

The Reserve at Pinewood Lakes Policy Paper No. 1

Adopted: April 1, 2013 and June 25, 2020

Ratified: May 3, 2022

DRAINAGE REQUIREMENTS AND RECOMMENDATIONS

Preface

The streets within "The Reserve" section of the Pinewood Lakes subdivision are privately owned and each lot owner is responsible for the lot drainage and street drainage adjacent to your house. The Covenants, Conditions and Restrictions (CC&Rs) for "The Reserve" contain specific requirements for the construction, maintenance and performance of the drainage system.

Drainage swales were originally constructed in the front of your house in accordance with engineered plans to accommodate this drainage. However, erosion and/or building construction activities may have altered the grading of these swales and regrading may be required. In addition, some homeowners have also found that construction of an infiltration swale type facility may be necessary to comply with the drainage performance requirements due to the existence of a clay layer below the swale that restricts drainage infiltration.

The purpose of this document is to highlight the requirements for lot grading and the construction, maintenance, and performance of the drainage swale in front of your home and to provide recommendations for achieving compliance with the drainage performance requirements. It is also recommended you consult with an expert in landscaping and drainage such as a landscape architect, geotechnical engineer, civil engineer and/or other qualified specialist to assist you in making decisions regarding the landscaping and drainage decisions for your lot.

Performance Requirements

- a. General drainage swales shall be constructed to restrict surface water flow to adjacent lots.
- b. Storm Drainage Performance Standard

Drainage swales shall be constructed and maintained such that they do not have standing water remaining within the timeframes shown below for the 24 hour rainfall totals listed.

For 24 hour rainfall totals of 1" or less (2 year design storm frequency), swales shall be free of standing water within 48 hours of the last rainfall.

For 24 hour rainfall totals of greater than 1" and less than 1.5" (10 year design storm frequency), swales shall be free of standing water within 72 hours of the last rainfall.

For 24 hour rainfall totals greater than 1.5," swales shall be free of standing water within 96 hours of the last rainfall.

- c. Irrigation Performance Standard

Drainage swales and irrigation systems shall be constructed, maintained and operated such that there is no standing water in the swales within 8 hours of the last irrigation cycle and such that the swales are free of standing water at least 8 hours per day.

Lot and Swale Grading

- a. Lots shall be graded at the time of building such that:
 - The building lot will drain sufficiently away from the foundation with proper slope to keep water out of the crawl space of the house.
 - Drainage is directed to flow from the sides and front of the house to the drainage swale adjacent to the street in front of the house.
 - Existing /designed drainage patterns are maintained.
 - Grading and drainage shall comply with all applicable building code requirements.
- b. With the exception of the driveway, the drainage swale adjacent to the road shall be graded to the dimensions shown in Attachment "A" to this document.
- c. A minimum 6" diameter pipe shall be installed under the driveway to maintain planned drainage patterns.

