

2019079109

**Initial Study and Proposed Negative Declaration**

**Simpco Minor Subdivision**

**Lake Earl Drive**

***July 2019***



*Prepared By*  
Del Norte County  
Community Development Department  
Planning Division  
981 H Street, Suite 110  
Crescent City, California 95531

[www.co.del-norte.ca.us](http://www.co.del-norte.ca.us)

## Project Information Summary

1. **Project Title:** Simpco Minor Subdivision, Lake Earl Drive  
MS1904
2. **Lead Agency Name and Address:** Del Norte County  
Community Development Department, Planning Division  
981 H Street, Suite 110  
Crescent City, CA 95531
3. **Contact Person and Phone Number:** Taylor Carsley  
(707) 464-7254
4. **Project Location and APN:** 3905 Lake Earl Drive, Crescent City, CA  
110-201-033
5. **Project Sponsor's Name and Address:** Dave Powell  
P.O. Box 263  
Crescent City, CA 95567
6. **County General Plan Land Use:** Rural Residential, 1 acre minimum lot size
7. **County Zoning:** Residential and Agriculture, 1 acre minimum lot size (R1A)
8. **Description of Project:**

The project is a minor subdivision of a 2.8-acre property at the intersection of Lake Earl Drive and Audree Lane. The property is currently developed with a single family residence. The subdivision would create two lots; one developed with a residence, and one undeveloped. Both proposed properties are zoned Residential and Agriculture, 1 acre minimum lot size. No development is proposed with this project, although one or two residences (in the form of an accessory dwelling unit) could be developed in the future as a result of the subdivision.
9. **Surrounding Land Uses and Settings:** Rural residential, and public lands
10. **Required Approvals:** Del Norte County Planning Commission
11. **Other Approval (Public Agencies):** Del Norte County Community Development Department
12. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?**

Native American tribes, traditionally and culturally affiliated with the project area have been notified of the project application completion and the beginning of the AB 52 consultation period pursuant to PRC §21080.3.1.

### Environmental Factors Potentially Affected

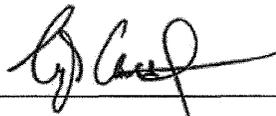
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Agriculture and Forestry Resources	<input type="checkbox"/> Air Quality	
<input type="checkbox"/> Biological Resources	<input type="checkbox"/> Cultural Resources	<input type="checkbox"/> Energy	
<input type="checkbox"/> Geology/Soils	<input type="checkbox"/> Greenhouse Gas Emissions	<input type="checkbox"/> Hazards & Hazardous Materials	
<input type="checkbox"/> Hydrology / Water Quality	<input type="checkbox"/> Land Use / Planning	<input type="checkbox"/> Mineral Resources	
<input type="checkbox"/> Noise	<input type="checkbox"/> Population / Housing	<input type="checkbox"/> Public Services	
<input type="checkbox"/> Recreation	<input type="checkbox"/> Transportation	<input type="checkbox"/> Tribal Cultural Resources	
<input type="checkbox"/> Utilities / Service Systems	<input type="checkbox"/> Wildfire	<input type="checkbox"/> Mandatory Findings of Significance	

### Determination

On the basis of this initial evaluation:

<input checked="" type="checkbox"/>	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<input type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
<input type="checkbox"/>	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
<input type="checkbox"/>	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
<input type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Taylor Carsley, Planner

7/23/19

Date

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# 1. Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) In non-urbanized areas, substantially degrade the existing visual character or public views of the site and its surroundings? (Public views are those that are experienced from publically accessible vantage points). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Discussion of Impacts

- a. This project would have no foreseeable impact on scenic vistas.
- b. This project would have no foreseeable impact on scenic resources.
- c. The project would not degrade the existing visual character or public views of the site and its surroundings.
- d. The project does not propose any development which would create a new source of substantial light or glare which would adversely affect views.

# 2. Agriculture and Forest Resources

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion of Impacts**

- a. No farmland exists on-site.
- b. No agricultural zoning exists on-site or adjacent to the property
- c. No Timber Production zones exist on-site or adjacent to the property
- d. The project would not result in the loss of forestland. No forestland exists on-site.
- e. The project does not involve any other changes in the existing environment that could adversely affect farmland or timberlands.

**3. Air Quality**

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in other emissions (such as those leading to odors or dust) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion of Impacts**

- a. This project would have no foreseeable impacts on the implementation of an air quality plan.
- b. This project would have no foreseeable impacts on increasing criteria pollutants in the region.
- c. This project would not expose receptors to pollutant concentrations.
- d. This project would have no foreseeable impacts in increasing any emissions.

**4. Biological Resources**

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

### Discussion of Impacts

a-f. No sensitive biological resources exist on the project site. The area is not indicated to contain wetland areas as mapped in the National Wetlands Inventory. The area is zoned and designated for residential and agricultural uses which have been previously analyzed under CEQA in the General Plan as suitable on this project site.

