksheet
- Attachment 3 - Stormwater Information Sheet
- Attachment 4 - Soil Quality Improvement
- Attachment 5 - Point Precipitation Frequency Estimate
- Attachment 6 – Tentative Parcel Map



## ATTACHMENT 1



United States  
Department of  
Agriculture

**NRCS**

Natural  
Resources  
Conservation  
Service

A product of the National  
Cooperative Soil Survey,  
a joint effort of the United  
States Department of  
Agriculture and other  
Federal agencies, State  
agencies including the  
Agricultural Experiment  
Stations, and local  
participants

# Custom Soil Resource Report for Humboldt County, Central Part, California



January 10, 2025

# Preface

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Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist ([http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\\_053951](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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# How Soil Surveys Are Made

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Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

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scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

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identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.



# Soil Map

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The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.







































# Custom Soil Resource Report Soil Map



## Custom Soil Resource Report

### MAP LEGEND

<b>Area of Interest (AOI)</b>			Spoil Area
	Area of Interest (AOI)		Stony Spot
<b>Soils</b>			Very Stony Spot
	Soil Map Unit Polygons		Wet Spot
	Soil Map Unit Lines		Other
	Soil Map Unit Points		Special Line Features
<b>Special Point Features</b>		<b>Water Features</b>	
	Blowout		Streams and Canals
	Borrow Pit	<b>Transportation</b>	
	Clay Spot		Rails
	Closed Depression		Interstate Highways
	Gravel Pit		US Routes
	Gravelly Spot		Major Roads
	Landfill		Local Roads
	Lava Flow	<b>Background</b>	
	Marsh or swamp		Aerial Photography
	Mine or Quarry		
	Miscellaneous Water		
	Perennial Water		
	Rock Outcrop		
	Saline Spot		
	Sandy Spot		
	Severely Eroded Spot		
	Sinkhole		
	Slide or Slip		
	Sodic Spot		

### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL:  
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Humboldt County, Central Part, California  
Survey Area Data: Version 11, Aug 28, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 1, 2022—Jun 19, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
212	Urban land-Halfbluff-Redsands complex, 0 to 5 percent slopes	0.8	100.0%
<b>Totals for Area of Interest</b>		<b>0.8</b>	<b>100.0%</b>

## Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

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onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## Humboldt County, Central Part, California

### 212—Urban land-Halfbluff-Redsands complex, 0 to 5 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2w91b  
*Elevation:* 10 to 150 feet  
*Mean annual precipitation:* 35 to 80 inches  
*Mean annual air temperature:* 50 to 55 degrees F  
*Frost-free period:* 275 to 330 days  
*Farmland classification:* Prime farmland if irrigated

#### Map Unit Composition

*Urban land, residential:* 65 percent  
*Redsands and similar soils:* 15 percent  
*Halfbluff and similar soils:* 15 percent  
*Minor components:* 5 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Urban Land, Residential

##### Setting

*Landform:* Terraces  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 8  
*Hydric soil rating:* No

#### Description of Halfbluff

##### Setting

*Landform:* Terraces  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Alluvium derived from sandstone

##### Typical profile

*A1 - 0 to 3 inches:* fine sandy loam  
*A2 - 3 to 11 inches:* fine sandy loam  
*Bw - 11 to 19 inches:* sandy loam  
*C1 - 19 to 22 inches:* sandy loam  
*C2 - 22 to 43 inches:* loamy sand  
*C3 - 43 to 61 inches:* sand

##### Properties and qualities

*Slope:* 0 to 5 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Moderately well drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.60 to 2.00 in/hr)

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*Depth to water table:* About 22 inches

*Frequency of flooding:* None

*Frequency of ponding:* Frequent

*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water supply, 0 to 60 inches:* Moderate (about 6.2 inches)

### Interpretive groups

*Land capability classification (irrigated):* 2e

*Land capability classification (nonirrigated):* 2e

*Hydrologic Soil Group:* B/D

*Ecological site:* F004BX118CA - Sitka spruce-redwood/salal/western brackenfern, marine terraces, marine deposits, fine sandy loam

*Hydric soil rating:* No

## Description of Redsands

### Setting

*Landform:* Terraces

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Alluvium derived from sandstone

### Typical profile

*A1 - 0 to 3 inches:* fine sandy loam

*A2 - 3 to 14 inches:* fine sandy loam

*C1 - 14 to 28 inches:* sand

*C2 - 28 to 31 inches:* sand

*C3 - 31 to 47 inches:* sand

*C4 - 47 to 54 inches:* sand

*C5 - 54 to 57 inches:* sand

*C6 - 57 to 61 inches:* loamy sand

### Properties and qualities

*Slope:* 0 to 5 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Somewhat poorly drained

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.60 to 2.00 in/hr)

*Depth to water table:* About 14 inches

*Frequency of flooding:* None

*Frequency of ponding:* Frequent

*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water supply, 0 to 60 inches:* Low (about 5.3 inches)

### Interpretive groups

*Land capability classification (irrigated):* 2e

*Land capability classification (nonirrigated):* 2e

*Hydrologic Soil Group:* B/D

*Ecological site:* F004BX118CA - Sitka spruce-redwood/salal/western brackenfern, marine terraces, marine deposits, fine sandy loam

*Hydric soil rating:* No

## Custom Soil Resource Report

### Minor Components

#### Millstreet

*Percent of map unit:* 3 percent  
*Landform:* Terraces  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

#### Tepona

*Percent of map unit:* 2 percent  
*Landform:* Marine terraces  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* F004BX118CA - Sitka spruce-redwood/salal/western brackenfern, marine terraces, marine deposits, fine sandy loam  
*Hydric soil rating:* No

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- United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2\\_053374](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374)
- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084>



## Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2\\_054242](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242)

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053624](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624)

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. [http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs142p2\\_052290.pdf](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf)

## 2.0 STORMWATER CONTROL PLAN (SCP) FOR SMALL PROJECTS/SINGLE-FAMILY HOMES (2,500 – 5,000 SQ. FT.)

### Introduction

This form is required to document compliance with stormwater (MS4) requirements for projects that create or replace between 2,500 and 5,000 square feet of impervious surface. To comply with these regulations, projects must include at least one reduction measure. Examples of reduction measures are shown below in Step 2. You are encouraged to include more but only one is required. You must show the added impervious surface and identify reduction measures on your site plan. While you are required to calculate your project's run-off reductions, there is no numeric standard or target required by the MS4 regulations.