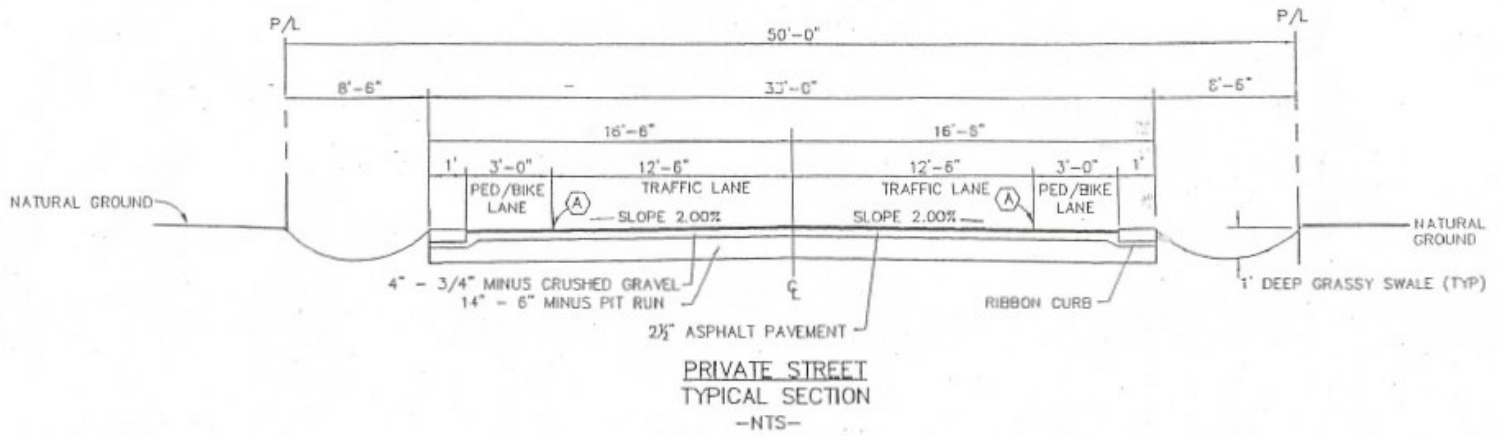
Infiltration Facilities

- a. Several homeowners have found that construction of an infiltration facility in the swale may also be required to comply with the drainage performance requirements due to the existence of a clay layer below the swale that restricts drainage infiltration. It is highly recommended that you consider construction of an infiltration facility at the time of building to reduce the chance of your drainage system not meeting performance requirements.
- b. Examples of infiltration facilities are shown in Attachments "B" and "C." The lowest point in the drainage swale is typically the most effective location to construct an infiltration facility. Low points for each lot are shown on Attachment "D."
- c. Prior to excavation call Digline (Ph# 342-1583) to locate potential utilities that may be impacted by excavation.