## 5. Cultural Resources

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

### Discussion of Impacts

a-c. No cultural resources are known to exist on-site. Notice was provided to tribes traditionally culturally affiliated with the project area and no comment was given with regard to cultural resources. Additionally, a Native American representative is a voting member of the County Environmental Review Committee which reviews projects and makes CEQA recommendations. No potential impacts are known to exist

## 6. Energy

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

resources, during project construction or operation?				
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion of Impacts**

- a. The project would have no foreseeable impacts on increasing wasteful, inefficient, or unnecessary energy use since no development is proposed as part of this application.
- b. This project does not conflict with nor obstruct a state or local plan for renewable energy or energy efficiency.

**7. Geology and Soils**

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion of Impacts**

a-f. No impacts related to geology and/or soils as a result of this project are expected to occur. This project subdivides property already developed. An on-site sewage disposal analysis was completed by a California Licensed Civil Engineer to ensure each proposed property has adequate soil for a septic system with reserve drainfield. Two test pits were dug during wet weather conditions, soils were analyzed, and a percolation test was performed. The report concluded that sufficient area existed on the proposed parcel to site a conventional leachfield system and reserve area. Otherwise the parcel is flat with no known geological issues which could be impacted by potential future development related to this subdivision.

## 8. Greenhouse Gas Emissions

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Discussion of Impacts

- a. The project would not create significant impacts to the environment from GHG emissions. No GHG emissions would be created as a result of this subdivision.
- b. The proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions.

## 9. Hazards and Hazardous Materials

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Discussion of Impacts

a-g. The project would not create impacts related to hazards or hazardous materials. This subdivision would not facilitate the transport of hazardous materials, the release of hazardous materials, nor would it create additional exposure to wildland fires.

### 10. Hydrology and Water Quality

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) result in substantial erosion or siltation on-or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional source of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable ground water management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Discussion of Impacts

a-e. This project would have no impact on hydrology or water quality. The subdivision does not affect water quality in any way, nor does it require substantial improvements that alters drainage systems, involves grading, or approve additional development that can increase runoff potential. The potential in the future to develop an additional residence as a result of this subdivision may increase impermeable surface area on the site and would require an Erosion and Runoff Control Plan to be reviewed and approved by the County Engineering Division at the time of future development. This would be considered a less than significant impact to the amount of surface runoff generated by potential future development.

### 11. Land Use and Planning

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact

a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation of an agency adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**Discussion of Impacts**

a-b. This project does not divide an established community nor does it cause a conflict with any land use plan in the County.

**12. Mineral Resources**

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**Discussion of Impacts**

a-b. No mineral resources are known to exist on site.

**13. Noise**

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**Discussion of Impacts**

a-b. This project would have no impacts through noise generation itself. The subdivision would create two parcels that are designated and zoned for residential use through the General Plan and County Zoning, respectively.

### 14. Population and Housing

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Discussion of Impacts

- a. The project would not create the ability to allow for substantial population growth in the area. The current parcel is developed with a single family residence. The subdivision would allow for the potential to develop an additional single-family residence and potentially an Accessory Dwelling Unit located on the same parcel.
- b. The project would not displace any number of existing people or housing.

### 15. Public Services

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Discussion of Impacts

- a. The project would not result in substantial adverse impacts associated with the need for new or altered governmental facilities and/or public services. The project would not substantially increase the density of development possible on the property, and thus would not directly nor indirectly place additional strain on existing public services.

## 16. Recreation

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Discussion of Impacts

a-b. The project does not impact existing recreational areas nor does it increase the need for additional recreational facilities. The subdivision would increase the future development potential by one additional single family residence, with the further potential for an Accessory Dwelling Unit on the new parcel.

## 17. Transportation

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision(b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Discussion of Impacts

a-d. The project does not impact transportation in any way. The subdivision does not substantially increase the development potential of the property which could cause transportation impacts.

## 18. Tribal Cultural Resources

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or				
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion of Impacts**

The project would have no foreseeable impacts on tribal cultural resources. A member of the Environmental Review Committee is a Native American representative and has not issued notice of any concern of resources on-site. Further, an AB 52 tribal consultation has been sent to local tribes associated with the project area and no requests for consultations have been received by the Lead Agency.

**19. Utilities and Service Systems**

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the providers existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion of Impacts**

a-e. The project would not have any impact on utilities and service systems. The proposed parcel would be served by on-site utilities including water and sewage disposal. An engineered wastewater treatment system has been designed in accordance with County regulations and the Basin Plan.

**20. Wildfire**

Would the project:	Potentially Significant	Less Than Significant Impact	Less Than Significant	No Impact
--------------------	-------------------------	------------------------------	-----------------------	-----------

	Impact	with Mitigation Incorporated	Impact		
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

### Discussion of Impacts

a-d. The project site is located in a State Responsibility Area for fire management and in a Moderate Fire Hazard Area. The subdivision is not substantially growth-inducing and would thus have no impact on wildfire hazards and introduction of additional development in the Wildland Urban Interface. The proposed parcel would be adjacent to Lake Earl Drive, a main arterial roadway which can provide for rapid response by emergency personnel.