### Step-by-Step Instructions Overview

The steps are:

1. Select a minimum of one Site Design Measure.
2. Identify the runoff reduction measures you will use
3. Calculate runoff reduction using the Small Projects Calculator (Attachment 1).
4. Sign and Submit your SCP with your building permit application

### Step 1: Project Data

<b>Total Pre-Project Impervious Surface Area (square feet)</b>	<b>4,475 Square Feet</b>
<b>Total New or Replaced Impervious Surface Area (square feet)</b> <small>[Sum of impervious area that will be constructed as part of the project]</small>	<b>11,780 Square Feet</b>
<b>Total Post-Project Impervious Surface Area (square feet)</b>	<b>16,255 Square Feet</b>
<b>To be completed by staff member:</b>	<b>Building Permit #</b>

### Step 2: Select a minimum of one Site Design Measure & show it on the Plot Plan

<p><b>Site Design Measures (Select a minimum of one)</b></p> <p>The following design strategies, in addition to at least one of the measures to the right, shall be considered for all projects as applicable:</p> <ul style="list-style-type: none"> <li>• Minimize compaction of highly permeable soils</li> <li>• Limit clearing and grading of native vegetation at the site to the minimum area needed to build the project, allow access, and provide fire protection</li> <li>• Minimize impervious surfaces by concentrating development on the least-sensitive portions of the site, while leaving the remaining land in a natural, undisturbed state</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> 1. Tree Planting and Preservation</li> <li><input type="checkbox"/> 2. Rain Barrels or Cisterns</li> <li><input type="checkbox"/> 3. Rooftop/ Impervious Area Disconnection</li> <li><input checked="" type="checkbox"/> 4. Soil Quality Improvement</li> <li><input type="checkbox"/> 5. Green Roof</li> <li><input type="checkbox"/> 6. PPPP Alternative engineered hardscaping surfaces (Pervious concrete, Porous asphalt, Permeable Pavers)</li> <li><input type="checkbox"/> 7. Vegetated Swales</li> <li><input type="checkbox"/> 8. Stream Setbacks and Buffers</li> <li><input type="checkbox"/> 9. On-site infiltration</li> </ul>
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### Step 3: Calculate runoff reduction using small projects calculator

Use *Small Projects Calculator - Humboldt LID Stormwater Manual* (Attachment 1)

### Step 4: Delineate impervious areas and locations of runoff reduction measures

Delineate the impervious area. On a site plan or sketch, show the impervious area (e.g. a roof, or portion of a roof, or a paved area) that will drain to your Site Design Measure such as Rain Barrels or Cisterns, Impervious Area Disconnection, Soil Quality Improvement, PPPP, Vegetated Swales, Infiltration trenches, and Stream Setbacks and Buffers. Typically, these delineations follow roof ridge lines or grade breaks. Alternatively, or in addition, show the type and extent of Site Design Measures such as PPPP, Tree Planting and Preservation, Green Roof, or Soil Quality Improvement. An example sketch is included as Attachment 2.

Confirm your design and submittal meet minimum requirements and specifications indicated on the Site Design Measure Sheets included in Attachment 3. Include a copy of the Site Design Measure Sheet or equivalent with your submittal.

### Step 5: Sign and submit your plan

Consult with City or County department staff as applicable about when and how to submit your Stormwater Control Plan.

#### Signature and Certification

I, the below signed, confirm that I have accurately described my project to the best of my ability and that I have not purposely omitted any detail affecting my project's classification for storm water regulation. I hereby certify that the site design measures identified herein as being incorporated into my project have been designed in accordance with the approved BMP Fact Sheet or equivalent, which is attached to this checklist and is included in the final site plans submitted to the appropriate County or City Department.

Leonard Lindstrom

Signature

02/07/2025

Date

Leonard Lindstrom

Print Name

I am the:

☒ Owner

☐ Representative

☐ Other: \_\_\_\_\_

Attachments:

Small Projects Calculator Humboldt Low Impact Development Stormwater Manual					
Project Information					Formulas/Notes
<b>DMA Name:</b>					
Total Post-Project Impervious Surface Area (square feet)	A	6,255	square feet		
24 hour - 85th Percentile Design Storm	B	0.65	inch		B = Select Design Storm Value (0.65-inch Humboldt Bay Area, 1.3-inch Shelter Cove)
Impervious Surface Runoff Value (Potential Stormwater Runoff due to impervious surface area and design storm value)	C	6,560	Gallons per 24 hours		$C = A \times B \times 0.083 \times 7.48$
<b>Pervious Self-Retaining Area (SRA) Credit (if applicable, if none enter 0)</b>					
Self-Retaining Area (square feet)				SRA Credit	0 square feet
					SRA Credit = Self-Retaining Area x Multiplier Select Multiplier (3.5 Humboldt Bay Area, 1.3 Shelter Cove)
<b>Site Design Measure Credits</b>					
<b>Tree Planting and Preservation</b>					
New Trees		# of trees			
100 square feet per deciduous tree	D		E	0	square feet
200 square feet per evergreen tree	F		G	0	square feet
Existing Trees (Credit for 50% of existing canopy area)		Canopy diameter (feet)			
Tree #1	H <sub>1</sub>	50	J <sub>1</sub>	981	square feet
Tree #2	H <sub>2</sub>	25	J <sub>2</sub>	245	square feet
Tree #3	H <sub>3</sub>	23	J <sub>3</sub>	208	square feet
<b>Rain Barrel or Cisterns (55 gallon minimum)</b>					
Square foot credit per gallon based on 24-hour, 85th Percentile Design Storm	K				K = Select square foot credit per gallon (2.48 Humboldt Bay Area, 1.24 Shelter Cove)
Rain Barrels	L		M	0	square feet
Cisterns	N		O	0	square feet
<b>Infiltration Trench/Basin (55 gallon minimum ~ 21 ft<sup>3</sup>)</b>					
volume(ft <sup>3</sup> ) = length x width x depth	P		Q	0	square feet
porosity (approximate %)	R	35%			
<b>Impervious Area Disconnection</b>					
Credit per square foot of pervious receiving area	S	0	square feet		S = Enter square foot value
<b>Soil Quality Improvement</b>					
Credit per square foot of soil quality improvement	T	13,160	square feet		T = Enter square foot value
<b>Green Roof</b>					
Credit per square foot of green roof installation	U	0	square feet		U = Enter square foot value
<b>PPPP (Porous Asphalt, Pervious Concrete, Permeable Pavers)</b>					
Credit per square foot installed	V	0	square feet		V = Enter square foot value
<b>Vegetated Swales</b>					
Credit per square foot of vegetated swale	W	0	square feet		W = Enter square foot value
<b>Stream Setbacks and Buffers</b>					
Credit per square foot of stream setback and buffer <sup>a</sup>	X	0	square feet		X = Enter square foot value
<b>Credits Total</b>	Y	14,594	square feet		$Y = \text{SRA Credit} + E + G + J_1 + J_2 + J_3 + M + O + Q + S + T + U + V + W + X$
<b>Post-Project Impervious Surface Area minus Site Design Measure Credits</b>	Z	1,661	square feet		$Z = A - Y$
<b>NEW Impervious Surface Runoff Value</b> (Potential Stormwater Runoff due to impervious surface area and design storm after implementation of Site Design Measures)	AA	670	Gallons per 24 hours		$AA = Z \times B \times 0.083 \times 7.48$
<b>Percent reduction in Impervious Surface Runoff Value<sup>a</sup></b>	BB	90	%		$BB = [(C - AA) / C] \times 100$
<p><sup>a</sup>The MS4 General Permit requires a calculation of the project runoff reduction resulting from the use of site design measures. However, there is no numeric standard or target for runoff reduction required for <u>Small Projects</u>.</p> <p><sup>a</sup>Infiltration Trench/Basin calculations are based on porosity (35%). Increased trench dimensions (volume) are required to meet 55 gallon minimum capacity.</p>					
<div> <div>Green</div> Fill In [Enter Value] </div> <div> <div>Red</div> Calculated Value </div> <div> <div>Black</div> Fixed Value/Selectable Value </div> <div> <p>Small Projects Calculator, Version 2.0 - June 29, 2016</p> </div> <div> <p>Conversions Used:</p> <p>1 inch = 0.083 feet</p> <p>1 cubic foot = 7.48 gallons</p> <p># check with agency with project area jurisdiction for requirements</p> </div>					