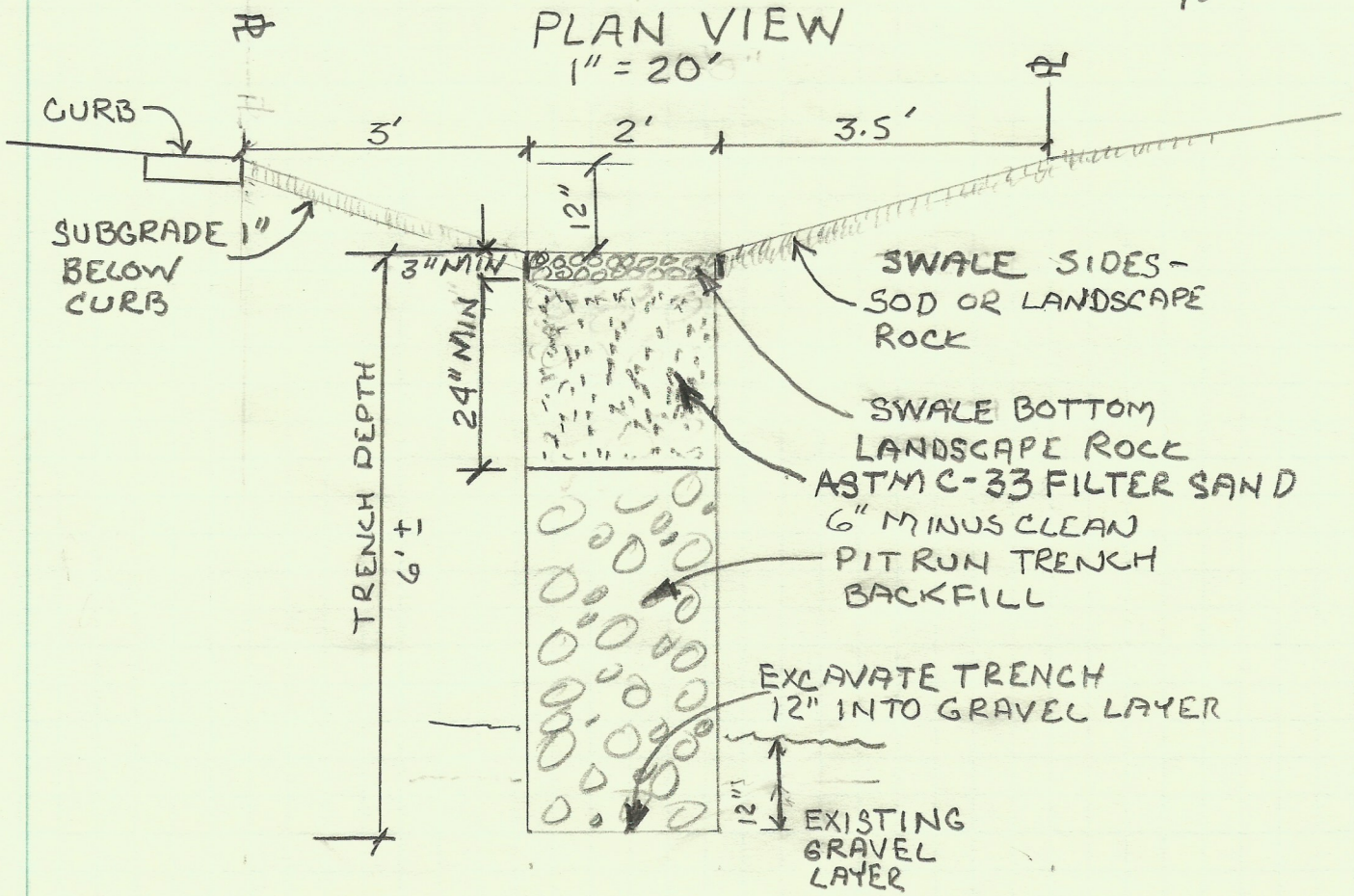
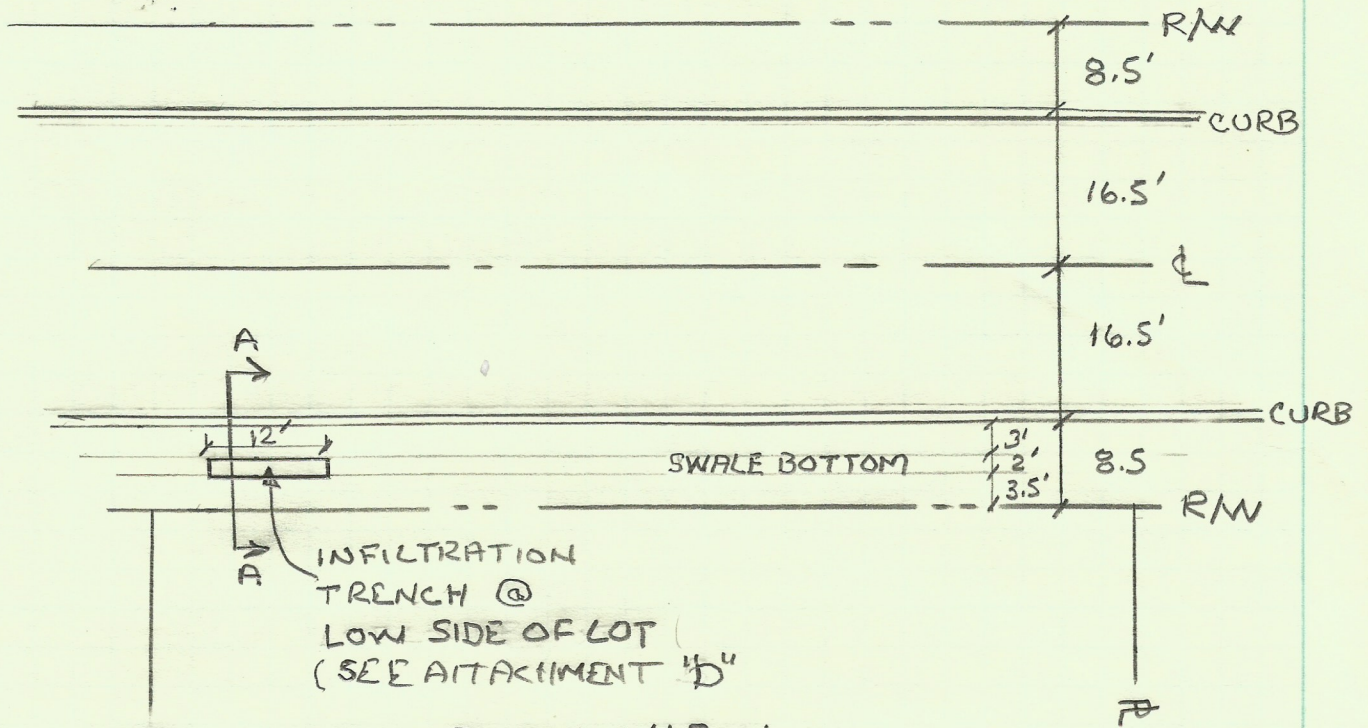
Swale Landscaping

- a. All swale landscaping shall be subject to the approval of the Design Committee.
- b. Landscaping within the swales must be designed, constructed, and maintained such that it does not impede the drainage performance of the swale and such that it promotes infiltration .
- c. The use of sod or landscape rock less than 6" diameter has proven to be an effective treatment for the sides of the swales. Landscape bark should not be used because the likelihood of floating away during rainfall events.
- d. It is extremely important to provide for infiltration in the bottom of the swale. Therefore, the use of small landscape rock or sand with loamy material with grass seed is recommended for the swale bottom for maximum nitrification performance. Sod, due to its normally high clay, is not recommended for the swale bottom.