### 21. Mandatory Findings of Significance

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

TENTATIVE MAP  
OF  
3905 LAKE EARL DRIVE  
FOR  
SIMP CO LANDS  
IN

SECTION 13, TOWNSHIP 17 NORTH, RANGE 1 WEST,  
HUMBOLDT MERIDIAN  
COUNTY OF DEL NORTE - STATE OF CALIFORNIA  
APRIL 2019

GENERAL NOTES

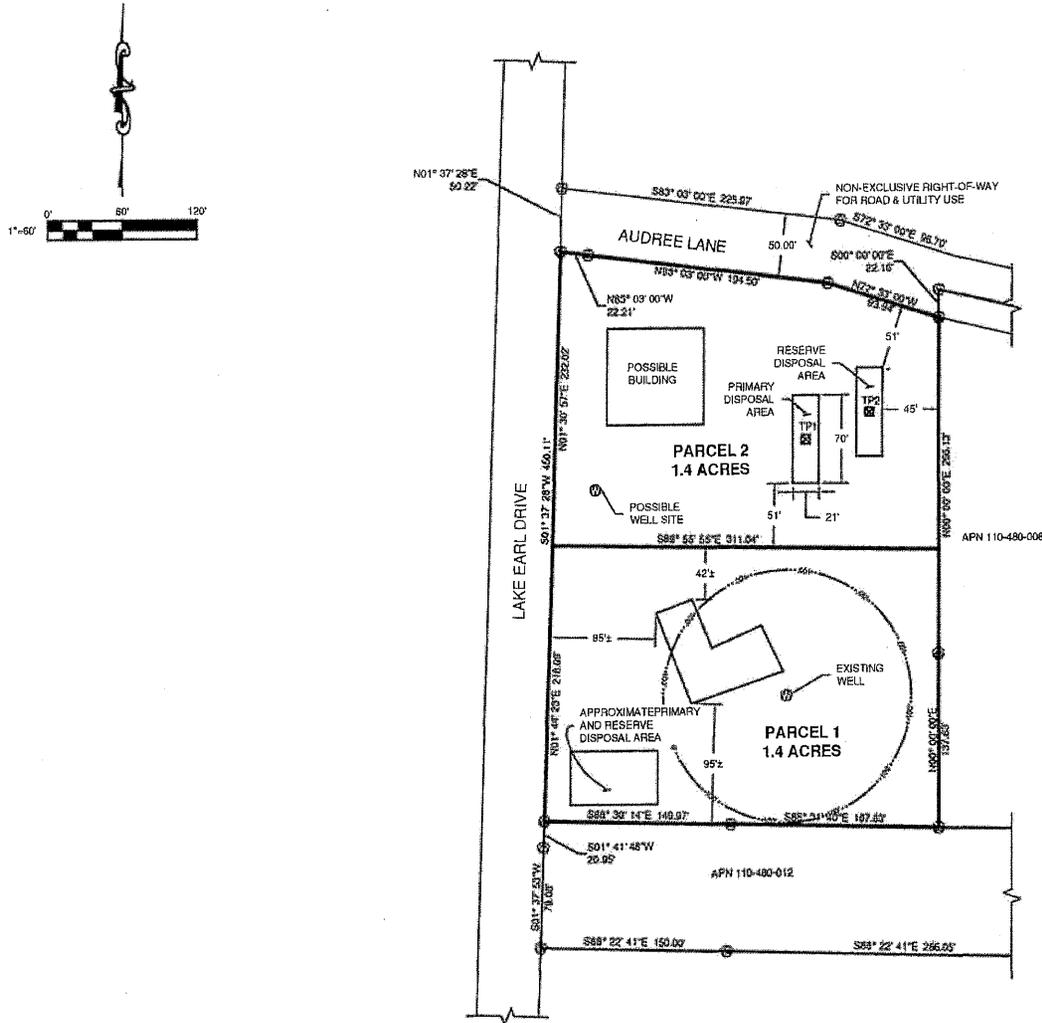
1. EXISTING PROPERTY LINES BASED ON PARCEL MAP PERFORMED BY SCHLACK & ASSOCIATES LAND SURVEYING BOOK 9 OF PARCEL MAPS PAGE 51 & 52.
2. PROPOSED PROPERTY LINES AND PARCEL AREAS ARE APPROXIMATE. EXACT LOCATIONS TO BE DETERMINED BY SURVEYOR LICENSED IN THE STATE OF CALIFORNIA.
3. TEST HOLES, WELLS, AND EXISTING FEATURES ARE ALL APPROXIMATE LOCATIONS.

LEGEND

	PROPERTY LINE
	EASEMENT
	TEST PIT #
	EXISTING BUILDING
	WELL

APN: 106-021-050-000  
AREA: 3.1 ACRES  
ZONING: R1A  
LAND USE: RR 1 DWELLING UNIT PER ACRE

PREPARED BY  
**STOVER ENGINEERING**  
Civil Engineers and Consultants  
PO BOX 783 - 711 H STREET  
CRESCENT CITY, CA 95531 707-465-6742  
JN 4586  
SHEET 1 OF 1



# STOVER ENGINEERING

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info@stovereng.com

DAVE POWELL  
SIMPCO LANDS  
PO BOX 263  
CRESCENT CITY CA 95531

Job Number: 4598

Date: 31 May 2019

RE: On-site Wastewater Treatment System Evaluation – APN 106-021-059, 3905 Lake Earl Dr., Crescent City, California

Dear Mr. Powell,

At your request, Stover Engineering performed an on-site wastewater treatment system (OWTS) evaluation for the subject property. It is my understanding that the project consists of subdividing the parcel into two separate parcels. A residence is located on the property as indicated on the attached site plan. The proposed parcel is to be served by a new well and OWTS. Based upon our investigation, it is my opinion that a conventional OWTS, plus a reserve area constructed in accordance with the Del Norte County Standards, can be situated on the property. This report conforms to the Del Norte County On-Site Sewage Disposal Ordinance.