# ATTACHMENT 3

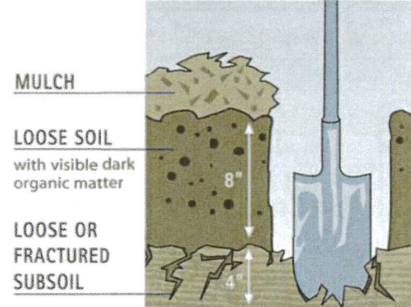
August 18, 2021

Humboldt Low Impact Development Stormwater Manual v3.0

STORMWATER INFORMATION SHEET		
<b>Instructions</b>		
Construction and development projects within portions of unincorporated Humboldt County (McKinleyville, the greater Eureka area, and Shelter Cove) and the Cities of Eureka, Arcata, Fortuna, and Trinidad are subject to stormwater runoff and pollution control requirements of State Water Resources Control Board Water Quality Order No. 2013-0001-DWQ; NPDES General Permit No. CAS0000004 [Municipal Separate Storm Sewer (MS4) General Permit].		
The following checklist is to be completed by you (the applicant) to determine which plans and specifications for stormwater runoff control are required as part of a Building or Development Permit application for projects located in areas subject to MS4 requirements.		
<b>I. Construction Project Information and Checklist (Completed by Applicant)</b>		
Site Location Address: <b>4721 Union Street, Eureka, CA 95503</b>		Assessor Parcel Number (APN): <b>301-052-036</b>
Anticipated Construction Start Date: <b>5/1/25</b>		Anticipated Construction Completion Date: <b>10/15/25</b>
Total area of Land Surface Disturbance: <b>15,800</b> square ft. or _____ acres		If project disturbs $\geq 1$ acre of land surface then provide the State Construction General Permit WDID No.:
Check and/or list all applicable permits directly associated with project construction or grading activity:		<input type="checkbox"/> State Construction General Permit (CGP)
		<input type="checkbox"/> State 401 Water Quality Certification
		<input type="checkbox"/> U.S. Army Corps 404 Permit
		<input type="checkbox"/> CA Fish and Wildlife 1600
Is the construction site part of larger common plan of development or sale (check as applicable)?		Name of larger common plan/project (if applicable):
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> Unknown		
Impervious Surface Area:		
Pre-Project	New or Replaced	Total Post-Project
Impervious Surface: <b>4,400</b> square ft.	Impervious Surface: <b>2,180</b> square ft.	Impervious Surface: <b>6,580</b> square ft.
Check Project Type as determined from LID Manual Part A, Table 1 - Applicable Post-Construction Standards Based on Project Type		
Project Type:		Notes:
<input type="checkbox"/> Exempt		Sign and Certify this form.
<input checked="" type="checkbox"/> Small Project		Sign and Certify this form. Follow instructions in Part B of LID Manual.
<input type="checkbox"/> Regulated Project		Sign and Certify this form. Follow instructions in Part C of LID Manual
<input type="checkbox"/> Regulated Project with $\geq 1$ acre of created or replaced impervious surface		Sign and Certify this form. Follow instructions in Part C of LID Manual.
<input type="checkbox"/> Regulated Redevelopment, Roads, or Linear Underground Project		Sign and Certify this form. Requirements vary; contact County or City Department with project jurisdiction.
Stormwater runoff from the project site discharges to (check as applicable):		
<input checked="" type="checkbox"/> Storm Drain System (including road side ditches and other conveyances)		<input type="checkbox"/> Directly to waters of the State or U.S. (e.g. river, lake, stream, ocean, wetland) Name of Waterbody:
Name of nearest waterbody receiving runoff from site: <b>Martin Slough</b>		
Indicate distance from project site to nearest watercourse: <b>1370 ft.</b>		
If your project is covered under the State Water Resources Control Board Construction General Permit (CGP), attach a copy of the submitted Stormwater Pollution Prevention Plan (SWPPP) including the Notice of Intent and WDID Number.		
If a CGP is not required for your project, submit appropriate construction site BMP plans as required by County or City Department with project jurisdiction.		
<b>II. Certification (Completed by Owner or Authorized Applicant/Agent)</b>		
I, the below signed, confirm that I have accurately described my project to the best of my ability, and that I have not purposely omitted any detail affecting my project's classification for stormwater regulation		
Printed Name: <b>Leonard Lindstrom</b>		
Signature: <i>Leonard Lindstrom</i>		Date: <b>02/07/2025</b>
<b>III. For Official Use Only</b>		
Permit No.:	Submittal Date:	Received By:



## Soil Quality Improvement and Maintenance

Description
<p>In areas subject to grading/clearing not covered by impervious surface, create/amend pervious areas with a 12" layer of topsoil. Soil quality improvement options include the following:</p> 
Technique

### Option 1: Leave native vegetation and soil undisturbed and protect from compaction during construction

Identify areas of the site that will not be stripped, logged, graded, or driven on, and fence off those areas to prevent impacts during construction. If neither soils nor vegetation are disturbed, these areas do not require amendment.

### Option 2: Amend existing site topsoil or subsoil

Scarify or till subgrade to 8 inch depth (or to depth needed to achieve a total depth of 12 inches of un-compacted soil after calculated amount of amendment is added). Entire surface should be disturbed by scarification. Amend soil to meet desired organic content.

### Option 3: Stockpile existing topsoil during grading. Replace topsoil before planting.

Stockpile and cover soil with weed barrier material that sheds moisture yet allows air transmission. Replace stockpiled topsoil prior to planting and ensure that replaced soil plus additional compost as needed will amount to at least 12 inches of depth.

Compost/amendment shall be mature, stable, weed free, and produced by aerobic decomposition of organic matter.

## Credits

Runoff reduction credits can be applied for the area of soil quality improvement.

- The runoff reduction credits (square feet) will be equal to the area of soil quality improvement.
- A minimum area of 150 square feet of soil quality improvement area must apply to use this credit.



# ATTACHMENT 5



NOAA Atlas 14, Volume 6, Version 2  
Location name: Eureka, California, USA\*  
Latitude: 40.7644°, Longitude: -124.1748°  
Elevation: 136 ft\*\*  
\* source: ESRI Maps  
\*\* source: USGS



## POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

[PF tabular](#) | [PF graphical](#) | [Maps & aeriels](#)