ATTACHMENT "A"

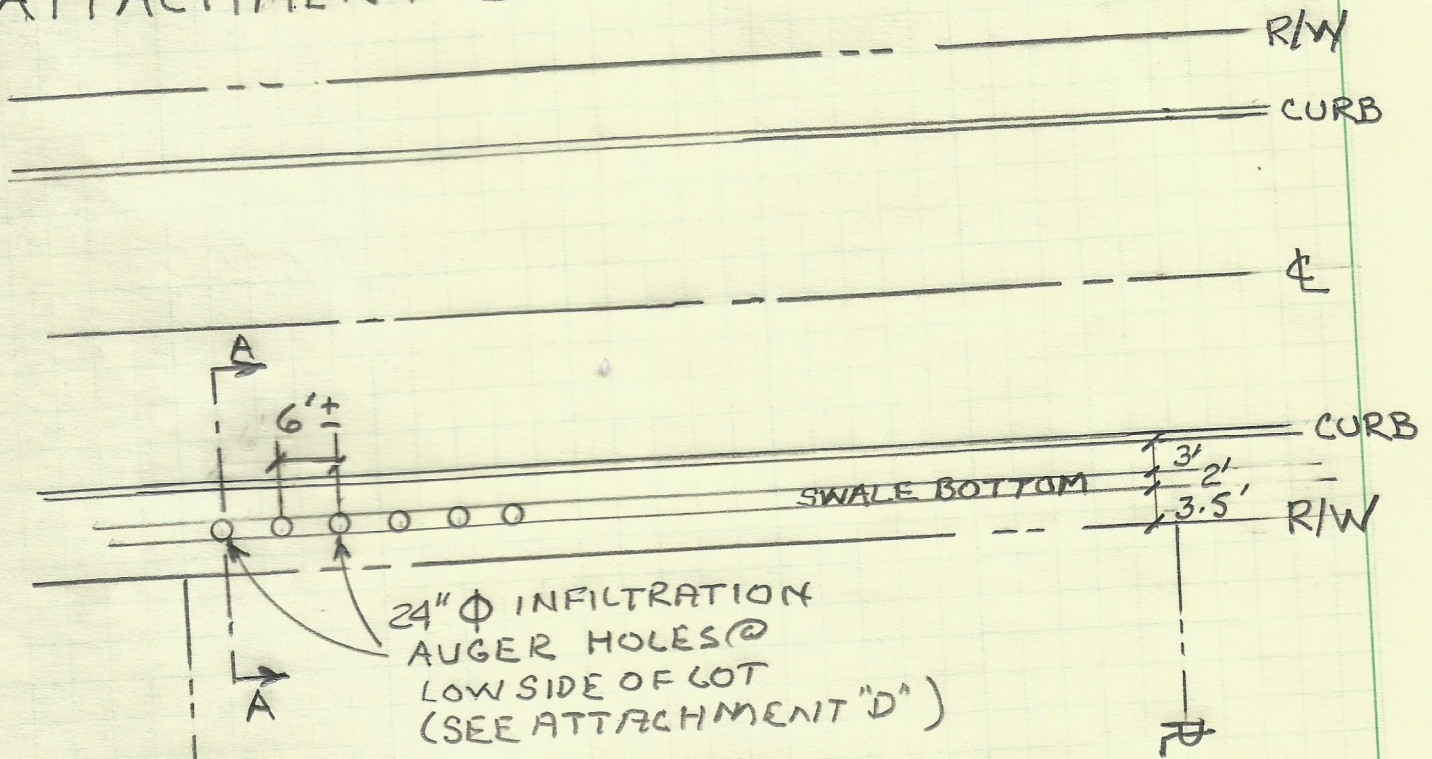


ATTACHMENT "B" - INFILTRATION TRENCH



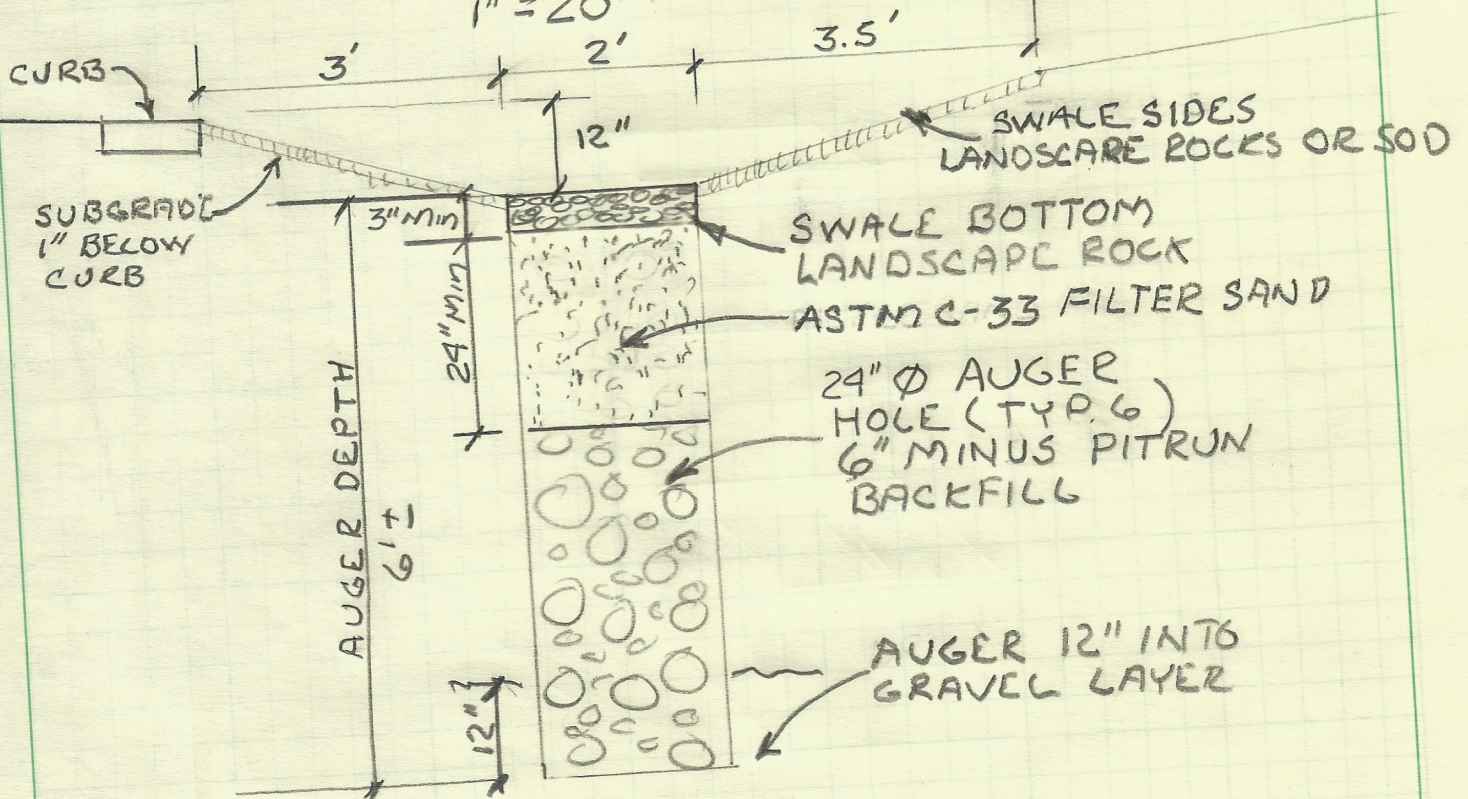
No. 937 811E
 Engineer's Computation Pad
 STAEDTLER