We performed field observations on 19 April 2019 during wet weather season for the purpose of determining suitability for on-site sewage disposal. Brian McNally of the Del Norte County Environmental Health Division was present during the field observations. The designated sites indicated on the plot plan are relatively level. Two test pits were excavated to a depth of 8 or more feet below ground surface (bgs) with a backhoe, as indicated on the attached site plan. The test pit (TP) locations shown on the attached site plan are designated as TP1 and TP2. Soils observed in TP-1 comprised of sandy loam topsoil to a depth of 2 feet bgs and tan sandy clay to a depth of 8 feet bgs. Soils observed in TP-2 were similar in nature to the soils observed in TP-1. No groundwater was observed in any of the test pits.

Percolation testing was performed by Stover Engineering on 25 April 2019 during wet weather season. The percolation testing was performed in the vicinity of TP1 and TP2. The percolation rate at these locations were observed to be 24 minutes per inch and 60 minutes per inch respectively. Percolation rates are consistent with Zone 2 and Zone 3 of the Soil Percolation Suitability Chart.

The minimum required separation distance to groundwater from the bottom of leachfield trenches is five feet for soils with percolation rates slower than 5 minutes per inch in accordance with the Regional Water Quality Control Board Basin Plan. Based on the absence of groundwater and our calculations, there is sufficient area to site a conventional leachfield system and a reserve area on the proposed parcel, as shown in the attached site plan. Copies of the site evaluation summary, site plan, soils exploration test logs, percolation test log, and design calculations are attached to this letter.

Dave Powell  
26 April 2019

Please be informed that grading activities which disturb the reserve or primary areas indicated on the attached site plan will alter the suitability of the existing soils and subsequently invalidate the findings of our report. In addition, the placement of both on-site and off-site future improvements, including but not limited to wells and water lines, must adhere to the setbacks indicated on the Site Evaluation Summary sheet (page 3).

The recommendations contained in this letter are based on data obtained during the stated site observations only. Soil conditions may vary throughout the site of the proposed disposal areas. Stover Engineering assumes no liability for conditions that differ from those observed by our staff at the time of the site visit.

We trust that this provides the information you require. Please feel free to contact me if you have any questions.



Very truly yours,

STOVER ENGINEERING

A handwritten signature in black ink that reads "Ryan C. Young".

Ryan C. Young, PE, PLS  
Project Engineer

QA/QC *WJG*

Attachment (10 pages)

STOVER ENGINEERING

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SITE EVALUATION SUMMARY

OWNER: SIMPCO LANDS  
ADDRESS: 3905 LAKE EARL DR.  
CRESCENT CITY CA 95531

DATE: 4/19/2019  
JOB NO.: 4598  
APN: 106-021-059-000

LOCATION: 3905 LAKE EARL DRIVE

LOT SIZE: 1.3 AC

WATER SYSTEM: ON-SITE

GROUND SLOPE: 0-2%<sup>10</sup>

SETBACKS: (DELNORTE COUNTY MINIMUM)	SEPTIC TANK	LEACH FIELD
PROPERTY LINE	✓ (10')	✓ (10')
WELL	✓ (100')	✓ (100')
WATER LINE	N/A (10')	N/A (10')
STREAM	N/A (100')	N/A (100')
DRAINAGE CHANNEL	N/A (50')	N/A (50')
OCEAN, LAKE, ETC.	N/A (50')	N/A (100')
BLUFF OR CUTBACK	N/A (25')	N/A (25')

PRIMARY AREA SITE(S): TP 1

REPLACEMENT SITE(S): TP 2

OTHER EXCAVATIONS NONE

DEPTH TO HARDPAN, BEDROCK, ETC.: NONE OBSERVED

DEPTH TO GROUNDWATER: NONE OBSERVED

DEPTH TO MOTTLING: NONE

OTHER FACTORS:

SOIL ANALYSIS ZONE: 2, 3 PERCOLATION RATE: 24-60

DEPTH OF SOILS UNDER LEACHFIELD REQUIRED: 5' ACTUAL DEPTH AVAILABLE: 5'

REPLACEMENT AREA AVAILABLE: YES ADEQUATE? YES

OTHER COMMENTS:

EXPLORATION TEST LOG

Project Name *SIMPO LANDS* 3905 LAKE EARL Job Number *4598* by *RCY* Date *4/19/2019*  
 Hole Number *1* Hole Type *BACKHOE* APN *106-021-059-000*