### PF tabular

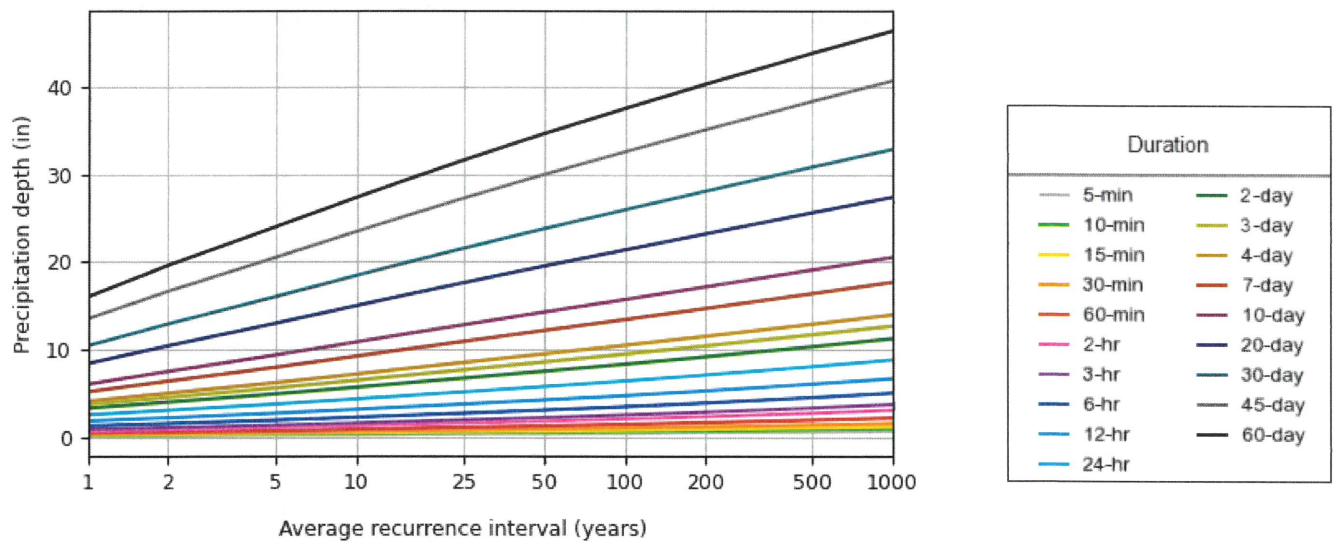
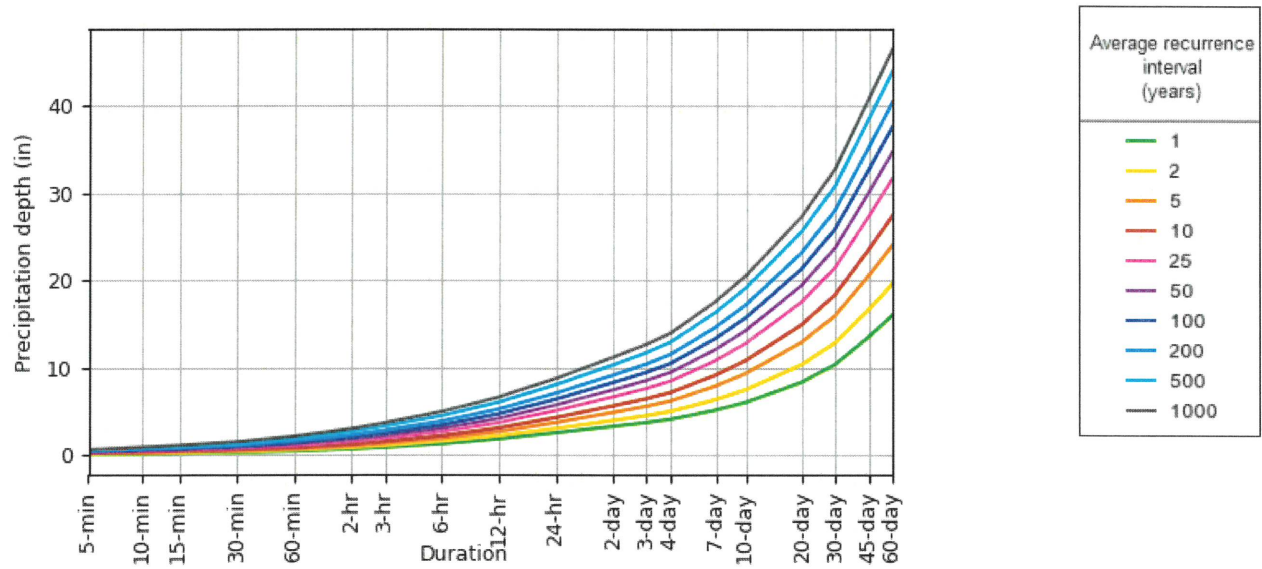
PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches) <sup>1</sup>										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.129 (0.113-0.148)	0.164 (0.144-0.189)	0.214 (0.187-0.247)	0.257 (0.222-0.300)	0.320 (0.266-0.388)	0.371 (0.302-0.461)	0.427 (0.337-0.545)	0.487 (0.373-0.643)	0.574 (0.419-0.795)	0.647 (0.454-0.931)
10-min	0.184 (0.162-0.212)	0.235 (0.206-0.271)	0.307 (0.268-0.355)	0.368 (0.319-0.430)	0.458 (0.381-0.556)	0.532 (0.432-0.661)	0.611 (0.483-0.782)	0.698 (0.534-0.921)	0.823 (0.601-1.14)	0.927 (0.651-1.34)
15-min	0.223 (0.196-0.257)	0.284 (0.249-0.328)	0.371 (0.324-0.429)	0.445 (0.385-0.520)	0.554 (0.461-0.672)	0.643 (0.523-0.800)	0.739 (0.584-0.945)	0.844 (0.646-1.11)	0.996 (0.727-1.38)	1.12 (0.787-1.61)
30-min	0.303 (0.266-0.349)	0.387 (0.339-0.446)	0.504 (0.440-0.583)	0.606 (0.524-0.707)	0.753 (0.627-0.914)	0.875 (0.711-1.09)	1.01 (0.794-1.29)	1.15 (0.878-1.52)	1.36 (0.989-1.88)	1.53 (1.07-2.20)
60-min	0.427 (0.375-0.492)	0.545 (0.478-0.629)	0.710 (0.620-0.822)	0.854 (0.738-0.997)	1.06 (0.884-1.29)	1.23 (1.00-1.53)	1.42 (1.12-1.81)	1.62 (1.24-2.14)	1.91 (1.39-2.64)	2.15 (1.51-3.09)
2-hr	0.666 (0.584-0.766)	0.825 (0.723-0.951)	1.05 (0.916-1.21)	1.24 (1.08-1.45)	1.53 (1.27-1.86)	1.76 (1.43-2.19)	2.02 (1.59-2.58)	2.29 (1.75-3.03)	2.69 (1.97-3.73)	3.03 (2.12-4.36)
3-hr	0.855 (0.750-0.985)	1.05 (0.917-1.21)	1.32 (1.15-1.52)	1.55 (1.34-1.81)	1.89 (1.58-2.30)	2.17 (1.77-2.70)	2.48 (1.96-3.17)	2.81 (2.15-3.71)	3.29 (2.40-4.55)	3.68 (2.59-5.30)
6-hr	1.26 (1.10-1.45)	1.52 (1.33-1.75)	1.88 (1.64-2.18)	2.20 (1.90-2.57)	2.65 (2.21-3.22)	3.02 (2.46-3.76)	3.42 (2.70-4.37)	3.85 (2.94-5.08)	4.47 (3.26-6.19)	4.98 (3.50-7.17)
12-hr	1.81 (1.58-2.08)	2.17 (1.90-2.50)	2.67 (2.33-3.09)	3.09 (2.67-3.61)	3.69 (3.07-4.48)	4.18 (3.39-5.19)	4.69 (3.70-5.99)	5.23 (4.00-6.91)	6.01 (4.38-8.31)	6.63 (4.66-9.55)
24-hr	2.51 (2.25-2.86)	3.02 (2.70-3.45)	3.71 (3.31-4.24)	4.28 (3.79-4.93)	5.07 (4.36-6.02)	5.70 (4.81-6.90)	6.36 (5.24-7.86)	7.04 (5.67-8.93)	8.00 (6.20-10.5)	8.77 (6.58-11.9)
2-day	3.27 (2.93-3.72)	3.96 (3.54-4.52)	4.88 (4.35-5.58)	5.63 (4.99-6.48)	6.66 (5.73-7.90)	7.46 (6.29-9.02)	8.28 (6.83-10.2)	9.13 (7.35-11.6)	10.3 (7.98-13.6)	11.2 (8.42-15.2)
3-day	3.70 (3.31-4.22)	4.51 (4.04-5.15)	5.58 (4.98-6.38)	6.44 (5.71-7.42)	7.62 (6.55-9.04)	8.52 (7.19-10.3)	9.44 (7.79-11.7)	10.4 (8.36-13.2)	11.7 (9.05-15.4)	12.7 (9.52-17.2)
4-day	4.07 (3.65-4.64)	4.99 (4.47-5.70)	6.19 (5.52-7.07)	7.15 (6.34-8.24)	8.46 (7.27-10.0)	9.45 (7.97-11.4)	10.5 (8.63-12.9)	11.5 (9.24-14.6)	12.9 (9.98-17.0)	14.0 (10.5-19.0)
7-day	5.14 (4.61-5.86)	6.37 (5.69-7.26)	7.94 (7.08-9.07)	9.19 (8.14-10.6)	10.9 (9.34-12.9)	12.1 (10.2-14.7)	13.4 (11.0-16.6)	14.7 (11.8-18.6)	16.4 (12.7-21.6)	17.7 (13.3-24.0)
10-day	6.01 (5.38-6.85)	7.47 (6.68-8.52)	9.33 (8.33-10.7)	10.8 (9.58-12.5)	12.8 (11.0-15.2)	14.2 (12.0-17.2)	15.7 (12.9-19.4)	17.1 (13.8-21.7)	19.1 (14.8-25.1)	20.5 (15.4-27.9)
20-day	8.36 (7.48-9.52)	10.4 (9.30-11.9)	13.0 (11.6-14.8)	15.0 (13.3-17.2)	17.6 (15.1-20.9)	19.5 (16.4-23.6)	21.4 (17.6-26.4)	23.2 (18.7-29.4)	25.6 (19.8-33.7)	27.4 (20.6-37.2)
30-day	10.4 (9.31-11.8)	12.9 (11.5-14.7)	16.0 (14.3-18.3)	18.4 (16.3-21.2)	21.5 (18.5-25.5)	23.8 (20.0-28.7)	26.0 (21.4-32.1)	28.1 (22.6-35.6)	30.9 (23.9-40.6)	32.9 (24.7-44.7)
45-day	13.5 (12.1-15.4)	16.7 (14.9-19.0)	20.5 (18.3-23.5)	23.5 (20.8-27.1)	27.3 (23.4-32.4)	30.0 (25.3-36.3)	32.6 (26.9-40.3)	35.2 (28.3-44.6)	38.4 (29.7-50.6)	40.7 (30.6-55.4)
60-day	16.0 (14.3-18.2)	19.6 (17.6-22.4)	24.0 (21.4-27.5)	27.4 (24.3-31.5)	31.6 (27.2-37.5)	34.7 (29.2-41.9)	37.6 (31.0-46.4)	40.4 (32.5-51.2)	43.9 (34.0-57.8)	46.4 (34.9-63.1)