ATTACHMENT "C" - INFILTRATION GALLERY



PLAN VIEW

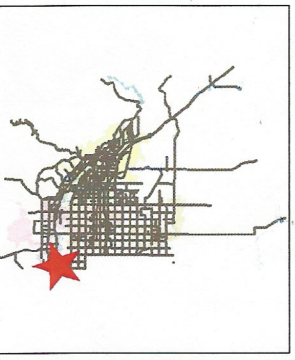
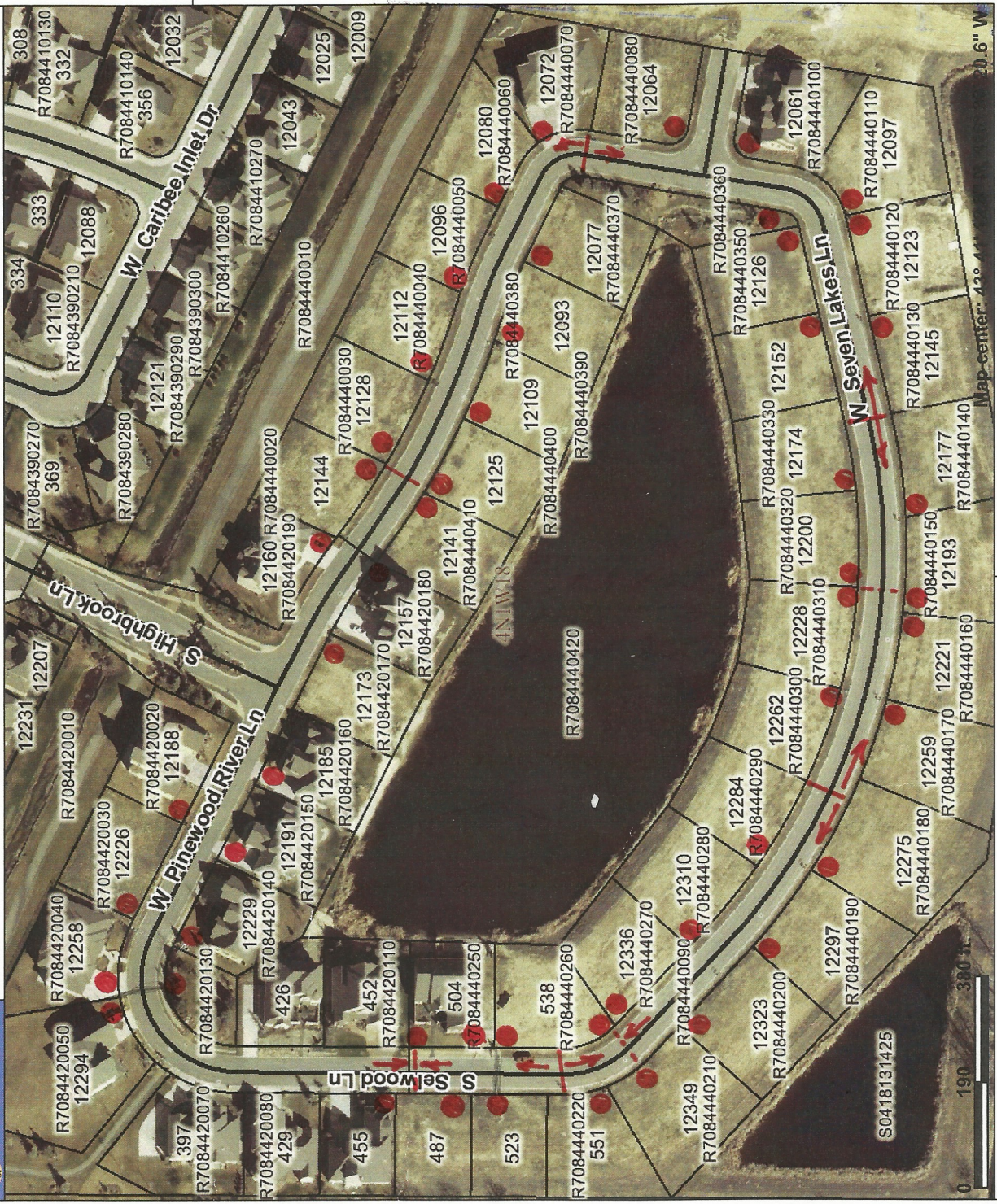
1" = 20'



SECTION A-A

1" = 2'

Attachment "D"



Legend

- Major Streets
- Minor Arterial
- Collector
- SECTION
- PRINCIPAL Arterial
- INTERSTATE
- Other
- Minor Streets
- LOCAL
- PARKS
- PRIVATE
- RESIDENTIAL
- Other
- Street Names (minor)
- Addresses
- Parcels
- Sections
- Ada-OC2010
- Parks
- City Limits
- Kuna
- Boise
- Garden City
- Eagle
- Star
- Meridian

LOT LOW POINT

Scale: 1:3,289


This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.

Policy paper # 1 Drainage & Swale Requirements

Ratified May 3, 2022 by The Reserve at Pinewood Lakes HOA Board.



William Kinard, President



Date