Soil Sample	Depth (ft)	Soil Description			
		Color	Type	Structure	Saturation
	0'				
	1	DARK BROWN	SANDY LOAM	MOD PLASTIC	DRY
	2				
	3				
	4	TAN/ BROWN	SANDY CLAY	PLASTIC WITH SAND GRAINS	MOIST
	5				
	6				
	7				
	8	NO GROUNDWATER TO 8'			
	9				
	10				
	11				
	12				

EXPLORATION TEST LOG

Project Name *SIMPLIC LANDS* by *REV*  
*3905 LAKE EARL* Job Number *4598* Date *4/19/2019*  
 Hole Number *2* Hole Type *BACKHOE* APN *106-021-059-000*

Soil Sample	Depth (ft)	Soil Description			
		Color	Type	Structure	Saturation
	0'				
	1	<i>DARK/BROWN</i>	<i>SANDY/ LOAM</i>	<i>MOD. PLASTIC</i>	<i>DRY</i>
	2				
	3				
	4	<i>TAN/BROWN</i>	<i>SANDY/ CLAY</i>	<i>PLASTIC W/ SAND</i>	<i>MOIST</i>
	5				
	6				
	7				
	8	<i>NO GROUNDWATER OBSERVED</i>			
	9				
	10				
	11				
	12				

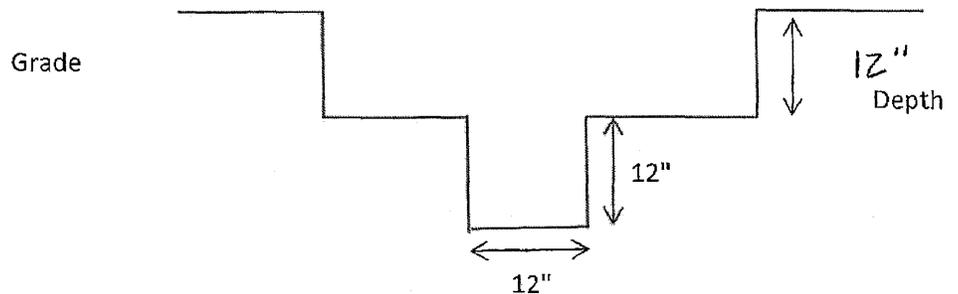
**STOVER ENGINEERING**

PERCOLATION TEST LOG							
Project Name	3905 Lake Earl Drive	Job #	4598	Test Date	4/25/19	Logged By	JDE
Hole Number	1	Hole Type		Hole Elevation		Water Table	NONE
Soil Type	Sandy loam, loam	Water Supply	ON-SITE	APN	106-021-059		

Begin Time	End Time	Begin Level (inch)	End Level (inch)	Elapsed Time (minutes)	Drop (inch)	Rate (min/inch)
2:19	2:34	5.625	6.625	15	1	15
2:34	2:49	5.25	5.875	15	0.625	24
2:49	3:04	4.5	5.25	15	0.75	20
3:04	3:19	4.625	5.125	15	0.5	30
3:19	3:34	4.625	5.375	15	0.75	20
3:34	3:49	4.625	5.25	15	0.625	24
3:49	4:04	4.875	5.5	15	0.625	24

Maximum Allowable Percolation Rate = 5 min/inch  
 Minimum Allowable Percolation Rate = 60 min/inch

STABILIZED RATE = 24 MIN/INCH



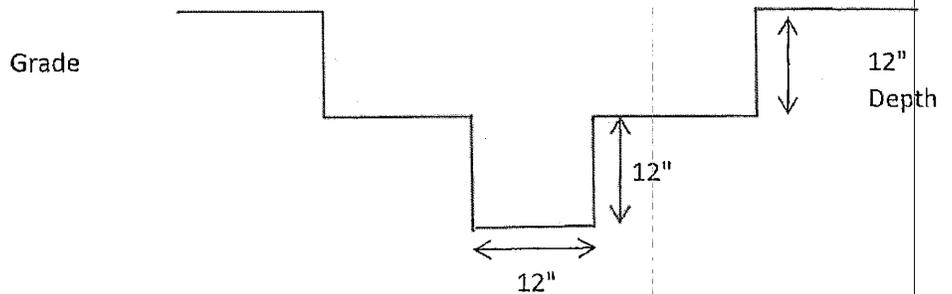
**STOVER ENGINEERING**

PERCOLATION TEST LOG							
Project Name	3905 Lake Earl	Job #	4598	Test Date	4/25/19	Logged By	JDE
Hole Number	2	Hole Type		Hole Elevation		Water Table	NONE
Soil Type	Sandy loam, loam	Water Supply	Onsite	APN	106-021-059		

Begin Time	End Time	Begin Level (inch)	End Level (inch)	Elapsed Time (minutes)	Drop (inch)	Rate (min/inch)
2:20	2:35	4.75	5	15	0.25	60
2:35	2:50	5	5.5	15	0.5	30
2:50	3:05	4.5	4.875	15	0.375	40
3:05	3:20	4.875	5.25	15	0.375	40
3:20	3:35	4.5	4.75	15	0.25	60
3:35	3:50	4.5	4.75	15	0.25	60
3:50	4:05	4.5	4.75	15	0.25	60

Maximum Allowable Percolation Rate = 5 min/inch  
 Minimum Allowable Percolation Rate = 60 min/inch