<sup>1</sup> Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).  
Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.  
Please refer to NOAA Atlas 14 document for more information.

[Back to Top](#)

PF graphical

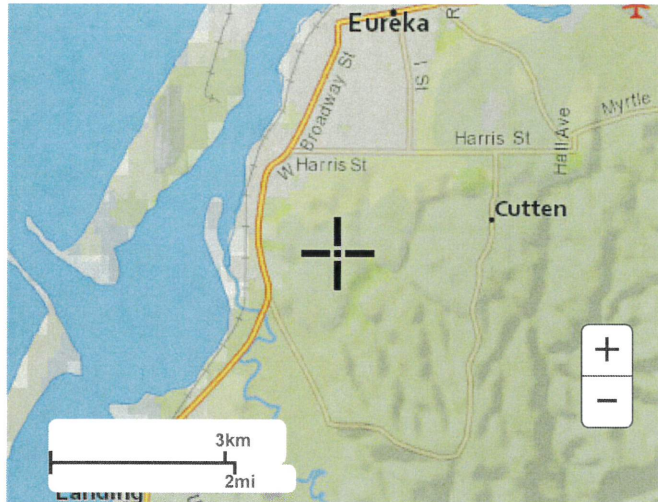
PDS-based depth-duration-frequency (DDF) curves  
Latitude: 40.7644°, Longitude: -124.1748°