STABILIZED RATE = 60 MIN/INCH



**STOVER ENGINEERING**  
711 H Street  
Crescent City, CA 95531  
(707) 465-6742 Fax (707) 465-5922

JOB 4598  
SHEET NO. \_\_\_\_\_ OF \_\_\_\_\_  
CALCULATED BY GBG DATE 5/1/19  
CHECKED BY RLW DATE 5/1/19  
SCALE \_\_\_\_\_

**ON - SITE SEWAGE DISPOSAL SYSTEM**  
**CONVENTIONAL LEACHFIELD DESIGN**

Design References:

1. EPA Design Manual 625, "Manual of Septic Practice"
2. California North Coast Basin Plan
3. Del Norte County SDS Ordinance, Chapter 14.12
4. Uniform Plumbing Code

Begin design...

Determine Peak Flow:

Ref. 3, Table B

3 Bedroom, Single Family Residence = 450 gpd

Determine Septic Tank Size:

Minimum size = 1000 gallons

Ref. 4

Minimum size = 1200 gallons

Ref. 3

USE 1200 gallon Septic Tank

This system design complies with the Del Norte County On-Site Sewage Disposal Systems Ordinance, Chapter 14.12.

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JOB 4598  
 SHEET NO. 3 OF \_\_\_\_\_  
 CALCULATED BY GBB DATE 5/1/19  
 CHECKED BY PW DATE 5/1/19  
 SCALE \_\_\_\_\_

**CONVENTIONAL LEACHFIELD DESIGN**

-Continued-

Determine the required Absorption Area (AA):

$$AA, ft^2 = \text{Peak Flow, gpd} / \text{Application Rate, gpd/ft}^2 \quad 450 / 0.6 = 750$$

$$= \underline{750} \quad ft^2$$

Determine standard trench Length (L<sub>1</sub>):

$$L_1, ft = AA, ft^2 / \text{Trench Width, ft (Standard trench width used = 3 ft)} \quad 750 / 3$$

$$= \underline{250} \quad ft$$

L<sub>1</sub> % reduction allowed due to treatment provided by trench sidewall depth as per MSTP, Table 3: Per the TRENCH DETAIL, page \_\_\_\_\_, allowed trench length reduction = 0.85, 0.83

Determine Adjusted Length (L<sub>2</sub>):

$$L_2, ft = L_1, ft * \underline{0.83} \quad 250 * 0.83 = 208$$

Use 3 each - 70 ft laterals

LATERAL LENGTH (L<sub>3</sub>) = 70 ft

LATERAL WIDTH (W) = 21 ft

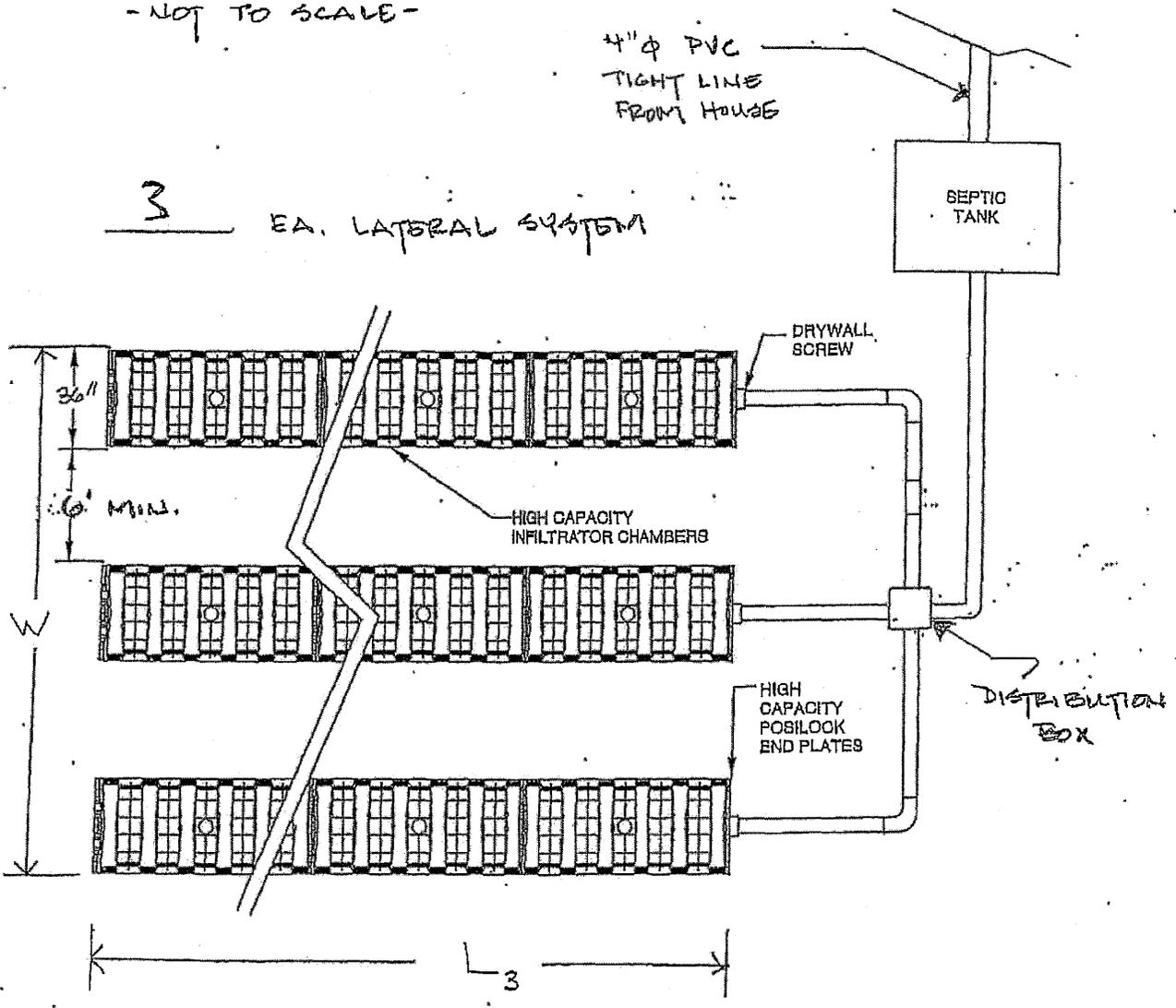
Trench: Spaces  
 (3 x 3') (2 x 6') = 21'

REFER TO TYPICAL LAYOUT ON THE FOLLOWING SHEET, PAGE \_\_\_\_\_

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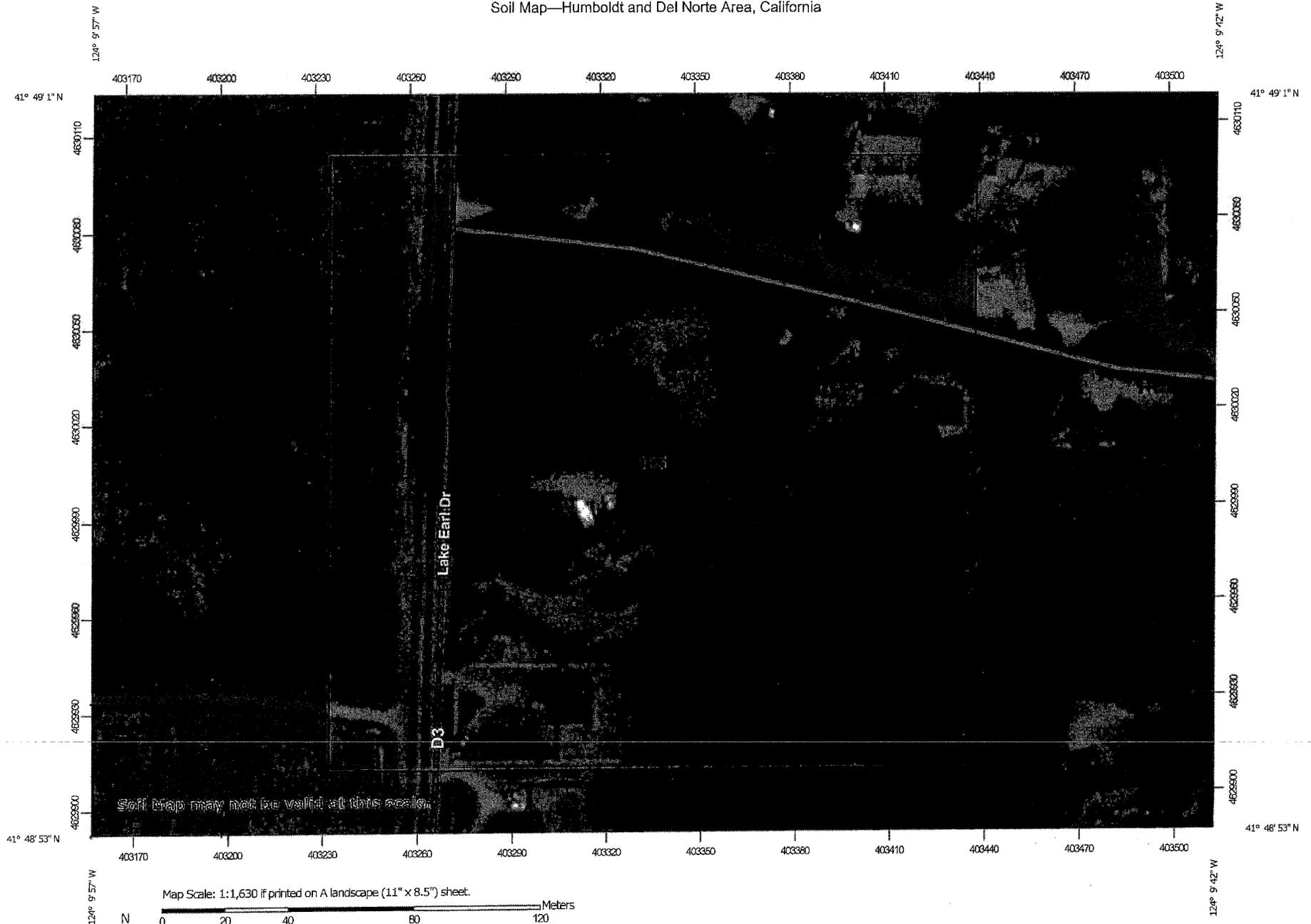
JOB 4598 4  
 SHEET NO. \_\_\_\_\_ OF \_\_\_\_\_  
 CALCULATED BY GBG DATE 5/1/19  
 CHECKED BY RLW DATE 5/1/19  
 SCALE \_\_\_\_\_