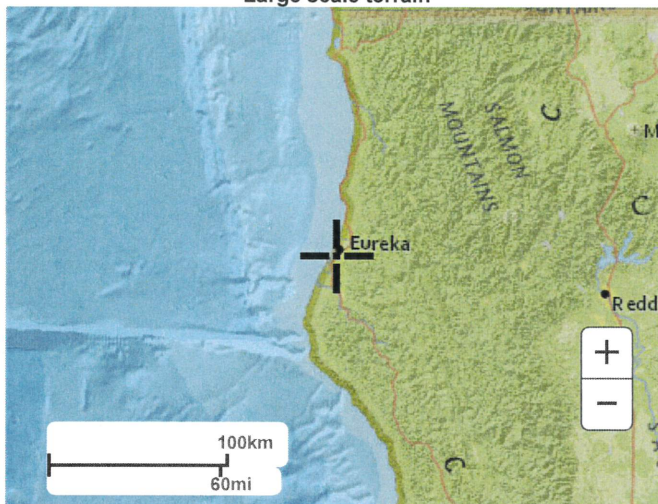
## Maps & aerals

Small scale terrain

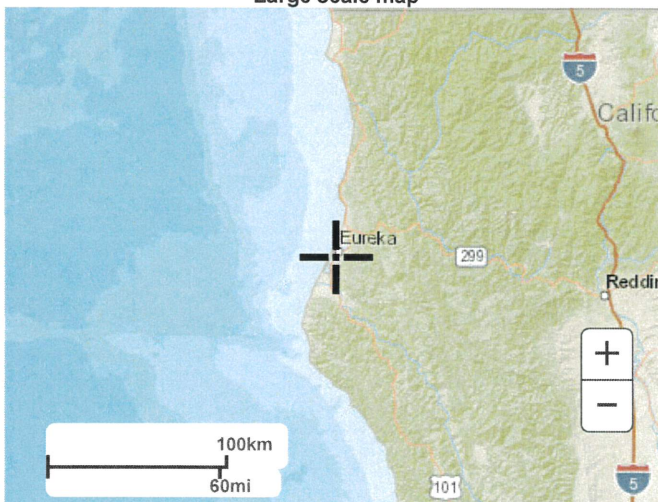




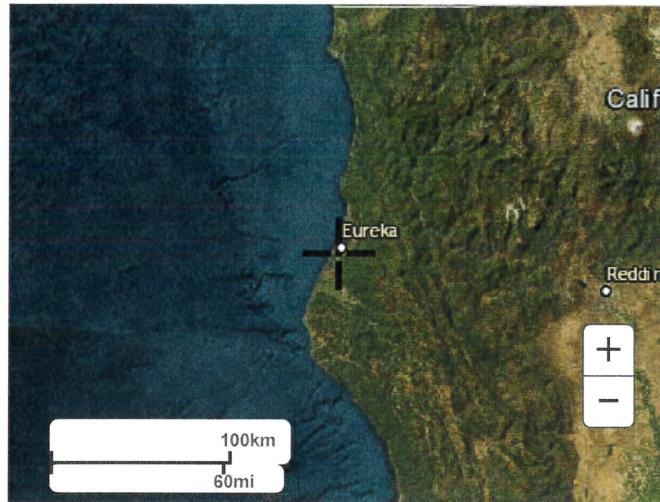
Large scale terrain



Large scale map



Large scale aerial



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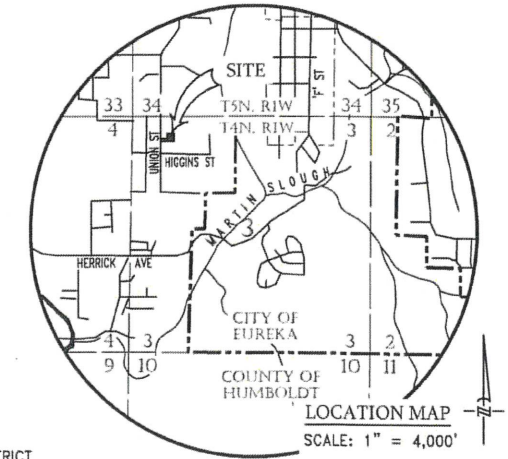
[US Department of Commerce](#)  
[National Oceanic and Atmospheric Administration](#)  
[National Weather Service](#)  
[National Water Center](#)  
1325 East West Highway  
Silver Spring, MD 20910  
Questions?: [HDSC.Questions@noaa.gov](mailto:HDSC.Questions@noaa.gov)

[Disclaimer](#)



OWNER  
ANTONIO DELEON JR  
3099 PIGEON POINT ROAD  
EUREKA, CA 95503  
(707) 498-2154

APPLICANT  
LINDSTROM CONSTRUCTION, INC.  
2382 LINDY LAND  
EUREKA, CA 95501  
(707) 572-2303

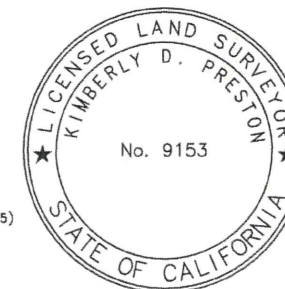


## UTILITIES

WATER & SEWER	HUMBOLDT COMMUNITY SERVICES DISTRICT
GAS & ELECTRIC	PACIFIC GAS & ELECTRIC COMPANY
CABLE TELEPHONE	OPTIMUM
FIRE PROTECTION	HUMBOLDT BAY FIRE DISTRICT