TYPICAL LAYOUT  
 - NOT TO SCALE -



$L_3 = \text{LENGTH OF LATERAL} = \underline{70'}$   
 $W = \text{OVERALL LEACHFIELD WIDTH} = \underline{21'}$

Soil Map—Humboldt and Del Norte Area, California



Map Scale: 1:1,630 if printed on A landscape (11" x 8.5") sheet.  
0 20 40 60 80 100 120 Meters  
0 50 100 200 300 Feet  
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

### MAP LEGEND

<b>Area of Interest (AOI)</b>	 Area of Interest (AOI)	 Spoil Area
<b>Soils</b>	 Soil Map Unit Polygons	 Stony Spot
	 Soil Map Unit Lines	 Very Stony Spot
	 Soil Map Unit Points	 Wet Spot
<b>Special Point Features</b>		 Other
 Blowout		 Special Line Features
 Borrow Pit	<b>Water Features</b>	 Streams and Canals
 Clay Spot	<b>Transportation</b>	 Streams and Canals
 Closed Depression	 Rails	 Streams and Canals
 Gravel Pit	 Interstate Highways	 Streams and Canals
 Gravelly Spot	 US Routes	 Streams and Canals
 Landfill	 Major Roads	 Streams and Canals
 Lava Flow	 Local Roads	 Streams and Canals
 Marsh or swamp	<b>Background</b>	 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 and Del Norte Area, California  
 Survey Area Data: Version 12, Sep 14, 2018

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

Date(s) aerial images were photographed: Dec 31, 2009—Oct 11, 2017

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
185	Timmons and Lepoil soils, 0 to 2 percent slopes	9.7	100.0%
<b>Totals for Area of Interest</b>		<b>9.7</b>	<b>100.0%</b>

## Humboldt and Del Norte Area, California

### 185—Timmons and Lepoil soils, 0 to 2 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2dgkv  
*Elevation:* 30 to 250 feet  
*Mean annual precipitation:* 35 to 90 inches  
*Mean annual air temperature:* 52 to 55 degrees F  
*Frost-free period:* 275 to 325 days  
*Farmland classification:* Prime farmland if irrigated

#### Map Unit Composition

*Timmons and similar soils:* 45 percent  
*Lepoil and similar soils:* 40 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Timmons

##### Setting

*Landform:* Marine terraces  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Mixed marine deposits

##### Typical profile

*Ap - 0 to 19 inches:* loam  
*AB - 19 to 30 inches:* loam  
*Bt - 30 to 60 inches:* clay loam

##### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Well drained  
*Capacity of the most limiting layer to transmit water (Ksat):*  
Moderately high (0.20 to 0.60 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water storage in profile:* High (about 11.2 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 1  
*Land capability classification (nonirrigated):* 2s  
*Hydrologic Soil Group:* C

*Ecological site:* Redwood-Sitka spruce/salal-California huckleberry/  
western swordfern, marine terraces, marine deposits, sandy  
loam an (F004BX121CA)  
*Hydric soil rating:* No

### Description of Lepoil

#### Setting

*Landform:* Marine terraces  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Mixed marine deposits

#### Typical profile

*A - 0 to 10 inches:* loam  
*AB - 10 to 22 inches:* clay loam  
*Bt - 22 to 60 inches:* clay loam

#### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Well drained  
*Capacity of the most limiting layer to transmit water (Ksat):*  
Moderately high to high (0.20 to 2.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0  
to 2.0 mmhos/cm)  
*Available water storage in profile:* High (about 10.9 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 2s  
*Hydrologic Soil Group:* C  
*Ecological site:* Redwood-Sitka spruce/salal-California huckleberry/  
western swordfern, marine terraces, marine deposits, sandy  
loam an (F004BX121CA)  
*Hydric soil rating:* No

### Minor Components

#### Urban land, residential

*Percent of map unit:* 5 percent  
*Landform:* Marine terraces  
*Landform position (two-dimensional):* Summit  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

**Hutsinpillar**

*Percent of map unit:* 4 percent  
*Landform:* Drainageways, alluvial fans  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear, concave  
*Across-slope shape:* Linear, concave  
*Hydric soil rating:* Yes

**Megwil,**

*Percent of map unit:* 3 percent  
*Landform:* Marine terraces  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* Redwood-Sitka spruce/California huckleberry-salmonberry/western swordfern-deer fern, marine terraces, loam (F004BX120CA)  
*Hydric soil rating:* No

**Talawa**

*Percent of map unit:* 3 percent  
*Landform:* Marine terraces  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Hydric soil rating:* Yes

## Data Source Information

Soil Survey Area: Humboldt and Del Norte Area, California  
Survey Area Data: Version 12, Sep 14, 2018