## NOTES

- THIS TENTATIVE PARCEL MAP PROPOSES A MINOR SUBDIVISION OF APN 301-052-036, A PARCEL ROUGHLY 0.83 ACRES IN SIZE, INTO THREE (3) PARCELS. AFTER SUBDIVISION, THE SIZE OF THE RESULTANT PARCELS ARE AS FOLLOWS:  
PARCEL 1: 13,553 S.F. (GROSS)  
PARCEL 2: 13,792 S.F. (GROSS)  
PARCEL 3: 8,810 S.F. (GROSS)
- THE PROPERTY IS LOCATED AT 4721 UNION STREET, IN THE EUREKA AREA OF THE COUNTY, AND IS ACCESSED DIRECTLY OFF UNION STREET (COUNTY ROAD 3J464). THE PARCEL IS NOT WITHIN A STATE RESPONSIBILITY AREA (SRA).
- THE PROPERTY HAS A GENERAL PLAN DESIGNATION OF RESIDENTIAL LOW DENSITY, ALLOWING 1-7 UNITS PER ACRE (RL 1-7), AND IS ZONED RESIDENTIAL ONE FAMILY, SPECIFYING A 6,000 S.F. MIN. PARCEL SIZE (R-1\*) AS SPECIFIED BY THE EUREKA AREA COMMUNITY PLAN.
- RESULTANT PARCEL 1 IS CURRENTLY DEVELOPED WITH A 1,080 S.F. SINGLE-FAMILY RESIDENCE (SFR), DETACHED GARAGE AND SHED. THE GARAGE AND SHED ARE PROPOSED TO BE REMOVED. A NEW 1,680 S.F. SFR WITH ATTACHED GARAGE (SHOWN HEREON AS "PROPOSED") HAS BEEN APPROVED UNDER BUILDING PERMIT NO. BLD-2024-60903. ONCE CONSTRUCTED, THIS WILL BECOME THE PARCEL'S PRIMARY RESIDENCE AND THE EXISTING RESIDENCE WILL BECOME AN ACCESSORY DWELLING UNIT (ADU). PARCELS 2 & 3 ARE CURRENTLY UNDEVELOPED, BUT AS FUTURE DEVELOPMENT OF THESE PARCELS IS EXPECTED, A FOOTPRINT FOR A ±1,500 S.F. SFR IS SHOWN HEREON FOR LOW IMPACT DEVELOPMENT (LID) CALCULATION PURPOSES (SEE NOTE 5). THE PROPOSED DRIVEWAY WILL BE CONSTRUCTED OF GRAVEL, WITH A PAVED DRIVEWAY APRON AT UNION STREET.
- THE PROPERTY IS VERY FLAT, WITH CONTOURS SHOWN HEREON AT 2-FOOT INTERVALS BASED ON USGS QUAD MAPPING. THE SITE IS WITHIN AN M54 AREA, REQUIRING LID MEASURES TO BE INCORPORATED INTO THE PROJECT'S DESIGN. APPROXIMATELY 1,520 S.F. OF EXISTING IMPERVIOUS SURFACES (DETACHED GARAGE, SHED & CONCRETE SLABS) ARE TO BE REMOVED AS A PART OF THIS PROJECT. A COMPLETED LID WORKSHEET AND PRELIMINARY DRAINAGE REPORT WERE SUBMITTED WITH THE APPLICATION PACKAGE.
- PER FIRM COMMUNITY PANEL NO. 060060 6806, THE PROPERTY IS NOT LOCATED WITHIN A MAPPED 100-YEAR FLOOD HAZARD ZONE AND IS NOT SUBJECT TO FLOODING. NO OTHER HAZARDOUS AREAS, SENSITIVE HABITATS, HISTORIC BUILDINGS OR ARCHAEOLOGICAL SITES ARE KNOWN TO EXIST ON OR ADJACENT TO PROPERTY.
- AN INITIAL BIOLOGICAL ASSESSMENT WAS PREPARED BY HOHMAN & ASSOCIATES, DATED JULY 22, 2024, AND WAS SUBMITTED WITH THE APPLICATION PACKAGE.
- LANDSCAPED AREAS SUBJECT TO GRADING/CLEARING NOT COVERED BY IMPERVIOUS SURFACE WILL INCLUDE A SOIL QUALITY IMPROVEMENTS AND MAINTENANCE OPTION DURING DEVELOPMENT, PER PART B, PAGE 1 OF HUMBOLDT COUNTY LID MANUAL.
- ALL EASEMENTS OF RECORD ARE SHOWN OR REFERENCED HEREON AND WILL APPEAR ON THE RECORDED PARCEL MAP. AN ACCESS & UTILITY EASEMENT OVER AND ACROSS PARCELS 2 AND 3, FOR THE BENEFIT OF PARCELS 1 AND 3, WILL BE SHOWN ON THE PARCEL MAP PREPARED FOLLOWING PROJECT APPROVAL.
- THIS TENTATIVE MAP IS BASED ON A PRELIMINARY FIELD SURVEY AS WELL AS RECORD INFORMATION. LOT BEARINGS & DISTANCES SHOWN HEREON MAY HAVE BEEN COMPILED FROM ASSESSOR'S MAPS, DEEDS, ETC., AND SHOULD BE CONSIDERED APPROXIMATE IN NATURE.
- PER THAT PRELIMINARY REPORT PREPARED BY PACIFIC COAST TITLE, ORDER NO. 10303318 DATED NOVEMBER 15, 2024, NO EXISTING EASEMENTS ENCUMBER THE SUBJECT PARCEL.
- THIS TENTATIVE MAP IS NOT INTENDED TO BE USED FOR CONSTRUCTION PURPOSES.



*Kimberly D. Preston* 2-7-25  
KIMBERLY D. PRESTON  
P.L.S. 9153  
DATE

APN 301-052-036

## TENTATIVE PARCEL MAP

for  
**LINDSTROM CONSTRUCTION, INC.**  
in the unincorporated area of Humboldt County  
Section 3, T.4N., R.1W., H.B.24.

SCALE	AS SHOWN
JOB NO.	24-2341
SHEET	OF
1	1



DESIGNED BY	KDP	DATE	04/29/24
DRAWN BY	CWB	DATE	04/29/24
CHECKED BY	KDP	DATE	02/06/25

## EASEMENTS &amp; ENCUMBRANCES

PER PRELIMINARY REPORT BY PACIFIC COAST TITLE COMPANY, DATED NOVEMBER 15, 2024, ORDER #10303318, THERE ARE NO EXISTING EASEMENTS OF RECORD ON THE SUBJECT PROPERTY.